



Red List of Bangladesh

Volume 4: Reptiles and Amphibians



INTERNATIONAL UNION FOR CONSERVATION OF NATURE



Red List of Bangladesh

Volume 4: Reptiles and Amphibians

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Volume 1: Summary (English)

Volume 1: Summary (Bangla)

Volume 2: Mammals

Volume 3: Birds

Volume 4: Reptiles and Amphibians

Volume 5: Freshwater Fishes

Volume 6: Crustaceans

Volume 7: Butterflies

PREFACE

The IUCN Red List of Threatened Species™ has been assessing the conservation status of plants, fungi and animal species on a global scale for the past 50 years. Since its conception in 1964, the Red List has evolved to become the world's most comprehensive information source on the extinction risk of species. Far more than a list of species and their status, it is a powerful tool to inform and catalyze action among scientists, activists, and politicians. It is used by government agencies, wildlife departments, conservation related non-governmental organizations (NGOs), natural resource planners, educational organizations, students, and the business community. The Red List process has become a massive enterprise involving the IUCN Global Species Program staff, partner organizations and experts in the IUCN Species Survival Commission and partner networks who compile the species information to make The IUCN Red List the indispensable product it is today.

IUCN Bangladesh had published the first Red List of Threatened Animals of Bangladesh in 2000. The list has been updated through a sub-project entitled 'Updating Species Red List of Bangladesh' under the 'Strengthening Regional Cooperation for Wildlife Protection (SRCWP)' Project of the Bangladesh Forest Department which is funded by The World Bank. The project commenced in December 2013 and ends in June 2016. A total of 1619 species have been assessed and updated from seven different animal groups (mammals, birds, reptiles, amphibians, freshwater fishes, crustaceans, and butterflies), subsequently published in seven volumes. In addition, summary volume (Vol: 01) has been translated into Bangla for reaching out its wider users. More than 300 national and international experts have contributed under the seven Red List Assessor Groups (RAGs) headed by respective Lead Assessors and Chief National Technical Expert to ensure that the updates are based on the best scientific information available.

A welltrained Red List project unit equipped with GIS support and all kinds of latest information technologies was established in IUCN Bangladesh to ensure the highest quality of assessment following the latest Red List categories and criteria guideline. For this purpose, more than 160 assessors have been trained on global standard Red List assessment guideline engaging international certified Red List trainers. A National Red List Database in the form of an online platform has been developed and made live for public dissemination on the <www.iucnredlistbd.org>. Data and information have been preserved for future use both electronically in offline database as well as hard copies for each individual species bearing unique Species Identification Number (SID). A National Red List Committee has been formed under the Ministry of Environment and Forests (MoEF) to ensure coordination among different agencies during the assessment process as well as for mainstreaming the findings into conservation policies. Series of dissemination workshops at national and regional levels were organized to share the preliminary assessment result to its wider stakeholders and ensure their participation in this highly scientific assessment process.

I would like to commend the assessors for their contributions to the assessment and for their commitment towards making this publication a reality. All the assessments have gone through a multistage review process engaging relevant experts and technical reviewers. The tireless efforts of the reviewers in making these books up to the global standard are gratefully acknowledged. Without their assistance this nationally important set of documents would not have been of the quality that it is now.

I also like to take this opportunity to express my sincere appreciation to all the members of 'Updating Species Red List of Bangladesh' project and all concerned people of publication work for publishing this manuscript. I would also express my gratitude to the Ministry of Environment and Forests (MoEF), Chief Conservator of Forests (CCF) and other Bangladesh Forest Department officials for their vigorous support and collaboration. I hope this publication will help the relevant agencies in taking appropriate conservation actions toward managing wildlife of Bangladesh.

Md. Akbar Hossain

Project Director

Strengthening Regional Cooperation for Wildlife Protection (SRCWP) Project

&

Deputy Chief Conservator of Forests

Bangladesh Forest Department

MESSAGE

The Government of Bangladesh is committed to take all measures prerequisite for a sustainable future. In effort, the Government takes myriad programmes and initiatives with the support of different consortia. Bangladesh has recently achieved unprecedented successes in the environmental sector. It was no surprise that Her Excellency Prime Minister Sheikh Hasina was awarded '2015 Champion of the Earth' by the United Nations. Updated 'Red List of Bangladesh' bears yet another signature of the goodwill and devotion rendered by the Government of Bangladesh. The publication sets another milestone in biodiversity conservation of the country.

The overwhelming evidence on the loss of biodiversity all over the world showcases that we, as a nation, must act to conserve biodiversity. Ministry of Environment and Forests has been playing a pivotal role in biodiversity conservation of Bangladesh through Bangladesh Forest Department, and other national and international organizations. This publication is one among many upshots envisioned by Bangladesh Forest Department through the 'Strengthening Regional Cooperation for Wildlife Protection (SRCWP)' Project. I would like to thank The World Bank for providing financial support, and appreciate the effort of IUCN Bangladesh Country Office in implementing the project.

I am sanguine that the updated 'Red List of Bangladesh' will concurrently help the Government of Bangladesh towards achieving the Aichi Biodiversity Targets, the Sustainable Development Goals (SDGs) and the Vision 2021.

Finally, I wish that the 'Red List of Bangladesh' would go a long way in protecting the biodiversity of the country.

Anwar Hossain Manju, MP

Minister

Ministry of Environment and Forests

Government of the People's Republic of Bangladesh

MESSAGE

I am very happy to know that *Red List of Bangladesh* - a set of visionary publications covering the status, extinction risks and possible conservation options for major biodiversity of Bangladesh has been thoroughly updated by the Bangladesh Forest Department with technical support from IUCN Bangladesh.

Bangladesh is bestowed with enviable natural resources. To save the bewildering inventory, Bangladesh is always strong-willed and committed to a number of Multilateral Environmental Agreements including the Convention on Biological Diversity (CBD). So as in harmony, the Government of Bangladesh has recently looked forward to engaging a globally recognized, powerful, most comprehensive conservation tool i.e. IUCN Red List of Threatened Species™ to update and assess the current biodiversity status. This has resulted in the rigorous effort entitling 'Updating Species Red List of Bangladesh' under the 'Strengthening Regional Cooperation for Wildlife Protection (SRCWP)' Project initiative funded by The World Bank.

'Red List of Bangladesh' is a massive milestone in the conservation history of the country. I expect that these scientific publications will provide new information; will strengthen and update existing knowledge inventory. Everybody from government/non-government officials to scholars, researchers, students and enthusiasts - should make expansive usages of these books as the most updated biodiversity database available in the country.

I strongly hope that these works of multitude potentials will help the coordination and promotion of national efforts in effective policy making for ensuring appropriate and continual biodiversity management practices envisioned by the Government of Bangladesh.

Abdullah Al Islam Jakob, MP

Deputy Minister

Ministry of Environment and Forests

Government of the People's Republic of Bangladesh

MESSAGE

Biodiversity, the incredible variety of life on Earth that sustains us, is in peril. Species are becoming threatened at the most expeditious rate ever recorded. Over the past few decades it has become the issue of global concern for its rapid reduction worldwide. Bangladesh is no exception in this regard. Though the country is exceptionally endowed with a vast variety of flora and fauna, it is unfortunate that in recent decades the biodiversity of the country is under pressure due to incrementing population and over- exploitation of natural resources.

Today, many species of Bangladesh have reached a dreadful genetic loss. Unfortunately, detailed information and consummate inventories of such species often do not exist. The Government of Bangladesh is acutely conscious of this, and has in fact been preparing to face this challenge for several years now. Bangladesh has made a tremendous progress in terms of taking development initiatives towards conservation and sustainable use of the threatened species. However, Bangladesh Forest Department in collaboration with IUCN Bangladesh and with financial assistance from The World Bank, the project 'Strengthening Regional Cooperation for Wildlife Protection' under which the subproject 'Updating Species Red List of Bangladesh' has successfully updated the threat status of wildlife of the country. I would like to express my appreciation to all the experts involved in this noble initiative.

I am very proud to note that 1619 fauna species have been assessed over the two and half year period and subsequently published in seven volumes entitled the 'Red List of Bangladesh'. I strongly believe, this set of achievements is one of the pioneer encyclopedic compilations in Bangladesh that can provide its users with updated information of different species. I hope these books will have impact on the government's policy and planning towards achieving the targets set by the different national and global commitments, as well as taking measures to protect these threatened species.

Dr. Kamal Uddin Ahmed

Secretary

Ministry of Environment and Forests

Government of the People's Republic of Bangladesh

MESSAGE

Globally, biodiversity forms the foundation of the vast array of ecosystem services that critically contribute to human well being. The diversity of the Earth's natural assets are made up of many millions of distinct biological species of plants and animals on land, in water, in atmosphere—linking humans and environment into an interdependent ecosystem which makes the Earth unique and beautiful. But, it's really unfortunate that biodiversity worldwide is disappearing faster than ever and already has declined by more than a quarter in the last 35 years in terms of number of species. It is thus indispensable to gather knowledge scientifically of existing species, their habitats, threats, etc. for undertaking pragmatic protection and conservation measures.

In this context Bangladesh Forest Department together with IUCN Bangladesh has accomplished 'Updating Species Red List of Bangladesh', as a sub-project of the 'Strengthening Regional Cooperation for Wildlife Protection (SRCWP)' Project of Bangladesh Forest Department following the most comprehensive 'IUCN Red List of Threatened Species™' approach. As a revolutionary outcome of the project, the books entitling the 'Red List of Bangladesh' aim to provide updated information and data of 1619 animal species under seven groups in total throughout the country. This national asset will undoubtedly serve the researcher and academicians as a scientific information hub for further research and the policy makers to occupy the gap of subsisting laws and policies to catalyze appropriate conservation action. By knowing the threatened species from this Red List, further, we can bring out incipient projects where these are exactly demanded and with the opportune execution of this undertaking, we can create a safe ground as a measure of conservation. In this whole process the Red List will be a great avail.

In addition, the status and trends of the threatened species of Bangladesh portrayed in these books have the impetus for taking up the stronger efforts towards the legislation of wildlife trafficking and trading of the country. Being a bio-rich country, Bangladesh has to adopt adequate measures to halt further degradation of our precious biological resources. We hope that these books could be a consequential material in the congruous execution of the objectives of numerous biodiversity conventions and treaties, like CBD, RAMSAR, and CITES.

I sincerely acknowledge the Government of the People's Republic of Bangladesh to initiate such a milestone project and The World Bank for providing financial support. I am also very thankful to those scientists, researchers, academicians and professionals involved with the project from the very beginning for their unwearied endeavour which finally make this most fruitful.

Md. Yunus Ali

Chief Conservator of Forests
Bangladesh Forest Department
Government of the People's Republic of Bangladesh

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The IUCN Red List of Threatened Species™ has been worldily recognized and used as the most comprehensive source for the conservation status of plant and animal species since 1964. IUCN Bangladesh first assessed the conservation status of species from Bangladesh in 2000. Fifteen years later, IUCN Bangladesh has updated the previous Red List implementing 'Updating Species Red List of Bangladesh' project. The final outcome of the project, the 'Red List of Bangladesh', is the fruit of a concerted effort from numerous individuals and bodies—all deserve a special note of thanks.

Our sincere gratitude to Dr. Kamal Uddin Ahmed, Secretary, Ministry of Environment and Forests, Government of the People's Republic of Bangladesh and Chair, National Committee for Updating Species Red List of Bangladesh for his endless effort along with the officials involved from the ministry in making this initiative a success.

We extend a heartfelt thanks to Mr. Md. Yunus Ali, Chief Conservator of Forests, Bangladesh Forest Department and the officials nominated to implement 'Strengthening Regional Cooperation for Wildlife Protection (SRCWP)' Project, especially Mr. Md. Akbar Hossain, Project Director and all other staff of the SRCWP project. Our special thanks to Mr. Ashit Ranjan Paul, Conservator of Forests, Wildlife Circle and Dr. Tapan Kumar Dey, former Conservator of Forests, Wildlife Management and Nature Conservation Division, Bangladesh Forest Department for their endless endeavor in all extent of the project. We would like to acknowledge The World Bank for financing SRCWP project. In addition, our sincere gratitude goes to Bangladesh Forest Department to entrust IUCN Bangladesh Country Office with the responsibility of 'Updating Species Red List of Bangladesh'.

We humbly acknowledge Dr. Mohammad Ali Reza Khan, Chief National Technical Expert, Updating Species Red List of Bangladesh for his expertise, knowledge and technical support used in these publications. Besides, seven Lead Assessors for seven animal groups namely, Professor Dr. Mohammed Mostafa Feeroz for mammals, Mr. Enam Ul Haque for birds, Professor Dr. Md. Farid Ahsan for reptiles, Professor Dr. M. Monirul H. Khan for amphibians, Professor Dr. Mohammad Sahadat Ali for freshwater fishes, Professor Dr. Mostafa Ali Reza Hossain for crustaceans, and Professor Dr. Md. Monwar Hossain for butterflies deserve special thanks. Besides, all other assessors, national and international photographers, contributors and geo-spatial analysts have indebted us with their time, effort and support. We sincerely thank all technical reviewers and editors, as well.

The Red List Project Unit of IUCN Bangladesh Country Office, along with other officials, merit special thanks for their relentless effort to finish this project successfully. Special thanks to Mr. Craig Hilton Taylor and Ms. Caroline Pollock from IUCN Red List Unit, Cambridge, UK and colleagues from IUCN Asia Regional Office for their technical support and guidance.

We humbly acknowledge Vice Chancellors from University of Dhaka, University of Chittagong, Bangladesh Agricultural University, Khulna University and Shahjalal University of Science and Technology for allowing us to use their premises for dissemination workshops. We also extend our gratitude to the officials from Department of Fisheries, Bangladesh Fisheries Research Institute, Bangladesh Forest Research Institute, Bangladesh National Herbarium, national universities, colleges, research institutes and other partners. Participants of all meetings and workshops, advisors, data contributors and personnel from electronic and print media deserve our appreciation for their support.

We hope that the publications entitled 'Red List of Bangladesh' would greatly accelerate conservation, management and policy interventions for the threatened species of Bangladesh.

Ishtiaq Uddin Ahmad

Country Representative

IUCN Bangladesh Country Office

LIST OF ABBREVIATIONS

| | |
|--------|--|
| AOO | Area of Occupancy |
| BFD | Bangladesh Forest Department |
| CBD | Convention on Biological Diversity |
| CCF | Chief Conservator of Forests |
| CITES | Convention on International Trade in Endangered Species |
| CNTE | Chief National Technical Expert |
| CR | Critically Endangered |
| DD | Data Deficient |
| ECR | Environment Conservation Rules |
| EN | Endangered |
| EOO | Extent of Occurrence |
| EW | Extinct in the Wild |
| EX | Extinct |
| FA | Forest Act |
| GIS | Geographical Information System |
| H | High |
| IUCN | International Union for Conservation of Nature |
| km | Kilometer |
| L | Low |
| LC | Least Concern |
| Litt | Literature |
| M | Medium |
| MoEF | Ministry of Environment and Forests |
| NA | Not Applicable |
| NBSAP | National Biodiversity Strategic Action Plan |
| NCS | National Conservation Strategy |
| NC-USR | National Committee for Updating Species Red List of Bangladesh |

| | |
|-------------|--|
| NE | Not Evaluated |
| NFA | National Forest Assessment |
| NP | National Park |
| NT | Near Threatened |
| PA | Protected Area |
| PDR | People's Democratic Republic |
| Pers. comm. | Personal communication |
| Pers. obs. | Personal observation |
| Ppt | Parts per thousand |
| PVA | Population viability analysis |
| RAG | Red List Assessor Group |
| RE | Regionally Extinct |
| RF | Reserve Forest |
| RLA | Red List Authority |
| RLU | Red List Unit |
| SID | Species Identification (Number) |
| SRCWP | Strengthening Regional Cooperation for Wildlife Protection |
| SSC | Species Survival Commission |
| VH | Very High |
| VL | Very Low |
| VU | Vulnerable |
| WB | The World Bank |
| WCCU | Wildlife Crime Control Unit |
| WI | Wildlife Inspector |
| WS | Wildlife Sanctuary |
| Yrs | Years |

TABLE OF CONTENTS

PART 1: REPTILES

| | |
|--|----|
| 1. INTRODUCTION | 3 |
| 1.1. Bangladesh Context | 3 |
| 1.2. Reptiles | 3 |
| 1.3. Major Habitats of Reptile | 4 |
| 1.3.1. <i>Moist Deciduous Forest or Shal Forest</i> | 5 |
| 1.3.2. <i>Mixed-evergreen Forest</i> | 6 |
| 1.3.3. <i>Mangrove Forest</i> | 6 |
| 1.3.4. <i>Freshwater Swamp Forest</i> | 7 |
| 1.3.5. <i>Countryside Forest or Homestead Forest</i> | 7 |
| 1.3.6. <i>Open Water Area Both Freshwater and Marine</i> | 7 |
| 1.4. History of Red List in Bangladesh | 8 |
| 1.5. Diversity and Endemism | 9 |
| 2. UPDATING SPECIES RED LIST OF BANGLADESH: ASSESSMENT METHODOLOGY | 13 |
| 2.1. Red List Assessment: from Field to Publication | 13 |
| 2.2. Red List Assessment Tools | 15 |
| 2.3. Red List Assessment Guideline (version 3.1) | 16 |
| 2.3.1. <i>Taxonomic Range of the Assessment</i> | 16 |
| 2.3.2. <i>Categories</i> | 16 |
| 2.3.3. <i>Criteria for Critically Endangered, Endangered and Vulnerable</i> | 19 |
| 3. STATUS OF REPTILES IN BANGLADESH | 27 |
| 3.1. Present Status of Reptiles | 27 |
| 3.2. Status by Taxonomic Groups | 28 |
| 3.3. Constraints to the Assessment | 28 |
| 3.4. Distribution of Threatened Reptiles by Different Geographic Ranges of Bangladesh | 28 |
| 3.5. Threats to Reptiles of Bangladesh | 30 |
| 3.5.1. <i>Habitat Loss, Degradation and Fragmentation</i> | 30 |
| 3.5.2. <i>Human-reptile Conflict</i> | 31 |
| 3.5.3. <i>Local and International Trade</i> | 31 |
| 3.5.4. <i>Tourist Activities</i> | 31 |

| | |
|--|----|
| 4. CONSERVATION AND RECOMMENDATIONS | 37 |
| 4.1. Conservation | 37 |
| 4.1.1. <i>Management of Reptiles</i> | 37 |
| 4.1.2. <i>Extinction Risk vs Conservation Status</i> | 38 |
| 4.2 Recommendations for Conservation | 38 |
| 4.2.1. <i>Research</i> | 38 |
| 4.2.2. <i>Management Priorities</i> | 38 |
| 4.2.3. <i>Ex-situ Conservation</i> | 39 |
| 4.2.4. <i>Institutional Development</i> | 39 |
| 4.2.5. <i>Protected Area (PA) Management</i> | 39 |
| 4.2.6. <i>Public Awareness and Conflict Management</i> | 39 |
| 4.2.7. <i>Collaboration</i> | 40 |
| 4.3. Species Specific Recommendations | 40 |
| 4.3.1. <i>Regionally Extinct Species</i> | 40 |
| 4.3.2. <i>Threatened Species</i> | 40 |
| 4.3.3. <i>Near Threatened Species</i> | 40 |
| 5. SPECIES PROFILE | 41 |

PART 2: AMPHIBIANS

| | |
|---|-----|
| 1. INTRODUCTION | 199 |
| 1.1. Diversity and Endemism | 200 |
| 1.2. Habitats | 201 |
| 2. STATUS OF AMPHIBIANS IN BANGLADESH | 207 |
| 2.1. Major Findings | 207 |
| 2.2. History of National Assessment | 207 |
| 2.3. Challenges of National Assessment | 208 |
| 2.4. Threats | 209 |
| 3. CONSERVATION AND RECOMMENDATIONS | 215 |
| 3.1. Conservation | 215 |
| 3.2. Recommendations | 216 |
| 4. SPECIES PROFILE | 218 |
| REFERENCES | 277 |
| APPENDICES | 297 |
| Appendix-i: <i>Status of Reptiles in Bangladesh</i> | 299 |
| Appendix-ii: <i>Status of Amphibians in Bangladesh</i> | 307 |
| Appendix-iii: <i>Sample Assessment Sheet</i> | 310 |
| Appendix-iv: <i>Technical Terms</i> | 312 |
| Appendix-v: <i>Summary of the Red List Criteria (A-E) for Threatened Categories</i> | 315 |
| Appendix-vi: <i>Contributor Index</i> | 316 |

PART 1: REPTILES

INTRODUCTION



1. INTRODUCTION

1.1. Bangladesh Context

Bangladesh, the largest delta in the world (Rashid 1991) of Pleistocene to Recent origin having an area of 147,570 km² formed mostly of alluvial soil deposited by the two mighty river systems of the Indian subcontinent- the Ganges (Padma) and the Brahmaputra (Jamuna), is situated between the Himalayan mountains and the Bay of Bengal at the junction of the Indian and Malayan subregions (20°34''–26°38''N and 88°00''–92°40''E). The most of its landmass is surrounded by the Indian States- in the west (West Bengal), north (Meghalaya), northeast (Assam) and eastern parts (Manipur, Tripura and Mizoram) when Myanmar in the southeast and by the Bay of Bengal in the south. It is a riverine country crisscrossed by innumerable rivers, rivulets and their tributaries with most of its parts at low elevations with an average of 12 m above mean sea level (asl) and some of its areas are 0-1 m asl and the undulating hills of northeast to southeast region reaches the highest peak of about 300 m asl. The country is exceptionally rich in wildlife and other biodiversity as a consequence of its location in the subtropical belt at the junction Indian and Malayan subregions. Moreover, the Chittagong Hill Tracts form the western end of Indo-Burma Biodiversity Hotspot- one of the 25 most biodiverse and one of the eight hottest hotspots biodiversity spots areas on earth (Myers *et al.* 2000), later the number of biodiversity hotspots has been increased from 25 to 34 then to 36 (<http://www.cepf.net/resources/hotspots/pages/default.aspx>, downloaded on 25 April 2016). Main concentrations of wildlife in Bangladesh are in

the natural forests and wetlands, although some reptiles are more at home in human habitations than the natural ones. Also several species live as commensal to human beings.

The climate of Bangladesh prevails three distinct seasons, which is characterized by hot and humid summer (March-May), tropical monsoon (June-October) and dry and mild cool winter (November-February) (Ahmad 1968). Despite zonal variation the average minimum and maximum temperatures are 21° and 35°C in summer and 11° and 29°C in winter, monsoon rainfall ranges from 1,194 to 3,454 mm, average relative humidity is 78% with the highest range in July (99%) and the lowest in December (36%) (calculated from Rashid 1991).

1.2. Reptiles

Reptiles are diversified vertebrates (animals with backbone), belonging to one of the four classes of tetrapods- the Reptilia (Latin *reptum* means creep) having scaly skin that keep their bodies from drying out, their young do not go through a larval stage like the amphibians but instead look like small miniatures of the adults when they hatch out. They have evolved from amphibian like tetrapods of the late Paleozoic Era- about 300-260 million years ago. They include four main groups: turtles and tortoises, lizards and snakes, crocodiles and alligators, and tuatara- the only species left from the ancient group of reptiles that goes back to the era of the dinosaurs (extinct reptiles those flourished during Mesozoic Era). Some reptiles spend most of their time in water, many spend their life on land, some are arboreal and when others

are even fully aquatic. They can be found in all types of habitat, except polar ice and the Tundra regions. They are ectotherms (poikilotherms or cold blooded)- their internal temperature varies according to the surrounding environment, so they must bask in the sun or find warm place to get warm and become active, and they must find shade or cool spot to cool off. In adverse cold weather they hibernate and in hot surrounding they aestivate.

The modern reptilian groups comprise two of three linkages of amniote vertebrates that arose from amphibian like tetrapods in the late Paleozoic Era. The two reptilian linkages are the anapsid amniotes, represented by turtles and tortoises, and the diapsid amniotes, represented by lizards, snakes and crocodiles, and tuatara. Reptiles are the paraphyletic group because that excludes birds, which are descendants of the common ancestor of the diapsid linkage. A third linkage of amniotes, the synapsids gave rise to modern mammals.

Turtles, tortoises and terrapins (commonly known as turtles) are reptiles of the Order Testudines and are remarkable for their shells. The shell is considered as a unique piece of biological engineering (Zangerl 1969). The encased body shell has two parts- the dorsal carapace and the ventral plastron, and these two parts are joined in along a bridge of bone and elastic ligaments, between the forelimbs and hindlimbs. Generally, the turtles are aquatic and omnivores but come to lay eggs on land when tortoises are terrestrial and herbivores and usually do not go into water and terrapins are both (amphibious), mostly live near water along rivers, ponds and lakes. Being carnivorous turtles eat carcasses and diseased and weakened animals in the aquatic medium and thus playing a vital role in cleaning the environment from pollution.

Lizards and snakes belong to the same reptilian Order Squamata but they have many differences. The most important physical difference is that lizards usually have four limbs (except limbless lizards), which are used



Calotes versicolor (Male)

© M K Hasan

for movement. Snakes are limbless and use their ventral scales along with body muscles for locomotion. Lizards and snakes are only reptiles that can climb, many are arboreal, some are aquatic (mostly marine) and some can glide through the air. They are carnivorous with the exception of a few lizards that are purely herbivorous but none of which exists in Bangladesh. Lizards and most of the snakes are oviparous but some snakes are ovoviviparous. As carnivores, lizards and snakes are playing important role in controlling insect and rodent populations in natural ecosystems.

The Order Crocodylia includes alligators, caimans, crocodiles and gharial, of which the last two groups occur in Bangladesh. They are large-bodied armoured aquatic reptiles and having nearly complete four-chambered heart. They are carnivorous and oviparous and come on land for laying eggs. The crocodylians are carnivorous, hence, they hunt actively and eat weak, sick animals and carcasses in the aquatic medium. Thus they play an important role in cleaning the environment from pollution and foul smell.

The systematic and nomenclature of reptiles are slightly different in various publications and websites. Here these are adapted from Uetz and Jirí Rošek (2015).

1.3. Major Habitats of Reptile

Bangladesh supports four main types of habitat: (1) forests- cover 1.45 million ha (i.e., 9.82%) of the country, including mangroves (0.71 million ha, of which 0.58



Chrysopelia ornata

© Tania Khan

million ha is the Sundarbans and the rest are planted mangroves), mixed-evergreen (0.55 million ha) and deciduous (0.12 million ha); (2) wetlands- wrap roughly 2.90 million ha (i.e., 19.65%), including rivers (0.48 million ha), estuarine areas (0.55 million ha) and the rest (1.87 million ha) are deeply flooded floodplains (seasonal), lakes and marshlands; (3) bushy, grassy and bamboo-covered areas cover 0.80 million ha (i.e., 5.42%), most of which (0.73 million ha) are found in the Chittagong Hill Tracts and legally designated as 'Unclassed State Forests'; and (4) homestead vegetation envelops 0.27 million ha (i.e., 1.83%) of the country. Other major land uses are housing areas (0.15 million ha (i.e., 1.02%) and agricultural areas (9.19 million ha i.e., 62.26% of Bangladesh), which are not considered as good habitats (Ahmed *et al.* 2009, Khan 2014) (Figure 1) although several reptile species happily live in these areas.

Based on plant (more specifically tree) species, the wildlife habitats of Bangladesh can broadly be categorized into: (A) Forests and (B) Non-forests. The forests can be classified in many ways but for simple and easy understanding

in relation to wildlife, it can be divided into the following types: (1) Moist deciduous forest or Shal forest, (2) Mixed-evergreen (also includes semi-evergreen and evergreen), (3) Mangrove forest and (4) Freshwater swamp forest. On the other hand, the non-forests can be divided into: (1) Country side forest or homestead forest or village groves and (2) Open water area both freshwater and marine. Furthermore, household areas even the houses support some wildlife, especially the wall lizards, geckos and monitor lizards and some snakes.

1.3.1. Moist Deciduous Forest or Shal Forest

This type of forest is distributed in the Madhupur Tracts (Greater Dhaka, Mymensingh, Tangail and Jamalpur Districts) and patchily found in the Greater Dinajpur, Rangpur, Sylhet, Comilla and Rajshahi Districts. It is dominated by coppice shal tree (*Shorea robusta*) associated with haldu (*Adina cordifolia*), kori (*Albizia* spp.) ajuli and chalta (*Dillenia* spp.), bot, pekur and dumur (*Ficus* spp.), jam (*Syzygium* spp.), sonalu and bander-lathi (*Cassia* spp.), etc., and the important climbers are simlata (*Spatholobus roxburghii*) and gilalata (*Entada paseolus*).

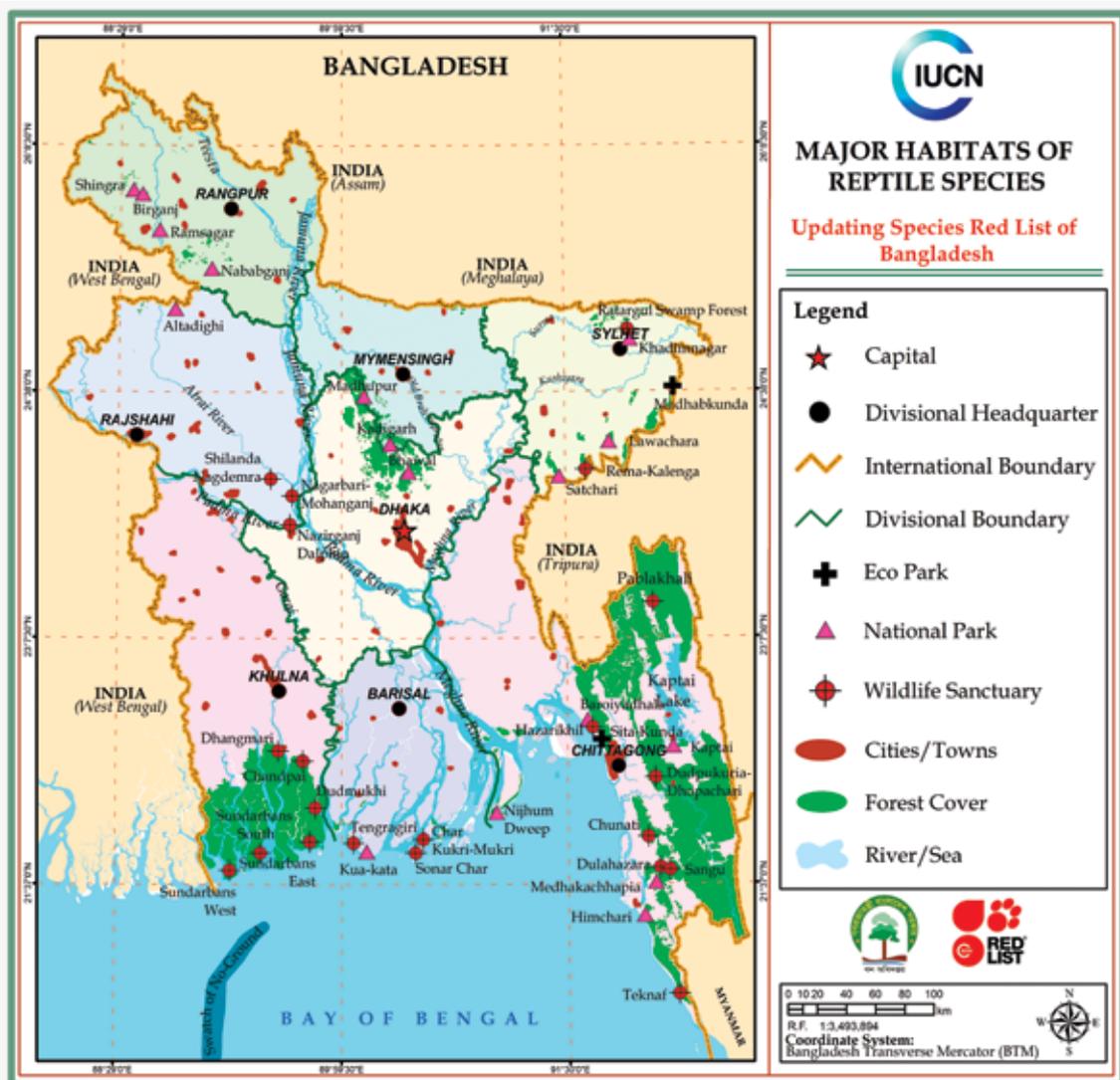


Figure 1: Map of Bangladesh showing the major habitats of Reptiles species.

1.3.2. Mixed-evergreen Forest

It includes the semi-evergreen and evergreen types of forests in the northeast, east and southeast of the country. Forests of Greater Chittagong, Chittagong Hill Tracts and Sylhet Districts are more or less of similar type, although those of Sylhet are severely fragmented. The important tree species of these areas are: garjan (*Dipterocarpus* spp.), koro (*Albizia* spp.), jam (*Syzygium* spp.), shegun/teak (*Tectona grandis*), chapalish and dewa (*Artocarpus* spp.), etc., and several species of bamboo. The important climbers are simlata (*Spatholobus roxburghii*) and gilalata (*Entada paseolus*).

1.3.3. Mangrove Forest

The Sundarbans, the largest chunk of mangrove forest in the world (5,770 km² minus water bodies) is predominated by sundri (*Heritiera fomes*). Other important plants are: gewa (*Excoecaria agallocha*), keora and ora (*Sonneratia* spp.), bain (*Avicennia* spp.), goran (*Ceriops* spp.), garjan (*Rhizophora* spp.), goal pata (*Nypa fruticans*), hental (*Phoenix paludosa*), etc., while the succession zone is dominated by *Acanthus ilicifolius*, *Phragmites karka*, *Typha elephantina* and *Imperata cylindrica*.

The Chakaria Sundarbans of Greater Chittagong District is also a mangrove forest but except sundri and hental other species are found here. The coastal mangroves in the Greater Chittagong, Noakhali and Barisal Districts and some islands also support good mangrove vegetation growing there either naturally and/or created through afforestation attempts by the Government Forest Department.

1.3.4. Freshwater Swamp Forest

It occupies the depressed basins of the northeast (haors of Greater Mymensingh and Sylhet Districts) of the country. Vast area of these basins are submerged and remained so during monsoon (June–October) but in dry season (November to March) the submerged areas are reduced. The vegetation consists of reeds and grasses like nawl (*Phragmites karka*) and khagra (*Saccharums pontaneum*) and ikad (*Erianthus ravennae*). Growing tree species in this area are: hijal (*Barringtonia acutangula*), shimul (*Bombax ceiba*), jarul (*Lagerstroemia speciosa*), kalahuza (*Cordia dichotoma*), pithali (*Trewia nudiflora*), batkurar (*Vitex canescens*), etc.

1.3.5. Countryside Forest or Homestead Forest

It includes villages and suburbs within flood plains (Greater Jessore, Kushtia, Faridpur, Pabna, Bogra and Rajshahi Districts). Literally there is no forest in these areas (except the small Altadighi National Park in greater Rajshahi) of Bangladesh. Whatever thick cover each homestead has is to meet the daily need for fuel wood, construction of houses and agricultural implements. The bushes and thickets are also home for many wildlife species. The major plant species here are aam (*Mangifera indica*), kanthal (*Artocarpus heterophyllus*), neem (*Azadiracha indica*), jam (*Syzygium cumini*), bamboos, boroi (*Zyzyphus auritiana*), koroi (*Albizia* spp.), dab/narikel (*Cocos nucifera*), supari (*Areca catechu*), khejur (*Phoenix sylvestris*, tal (*Borassus flabellifer*), pithali (*Trewia nudiflora*), babla (*Acacia nilotica*), piara (*Psidium guajava*), lichu (*Litchi chinensis*),



Mixed evergreen forest

© Md. Farid Ahsan

amra (*Spondias dulce*), tentul (*Tamarindus indicus*), nonaphal (*Annona reticulata*), dumur, bot and pekur (*Ficus* spp.), etc., Mango orchards, banana and sugarcane plantations, and bamboo thickets are common in some parts of the country.

1.3.6. Open Water Area both Freshwater and Marine

It includes both marine and freshwater areas. Literally no tree species grows in this area. During monsoon some countryside areas are inundated by rain and flood waters and these areas have been excluded from this habitat. Some floating and submerged vegetations grow in this habitat.

Furthermore, rivers, canals, streams, estuaries, beels, ponds, ditches, household areas and even the human dwellings support some wildlife. Rivers safeguard some reptiles' especially freshwater turtles. The canals make the bridge between rivers and floodplains, beels, haors and baors, so they support reptiles like freshwaters turtles and other amphibious reptiles. Ponds and ditches are good habitats for freshwater turtles for food and shelter, and for varanid lizards for food sources. The hill streams and pools are also suitable habitats for some turtles, especially Asian Soft Shell Turtle (*Amyda cartilaginea*).

1.4. History of Red List in Bangladesh

Realizing the dwindling of population of plants and animals, the inventory of threatened species started long back after the middle of the last century. The innovative history of inventory of threatened species was prescribed by Late Sir Peter Scott in 1963 as “a register of threatened wildlife that includes definitions of degrees of threat” (Scott *et al.* 1987). The global criteria for assessing extinction risks was reviewed and adopted by IUCN in 1994. Subsequently, adopting these criteria the global status of animals was done in 1996 (1996 IUCN Red List of Threatened Animals) and for plants done in 1997 (1997 IUCN Red List of Threatened Plants).

In Bangladesh, after the establishment of country office of IUCN in late 1980s, the realization of identifying threatened species of wildlife at the national level was initiated and the local experts in the relevant fields joined in the program. Subsequently, the assessment of threatened vertebrates of five groups (mammals, birds, reptiles, amphibians and fishes) at national level were done together with the experts of the relevant fields, under the auspices of the Royal Netherlands Embassy in Bangladesh and the German Federal Ministry for Economic Co-operation and Development, and published IUCN Bangladesh in 2000. The methodology developed for national

assessment was the modified one of the global assessment system and followed Sri Lankan use of scoring methods by the local experts in the related fields. Therefore, the identification of the threatened species at the national level was initiated for guiding the conservation and management policies and attempts. The global assessment does not properly reflect the extinction risk of a species in a country. Many species are not globally threatened but are nationally threatened. Most of the threatened reptiles of Bangladesh are not threatened globally. According to this the seven criteria that were followed are: (1) Extent of Occurrence, (2) Suspected change in population in the last 20 years, (3) Habitat fragmentation, (4) Habitat condition, (5) Habitat status (i.e., percentage of protection in the area of occurrence), (6) Human impact, and (7) Intrinsic capacity to adapt (IUCN-Bangladesh 2000a). More or less similar to the global categories, the categories that were followed in the recent process of Red Listing are Extinct, Critically Endangered, Endangered, Vulnerable, Near Threatened and Data Deficient. Notably, a species was designated as Data Deficient when the data were available on less than four criteria mentioned above. Developing this new assessment system, together with doing something for the first time in the country, took a long time. Finally, in 2000 the assessment results, together with species profiles of the



threatened species were published in the form of national Red Books (IUCN-Bangladesh 2000a, b, c, d, e). Since the status of the species changes with time and updating the status is necessary, it was decided that the assessment will be repeated after every five years to publish the updated Red Lists. Unfortunately, this was not done due mainly to the lack of funding.

Finally, in 2013 the Forest Department came forward with the financial support to IUCN-Bangladesh's proposal to update the species Red List of Bangladesh. This was done under a regional project titled 'Strengthening Regional Co-operation for Wildlife Protection' developed under the support of The World Bank. This national Red Listing not only included the five vertebrate groups (i.e., mammals, birds, reptiles, amphibians and freshwater fish) that were assessed earlier but also included two new invertebrate groups (i.e., crustaceans and butterflies).

1.5. Diversity and Endemism

A total of 167 species of reptiles (3 orders and 25 families) have been listed in this Red Book based on published articles, books, reports, available unpublished information, some from organized field visits and checking specimens present in the collection of the major institutions/museums in the country. These have also been assessed here and all do not have voucher specimens and/or photographic records, although the new records

are being added to the list; for instances, the Asian Soft-shelled Turtle (*Amyda cartilaginea*, False Cobra (*Pseudoxenodon macrops*), etc. The globally Critically Endangered Arakan Forest Turtle (*Heosemys depressa*) was endemic to Myanmar (Asian Turtle Trade Working Group 2000) and its recent record in Bandarban of Bangladesh is an example of the country's potential as the home of diverse species of reptiles. The vast area of forests (Chittagong Hill Tracts, Greater Sylhet and Mymensingh Districts along the Indian and Myanmar borders) has remained least explored where some new records for Bangladesh are expected.

There is no endemic species of reptile in Bangladesh so far, although once it was said to be the Bostami or Black Soft-shell Turtle (*Nilssonina nigricans*) is endemic to Bangladesh (Khan 1980, 1982a, b) it had not been reported from anywhere else since Annandale and Shastri (1914). However, Praschag and Gemel (2002) recorded it from eight places (temple ponds, ponds, vicinity of the Brahmaputra River and two national parks- Kaziranga and Nameri) of Assam State of India, bordering Bangladesh. Beside the Bostami pond of Chittagong, this species has been recorded from Srimangal fish market of Moulvibazar, Feni and Baro Pathor of Thanchi in Bandarban.





UPDATING SPECIES RED LIST OF BANGLADESH: ASSESSMENT METHODOLOGY



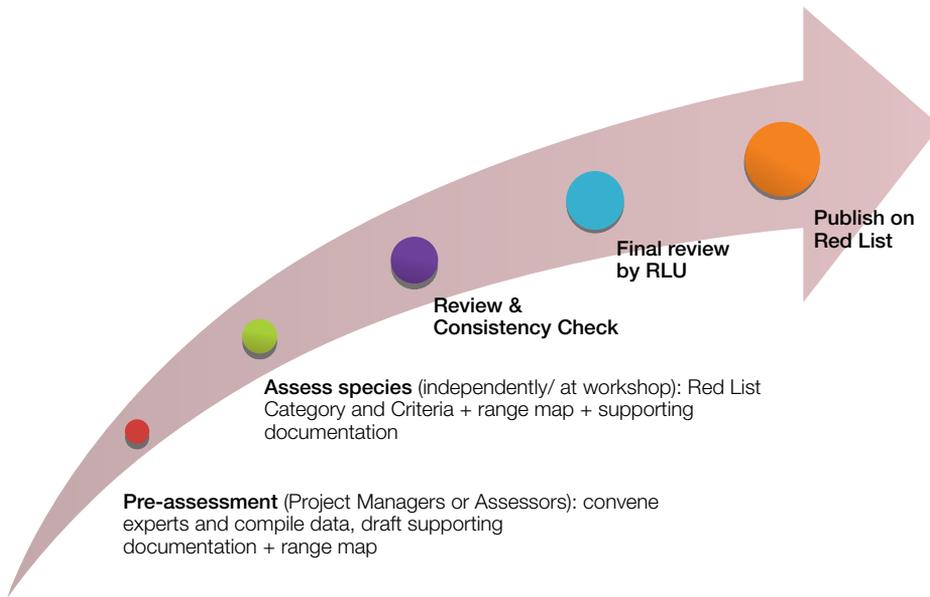
2. UPDATING SPECIES RED LIST OF BANGLADESH: ASSESSMENT METHODOLOGY

The IUCN Red List of Threatened Species™ is widely recognized as the most comprehensive, objective global approach for evaluating the conservation status of plant and animal species and their links to livelihoods. Particularly, its scientifically rigorous approach to determine risks of extinction has become a world standard. Looking back at 50 years since its implementation in 1964, the IUCN Red List of Threatened Species™ has been successfully established as a powerful conservation tool and has achieved its goal of providing information and analyses on the status, trends and threats to species. The assessment process of 'Updating Species Red List of Bangladesh' took more than two and a half years. During the process, members of the IUCN Global Species Programme, Red List Unit based in Cambridge-UK, the IUCN Species Survival Commission, technical team members of the Red List unit of IUCN Bangladesh, Bangladesh Forest Department officials, officials from the Department of Fisheries, faculties of the universities, scientists of the research institutes, as well as conservationists, species specialists, nature lovers, and partner organizations and other governmental agencies worked closely to ensure most accurate information and analysis of the most current status, trends and threats to wildlife species in Bangladesh. For this purpose, an inter-ministerial committee named 'National Committee for Updating Species Red List of Bangladesh (NC-USR)' was formed to ensure highest level collaboration among involved organizations, and sustainability of the outcome of the assessment at the policy level. Seven Red List Assessor Groups (RAGs) at project level led by renown species specialists have been

formed to coordinate the assessment process engaging species specialists/assessors. In this course of assessment of the species strategies adapted to reduce knowledge gaps, influence national conservation, and build national capacity. A total of 1619 species status under seven groups of wildlife (Mammals, Reptiles, Amphibians, Birds, Freshwater Fishes, Crustaceans and Butterflies) have been assessed. Moreover, 160 assessors were trained on the latest Red List assessment guideline (ver 3.1) engaging certified red list trainers from IUCN Red List Unit, Cambridge, UK. A vigorous work process was applied to finish the assessment within the given timeframe ensuring highest quality, using latest species information and sharing through wider dissemination among expert groups. An interactive website (www.iucnredlistbd.org) was also published to ensure participation of all stakeholders in the assessment process as well as collecting public opinion on the draft assessment. Assessment was started in July, 2014 and stopped in November, 2015, while the project duration was from December, 2013 to June, 2016.

2.1. Red List Assessment: from Field to Publication

Categorization of Red List and criteria set up following latest Red List guideline, managing and storing the documents supporting the category and criteria of a species, and a map of species' distribution are the components of the Red List assessment. Before an assessment can be published on the Red List, it goes through a rigorous approval process (Figure in next page), which is one of the reasons that Red List is respected and valued for informing



Red List assessment process

conservation decisions. This process differed slightly depending on the assessors expertise but the basic process involved was: First, an individual assessor was assigned to assess one species or multiple species based on his/her expertise. The convening experts assessed and compiled the data for all the species that were assigned through the project. This information often comes from published books, articles, reports and research findings but information from the grey literatures (unpublished material) and scientists' years of experience and observations were also used. Experts then examined the data and assigned a Red List category, and criteria for the species (often working with trained project staff). They also demarcated a range map and provided supporting documentations that justify the assessment. These draft assessments were then reviewed in three steps to check and make sure that all relevant data have included in the assessment, and the assessment was done using the most appropriate available data. Lead assessors of the respective animal groups were the first reviewers to provide comments and suggestions on the initial assessment by the assessors. The assessors then had to share their findings in a monthly review workshop participated by different wildlife specialists

incorporating lead assessors comments. If there were any problems, it was returned to the assessors with an explanation of further improvement. After the further improvement, if everything was in place, the reviewers approve the assessment and let the assessor know it was ready for submission. The assessor then checked all the assessments for consistency, proofreading and formatting before submitting to the IUCN Red List Project Unit. The Red List Project Unit scanned the assessments for obvious errors and quality was checked through engaging independent technical reviewers. If there were problems, the assessment further returned to the assessor for improvement. Lead assessors worked with the technical reviewers following a multi-step review process before sending the assessments for final approval by the Chief National Technical Expert (CNTE). Lead assessors meeting was held at regular interval to monitor progress of the assessment. The project also organized field investigations using sophisticated wildlife survey techniques and tools to collect missing data and information that required to make conclusive assessment of some important species. In addition, surveys were carried out in different museums owned by academic and research institutions of the country to know

more about the historic information of different species. Besides, to enhance exposure of the draft assessment, number of dissemination events were organized in collaboration of different organizations throughout the project period in all over the country. Finally, if the assessments were accepted by CNTE, they were properly documented. All the assessment sheets including species photographs, distribution maps and others necessary documents were also recorded in a computer based database- finally published on the Red List website (www.iucnredlistbd.org) and Red List books containing seven volumes.

2.2. Red List Assessment Tools

All the assessors were trained on latest assessment guideline and its application at the local level context. Two major tools applied during the assessment process were respectively 'IUCN Red List Categories and Criteria Version 3.1 (IUCN 2012)' and 'Guidelines for Application of IUCN Red List Criteria at Regional and National Levels Version 4.0 (IUCN 2012)' prepared by IUCN Species Survival Commission (SSC). Both of these tools are available online (www.iucnredlist.org and www.iucnredlistbd.org).

A species assessment sheet designed purposefully by the IUCN Red List Unit was used for assessing an individual taxon. A sample copy of the Assessment Sheet is provided in Appendix-iii.

A wide range of information were required for the assessment of species. These included, among others, species taxonomic classification and synonyms, assessment history- global and regional, global and local distribution ranges, population size and trend, Extent of Occurrence (EOO), Area of Occupancy (AOO), habitat preferences and habits, major threats and conservation measures in practice, etc.

GIS software was used to estimate AOO and EOO to assess the distribution of the taxon plotting on a 2 km² grid map of Bangladesh. The geographic range of present assessment included all the areas within the political boundary of Bangladesh, including coastal territorial waters. It included rivers, flat lands areas, reservoirs, hilly areas, mangrove areas and the estuaries. However, the assessment process sometimes considered the distributional ranges of some species in its catchment areas beyond political boundary, particularly estimating EOO, in that case, a dot line was used on the map for that particular species.

All species have given a Species Identification Number i.e. SID for the first time in Bangladesh, which will ensure a systematic national web-based Red List database that was synchronized with the published books. Species photographs and distribution maps were also aligned with this SID. Moreover, the assessment process also generated a large number of data sheets containing relevant and required information at various stages of the assessment.



Participants of the 5th training workshop on the Red List Assessment Process

In addition, large quantity of resource materials related to training, workshops, published and grey literatures on species were collected. All these information and materials have been electronically preserved in a purposefully designed database system in the IUCN Bangladesh Country Office to be managed in the future by the IUCN itself or the Bangladesh Forest Department. This would be used as a depository of resources and could be inspected and used by stakeholders.

Red List guideline has a number of technical terms used in different section of this document to represent assessment categories and criteria of a taxon, which are described in an Appendix-iv.

2.3. Red List Assessment Guideline (version 3.1)¹

2.3.1. Taxonomic Range of the Assessment

Regional Red List assessment initiatives are always encouraged to follow the same taxonomic checklists as used by the global IUCN Red List (See www.iucnredlist.org/technical-documents/information-source-and-quality). For other taxonomic groups or any deviations from the recommended list, the differences and the taxonomic authorities followed should be specified. The categorization process should be applied only to wild populations inside their natural range and to populations resulting from benign introductions (IUCN 1998, 2001, 2012). All taxa should be assessed for which an important part of any stage of their life cycle (breeding, wintering, migrating, etc.) takes place in the region. The regional Red List should include all globally red listed taxa present within the region, including those that are Not Applicable (NA) at the regional level, and the global category should not be displayed alongside the regional assessment. Taxa formerly considered Regionally Extinct (RE) that naturally re-colonize the region may be assessed after the first year of reproduction. Re-introduced, formerly RE taxa may be assessed as soon as at least a

part of the population successfully reproduces without direct support and the offspring are shown to be viable. Assessors are encouraged to assess visiting taxa. Vagrant taxa should NOT be assessed.

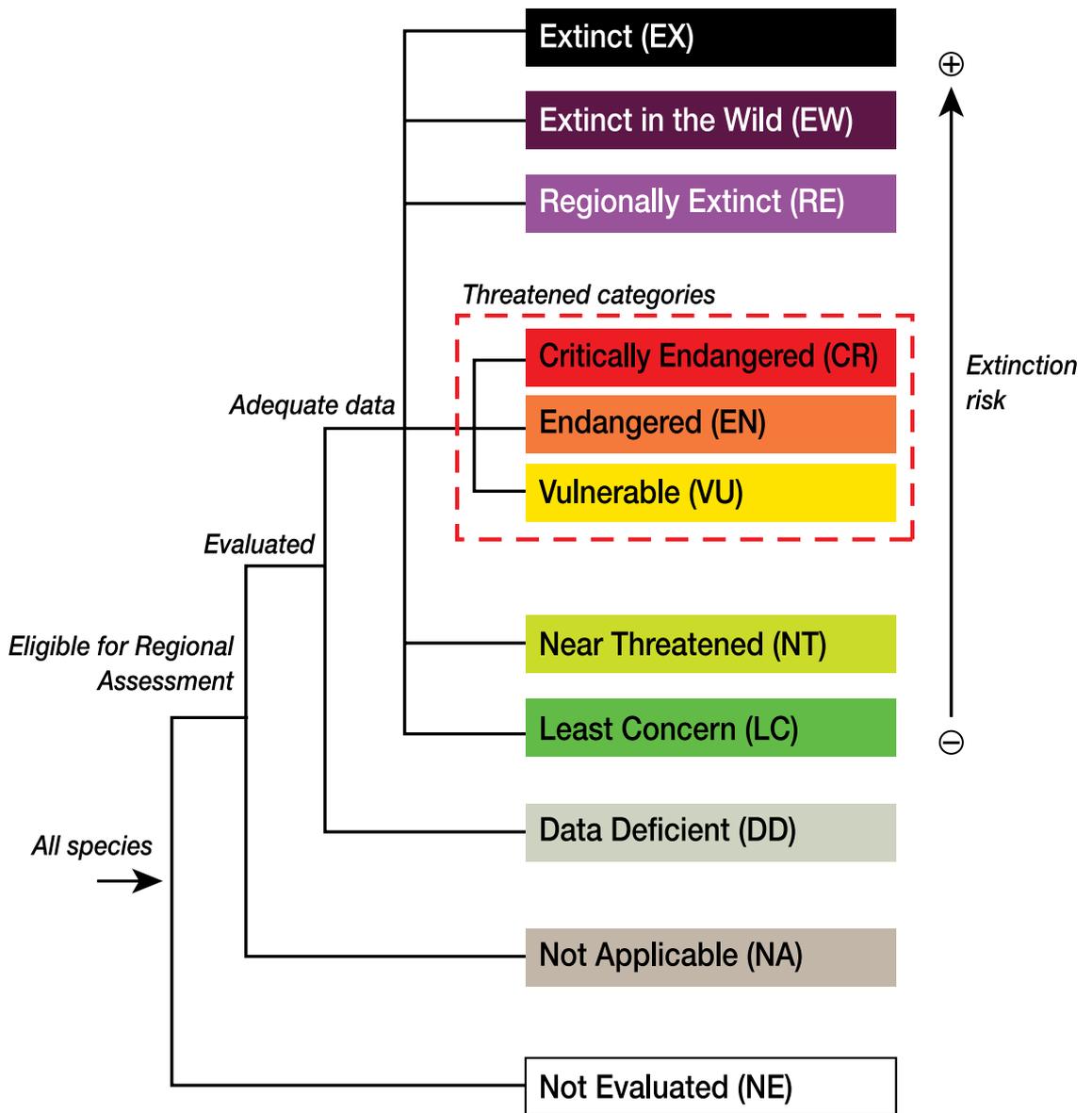
Following the conditional issues of regional assessment in the case of reptiles group as described earlier, taxonomic checklists of the Uetz and Jirí Ro ek (2015) was used after selection of all 167 reptiles species, which are also included according to the list of M.A.R. Khan 2010, 2015 and Hasan *et al.* 2014.

Similarly, in the case of amphibians group in the taxonomy and nomenclature was followed from Frost (2013), which has also followed by Hasan *et al.* (2014), in order to list the 49 amphibian species for national assessment for which there are confirmed record yet was not considered for assessment.

2.3.2. Categories

The information in this section is intended to direct and facilitate the use and interpretation of the categories, criteria and subcriteria. The criteria applied to any taxonomic unit at or below species level. In this document, the term 'taxon' is used for convenience, and may represent species or lower taxonomic levels. The Red List Categories considered were as set out in IUCN Red List Categories and Criteria Version 3.1. There are nine categories at global scale, ranging from Least Concern (LC) for species that are not threatened, to the Extinct (EX) Category, for species that have disappeared from the earth. The IUCN Red List Categories and Criteria were designed for global taxon assessments. Hence, applying them to subsets of global data, especially at regional, national or local levels needs to refer to the guidelines prepared by the IUCN/SSC Regional Applications Working Group and the National Red List Working Group of the IUCN SSC Red List Committee (e.g. Gardenfors *et al.* 2001; IUCN 2003, 2012). All the rules and

¹ This is a shorter form of general guideline summarizing most common rules appropriate for Bangladesh, adapted from 'IUCN Red List categories and criteria version 3.1 (IUCN 2012)' and 'Guidelines for application of IUCN Red List criteria at regional and national levels version 4.0 (IUCN 2012)'. It is purposely written in present form of sentences so that it can be reutilized as a guiding principle for any future Red List Assessment in Bangladesh.



Red List Categories (Regional/National Level) (IUCN 2012)

definitions in the IUCN Red List Categories and Criteria: Version 3.1 (IUCN 2001, 2012) apply at regional levels, unless otherwise indicated in the above regional guideline.

When applied at national or regional levels it must be recognized that a global category may not be the same as a national or regional category for a particular taxon. For example, taxa classified as Least Concern globally might be Critically Endangered within a particular region where numbers are very small or declining, perhaps only because they are at the margins of their global range. Conversely, taxa classified as Vulnerable on the basis of their global declines in numbers or range might be Least Concern within a particular region where their population are stable. Similar results were found in the cases of current assessment, many species assessment results differed from their category assessed at the global level.

It is also important to note that taxa endemic to regions or nations will be assessed globally in any regional or national applications of the criteria, and in these cases great care must be taken to check that an assessment has not already been undertaken by a Red List Authority (RLA), and that the categorization is agreed with relevant RLA. In Bangladesh, during this assessment process, no such endemic species were assessed that needed to be considered for above steps. However, following the regional assessment guideline two more categories were applied (IUCN, 2012), Regionally Extinct (RE) for those species extinct locally but still exist elsewhere and Not Applicable (NA) for species those are not native to the region or country concerned. All taxa listed as Critically Endangered qualify for Vulnerable and Endangered, and all listed as Endangered qualify for Vulnerable. Together these categories are described as 'threatened'. The threatened categories form a part of the overall scheme. All the taxa were placed into one of the categories listed in the Figure of previous page.

Explanation of the above categories is given below:

EXTINCT (EX)

A taxon is Extinct when there is no reasonable

doubt that the last individual has died. A taxon is presumed Extinct when exhaustive surveys in known and/or expected habitat, at appropriate times (diurnal, seasonal, annual), throughout its historic range have failed to record an individual. Surveys should be over a time frame appropriate to the taxon's life cycle and life form.

EXTINCT IN THE WILD (EW)

A taxon is Extinct in the Wild when it is known only to survive in cultivation, in captivity or as a naturalized population (or populations) well outside the past range. A taxon is presumed Extinct in the Wild when exhaustive surveys in known and/or expected habitat, at appropriate times (diurnal, seasonal, annual), throughout its historic range have failed to record an individual. Surveys should be over a time frame appropriate to the taxon's life cycle and life form.

REGIONALLY EXTINCT (RE)

Category for a taxon when there is no reasonable doubt that the last individual potentially capable of reproduction within the region has died or has disappeared from the wild in the region, or when, if it is a former visiting taxon, the last individual has died or disappeared in the wild from the region. The setting of any time limit for listing under RE is left to the discretion of the regional Red List authority, but should not normally pre-date 1500 AD.

CRITICALLY ENDANGERED (CR)

A taxon is Critically Endangered when the best available evidence indicates that it meets any of the criteria A to E for Critically Endangered, and it is therefore considered to be facing an extremely high risk of extinction in the wild.

ENDANGERED (EN)

A taxon is Endangered when the best available evidence indicates that it meets any of the criteria A to E for Endangered, and it is therefore considered to be facing a very high risk of extinction in the wild.

VULNERABLE (VU)

A taxon is Vulnerable when the best available evidence indicates that it meets any of the criteria A to E for Vulnerable, and it is therefore considered to be facing a high risk of extinction in the wild.

NEAR THREATENED (NT)

A taxon is Near Threatened when it has been evaluated against the criteria but does not qualify for Critically Endangered, Endangered or Vulnerable now, but is close to qualifying for or is likely to qualify for a threatened category in the near future.

LEAST CONCERN (LC)

A taxon is Least Concern when it has been evaluated against the criteria and does not qualify for Critically Endangered, Endangered, Vulnerable or Near Threatened. Widespread and abundant taxa are included in this category.

DATA DEFICIENT (DD)

A taxon is Data Deficient when there is inadequate information to make a direct, or indirect, assessment of its risk of extinction based on its distribution and/or population status. A taxon in this category may be well studied, and its biology well known, but appropriate data on abundance and/or distribution are lacking. Data Deficient is therefore not a category of threat. Listing of taxa in this category indicates that more information is required and acknowledges the possibility that future research will show that threatened classification is appropriate. It is important to make positive use of whatever data are available. In many cases great care should be exercised in choosing between DD and a threatened status. If the range of a taxon is suspected to be relatively circumscribed, and a considerable period of time has elapsed since the last record of the taxon, threatened status may well be justified.

NOT EVALUATED (NE)

A taxon is Not Evaluated when it has not yet been evaluated against the criteria.

NOT APPLICABLE (NA)

Category for a taxon deemed to be ineligible for assessment at a regional level. A taxon may be NA because it is not a wild population or not within its natural range in the region, or because it is a vagrant to the region. It may also be NA because it occurs at very low numbers in the region (i.e. when the regional Red List authority

has decided to use a “filter” to exclude taxa before the assessment procedure) or the taxon may be classified at a lower taxonomic level (e.g. below the level of species or subspecies) than considered eligible by the regional Red List authority. In contrast to other Red List Categories, it is not mandatory to use NA for all taxa to which it applies; but is recommended for taxa where its use is informative.

2.3.3. Criteria for Critically Endangered, Endangered and Vulnerable

The Red List Assessment is based primarily on five broad Criteria as follows:

- **Criteria A:** Population reduction (measured in percent reduction of population) for different threatened categories. This criterion has four sub-criteria which further take into accounts four factors.
- **Criteria B:** Geographic range in the form of either B1 (Extent of Occurrences-EOO) and B2 (Area of Occupancy-AOO)
- **Criteria C:** Applicable for small population size and decline
- **Criteria D:** Applicable for very small or restricted population (used in terms of number of mature individuals)
- **Criteria E:** Relates to Qualitative Analysis

CRITICALLY ENDANGERED (CR)

A taxon is Critically Endangered when the best available evidence indicates that it meets any of the following criteria (A to E), and it is therefore considered to be facing an extremely high risk of extinction in the wild:

- A. Reduction in population size based on any of the following:
 1. An observed, estimated, inferred or suspected population size reduction of $\geq 90\%$ over the last 10 years or three generations, whichever is the longer, where the causes of the reduction are clearly reversible AND understood AND ceased, based on (and specifying) any of the following:
 - (a) direct observation
 - (b) an index of abundance appropriate to the taxon
 - (c) a decline in area of occupancy, extent of occurrence and/or quality

- of habitat
 - (d) actual or potential levels of exploitation
 - (e) the effects of introduced taxa, hybridization, pathogens, pollutants, competitors or parasites.
2. An observed, estimated, inferred or suspected population size reduction of $\geq 80\%$ over the last 10 years or three generations, whichever is the longer, where the reduction or its causes may not have ceased OR may not be understood or may not be reversible, based on (and specifying) any of (a) to (e) under A1.
 3. A population size reduction of $\geq 80\%$, projected or suspected to be met within the next 10 years or three generations, whichever is the longer (up to a maximum of 100 years), based on (and specifying) any of (b) to (e) under A1.
 4. An observed, estimated, inferred, projected or suspected population size reduction of $\geq 80\%$ over any 10 year or three generation period, whichever is longer (up to a maximum of 100 years in the future), where the time period must include both the past and the future, and where the reduction or its causes may not have ceased OR may not be understood OR may not be reversible, based on (and specifying) any of (a) to (e) under A1.
- B. Geographic range in the form of either B1 (extent of occurrence) OR B2 (area of occupancy) OR both:
1. Extent of occurrence estimated to be less than 100 km², and estimates indicating at least two of a-c:
 - (a) Severely fragmented or known to exist at only a single location.
 - (b) Continuing decline, observed, inferred or projected, in any of the following:
 - i) extent of occurrence
 - ii) area of occupancy
 - iii) area, extent and/or quality of habitat
2. Area of occupancy estimated to be less than 10 km², and estimate indicating at least two of a-c:
 - (a) Severely fragmented or known to exist at only a single location.
 - (b) Continuing decline, observed, inferred or projected, in any of the following:
 - i) extent of occurrence
 - ii) area of occupancy
 - iii) area, extent and/or quality of habitat
 - iv) number of locations or subpopulations
 - v) number of mature individuals.
 - (c) Extreme fluctuations in any of the following:
 - i) extent of occurrence
 - ii) area of occupancy
 - iii) number of locations or subpopulations
 - iv) number of mature individuals.
- C. Population size estimated to number fewer than 250 mature individuals and either:
1. An estimated continuing decline of at least 25% within three years or one generation, whichever is longer, (up to a maximum of 100 years in the future) OR
 2. A continuing decline, observed, projected, or inferred, in numbers of mature individuals AND at least one of the following (a-b):
 - (a) Population structure in the form of one of the following:
 - i) no subpopulation estimated to contain more than 50 mature individuals,
- OR

- ii) at least 90% of mature individuals in one subpopulation.
- (b) Extreme fluctuations in number of mature individuals.
- D. Population size estimated to number fewer than 50 mature individuals.
- E. Quantitative analysis showing the probability of extinction in the wild is at least 50% within 10 years or three generations, whichever is the longer (up to a maximum of 100 years).

ENDANGERED (EN)

A taxon is Endangered when the best available evidence indicates that it meets any of the following criteria (A to E), and it is therefore considered to be facing a very high risk of extinction in the wild:

- A. Reduction in population size based on any of the following:
 - 1. An observed, estimated, inferred or suspected population size reduction of $\geq 70\%$ over the last 10 years or three generations, whichever is the longer, where the causes of the reduction are clearly reversible AND understood AND ceased, based on (and specifying) any of the following:
 - (a) direct observation
 - (b) an index of abundance appropriate to the taxon
 - (c) a decline in area of occupancy, extent of occurrence and/or quality of habitat
 - (d) actual or potential levels of exploitation
 - (e) the effects of introduced taxa, hybridization, pathogens, pollutants, competitors or parasites.
 - 2. An observed, estimated, inferred or suspected population size reduction of $\geq 50\%$ over the last 10 years or three generations, whichever is the longer, where the reduction or its causes may not have ceased OR may not be understood OR may not be reversible, based on (and specifying) any of (a) to (e) under A1.
- B. Geographic range in the form of either B1 (extent of occurrence) OR B2 (area of occupancy) OR both:
 - 1. Extent of occurrence estimated to be less than 5,000 km², and estimates indicating at least two of a-c:
 - (a) Severely fragmented or known to exist at no more than five locations.
 - (b) Continuing decline, observed, inferred or projected, in any of the following:
 - i) extent of occurrence
 - ii) area of occupancy
 - iii) area, extent and/or quality of habitat
 - iv) number of locations or subpopulations
 - v) number of mature individuals.
 - (c) Extreme fluctuations in any of the following:
 - i) extent of occurrence
 - ii) area of occupancy
 - iii) number of locations or subpopulations
 - iv) number of mature individuals.
 - 2. Area of occupancy estimated to be less than 500 km², and estimates indicating at least two of a-c:
 - (a) Severely fragmented or known

to exist at no more than five locations.

- (b) Continuing decline, observed, inferred or projected, in any of the following:
 - i) extent of occurrence
 - ii) area of occupancy
 - iii) area, extent and/or quality of habitat
 - iv) number of locations or subpopulations
 - v) number of mature individuals.
 - (c) Extreme fluctuations in any of the following:
 - i) extent of occurrence
 - ii) area of occupancy
 - iii) number of locations or subpopulations
 - iv) number of mature individuals.
- C. Population size estimated to number fewer than 2,500 mature individuals and either:
- 1. An estimated continuing decline of at least 20% within five years or two generations, whichever is longer, (up to a maximum of 100 years in the future) OR
 - 2. A continuing decline, observed, projected, or inferred, in numbers of mature individuals AND at least one of the following (a-b):
 - (a) Population structure in the form of one of the following:
 - i) no subpopulation estimated to contain more than 250 mature individuals,OR
 - ii) at least 95% of mature individuals in one subpopulation.
 - (b) Extreme fluctuations in number of mature individuals.
- D. Population size estimated to number fewer than 250 mature individuals.
- E. Quantitative analysis showing the probability of extinction in the wild is at least 20% within 20 years or five generations, whichever is the longer (up to a maximum of 100 years).

VULNERABLE (VU)

A taxon is Vulnerable when the best available evidence indicates that it meets any of the following criteria (A to E), and it is therefore considered to be facing a high risk of extinction in the wild:

- A. Reduction in population size based on any of the following:
 - 1. An observed, estimated, inferred or suspected population size reduction of $\geq 50\%$ over the last 10 years or three generations, whichever is the longer, where the causes of the reduction are clearly reversible AND understood AND ceased, based on (and specifying) any of the following:
 - (a) direct observation
 - (b) an index of abundance appropriate to the taxon
 - (c) a decline in area of occupancy, extent of occurrence and/or quality of habitat
 - (d) actual or potential levels of exploitation
 - (e) the effects of introduced taxa, hybridization, pathogens, pollutants, competitors or parasites.
 - 2. An observed, estimated, inferred or suspected population size reduction of $\geq 30\%$ over the last 10 years or three generations, whichever is the longer, where the reduction or its causes may not have ceased or may not be understood or may not be reversible, based on (and specifying) any of (a) to (e) under A1.
 - 3. A population size reduction of $\geq 30\%$ projected or suspected to be met within the next 10 years or three generations, whichever is the longer (up to a maximum of 100 years), based on (and specifying) any of (b) to (e) under A1.
 - 4. An observed, estimated, inferred, projected or suspected population size reduction of $\geq 30\%$ over any 10 year or three generation period, whichever is longer (up to a maximum of 100 years in the future), where the time period

must include both the past and the future, AND where the reduction or its causes may not have ceased OR may not be understood OR may not be reversible, based on (and specifying) any of (a) to (e) under A1.

- B. Geographic range in the form of either B1 (extent of occurrence) OR B2 (area of occupancy) OR both:
1. Extent of occurrence estimated to be less than 20,000 km², and estimates indicating at least two of a-c:
 - (a) Severely fragmented or known to exist at no more than 10 locations.
 - (b) Continuing decline, observed, inferred or projected, in any of the following:
 - i) extent of occurrence
 - ii) area of occupancy
 - iii) area, extent and/or quality of habitat
 - iv) number of locations or subpopulations
 - v) number of mature individuals.
 - (c) Extreme fluctuations in any of the following:
 - i) extent of occurrence
 - ii) area of occupancy
 - iii) number of locations or subpopulations
 - iv) number of mature individuals.
 2. Area of occupancy estimated to be less than 2,000 km², and estimates indicating at least two of a-c:
 - (a) Severely fragmented or known to exist at no more than 10 locations.
 - (b) Continuing decline, observed, inferred or projected, in any of the following:
 - i) extent of occurrence
 - ii) area of occupancy
 - iii) area, extent and/or quality of habitat
 - iv) number of locations or subpopulations
 - v) number of mature individuals.
 - (c) Extreme fluctuations in any of the following:
 - i) extent of occurrence
 - ii) area of occupancy

- iii) number of locations or subpopulations
- (iv) number of mature individuals.

- C. Population size estimated to number fewer than 10,000 mature individuals and either:
1. An estimated continuing decline of at least 10% within 10 years or three generations, whichever is longer, (up to a maximum of 100 years in the future) OR
 2. A continuing decline, observed, projected, or inferred, in numbers of mature individuals AND at least one of the following (a-b):
 - (a) Population structure in the form of one of the following:
 - i) no subpopulation estimated to contain more than 1,000 mature individuals,OR
 - ii) all mature individuals in one subpopulation.
 - (b) Extreme fluctuations in number of mature individuals.
- D. Population very small or restricted in the form of either of the following:
1. Population size estimated to number fewer than 1,000 mature individuals.
 2. Population with a very restricted area of occupancy (typically less than 20 km²) or number of locations (typically five or fewer) such that it is prone to the effects of human activities or stochastic events within a very short time period in an uncertain future, and is thus capable of becoming Critically Endangered or even Extinct in a very short time period.
- E. Quantitative analysis showing the probability of extinction in the wild is at least 10% within 100 years.

See Appendix-v for a summary of five criteria used to evaluate if a taxon belongs to an IUCN Red List threatened category i.e. Critically Endangered, Endangered or Vulnerable.



1st Meeting of the National Red List Committee



Regional Dissemination Workshop held in Bangladesh Agricultural University

STATUS OF REPTILES IN BANGLADESH



3. STATUS OF REPTILES IN BANGLADESH

3.1. Present Status of Reptiles

One hundred-ten species of reptile assessed in 2000 (IUCN Bangladesh 2000b) of which one was declared Extinct, 58 (i.e., 53%) were asserted under threatened categories and 51 (46%) in other categories. In 2015, 167 species are assessed of which one is extinct, 38 (i.e., 23%) are in threatened categories and 128 (i.e., 77%) in other categories (Table 1, Figure 2ab). The number of species assessed in 2015 is one-and-half more than 2000's assessment but the threatened categories are less than half of the previous one. This is because the activities of wildlife researchers in the field has increased in manifolds by new emerging scientists that have provided us a landable amount of information in this field, though the reptile habitats of Bangladesh have degraded than before.

The assessment of 167 species of reptile was based on reliable published and

unpublished information available during the assessment process. One species (marsh crocodile, *Crocodylus palustris*) has been declared extirpated from the natural habitat of Bangladesh (Khan 1982b, IUCN 2000). However, a handful specimens have been brought from India and distributed to few zoos and safari parks (as well as in the shrine pond of Khan Jahan Ali of Bagherhat) managed by the Bangladesh Government. No reintroduction attempt with any reptile species has yet been made in natural habitat. Moreover, 16% (i.e., 27 sps) species is identified as Data Deficient and 12% (i.e., 20 sps) Not Evaluated, because of enough data were not available to properly assess the status of these species (Table 1). It is feared that some of the species in Data Deficient Category could actually be threatened when proper information on these are available. Status of all 167 Reptiles is shown in Appendix-i.

Table 1. Number of Reptile Species Assessed under Different Categories in 2000 and 2015.

| Year | Total Species | EX/RE | CR | EN | VU | Total Threatened Species | NT | NO | LC | DD | NE |
|------|---------------|-------|----|----|----|--------------------------|-----|-----|-----|----|-----|
| 2000 | 110 | 1 | 12 | 24 | 22 | 58 | N/A | 12 | N/A | 39 | N/A |
| 2015 | 167 | 1 | 17 | 10 | 11 | 38 | 18 | N/A | 63 | 27 | 20 |

Status Code: EX-Extinct, RE-Regionally Extinct, CR-Critically Endangered, EN-Endangered, VU-Vulnerable, NT-Near Threatened, NO-Not Threatened, LC-Least Concern, DD-Data Deficient, NE-Not Evaluated

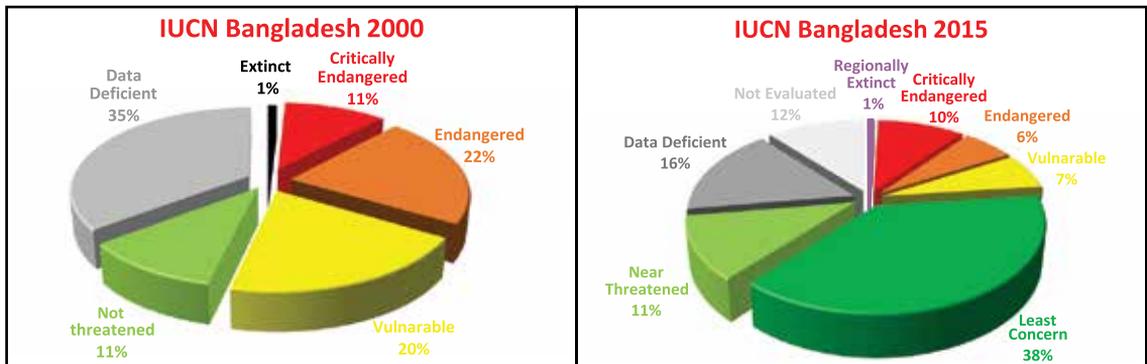


Figure 2a: Reptile species (%) in different categories in 2000 assessment.

Figure 2b: Reptile species (%) in different categories in 2015 assessment.

3.2. Status by Taxonomic Groups

During this assessment 38 of 167 species (i.e., 22.8%) of reptiles are found to be in threatened categories of which 22 species (i.e., 13.2%) of Testudines, 14 species (i.e., 8.4%, 6 species of lizards and 8 species of snakes) of Squamata and 2 species (i.e., 1.2%) of Crocodylia (Table 2). On the other hand, most of the reptile species (128 i.e., 76.6%) are not in threatened categories that include 8 species (i.e., 4.8%)

have included some species for which there is no evidence of occurrence but these are likely to occur in Bangladesh. Two separate lists of reptiles have been given in Hasan *et al.* (2014): one contained 137 species for which there are evidences (publication, specimen or photo) and the other 27 species for those evidences of occurrence are lacking but are likely to occur in Bangladesh. Besides, there are a few late confirmed records based either on specimens and/or photographs (e.g., Arakan

Table 2. Order-wise Species Categories of Reptiles

| Order | RE | CR | EN | VU | Total Threatened Category | | NT | LC | DD | NE | Total Not Threatened Category | | Grant Total |
|--------------|-----------|-----------|-----------|-----------|---------------------------|-------------|-----------|-----------|-----------|-----------|-------------------------------|-------------|-------------|
| | | | | | No. | % | | | | | No. | % | |
| | | | | | | | | | | | | | |
| Testudines | 0 | 14 | 4 | 4 | 22 | 13.2 | 4 | 3 | 1 | 0 | 8 | 4.8 | 30 |
| Squamata | 0 | 2 | 5 | 7 | 14 | 8.4 | 14 | 60 | 26 | 20 | 120 | 71.8 | 134 |
| Crocodylia | 1* | 1 | 1 | 0 | 2 | 1.2 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| Total | 1* | 17 | 10 | 11 | 38 | 22.8 | 18 | 63 | 27 | 20 | 128 | 76.6 | 167 |

Status Code: RE-Regionally Extinct, CR-Critically Endangered, EN-Endangered, VU-Vulnerable, NT-Near Threatened, LC-Least Concern, DD-Data Deficient, NE-Not Evaluated
* is included in the total number of assessed species.

of Testudines and 120 species (i.e., 71.8%) of Squamata (Table 2).

On the other hand, within the groups, majority of the Testudines (22 of 30 i.e., 73.3%) are in threatened categories and most of the Squamata (120 of 134 i.e., 89.6%) are not in threatened categories. Moreover two of three species of Crocodylia are threatened and one is regionally extinct (Table 2).

3.3. Constraints to the Assessment

The challenge of assessing reptiles of Bangladesh was the lack of information, together with the validity of the available information. Except some common species that occur in a wide range of habitats, reptiles are generally very secretive, nocturnal and/or crepuscular. Limited number of researchers is working on reptiles especially on lizards, skinks and snakes. There is a general mass fear of snakes. Moreover, there are just a handful of experts on reptiles in Bangladesh to assess the species.

There are quite a few publications on reptiles' status and distributions in Bangladesh and most of them are compiled works. These lists

Forest Turtle (*Heosemys depressa*), Lesser Black Krait (*Bungarus lividus*), etc.) but did not qualify to any threatened category due to lack of information. Therefore, these should not be considered as the species with no threat but be given the same degree of attention as any other threatened taxa, at least until the necessary information are gathered and their status assessed properly.

3.4. Distribution of Threatened Reptiles by Different Geographic Ranges of Bangladesh

The geographic distribution of threatened species of reptiles are mostly concentrated in the east and southeast, and along the coast of the Bay of Bengal then to the northeast regions of Bangladesh (Figure 3). In fact, most of the reptiles species are also distributed in the east, southeast and northeast parts where mixed evergreen forests of the country exist and human density is very low. These areas are unique in a sense that unlike the rest of Bangladesh, these are hilly areas having wide variation of altitudes, together with a range of habitats like mixed evergreen forests, bamboo groves, grasslands, lakes, rivers, streams and pools. These are

the most biodiverse areas in Bangladesh and the last strongholds for a number of nationally threatened species. On the other hand, northwest region safeguards comparatively less number of species, so have the very less (low) number of threatened species. Nearly two-third areas of the country support less number of threatened species because these are more urbanized densely populated than other parts of the country. The southwest part supports a moderate number of threatened species because it covers the mangrove Sundarbans where human population is very low and their access is very limited. Considering civil district-wise distribution of threatened species of reptiles (except Chittagong Hill Tracts and Rangamati that are less visited areas by the researchers due to remoteness and communication). Bandarban

(23 threatened species) and Chittagong (22 species) come in front and both Joypurhat (4 species) and Thakurgaon (4 species) approach rear (Figure 3). The former two districts support higher numbers of the threatened reptile species because of higher proportion of habitats are available as well these are less urbanized and thinly populated, while the later two districts have a lesser proportion of habitats for reptiles and are more urbanized and populated. Interestingly, the coastal shore line areas support the highest number of species of threatened reptiles that cover in fact several districts as well as five species sea turtles very occasionally come to lay eggs in those areas has increased the number of species. List of the threatened reptile species is given in Table 3.

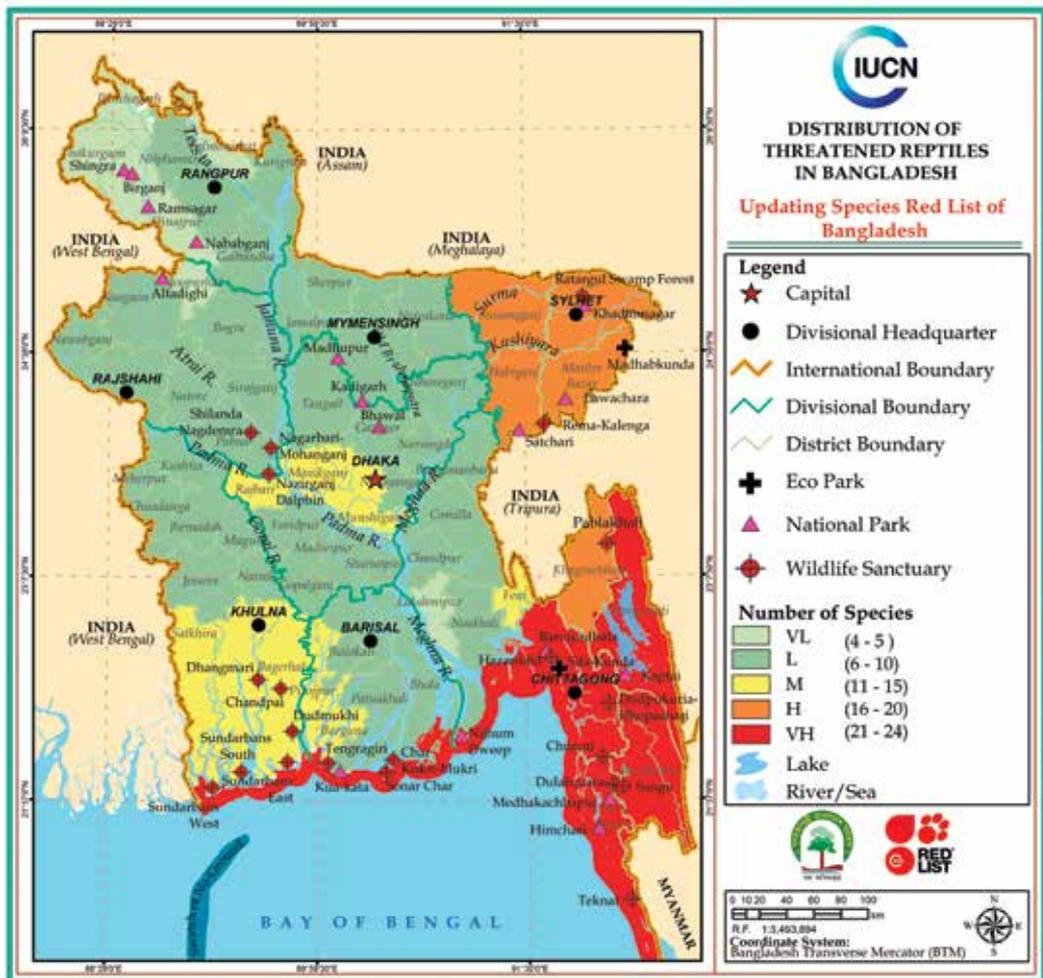


Figure 3: Distribution of threatened reptiles in Bangladesh

3.5. Threats to Reptiles of Bangladesh

The important threats to reptiles in Bangladesh are the loss, degradation and conversion of all types of natural habitat that are being continuously being converted into agricultural land, human habitation, and industrial and other infrastructural developments. As a result, the reptiles of these areas are either completely wiped out or moved in areas where most of them starved to death. Some habitats are degraded or converted in such a way that the areas have significantly reduced their capacities to support reptiles. For instance, when a natural wetland is converted for commercial fish culture, although the area still remains as a wetland but gets reduced in its capacity to support reptiles.

The industrial and household pollutants and litter are often disposed in the natural environment, particularly in water. This pollutes the entire ecosystem of the surroundings and in the downstream areas. Since the turtles depend on the water in many ways, the pollution directly affects the reptilian populations. As a consequence, the reptiles are killed, their breeding is hampered and their food diminished.

The indiscriminate use of insecticides and other agrochemicals is the second important threats to reptiles. Different type of insecticides and other agrochemicals are widely used in the agricultural fields in the plains and in the hills. Previously these chemicals were not used in the hilly areas in the southeast and northeast of the country but due to the development of roads and communication these have reached virtually all over the country. In the tea gardens, surrounding the natural and semi-natural forest patches of Greater Sylhet, not only the insecticides but herbicides are used. All the agrochemicals are washed by the rain water and spread in the surrounding areas, including the natural forests and wetlands, through the water. Since the insects are the principal food of lizards, skinks and snakes, they get poisoned by feeding on poisoned insects. Even if the poison dose is minimum, these reptiles

eventually die or become sick due to biological magnification of the poison in their bodies.

In the narrow creeks of the Sundarbans and in hill streams in the northeast, east and southeast of Bangladesh, poison fishing is occasionally and illegally practiced. This is mainly done in the Government-owned forested areas where fishing is prohibited. Although it is strictly prohibited, some people do it secretly for personal gain. In this process the poison is poured into the water so that all the dying fish and shrimps float on the surface and people can easily harvest them in a short period of time. During this process the non-target frogs and tadpoles also die. As a consequence of this, the reptiles (lizards, skinks and snakes) face food shortage.

In the hills (Chittagong Hill Tracts and Greater Sylhet) and plains (Greater Mymensingh, Dinajpur and Rangpur) where the people of small ethnic groups hunt turtles, varanids and larger snakes for meat whenever they encounter those animals. In many places of the country, turtles are sold in the local markets (Figure 4a) with relatively high price (BDT 200-500/kg, BDT 80 equivalent to 1 US\$). The demand is so high that turtles have become rare in the natural habitat and their supplies mainly come from the nearby districts and even from India.

During the present evaluation process of IUCN Red List, several threats are identified/recognized for the declining/decreasing of reptiles population in the country. These are habitat loss due to destruction, degradation, fragmentation, encroachment, shrinking forests, clearing forest edge and floor, illegal logging, urbanization, jhum cultivation, developmental activities, deforestation, and over exploitation of forest, forest products and potential habitat of wildlife.

3.5.1. *Habitat Loss, Degradation and Fragmentation*

Reptile habitats are being destroyed and fragmented in an alarming rate because of



Figure 4a: Turtles selling in the market

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Figure 4b: Burning of habitats in order to expand the agricultural Land

© M. Monirul H. Khan

accelerating human population pressure and different anthropogenic factors. Fuel wood collection is a regular event by the people living in and around the forest for their daily demand. But large scale commercial extraction of fuel wood severely affects reptilian habitats. Bush and different undergrowth are mostly affected by fuel wood extraction and eventually affect terrestrial and fossorial reptiles. Extension of agricultural products in the forested areas (Figure 4b) is also destroying the habitat of reptiles. Grazing of livestock is adding the edge effect to shrinking habitat of reptiles forests. Large scale urbanization are fragmenting wildlife habitat in the country causing death toll of reptiles in the roads through forest habitats (Rahman *et al.* 2015).

3.5.2. Human-reptile Conflict

Human-wildlife conflict is a growing concern worldwide and so in Bangladesh. Killing of reptiles due to fear especially snake bites and

for meat consumption of large reptiles and lizards by some ethnic groups are important causes of population declining. Skin of pythons and cobras are also lucrative for some commercial products adding the killing of these species.

3.5.3. Local and International Trade

Illegal wildlife trade is another serious threat to large reptiles in the country. *Gekko gecko* has faced the serious threats due to illegal collection for medicinal values.

3.5.4. Tourist Activities

Recently, uncontrolled tourist activities are recorded which severely interrupt normal daily movement of reptiles and disturbing their feeding grounds. Some protected areas for instance, Lawachara National Park, Satchari National Park, Chunati Wildlife Sanctuary, Teknaf Wildlife Sanctuary are over crowded with tourists every year, which are causing the destruction of reptile habitats.

| Table 3. Threatened Reptiles in Bangladesh | | | | | | | | |
|--|------------|--------------|------------------------------|--|--|----------------------|---------------|-----------|
| Status Code: CR-Critically Endangered, EN-Endangered, VU-Vulnerable, NT-Near Threatened, LG-Least Concern, DD-Data Deficient, NE-Not Evaluated | | | | | | | | |
| Sl. No. | Order | Family | Scientific Name | English Name | Local Name | Status in Bangladesh | Global Status | Specie ID |
| 1 | Testudines | Testudinidae | <i>Indotestudo elongata</i> | Elongated Tortoise, Yellow-headed Tortoise | Holud Pahari Kacchop/Kachim, Pahari Kacchop, Hunro, Parbo Dur (Chakma) | CR | EN | RE0010 |
| 2 | Testudines | Testudinidae | <i>Manouria emys</i> | Asian Giant Tortoise, Burmese Brown Tortoise | Shila Kacchap, Baro Pahari Kachchop, Mon Dur | CR | EN | RE0011 |
| 3 | Testudines | Geoemydidae | <i>Batagur baska</i> | Batagur, Common Batagur, Four-toed Terrapin, River Terrapin, Mangrove Terrapin, Asian River Terrapin | Baro Kaitta | CR | CR | RE0002 |
| 4 | Testudines | Geoemydidae | <i>Batagur dhongoka</i> | Three-striped Roofed Turtle, Three-striped Roof Turtle | Dhoor Kachhim | CR | EN | RE0003 |
| 5 | Testudines | Geoemydidae | <i>Batagur kachuga</i> | Bengal Roof Turtle, Red-crowned Roofed Turtle | Kori Kaitta, Aadi Kori Kaitta | CR | CR | RE0004 |
| 6 | Testudines | Geoemydidae | <i>Cuora mouhotii</i> | Keeled Box Turtle, Jagged-shelled Turtle, Keel-backed Terrapin | Lal-chokha Deebea Kachhim | CR | EN | RE0007 |
| 7 | Testudines | Geoemydidae | <i>Heosemys depressa</i> | Arakan Forest Turtle | Arakani Kochchop | CR | CR | RE0171 |
| 8 | Testudines | Geoemydidae | <i>Pangshura sylhetensis</i> | Sylhet Roofed Turtle, Assam Roofed Turtle, Khasi Hills Terrapin, Assam Sawback | Sylheti Kori Kaitta, Sylhet Kachuga, Sylheti Kasim | CR | EN | RE0001 |
| 9 | Testudines | Trionychidae | <i>Amyda cartilaginea</i> | Asiatic Softshell Turtle, Southeast Asian Softshell Turtle, Malayan Softshell Turtle | Pahari Tarunasthi | CR | VU | RE0027 |
| 10 | Testudines | Trionychidae | <i>Chitra indica</i> | Narrow-headed Softshell Turtle, Indian Narrow-headed Softshell Turtle | Chim Kachhim, Gotajil | CR | EN | RE0031 |
| 11 | Testudines | Trionychidae | <i>Pelochelys cantorii</i> | Asian Giant Softshell Turtle, Cantor's Giant Softshell Turtle, Frog-faced Softshell Turtle | Jata Kachim | CR | EN | RE0012 |
| 12 | Testudines | Cheloniidae | <i>Chelonia mydas</i> | Green Sea Turtle, Green Turtle, Black (sea) Turtle, Pacific Green Turtle | Sabuj Shamudrik Kachhim, Samudrik Kasim, Baro Kassop or Kasim | CR | EN | RE0009 |

| Sl. No. | Order | Family | Scientific Name | English Name | Local Name | Status in Bangladesh | Global Status | Specie ID |
|---------|------------|-----------------|---------------------------------|--|--|----------------------|---------------|-----------|
| 13 | Testudines | Cheloniidae | <i>Eretmochelys imbricata</i> | Hawksbill Turtle, Hawksbill Sea Turtle | Samudrik Kachhim, Bajthuti Samudrik Kachhim | CR | CR | RE0023 |
| 14 | Testudines | Derμοchoelyidae | <i>Derμοchoelys coriacea</i> | Leatherback Sea Turtle | Samudrik Kachhim, Baro Kachhim, Chamra Kachhim | CR | VU | RE0025 |
| 15 | Squamata | Anguidae | <i>Dopasia gracilis</i> | Asian Glass Lizard, Burmese Glass Lizard | Pahin-Tiktiki, Jhiliik shap Tiktiki | CR | NE | RE0051 |
| 16 | Squamata | Pythonidae | <i>Malayopython reticulatus</i> | Reticulated Python, (Asiatic) Reticulated Python | Ajgor, Goi Bahar | CR | NE | RE0073 |
| 17 | Crocodylia | Gavialidae | <i>Gavialis gangeticus</i> | Gharial, Indian Gharial, Fish-eating Crocodile, Gavial, Long-nosed Crocodile | Gharial | CR | CR | RE0170 |
| 18 | Testudines | Geoemydidae | <i>Geoemyys hamiltonii</i> | Black Spotted Pond Turtle, Black Pond Turtle, Spotted Pond Turtle, Indian Spotted Turtle, Spotted River Terrapin | Kalo Kasim, Mogom | EN | VU | RE0016 |
| 19 | Testudines | Geoemydidae | <i>Hardella thurjii</i> | Crowned River Turtle, Brahminy River Turtle | Kali Kaitta, Kali Kachhim, Baro Kaitta | EN | VU | RE0017 |
| 20 | Testudines | Trionychidae | <i>Nilssonina gangetica</i> | Ganges Soft-shell Turtle, Indian Softshell Turtle | Khalua Kachhim, Ganga Kachhim | EN | VU | RE0028 |
| 21 | Testudines | Trionychidae | <i>Nilssonina nigricans</i> | Black Softshell Turtle, Black Soft-shell Turtle, Bostami Turtle, Chittagong Mud Turtle, Chittagong Softshell Turtle, Sacred Turtle, Dark Soft shell Turtle | Bostami Kasim, Gazari-Madari, Bugum | EN | CR | RE0030 |
| 22 | Squamata | Agamidae | <i>Draco maculatus</i> | Spotted Flying Lizard, Asian Gliding Lizard | Chiti Uranto Tiktiki, Chitra Uranta Tiktiki | EN | LC | RE0036 |
| 23 | Squamata | Agamidae | <i>Ptyctolaemus gularis</i> | Blue-throated Lizard, Green Fan-throated Lizard, Throated Agama | Nil-gola Girgiti | EN | NE | RE0038 |
| 24 | Squamata | Scincidae | <i>Lygosoma punctata</i> | Spotted Supple Skink, Common Dotted Garden Skink, Common Snake Skink, Punctate Supple Skink | Chiti Anjan, Chitrito Nomonio Anjan | EN | NE | RE0055 |
| 25 | Squamata | Colubridae | <i>Boiga siamensis</i> | Eyed Cat Snake | Borochokh Phonimonosha, Chokh-futajukto Phonimonosha | EN | NE | RE0124 |

| Sl. No. | Order | Family | Scientific Name | English Name | Local Name | Status in Bangladesh | Global Status | Specie ID |
|---------|------------|--------------|---------------------------------|--|---|----------------------|---------------|-----------|
| 26 | Squamata | Colubridae | <i>Oligodon cinereus</i> | Black-barred Kukri Snake | Kalo-ber Kukri Shap, Kalo-daghi Uday Kal | EN | LC | RE0085 |
| 27 | Crocodylia | Crocodylidae | <i>Crocodylus porosus</i> | Salt-water Crocodile, Estuarine Crocodile | Lona-panir Kumir | EN | LC | RE0169 |
| 28 | Testudines | Geoemydidae | <i>Cuora ambonensis</i> | Malayan Box Turtle, Domed Malayan Box Turtle, Southeast Asian Box Turtle, South Asian Box Turtle, Amboina Box Turtle | Deeba Kachhim | VU | VU | RE0005 |
| 29 | Testudines | Geoemydidae | <i>Cyclermys gemeli</i> | Asian Leaf Turtle | Pata Kasim | VU | NE | RE0172 |
| 30 | Testudines | Geoemydidae | <i>Melanochelys tricarinata</i> | Tricarinate Hill Turtle, Three-keeled Land Tortoise, Three-keeled Tortoise, Three-keeled Land Turtle | Shila Kossop, Trishira Shila Kachchop | VU | VU | RE0006 |
| 31 | Testudines | Cheloniidae | <i>Lepidochelys olivacea</i> | Olive Ridley Sea Turtle, Pacific Ridley Sea Turtle | Jolpaironga Samudrik Kasim, Samudrik Kachchap, Dojley Dur | VU | VU | RE0024 |
| 32 | Squamata | Scincidae | <i>Tropidophorus assamensis</i> | Water Skink, Northeastern Water Skink | Jolar Anchil | VU | NE | RE0064 |
| 33 | Squamata | Varanidae | <i>Varanus salvator</i> | Ring Lizard, Water Monitor, Common Water Monitor, Asian Water Monitor, Two-banded Monitor, Rice Lizard, Plain Lizard, No-Mark Lizard | Kalogui, Ramgodi | VU | LC | RE0067 |
| 34 | Squamata | Pythonidae | <i>Python bivittatus</i> | Burmese Python, Rock Python, Indian Rock Python | Ajogor, Burmese Ajogor | VU | VU | RE0173 |
| 35 | Squamata | Colubridae | <i>Ptyas nigromarginata</i> | Green Rat snake, Black-bordered Rat Snake | Sabuj Darash Shap, Sabuj Daraj Shap | VU | NE | RE0108 |
| 36 | Squamata | Natricidae | <i>Rhabdophis himalayanus</i> | Himalayan Keelback, Orange-collared Keelback | Komola-ghar Dhora Shap | VU | NE | RE0096 |
| 37 | Squamata | Elapidae | <i>Ophiophagus hannah</i> | King Cobra | Raj Gokra, Sangkhachur, Hala Jamuro | VU | VU | RE0145 |
| 38 | Squamata | Viperidae | <i>Trimeresurus popelorum</i> | Pope's Pit Viper, Pope's Tree Viper, Pope's Bamboo Pit Viper | Lal –petey Sabuj Bora | VU | LC | RE0163 |

CONSERVATION AND RECOMMENDATIONS



4. CONSERVATION AND RECOMMENDATIONS

4.1. Conservation

4.1.1. Management of Reptiles

Reptiles are a part of wildlife, which get legal protection by the Ordinance of the Government of the People's Republic of Bangladesh. There are several acts (e.g., Wildlife Act, 1974/2012, Forest Act, 1927/2010, Bangladesh Environment Conservation Act, 1995, etc.) those are directly enhanced the legal protection of reptiles and other wildlife. Besides, Bangladesh is committed to conserve biodiversity including reptiles as a signatory to several international conventions (e.g., Convention on Biological Diversity (CBD), Convention on International Trade in Endangered Species of Wild Fauna and Flora [CITES], Convention on Wetlands of International Importance Especially as Waterfowl Habitat [Ramsar Convention], Convention Concerning the Protection of the World Cultural and Natural Heritage [World Heritage Convention], etc.).

For conserving biodiversity Bangladesh Government has notified 17 National Parks and 21 Wildlife Sanctuaries plus one Marine Protected Area, and some other protected areas are Ecoparks, Safari Parks, Botanical Gardens, Community Conservation Areas and Ecologically Critical Areas, etc. All these protected areas safeguard hotspots of wildlife including reptiles. Protected area is a clearly defined geographical space, recognized, dedicated and managed through legal or other effective means, to achieve the long-term conservation of nature with associated

ecosystem services and cultural values. A significant improvement in the legal status of the protected areas has been achieved through the promulgation of Bangladesh Wildlife Preservation Order 1973 and later shortly amended as Bangladesh Wildlife (Preservation) (Amendment) Act, 1974, which has been replaced by the new Wildlife (Conservation and Security) Act, 2012. All the above mentioned Protected Areas are defined and declared under this Act. Bangladesh has limited human resources who are educated and trained up on various aspects of reptile management and conservation, and above all lack of strong and firm meaningful political commitment. The newly established Wildlife Centre and Wildlife Crime Control Unit under the Wildlife and Nature Conservation Division of the Forest Department may come forward to resolve the problem to some extent slowly, but needs faster.

The following are acts, rules, ordinances and policies for legal conservation of reptiles in the country.

1. Wildlife (Conservation and Security) Act, 2012
2. Forest Act, 1927 revised in 1994
3. National Forestry policy (NEP, 1979 revised in 1994)
4. Bangladesh Environment Conservation Act, 1995
5. Environment Conservation Rules (ECR), 1997
6. The Environment Court Act, 2000
7. Protection and Conservation of Fish Act,

1950 (Amendment in 1963, 1970, 1972, 1995, 2002)

8. Protection and Conservation Fish Rules, 1985 (Amendment in 1987)
9. Marine Fisheries Ordinance, 1971
10. The fertilizer Regulation Order, 1995
11. Import and Export (Control) Act, 1950
12. Customs Act, 1969
13. Export Policy Order, 2012-15

Other than the above major legal actions, many environmental policies of Bangladesh have been formulated/promulgated in the post-Rio era, which play vital role biodiversity conservation including reptiles and some of these are:

1. National Science and Technology Policy 1983
2. National agriculture Policy, 1992
3. The Environment Policy, 1992
4. Energy Policy, 1995
5. Bangladesh National Conservation Strategy (NCS), 1996
6. Export Policy, 1997-2002
7. The Fisheries Policy, 1998
8. National Water Policy, 1999
9. Industry Policy, 1999
10. Land Use Policy, 2001
11. National Environment Management Action Plan (NBSAP), 2004
১২. বনজন্ম-পরিবহন-(নিয়ন্ত্রণ-বিধিমালা-২০১১ (Forest Products Transport (Control) Rules, 2011)
১৩. করাত-কল-(লাইসেন্স)-বিধিমালা-২০১২ (Saw Mills (License) Rules, 2012)
১৪. সামাজিক বনায়ন বিধিমালা-২০০৪ (Social Forestry Policy, 2004)
১৫. বন্যপ্রাণীদ্বারা আক্রান্ত মানুষের জানমালের ক্ষতিপূরণ আইন-২০০০ (Wildlife Attack in Loss of Human Life and their Belongings Compensation Act, 2000)
১৬. ইট প্রস্তু ও ভাটা-স্থাপন (নিয়ন্ত্রণ) আইন-২০১৩ (Brick Production and Brick-field Establishment Control Act, 2013)

4.1.2. Extinction Risk vs Conservation Status

The population and abundance of reptilian species have been decreasing day by day all over Bangladesh and one has gone extinct from the wild (marsh crocodile). Some species of reptiles are facing high risk of extinction due to mainly habitat loss and human interference. Proper conservation measures are not being taken meaningfully through the implementation of Wildlife (Conservation and Security) Act, 2012 of Bangladesh for conserving reptiles due to several reasons including man power.

4.2. Recommendations for Conservation

4.2.1. Research

Three research objectives have been identified in preparing the 2015 Red Book of Threatened Reptiles of Bangladesh. The first major objective has been suggested to work on ecological aspects of 52% of the assessed species and the second major objective has been focused on the status and distribution of 32% species and population survey is needed for 16% species. The recent development of genetic sequencing can also be done to see the variations between the populations and sub-populations due to the dispersion of the species in different parts of the country.

4.2.2. Management Priorities

Three management priorities have been suggested for the threatened reptiles of the country (Figure 5). The highest priority (45%) has been emphasized in Protected Area Management for the Threatened groups. To stop indiscriminate killing of reptiles, especially the snakes due to death fear, the creation of awareness campaign should reach to mass people about the positive role (like controlling pest populations in turn saving crops and help in balancing ecosystem) that reptiles play in the natural environment through mass media propagation. Immediate and effective measures should be taken for proper implementation of the Wildlife (Conservation and Security) Act, 2012 of Bangladesh for the reduction of indiscriminate hunting and poaching as well as loss of habitats of the reptiles in the country.

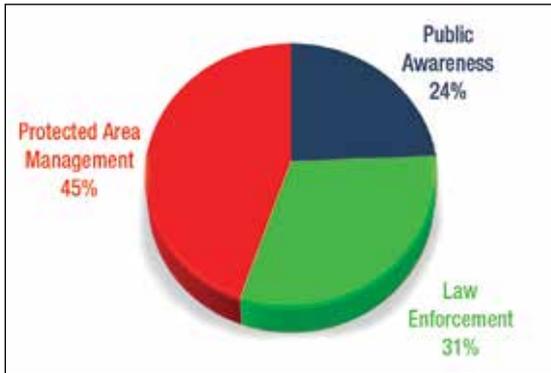


Figure 5: Conservation priorities for the reptiles of the country.

4.2.3. Ex-situ Conservation

Captive propagation is not essential for most of the reptile species of Bangladesh and captive breeding has been suggested for 5% of the species. And it can be done for gharial (*Gavialis gangeticus*) in the zoos because of its rarity in nature as well as only males are present in Dhaka Zoo and females both in Rajshahi and Rangpur Zoos.

4.2.4. Institutional Development

All major forested areas, especially all PAs (protected areas) in the country are having been managed by the Forest Department. The institutional framework of the Department has so far highly been focused on revenue earning from the forest resources while conservation of wildlife and reptiles in particular is mostly neglected. On the other hand, poor institutional capacity, insufficient manpower and logistic supports of the Forest Department are not sufficient for the proper management and conservation of reptiles in the country. However, in the last half-a-decade, Forest Department has been realizing the necessity of wildlife conservation and trying to overcome the condition. Some of the recent initiatives viz., creating a Wildlife Circle (Nature and Wildlife Conservation), Wildlife Crime Control Unit (WCCU), Wildlife Biodiversity Conservation Officer (WBCO), Wildlife Inspectors (WI) and Junior Wildlife Scout (JWS) all are playing a vital role in conserving reptiles (especially commercially important and large bodied

ones) in the country. Priority should also be given to strengthen the capacity of the Forest Department in respect to human resource development as well as logistic support enhancement. Well trained and well equipped working force can minimize most of the anthropogenic threats for the reptiles in the country. Hopefully, the newly created Wildlife Center will add further in developing trained up manpower in this field.

4.2.5. Protected Area (PA) Management

Most of the threatened reptiles are found in the PAs in the country. All Critically Endangered reptiles except gharial (*Gavialis gangeticus*) are only found in the protected areas. Thus, proper management of PAs can ensure habitat protection of all threatened reptiles. PAs are declared and established under the legal provision of the Wildlife (Conservation and Security) Act, 2012 of Bangladesh but their management system is still very poor. The following issues should be addressed in the proper management of PAs in respect to reptile conservation.

- 1) Visual demarcation of boundaries between PAs and Non-PAs.
- 2) Wipe out human settlement from the PAs.
- 3) Reduce fragmentation and degradation of habitats within PAs.
- 4) Buffer zone and Core areas of all the PAs have to be demarcated.
- 5) Strengthen the capability of Forest Department Officials working in the PAs by providing proper training and logistics.

4.2.6. Public Awareness and Conflict Management

Non-formal environmental education and awareness programmes among the people living in and around PAs may play a vital role in conserving reptiles. Involvement of local people in the management of PAs through providing them alternate livelihood can reduce

habitat destruction and wildlife trade. Aware the general people about the deadly venomous snakes and convey them properly that all snakes are not venomous rather than helpful in agriculture and do not kill them unnecessarily. This can also help in reducing human-reptile conflicts and indiscriminate killing of snakes in the country.

4.2.7. Collaboration

Collaboration among policy maker, implementing authority, researchers, NGOs and donors is essential for the successful reptile conservation in the country.

4.3. Species Specific Recommendations

4.3.1. Regionally Extinct Species

Attempt may be taken to reintroduce freshwater crocodile (*Crocodylus palustris*) in its original range in the country from the captive stocks (zoos and safari parks) received donation from India.

4.3.2. Threatened Species

- 1) Protecting existing gharial (*Gavialis gangeticus*) habitats by implementing law.
- 2) Study on status and distribution of the Sea Turtle in the Coastal Areas and islands of Bangladesh.
- 3) Most of the freshwater turtles and tortoises are threatened, and as well as they have high demand for meat in the local and international markets too. So commercial farming may be encouraged for species like black softshell turtles (*Nilssonina* spp.), Indian flapshell turtle (*Lissemys punctata*) and roofed turtle (*Pangshura tecta*).
- 4) Large snakes like pythons (*Python bivittatus*, *P. molurus* and *Malayopython reticulatus*) are to be protected and their commercial farming

may be initiated as they have high demand in both local and international markets for their skins and meat. Similar programme may be initiated for monitor lizards (*Varanus* spp.).

- 5) Development of national capacity for monitoring, translocation, and other aspects of the Threatened reptiles by training the Forest Department officials working in the PAs.
- 6) The known area of occupancy of Threatened species should be protected by raising awareness and implementing the law.
- 7) Captive breeding programmes to restore wild population specifically for some Critically Endangered species viz., *Batagur baska*, *Amyda cartilaginea*, *Chitra indica*, *Manoura emys*, *Heosemys depressa*, *Pangshura sylhetensis*.

4.3.3. Near Threatened Species

Near Threatened species are at the risk of being threatened if condition persists and no measures are taken to reduce the existing threats. Population fragmentation and reduction are the main factors for most of the Near Threatened species. Following steps should be taken to keep Near Threatened species out of danger:

- a) Identify all possible threats and steps should be taken to minimize these.
- b) Provide scope for fragmented population to migrate among the population to reduce inbreeding depression.
- c) Identify route and create corridor for movement between the fragmented populations.
- d) Selective plantations for shelter in the fragmented habitats help all wildlife in different ways.

SPECIES PROFILE





REGIONALLY EXTINCT
<RE>

Crocodylus palustris

Species ID: RE0168

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|------------|--------------|
| ANIMALIA | CHORDATA | REPTILIA | CROCODYLIA | CROCODYLIDAE |

Scientific Name: *Crocodylus palustris* (Lesson, 1831)

English Name: Mugger, Muggar, Broad-snouted Crocodile, Marsh Crocodile

Local Name: Mithapanir Kumir

Synonym/s: *Crocodylus palustris* Lesson, 1831

Crocodylus palustris King and Burke, 1989

Crocodylus palustris Ziesmann *et al.*, 2007

Assessment Information

Red List Category & Criteria: Regionally Extinct (RE) ver 3.1

Justification: Habitat destruction and killing are the main reasons for the extinction of this species in Bangladesh. No record of occurrence of this species in the wild within the country at least, in the last five decades (Cox and Rahman 1994, Khan 1982a, 1982c, 1987, 1996, M. A. R. Khan pers. comm.). Thus, for the last 50 years this species has not been reported in the wild. So, Marsh Crocodile is considered as Regionally Extinct in the country although there are a few specimens in captivity of unknown origin and 40 individuals have been brought from India. It was also considered as Extinct during 2000 evaluation (IUCN 2000).

Date Assessed: 18 March 2015

History

Regional Status: Extinct (IUCN Bangladesh 2000b)

Geographic Range

Global: This species is known to occur in India, Iran, Nepal, Pakistan and Sri Lanka (Choudhury and de Silva 2013).

Bangladesh: No individual occurs in the wild.

Population



Crocodylus palustris

© Faysal Ahmad

Generation Time (Length): Not known

Total Population: S.M.A. Rashid (pers. comm.) reported 40 adults and 28 hatchling Muggers in seven zoos in 2009. Forty captive adults *C. palustris* (8 males and 32 females) were obtained from the Madras Crocodile Bank Trust (India) in June 2005 (Andrews 2005).

Habitat and Ecology

C. palustris inhabits all freshwater habitats including rivers, lakes and marshes (de Silva and Lenin 2010). The taxon is aquatic and excellent swimmer, tail acts as propellant. It also walks and runs well on the ground, and alert when basking on land. It is carnivorous, the diet is largely fish but any animal that can be overcome is taken (Daniel 2002). The stomach contents of muggers include leopard, wild dog, hyaena, spotted deer, sambar and nilgai fawn, four-horned antelope, barking deer, monkeys, domestic dogs, goats, calves, pig, ducks, a variety of wild birds, snakes and soft-shelled turtles (Ranjitsinh 1989, Daniel 2002). This species is oviparous, females lay 3 to 40 or more eggs in a clutch in a self-built nest-hole and guard them, eggs hatch in 60 to 90 days (Daniel 2002).



Assessor: Mohammad Firoj Jaman

CRITICALLY ENDANGERED

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Indotestudo elongata

Species ID: RE0010

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|------------|--------------|
| ANIMALIA | CHORDATA | REPTILIA | TESTUDINES | TESTUDINIDAE |

Scientific Name: *Indotestudo elongata* (Blyth, 1854)**English Name:** Elongated Tortoise, Yellow-headed Tortoise**Local Name:** Holud Pahari Kacchop/Kachim, Pahari Kacchop, Hunro, Parbo Dur**Synonym/s:** *Testudo elongata* Blyth, 1854*Testudo elongate* Gray, 1857*Testudo parallelus* Annandale, 1913*Geochelone elongata* Pritchard, 1967*Indotestudo elongata* Bour, 1980**Taxonomic Notes:** Morphologically distinct, so it is easy to identify the species.

Assessment Information

Red List Category & Criteria: CR C2a (i) ver 3.1**Justification:** *Indotestudo elongata* is rarely found in the hill forests of the northeast, east and southeast Bangladesh. The Area of Occupancy is 1,052 km², which qualifies for Vulnerable category [B1 ab(i,ii,iii)]. Out of several sub-populations the number of mature individuals at Inani Reserve Forest (a sub-population) is predicted to be less than 50, which signifies Critically Endangered [C2a(i)], so the species is assessed as Critically Endangered.**Date Assessed:** 12 June 2014

History

Regional Status: Endangered (IUCN Bangladesh 2000b)

Geographic Range

Global: It is known to occur in Bangladesh, Cambodia, China, India, Lao PDR, Malaysia, Myanmar, Nepal, Thailand and Vietnam (Asian Turtle Trade Working Group 2000, <http://reptile-database.reterium>).*Indotestudo elongata*

© Md. Mizanur Rahman

cz/species?genus=Indotestudo&species=elongata. Downloaded on 12 June 2014).

Bangladesh: It is found in northeast, south and southeast forests including Chittagong University campus (Khan 1982a, Kabir *et al.* 2014, Hasan *et al.* 2014, S.U. Chowdhury pers. comm.).**EOO:** 41,484 km²**AOO:** 10,520 km²

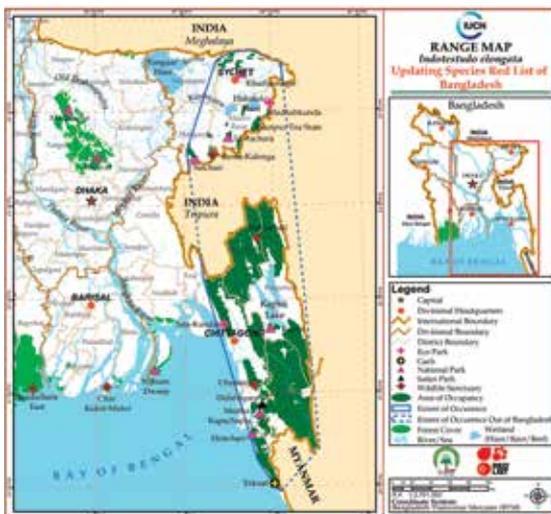
Population

Generation Time (Length): Not known**Total Population:** Not known**No. of Sub-population:** Not known**Trend:** Decreasing

Habitat and Ecology

It is known to be terrestrial, omnivorous, feeding on miscellaneous plants (wild flowers, fallen fruits), fungus and animals such as slugs, worms and insects. In captivity it eats plantain, dead prawn and fish, though the species is largely herbivorous (Das 1995). One wild caught female preferred to eat sweet-gourd, grain, tomato and kidney bean, and refused to eat fish or any meat. The female laid 2 hard-shelled spherical eggs in late October 2012. Females lay 1-7 eggs during May-October and hatch out by 96-165 days depending on temperature and moisture (Das 2002). It inhabits deciduous and mixed evergreen and evergreen forests low hilly areas and rocky hill streams/creeks.

*I. elongata*s exclusively diurnal but more active in the morning and less so when the sun is hot and becomes active again in the rains.

Assessor: Md. Tarik Kabir**Associate Assessor/s:** Md. Farid Ahsan

Manouria emys

Species ID: RE0011

**CRITICALLY
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Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|------------|--------------|
| ANIMALIA | CHORDATA | REPTILIA | TESTUDINES | TESTUDINIDAE |

Scientific Name: *Manouria emys* (Schlegel and Müller, 1844)

English Name: Asian Giant Tortoise, Burmese Brown Tortoise

Local name: Shila Kacchap, Baro Pahari Kachchop, Mon Dur

Synonym/s: *Testudo emys* Schlegel and Müller, 1844

Testudo phayrei Blyth, 1853

Manouria fusca Gray, 1854

Telopos luxatus Le Contre, 1854

Testudo emys Boulenger, 1889

Geochelone emys Pritchard, 1967

Testudo nutapundi Reinmann in Nutapund, 1979

Geochelone emys Pritchard, 1967

Manouria emys Obst, 1985

Taxonomic Notes: Two subspecies are recognized, the smaller southern subspecies (*M. e. emys*) and the larger northern subspecies (*M. e. phayrei*).

Bangladesh subspecies is likely to be *M. e. phayrei* (Blyth, 1854) that is known to occur from N/W Thailand to NE India, (<http://reptile-database.reptarium.cz/species?genus=Manouria&species=emys>. Downloaded on 01 November 2015).

Assessment Information

Red List Category & Criteria: CR C2a(i) ver 3.1

Justification: It is difficult to estimate population reduction and exploitation rate but no doubt that Extent of Occurrence (EOO) and Area of Occupancy (AOO) is continuously decreasing. The AOO (1,759 km²) and EOO is (5,509 km²) are very near to threshold for Endangered category [EN A2cd+B2ab(ii,iii)]. But, the species is restricted to hill forest and the habitat is highly fragmented into many small units. It is assumed that few individuals (≤ 50) are surviving in each unit or isolated patches and there is very low chance of genetic exchange between



Manouria emys

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populations, which signifies Critically Endangered [C2a(i)]. Therefore, it can be assessed as Critically Endangered.

Date Assessed: 17 June 2014

History

Regional Status: Critically Endangered (IUCN Bangladesh 2000b)

Geographic Range

Global: This taxon occurs in Bangladesh, India, Indonesia, Malaysia, Myanmar, Thailand and Vietnam (Asian Turtle Trade Working Group 2000).

Bangladesh: It is recorded from Ruma Bazar (Bandarban), Baghaichari (Nava, Sijak), Thanchi (Lekkri, Youngboun) and Chittagong Hill Tracts (Khan 1982a, S. Chakma pers. obs., Hasan *et al.* 2014).

EOO: 18,331 km²

AOO: 12,641 km²

Population

Generation Time (Length): Not known

Total Population: <250

No. of Sub-population: Not known

Trend: Decreasing

Habitat and Ecology

Manouria emys is terrestrial, slow and docile, and mainly herbivorous, prefers *Alocasia* spp. (Høybye-Mortensen 2004), but also eats insects and frogs. In captivity it ate apple, tomato, bean sprout, cauliflower, orange, cat food, hard-boiled egg, strawberry and watermelon, the last two were more favourite (Das 1995). Female builds nest mound with forest litters and debris, in which her eggs are laid. The nest is guarded for a few days to weeks (Chakma 2009) and lays 23-51 hard-shelled spherical eggs, which hatch out by 60-75 days depending on temperature and moisture (Das 1995, 2002). It inhabits hilly mixed evergreen forests.

Assessor: Suprio Chakma

Associate Assessor/s: Md. Farid Ahsan



CRITICALLY
ENDANGERED
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Batagur baska

Species ID: RE0002

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|------------|-------------|
| ANIMALIA | CHORDATA | REPTILIA | TESTUDINES | GEOEMYDIDAE |

Scientific Name: *Batagur baska* (Gray, 1831)**English Name:** Batagur, Common Batagur, Four-toed Terrapin, River Terrapin, Mangrove Terrapin, Asian River Terrapin**Local Name:** Baro Kaitta**Synonym/s:** *Emys baska* Gray, 1831*Emys batagur* Gray, 1831*Tetronyx longicollis* Lesson, 1832*Emys tetraonyx* Temminck and Schlegel, 1833*Tetraonyx lessonii* Duméril and Bibron, 1835*Batagur baska* Gray, 1855*Batagur baska ranongensis* Nutaphand, 1979*Batagur baska* Manthey and Grossmann, 1997*Batagur baskaranongensis* Obst, 2003*Batagur baska* Rhodin *et al.*, 2010*Batagur baska*

© M K Hasan

Assessment Information

Red List Category & Criteria: CR CD ver 3.1**Justification:** *Batagur baska* is listed as Critically Endangered because in recent surveys no viable population was found in the wild and only 2-young were found in the Sundarbans in 2013. However, about four decades back it had good population that has virtually been decimated due to hunting by the local fishers and consuming by the people of a particular community living besides the Sundarbans.**Date Assessed:** 28 July 2015

History

Regional Status: Critically Endangered (IUCN Bangladesh 2000b)

Geographic Range

Global: *B. baska* is native to Bangladesh, Cambodia, India, Indonesia and Malaysia; and regionally extinct: Myanmar, Singapore, Thailand and Vietnam (Asian Turtle Trade Working Group 2000).**Bangladesh:** This species is used to be found in the large rivers and estuaries of coastal region of Greater Noakhali, Barisal and Khulna Districts, including the Sundarbans Mangrove Forest (Khan M.A.R. 1982b, Khan M.M.H. 2008, Morshed and Sobhan 2014). There might be an insignificant number still present in its former range.**EOO:** 24,607 km²**AOO:** 9,514 km²

Population

Generation Time (Length): Not known**Total Population:** Not known**No. of Sub-population:** Not known**Trend:** Decreasing

Habitat and Ecology

B. baska inhabits estuaries and parts of large tidal rivers (Moll *et al.* 2009). It nests on sandbars and riverbanks. In captivity in Bangladesh, the clutch size varies from 11-26 (mean 19) and the incubation period is 59-74 days with an average of 70 days (Morshed and Sobhan 2014). This species is diurnal and mostly active in the morning and afternoon.**Assessor:** Kamrun Naher

Batagur dhongoka

Species ID: RE0003

CRITICALLY
ENDANGERED
<CR>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|------------|-------------|
| ANIMALIA | CHORDATA | REPTILIA | TESTUDINES | GEOEMYDIDAE |

Scientific Name: *Batagur dhongoka* (Gray, 1832)
English Name: Three-striped Roofed Turtle, Three-striped Roof Turtle

Local Name: Dhoor Kachhim

Synonym/s: *Emys dhongoka* Gray, 1832
Emys duvaucelii Duméril and Bibron, 1835
Kachuga dhongoka Gray, 1834
Batagur (Kachuga) dhongoka Gray, 1856
Kachuga hardwickii Gray, 1869
Kachuga dhongoka Das, 1996
Batagur dhongoka Le et al., 2007
Kachuga dhongoka Rohilla and Tiwari, 2008
Kachuga dhongoka Murthy, 2010



Batagur dhongoka

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Assessment Information

Red List Category & Criteria: CR A1cd+A2bc ver 3.1

Justification: The Extent of Occurrence of *Batagur dhongoka* is very large (84,102 km²) as also the Area of Occupancy (4,508 km²), which are beyond the threshold of Threatened Category. However, the species is very rare in its entire range in the Ganges (Padma) and the Jamuna River Systems of Bangladesh and assumed to have very small and restricted population and the population reduction is more than 90% in the last 10 years. Considering all these facts, this taxon has been assessed as Critically Endangered.

Date Assessed: 29 July 2015

History

Regional Status: Critically Endangered (IUCN Bangladesh 2000b)

Geographic Range

Global: This taxon is found in Bangladesh, India, and Nepal (<http://www.reptile-database.reptarium.cz/species?genus=Batagur&species=dhongoka>. Downloaded on 31 August 2015); possibly also occurs in Bhutan (Lenz 2012).

Bangladesh: In Bangladesh, the species is restricted to the Ganges (Padma) and Jamuna River Systems, also found in the suburbs of Dhaka (Khan 1982a, b; Islam 2009).

EOO: 85,265 km²

AOO: 5,876 km²

Population

Generation Time (Length): Not known

Total Population: Not known

No. of Sub-population: Not known

Trend: Decreasing

Habitat and Ecology

Batagur dhongoka is an animal of deep flowing large rivers, like the Ganges (Padma) and the Jamuna River systems, and also in the sandbanks and riverbanks of these rivers as this species basks and lays eggs there. This diurnal species is semi-aquatic (Asian Turtle Trade Working Group 2000) and is found in large rivers (Das 2002, Islam 2009). It basks on the shore, sandbanks and logs (Islam 2009). Males are omnivorous, feeding on water plants and mollusks, females are vegetarian (Das 2002). Females lay 21-35 eggs on sandbank during March-April (*op. cit.*).



Assessor: A.B.M. Sarwar Alam

CRITICALLY
ENDANGERED
<CR>

Batagur kachuga

Species ID: RE0004

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|------------|-------------|
| ANIMALIA | CHORDATA | REPTILIA | TESTUDINES | GEOEMYDIDAE |

Scientific Name: *Batagur kachuga* (Gray, 1831)

English Name: Bengal Roof Turtle, Red-crowned Roofed Turtle

Local Name: Kori Kaitta, Aadi Kori Kaitta

Synonym/s: *Emys kachuga* Gray, 1831

Emys lineate Gray, 1831

Emys lineate Duméril and Bibron, 1835

Batagur ellioti Gray, 1862

Kachuga fusca Gray, 1870

Batagur ellioti Anderson, 1871

Kachuga lineate Boulenger, 1889

Kachuga kachuga Smith, 1931

Batagur kachuga Le et al., 2007

Assessment Information

Red List Category & Criteria: CR A1cd+A2bc ver 3.1

Justification: The Extent of Occurrence of *Batagur kachuga* is 61,207 km² and the Area of Occupancy is 3,718 km². These are beyond the threshold of any Threatened Category but the species is very rare in its entire range in the Ganges (Padma) River System of Bangladesh and sparingly sighted and the population reduction is more than 80% in the last 10 years/. Thus, it is assessed as Critically Endangered (A1cd+A2bc).

Date Assessed: 29 July 2015

History

Regional Status: Critically Endangered (IUCN Bangladesh 2000b).



Batagur kachuga

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Geographic Range

Global: This species occurs in Bangladesh, India, Nepal and probably Myanmar (<http://www.reptile-database.reptarium.cz/species?genus=Batagur&species=kachuga>. Downloaded on 30 August 2015); possibly also occurs in Bhutan (Lenz 2012).

Bangladesh: It is found in the Ganges (Padma) River System (Khan 1982a, b).

EOO: 61,207 km²

AOO: 3,718 km²

Population

Generation Time (Length): Not known

Total Population: Not known

No. of Sub-population: Not known

Trend: Decreasing

Habitat and Ecology

B. kachuga is an animal of deep flowing rivers with terrestrial nest sites (Asian Turtle Trade Working Group 2000). This species is entirely aquatic and found in large rivers (Das 2002, Islam 2009). It is herbivorous and sustains on aquatic vegetation (Das 2002). It basks on the shore, sandbanks and logs (*op. cit.*). Females lay 11-30 eggs on sandbank during March-April (*op. cit.*). This species is diurnal and most active in the morning and afternoon.



Assessor: A.B.M. Sarwar Alam

Cuora mouhotii

Species ID: RE0007

**CRITICALLY
ENDANGERED
<CR>**

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|------------|-------------|
| ANIMALIA | CHORDATA | REPTILIA | TESTUDINES | GEOEMYDIDAE |

Scientific Name: *Cuora mouhotii* (Gray, 1862)
English Name: Keeled Box Turtle, Jagged-shelled Turtle, Keel-backed Terrapin

Local Name: Lal-chokha Deeba Kachhim

Synonym/s: *Cyclemys mouhotii* Gray, 1862

Pyxidea mouhotii Gray, 1864

Cuora serrata Iverson and McCord, 1992

Cyclemys mouhotii Xiangkui, 1994

Pyxidea mouhotii Das, 1996

Pyxidea mouhotii Ziegler, 1996

Cuora mouhotii Stuart and Parham, 2004

Pyxidea mouhotii Murthy, 2010

Cuora mouhotii Das, 2010

Taxonomic Notes: Two subspecies are currently recognized: *Cuora m. mouhotii* (Gray, 1862) and *C. m. obsti* (Fritz *et al.*, 1998), of which *C. m. mouhotii* occurs in Bangladesh. It is sometimes treated under the genus *Pyxidea* (Asian Turtle Trade Working Group 2000).

Assessment Information

Red List Category & Criteria: CR B2b(iii)+c(ii) ver 3.1

Justification: So far there are only two records from two localities of mixed evergreen forest areas in the southeast of Bangladesh. Moreover, it is clearly evident that the hill based mixed evergreen forest where it lives is declining rapidly. So its rarity qualifies it as Critically Endangered species.

Date Assessed: 25 June 1862

History

Regional Status: Not Assessed (IUCN Bangladesh in 2000b).

Geographic Range

Global: The country-wise distribution is: Bangladesh (Hasan *et al.* 2014, Khan M.A.R. 2015), Bhutan, China,



Cuora mouhotii

© M. Monirul H. Khan

India, Lao PDR, Myanmar, Thailand and Vietnam (Asian Turtle Trade Working Group 2000), <http://reptile-database.reptarium.cz/species?genus=Cuora&species=mouhotii>. Downloaded on 25 June 2014).

Bangladesh: There are only two country records of this species from the mixed evergreen forest areas of Chittagong Hill Tracts, southeastern Bangladesh (Hasan *et al.* 2014). Based on its occurrence in the neighbouring countries its presence in Bangladesh was expected, but the first confirmed record came from a shell (recent hunt by the local tribal Mru hunters) from Alikadam, Bandarban, in December 2011, and the second record of a live specimen from Kassalong Reserve Forest, Rangamati, in October 2013. The species might also occur in other mixed evergreen forest of the country.

EOO: 6,476 km²

AOO: 1,439 km²

Population

Generation Time (Length): Not known

Total Population: Not known

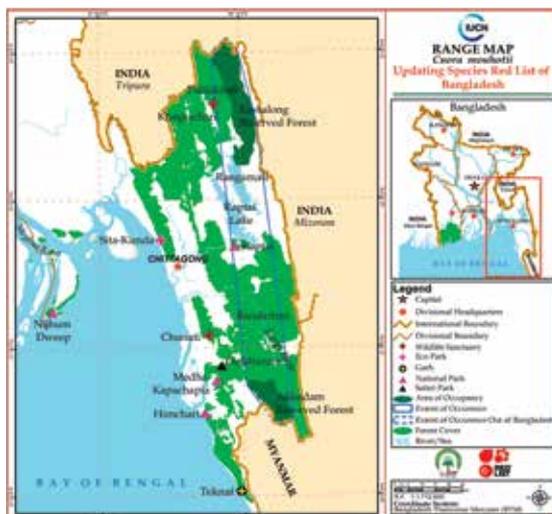
No of Sub-population: Not known

Trend: Not known, but possibly declining

Habitat and Ecology

It inhabits evergreen and mixed evergreen forests with moist leaf litter, under fallen logs, small caves and rock crevices, and preferably close to rivers (pers. obs., Das 1995, 2010). *C. mouhotii* is terrestrial and omnivorous but primarily feeds on vegetation, prefers fallen fruits (see Das 1995). In captivity, preferred food items are small mice, rats and snails, dry dogfood and pulpy vegetables and fruits (apple, avocado, squash and tomato), hatchling feeds on worms, snails and insects (Das 1995). Females lay 1-5 eggs in self dug nests and/or under fallen leaves during June-July and hatch out by 90-120 days depending on temperatures (Das 2010, Ji-Chao *et al.* 2011). A single specimen in captivity was repuscular and nocturnal.

Assessor: M. Monirul H. Khan



Heosemys depressa

Species ID: RE0171

CRITICALLY
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Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|------------|-------------|
| ANIMALIA | CHORDATA | REPTILIA | TESTUDINES | GEOEMYDIDAE |

Scientific Name: *Heosemys depressa* (Anderson, 1875)

English Name: Arakan Forest Turtle

Local Name: Arakani Kochchop

Synonym/s: *Geoemyda depressa* Anderson, 1875

Geoemyda arakana Theobald, 1876

Heosemys depressa Stejneger, 1902

Assessment Information

Red List Category & Criteria: CR A2d ver 3.1

Justification: This species has recently been recorded from Bangladesh for the first time. Its distribution in Bangladesh is not well known. Hunting for consumption by local people is the biggest threat. Due to chronic subsistence hunting by the ethnic people for generations after generations it can be estimated that the population size has declined locally by at least 90%, so it qualifies as Critically Endangered.

Date Assessed: 20 October 2014

History

Regional Status: Not assessed (IUCN Bangladesh 2000b)

Geographic Range

Global: This species occurs in Bangladesh and Myanmar (Rakhine and Chin State); west of Arakan-Yoma Mountain range; and possibly also occurs in Mizoram of India (S.C. Rahman, pers. obs.).

Bangladesh: It is found in hill forests of Thanchi, Alikadom and Nyakhongchori of Bandarban District. Possibly it also occurs in the hill forests of Cox's Bazar District.

EOO: 1,044 km²

AOO: 763 km²



Heosemys depressa

© S. C. Rahman

Population

Generation Time (Length): Not known

Total Population: Not known

No. of Sub-population: Not known

Trend: Declining

Habitat and Ecology

In Bangladesh *Heosemys depressa* inhabits mixed evergreen forests but locals find them in degraded *jhum* landscape. In Myanmar, it is mostly found in bamboo forests but also lives in a variety of habitats, including, evergreen forest, mesic ravines, open-canopy deciduous forest, secondary forest, and even sugarcane fields (Platt *et al.* 2003). The species is very secretive, terrestrial and omnivorous. It is known to burrow and breeds from October to December in captivity. However, it has also been reported as semi-terrestrial (Ludwig *et al.* 2007). Diet of this species consists of equal parts of animals and plants; very fond of fruits that fall to the forest floor; aggressive in eating insects, crustaceans, worms, fish or anything they can get their mouths on (www.zooatlanta.org/home/animals/reptiles/arakan_forest-turtle. Downloaded on 20 December 2104). Females lay 2-6 eggs, usually once a year, those incubate for 120 to 130 days at 80 to 84° F (www.zooatlanta.org/home/animals/reptiles/arakan_forest-turtle. Downloaded on 20 December 2104.). It was recorded up to 300 m above mean sea level.



Assessor: Shahriar Caesar Rahman

Pangshura sylhetensis

Species ID: RE0001

CRITICALLY
ENDANGERED
<CR>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|------------|-------------|
| ANIMALIA | CHORDATA | REPTILIA | TESTUDINES | GEOEMYDIDAE |

Scientific Name: *Pangshura sylhetensis* Jerdon, 1870
English Name: Sylhet Roofed Turtle, Assam Roofed Turtle, Khasi Hills Terrapin, Assam Sawback

Local Name: Sylheti Kori Kaitta, Sylhet Kachuga, Sylheti Kasim

Synonym/s: *Pangshura sylhetensis* Jerdon, 1870
Jerdonella sylhetensis Gray, 1870
Kachuga sylhetensis Boulenger, 1889
Kachuga sylhetensis King and Burke, 1889
Kachuga sylhetensis Obst, 2003
Batagur sylhetensis Le et al. 2007
Pangshura sylhetensis Das et al., 2008
Kachuga sylhetensis Murthy, 2010
Pangshura sylhetensis Rhodin et al., 2010

Taxonomic Notes: Appeared as *Kachuga sylhetensis* in Red List of IUCN Bangladesh in 2000b.

Assessment Information

Red List Category & Criteria: CR B2ab ver 3.1

Justification: This species covers large Extent of Occurrence (47,053 km²) and Area of Occupancy (18,343 km²) but it is extremely rare and is recorded from two sites so far, near airport of Sylhet (M.M.H. Khan pers. comm. with M.F. Ahsan) and Mainimukh of Chittagong Hill Tracts (Das 1995, Khan, M.A.R. 2015). Also hill people eat almost all species of chelonians found there and its known habitats are in continuous decline. So, this taxon is assessed as Critically Endangered.

Date Assessed: 22 June 2014

History

Regional Status: Endangered (IUCN Bangladesh 2000b)



Pangshura sylhetensis

© M. Monirul H. Khan

Geographic Range

Global: Bangladesh and India are included in its distribution range (Asian Turtle Trade Working Group 2000); possibly also occurs in Bhutan (Lenz 2012).

Bangladesh: The species is first reported from several specimens collected from a stream that runs from the Terria Ghat at the foot of the Khasi Hill by Jerdon (1870) and after then it was recorded from a shell brought by a student from an oil field of Sylhet (M.A.R. Khan pers. comm. with M.F. Ahsan, Khan 1982a). This taxon has also been recorded from near airport of Sylhet (M.M.H. Khan Pers. comm. with M.F. Ahsan) and Mainimukh of Chittagong Hill Tracts (Das 1995). As the holotype is collected from Khasi Hills of Sylhet, so this species may be found in suitable habitats of the greater Sylhet (see also Khan 1982b, Hasan et al. 2014) and also in Chittagong Hill Tracts (Khan M.M.H. 2009).

EOO: 47,053 km²

AOO: 18,343 km²

Population

Generation Time (Length): Not known

Total Population: No estimate exists for this species. It appears to be extremely rare even within its limited range.

No of Sub-population: Not known

Trend: Decreasing

Habitat and Ecology

This oviparous species is terrestrial and freshwater in nature. No estimate exists for this species. It appears to be extremely rare even within its limited range. This taxon's preferred habitats are fast flowing streams, small rivers in the hills and foothills as well as ox-bow lakes in the plains (Das 1995). It is crepuscular in habit.

Assessor: Mohammed Mostafa Feeroz



Amyda cartilaginea

Species ID: RE0027

CRITICALLY
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Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|------------|--------------|
| ANIMALIA | CHORDATA | REPTILIA | TESTUDINES | TRIONYCHIDAE |

Scientific Name: *Amyda cartilaginea* (Boddaert, 1770)

English Name: Asiatic Softshell Turtle, Southeast Asian Softshell Turtle, Malayan Softshell Turtle

Local Name: Pahari Tarunasthi Kasim

Synonym/s: *Testudo cartilaginea* Boddaert, 1770

Testudo rostrata Thunberg, 1787

Trionyx javanicus Geoffroy Saint-Hillaire, 1809

Aspidonectes javanicus Wagler, 1830

Gymnopus javanicus Deménil and Bibron, 1835

Trionyx ornatus Gray, 1861

Trionyx phayrei Theobald, 1870

Trionyx ephippium Theobald, 1875

Trionyx cartilagineus Boulenger, 1889

Trionyx nakornsrihammarajensis Nutaphand, 1979

Trionyx cartilagineus Bong Heang, 1987

Amyda cartilaginea Ernst and Barbour, 1989

Taxonomic Notes: Based on molecular studies, Friez *et al.* (2014) reported that the species occurs in Bangladesh territory is *amyda ornata*.

Assessment Information

Red List Category & Criteria: CR B2ab ver 3.1

Justification: The species is restricted to few hills rivers in Bandarban (Khan 2012) and in stony stream inside Inani Reserved Forest of Cox's Bazar (Kabir *et al.* in press, pers. comm.). It is heavily hunted by ethnic people for meat. Since it occurs in restricted areas and the quality of habitat is continuously degrading due to use of agrochemicals in the catchment areas and siltation due to deforestation, it qualifies for Critically Endangered Category.

Date Assessed: 21 August 2014



Amyda cartilaginea

© Md. Tarik Kabir

History

Regional Status: It was not assessed (IUCN Bangladesh 2000b).

Geographic Range

Global: It is native to Bangladesh, Cambodia, Brunei Darussalam, India Indonesia, Laos, Malaysia, Myanmar, Singapore, Thailand and Vietnam (Asian Turtle Trading Group 2000, <http://reptile-database.reptarium.cz/species?genus=Amyda&species=cartilaginea>. Downloaded on 05 August 2015, Das 2010, Khan 2012). Bangladesh: It is known to occur in parts of the Sangu River, its tributary Remakri Khal in Bandarban (Khan 2012) and streams in Inani Reserved Forest of Cox's Bazar (Kabir *et al.* in press, pers. comm.).

EOO: 4,907 km²

AOO: 88 km²

Population

Generation Time (Length): Not known

Total Population: Not known

No of Sub-population: Not known

Trend: Decreasing

Habitat and Ecology

Amyda cartilaginea inhabits streams, canals and rivers in hilly areas. It is carnivorous and feeds on fishes, crustaceans, shrimps, frogs and aquatic insects; females lay 4-8 round eggs in riverbanks and incubation period is about 130-140 days (Das 2010). It occurs in water or on ground near water. It is exploited by ethnic people for meat.

Assessor: M. Monirul H. Khan



Chitra indica

Species ID: RE0031

CRITICALLY
ENDANGERED
<CR>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|------------|--------------|
| ANIMALIA | CHORDATA | REPTILIA | TESTUDINES | TRIONYCHIDAE |

Scientific Name: *Chitra indica* (Gray, 1830)

English Name: Narrow-headed Softshell Turtle, Indian Narrow-headed Softshell Turtle

Local Name: Chim Kachhim, Gotajil

Synonym/s: *Trionyx indicus* Gray, 1830

Trionyx aegyptiacus var. *indicus* Gray, 1831
Gymnopus lineatus Duméril and Bibron, 1835
Chitra indica Gray, 1844
Gymnopus indicus Cantor, 1847
Trionyx lineatus Martens, 1876
Chitra indica Boulenger, 1889
Pechelys bibronii Smith, 1931
Trionyx indica Taylor, 1970
Chitra indica Manthey and Grossmann, 1997

Taxonomic Notes: It is placed by some researchers as a subspecies under *C. chitra* (Asian Turtle Trade Working Group 2000), but *C. indica* is a Southeast Asian species and different from the Malaysian species.

Assessment Information

Red List Category & Criteria: CRA2bcd ver 3.1

Justification: The species is rare in the country. Once reported from food market (Ahmed 1958; Fugler 1984; Rashid and Khan 2000), but the species has now disappeared from the market (Das and Singh 2009; pers. obs.). Khan (1996) reported it as being sold in Dinajpur market based on sighting a few specimens there during May 1988. No specimen of this species has appeared in the market in last 15 years (Rahman *et al.* 2013), which might indicate that the species is close to extermination from Bangladeshi river systems. Therefore, it is considered as Critically Endangered.

Date Assessed: 21 August 2014.



Chitra indica

© Shekar Dattatri

History

Regional Status: Critically Endangered (IUCN Bangladesh 2000b).

Geographic Range

Global: It occurs in Bangladesh, India, Myanmar, Nepal, Pakistan and Western Malaysia (Asian Turtle Trade Working Group 2000).

Bangladesh: Narrow-headed Softshell Turtle known to live in larger rivers, including the Bhairab, Brahmaputra, Dhaleswari, Jamuna, Kirtankhola, Meghna, Padma, Sitalakka, Tista and others (Khan 1982a, 1982b, 1996, Hossain and Sarker 1995, Rashid and Khan 2000).

EOO: 2,08,257 km²

AOO: 7,143 km²

Population

Generation Time (Length): Not known

Total Population: Not known

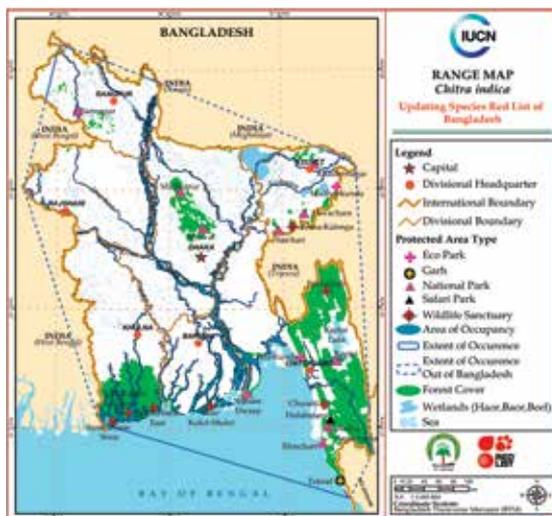
No of Sub-population: Not known

Trend: Decreasing.

Habitat and Ecology

Narrow-headed Softshell Turtle lives in freshwater and spends most of the day submerged in the sandy bottoms of deep rivers. However, during winter it spends appreciable time basking on sandbars, locally called chars (Khan 1996). Females lay their eggs on sandy beaches and the clutch varies from 65-187 with an average of 118 eggs (Das 1995). Feed mainly on fish, mollusks and crustaceans (Ahsan 2009). Breeding season in Bangladesh extends from February to May and females lay eggs on land in three clutches: (1) between late February and mid-March, (2) between late March and mid-April, and (3) between late April and mid-May (Rashid and Swingland 1997).

Assessor: Suprio Chakma



CRITICALLY
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Pelochelys cantorii

Species ID: RE0012

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|------------|--------------|
| ANIMALIA | CHORDATA | REPTILIA | TESTUDINES | TRIONYCHIDAE |

Scientific Name: *Pelochelys cantorii* Gray, 1864**English Name:** Asian Giant Softshell Turtle, Cantor's Giant Softshell Turtle, and Frog-faced Softshell Turtle**Local Name:** Jata Kachim**Synonym/s:** *Pelochelys cantorii* Gray, 1864*Pelochelys cumingii* Gray, 1864*Pelochelys poljakowii* Strauch, 1890*Pelochelys cantoris* Baur, 1891*Pelochelys cantori* De Rooij, 1915*Pelochelys cantorii* Cox et al., 1998**Taxonomic Notes:** This species had been described as *P. bibroni* in older publications (e.g., Khan 1982 a, b, 1987, IUCN Bangladesh 2000b).

Assessment Information

Red List Category & Criteria: CR A2cd ver 3.1**Justification:** The Extent of Occurrence and Area of Occupancy of the taxon are very large due to its wide distributional range and do not meet any criterion of the threatened category that signifies Least Concern. But the species is very rare in its range area and rarely found in the fish markets that indicates definite decline of the population. It is highly sought after delicacy (Khan 1987), which also points out towards decreasing population and its habitats have significantly been decreased (>80%). Therefore, it is categorized as Critically Endangered (A2cd).**Date Assessed:** 14 June 2014

History

Regional Status: The species is reported as *Pelochelys bibroni* and assessed as Critically Endangered (IUCN Bangladesh 2000b).*Pelochelys cantorii*

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Geographic Range

Global: The species is known to occur in Bangladesh, Cambodia, China, India, Indonesia, Lao PDR, Malaysia, Myanmar, Papua New Guinea, Philippines, Thailand and Vietnam (Asian Turtle Trade Working Group 2000).**Bangladesh:** This taxon has been reported from Lower Ganges System Comilla/Meghna, Sundarbans river system, Bhola and Pirojpur (Annandale 1912, Ahmed, 1958, Khan 1987, Das 2002, Chakma 2009, S.M.A. Rashid pers. comm.).**EOO:** 79,339 km²**AOO:** 11,586 km²

Population

Generation Time (Length): Not known**Total Population:** Not known**No of Sub-population:** Not known**Trend:** Decreasing

Habitat and Ecology

Pelochelys cantorii inhabits coastal and estuary areas and freshwater bodies like lakes, streams, and big river systems. It is aquatic. It is slow and docile, never bites even it is roughly handled (Chakma 2009). Diet includes fish, shrimps, crabs and mollusks, and also eats aquatic plants (Das 2010). Clutches comprise 20-70 (Das 1995, 2010); in Malaysia nesting takes place during February-March along with other estuarine species like *Batagur baska* (Das 1995) and more than one nesting done in December (Sharma 1998).**Assessor:** Suprio Chakma

Chelonia mydas

Species ID: RE0009

CRITICALLY
ENDANGERED
<CR>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|------------|-------------|
| ANIMALIA | CHORDATA | REPTILIA | TESTUDINES | CHELONIIDAE |

Scientific Name: *Chelonia mydas* (Linnaeus, 1758)
English Name: Green Sea Turtle, Green Turtle, Black (sea) Turtle, Pacific Green Turtle

Local Name: Sabuj Shamudrik Kachhim, Samudrik Kasim, Baro Kassop or Kasim

Synonym/s: *Testudo mydas* Linnaeus, 1758
Testudo cepediana Daudin, 1802
Chelonia mydas Schweigger, 1812
Chelonia lachrymata Cuvier, 1829
Testudo mydas Cuvier, 1831
Chelonia midas Duméril and Bibron, 1835
Euchelus macropus Girard, 1858
Chelonia albiventer Nardo, 1864
Mydas viridis Gray, 1870
Chelone mydas Boulenger, 1889
Chelonia mydas Stebbins, 1985

Assessment Information

Red List Category & Criteria: CR C2a(i) ver 3.1

Justification: Nesting site of the green turtle is known to occur at small areas of Saint Martin's Island, Shahporir Dweep and Sonadia Island; and the total number of nests predicted to be less than 50 between 2001 and 2005 (Islam *et al.* 2011), so the number of mature individuals also likely to be less than 50; and also the Area of Occupancy to be less than 50 km², that qualify it as Critically Endangered.

Date Assessed: 21 August 2014

History

Regional Status: It was not assessed (IUCN Bangladesh 2000b).



Chelonia mydas

© Chinmay Khanchi

Geographic Range

Global: This species occurs throughout tropical and subtropical ocean worldwide, oceanic islands and coastal waters with sandy beaches; and detailed range countries are available in IUCN (Seminoff 2004).

Bangladesh: It occurs from the Sundarbans to the Saint Martins in the Bangladesh part of the Bay of Bengal in small numbers (Khan 1982a, b, 1986). Green Turtle females come to lay eggs in the Saint Martin's Island, Shahporir Dweep and Sonadia Island; there is no resident population (Islam 2002, Islam *et al.* 2011).

EOO: 997 km²

AOO: 42 km²

Population

Generation Time (Length): Not known (the generation lengths used for this assessment range from 35.5 to 49.5 years Seminoff 2014).

Total Population: Not known

No of Sub-population: Not known

Trend: Decreasing

Habitat and Ecology

In Bangladesh it is known to be present in the Bay of Bengal from the Sundarbans to the Saint Martin's in small numbers. It commonly inhabits around oceanic islands especially in areas with sea grass beds and coasts with wide sandy beaches. Juveniles of *Chelonia mydas* are carnivorous, but adults are grazing herbivores in nature feeding on sea grasses, sea weeds and algae (Das 1995), but it also eat sea creatures like jelly-fish, comb jellies, crayfish and crabs (<http://marinebio.org/species.asp?id=51>. Downloaded on 20 June 2014).

The estimated reproductive longevity is 17-23 years (Carr *et al.* 1978, Fitzsimmons *et al.* 1995) and a mean reproductive life is reported to be 19 years at Heron Island in Australia (Chaloupka *et al.* 2004). Females lay eggs every 2-3 years depending on ecological factors like feeding ground quality and remoteness and return to the same beach, and incubation period is 42-70 days (Venkataraman and Milton 2003).

Assessor: Md. Farid Ahsan, Md. Tarik Kabir



CRITICALLY
ENDANGERED
<CR>

Eretmochelys imbricata

Species ID: RE0023

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|------------|-------------|
| ANIMALIA | CHORDATA | REPTILIA | TESTUDINES | CHELONIIDAE |

Scientific Name: *Eretmochelys imbricata* (Linnaeus, 1766)**English Name:** Hawksbill Turtle, Hawksbill Sea Turtle**Local Name:** Samudrik Kachhim, Bajthuti Samudrik Kachhim**Synonym/s:** *Testudo imbricata* Linnaeus, 1766*Testudo imbricata* Shaw and Nodder, 1797*Chelonia radiata* Cuvier, 1829*Testudo imbricata* Cuvier, 1831*Eretmochelys imbricata* Agassiz, 1857*Onychochelys kraussi* Gray, 1873*Chelone imbricata* Boulenger, 1889*Eretmochelys imbricata* Stebbins, 1985**Taxonomic Notes:** Three subspecies occur in nature: *E. i. imbricata* (Linnaeus, 1766), *E. i. bisssa* (Rüppell, 1835) and *E. i. squamata* Agassiz, 1857. Possibly the last one occurs in Bangladesh.

Assessment Information

Red List Category & Criteria: CR B2ab(iii) ver 3.1**Justification:** The species rarely comes to lay eggs in Bangladesh coastal islands and the last nesting was recorded in 1998 in the Saint Martin's Island. Only a small portion (about 3.5 km²) of the whole island (8 km²) is suitable for laying eggs, which puts it in the Critically Endangered Category.**Date Assessed:** 31 March 2015

History

Regional Status: Endangered (IUCN Bangladesh 2000b)

Geographic Range

Global: The species is distributed throughout tropical and subtropical waters of the Atlantic, Indian and Pacific Oceans (Mortimer and Donnelly 2008).*Eretmochelys imbricata*

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Bangladesh: It is reported from the Saint Martin's Island (Islam 2002, <http://www.marinelifealliance.org>. Downloaded on 05 March, 2015) but possibly occurs in the Bay of Bengal from the south of the Sundarbans to the Saint Martin's Island (Khan 1982a).**EOO:** 8 km²**AOO:** 4 km²

Population

Generation Time (Length): It is recorded 45 years in Indo-Pacific population (Mortimer and Donnelly 2008).**Total Population:** Not known**No. of Sub-population:** Not known**Trend:** Decreasing

Habitat and Ecology

Information on the species from Bangladesh territory is wanting. *Eretmochelys imbricata* is common in warm seas around oceanic islands with sandy nesting beaches (Das 1995). It is diurnal in habit but nocturnal for laying eggs. It prefers shallow coastal waters with rocky coastal embankment and coral reef with shallow vegetated bottom (Chakma 2009). It is mainly carnivorous in nature and diets include sponges, coelenterates, echinoderms, ectopods, gastropods, bivalve mollusks, and crustaceans (Pritchard 1979). Nesting is round the year and varies from place to place with a peak between June and October on the Indian mainland and December and January in Sri Lanka (Das 1995). Females lay 2-4 clutches in a year with 96-182 eggs in each clutch (Sharma 1998; <http://www.marinelifealliance.org>. Downloaded on 05 March, 2015) and eggs hatch out by 60-65 days (Das 1995).**Assessor:** Md. Tarik Kabir

Dermochelys coriacea

Species ID: RE0025

CRITICALLY
ENDANGERED
<CR>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|------------|----------------|
| ANIMALIA | CHORDATA | REPTILIA | TESTUDINES | DERMOCHELYIDAE |

Scientific Name: *Dermochelys coriacea* (Vandelli, 1761)

English Name: Leatherback Sea Turtle

Local Name: Samudrik Kachhim, Baro Kachhim, Chamra Kachhim

Synonym/s: *Testudo coriacea* Vandelli, 1761
Testudo coriacea Linnaeus, 1766
Testudo arcuata Catesby, 1771
Testudo tuberculata Pennant, 1801
Chelonia lutaria Rafinesque, 1814
Sphargis coriacea Gray, 1831
Testudo coriacea Cuvier, 1831
Dermatochelys coriacea Günther, 1864
Dermochelys coriacea Cox *et al.*, 1998
Dermochelys coriacea Bonin *et al.*, 2006

Assessment Information

Red List Category & Criteria: CR B2bc(iii) ver 3.1

Justification: *Dermochelys coriacea* has a very small distributional range in Bangladesh. Its Area of Occupancy is just 8 km² that meets the Criterion of Critically Endangered Category. Moreover, mass tourism and fishing activities are destroying the nesting and feeding habitats of this and other marine turtles.

Date Assessed: 31 March 2015

History

Regional Status: Endangered (IUCN Bangladesh 2000b).

Geographic Range

Global: It is distributed throughout tropical and subtropical waters of the Atlantic, Pacific and Indian Oceans (<http://reptile-database.reptarium.cz/species?genus=Dermochelys&species=coriacea>. Download on 07 March 2015).



Dermochelys coriacea

© Paul Freed

Bangladesh: In the Bay of Bengal from the Sundarbans in the west to the Saint Martin's Island in the east (Khan 1982, 1987). So far live specimens have been caught in fishing gears in and around the Sonadia Island, Maheshkhali Island the Cox's Bazar in Bakkhali Channel and Estuary under the Cox's Bazar district (Islam 2002, <http://www.seaturtlebd.org/Leatherback.html>. Downloaded on 10 March 2015; <http://fri.shabdik.com/images/newsletter/Newsletter.pdf> downloaded on 22 September 2015).

EOO: 503 km²

AOO: 410 km²

Population

Generation Time (Length): Not known

Total Population: Not known

No of Sub-population: Seven sub-populations have been traced globally (Wallace *et al.* 2013)

Trend: Decreasing

Habitat and Ecology

Dermochelys coriacea is a truly pelagic species and comes ashore only to nest. It is known to dive up to 1,200 m below the surface (Das 1995). This species is diurnal in habit and nocturnal for laying eggs, but oviposition was recorded during day at Calicut, Kerala in India (Das 1995). Nesting occurs round the year and it varies from place to place. Females lay 3-9 times in a season; clutches comprise 50-180 eggs of which 10-15 are smaller, eggs hatch in 50-70 days or more depending on weather conditions (Das 1995, Sharma 1998, Wallace *et al.* 2013, <http://www.seaturtlebd.org/Leatherback.html>. Downloaded on 10 March, 2015). It makes extensive migration between different feeding and breeding areas (Wallace *et al.* 2013).



Assessor: Md. Tarik Kabir

Dopasia gracilis

Species ID: RE0051

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|----------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | ANGUIDAE |

Scientific Name: *Dopasia gracilis* (Gray, 1845)**English Name:** Asian Glass Lizard, Burmese Glass Lizard**Local Name:** Pahin-Tiktiki, Jhiliik shap Tiktiki**Synonym/s:** *Pseudopus gracilis* Gray, 1845*Ophiseps tessellatus* Blyth, 1853*Ophisaurus gracilis* Smith, 1935*Dopasia gracilis* Nguyen, 2011*Ophisaurus gracilis* Kastle, 2013

Assessment Information

Red List Category & Criteria: CR B2ab(iii,iv) ver 3.1

Justification: There is only one sight record of the species in Bangladesh (Madhabkunda Eco-Park of Moulvibazar) and the total area of the Eco-Park is only 2.66 km². Similar habitats elsewhere in Bangladesh have been half-heartedly surveyed, but the species has not been found. Therefore, the Area of Occupancy of the species is estimated to be <10 km², found in only one location, and continued decline of its habitat is occurring. Therefore, it qualifies for Critically Endangered category.

Date Assessed: 22 September 2014

History

Regional Status: It is not evaluated by IUCN Bangladesh in 2000, because its occurrence in the country was not known at that time.

Geographic Range

Global: The species is native to Bangladesh, China, India, Myanmar, Thailand and Vietnam (<http://reptile-database.reptarium.cz/species?genus=Dopasia&species=gracilis>. Downloaded on 20 October 2014).

*Dopasia gracilis*

© Abhijit Das

Bangladesh: It has so far been recorded from the Madhabkunda Eco-Park in Moulvibazar (M.A. Muhi pers. comm. in Chakma 2009, Hasan *et al.* 2014, Khan 2015) but might occur in similar habitats elsewhere.

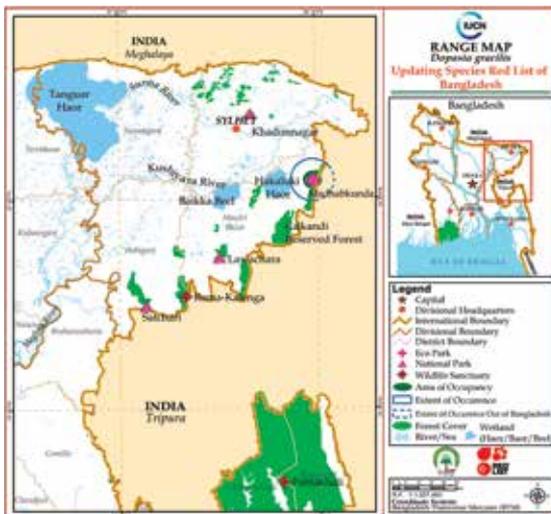
EOO: 4 km²**AOO:** 4 km²

Population

Generation Time (Length): Not known**Total Population:** Not known**No. of Sub-population:** Not known**Trend:** Presumably declining

Habitat and Ecology

This species is sluggish and feigns death when frightened. It feeds on insects, mollusks and earthworms and breeds during the rainy season (Daniel 2002). The female lays 4-6 eggs in a clutch and stay with the eggs (Daniel 2002, Ahmed *et al.* 2009). It inhabits under the forest litter, logs or stones in the hill forests (Daniel 2002) and prefers hilly areas. It is nocturnal (Ahmed *et al.* 2009) and possibly diurnal as the only record of it was done at daytime when the specimen was basking in sunlight on 8 September 2006 (Khan 2010).

**Assessor:** M. Monirul H. Khan

Malayopython reticulatus

Species ID: RE0073

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Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|------------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | PYTHONIDAE |

Scientific Name: *Malayopython reticulatus* (Schneider, 1801)

English Name: Reticulated Python, (Asiatic) Reticulated Python

Local Name: Ajogor, Gol Bahar

Synonym/s: *Boa reticulata* Schneider, 1801

Boa phrygia Shaw, 1802

Coluber javanicus Shaw, 1802

Python schneideri Merrem, 1820

Python reticulatus Fitzinger, 1826

Constrictors chneideri Wagler, 1830

Python schneiderii Cuvier, 1831

Broghammerus reticulatus Hoser, 2004

Malayopython reticulatus Reynold *et al.*, 2014

Taxonomic Notes: Three subspecies have recently been recognized (<http://reptile-database.reptarium.cz/species?genus=Malayopython&species=reticulatus>.

Downloaded on 12 November 2014): *Malayopython r. reticulatus* (Schneider, 1801), *M. r. saputrai* (Auliya *et al.*, 2002), and *M.r. jampeanus* (Auliya *et al.*, 2002).

Assessment Information

Red List Category & Criteria: CR A2cd or B1ab(i,ii,iii) ver 3.1

Justification: The species is very rare with restricted distribution in the mixed evergreen forests of southeast in the country and its habitats are being lost and degraded due to anthropogenic factors and developments in some areas of its range. Hunting is also reported for meat and skin. So, it qualifies as Critically Endangered.

Date Assessed: 17 November 2014

History

Regional Status: Critically Endangered (IUCN Bangladesh 2000b).

Geographic Range

Global: The species occurs in Bangladesh, Brunei Darussalam, Cambodia, India (Nicobar Islands), Lao



Malayopython reticulatus

© Mcd. Tarik Kabir

PDR, Malaysia, Myanmar; Philippines Singapore, Thailand and Vietnam (<http://reptile-database.reptarium.cz/species?genus=Malayopython&species=reticulatus>.. Downloaded on 12 November 2014).

Bangladesh: It is found in mixed evergreen forests of Southeast Bangladesh (pers. obs., Khan 1982a, 2015; Khan M.M.H. 2008, Hasan *et al.* 2014).

EOO: 22,554 km²

AOO: 10,119 km²

Population

Generation Time (Length): Not known

Total Population: Not known

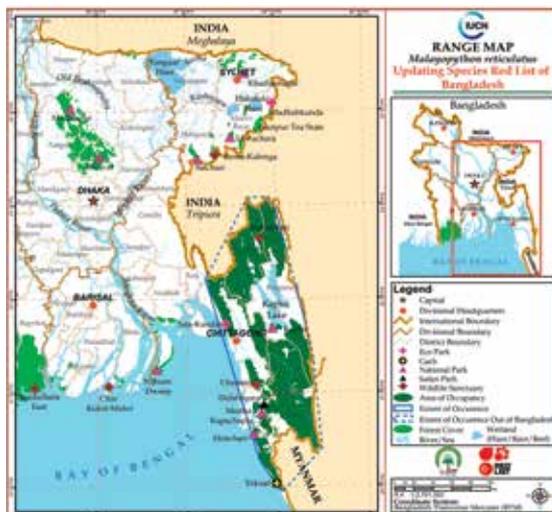
No. of Sub-population: Not known

Trend: Decreasing

Habitat and Ecology

The taxon is mainly terrestrial, arboreal and semi-aquatic. It inhabits humid forests, woodlands, and nearby grasslands associated with rivers and is found in areas with nearby streams and lakes. In Bangladesh context the Reticulated Python is partial to deeper parts of the mixed evergreen forests still having century-old *Ficus* and other large trees with plenty of hollows and decaying parts, near some streams or larger waterbodies. Due to excessive persecution this python is now more arboreal than its other populations (M.A.R.Khan pers. comm.). It is mainly solitary, sedentary, nocturnal, and a good climber and an excellent swimmer. It is an ambush hunter and kills preys through constrict coiling. Its natural diet includes large mammals like wild boar, deer, cattle, civets, binturong, primates, cats, dogs, tiger and rodents and occasionally eats birds, reptiles and very rarely human being (http://en.wikipedia.org/wiki/Reticulated_python, downloaded on 12 November 2014; Chakma 2009). The taxon is oviparous, female lays 50-124 eggs per clutch during April-May. The average lifespan in captivity is 21.3 years and it is 25.3 years for male (Max Planck Institute for Demographic Research in http://animaldiversity.org/accounts/Python_reticulatus. Downloaded on 12 November 2014).

Assessor: Md. Farid Ahsan



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Gavialis gangeticus

Species ID: RE0170

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|------------|------------|
| ANIMALIA | CHORDATA | REPTILIA | CROCODYLIA | GAVIALIDAE |

Scientific Name: *Gavialis gangeticus* (Gmelin, 1789)**English Name:** Gharial, Indian Gharial, Fish-eating Crocodile, Gavial, Long-nosed Crocodile**Local Name:** Gharial

Synonym/s: *Lacerta gangetica* Gmelin in Linnaeus, 1789
Crocodylus gavial Bonnaterre, 1789
Crocodylus longirostris Schneider, 1801
Crocodylus arctirostris Daudin, 1802
Crocodylus tenuirostris Cuvier, 1807
Gavialis gangeticus Gray, 1831

Taxonomic Notes: Molecular genetic studies show that the gharial and the false gharial (*Tomistoma*) are close relatives, which would support to place them in the same family (Janke *et al.* 2005). Further, molecular studies consistently and unambiguously show the Gavialidae to be a sister group of the Crocodylidae to the exclusion of Alligatoridae, rendering Brevirostris paraphyletic and Gavialoidea perhaps polyphyletic. The clade including crocodiles and gharials has been suggested to be called *Longirostris* (Gatesy and Amato 2008).

Assessment Information

Red List Category & Criteria: CR A2abc+C2a(i)(ii) +D ver 3.1

Justification: The species has been assessed as Critically Endangered because its population size is being reduced day by day, there exists no breeding population in the country and habitat has dwindled severely in the past few decades. It fits to the Criteria A (2abc), C (2a(i)(ii)) and D.

Date Assessed: 18 March 2015

History

Regional Status: Critically Endangered (IUCN Bangladesh 2000b).*Gavialis gangeticus*

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Geographic Range

Global: *Gavialis gangeticus* occurs in Bangladesh, Bhutan, India, Myanmar, Nepal and Pakistan (<http://reptile-database.reptarium.cz/species?genus=Gavialis&species=gangeticus>. Downloaded on 20 June 2015).

Bangladesh: The taxon is found in the Padma, Jamuna and Tista River of northern part of Bangladesh (Khan 1992, 2015).

EOO: 47,109 km²**AOO:** 5,983 km²

Population

Generation Time (Length): The generation time (the age at which 50% of total reproductive output is achieved) is 20 years (Rao *et al.* 1995).

Total Population: The estimated population was 52 individuals (with adult-young ratio 2.5:1) during 1957-1990; 32 individuals (with adult-young ratio 1.1:1) during 1991-2000 and one young was found during 2000-2002 (Sarker *et al.* 2003). Nine individuals were spotted during 2009-2010 and 7 individuals during 2010-2011 and 5 individuals during 2011-2012 in the Padma river (Rashid *et al.* 2014).

No. of Sub-population: Not known**Trend:** Decreasing.

Habitat and Ecology

Gavialis gangeticus inhabits deep and fast flowing rivers but prefers places with reduced current (Khan 1982, 1987, 1996, Whitaker and Basu 1983). Females lay 10-96 eggs (average 40) on sandy eroded banks, which hatch out in 72-96 days at 32-34°C (Daniel 2002). This freshwater species is predominantly piscivorous but also eats turtles, birds and small mammals and is said to feed on corpses (Daniel 2002); young eat insects, tadpoles, small fish and frogs (Whitaker *et al.* 2007). It is solitary in nature but sometimes several individuals move in a group (Whitaker *et al.* 2007). It is both diurnal and nocturnal.

Assessor: Mohammad Firoj Jaman

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Geoclemys hamiltonii

Species ID: RE0016

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|------------|-------------|
| ANIMALIA | CHORDATA | REPTILIA | TESTUDINES | GEOEMYDIDAE |

Scientific Name: *Geoclemys hamiltonii* (Gray, 1831)
English Name: Black Spotted Pond Turtle, Black Pond Turtle, Spotted Pond Turtle, Indian Spotted Turtle, Spotted River Terrapin

Local Name: Kalo Kasim, Mogom

Synonym/s: *Emyshamiltonii* Gray, 1831
Emyspicquotii Lesson, 1831
Emysguttata Gray, 1832
Clemmys (Clemmys) hamiltonii Fitzinger, 1835
Geoclemys hamiltonii Gray, 1855
Melanochelys pictus Murray, 1884
Damonia hamiltonii Boulenger, 1889
Geoclemys hamiltonii Obst, 2003



Geoclemys hamiltonii

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Assessment Information

Red List Category & Criteria: EN (A2bcd) ver 3.1

Justification: There are few sighting records in Chittagong, Dhaka, Jessore, Manikganj, Narshingdi and Sylhet. It is an uncommon species in the Ganges and Brahmaputra river systems and adjacent water bodies. The population has declined more than 50% due to trapping in fishermen's net, professional poachers and over-exploitation and due to habitat loss. Therefore, the species is categorized as Endangered.

Date Assessed: 21 August 2014

History

Regional Status: Assessed as Endangered (IUCN Bangladesh 2000b)

Geographic Range

Global: This taxon is found in Bangladesh, India, Nepal and Pakistan (Asian Turtle Trade Working Group 2000).

Bangladesh: It is mostly seen in freshwater wetlands, in the Ganges and Brahmaputra river systems and their adjacent water bodies, including ponds and lakes in the countryside in Bagherhat, Barisal, Comilla, Dhaka, Faridpur, Manikganj, Noakhali, Panchagarh and Patuakhali Districts as well as in the haor basin of eastern parts i.e., greater Mymensingh and Sylhet Districts (Khan 1982, Das 1995, 2002; Hosen 2013, pers. obs.).

EOO: 1,48,173 km²

AOO: 7,453 km²

Population

Generation Time (Length): Not known

Total Population: Not known

No. of Sub-population: Not known

Trend: Decreasing

Habitat and Ecology

Geoclemys hamiltonii is aquatic and carnivorous; diets include mollusks, insect larvae, earthworms, meat and fish, fruits and leaves. Females lay 13-24 eggs in a clutch and more than one can be laid in a year; and incubation period is 23-76 days (Das 2002). It inhabits freshwater river systems, wetlands, shallow water, beels, haors and ponds.



Assessor: Md. Farid Ahsan

Hardella thurjii

Species ID: RE0017

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Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|------------|-------------|
| ANIMALIA | CHORDATA | REPTILIA | TESTUDINES | GEOEMYDIDAE |

Scientific Name: *Hardella thurjii* (Gray, 1831)**English Name:** Crowned River Turtle, Brahminy River Turtle**Local Name:** Kali Kaitta, Kali Kachhim, Baro Kaitta**Synonym/s:** *Emys thurjii* Gray, 1831*Emys flavonigra* Lesson, 1831*Emys thurjii* Duméril and Bibron, 1835*Kachuga oldhami* Gray, 1869*Hardella indi* Gray, 1870*Hardella thurgi* (Gray, 1870) [orth. error]*Hardella thurjii indi* Gray, 1870*Batagur floweri* Lydekker, 1885*Batagur cautleyi* Lydekker, 1885*Batagur watsonii* Lydekker, 1886*Hardella thurjii* Obst, 2003

Taxonomic Notes: Lydekker (1985, 1986) placed this species in the genus *Batagur* from fossil turtles of India, but all other authors continued to recognize *Hardella* as a distinct genus. It includes two subspecies: *H. t. indi* Gray, 1870 and *H. t. thurjii* (Gray, 1831); the latter occurs in Bangladesh

Assessment Information

Red List Category & Criteria: EN A2bc+A3bc ver 3.1

Justification: Although the Extent of Occurrence and the Area of Occupancy are quite large, but the species is rarely seen and the decline of both population and habitat (at least 50%) are continuing. Illegal trade and habitat destruction have caused local extinction from many places. It has not been seen in the local market for the last 10 years. Based on geographic range it signifies Vulnerable [B2ab(i)(ii)(iii)], but population projection signifies it as Endangered (A2bc+A3bc).

Date Assessed: 23 August 2014

History

Regional Status: Endangered (IUCN Bangladesh 2000b).*Hardella thurjii*

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Geographic Range

Global: This species occurs in Bangladesh, India, Nepal and Pakistan (Asian Turtle Trade Working Group 2000), possibly also occurs in Bhutan (Lenz 2012).

Bangladesh: It is found in all the major rivers and tributaries principally in the Brahmaputra, Buriganga, Dakatia, Dholeswari, Gomti, Jamuna, Kirtankhola, Kushiya, Meghna, Padma, Sitalakhaya, Surma; and Tista rivers as well as in fresh water wetlands (Khan M.A.R. 1982, Rashid and Swingland 1997, Sarker and Hossain 1997, Khan M.M.H., Ahsan and Kabir in preparation).

EOO: 73,888 km²**AOO:** 5,771 km²

Population

Generation Time (Length): Not known**Total Population:** Not known**No. of Sub-population:** Not known**Trend:** Declining

Habitat and Ecology

Hardella thurjii mostly uses sluggish or still water bodies but also inhabits pools, ponds, canals, slow-moving rivers, oxbow lakes and even estuaries (Khan M.A.R. 1987, Shrestha 1997, Das 2002). This taxon is semi-aquatic, terrestrial and freshwater. It feeds on plants (grasses, sedges, aquatic weeds and water hyacinth) and animals (prawns and fishes) in the wild and fruits, vegetables and parts of frog in captivity (Das and Bhupathy 2009). It nests at sand banks in winter from November to January; clutch size is 12-16 in Bangladesh (Rashid and Swingland 1997); in India, multiple clutches of 8-13 each and 30-100 eggs in a season; incubation period is 223-273 days (Basu 1998).

Assessor: Md. Tarik Kabir, Md. Farid Ahsan

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Nilssonia gangetica

Species ID: RE0028

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|------------|--------------|
| ANIMALIA | CHORDATA | REPTILIA | TESTUDINES | TRIONYCHIDAE |

Scientific Name: *Nilssonia gangetica* (Cuvier, 1825)**English Name:** Ganges Soft-shell Turtle, Indian Softshell Turtle**Local Name:** Khalua Kachhim, Ganga Kachhim**Synonym/s:** *Trionyx gangeticus* Cuvier, 1825*Aspidonectes gangticus* Wagler, 1833*Tyrse gangetica* Gray, 1844*Trionyx gangetiga* Gray, 1873*Aspideretes gangeticus* Hay, 1904*Amyda gangetica* Mertens, et al., 1934*Aspideretes gangeticus* Meylan, 1987*Nilssonia gangetica* Praschag et al., 2007

Assessment Information

Red List Category & Criteria: EN A2bcd ver 3.1**Justification:** The Extent of Occurrence (45,348 km²) and the Area of Occupancy (2,140 km²) are large due to the river systems and their tributaries where the species occurs sporadically. The population has declined more than 50% due to trapping in fishers' net, poaching for meat, bones and carapace and over-exploitation. As a result of these few individuals are now seen in the local markets (Khan 1987, Rahman et al. 2013). Therefore, the species is categorized as Endangered.**Date Assessed:** 21 August 2014

History

Regional Status: Endangered (IUCN Bangladesh 2000b)

Geographic Range

Global: It is found in Bangladesh, India, Nepal and Pakistan (Ganges, Indus and Mahanadi river systems) (Das 1995, <http://reptiledatabase.reptarium.cz/>)*Nilssonia gangetica*

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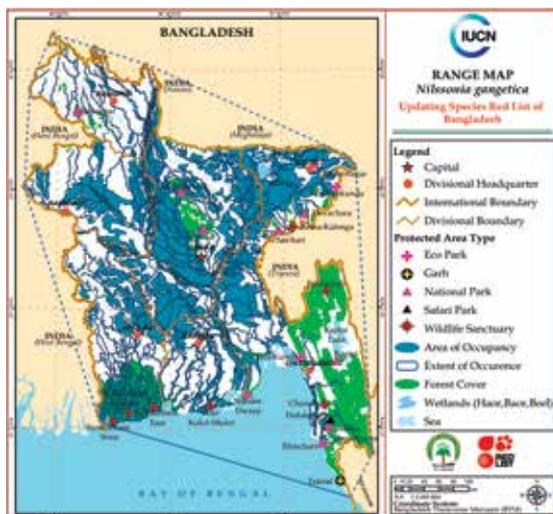
species?genus=*Nilssonia*&species=*gangetica*. Downloaded on 15 August 2014).**Bangladesh:** It lives in the major river systems (Ganga-Padma, Jamuna-Brahmaputra, Surma-Kushiara-Megna, and so on) and flood-plains.**EOO:** 2,13,986 km²**AOO:** 45,348 km²

Population

Generation Time (Length): Not known**Total Population:** Not known**No of Sub-population:** Not known**Trend:** Decreasing

Habitat and Ecology

It inhabits the major river systems, including the Ganga-Padma, Jamuna-Brahmaputra and Surma-Kushiara-Megna and flood-plains but minus the rivers in the north-eastern hilly regions of the country (Khan 1982a, 1982b, 1987, 2015). Its home range is not known, but found up to an elevation of 10 m. *Nilssonia gangetica* is omnivorous and diurnal. It feeds on aquatic macrophytes and animal matter (Ahsan 2009). It has two peak breeding seasons: July to October is the major and December to January a minor peak; incubation period 217 to 287 days (Das 1995). Females sexually mature at the age of 10 years (Vyas 1995).

Assessor: Md. Farid Ahsan, Md. Tarik Kabir

Nilssononia nigricans

Species ID: RE0030

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Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|------------|--------------|
| ANIMALIA | CHORDATA | REPTILIA | TESTUDINES | TRIONYCHIDAE |

Scientific Name: *Nilssononia nigricans* (Anderson, 1875)
English Name: Black Softshell Turtle, Black Soft-shell Turtle, Bostami Turtle, Chittagong Mud Turtle, Chittagong Softshell Turtle, Sacred Turtle, Dark Softshell Turtle
Local Name: Bostami Kasim, Gazari-Madari, Bugum
Synonym/s: *Trionyx nigricans* Anderson, 1875
Aspideretes nigricans Meylan, 1987
Nilssononia nigricans Praschag *et al.*, 2007

Taxonomic Notes: Hatchlings and young individuals are easy to identify morphologically, but adults are little difficult to separate from *Nilssononia hurum*.

Assessment Information

Red List Category & Criteria: EN C2a(i) ver 3.1

Justification: Seven sighting records (including the Bostami Pond in Chittagong) give a wide distributional range of the species with large Extent of Occurrence and Area of Occupancy that signifies Threatened Category Vulnerable (VU-B2ab) but the mature and reproductively active individuals at the Bostami Pond, where the major population and the only semi-captive breeding population exists is less than 250 that signifies the species to Endangered category.

Date Assessed: 18 March 2015

History

Regional Status: Assessed as Critically Endangered (IUCN Bangladesh 2000b)

Geographic Range

Global: It is reported from Bangladesh and India (Praschag and Gemel 2002, Ahsan 2009, Ahsan and Saeed 2009)



Nilssononia nigricans

© Md. Farid Ahsan

Bangladesh: It is found in Bostami Pond in Chittagong, Mohonganj (Netrokona), Feni River, Muhuri Dam (Feni), Manikchari (Rangamati), Boropathar (Thanchi) and Srimangal (Maulavi bazaar). Before it was discovered in India in the 1990s it was considered to be the only 'endemic' vertebrate in Bangladesh (Khan 1982a, 1982b, 1987).

EOO: 25,044 km²

AOO: 958 Km²

Population

Generation Time (Length): Not known

Total Population: It is roughly estimated to be less than 2,500.

No of Sub-population: Seven sub-populations may be recognized in Bangladesh

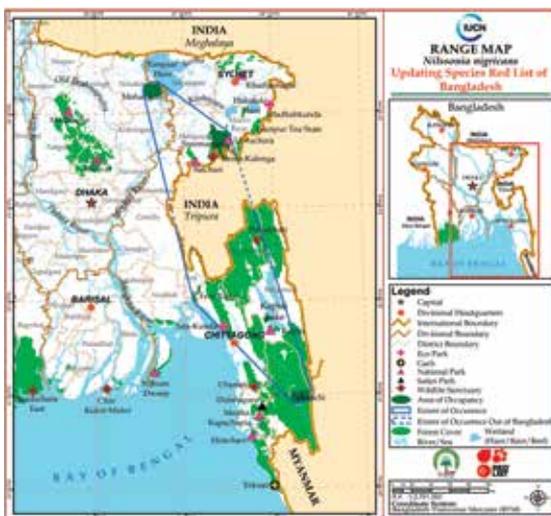
Trend: Decreasing

Habitat and Ecology

It inhabits freshwater river systems, hill streams, wetlands, shrine pond, dams and some other water bodies. It is aquatic, carnivorous but the captive population within the Bostami pond and its environs have been forced and enticed to eat man-made food such as puffed rice, banana, pieces of cattle lungs and livers, etc. (Ahsan and Haque 1987, Ahsan *et al.* 1991, 1994, Khan 1980, 1982a, 1987). Females nest from mid-January to mid-May lay 10–38 eggs; incubation period is between 81 and 108 days, hatchlings emerge from May to August (Ahsan 2009, Ahsan and Haque 1987, Ahsan *et al.* 1991, Ahsan and Saeed 1992).

Assessor: Md. Farid Ahsan

Associate Assessors: S.M.A. Rashid, Md. Tarik Kabir, Shahriar Caesar Rahman, Rukhsana Sultana



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Draco maculatus

Species ID: RE0036

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|----------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | AGAMIDAE |

Scientific Name: *Draco maculatus* (Gray, 1845)**English Name:** Spotted Flying Lizard, Asian Gliding Lizard**Local Name:** Chiti Uranto Tiktiki, Chitra Uranta Tiktiki**Synonym/s:** *Dracunculus maculatus* Gray, 1845*Draco maculatus* Cantor, 1847*Dracunculus maculatus* Günther, 1861*Draco maculatus* Boulenger, 1885*Draco haasei* Boettger, 1893 (fide Smith, 1935)*Draco maculatushaasei* Smith and Kloss, 1915 (fide Smith, 1935)*Draco maculatus* Smith, 1935**Taxonomic Notes:** This species has several subspecies (Taylor 1963); however, the validity of all subspecies is not clear (Manthey 2008).

Assessment Information

Red List Category & Criteria: EN B1+B2ab(i,ii,iii) ver 3.1**Justification:** The species has a wide distribution with large Extent of Occurrence and Area of Occupancy but its sighting records are few and data on its population are missing, its habitats are being lost and degraded due to commercial forestry, anthropogenic factors and developmental activities throughout its range in the country. So, it is considered as Endangered.**Date Assessed:** 24 September 2014

History

Regional Status: Critically Endangered (IUCN Bangladesh 2000b).

Geographic Range

Global: It is found in Bangladesh, Cambodia, China (Guangxi, Hainan, Tibet [or Xizang], Yunnan),*Draco maculatus*

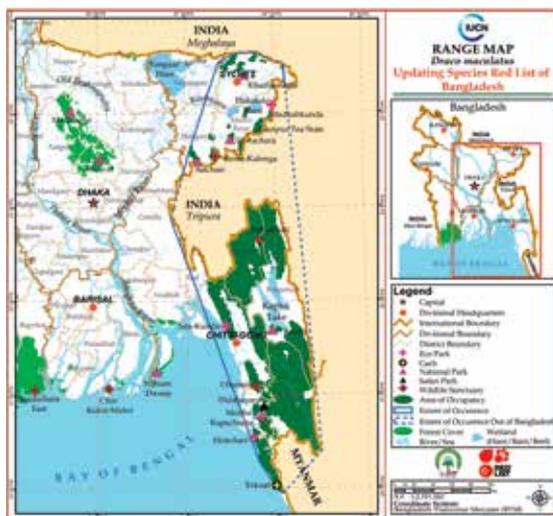
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India, Lao PDR, Malaysia, Myanmar, Thailand and Vietnam (<http://reptile-database.reptarium.cz/species?genus=Draco&species=maculatus>. Downloaded on 03 September 2014) and possibly occurs in Bhutan (Lenz 2012).**Bangladesh:** It is known to occur in mixed evergreen forests of east, northeast and southeast of the country (Chakma 2009; Feeroz *et al.* 2011, 2012; Hasan *et al.* 2013, 2014, Khan 2015).**EOO:** 45,192 km²**AOO:** 10,629 km²

Population

Generation Time (Length): Not known**Total Population:** Not known**No of Sub-population:** Not known**Trend:** Decreasing

Habitat and Ecology

Draco maculatus is arboreal and diurnal. It inhabits large trees in dense forests and rarely in nearby plantations. Highly camouflaging and difficult to trace except when it opens its gular pouch. It glides between trees using wing-like patagial membranes and feeds on ants and other small insects.**Assessor:** Md. Farid Ahsan

Ptyctolaemus gularis

Species ID: RE0038

ENDANGERED
 <EN>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|----------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | AGAMIDAE |

Scientific Name: *Ptyctolaemus gularis* (Peters, 1864)

English Name: Blue-throated Lizard, Green Fan-throated Lizard, Throated Agama

Local Name: Nil-gola Girgiti

Synonym/s: *Otocryptis (Ptyctolaemus) gularis* Peters, 1864

Ptyctolaemus gularis Boulenger, 1885

Ptyctolaemus gularis Smith, 1935

Ptyctolaemus gularis Das, 1996

Ptyctolaemus gularis Mahony *et al.*, 2009

Assessment Information

Red List Category & Criteria: EN A2bc+A4bc ver 3.1

Justification: This species is rather rare and spotted sporadically within its large Extent of Occurrence and Area of Occupancy in Bangladesh. Although these areas are large and the population status is rare, its habitats are being degraded and decreasing day by day due to wholesale conversion of forested areas into plantation and community forests, and other anthropogenic factors including developmental works. So, it is assessed as Endangered

Date Assessed: 24 September 2014

History

Regional Status: It was not included in the Red List IUCN Bangladesh 2000b. As it was not reported at that time.

Geographic Range

Global: It is found in Bangladesh, China (Xizang = Tibet), NE India (Assam; Khasi hills; Arunachal Pradesh, Mizoram) and Myanmar (Kachin, Chin) (<http://reptile-database.reptarium.cz/species?genus=Ptyctolaemus&species=gularis>. Downloaded on 21 September 2014); possibly also occurs



Ptyctolaemus gularis

© M K Hasan

in Bhutan (Lenz 2012).

Bangladesh: It occurs in northeast, east and southeast forests (Ahsan *et al.* 2008; Khan M M H 2008, Chakma 2009; Khan M A R 2010, 2015; Feeroz *et al.* 2011, 2012; Hasan *et al.* 2013, 2014).

EEO: 45,192 km²

AOO: 10,629 km²

Population

Generation Time (Length): Not known

Total Population: Not known

No of Sub-population: Not known

Trend: Decreasing

Habitat and Ecology

Ptyctolaemus gularis is a forest dweller species of mixed evergreen forests. The species is arbo-terrestrial, diurnal and insectivorous.



Assessor: Md. Farid Ahsan



Lygosoma punctata

Species ID: RE0055

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|-----------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | SCINCIDAE |

Scientific Name: *Lygosoma punctata* (Gmelin, 1799)

English Name: Spotted Supple Skink, Common Dotted Garden Skink, Common Snake Skink, Punctate Supple Skink

Local Name: Chiti Anjan, Chitrito Nomonio Anjan

Synonym/s: *Scincus punctatus* Gmelin, 1799
Seps scincoides Cuvier, 1829
Riopa punctata Gray, 1845
Riopa hardwickii Gray, 1845
Lygosoma punctatum Boulenger, 1887
Lygosoma (Riopa) punctata Deraniyagala, 1931
Riopa punctata Smith, 1935
Lygosoma punctatus Das, 1996
Lygosoma punctatum Ziegler *et al.* 2007
Lygosoma punctatum Geissleret *al.* 2012



Lygosoma punctata

© M K Hasan

Assessment Information

Red List Category & Criteria: EN B1+2 ab (i, ii, iii) ver 3.1

Justification: This species is rare and recorded only from two sites. The continuous decline of its Extent of Occurrence and Area of Occupancy fulfil the Criteria Endangered.

Date Assessed: 20 October 2014

History

Regional Status: Data Deficient (IUCN Bangladesh 2000b)

Geographic Range

Global: The species is known to occur in Bangladesh, India, Pakistan, Nepal, Sri Lanka and Vietnam (<http://reptile-database.reptarium.cz/species?genus=Lygosoma&species=punctata>).

Downloaded on 17 October 2104); possibly also occurs in Bhutan (Lenz 2012).

Bangladesh: It has so far been recorded from Lawachara National Park in the northeast and Dudpukuria-Dhopachari Wildlife Sanctuary in the southeast (Hasan *et al.* 2014). It may occur in other forests of northeast and southeast.

EOO: 4,957 km²

AOO: 73 km²

Population

Generation Time (Length): Not known

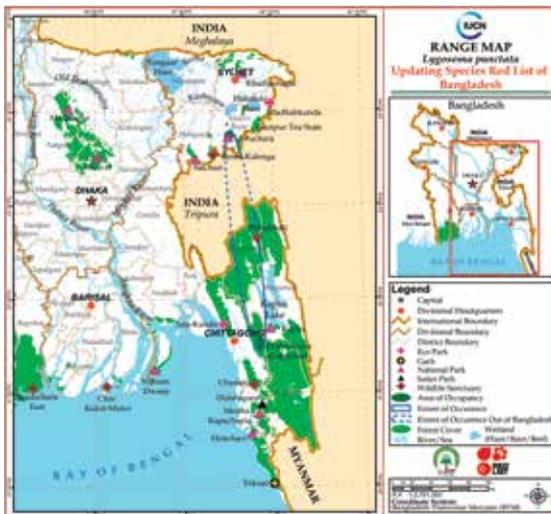
Total Population: No quantitative data available, presumably has a small population as it is rare and recorded from two sites only.

No. of Sub-population: Not known

Trend: Presumably declining

Habitat and Ecology

The species is terrestrial, diurnal and semi-fossorial. It feeds on small insects. Females of this taxon lay 2-4 eggs in a clutch (Das 2002, Chakma 2009). It inhabits forest floor of both hills and plains, and also in leaf litter of homestead vegetations.



Assessor: Md. Kamrul Hasan

Boiga siamensis

Species ID: RE0124

ENDANGERED
 <EN>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|------------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | COLUBRIDAE |

Scientific Name: *Boiga siamensis* Nootpand, 1971

English Name: Eyed Cat Snake.

Local Name: Borochokh Phonimonosha, Chokh-futajukto Phonimonosha

Synonym/s: *Boiga siamensis* Nootpand, 1971
Boiga ocellata Kroon, 1973
Boiga ocellata Cox *et al.*, 1998
Boiga ocellata Chan-ard *et al.*, 1999
Boiga ocellata Nabhitabhata *et al.*, 2000
Boiga ocellata Whitaker and Captain, 2004
Boiga ocellata David *et al.*, 2004
Boiga siamensis Pauwels *et al.*, 2005

Assessment Information

Red List Category & Criteria: EN B1+2 ab(i,ii) ver 3.1

Justification: This species has been categorized as Endangered in view of its small range of distribution, number of locations and continuous decline of its Extent of Occurrence and Area of Occupancy in the northeast of Bangladesh.

Date Assessed: 18 March 2015

History

Regional Status: Not Assessed (IUCN Bangladesh 2000b).

Geographic Range

Global: This species occurs in Bangladesh, Cambodia, India, Malaysia, Myanmar, Thailand and Vietnam (<http://reptile-database.reptarium.cz/species?genus=Boiga=siamensis>. Downloaded on 18 June 2015).



Boiga siamensis

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Bangladesh: It inhabits mixed evergreen forests of northeast (Hasan *et al.* 2014).

EOO: 79,973 km²

AOO: 505 km²

Population

Generation Time (Length): Not known

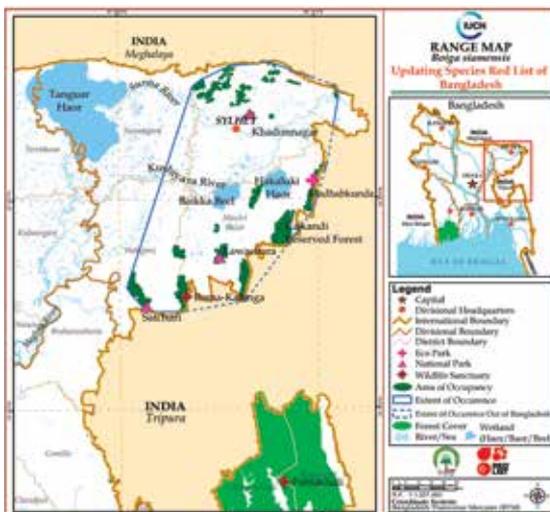
Total Population: It has a small population

No. of Sub-population: Not known

Trend: Not known

Habitat and Ecology

Boiga siamensis is a forest dwelling arboreal species (Chakma 2009, Hasan *et al.* 2014). This is nocturnal and oviparous. Its main food is birds and their eggs but it also feeds on small rodents (Whitaker and Captain 2004, Das 2012, Hasan *et al.* 2014).



Assessor: Md. Kamrul Hasan



Oligodon cinereus

Species ID: RE0085

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|------------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | COLUBRIDAE |

Scientific Name: *Oligodon cinereus* (Günther, 1864)

English Name: Black-barred Kukri Snake

Local Name: Kalo-ber Kukri Shap, Kalo-daghi Udoy Kal

Synonym/s: *Simotes cinereus* Günther, 1864

Simotes swinhonis Günther, 1864

Simotes multifasciatus Jan, 1865

Simotes semifasciatus Anderson, 1871

Simotes violaceus Boulenger, 1890

Oligodon cinereus Smith, 1943

Assessment Information

Red List Category & Criteria: EN B1+ab (iv) ver 3.1

Justification: This species is very rare and recorded from Lawachara National Park in the northeast and Kaptai National Park in the southeast (Hasan *et al.* 2014), and also from Chittagong Hill Tracts (Khan 1992) that mean it is recorded from three locations, which qualifies for the criteria of Endangered.

Date Assessed: 23 December 2014

History

Regional Status: Data Deficient (IUCN Bangladesh 2000b).

Geographic Range

Global: The species is reported from Bangladesh, Cambodia, China, Hong Kong, India, Lao PDR, Malaysia, Myanmar, Thailand and Vietnam (Stuart 2010).

Bangladesh: Khan (1992) noted it for Chittagong Hill Tracts region. Later on it has been found in Lawachara National Park in the Sylhet region and Kaptai National Park in the Hill Tracts (Hasan *et al.* 2014). However, it may also occur in other areas of the northeast, east and southeast regions.



Oligodon cinereus

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EOO: 18,453 km²

AOO: 7,828 km²

Population

Generation Time (Length): Not known

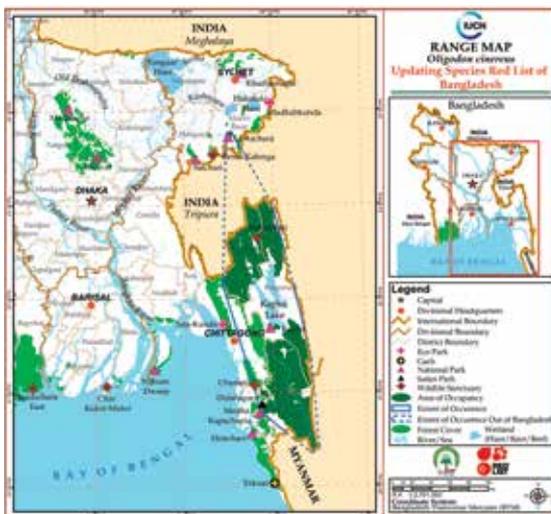
Total Population: It apparently has a small population

No. of Sub-population: Not known

Trend: Not known

Habitat and Ecology

It is a forest dwelling species and prefers forest floor (Hasan *et al.* 2014). The taxon is terrestrial and nocturnal (Das 2010). Very little information is available on its ecology. Possibly crepuscular and like other Kukri snakes feeds on frogs, small lizards, skinks (Kamruzzaman 2009; Hasan *et al.* 2014); diet comprises spiders and insects (Das 2010). Females lay 4-5 eggs in a clutch (*op. cit.*).



Assessor: Md. Kamrul Hasan

Crocodylus porosus

Species ID: RE0169

ENDANGERED
 <EN>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|------------|--------------|
| ANIMALIA | CHORDATA | REPTILIA | CROCODYLIA | CROCODYLIDAE |

Scientific Name: *Crocodylus porosus* Schneider, 1801

English Name: Salt-water Crocodile, Estuarine Crocodile

Local Name: Lona-panir Kumir

Synonym/s: *Crocodylus porosus* Schneider, 1801

Crocodylus oopholis Schneider, 1801

Crocodylus biporcatus Cuvier, 1807

Crocodylus biporcatus Duméril and Bibron, 1836

Oopholis pondicherianus Gray, 1862

Crocodylus porosus australis Deraniyagala, 1953

Crocodylus porosus minikanna Deraniyagala, 1953

Crocodylus porosus Cox et al., 1998

Assessment Information

Red List Category & Criteria: EN D ver 3.1

Justification: *Crocodylus porosus* is restricted to the Sundarbans with a small population of 100-150 mature individuals (Khan 1982, Rashid 2012) i.e., less than 250 mature individuals in nature and the population is further decreasing and there is tremendous anthropogenic pressure from the so-called 'Eco-tourism' and water transports passing through the core areas. So, the species has been assessed as Endangered.

Date Assessed: 18 March 2015

History

Regional Status: Critically Endangered (IUCN Bangladesh 2000b)

Geographic Range

Global: This species occurs in Australia, Bangladesh, Brunei Darussalam, Cambodia, China, India, Indonesia, Malaysia, Micronesia, Myanmar, Nauru, Palau, Papua



Crocodylus porosus

© Faysal Ahmad

New Guinea, Philippines, Singapore, Solomon Islands, Sri Lanka, Thailand, Vanuatu and Vietnam (Crocodile Specialist Group 1996).

Bangladesh: It is found in only some rivers of the Sundarbans and mangrove forests of Bangladesh (Khan 1982a, 2015).

EOO: 6,298 km²

AOO: 5,721 km²

Population

Generation Time (Length): Not Known

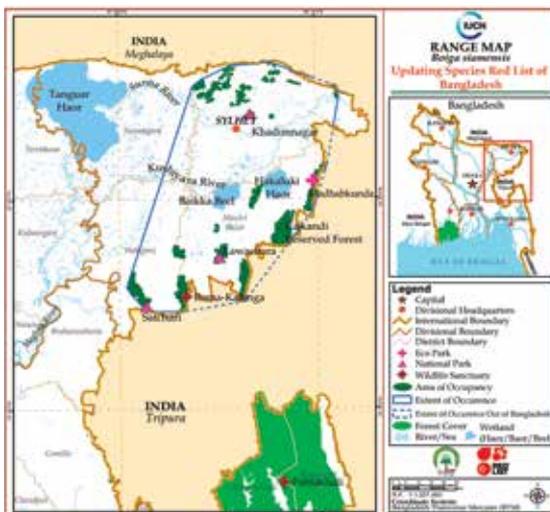
Total Population: Estimated to be 100-150 adult individuals in the wild (Rashid 2012)

No. of Sub-population: Not known

Trend: Decreasing

Habitat and Ecology

C. porosus lives in estuary and all river systems in Sundarbans only. Elsewhere, it inhabits brackish water of coastal areas and rivers in the coast, coastal mangrove swamp forests, also visits freshwater rivers and grass swamps (Chakma 2009). It lives in both salt water and freshwater. It is both diurnal and nocturnal.



Assessor: Mohammad Firaj Jaman



VULNERABLE
<VU>

Cuora amboinensis

Species ID: RE0005



Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|------------|-------------|
| ANIMALIA | CHORDATA | REPTILIA | TESTUDINES | GEOEMYDIDAE |

Scientific Name: *Cuora amboinensis* (Daudin, 1802)
English Name: Malayan Box Turtle, Domed Malayan Box Turtle, Southeast Asian Box Turtle, South Asian Box Turtle, Amboina Box Turtle

Local Name: Deeba Kachhim

Synonym/s: *Testudo ambionensis* Daudin, 1802
Testudo melanocephala Daudin, 1802
Terrapene bicolor Bell, 1825
Cuora amboienensis Gray, 1825
Cuora amboienensis Manthey and Grossmann, 1997

Taxonomic Notes: Type locality of the species is Amboine Island, Indonesia. Four subspecies are currently recognized, of which *C. a. lineata* occurs in Bangladesh and Myanmar

Assessment Information

Red List Category & Criteria: VU B1b(i,ii) ver 3.1

Justification: Based on some scattered records in the southeast of Bangladesh (Khan M.A.R. 1982, Khan M.M.H. 2008, Hasan *et. al.* 2014), the species covers large Extent of Occurrence (EOO) and Area of Occupancy (AOO) and do not signify any threatened category. But due to its rarity, scattered distribution, degradation of habitat quality and continuing decline of the EOO and AOO qualify it is to be assessed as Vulnerable [VU B1b(i,ii)].

Date Assessed: 25 June 2014

History

Regional Status: Endangered (IUCN Bangladesh 2000b)

Geographic Range

Global: The species occurs in Bangladesh, Bhutan, Cambodia, India (northeastern part), Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Singapore



Cuora amboinensis

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Thailand and Vietnam (Asian Turtle Trade Working Group 2000, <http://reptile-database.reptarium.cz/species?genus=Cuora&species=amboinensis>. Downloaded on 25 June 2014).

Bangladesh: It was first found at Duhapalong area of Cox's Bazar in June 1981 (Khan 1982a, 1987). It is known to occur in hills and plains in the southeast (i.e., Chittagong Hill Tracts, Chittagong and Cox's Bazar areas) having forests or good vegetation cover.

EOO: 22,420 km²

AOO: 10,026 km²

Population

Generation Time (Length): The longevity is usually 25-30 years and one turtle was reported to have lived for 38 years (Barbour and Ernst 1992).

Total Population: Not known

No of Sub-population: Not known, but probably one since the distribution is restricted to one area in the country.

Trend: Not known but probably declining.

Habitat and Ecology

C. amboinensis inhabits both standing and slow-flowing water bodies such as rivers, lakes, ponds, mangrove swamps, marshy areas and wet agricultural lands, particularly in and around forests including denuded low hills. It prefers still, warm water, it is often found in wet paddy fields, marshes and shallow ponds in the tropical areas (Das, 1995, 2002, 2010; Chakma 2009). It is usually solitary and slow-moving species active round the year. It is omnivorous (Barbour and Ernst 1992). Unlike most box turtles, this species is more aquatic and prefers a warm, wet environment; juveniles are more aquatic than amphibious adults (Das 2010). Female lays two clutches a year with 1-6 eggs in a clutch from April to June; and incubation period varies from 45-100 days depending on temperatures (Das 1995, 2002). The species reaches sexual maturity at 4-5 years (Barbour and Ernst 1992).

Assessor: M. Monirul H. Khan



Cyclemys gemeli

Species ID: RE0172

VULNERABLE
 <VU>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|------------|-------------|
| ANIMALIA | CHORDATA | REPTILIA | TESTUDINES | GEOEMYDIDAE |

Scientific Name: *Cyclemys gemeli* Fritz *et al.*, 2008

English Name: Asian Leaf Turtle

Local Name: Pata Kasim

Synonym/s: None

Taxonomic Notes: Species reported from Bangladesh as *Cyclemys dentata* and *C. oldhami* are both now considered as *C. gemeli*. However, the taxonomy still remains unclear; several species might be included in this species complex.

Assessment Information

Red List Category & Criteria: VU A2cd ver 3.1

Justification: The species is found in hilly areas of Chittagong and Chittagong Hill Tracts and Sylhet regions of the country. The Area of Occupancy and Extent of Occurrence do not fit to any Threatened Categories but considering the scale of hunting and other anthropogenic pressures the species is becoming rare to extremely rare. Therefore, it has been assessed as Vulnerable.

Date Assessed: 17 November 2014

History

Regional Status: Assessed as Data Deficient as *Cyclemys dentata* (IUCN Bangladesh 2000b).

Geographic Range

Global: This species occurs in Bangladesh, Bhutan and northeastern India and probably in western Myanmar (van Dijk *et al.* 2011, 2014).

Bangladesh: It occurs in Sylhet, Chittagong, Chittagong Hill tracts and Cox's Bazar including Maheshkhali Island and the forests of northeast, east and southeast (pers. obs., Hasan *et al.* 2014, Khan 2015).



Cyclemys gemeli

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EOO: 51,524 km²

AOO: 23,738 km²

Population

Generation Time (Length): Not known

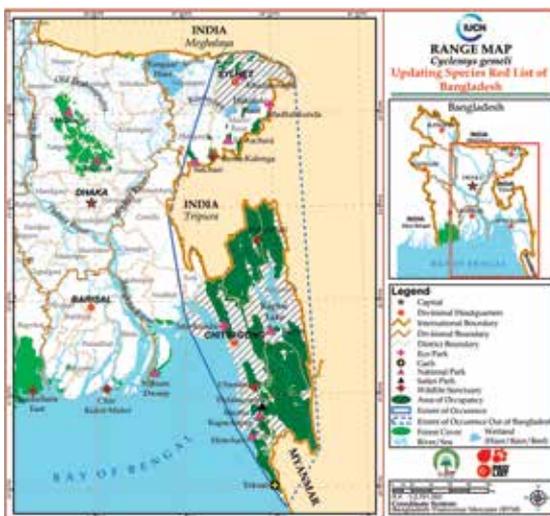
Total Population: Not known

No. of Sub-population: Not known

Trend: Decreasing

Habitat and Ecology

Cyclemys gemeli inhabits small river, stream and stream-bed both in hills and plains. This species is oviparous and omnivorous but prefer ripe wild fruits. Female lays 2-4 elongated eggs and incubation period is 2.5-3 months (Das 2002). It has been recorded up to an elevation of 1000 m above mean sea level.



Assessor: Suprio Chakma

Melanochelys tricarinata

Species ID: RE0006

VULNERABLE
 <VU>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|------------|-------------|
| ANIMALIA | CHORDATA | REPTILIA | TESTUDINES | GEOEMYDIDAE |

Scientific Name: *Melanochelys tricarinata* (Blyth, 1856)
English Name: Tricarinate Hill Turtle, Three-keeled Land Tortoise, Three-keeled Tortoise, Three-keeled Land Turtle
Local Name: Shila Kossop, Trishira Shila Kachchop
Synonym/s: *Geomyda tricarinata* Blyth, 1856
Chaibassia theobaldi Anderson, 1878
Chaibassia theobaldi Boulenger, 1889
Melanochelys tricarinata Pritchard, 1979

Assessment Information

Red List Category & Criteria: VU B1b(i,iii)+c(i) ver 3.1
Justification: Based on several records in the northeast, southeast, north and northwest of Bangladesh the species covers very large Extent of Occurrence (EOO) (76,299 km²) and Area of Occupancy (AOO) (21,676 km²) and do not qualify for any threatened category. But due to its rarity, scattered distribution, degradation of habitat quality and continuing decline of the EOO and AOO qualify it to be assessed as Vulnerable.

Date Assessed: 25 Jun 2014

History

Regional Status: Endangered (IUCN Bangladesh 2000b)

Geographic Range

Global: This species occurs in Bangladesh, Bhutan, India and Nepal (<http://reptile-database.reptarium.cz/species?genus=Melanochelus&species=tricarinata>. Downloaded on 25 June 2014).

Bangladesh: It is found in northeast, southeast (Cox's Bazar), north (greater Mymensingh) and northwest (Dinajpur) of Bangladesh (Khan 1982, 2004; Hasan *et al.* 2014).



Melanochelys tricarinata

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EOO: 1,13,233 km²

AOO: 33,839 km²

Population

Generation Time (Length): Not known

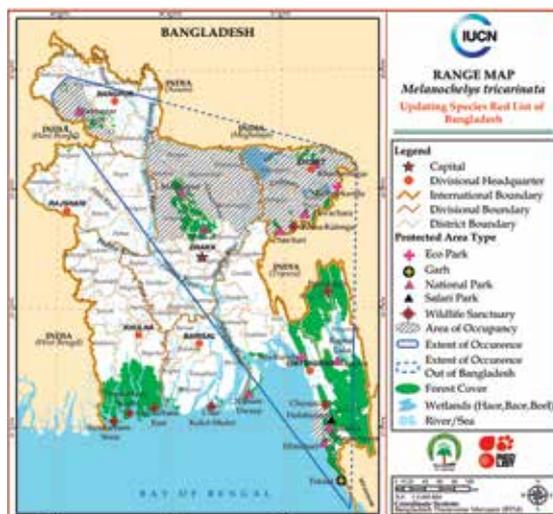
Total Population: Not known

No of Sub-population: Not known, but definitely it will not be less than four since it occurs in four different areas of the country.

Trend: Decreasing

Habitat and Ecology

Melanochelys tricarinata is terrestrial and omnivorous; mainly feeds on vegetable matters (Das 2002, Islam 2009) but eats fruits, as well as fish in captivity (Das 1995). It is crepuscular and spend the day time in retreats in the leaf litter, under fallen tree trunks or tree buttresses, but become active during day in mating period. Females lay 1-3 eggs in a clutch, usually twice a year: February to April and October to December, and incubation period is 60-72 days (Das 2002). It inhabits along the Ganges and Brahmaputra as well as hilly areas in their vicinity (Das 2002). In addition it is also found in moist deciduous (especially *Shorea robusta*) and mixed evergreen forests.



Assessor: M. Monirul H. Khan



Lepidochelys olivacea

Species ID: RE0024

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|------------|-------------|
| ANIMALIA | CHORDATA | REPTILIA | TESTUDINES | CHELONIIDAE |

Scientific Name: *Lepidochelys olivacea* (Eschscholtz, 1829)

English Name: Olive Ridley Sea Turtle, Pacific Ridley Sea Turtle
Local Name: Jolpaironga Samudrik Kasim, Samudrik Kachchap, Dojje Dur (Chakma)

Synonym/s: *Chelonia olivacea* Eschscholtz, 1829
Caretta olivacea Rüppell, 1835
Chelonia dussumierii Duméril and Bibron, 1835
Caouana olivacea Gray, 1844
Lepidochelys dussumierii Girard, 1858
Lepidochelys olivacea Girard, 1858
Thalssochelys olivacea Strauch, 1862
Caouana olivacea Günther, 1864
Caretta remivaga Hay, 1908
Caretta caretta olivacea Smith, 1931
Lepidochelys olivacea olivacea Mertens and Wermuth, 1955
Lepidochelys olivacea Stebbins, 1985



Lepidochelys olivacea

© M. Monirul H. Khan

Assessment Information

Red List Category & Criteria: VU B2ab(ii)(iii)(iv) ver 3.1

Justification: *Lepidochelys olivacea* comes to lay eggs in the Saint Martin's Island, Sonadia Islands and some coastal areas of the Sundarbans. The number of turtles coming ashore to lay eggs is decreasing for the last 15 years due to destruction of nesting sites, egg poaching and death of gravid females. The Extent of Occurrence is large but the Area of Occupancy is <2,000 km² for the six known egg laying locations. So, it is considered as Vulnerable.

Date Assessed: 20 October 2015

History

Regional Status: Endangered (IUCN Bangladesh 2000b).



Geographic Range

Global: The turtle has a circumtropical distribution with nesting occurring throughout most tropical waters and migratory circuits in tropical and some subtropical areas (Abreu-Grobois and Plotkin 2008).

Bangladesh: It comes to lay eggs in the Saint Martin's Island, southern tip of Teknaf Peninsula, Monkhali, Sonadia Island, Shah Porir Dweep and the coast of the Sundarbans (Khan 1982a, 1987, 2015, Islam *et al.* 2011)

EOO: 24,341 km²

AOO: 1,915 km²

Population

Generation Time (Length): Twenty years (Abreu-Grobois and Plotkin 2008)

Total Population: Not Known

No of Sub-population: Not Known

Trend: Decreasing

Habitat and Ecology

The taxon is predominantly carnivorous, especially in immature stages of the life cycle. Animal prey consists of worms, jellyfish, tunicates, sea urchins, bryozoans, bivalves, snails, shrimps, crabs, rock lobsters, protochordates, fish and fish eggs (Das 1995, Abreu-Grobois and Plotkin 2008). Oviposition occurs in winter (October to April), in Bangladesh (Khan 1982a, 1987, Islam *et al.* 2011).

Assessor: Rukshana Sultana

Tropidophorus assamensis

Species ID: RE0064

VULNERABLE
<VU>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|-----------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | SCINCIDAE |

Scientific Name: *Tropidophorus assamensis* Annandale, 1912**English Name:** Water Skink, Northeastern Water Skink**Local Name:** Jolar Anchil**Synonym/s:** None

Assessment Information

Red List Category & Criteria: VUB1ab(iii) ver 3.1

Justification: The species is rare and restricted to the rocky stream beds in the Chittagong Hill Tracts under the Chittagong Revenue Division of Bangladesh. The Extent of Occurrence is <20,000 km². It is known to occur in a few locations that are separated from one another by impassable barriers and continuing decline of the quality of habitat has been observed. Therefore, it is assessed as Vulnerable..

Date Assessed: 19 October 2014

History

Regional Status: It is not evaluated by IUCN Bangladesh in 2000b, because its occurrence in the country was not known at that time.

Geographic Range

Global: The species is native to Bangladesh and India (Assam and Mizoram) (<http://reptile-database.reptarium.cz/species?genus=Tropidophorus&species=assamensis>. Downloaded on 20 August 2014); possibly also occurs in Bhutan (Lenz 2012).

Bangladesh: It is known to occur in rocky stream beds in the Chittagong Hill Tracts (Chakma 2009), southeast forests (Hasan *et al.* 2014), and might also occur in similar habitats in greater Chittagong and Sylhet Districts.

*Tropidophorus assamensis*

© Abhijit Das

EOO: 14,436 km²AOO: 8,102 km²

Population

Generation Time (Length): Not known**Total Population:** Not known**No. of Sub-population:** Not known**Trend:** Presumably declining

Habitat and Ecology

This skink inhabits the vicinity of rocky hill streams and active at dusk. The taxon is sluggish and spends the day hiding under stones, boulders and rock crevices. It feeds mainly on insects. It is fond of water and can remain fully submerged and dive to escape predator or to hunt. It calls during the dusk that resembles the call of a puppy. Presumably females are viviparous and give birth to 6-9 young at a time (Smith 1935).

**Assessor:** M. Monirul H. Khan

Varanus salvator

Species ID: RE0067

VULNERABLE
 <VU>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|-----------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | VARANIDAE |

Scientific Name: *Varanus salvator* (Laurenti, 1768)
English Name: Ring Lizard, Water Monitor, Common Water Monitor, Asian Water Monitor, Two-banded Monitor, Rice Lizard, Plain Lizard, No-Mark Lizard

Local Name: Kalogui, Ramgodi

Synonym/s: *Stellio salvator* Laurenti, 1768
Monitor nigricans Cuvier, 1829
Hydrosaurus salvator Gray, 1845
Monitor salvator Blyth, 1846
Varanus salvator Cantor, 1847
Hydrosaurus salvator Günther, 1864
Varanus salvator Boulenger, 1885

Taxonomic Notes: Six subspecies are known to occur in its distributional range of which *Varanus salvator macromaculatus* is found in Bangladesh.

Assessment Information

Red List Category & Criteria: VU A1 (c) ver 3.1

Justification: *Ring lizard* covers a quite large distributional range and can thrive in disturbed as well as to some extent in polluted areas. As its habitat is shrinking due to anthropogenic factors and development activities, and its population is also decreasing day by day. So, it can be assessed as Vulnerable.

Date Assessed: 20 October 2014

History

Regional Status: Endangered (IUCN Bangladesh 2000b).

Geographic Range

Global: The world distribution range of this species is Bangladesh, Cambodia, China (Guangxi, Hainan, Yunnan), Hong Kong, India (Andaman Is., Nicobar Is.), Indonesia (Bali, Jawa, Kalimantan, Sulawesi, Sumatera),



Varanus salvator

© Sourav Mahmud

Lao PDR, Malaysia (Peninsular Malaysia), Myanmar, Singapore, Sri Lanka, Thailand and Vietnam (Bennett *et al.* 2010, <http://reptile-database.reptarium.cz/species?genus=Varanus&species=salvator>. Downloaded on 18 October 2014).

Bangladesh: The taxon is common in mangrove and coastal areas of Chittagong, Khulna and Barisal Divisions; rare in northeast, southeast forests, Manikganj and Keraniganj (Narayanganj).

EOO: 1,34,241 km²

AOO: 26,411 km²

Population

Generation Time (Length): Not known

Total Population: Not known

No. of Sub-population: Not known

Trend: Decreasing

Habitat and Ecology

This species inhabits burrows and crevices in a variety of habitats from semi-desert areas to floodplains, marshylands, farmlands, scrublands to forests and prefers to live in lowlands and swamps near riverbank or edge of water bodies including coastal belt. It is terrestrial; fresh-, brackish- and –salt waters; carnivorous, insectivorous, as well as scavenger. It is a good walker, runner, swimmer and tree climber (Ahsan 2009). The species eats anything that it can swallow and fond of carrion. Diet includes tiny insects to mammals (includes other monitor lizards, snakes, birds, rodents, small deer, domestic goat, rubbish, human faeces, and even dead bodies). It is known to scavenge too. In the Saint Martin's Island the islanders face hard time saving the human corpse in the freshly buried in a grave (pers. obs., M.A.R. Khan Pers. comm.). Breeding season lasts from April-October, females lay a clutch up to 40 eggs a year in 2 or more clutches (mean 15), eggs hatch out by 2.5-10 months and lifespan up to 15 years (<http://naturaia.per.sg...monitor>, downloaded on 18 October 2014).

Assessor: Md. Farid Ahsan



Python bivittatus

Species ID: RE0173

VULNERABLE
 <VU>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|------------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | PYTHONIDAE |

Scientific Name: *Python bivittatus* Kuhl, 1820

English Name: Burmese Python, Rock Python, Indian Rock Python

Local Name: Ajogor, Burmese Ajogor

Synonym/s: *Coluber molurus* Linnaeus, 1758

Boa ordinata Schneider, 1801

Python bivittatus bivittatus Kuhl, 1820

Python molurus Gray, 1842

Python molurus Duméril and Bibron, 1844

Python molurus Boulenger, 1893

Python molurus Wall, 1921

Python molurus pimbura Deraniyagala, 1945

Python molurus Mcdiarmid, Campbell and Touré, 1999

Python molurus molurus Barone, 2004

Python bivittatus Jacobs *et al.*, 2009

Taxonomic Notes: Two subspecies were recognized:

Python molurus molurus (Linnaeus, 1758) and *P. m.*

bivittatus Kuhl, 1820. *P. m. bivittatus* is now recognized as *P. bivittatus* Kuhl, 1820 (Jacobs *et al.* 2009).

Assessment Information

Red List Category & Criteria: VU A2cd ver 3.1

Justification : The species is rare but has a wide range of restricted distribution in the northeast, southeast and southwest (possibly central as well) forests and its habitats are being lost and degraded due to anthropogenic factors like hunting for meat and skin and developmental works in part of its range that justifies its status as Vulnerable.

Date Assessed: 17 November 2014

History

Regional Status: Endangered (IUCN Bangladesh 2000b).



Python bivittatus

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Geographic Range

Global: This is native to Bangladesh, Cambodia, China, Hong Kong, India, Indonesia, Lao PDR, Myanmar, Nepal, Thailand and Vietnam; established through introduction in Singapore and Florida of USA (Stuart *et al.* 2012).

Bangladesh: It is found in forests of northeast and southeast, and mangrove in the Sundarbans.

EOO: 1,07,896 km²

AOO: 14,738 km²

Population

Generation Time (Length): Not known

Total Population: Not known

No. of Sub-population: Not known

Trend: Decreasing

Habitat and Ecology

Python bivittatus inhabits humid forests, estuarine mangrove forests, rainforests, grasslands, marshes, streams, rivers and wetlands (Whitaker and Captain 2004, Stuart *et al.* 2012). It is also found in wet rocky areas near streams and pools, large rotting logs, large burrows, caves, crevices, and old and ruined structures (Khan 1987, 1992, 1997, Chakma 2009, Stuart *et al.* 2012). The taxon is more nocturnal than diurnal. It is fond of water and a good swimmer as well as good climber. It is an ambush hunter and kills preys through constriction by coiling. Its diet mainly consists of mammals and birds (Whitaker and Captain 2004). It also eats reptiles and amphibians but prefers mammals (Stuart *et al.* 2012). This oviparous species lays up to 107 eggs in a clutch from March to June and remains coiled over them till hatching, regularly twitching its body to raise eggs for incubation (Whitaker and Captain 2004). Eggs hatch in 60 to 80 days.

Assessor: Md. Farid Ahsan



Ptyas nigromarginata

Species ID: RE0108

VULNERABLE
 <VU>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|------------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | COLUBRIDAE |

Scientific Name: *Ptyas nigromarginata* (Blyth, 1854)
English Name: Green Rat snake, Black-bordered Rat Snake
Local Name: Sabuj Darash Shap, Sabuj Daraj Shap
Synonym/s: *Coluber nigromarginatus* Blyth, 1854
Coryphodon carinatus Gunther, 1858
Zaocys nigromarginatus Günther, 1864
Coryphodon dhumnades Jan, 1867
Zaocys nigromarginatus Smith, 1943
Coluber nigromarginatus Das, 1996
Ptyas nigromarginata David and Das, 2004

Assessment Information

Red List Category & Criteria: VU B1 ab (I,iii) ver 3.1
Justification: The Extent of Occurrence of this species is 16,164 km² i.e., < 20,000 km² hence it qualifies for Vulnerable Category B1 (a) b (i,iii). The Area of Occupancy is 7,802 km² i.e., >2000 km², which indicates it is not vulnerable. But considering its declining status due to serious loss of habitats it is assessed as Vulnerable.

Date Assessed: 22 January 2015

History

Regional Status: Vulnerable (IUCN Bangladesh 2000b).

Geographic Range

Global: Green Rat snake is usually endemic to Asia: Bangladesh, Bhutan, China, India, Myanmar, Nepal and northern Vietnam (<http://reptile-database.reptarium.cz/species?genus=Ptyas&species=nigromarginata>). Downloaded on 16 February 2015).



Ptyas nigromarginata

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Bangladesh: The species is rare in Bangladesh (Khan 2015 and distributed in the districts of the Chittagong Hill Tracts (evergreen and mixed evergreen forests of Bangladesh) (Chakma 2009) and may be found in the north (Hasan *et al.* 2014).

EOO: 16,164 km²

AOO: 7,802 km²

Population

Generation Time (Length): Not known

Total Population: Not known

No of Sub-population: Not known

Trend: Possibly decreasing

Habitat and Ecology

Ptyas nigromarginata inhabits disturbed areas, open forests in the plains and mid-hills (Das 2010). It is found only in the mixed evergreen forests of Bangladesh. The species is terrestrial and arboreal (Das 2010). It primarily feeds on frogs (Whitaker and Captain 2004, Chakma 2009) but also eats rodents, birds, lizards and other snakes (Das 2010). It is oviparous and females lay 8-9 eggs (*op. cit.*). It is primarily diurnal (Chakma 2009).



Assessor: Jadab Kumar Biswas

Rhabdophis himalayanus

Species ID: RE0096

VULNERABLE
 <VU>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|------------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | NATRICIDAE |

Scientific Name: *Rhabdophis himalayanus* (Günther, 1864)

English Name: Himalayan Keelback, Orange-collared Keelback

Local Name: Komola-ghar Dhora Shap

Synonym/s: *Tropidonotus himalayanus* Günther, 1864
Tropidonotus himalayanus Boulenger, 1893
Macropisthodon himalayanus Annandale, 1905
Rhabdophis himalayanus Wall, 1923
Natrix speciosus Wall, 1925
Natrix himalayanus Smith 1938
Natrix himalayanus Smith, 1943
Rhabdophis himalayanus Das, 1996
Rhabdophis himalayana Sharma, 2004
Rhabdophis himalayanus Wallach *et al.*, 2014

Assessment Information

Red List Category & Criteria: VU B1ab(i,ii,iii) +2ab(i,ii,iii) ver 3.1

Justification: This species is apparently rare and is found within limited areas of suitable habitat. It is known to be found only in the northeast mixed evergreen forests of the country, which are fragmented and in continuously declining stage along with other disturbances. Therefore, a precautionary listing of Vulnerable is warranted inferring to its rarity within its range also its Extent of Occurrence and Area of Occupancy just above the Endangered category.

Date Assessed: 12 March 2015

History

Regional Status: Not assessed (IUCN Bangladesh 2000b).



Rhabdophis himalayanus

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Geographic Range

Global: This taxon is known to occur in Bangladesh, Bhutan, China, India, Myanmar and Nepal (<http://reptile-database.reptarium.cz/species?genus=Rhabdophis&species=himalayanus>. Downloaded on 25 June 2015).

Bangladesh: It is found in mixed evergreen forests in the northeast (Hasan *et al.* 2014).

EOO: 7,973 km²

AOO: 505 km²

Population

Generation Time (Length): Not known

Total Population: Not known

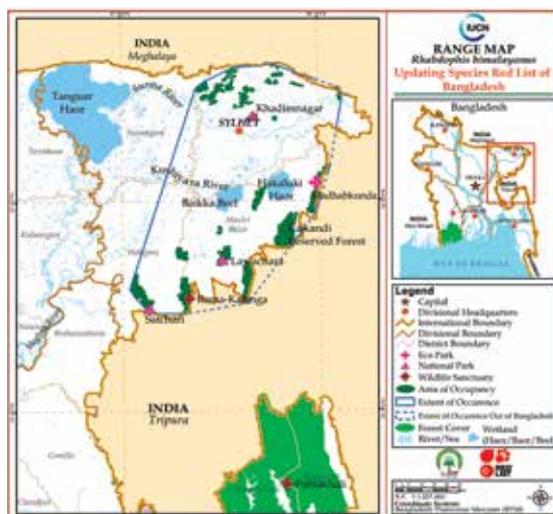
No. of Sub-population: Not known

Trend: Presumably declining

Habitat and Ecology

It inhabits agricultural lands, forests, grasslands, marshy areas, streams, ponds, lakes or ditches. It occurs both in plains and hills. The taxon is terrestrial and feeds on frogs, lizards, small mammals and occasionally fishes (Das 2002, 2010; Whitaker and Captain 2004). The taxon is oviparous and lays 5-7 eggs (Whitaker and Captain 2004). It has rear fang and mildly venomous. It is diurnal.

Assessor: Rukshana Sultana



Ophiophagus hannah

Species ID: RE0145

VULNERABLE
 <VU>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|----------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | ELAPIDAE |

Scientific Name: *Ophiophagus hannah* (Cantor, 1836)

English Name: King Cobra

Local Name: Raj Gokra, Sangkhachur, Hala Jamuro (Chakma)

Synonym/s: *Hamadryas hannah* Cantor, 1836

Naja bungarus Schlegel, 1837

Hamadryas ophiophagus Cantor, 1838

Naja vittata Elliott, 1840

Dendraspis bungarus Fitzinger, 1843

Hamadryas elaps Günther, 1858

Ophiophagus elaps Günther, 1864

Naja ingens Van Hasselt, 1882

Naia bungarus Wall, 1908

Naja hannah Taylor, 1922

Ophiophagus hannah Bogert, 1945

Taxonomic Notes: Because of its wide distribution and variation, sometimes the species is considered as a species complex. Author like Deraniyagala (1960, 1961 in <http://reptile-database.reptarium.cz/species?genus=Ophiophagus&species=hannah>. Downloaded on 16 August 2014) suggested 8 subspecies under *Dendraspis hannah* species.

Assessment Information

Red List Category & Criteria: VU A2cd ver 3.1

Justification: Uncommon to rare in hill forests where it occurs, but frequently encountered in the Sundarbans. Though no quantitative population data is available, it can be conservatively estimated that the population size has declined locally by at least 30% from hill forests. However, population is stable to very slowly declining from the Sundarbans over an estimated three-generation period of 15-18 years. The species is exploited all over its range. The scale of exploitation is poorly known in Bangladesh except indiscriminate killing and local consumption by few



Ophiophagus hannah

© Md. Mizanur Rahman

Indigenous groups in Chittagong Hill Tracts. Considering the declining rate of habitat quality that has profound impact on the snake fauna, on which this snake is much dependent for its food, the species is assessed as Vulnerable.

Date Assessed: 21 August 2014

History

Regional Status: Endangered (IUCN Bangladesh 2000b)

Geographic Range

Global: This species has been reported from Bangladesh, Bhutan, Brunei Darussalam, Cambodia, China, Hong Kong, India, Indonesia, Lao PDR, Malaysia, Myanmar, Nepal, Philippines, Singapore, Thailand and Vietnam (Stuart *et al.* 2012).

Bangladesh: It is known to occur in Chittagong, Chittagong Hill Tracts, Sylhet and Sundarbans (Khan 1982a).

EOO: 99,657 km²

AOO: 7,542 km²

Population

Generation Time (Length): Reproductive age in captivity has been estimated to be 5-6 years (Stuart *et al.* 2012).

Total Population: Not known

No. of Sub-population: Presumably two – one in the Sundarbans and rest in the Hill Forests of the northeast, east and southeast).

Trend: Decreasing

Habitat and Ecology

Ophiophagus hannah is globally found in a variety of habitats but in Bangladesh it is restricted to Mangrove forests and Hill forests including Tea Estates. This is the only snake species known to build a kind of nest. It is a very good swimmer. It spends an appreciable time on trees and foliage and does not hibernate and prefers to live in a pair. It feeds mainly on other snakes (Khan 1987, Bhaishare *et al.* 2010).

Assessor: Suprio Chakma

Associate Assessor: Shahriar Caesar Rahman



Trimeresurus popeiorum

Species ID: RE0163

VULNERABLE
 <VU>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|-----------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | VIPERIDAE |

Scientific Name: *Trimeresurus popeiorum* Smith, 1937
English Name: Pope's Pit Viper, Pope's Tree Viper, Pope's Bamboo Pit Viper

Local Name: Lalpetey Sabuj Bora

Synonym/s: *Trimeresurus popeiorum* Smith, 1937
Trimeresurus popeiorum Grandison, 1972
Trimeresurus popeiorum Hoffmann, 1998
Trimeresurus popeiorum Cox *et al.*, 1998
Trimeresurus popeiorum McDiarmid *et al.*, 1999
Trimeresurus popeiorum Tu *et al.*, 2000
Trimeresurus popeiorum Vogel *et al.*, 2004
Popeia popeiorum Malhotra and Thorpe, 2004
Popeia popeiorum Grismer *et al.*, 2006
Trimeresurus popeiorum David *et al.*, 2009
Trimeresurus (Popeia) popeiorum David *et al.*, 2011
Trimeresurus popeiorum Wallach *et al.*, 2014



Trimeresurus popeiorum

© M. Monirul H. Khan

Assessment Information

Red List Category & Criteria: VU B1 b(i,ii,iii)+c(i,ii) ver 3.1

Justification: Small Extent of Occurrence of this species with continuous decline of the same and Area of Occupancy as well as degrading quality of habitat indicates it as Vulnerable.

Date Assessed: 26 February 2015

History

Regional Status: Not Assessed (IUCN Bangladesh 2000b).

Geographic Range

Global: This species is reported from Bangladesh, India, Lao PDR, Malaysia, Myanmar, Singapore and Thailand (Whitaker and Captain 2004). It is also recorded from Indonesia (Sumatra, Mentawai Islands and Borneo

(McDiarmid *et al.* 1999), Nepal (Kästle *et al.* 2013), Cambodia and Vietnam (Gumprecht *et al.* 2004). It probably also occurs in Bhutan (Lenz 2012) and Yunnan Province, China (Vogel *et al.* 2004).

Bangladesh: It is recorded only from Banderban Hill district (Chakma 2009) especially eastern side of the Matamuhuri River (S. Chakma pers. comm.).

EOO: 6,277 km²

AOO: 4,600 km²

Population

Generation Time (Length): Not known

Total Population: Not known

No. of Sub-population: Not known

Trend: Not known

Habitat and Ecology

T. popeiorum is usually seen on low bushes, shrubs, sometimes near water courses on the ground (Whitaker and Captain 2004). This taxon is arboreal and feeds on squirrels, birds, lizards, rats and frogs. It is ovoviparous when females bear 10 live young from April to May (Das 2002) but they may produce up to 15 young in clutch (Whitaker and Captain 2004). It is nocturnal in habit.



Assessor: Md. Mizanur Rahman

A red teardrop-shaped graphic is centered on a light green background. The background features faint, wavy, light green lines that create a sense of movement and depth. The text is white and centered within the red shape.

NEAR THREATENED
< NT >

Melanochelys trijuga

Species ID: RE0018

NEAR
THREATENED
<NT>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|------------|-------------|
| ANIMALIA | CHORDATA | REPTILIA | TESTUDINES | GEOEMYDIDAE |

Scientific Name: *Melanochelys trijuga* (Shweigger, 1812)

English Name: Pond Tortoise, Indian Black Turtle

Local Name: Kalo Kossop, Kali Kachchop

Synonym/s: *Emys trijuga* Schweigger, 1812

Emys belangeri Lesson, 1831

Emys trijuga Duméril and Bibron, 1835

Clemmys theobaldi Lydekker, 1885

Nicora trijuga Boulenger, 1889

Geoemydatrijuga Siebenrock, 1909

Geoemyda indopeninsularis Annandale, 1913

Melanochelys trijuga Pritchard, 1979

Taxonomic Notes: Six subspecies are recognized: (1) *Melanochelys trijuga trijuga* (Shweigger, 1814); (2) *M. t. edeniana* (Theobald, 1876) (3) *M. t. indopeninsularis* (Annandale, 1913); (4) *M. t. parkeri* (Deraniyagala, 1939); (5) *M. t. thermalis* (Lesson, 1830); and (6) *M. t. coronata* (Anderson, 1879); of which nos. 1,3,4,5, and 6 are found in the Indian subcontinent and *M. t. indopeninsularis* occurs in Bangladesh.

Assessment Information

Red List Category & Criteria: Near Threatened ver 3.1

Justification: This species qualifies as Near Threatened under the Criterion B because its range area is extensive. It is threatened by habitat destruction; and its population is also likely to be declining due to overexploitation (*cf.* Das and Bhupathy 2009).

Date Assessed: 21 August 2014

History

Regional Status: Endangered (IUCN Bangladesh 2000b).



Melanochelys trijuga

© Abhijit Das

Geographic Range

Global: This species is known to occur in Bangladesh, India, Maldives, Myanmar, Nepal, Sri Lanka and Thailand (Turtle Trade Working Group 2000); possibly also occurs in China and Pakistan (Das and Bhupathy 2009).

Bangladesh: It occurs in the low-lying floodplain freshwater both in slow moving rivers and in the wetlands in the Greater Districts of Barisal, Comilla, Chittagong, Dhaka, Faridpur, Jamalpur, Mymensingh, Noakhali, Pabna, Sylhet and Tangail.

EOO: 99,645 km²

AOO: 13,725 km²

Population

Generation Time (Length): Not known

Total Population: Not known

No of Sub-population: Not known

Trend: Decreasing

Habitat and Ecology

Melanochelys trijuga is omnivorous, eats aquatic macrophytes and invertebrates and even carrion, freshwater prawn, grass, water hyacinth and fruits (Das 1991, Das and Bhupathy 2009); sometimes many turtles can be seen alongside a carcass of a large dead mammal (Fugler 1984). *M. t. indopeninsularis* lays 5-16 eggs between October and January (McCann 1934, Shyam Sundar 1984), eggs hatch out in May in 125 days at 29°C (Vijaya 1982). It inhabits a variety of water bodies including ponds, marshes, streams, rivers, paddy fields, watering holes, etc. (Das and Bhupathy 2009). It is crepuscular to nocturnal in habit (Das and Bhupathy 2009).

Assessor: Md. Lokman Hossain



NEAR
THREATENED
<NT>

Morenia petersi

Species ID: RE0019

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|------------|------------|
| ANIMALIA | CHORDATA | REPTILIA | TESTUDINES | GEOMYDIDAE |

Scientific Name: *Morenia petersi* (Anderson, 1879)**English Name:** Yellow Turtle, Indian Eyed Turtle**Local Name:** HaldeyKaitta

Synonym/s: *Batagur (Morenia) petersi* Anderson, 1879
Morenia petersi Boulenger, 1889
Morenia petersi Das, 1996
Morenia petersi Murthy, 2010

Assessment Information

Red List Category & Criteria: Near Threatened ver 3.1

Justification: This species qualifies as Near Threatened because its range area is more than 20,000 km² and it occurs only in the low lying floodplain freshwater wetlands of the country. It is threatened by habitat destruction and also likely to be declining due to over harvesting.

Date Assessed: 21 August 2014

History

Regional Status: Vulnerable (IUCN Bangladesh 2000b)

Geographic Range

Global: It occurs in Bangladesh, India and Nepal (Das and Sengupta 2010), (<http://reptile-database.retarium.cz/species?genus=Morenia&species=petersi>. Downloaded on 04 July 2015).

Bangladesh: This turtle is widely distributed in the country being restricted to the freshwater wetlands that included both feebly flowing rivers larger beels, baors and haors of the country (Khan M.A.R. 1982a, Khan M.M.H. 2008, Hasan *et al.* 2014).

EOO: 2,15,854 km²**AOO:** 11,864 km²*Morenia petersi*

© M K Hasan

Population

Generation Time (Length): Not known**Total Population:** Not known**No of Sub-population:** Not known**Trend:** Decreasing

Habitat and Ecology

The species is typically found in shallow water, including large tanks, pools, puddles, ponds, 'haors', and slow-flowing canals and streams (Rashid and Swingland 1997). It inhabits mainly slow flowing water like canals, streams, submerged agriculture fields, wetlands, lakes, domestic ponds, derelict ponds, oxbows, deghees, and tributaries and distributaries of rivers (Khan M.A.R. 1982a, Hossain *et al.* 2008). In summer, when water level reduces to a certain depth and food availability and shelter become hampered, these turtles cross landmass like roads, highways and agriculture lands to reach other suitable habitats (Hossain and Sarker 1993). It is herbivorous, feed mainly on aquatic, semi-aquatic, floating and submerged plants viz., *Eichhornia crassipes*, *Hydrilla verticillata*, *Vallisneria spiralis*, *Spirodela* sp., *Lemna* spp., *Enhydra* sp., *Pistia* spp., *Wolffia* spp., *Najas graminea*, *Potamogeton crispus*, *Limnocharis flava*, *Tenagocharis latifolia*, *Ottelia alismoides*, *Hydrocharis dubia*, *Blyxa auberti*, *Ipomoea aquatica*, *Aponogeton* spp, *Trapa* spp., *Ludwigia adscendens* and *Nymphaea* spp. and plant leaves, flowers, grasses and seeds (Rashid and Swingland 1997, Hossain *et al.* 2010). Nesting times varies depending on habitat and location. Sun exposed soils are common nesting sites; eggs are buried in the soil, clutch size is 3 -13 and incubation period is 50-60 days (Fugler 1984, Hossain *et al.* 2008). Eggs are laid during winter (end of December to end of January) with a clutch size of 6-10 (multiple clutching not confirmed) and hatch out during April-May (Rashid and Swingland 1997).

Assessor: Md. Lokman Hossain

Pangshura smithii

Species ID: RE0020

NEAR
THREATENED
<NT>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|------------|-------------|
| ANIMALIA | CHORDATA | REPTILIA | TESTUDINES | GEOEMYDIDAE |

Scientific Name: *Pangshura smithii* (Gray, 1868)

English Name: Brown Roofed Turtle, Common Brown Roofed Turtle

Local Name: Bora Kori Kaitta, Vaital Kaitta

Synonym/s: *Batagur smithii* Gray, 1863

Kachuga smithii Boulenger, 1889

Kachuga smithii King and Burke, 1989

Kachuga smithii Obst, 2003

Pangshura smithii Spinks et al., 2004

Batagur smithii Le et al., 2007

Batagur smithii Baig et al., 2008

Pangshura smithii Das et al., 2000

Kachuga smithii Murthy, 2010

Pangshura smithii smithii Rhodin, 2010

Taxonomic Notes: It appeared in IUCN Red Lists from 2000 to 2006 under the name *Kachuga smithii*. There is debate about the correct ending of the species name a single 'i' or double 'ii' (Asian Turtle Trade Working Group 2000). Of two subspecies *P. s. smithii* is found in Bangladesh (Das 1995).

Assessment Information

Red List Category & Criteria: Near Threatened ver 3.1

Justification: The species is occasionally found in the low lying floodplain areas of 12 districts (northeast, central, south and southwest) of Bangladesh (Hossain 1993, Khan 1982, 1987), which covers large Extent of Occurrence and Area of Occupancy and it does not meet the threshold of any IUCN threatened category. So, it has been assessed as Near Threatened.

Date Assessed: 10 March 2015

History

Regional Status: Endangered (IUCN Bangladesh 2000b)



Pangshura smithii

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Geographic Range

Global: It occurs in Bangladesh, Bhutan (possibly), India, Nepal and Pakistan (<http://reptile-database.retarium.cz/species=genus=Pangshura&species=smithii>. Downloaded on 24 June 2015)

Bangladesh: It is mainly found in the low lying floodplain districts (Noakhali, Comilla, Barisal, Patuakhali, Pabna, Dhaka, Mymensingh, Sylhet, Khulna, Faridpur, Tangail and Kishorganj) and Rajshahi of the country (Hossain 1993, Das 1995).

EOO: 1,13,539 km²

AOO: 36,096 km²

Population

Generation Time (Length): Not known

Total Population: Not known

No of Sub-population: Not known

Trend: Decreasing

Habitat and Ecology

Pangshura smithii inhabits all types of stagnant and running freshwater habitats. In summer, when water level reduces, it may bury itself into the mud. It is an omnivore and eats aquatic invertebrates as well as aquatic and semi-aquatic vegetation in the wild and more or less the similar food in captivity. Nesting occurs twice a year: October-December and January-March; clutch size ranges from 5-11 and incubation period is 50-60 days (Fugler 1984, Hossain 1993).

Assessor: Md. Lokman Hossain

NEAR
THREATENED
<NT>

Pangshura tentoria

Species ID: RE0022

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|------------|-------------|
| ANIMALIA | CHORDATA | REPTILIA | TESTUDINES | GEOEMYDIDAE |

Scientific Name: *Pangshura tentoria* (Gray, 1834)

English Name: Indian Tent Turtle, Tent Turtle, Deccan Saw-backed Terrapin, South Indian Roofed Turtle

Local Name: Majhari Kaitta

Synonym/s: *Emys tentoria* Gray, 1834

Pangshura lethii Gray, 1870

Kachuga intermedia Boulenger, 1889

Kachuga tectum tentoria Smith, 1931

Kachuga tentoria King and Burke, 1989

Pangshura tentoria Spinks *et al.*, 2004

Batagur tentoria Le *et al.*, 2007

Pangshura tentoria Das *et al.*, 2008

Kachuga tentoria Murthy, 2010

Pangshura tentoria tentoria Rhodin *et al.*, 2004

Taxonomic Notes: Of the four subspecies *P. tentoria flaviventer* is found in Bangladesh (Das 1995, <http://reptile-database.reptarium.cz/species?genus=Pangshura&species=tentoria>).

Assessment Information

Red List Category & Criteria: Near Threatened (NT) ver 3.1

Justification: The species has a wide distributional range in Bangladesh but based on its relative abundance data it is confirmed that the population size has been reduced by nearly 30% in the last 10 years. Moreover, many of its former wetland habitats have been converted for agriculture and commercial fish cultivation, so the Extent of Occurrence and Area of Occupancy have been reduced. Therefore, it has been assessed as Near Threatened.

Date Assessed: 21 August 2014

History

Regional Status: Endangered (IUCN Bangladesh 2000b).



Pangshura tentoria

© M. Monirul H. Khan

Geographic Range

Global: The species occurs in Bangladesh, India, Nepal and Pakistan (Ahmed *et al.* 2009, <http://reptile-database.reptarium.cz/species?genus=Pangshura&species=tentoria>. Downloaded on 23 August 2015); possibly also occurs in Bhutan (Lenz, 2012).

Bangladesh: It is widely distributed in large and small rivers, and lowland areas (Khan M.A.R. 1987, Khan M.M.H. 2008, Hasan *et al.* 2014).

EOO: 2,11,112 km²

AOO: 9,904 km²

Population

Generation Time (Length): Not known

Total Population: Not known

No of Sub-population: Not known

Trend: Declining

Habitat and Ecology

It is primarily a riverine species and prefers slow flowing rivers, but it also occurs in streams, ponds, lakes, ditches, all freshwater wetlands and on nearby land (Khan 1982, 1987, Das 1995, Ahmed *et al.* 2009, Hasan *et al.* 2014). *Pangshura tentoria* is completely aquatic and a good swimmer and feeds on vegetation, small fish, crustaceans and insects. It basks on floating vegetation and on the nearby dry banks (M.A.R. Khan pers. comm. with M.F. Ahsan). Females lay 4-10 eggs and nests are located 3.3-14 m away from water (Das 1995).

Assessor: M. Monirul H. Khan



Lygosoma lineolatum

Species ID: RE0054

NEAR
THREATENED
<NT>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|-----------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | SCINCIDAE |

Scientific Name: *Lygosoma lineolatum* (Stoliczka, 1870)
English Name: Striped Writhing Skink, Lined Supple Skink
Local Name: Dorakata Nomonio Anjon, Chotphotani Achila
Synonym/s: *Riopa lineolata* Stoliczka, 1870
Riopa cyanella Stoliczka, 1872
Lygosoma cyanellum Boulenger, 1887
Lygosoma feae Boulenger, 1887
Lygosoma calamus Boulenger, 1887
Lygosoma lineolatum Boulenger, 1890
Riopa lineolata Smith, 1935
Lygosoma lineolatum Zug *et al.*, 1998
Lygosoma lineolatum Geissler *et al.*, 2012

Assessment Information

Red List Category & Criteria: Near Threatened (NT) ver 3.1
Justification: This species is rare and recorded from few sites in the southeast region of the country (Mahony and Reza 2007). It occurs in a wide area, but decline of its Extent of Occurrence and Area of Occupancy are continuing. So, it qualifies for the Criterion Near Threatened.
Date Assessed: 24 October 2014

History

Regional Status: It is not evaluated by IUCN Bangladesh in 2000.

Geographic Range

Global: It is reported from Bangladesh, India and Myanmar (Mahony and Reza 2007, Das 2010, Srinivasulu and Srinivasulu 2013).

Bangladesh: It is recorded from the southeast region of Bangladesh (Mahony and Reza 2007, Hasan *et al.* 2014).



Lygosoma lineolatum

© Parag H. Dandge

EEO: 22,554 km²

AOO: 10,121 km²

Population

Generation Time (Length): Not known

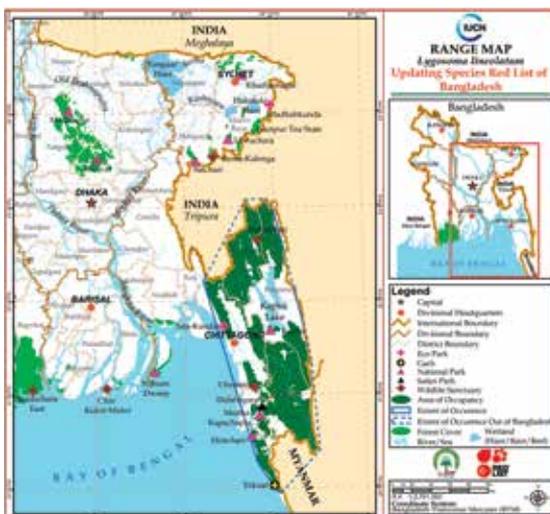
Total Population: Not known

No. of Sub-population: Not known

Trend: Presumably decreasing

Habitat and Ecology

It inhabits leaf litter on forest floor. It is recorded from 100m asl (Mahony and Reza 2007). *Lygosoma lineolatum* is diurnal and crepuscular. It is semi-fossorial, feeds on small insects. Gravid females are found in July with 2-3 eggs in the oviduct (Chakma 2009)



Assessor: Md. Kamrul Hasan

Varanus bengalensis

Species ID: RE0065

NEAR
THREATENED
<NT>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|-----------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | VARANIDAE |

Scientific Name: *Varanus bengalensis* (Daudin, 1802)
English Name: Bengal Lizard, Bengal Monitor, Bengal Monitor Lizard, Clouded Monitor, Common Indian Monitor, Indian Monitor

Local Name: Gui Shap, Bangla Gui Shap, Guil

Synonym/s: *Tupinambis bengalensis* Daudin, 1802
Tupinambis cepedianus Daudin, 1802
Varanus punctatus Merrem, 1820
Monitor gemmatus Guérin-Méneville, 1829
Varanus bengalensis Duméril and Bibron, 1836
Monitor inornatus Schlegel, 1839
Varanus bibronii Blyth, 1842
Uranus lunatus Gray, 1845
Varanus bengalensis Cox *et al.*, 1998

Taxonomic Notes: This species has three subspecies: *V. b. bengalensis* (Daudin, 1802); *V. b. irrawadicus* Yang and Li, 1987; and *V. b. vietnamensis* Yang and Li, 1994; of which the first one is found in Bangladesh.

Assessment Information

Red List Category & Criteria: Near Threatened (NT) ver 3.1

Justification: The taxon has the widest distribution among the *Varanus* species of the country. Certain threats are affecting the species and this has led to extermination in some parts of its range in the country. Increasing human population pressure and development across its range are likely to become more severe in the future. As a result, further research and monitoring of this species are needed to ensure that a threat category is not triggered in the future. Hunting of the species is known in some areas in Bangladesh, especially in tribal areas. As the range area and population are becoming squeezed, the species may become threatened in near future. So, it can safely be evaluated as Near Threatened.



Varanus bengalensis

© M K Hasan

Date Assessed: 20 October 2014

History

Regional Status: Vulnerable (IUCN Bangladesh 2000b)

Geographic Range

Global: The species has been reported from Afghanistan, Bangladesh, Bhutan, Cambodia, China, India, Indonesia (Java, Sumatra), Iran, Lao PDR, Malaysia, Myanmar, Nepal, Pakistan, Sri Lanka, Thailand and Vietnam (Papenfuss *et al.* 2010).

Bangladesh: It is widely distributed throughout Bangladesh including coastal islands. The population has recovered from the large scale foreign trades of 1970s and 1980s with a blanket ban on its utilization (pers. obs., M. R. Khan pers. comm.).

EOO: 2,22,509 km²

AOO: 1,36,929 km²

Population

Generation Time (Length): Not known

Total Population: Not known

No. of Sub-population: Not known

Trend: Decreasing

Habitat and Ecology

This species is found in a variety of habitats- ranging from the backyards of human dwellings to croplands and forests of all types in Bangladesh. It is diurnal, terrestrial and amphibious. It is carnivorous, as well as scavenger. It is a good walker, runner, swimmer and tree climber. It feeds on invertebrates to mammals including carrion of own species. It often ransacks graveyard and eat human corpses. In the villages it regularly kills and eats chicks of poultry and ducks. Females lay 10-32 (mean 21) eggs during August-October (Ahsan and Saeed 2004) and eggs hatch in March-June by 189-215 (mean 193) days in artificial breeding chambers (op. cit.). In captivity, it lives about 22 years (Auffenberg 1994).

Assessor: Md. Farid Ahsan



Varanus flavescens

Species ID: RE0066

NEAR
THREATENED
<NT>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|-----------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | VARANIDAE |

Scientific Name: *Varanus flavescens* (Hardwicke and Gray, 1827)

English Name: Yellow Monitor, Yellow Land Lizard, Yellow Monitor Lizard, Yellow Lizard, Golden Monitor, Calcutta Oval-grain Lizard, Indian Oval-grain Lizard, Ruddy Snub-nosed Monitor

Local Name: Sona Gui, Haldey Gui

Synonym/s: *Monitor flavescens* Hardwicke and Gray, 1827
Varanus russelli Heyden, 1830
Varanus picquotii Duméril and Bibron, 1836
Varanus flavescens Cantor, 1847
Varanus flavescens Günther, 1864
Varanus flavescens Boulenger, 1885
Varanus (Empagusia) flavescens Mertens, 1942
Varanus flavescens Taylor, 1963
Varanus (Empagusia) flavescens Visser, 1985
Varanus flavescens de Lisle, 1996



Varanus flavescens

© Tania Khan

Assessment Information

Red List Category & Criteria: Near Threatened (NT) ver 3.1

Justification: This species has a wide range in a variety of habitats but sparsely distributed. Certain threats are affecting the species and this has led to eradication in some parts of its range in the country. Increasing human population pressure and development across its range are likely to become more severe in the future. Hunting of the species is known in some areas in Bangladesh, especially in areas having tribal people. As the range area and population are shrinking, the species may become threatened in the near future. So, it has been evaluated as Near Threatened.

Date Assessed: 20 October 2014

History

Regional Status: Endangered (IUCN Bangladesh 2000b).

Geographic Range

Global: The species is known to occur in Bangladesh, Bhutan, India, Nepal and Pakistan (World Conservation Monitoring Centre 1996).

Bangladesh: Yellow Monitor occurs almost in every part of the country barring the deep forests, although not uncommon in the periphery. It is partial to countryside and crop fields (Khan 1982, 1986, 1987, 1996, 2015).

EOO: 1,93,500 km²

AOO: 16,459 km²

Population

Generation Time (Length): Not known

Total Population: Not known

No of Sub-population: Not known

Trend: Decreasing

Habitat and Ecology

This species inhabits in burrows and crevices in a variety of habitats in the country. It is basically terrestrial, burrow dweller, good swimmer and bad climber. But during monsoon it is more often seen in water than on land. Many are found along the highways as most countryside go underwater at that time. Of the three species we have in the country this is the only one that avoids deep or main forested areas of the country and is not available in the coastal areas. Also, this is possibly the most terrestrial of all and during winter almost the entire population hibernates. The taxon is carnivorous and scavenger.

Assessor: Md. Farid Ahsan



Boiga gokool

Species ID: RE0120

NEAR
THREATENED
<NT>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|------------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | COLUBRIDAE |

Scientific Name: *Boiga gokool* (Gray, 1835)**English Name:** Eastern Cat Snake, Arrow-backed Tree Snake**Local Name:** Sabuj Phonimonosha, Gokool Phonimonosha**Synonym/s:** *Dispus gocool* Gray, 1835*Dipsadomorphus trigonatus* var. A. *Dipsas gokool* Günther, 1858*Dipsas gokool* Günther, 1864*Dipsas gokool* Boulenger, 1890*Dipsadomorphus gokool* Boulenger, 1896*Boiga gokool* Shaw and Shebbeare, 1930*Boiga gokool* Smith, 1943*Boiga gokool* Das, 1996*Boiga gokool* Whitaker and Captain, 2004**Taxonomic Notes:** Sometimes it is confused with *Boiga trigonata* and *Boiga forsteni*.

Assessment Information

Red List Category & Criteria: Near Threatened (NT) ver 3.1**Justification:** The species is rare and recorded from the northeast forests and Chittagong University Campus. It may also be present in the southeast forests. Due to its rarity, habitat destruction and killing by people, the species can be categorized as Near Threatened.**Date Assessed:** 18 March 2015

History

Regional Status: Data Deficient (IUCN Bangladesh 2000b).

Geographic Range

Global: This species is known to occur in Bangladesh, Bhutan, India (<http://reptile-database.reptarium.cz/species?genus=Boiga&species=gokool>). Downloaded on 01 March 2015, indiansnakes.org/content/eastern-cat-snake. Downloaded on 01 March 2015).*Boiga gokool*

© Tania Khan

Bangladesh: It occurs in northeast and southeast forests including Chittagong University Campus (pers. obs., Khan 1982a, Chakma 2009, Hasan *et al.* 2014)**EOO:** 41,602 km²**AOO:** 10,624 km²

Population

Generation Time (Length): Not known**Total Population:** Not known**No. of Sub-population:** Not known**Trend:** Decreasing

Habitat and Ecology

Boiga gokool is inhabitant of bushes and small to tall trees in homestead forests, forests and degraded forests. It is active at night and comes down to ground in search of food (Whitaker and Captain 2004, Chakma 2009). It feeds on frogs, lizards, small birds and mice (Whitaker and Captain 2004, Chakma 2009, Hasan *et al.* 2014).**Assessor:** Md. Farid Ahsan

Boiga ochracea

Species ID: RE0121

NEAR
THREATENED
<NT>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|------------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | COLUBRIDAE |

Scientific Name: *Boiga ochracea* (Günther, 1868)

English Name: Tawny Cat Snake, Wall's Cat Snake, Nicobar Cat Snake

Local Name: Khoiri Phonimonosha, Khoiri Phonimonosha Shap

Synonym/s: *Dipsas ochraceus* Günther, 1868
Dipsas hexogonatus Stoliczka, 1871
Dipsadomorphus hexogonotus Boulenger, 1896
Dipsadomorphus stoliczkae Wall, 1909
Boiga stoliczkae Shaw, 1940
Boiga ochracea Smith, 1943
Boiga ochraceus Das, 1996
Boiga ochracea Whitaker and Captain, 2004

Taxonomic Notes: Three subspecies are found: *B. o. ochracea* (Günther, 1868), *B. o. stoliczkae* (Wall, 1909) and *B. o. walli* Smith, 1943. Of which *B. o. ochracea* and *B. o. walli* have been found in the Chittagong University Campus (Ahsan and Parvin 2004, M.F. Ahsan, pers. obs.). This is a species complex that possibly contains at least three distinct species (Whitaker and Captain 2004).

Assessment Information

Red List Category & Criteria: Near Threatened (NT) ver 3.1

Justification: The species is not uncommon and reported from the northeast and southeast forests including Chittagong University Campus. It has a wide range of distribution and its Extent of Occurrence and Area of Occupancy are large that do not qualify for any threatened category. So it can be assessed as Near Threatened.

Date Assessed: 18 March 2015



Boiga ochracea

© M K Hasan

History

Regional Status: Data Deficient (IUCN Bangladesh 2000b).

Geographic Range

Global: This species is known to occur in Bangladesh, Bhutan, India, Myanmar, Nepal (Whitaker and Captain 2004, reptile-database.reptarium.cz/species?genus=Boiga&species=ochracea. Downloaded on 01 March 2015).

Bangladesh: The taxon is known from northeast and southeast forests including Chittagong University Campus (Chakma 2009, Hasan *et al.* 2014, Khan 2015).

EEO: 41,602 km²

AOO: 10,624 km²

Population

Generation Time (Length): Not known

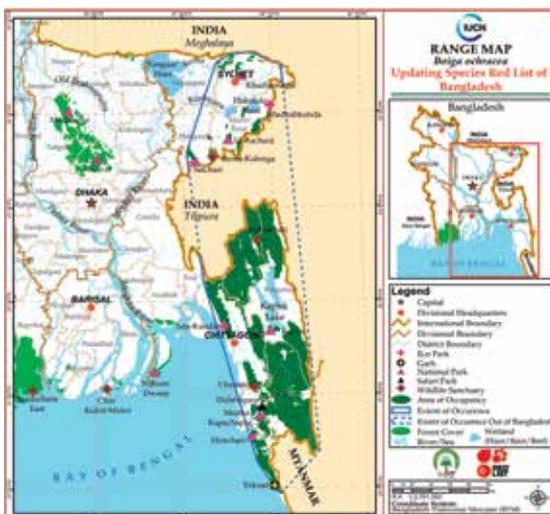
Total Population: Not known

No. of Sub-population: Not known

Trend: Decreasing

Habitat and Ecology

Boiga ochracea inhabits bushes and shrubs in homestead vegetation, natural forests and degraded forests. It is crepuscular and nocturnal and primarily arboreal in habit. But this species also comes down in search of food. It feeds on frogs, lizards, small birds and their eggs and small mammals (Das 2002, Whitaker and Captain 2004, Chakma 2009, Hasan *et al.* 2014). It is oviparous (Das 2002, Whitaker and Captain 2004).



Assessor: Md. Farid Ahsan

Ptyas korros

Species ID: RE0107

NEAR
THREATENED
<NT>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|------------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | COLUBRIDAE |

Scientific Name: *Ptyas korros* (Schlegel, 1837)

English Name: Chinese Rat Snake, Indo-chinese Rat Snake

Local Name: Darash Shap

Synonym/s: *Coluber korros* Schlegel, 1837

Ptyas korros Cope, 1861

Coryphodon korros Duméril and Bibron, 1854

Zamenis korros Boulenger, 1890

Ptyas korros Stejneger, 1907

Zamenis korros Wall, 1908

Liopeltis libertatis Barbour, 1910

Ptyas korros chinensis Mell, 1930

Ptyas korros indicus Mell, 1931

Zamenis korros Bourret, 1935

Ptyas korros Smith, 1943

Coluber korros Lazell, 1998

Ptyas korros Cox *et al.*, 1998



Ptyas korros

© Md. Mizanur Rahman

Assessment Information

Red List Category & Criteria: Near Threatened (NT) ver 3.1

Justification: The species is common and has a wide range of distribution in the mixed evergreen forests of the Chittagong and Sylhet Revenue Divisions but due to shrinking and destruction of its habitat, killing by people for consumption and road kills, the species can be categorized as Near Threatened.

Date Assessed: 26 February 2015

History

Regional Status: Data Deficient (IUCN Bangladesh 2000).

Geographic Range

Global: It is known to occur in Bangladesh, Cambodia, China, Hong Kong, India, Indonesia, Lao PDR,

Malaysia, Myanmar, Singapore, Taiwan, Thailand and Vietnam <http://reptile-database.reptarium.cz/species?genus=Ptyas&species=korros>. Downloaded on 02 February 2015; possibly also in Bhutan (Lenz 2012).

Bangladesh: It is known to occur in the mixed evergreen forests of the northeast, east and southeast covering areas under the Chittagong and Sylhet Revenue Divisions (Chakma 2009, Khan 1992a).

EOO: 41,602 km²

AOO: 10,624 km²

Population

Generation Time (Length): Not known

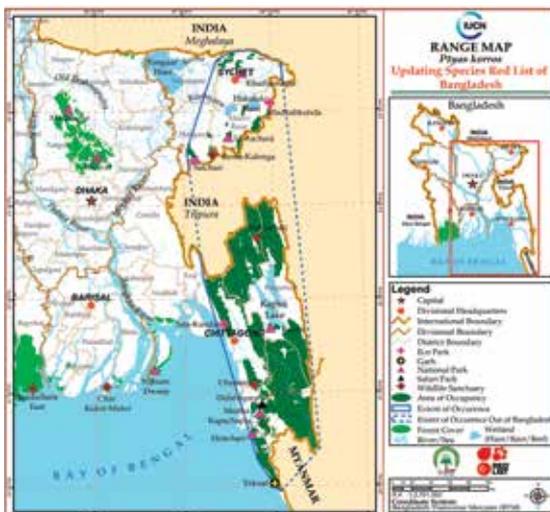
Total Population: Not known

No. of Sub-population: Not known

Trend: Decreasing

Habitat and Ecology

Ptyas korros inhabits open grassy bank of streams and reservoirs, edge of cultivated fields and ponds, agricultural fields, forests and its surroundings, and near human settlements adjacent to forests. The species is terrestrial and arboreal. It mainly feeds on rodents, birds, lizards and frogs. If disturbed, it bites viciously and flees away quickly. It is oviparous, females lay 4-12 eggs during June-July (Whitaker and Captain 2004), which hatch out in about 45 days (www.biosch.hku). It is diurnal in habit.



Assessor: Md. Farid Ahsan

Rhabdophis subminiatus

Species ID: RE0095

NEAR
THREATENED
<NT>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|------------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | NATRICIDAE |

Scientific Name: *Rhabdophis subminiatus* (Schlegel, 1837)

English Name: Red-necked Keelback

Local Name: Lalghar Dora Sap, Ladhora Shap, Orol Shap

Synonym/s: *Tropidonotus subminiatus* Schlegel, 1837

Natrix subminatus Boie, 1827

Rhabdophis subminatus Fitzinger, 1843

Amphiesma subminatum Duméril et al., 1854

Tropidonotus subminiatus Günther, 1858

Tropidonotus subminiatus Boulenger, 1893

Pseudoxenodon intermedius Lonnberg, 1899

Tropidonotus subminiatus Wall, 1908

Natrix subminata Barbour, 1912

Natrix subminata Smith, 1943

Rhabdophis subminatus Malnate, 1960

Rhabdophis subminatus Manthey and

Grossmann, 1997

Rhabdophis subminata Sharma, 2004

Rhabdophis subminatus Wallach et al., 2014



Rhabdophis subminiatus

© Faysal Ahmad

Assessment Information

Red List Category & Criteria: Near Threatened (NT) ver 3.1

Justification: This species is common and widely distributed within its range of habitats. Its Extent of Occurrence and Area of Occupancy are larger than the threshold level of IUCN. Threats like habitat destruction, indiscriminate killing and death on roads persist. Thus, the species is assessed as Near Threatened.

Date Assessed: 12 March 2015

History

Regional Status: Vulnerable (IUCN Bangladesh 2000b).



Geographic Range

Global: The species is known to occur in Bangladesh, Bhutan, Brunei Darussalam, Cambodia, China, Hong Kong, India, Indonesia, Lao PDR, Malaysia, Myanmar, Nepal, Singapore, Thailand, Vietnam (Wogan and Chan-Ard 2012, <http://reptile-database.reptarium.cz/species?genus=Rhabdophis&species=subminatus>. Downloaded on 25 June 2015).

Bangladesh: It is known to occur in mixed evergreen forests and surrounding areas in the northeast and southeast (Khan 1982a, 1992; Hasan et al. 2014).

EOO: 7,973 km²

AOO: 505 km²

Population

Generation Time (Length): Not known

Total Population: Not known

No. of Sub-population: Not known

Trend: Presumably stable

Habitat and Ecology

It inhabits forests, forest clearings, open scrub lands, marshes, swamps, wet grasslands, cultivated areas—particularly rice fields, and bank of streams, rivers and ponds (Wogan and Chan-Ard 2012); occurs both in plains and hills. The species is terrestrial and semi-arboreal (Das 2010). It feeds on frogs, toads, lizards and small mammals (Das 2002, 2010; Whitaker and Captain 2004). It is oviparous and females lay 5-17 eggs in June-July and incubation period is 50-70 days (*op. cit.*). It has greatly enlarged teeth instead of true fangs and has highly toxic saliva, even juvenile bite may cause severe symptoms. It is both diurnal and nocturnal (Das 2010).

Assessor: Rukshana Sultana

Bungarus lividus

Species ID: RE0138

NEAR
THREATENED
<NT>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|----------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | ELAPIDAE |

Scientific Name: *Bungarus lividus* Cantor, 1839

English Name: Lesser Black Krait

Local Name: Choto Kalo Kewtey, Chhoto Kal-kewtey

Assessment Information

Red List Category & Criteria: Near Threatened (NT) ver 3.1

Justification: The species is rarely found in northwest, southwest and central parts of the country in suitable terrestrial habitats that indicate both large Extent of Occurrence and Area of Occupancy but due to its extreme rarity, habitat destruction and shrinkages, the species is evaluated as Near Threatened.

Date Assessed: 22 January 2015

History

Regional Status: Data Deficient (IUCN Bangladesh 2000b).

Geographic Range

Global: This species is known to occur in Bangladesh, India and Nepal (<http://reptile-database.reptarium.cz/species?genus=Bungarus&species=lividus>. Downloaded on 01 January 2015); and possibly also occurs in Bhutan (Lenz 2012).

Bangladesh: This species is reported from Rangpur (Smith 1943, Khan 1992), Dinajpur (M.F. Ahsan, pers. obs. Sharma *et al.*, 2013), Mymensingh, Feni (M.F. Ahsan pers. obs.), Bagerhat and Pirojpur district (Ahsan *et al.* in prep.).

EOO: 87,496 km²

AOO: 15,744 km²



Bungarus lividus

© Md. Mizanur Rahman

Generation Time (Length): Not known

Total Population: Not known

No. of Sub-population: Not known

Trend: Decreasing.

Habitat and Ecology

Bungarus lividus inhabits in grasslands, agricultural fields and forests up to 10 m above mean sea level. It sometimes enters into human dwellings. It is active mostly during evening and night, and feeds on small snakes, rodents, toads, frogs and lizards.

Population



Assessor: Md. Farid Ahsan

Bungarus niger

Species ID: RE0139

NEAR
THREATENED
<NT>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|----------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | ELAPIDAE |

Scientific Name: *Bungarus niger* Wall. 1908**English Name:** Grater Black Krait, Black Krait**Local Name:** Kalo Kewtey, Kal-kewtey, Baro Kalo Kewtey, Baro Kal-kewtey

Assessment Information

Red List Category & Criteria: Near Threatened (NT) ver 3.1
Justification: The species is very rarely found in northeast, southeast, northwest and southwest of the country except the water bodies indicating that its Extent of Occurrence and Area of Occupancy are pretty large but due to its rarity, and habitat destruction and shrinkages, it has been assessed as Near Threatened.

Date Assessed: 22 January 2015

History

Regional Status: Data Deficient (IUCN Bangladesh 2000b).

Geographic Range

Global: This species is known to occur in Bangladesh, Bhutan, India and Nepal (<http://reptile-database.reptarium.cz/species?genus=Bungarus&species=niger>. Downloaded on 01 January 2015), and western Myanmar (Sharma *et al.* 2013).

Bangladesh: It is reported from Rangpur in northwest (Kabir 2013), northeast, southeast and southwest (Sundarbans) (M.F. Ahsan pers. obs., Faiz *et al.* 2010, Hasan *et al.* 2014).

EOO: 1,73,099 km²**AOO:** 22,422 km²*Bungarus niger*

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Population

Generation Time (Length): Not known**Total Population:** Not known**No. of Sub-population:** Not known**Trend:** Decreasing

Habitat and Ecology

Bungarus niger inhabits forests, and its surroundings, agricultural fields and sometimes enters into houses. The species is terrestrial, active mostly during early morning, evening and night time. It feeds on small snakes, rodents, frogs, lizards and fish. In captivity, it voraciously feeds on mammals (Whitaker and Captain 2004).

**Assessor:** Md. Farid Ahsan

NEAR
THREATENED
<NT>

Bungarus walli

Species ID: RE0140

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|----------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | ELAPIDAE |

Scientific Name: *Bungarus walli* Wall, 1907**English Name:** Wall's Krait**Local Name:** Water Keutey

Synonym/s: *Bungarus caeruleus sindanus* Boulenger, 1897
Bungarus sindanus Annandale, 1905
Bungarus sindanus walli Wall, 1907
Bungarus walli Wall, 1907
Bungarus walli Smith, 1943
Bungarus sindanus Khan, 1985
Bungarus sindanus walli Das and Chaturvedi, 1998
Bungarus sindanus walli Whitaker and Captain, 2004
Bungarus sindanus walli Kästle *et al.*, 2013
Bungarus walli Wallach *et al.*, 2014

Taxonomic Notes: The species is always confused with Common Krait (*Bungarus caeruleus*) and Sind Krait (*B. sindanus*).

Assessment Information

Red List Category & Criteria: Near Threatened (NT) ver 3.1

Justification: The species is distributed in some specific regions with large Extent of Occurrence and Area of Occupancy but with an insignificant population in Bangladesh. It has no known major threat but might qualify for Threatened Category in near future, so it is categorized as Near Threatened.

Date Assessed: 22 January 2015

History

Regional Status: Data Deficient (IUCN Bangladesh 2000b).*Bungarus walli*

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Geographic Range

Global: This species is reported from Bangladesh, India, Nepal and Pakistan (<http://reptile-database.reptarium.cz/species?genus=Bungarus&species=sindanus>. Downloaded on 05 January 2015).

Bangladesh: Wall's Krait is known to occur in the central (Gazipur, Sirajgonj and Tangail), northeast (Dinajpur, Rajshahi and Rangpur), southeast (Chittagong, Laxmipur and Noakhali), southwest (Barisal, Jessore and Khulna) parts of Bangladesh (Ahsan and Rahman 2015).

EOO: 1,12,127 km²**AOO:** 32,290 km²

Population

Generation Time (Length): Not known**Total Population:** Not known**No. of Sub-population:** Not known**Trend:** Presumably stable

Habitat and Ecology

Bungarus walli inhabits plainlands, lowlands, open forests, grasslands, agricultural lands, sandy "Charland" and in the vicinity of village or human habitation. It was reported from a house amongst television and video cables (Whitaker and Captain 2004). This crepuscular and nocturnal species is terrestrial, timid and docile. It is oviparous. It eats mainly snakes, may also feed on rodents, lizards and fishes (Whitaker and Captain 2004).

Assessor: Md. Mizanur Rahman

Naja kaouthia

Species ID: RE0144

NEAR
THREATENED
<NT>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|----------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | ELAPIDAE |

Scientific Name: *Naja kaouthia* Lesson, 1831

English Name: Monocled Cobra, Monocellate Cobra

Local Name: Gokhra Shap. Goma Shap, Gohama shap, Doshla Gohama Shap

Synonym/s: *Najakaouthia* Lesson, 1831

Naiatripudians var. *fasciata* Hardwicke and Gray, 1835

Naiatripudians var. *fasciata* Boulenger, 1896

Naja naja sputatrix Bourret, 1937

Naja naja kaouthia Smith, 1943

Naja kaouthia kaouthia Deraniyagala, 1960

Naja naja kaouthia Harding and Welch, 1980

Naja kaouthia Manthey and Grossmann, 1997

Taxonomic Notes: This was earlier considered as *Naja naja kaouthia* Smith, 1943 (Wüster 1996).

Assessment Information

Red List Category & Criteria: Near Threatened (NT) ver 3.1

Justification: The species is distributed throughout the country, including major wetlands with some vegetation but not major rivers and open waters. However, due to its over-exploitation and killings the species signifies as Near Threatened.

Date Assessed: 23 December 2014

History

Regional Status: Vulnerable (IUCN Bangladesh 2000b).

Geographic Range

Global: This species occurs in Bangladesh, Bhutan, Cambodia, China, India, Lao PDR, Malaysia (Peninsular Malaysia), Myanmar, Nepal, Thailand and Vietnam (Stuart and Wogan 2012, <http://reptile-databasehttp://reptile-database.reptarium.cz/>)



Naja kaouthia

© Tania Khan

species?genus=Naja&species=kaouthia. Downloaded on 19 December 2014).

Bangladesh: It is widely distributed in Bangladesh except major rivers and open water but found in wetlands with some vegetation. Its largest population thrives in the Sundarbans Mangrove Forests and its neighbouring areas (Khan 1986, 1992, pers. comm.)

EOO: 2,22,509 km²

AOO: 1,32,741 km²

Population

Generation Time (Length): Not known

Total Population: Not known

No. of Sub-population: Not known

Trend: Decreasing

Habitat and Ecology

Naja kaouthia lives in diverse habitats, including both natural and man-made environments, prefers habitats associated with water, such as paddy fields, swamps, and mangroves, but can also be found in grasslands, shrublands, forests, and human settlements, including cities (Whitaker and Captain 2004, Chakma 2009; Hasan *et al.* 2014). It occurs up to 100 m above mean sea level, crepuscular in habit and prefers wetter areas than the spectacled cobra, and common in rice growing areas and plantations. It is a good swimmer and climber. Its diet includes small fishes, frogs and toads, lizards, small snakes, birds and rats. Females lay 8-18 eggs during January-March (Whitaker and Captain, 2004); 16 to 33 eggs per clutch and incubation periods range from 55 to 73 days (Chanhome *et al.* 2001). Females guard eggs throughout the incubation period, only leaving to feed.

Assessor: Md. Farid Ahsan



Naja naja

Species ID: RE0143

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|----------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | ELAPIDAE |

Scientific Name: *Naja naja* (Linnaeus, 1758)**English Name:** Binocellate Cobra, Spectacled Cobra, Asian Cobra, Indian Cobra**Local Name:** Khoia Gokhra, Gokhra Shap, Goma Shap, Gahama Shap, Kharampaia Shap

Synonym/s: *Coluber Naja* Linnaeus, 1758
Naja brasiliensis Laurenti, 1768
Coluber caecus Gmelin, 1788
Coluber rufus Gmelin, 1788
Coluber naja Shaw and Nodder, 1791
Naja tripudians Merrem, 1820
Naja nigra Gray, 1830
Naja tripudians var. *caeca* Boulenger, 1896
Naja naja Stejneger, 1907
Naja naja Smith, 1943

Taxonomic Notes: This was earlier considered as *Naja naja* Smith, 1943 (Wüster 1996).

Assessment Information

Red List Category & Criteria: Near Threatened (NT) ver 3.1**Justification:** The species is distributed throughout the country except major rivers and open waters but due to its excessive and unsystematic exploitation and large-scale persecution by the mass people in the country, the species is assessed as under the Near Threatened.**Date Assessed:** 23 December 2014

History

Regional Status: Endangered (IUCN Bangladesh 2000b)

Geographic Range

Global: The species is known occur in Afghanistan, Bangladesh, Bhutan, India, Myanmar, Nepal, Pakistan and Sri Lanka (Wüster 1998, <http://reptile-database.reptarium.cz/species?genus=Naja&species=naja>. Downloaded on 19 December 2014).*Naja naja*

© Faysal Ahmad

Downloaded on 19 December 2014).

Bangladesh: This species is widely distributed in Bangladesh except major rivers and open waters. (Chakma 2009, Khan 2015)**EOO:** 2,22,509 km²**AOO:** 1,32,741 km²

Population

Generation Time (Length): Not known**Total Population:** Not known**No. of Sub-population:** Not known**Trend:** Decreasing

Habitat and Ecology

This taxon inhabits diverse natural as well as man-made environments, but prefers dark and dry areas of cultivated lands, grasslands, plantations, forests, scrub jungles, near human habitations, crevices and old buildings, grain houses and shops, termite mounds, rat holes, mammal burrows, etc. (Whitaker and Captain 2004, Chakma 2009, Hasan *et al.* 2014). It is active both during the day and night. It prefers drier areas than Monocled cobra and found up to 100 m asl. Its diet includes rodents, toads, frogs, lizards, birds and even other snakes. It is generally shy, but alert, agile and fast, and a good swimmer. When excited, it can raise one-third to half of the body with expanded hood. Females lay 12-30 eggs during March- July and remain with eggs till hatching that takes about 60 days (Whitaker and Captain 2004).

Assessor: Md. Farid Ahsan

Fordonia leucobalia

Species ID: RE0133

NEAR
THREATENED
<NT>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|--------------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | HOMALOPSIDAE |

Scientific Name: *Fordonia leucobalia* (Schlegel, 1837)
English Name: Crab-eating Snake, Crab-eating Water Snake, Fordons' Water Snake, Mangrove Snake, The Fordonia, The Plain Fordonia, White-bellied Freshwater Snake, White-bellied Mangrove Snake, White-bellied Water Snake

Local Name: Shundori Shap, Kakra-bhuk Shap, Kankr-bhuk Painna Shap, Sudarban-er Shap

Synonym/s: *Homalopsis leucobalia* Schlegel, 1837
Fordonia leucobalia Gray, 1842
Homalopsis unicolor Gray, 1849
Hemiodontus leucobalia Duméril and Bibron, 1854
Hemiodontus chalybaeus Jan, 1863
Fordonia bicolor Theobald, 1868
Fordonia papuensis Macleay, 1877
Fordonia varabilis Macleay, 1878
Fordonia leucobalia Smith, 1943

Assessment Information

Red List Category & Criteria: Near Threatened (NT) ver 3.1

Justification: The species is uncommon and has a narrow habitat and diet breadth and therefore it is likely to be affected by habitat loss and degradation, but it has a relatively wide distribution range in mangrove forest habitat throughout the coastal belt of the Bay of Bengal in Bangladesh. Therefore, this species has been assess as Near Threatened.

Date Assessed: 21 August 2015

History

Regional Status: Data Deficient (IUCN Bangladesh 2000b)



Fordonia leucobalia

© M K Hasan

Geographic Range

Global: This species is distributed in Australia, Bangladesh, Cambodia, India, Indonesia, Timor-Leste, Malaysia, Myanmar, Papua New Guinea, Philippines, Singapore, Thailand and Vietnam (Murphy *et al.* 2010, <http://www.reptile-database.reptarium.cz/species?genus=Fordonia&species=leucobalia>. Downloaded on 02 September 2015).

Bangladesh: The species is found in mangrove forest habitats throughout the coastal belt of Bangladesh (Rahman *et al.* 2014). Possibly it has disappeared from the Chokoria Sundarbans and the River Naf (Khan 1982a)

EOO: 16,695 km²

AOO: 4,352 km²

Population

Generation Time (Length): Not known

Total Population: Not known

No. of Sub-population: Not known

Trend: Not known

Habitat and Ecology

Fordonia leucobalia inhabits mangrove forests, coastal belts, river mouths and sometimes in the mudflats (Whitaker and Captain 2004, Rahman *et al.* 2014). This taxon is nocturnal in habit but sometimes active during the day especially in the rain (Rahman *et al.* 2014) and rests in mud lobster (*Thalassina anomala*) mound by day (Whitaker and Captain 2004). It feeds on crabs, small fishes and mud lobster (Das 2010) and females give birth to 6-15 young (Whitaker and Captain 2004).

Assessor: Shahriar Ceaser Rahman



Daboia russelii

Species ID: RE0161

NEAR
THREATENED
<NT>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|-----------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | VIPERIDAE |

Scientific Name: *Daboia russelii* (Shaw and Nodder, 1797)**English Name:** Russell's Viper, Indian Russell's Viper, Common Russell's Viper**Local Name:** Chandra Bora, Ulu Bora**Synonym/s:** *Coluber russelii* Shaw and Nodder, 1797*Vipera elegans* Daudin, 1803*Daboia elegans* Gray, 1842*Daboia pulchella* Gray, 1842*Vipera russelii* Strauch, 1869*Daboia russelii* Fayrer, 1874*Vipera russelii* Boulenger, 1890*Viperarusselii* Smith, 1943*Daboia russelii* Manthey and Grossmann, 1997*Vipera russelii* Sharma, 2004*Daboia russelii* Thorpe *et al.*, 2007

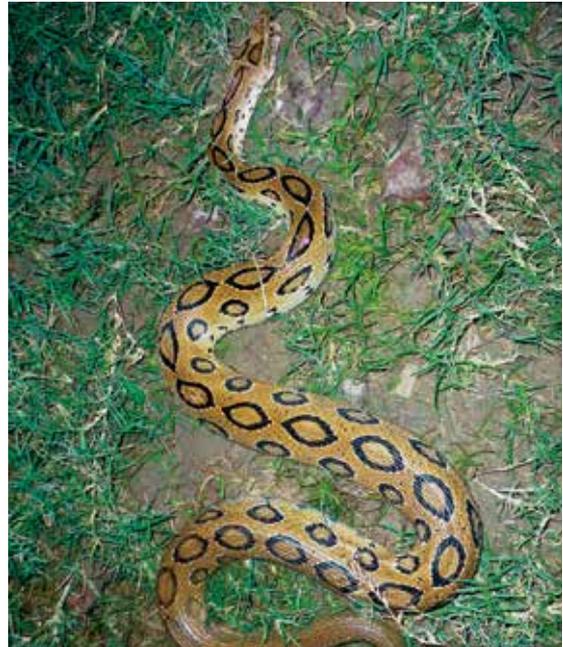
Assessment Information

Red List Category & Criteria: Near Threatened (NT) ver 3.1**Justification:** It is distributed in some specific areas in Bangladesh but not abundant. Extent of Occurrence and Area of Occupancy do not qualify for any Threatened Category but close to qualifying for it. Thus, it assessed as Near Threatened.**Date Assessed:** 26 February 2015

History

Regional Status: Critically Endangered (IUCN Bangladesh 2000b).

Geographic Range

Global: This species occurs in Bangladesh, Bhutan, Cambodia, China, India, Indonesia, Myanmar, Nepal, Pakistan, Sri Lanka, Taiwan and*Daboia russelii*

© M A Saeed

Thailand (<http://reptile-database.reptarium.cz/species?genus=Daboia&species=russelii>). Downloaded on 10 February 2015). It can found in Lao PDR and Viet Nam, (Brown 1973).**Bangladesh:** It has been reported from Bogra, Rajshahi (Khan 1992, 2015), Chapai Nawabganj (Shibganj), Naogaon, Dinajpur, and Sundarbans (Bagerhat) (M. M. Rahman pers. obs.)**EOO:** 51,357 km²**AOO:** 14,344 km²

Population

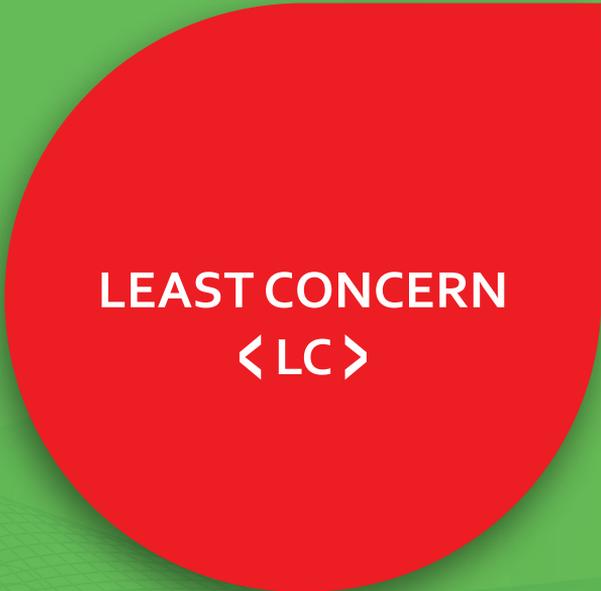
Generation Time (Length): Not known**Total Population:** Not known**No. of Sub-population:** Not known**Trend:** Not known

Habitat and Ecology

Daboia russelii inhabits open, grassy or bushy areas; scrub jungles, forested plantations, rocky hillocks, forest edges, mangroves and farmlands (Whitaker and Captain 2004).

The taxon is terrestrial and nocturnal, diet comprises rodents, crabs, frogs, lizards and birds (Das 2002). It is ovoviparous and females bear 6-63 live young during May-July (Daniel 2002).

Assessor: Md. Mizanur Rahman

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LEAST CONCERN
<LC>

Pangshura tecta

Species ID: RE0021

**LEAST
CONCERN
<LC>**

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|------------|-------------|
| ANIMALIA | CHORDATA | REPTILIA | TESTUDINES | GEOEMYDIDAE |

Scientific Name: *Pangshura tecta* (Gray, 1830)

English Name: Roofed Turtle, Indian Roofed Turtle

Local Name: Kori Kaitta

Synonym/s: *Emys tectum* Gray, 1830

Emys tecta Gray, 1831

Testudo dura Hamilton, 1831 (*nomen nudum*)

Pangshura dura Gray, 1869

Pangshura tecta Gray, 1873

Kachuga tectum Boulenger, 1889

Kachuga tectum Smith, 1933

Pangshura tecta Spinks *et al.*, 2004

Batagur tecta Le *et al.*, 2007

Kachuga tecta Rhodin *et al.*, 2010

Taxonomic Notes: Appeared in IUCN Red Lists as *Kachuga tecta* from 2000 to 2006 (Asian Turtle Trade Working Group 2000).



Pangshura tecta

© Md. Mizanur Rahman

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: The species qualifies as Least Concerned because it is the most widely distributed hard-shelled freshwater chelonian of the country, especially low lying floodplain areas of almost all the districts including hills and islands of the Bay of Bengal (Khan M.A.R. 1982a, Hossain 1995, Khan M.M.H. 2008, Hasan *et al.* 2104).

Date Assessed: 21 Aug 2014

History

Regional Status: Not Threatened (IUCN Bangladesh 2000b).

Geographic Range

Global: This species occurs in Bangladesh, India and Pakistan (Asian Turtle Trade Working

Group 2000, <http://reptile-database.retarium.cz/species?genus=Pangshura&species=tecta>. Downloaded on 04 July 2015).

Bangladesh: It is widely distributed across the country especially in the freshwater wetlands of the mainland, floodplain, low hill countries and some near shore islands (Hossain 1995, Khan M.A.R. 1982, Khan M.M.H., Hasan *et al.* 2104).

EOO: 1,13,532 km²

AOO: 35,459 km²

Population

Generation Time (Length): Not known

Total Population: Not known

No of Sub-population: Not known

Trend: Declining

Habitat and Ecology

The species is diurnal (Khan M.M.H. 2008), an omnivore, eats a variety of animals (tadpoles, snails, worms, aquatic insects, small fish and carrion) and plants (numerous aquatic and semi-aquatic species) including human fecal matters in the wild (Hossain 2008). In captivity, diet varies from invertebrates to vertebrates such as annelids, molluscs, small fish, animal fragments, live and dead parts of plants, vegetables, cereal, rice, and other natural foods. Most of the time it is seen basking on floating material like logs, tree stems, shunken boats, banana plants, semi-submerged trees, piles of the wastes, water hyacinth also on bank of water bodies) after feeding, browsing and burrowing condition (Fugler 1984, Hossain 2006). Nesting occurs several (2-3) times, in October-December, January-February, and March-April (Hossain 2004). Sun-exposed soils are common nesting sites, eggs are buried in the soil, clutch size ranges from 5-15 and incubation period from 45-60 days (Hossain 1995).

Assessor: Md. Lokman Hossain



Lissemys punctata

Species ID: RE0032

LEAST
CONCERN
<LC>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|------------|--------------|
| ANIMALIA | CHORDATA | REPTILIA | TESTUDINES | TRIONYCHIDAE |

Scientific Name: *Lissemys punctata* Bonnaterre, 1789
English Name: Spotted Flapshell Turtle, Indian Flap-shelled Turtle

Local Name: Shundhi Kasim

Synonym/s: *Lissemys punctata* Bonnaterre, 1789

Testudo punctata Lacépède, 1788
Testudo granulosa Suckow, 1798
Testudo granulosa Schoepff, 1801
Trionyx punctata Hardwicke and Gray, 1835
Trionyx granosus Hardwicke and Gray, 1835
Emyda punctata Gray, 1836
Emyda granulosa Boulenger, 1889
Lissemys punctata Smith, 1931
Lissemys punctata Das, 1995
Lissemys punctata Schafer, 2006



Lissemys punctata

© Faysal Ahmad

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: The species qualifies as Least Concerned because it is widely distributed across the country, especially in low lying floodplain areas of almost all the districts including slopes of hills and islands of the Bay of Bengal (Hossain *et al.* 2008, Khan 1982a, 1996, 2015.). Also the threat level from the habitat destruction is low as it thrives on any freshwater body with food around (M.A.R. Khan pers. comm.).

Date Assessed: 10 March 2015

History

Regional Status: Vulnerable (IUCN Bangladesh 2000a).

Geographic Range

Global: This species occurs in Bangladesh, India, Pakistan, Sri Lanka, Nepal and Myanmar <http://reptile-database.reptarium.cz/species?genus=Lissemys&species=punctata>;

Downloaded on 15 March 2015. possibly also occurs in Bhutan (Lenz 2012).

Bangladesh: It is most widely distributed across the country especially in the low lying flood plains including coastal islands of the Bay of Bengal and hill districts. It does not occur in salt water environment (Hossain *et al.* 2008, Khan 1982a, 198b, 1996).

EOO: 1,99,170 km²

AOO: 53,376 km²

Population

Generation Time (Length): Not known

Total Population: Not known

No of Sub-population: Not known

Trend: Decreasing

Habitat and Ecology

Lissemys punctata lives in all kinds of freshwater bodies in the country but avoids saltwater. Most of the time it is found in burrowing condition under moist soil, piles of vegetation, agriculture fields, betel leaf and pineapple gardens and seen basking on floating material that followed feeding, browsing or in burrowing condition. As water recedes from water bodies it buries itself in the mud and virtually hibernates there. (Fugler 1984, Hossain *et al.* 2008, Khan 1982a, 1997). It is a freshwater species and comes on land for laying eggs. It is an omnivore and eats a variety of animals and aquatic and semi-aquatic vegetations including flowers, and seeds. In captivity, diet varies from invertebrates to vertebrates (annelids, mollusks, small fish, animal fragments), live and dead parts of plants, vegetables and rice (Hossain *et al.* 2007). Nesting occurs 2-3 times between March and August each year. Loam soil exposed to sunlight is common nesting sites. Eggs are spherical in shape; clutch size 13 ± 1.9 , egg weight 10.3 ± 1.3 g and these eggs are buried in soil for incubation that is about 173 ± 34 days (Hossain *et al.* 2010).

Assessor: Md. Lokman Hossain



Nilssonia hurum

Species ID: RE0029

LEAST
CONCERN
<LC>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|------------|--------------|
| ANIMALIA | CHORDATA | REPTILIA | TESTUDINES | TRIONYCHIDAE |

Scientific Name: *Nilssonia hurum* (Gray, 1830)

English Name: Peacock Soft-shelled Turtle, Indian Peacock Softshell Turtle, Brown Softshell Turtle

Local Name: Dhum Kachchim

Synonym/s: *Trionyx ocellatus* Gray, 1830

Trionyx hurum Gray, 1831

Gymnopus duvaucelii Duméril and Bibron, 1835

Isola hurum Baur, 1893

Trionyx buchanani Theobald, 1874

Aspideretes hurum Meylan, 1987

Trionyx hurum Alderton, 1988

Aspideretes hurum Ernst and Barbour, 1989

Aspideretes hurum Gemel and Praschag, 2003

Nilssonia hurum Prashag *et al.*, 2007

Aspideretes hurum Murthy, 2010



Nilssonia hurum

© M. Monirul H. Khan

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: *Nilssonia hurum* is considered as Least Concern, because despite its slow decline due to consumption for meat, it still has a wide distribution in the country. Therefore, it does not qualify for any of the threatened categories and considered as Least Concern.

Date Assessed: 21 August 2014.

History

Regional Status: Endangered (IUCN Bangladesh 2000b)

Geographic Range

Global: The species is native to Bangladesh, India, Nepal and Pakistan (Asian Turtle Trade Working Group 2000).

Bangladesh: It is widely distributed in the freshwater river

systems and major wetland habitats, minus the hilly regions of the north-east of the country (Hasan *et al.* 2014, Khan 1982, 1987, 2015).

EOO: 1,86,253 km²

AOO: 6,848 km²

Population

Generation Time (Length): Not known

Total Population: Not known

No of Sub-population: Not known

Trend: Decreasing.

Habitat and Ecology

Nilssonia hurum is a nocturnal species that inhabits rivers, canals, lakes, ponds and other freshwater bodies. It feeds on snails, fish, aquatic insects and their larvae (Ahsan 2009). Females lay 20-38 hard-shelled eggs between August and December (Das 1995).



Assessor: M. Monirul H. Khan

Calotes emma

Species ID: RE0033

LEAST
CONCERN
<LC>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|----------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | AGAMIDAE |

Scientific Name: *Calotes emma* Gray, 1845

English Name: Forest Crested Lizard, Emma Gray's Forest Lizard, Spiny-headed Forest Lizard

Local Name: Bon Jhutil Girgiti, Bonobashi Roktochusha

Synonym/s: *Calotes emma* Gray, 1845

Calotes emma Boulenger, 1885

Calotes alticristatus Schmidt, 1925

Calotes emma Smith, 1935

Calotes emma Manthey and Grossmann, 1997

Calotes emma Grismer, 2011

Taxonomic Notes: Two subspecies are recognized:

Calotes emma alticristatus Schmidt, 1925 and *Calotes emma emma* Gray, 1845; of which *C. e. emma* occurs in Bangladesh.

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: The species is widely distributed throughout the mixed evergreen forests in the hilly northeast, east and southeast parts of the country. The population status is also stable and it has very little impact from the habitat modifications taking place there. So, it is categorized as Least Concern.

Date Assessed: 24 September 2014

History

Regional Status: It was not assessed by IUCN Bangladesh (2000b) as it had not been reported from the country at that time.

Geographic Range

Global: Its range countries include Bangladesh, Cambodia, China (Southern), India, Lao PDR,



Calotes emma

© Faysal Ahmad

Malaysia, Myanmar, Thailand and Vietnam (<http://reptile-database.reptarium.cz/species?genus=Calotes&species=emma>) and possibly also occurs in Bhutan (Lenz 2012).

Bangladesh: This lizard lives in mixed evergreen forests of east, northeast and southeast parts of Bangladesh (Chakma 2009, Feeroz *et al.* 2012, 2013; Hasan *et al.* 2013, 2014; Khan 2015).

EOO: 41,602 km²

AOO: 10,626 km²

Population

Generation Time (Length): Not known

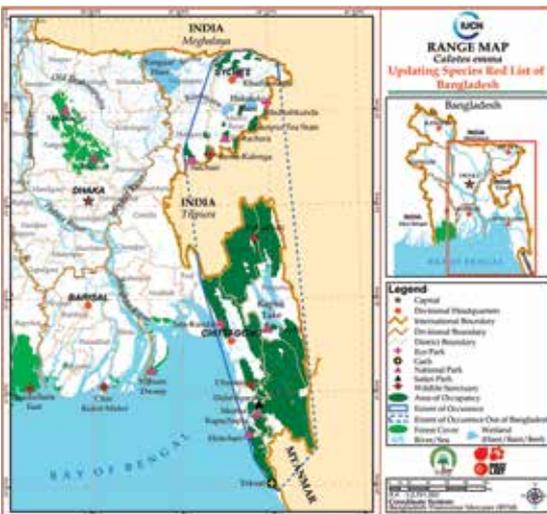
Total Population: Not known

No of Sub-population: Not known

Trend: Possibly stable

Habitat and Ecology

Calotes emma lives in mixed evergreen forests, undergrowth and periphery of forests (Chakma 2009) and all plantation forests that have replaced the natural forests in the hill districts of Sylhet and Chittagong Revenue Divisions (M.A.R. Khan pers. comm.). This species is diurnal. It breeds from April to September (Hasan *et al.* (2014); females lay 4-12 eggs in a clutch and incubation lasts from 62 to 100 days (Das, 2010).



Assessor: Md. Mizanur Rahman

Calotes versicolor

Species ID: RE0035

LEAST
CONCERN
<LC>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|----------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | AGAMIDAE |

Scientific Name: *Calotes versicolor* (Daudin, 1802)
English Name: Common Garden Lizard, Garden Lizard, Bloodsucker

Local Name: Roktochosa

Synonym/s: *Agama versicolor* Daudin, 1802
Agama tiedmanni Kuhl, 1802
Calotes versicolor Fitzinger, 1826

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1
Justification: *Calotes versicolor* is most widely distributed among the lizards of country, ranging from the Narikel Jinjira or the Saint Martin's Island to the highest hill forests in the Bandarban District. There is apparently no major threat to its habitat and population. So, it is categorized as the Least Concern.

Date Assessed: 24 September 2014

History

Regional Status: Not Threatened (IUCN Bangladesh 2000b).

Geographic Range

Global: This species occurs in Afghanistan, Bangladesh, Bhutan, Cambodia, China (Southern), Hong Kong,, India, Indonesia, Iran (South East), Malaysia, Maldives, Myanmar, Nepal, Pakistan, Singapore, Sri Lanka, Thailand and Vietnam (<http://reptile-database.reptarium.cz/species?genus=Calotes&species=versicolor>. Downloaded on 12 September 2014).

Bangladesh: It is widely distributed all over the country in suitable habitats.



Calotes versicolor (Male)

© M K Hasan



Calotes versicolor (Female)

© Md. Mizanur Rahman

EOO: 2,22,509 km²

AOO: 1,32,741 km²

Population

Generation Time (Length): Not known

Total Population: Not known

No of Sub-population: Not known

Trend: Stable

Habitat and Ecology

Calotes versicolor inhabits shrubs and trees, all types of forest and forest edges, roadside bushes, hedges and parks in city centers as well as homestead gardens (Khan 1982a, 1987, 2004, 2015, Chakma 2009, Feeroz *et al.* 2012, 2013, Hasan *et al.* 2013, 2014). The species is diurnal and arboreal. It breeds from April to September (Daniel 2002, Chakma 2009); females lay 6-25 eggs in a clutch (Sharma 2002, Das 2010), buried in moist soil. Incubation period is 37-47 days (Daniel 2002, Das 2010).

Assessor: Md. Mizanur Rahman



Cyrtodactylus ayeerwadyensis

Species ID: RE0047

LEAST
CONCERN
<LC>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|------------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | GEKKONIDAE |

Scientific Name: *Cyrtodactylus ayeerwadyensis* Bauer, 2003

English Name: Ayeerwady Bent-toed Gecko, Ayeerwady Bow-fingered Gecko

Local Name: Banka Angul Tikiki

Taxonomic Notes: This species was split from *Cyrtodactylus khasiensis* and established as a species new to science by Bauer (2003). Initially it was considered as endemic to Myanmar, but Mahony *et al.* (2009) concluded that *C. khasiensis* recorded from Bangladesh is actually *C. ayeerwadyensis*.

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: The species is widely distributed in the hilly areas of northeast and southeast, particularly in and around mixed evergreen forests (Mahony *et al.* 2009, Hasan *et al.* 2014, Khan 2015, and the population is stable and relatively healthy. So, it has been categorized as Least Concern.

Date Assessed: 22 September 2014

History

Regional Status: Not evaluated (IUCN Bangladesh 2000b).

Geographic Range

Global: It occurs in Bangladesh and Myanmar (<http://reptile-database.retarium.cz/species?genus=Cyrtodactylus&species=ayeerwadyensis>. Downloaded on 13 November 2014), and probably also found in India (Northeast)



Cyrtodactylus ayeerwadyensis

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Bangladesh: It occurs in the hilly areas of the northeast, east and southeast forested regions in the country (Hasan *et al.* 2014, Khan 2015).

EOO: 45,074 km²

AOO: 10,629 km²

Population

Generation Time (Length): Not known

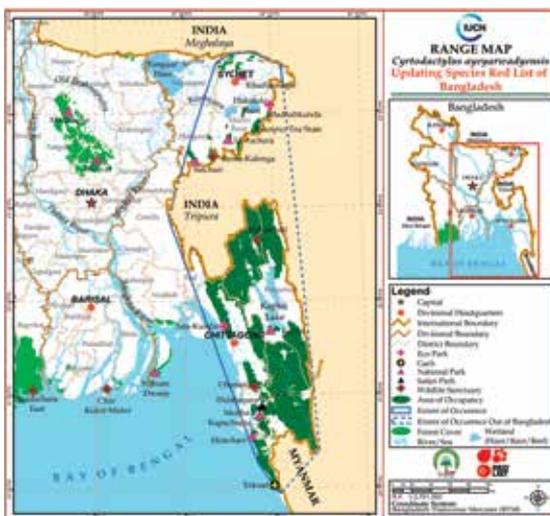
Total Population: Not known

No. of Sub-population: Not known

Trend: Presumably stable

Habitat and Ecology

This taxon spends the day hiding under the rocks and wooden logs, and is quite aggressive sometimes. It feeds on insects, mainly at night. It sometimes utters a snarling voice. Nothing is known about its breeding. It is mainly found on ground, rock faces, masonry works and on tree trunks, and also found in the secondary forests and plantation but prefers shady areas of hill forests.



Assessor: M. Monirul H. Khan

Gekko gekko

Species ID: RE0048

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|------------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | GEKKONIDAE |

Scientific Name: *Gekko gekko* (Linnaeus, 1778)**English Name:** Tokay Gecko**Local Name:** Tokkhak, Tuingtang**Synonym/s:** *Lacerta gekko* Linnaeus, 1758*Gekko teres* Laurenti, 1768*Gekko guttatus* Daudin, 1802*Gekko annulatus* Kuhl, 1820*Gekko indicus* Girard, 1831*Gekko gekko* Barbour, 1912

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1**Justification:** This species is more or less common and widely distributed all over Bangladesh (Khan 1982a, Hasan *et al.* 2014) except greater Rajshahi district (M.F. Ahsan pers. comm.) and relatively more concentrated in the forests. Though there is tremendous poaching pressure for use in traditional medicine, it does not fulfill any of the criteria to qualify for any of the threatened categories of IUCN. Thus, it is assessed as Least Concern.**Date Assessed:** 22 September 2014

History

Regional Status: Assessed as Vulnerable (IUCN Bangladesh 2000b).

Geographic Range

Global: This species is known to occur in Bangladesh, Bhutan, Cambodia, China, Hong Kong, India, Indonesia, Lao PDR, Malaysia, Myanmar, Malay Peninsula, Nepal, Philippines, Thailand, Timor-Leste and Vietnam; also introduced to USA (<http://reptile-database.reptarium.cz/species?genus=Gekko&species=gekko>). Downloaded on 20 October 2014).*Gekko gekko*

© Md. Mizanur Rahman

Bangladesh: The taxon is widely distributed all over Bangladesh (Khan 1982a, Hasan *et al.* 2014) except greater Rajshahi district (M.F. Ahsan pers. comm.).**EOO:** 2,22,509 km²**AOO:** 1,32,741 km²

Population

Generation Time (Length): Not known**Total Population:** As the species is more or less common and widely distributed, presumably it has a large population.**No. of Sub-population:** Not known**Trend:** Presumably stable

Habitat and Ecology

This is a nocturnal species and becomes active at the evening. It feeds mostly on insects. The female lays hard-shelled eggs. It inhabits large trees in the forest and old buildings; hides in tree holes or secluded places in human settlements.

**Assessor:** Md. Kamrul Hasan

Hemidactylus bowringii

Species ID: RE0041

LEAST
CONCERN
<LC>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|------------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | GEKKONIDAE |

Scientific Name: *Hemidactylus bowringii* (Gray, 1845)
English Name: Oriental Leaf-toed Gecko, House lizard
Local Name: Tiktiki, Choto Tiktiki
Synonym/s: *Doryura bowringii* Gray, 1845
Leiurus bermorei Blyth, 1853
Hemidactylus coctaei Günther, 1872
Hemidactylus coctaei Boulenger, 1885
Hemidactylus bowringii Boulenger, 1885

Taxonomic Notes: The species reported from Bangladesh is probably similar to recently described *H. aquilonius* from Myanmar (McMahan and Zug, 2007). The species is reported as *H. bowringii* from northeast India and West Bengal has already been assigned to *H. aquilonius* (Purakayastha *et al.* 2010).

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1
Justification The species has been assessed as Least Concern considering its widespread distribution and adaptive nature. It is associated with human habitation and common in houses near forests and sympatric with other common species like *H. frenatus* (Schlegel 1836). There is no significant threat observed to qualify the species for any of threatened categories in near future.
Date Assessed: 24 September 2014

History

Regional Status: Vulnerable (IUCN Bangladesh 2000b)

Geographic Range

Global: It lives in Bangladesh, Bhutan, China, Hong Kong, India, Japan, Myanmar, Nepal and Vietnam (<http://reptile-database.reptarium.cz/>)



Hemidactylus bowringii

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species?genus=Hemidactylus&species=brookii.
 Downloaded on 07 August 2015).
 Bangladesh: It is known to occur in the east of the Jamuna river mainly in the southeast (Chittagong and Chittagong Hill Tracts (M.A.R. Khan 1982, M.M.H. Khan 2008, Hasan *et al.* 2014).

EOO: 41,602 km²

AOO: 10,626 km²

Population

Generation Time (Length): Not known

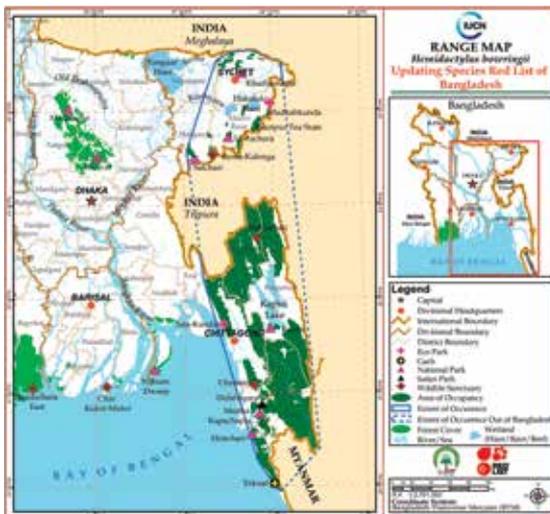
Total Population: Not known

No of Sub-population: Not known

Trend: Probably stable

Habitat and Ecology

Hemidactylus bowringii inhabits human habitations and forests. The species is arboreal and insectivorous. Oviposition occurs between late May and late July (Islam 2009). Female lays two eggs early in the breeding season and 1-2 eggs later in the season (Xu and Ji 2007). It is nocturnal in habit.



Assessor: Suprio Chakma

Hemidactylus flaviviridis

Species ID: RE0043

LEAST
CONCERN
<LC>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|------------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | GEKKONIDAE |

Scientific Name: *Hemidactylus flaviviridis* Rüppell, 1835
English Name: House Lizard, Yellow-green House Lizard, Northern House Gecko

Local Name: Tiktiki, Baro Tiktiki, Goda Tiktiki

Synonym/s: *Hemidactylus flaviviridis* Rüppell, 1835
Hemidactylus coctaei Duméril and Bibron, 1836
Boittalia sublevis Gray, 1842
Hoplopodion rüppellii Fitzinger, 1843
Hemidactylus bengaliensis Anderson, 1871
Hemidactylus flaviviridis Boulenger, 1885
Hemidactylus coctaei Boulenger, 1887
Hemidactylus flavoviridis Matschie, 1893
Hemidactylus flaviviridis Schmidt, 1939

*Hemidactylus flaviviridis*

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Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: This species is common and widely distributed in areas west of the Jamuna River that means in the Civil Divisions of Khulna, Rajshahi and Rangpur. It does not live in any forest, including the Sundarbans Mangrove Forest. Thus, it is assessed as Least Concern.

Date Assessed: 19 October 2014

History

Regional Status: Not Threatened (IUCN Bangladesh 2000b)

Geographic Range

Global: It is known to occur in Afghanistan, Bangladesh, Egypt, Eritrea, Ethiopia, India, Iran, Iraq, Kuwait, Nepal, Oman, Pakistan, Saudi Arabia, Somalia, Sudan, United Arab Emirates and Yemen (<http://reptile-database.reptarium.cz/>)

species?genus=Hemidactylus&species=flaviviridis. Downloaded on 20 October 2014).

Bangladesh: The species is widely distributed in the west of the Jamuna River, but absent in the Sundarbans (Khan 1982, Chakma 2009, Hasan *et al.* 2014). However, it has now spread east of the Jamuna river, especially in Dhaka Civil Division, possibly through incidental transport through human belongings, provisions, etc., and road transport system (Khan 2015).

EOO: 1,07,384 km²

AOO: 79,771 km²

Population

Generation Time (Length): Not known

Total Population: Not known

No. of Sub-population: Not known

Trend: Population is stable and expanding

Habitat and Ecology

It occurs mainly on vertical surface of human houses and active mainly at night and at evening, but it is rarely active during daytime. The species remains hidden in cracks and crevices and masonry holes in buildings, under trash and tree barks during daytime. It shows homing behaviour and maintains territorial integrity against other intruder lizards. It feeds mainly on grasshoppers, moths, butterflies, caterpillars, spiders and other arthropods, especially those that are attracted to electrical bulbs in human dwellings, office blocks and market places. It breeds during March-August. Usually two spherical white eggs are laid in a single clutch in a secluded place.



Assessor: M. Monirul H. Khan

Hemidactylus frenatus

Species ID: RE0044

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|------------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | GEKKONIDAE |

Scientific Name: *Hemidactylus frenatus* Dumeril and Bibron, 1836

English Name: Common House Gecko

Local Name: Mosrin Tikiki

Synonym/s: *Hemidactylus frenatus* Dumeril and Bibron, 1836
Hemidactylus vittatus Gray, 1845
Hemidactylus punctatus Jerdon, 1853
Hemidactylus frenatus Blecker, 1857
Hemidactylus longiceps Cope, 1869
Hemidactylus hexaspis Cope, 1869
Hemidactylus tristis Sauvage, 1879
Hemidactylus frenatus Boulenger 1885
Hemidactylus nigriventris Lidth de Jeude, 1905
Hemidactylus fragilis Calabresi, 1915

Taxonomic Notes: There are wide variations in colour markings, number and position of the tubercles in this species (Smith 1935).

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: This species is very common and widely distributed all over Bangladesh (Khan 1982, Hasan *et al.* 2014). Moreover, it is common in diverse habitats including forests and human settlements. There is no significant threat affecting this species. It does not fulfill to qualify for any IUCN threatened category. So, it is assessed as least concern.

Date Assessed: 22 September 2014.

History

Regional Status: Not Threatened (IUCN Bangladesh 2000b).



Hemidactylus frenatus

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Geographic Range

Global: This species is native to southern and southeast Asia and the Indo-Australian Archipelago. It is also found worldwide in tropical and subtropical regions due to ethnophoresy (Ota and Whitaker 2010, <http://reptile-database.reptarium.cz/species?genus=Hemidactylus&species=frenatus>. Downloaded on 14 January 2015).

Bangladesh: This species is widely distributed all over Bangladesh (Khan 1982).

EOO: 2,22,509 km²

AOO: 1,32,741 km²

Population

Generation Time (Length): Not known

Total Population: As the species is common and widely distributed, presumably it has a large population.

No. of Sub-population: Not known

Trend: Its population is stable and rather expanding occupying all new human habitations in newly accreted islands reaching there incidentally or through expanding its natural range.

Habitat and Ecology

It is found in a variety of habitats including trees, logs, stones, and in human settlements both in rural and urban areas. It also inhabits forests. The species is nocturnal and becomes active in the evening but could remain active in well-lit restaurants and human dwellings. It hides in secretive places. At night, it is often found near the electrical bulbs in buildings that attract lot of insects and arthropods. Female usually lays two eggs in a clutch.

Assessor: Md. Kamrul Hasan



Hemidactylus garnotii

Species ID: RE0045

LEAST
CONCERN
<LC>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|------------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | GEKKONIDAE |

Scientific Name: *Hemidactylus garnotii* Duméril and Bibron, 1836

English Name: Garnot's House Gecko, Indo-Pacific Gecko

Local Name: Garnoter Tiktiki, Sada Tiktiki

Synonym/s: *Hemidactylus garnotii* Duméril and Bibron, 1836

Hemidactylus peruvianus Wiegmann, 1834

Doryura garnotii Duméril, 1845

Hemidactylus mortoni Theobald, 1868

Hemidactylus blanfordii Boulenger, 1885

Hemidactylus peruvianus Boulenger, 1885

Hemidactylus garnotii Boulenger, 1885

Lepidodactylus garnotii Henshaw, 1902

Hemidactylus garnotii de Rooij, 1915

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: The species is reported as rare in Bangladesh (Mahony and Reza 2008, Khan M.M.H. 2008, Hasan *et al.* 2014, Khan M.A.R. 2015), but probably more widespread than currently known. Presumed large population considering availability of habitats as the species is highly tolerant of habitat modification and found in different habitats including human houses. The species is, therefore, assessed as Least Concern.

Date Assessed: 24 September 2014

History

Regional Status: It was not assessed (IUCN Bangladesh 2000b).

Geographic Range

Global: It is known to occur throughout South and Southeast Asia including Bangladesh. The species has been introduced to many countries from New Zealand



Hemidactylus garnotii

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to Florida of USA to Costa Rica of North America from its original range (<http://reptile-database.reptarium.cz/species?genus=Hemidactylus&species=garnotii>. Downloaded on 20 October 2014).

Bangladesh: It is found in the forested and non-forested areas of northeast and southeast (Mahony and Reza 2008, Hasan *et al.* 2014, Khan 2015).

EOO: 55,581 km²

AOO: 29,434 km²

Population

Generation Time (Length): Not known

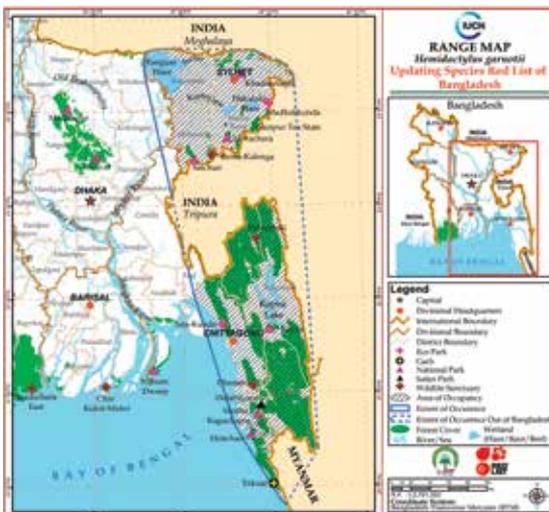
Total Population: Not known

No. of Sub-population: Not known

Trend: Probably stable

Habitat and Ecology

H. garnotii is an arboreal species feeding on a variety of insects, spiders and other invertebrates. All individuals are females laying eggs that hatch without fertilization (Kluge and Eckard 1969). It often perches around outdoor lights grabbing insects attracted to light. (<http://srelherp.uga.edu/lizards/hemgar.htm>). It is found both in urban and suburban areas including man-made structures (Das 2002); hill forests and its nearby areas of Sylhet and Chittagong Revenue Divisions (Mahony and Reza 2008, Khan M.M.H. 2008, Hasan *et al.* 2014, Khan M.A.R. 2015).



Assessor: Suprio Chakma

Takydromous khasiensis

Species ID: RE0050

LEAST
CONCERN
<LC>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|------------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | LACERTIDAE |

Scientific Name: *Takydromous khasiensis* (Boulenger, 1917)

English Name: Khasi Hills Long-tailed Lizard

Local Name: Lomba-leji Khashia Roktochusha, Lombaleji Roktochusha

Synonym/s: *Tachydromous khasiensis* Boulenger, 1917
Takydromus sexlineatus khasiensis Smith, 1935
Takydromus sexlineatus khasiensis Das, 1996
Takydromus khasiensis Schlüter, 2003

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: The species has been assessed as Least Concern considering its widespread distribution and assuming that it has a large population. It is uncommon but found throughout its preferred habitats (mixed evergreen forests) and currently there is no major threat observed to qualify the species for any of the IUCN threatened categories within short period of time or next ten years.

Date Assessed: 24 September 2014

History

Regional Status: It is not assessed before in Bangladesh (IUCN Bangladesh 2000b).

Geographic Range

Global: It occurs in Bangladesh, India, and Myanmar (<http://reptile-database.retarium.cz/species?genus=Takydromus&species=khasiensis>. Downloaded on 20 October 2014).

Bangladesh: It is found in mixed evergreen forests of Chittagong, Chittagong Hill Tracts and Sylhet (Chakma 2009, Hasan *et al.* 2014, Khan 2015).



Takydromous khasiensis

© M K Hasan

EEO: 41,602 km²

AOO: 10,626 km²

Population

Generation Time (Length): Not known

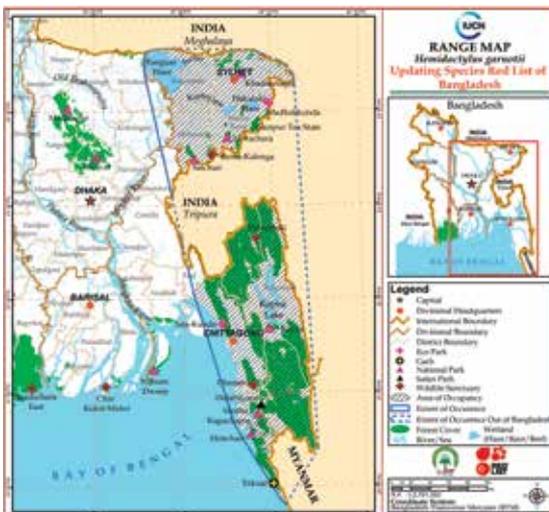
Total Population: Not known

No. of Sub-population: Not known

Trend: Probably stable

Habitat and Ecology

The taxon is diurnal and arbo-terrestrial and is often seen basking on low vegetation. It is insectivorous. It inhabits mixed evergreen low hill forests and clearings where scrub vegetation grows up to an elevation of about 100 m above mean sea level.



Assessor: Suprio Chakma

LEAST
CONCERN
<LC>

Eutropis carinata

Species ID: RE0057

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|-----------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | SCINCIDAE |

Scientific Name: *Eutropis carinata* (Schneider, 1801)

English Name: Common Skink, Brahminy Skink, Common Grass Skink, Keeled Indian Skink, Keeled Grass Skink

Local Name: Anjon, Anchil, Anchila

Synonym/s: *Scincus carinatus* Schneider, 1801

Tiliqua carinata Gray, 1827

Euprepes merremi Duméril and Bibron, 1839

Euprepes rufescens Günther, 1864

Mabuia carinata Boulenger, 1887

Mabuya carinata Smith, 1935

Eutropis carinata Mausfeld *et al.*, 2002

Taxonomic Notes: This species has two subspecies: *E. carinata carinata* (Schneider, 1801) and *E. carinata lankae* (Deraniyagala, 1953) but which one occurs in Bangladesh has not yet been confirmed.

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: The species is widely distributed in Bangladesh (Khan 1982, 2015, Hasan *et al.* 2014) without any known major threat and this species is not undergoing population decline. So, it signifies as Least Concern.

Date Assessed: 20 October 2014

History

Regional Status: Not Threatened (IUCN Bangladesh 2000b)

Geographic Range

Global: The species has been reported from Bangladesh, India (except in the North-West), Maldives, Nepal and Sri Lanka (Silva and Vyas 2010, <http://reptile-database.reptarium.cz/species?genus=Eutropis&species=carinata>. Downloaded on 19 September 2014).



Eutropis carinata

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Bangladesh: It is widely distributed all over the country, including newly accreted islands where there is human habitations as well as in offshore islands such as the Hatiya and Saint Martin's (Khan 1982a, 2015; Hasan *et al.* 2014).

EOO: 2,22,509 km²

AOO: 1,32,741 km²

Population

Generation Time (Length): Not known

Total Population: Not known

No. of Sub-population: Not known

Trend: Presumably stable

Habitat and Ecology

The species is diurnal and terrestrial, frequently seen basking or foraging in open areas. It is apt in swimming and gathering food from floating vegetation like the water hyacinth. It breeds from August to September and 2-8 eggs are laid in a self-excavated hole or under fallen logs (Das 2002). It is ovo-viviparous (Daniel 2002). The species inhabits in diverse habitats including forests, homestead vegetation, suburban areas, parks and gardens. It is a ground dweller and prefers leaf litter (Daniel 2002). It is diurnal and recorded at up to 200 m above mean sea level.

Assessor: Md. Mizanur Rahman



Eutropis dissimilis

Species ID: RE0058

LEAST
CONCERN
<LC>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|-----------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | SCINCIDAE |

Scientific Name: *Eutropis dissimilis* (Hallowell, 1857)
English Name: Striped Skink, Striped Grass Mabuya
Local Name: Anjon, Dora-kata Anjon
Synonym/s: *Euprepis dissimilis* Hallowell, 1857
Euprepes monticola Günther, 1864
Euprepes petersi Steindachner, 1867
Euprepes guentheri Blandford, 1879
Mabuia dissimilis Boulenger, 1887
Mabuya dissimilis Smith, 1935
Eutropis dissimilis Bauer *et al.*, 2007

*Eutropis dissimilis*

© Faysal Ahmad

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: The species is not so common but it has been recorded from a wide range of areas of different habitats in more than 10 locations. It covers large Extent of Occurrence and Area of Occupancy, so it qualifies for the Least Concern.

Date Assessed: 20 October 2014

History

Regional Status: Vulnerable (IUCN Bangladesh 2000b).

Geographic Range

Global: It is known to occur in Bangladesh, Bhutan, India, Myanmar, Nepal and Pakistan (<http://reptile-database.reptarium.cz/species?genus=Eutropis&species=dissimilis>. Downloaded on 20 September 2014).

Bangladesh: It is found in Shal forests of northern region of the country (Chakma 2009); Keranigonj, Dhaka (S. Chakma pers. comm.); and Bhuyapur, Tangail (pers. obs.); Pabna and Rajshahi (S. C. Rahman pers. comm.) as well as northeast, east and southeast forests (Hasan *et al.* 2014, Kahn 2015).

EOO: 1,14,617 km²**AOO:** 16,108 km²

Population

Generation Time (Length): Not known**Total Population:** Not known**No. of Sub-population:** Not known**Trend:** Not known

Habitat and Ecology

The species inhabits grasslands, bushes, and fallen leaves both in plains and low hills; also found within parks, gardens and other man made farmlands (Chakma 2009). It is insectivorous (Chakma 2009). Young are seen in May to June; about 6-7 eggs are laid, buried in loose soils (Sharma 2002). It is diurnal in habit.

**Assessor:** Md. Mizanur Rahman

LEAST
CONCERN
<LC>

Eutropis macularia

Species ID: RE0059

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|-----------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | SCINCIDAE |

Scientific Name: *Eutropis macularia* (Blyth, 1853)

English Name: Bronze Grass Skink

Local Name: Tamatey Anjon

Synonym/s: *Euprepes macularius* Blyth, 1853

Tiliqua macularia Blyth, 1856

Euprepes brevis Günther, 1875

Mabuia macularia Boulenger, 1887

Lygosoma dawsoni Annandale, 1909

Mabuya allapallensis Schmidt, 1926

Mabuya allapallensis Smith, 1935

Mabuya macularia Smith, 1935

Mabuya macularia Greer and Nussbaum, 2000

Eutropis macularia Mausfeld *et al.*, 2002

Taxonomic Notes: Of the four subspecies, *Eutropis macularia macularia* is known to occur in Bangladesh. The type locality was Rangpur, which is now in Bangladesh (Taylor and Elbel 1958).

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: The species has been assessed as Least Concern in view of its abundance and wide distribution in mixed evergreen forests of Chittagong, Chittagong Hill Tracts and Sylhet, and deciduous forests of central and northern Bangladesh (Hasan *et al.* 2014, Khan 2015).

Date Assessed: 17 November 2014

History

Regional Status: The taxon has been mentioned as *Mabuya macularius* and assessed as Data Deficient (IUCN Bangladesh 2000b).



Eutropis macularia

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Geographic Range

Global: This species occurs in Bangladesh, Bhutan, Cambodia, India, Lao PDR, Malaysia, Myanmar, Nepal, Pakistan, Sri Lanka, Thailand and Vietnam (<http://reptile-database.reptarium.cz/species?genus=Eutropis&species=macularia>. Downloaded on 05 September 2015).

Bangladesh: It is found in Chittagong, Chittagong Hill Tracts, Comilla, Gazipur, Rangpur, Sherpur, Sylhet, and probably Shal forest of North Bengal (Taylor and Elbel 1958, Mahony *et al.* 2007, 2009, Chakma 2009, Hasan *et al.* 2014, Khan 2015).

EOO: 95,378 km²

AOO: 29,035 km²

Population

Generation Time (Length): Not known

Total Population: Not known

No. of Sub-population: Not known

Trend: Presumably stable

Habitat and Ecology

Eutropis macularia inhabits deciduous, mixed evergreen and secondary forests, plantations and human modified habitation (Chakma 2009, Das 2010, Hasan *et al.* 2014). This species is terrestrial, diurnal and crepuscular (Das 2010, Hasan *et al.* 2014). It feeds on beetles and grasshoppers (Das 2010), breeds in April–June (Hasan *et al.* 2014) and females lay 1–4 eggs (Das 2010).

Assessor: Suprio Chakma



Eutropis multifasciata

Species ID: RE0060

LEAST
CONCERN
<LC>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|-----------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | SCINCIDAE |

Scientific Name: *Eutropis multifasciata* (Kuhl, 1820)

English Name: Many-lined Sun Skink, Common Sun Skink, East Indian Brown Mabuya, Javan Sun Skink

Local Name: Bohu-dora Anchil, Dagi Anjon

Synonym/s: *Scincus multifasciatus* Kuhl, 1820

Mabuya multifasciata Fitzinger, 1826

Euprepes sebae Duméril and Bibron, 1839

Plestiodon sikkimensis Gray, 1853

Tropidolepisma macrurus Bleeker, 1860

Mabuia multifasciata De Rooij, 1915

Mabuya multifasciata Smith, 1935

Mabuya multifasciata Manthey and

Grossmann, 1997

Eutropis multifasciata Mausfeld *et al.*, 2003

Eutropis multifasciata Ziegler *et al.*, 2015



Eutropis multifasciata

© Md. Mizanur Rahman

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: *Eutropis multifasciata* is assessed as Least Concern because it has presumably a large population as it is common in hill forests of northeast and southeast. Habitat degradation is a likely cause of decline, but the species can adapt to some degree of habitat disturbances. So, it is unlikely to be declining fast enough to qualify for listing in any Threatened Category within a short time.

Date Assessed: 22 October 2014

History

Regional Status: Not assessed (IUCN Bangladesh 2000b).

Geographic Range

Global: This species occurs in Bangladesh (Hasan *et al.* 2014), Cambodia, China, India, Indonesia, Lao PDR, Malaysia, Myanmar, New Guinea, Philippines, Singapore, Thailand, Timor-Leste and Vietnam; and introduced to Florida of USA (<http://reptile-database.reptarium.cz/species?genus=Eutropis&species=multifasciata>. Downloaded on 05 September 2015).

Bangladesh: It is found in Chittagong, Chittagong Hill Tracts and Sylhet. It is likely to occur in central north but this has not yet been confirmed (Hasan *et al.* 2014, Khan 2015).

EOO: 44,480 km²

AOO: 20,614 km²

Population

Generation Time (Length): Not known

Total Population: Not known

No. of Sub-population: Not known

Trend: Presumably stable

Habitat and Ecology

E. multifasciata inhabits primary and secondary forests and open area, where it is often found on open forest floor, forest edges, stream-beds, and other degraded area and around human settlements. This species is terrestrial. It mainly eats termites, grasshoppers and beetles (Auffenberg and Auffenberg 1991) but also reported to eat ripe fruits (Meshaka *et al.* 2004). Females are ovoviviparous and they give birth to 2-10 live young (Das 2002). It is diurnal in habit.

Assessor: Suprio Chakma



LEAST
CONCERN
<LC>

Lygosoma albopunctata

Species ID: RE0052

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|-----------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | SCINCIDAE |

Scientific Name: *Lygosoma albopunctata* (Gray, 1846)
English Name: White-spotted Supple Skink
Local Name: Sada Chiti Anjon, Sada-phota Nomonio Anjon
Synonym/s: *Riopa albopunctata* Gray, 1846
Eumeces albopunctatus Anderson, 1871
Lygosoma albopunctatum Boulenger, 1887
Riopa albopunctata Smith, 1935
Lygosoma albopunctata Bobrov, 1995
Lygosoma albopunctata Das, 1996
Riopa albopunctata Chan-Ard *et al.*, 1999
Lygosoma albopunctata Ziegler *et al.*, 2007
Riopa albopunctata Wagner *et al.*, 2009
Lygosoma albopunctata Murthy, 2010
Lygosoma albopunctatum Kästle *et al.*, 2013

Taxonomic Notes: Often it is misidentified as *Lygosoma bowringii*.

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: The species has a wide distributional range (Hasan *et al.* 2014, Khan 2015) and there is no significant threat, so it can be assessed as Least Concern.

Date Assessed: 20 October 2014

History

Regional Status: It was assessed as Data Deficient (IUCN Bangladesh 2000b).

Geographic Range

Global: It is known to occur in Bangladesh, India, Malaysia, Maldives, Nepal and Vietnam (<http://replite-database.reptarium.cz/species?genus=Lygosoma&species=albopunctata>).



Lygosoma albopunctata

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Downloaded on 06 February 2015); possibly also occurs in Bhutan (Lenz 2012).

Bangladesh: It has been reported from Chittagong, Dhaka, Dinajpur, Hobiganj, Nilphamari, and Rangamati districts by various researchers (e.g., Khan M.M.H. 2008, Chakma 2009, Hasan *et al.* 2014, Khan M.A.R. 2015, Sarker 2014).

EOO: 88,661 km²

AOO: 19,085 km²

Population

Generation Time (Length): Not known

Total Population: Not known

No. of Sub-population: Not known

Trend: Not known

Habitat and Ecology

This terrestrial species is both diurnal and nocturnal but more active in the evening and night. It is recorded from 12 to 80 m above mean sea level (Sarker 2014). It prefers to forage through litter in the forest floor (Khan M.A.R. pers. comm.). It presumably feeds on insects (Chakma 2009, Hasan *et al.* 2014).



Assessor: Md. Abdur Razzaque Sarker

Lygosoma bowringii

Species ID: RE0053

LEAST
CONCERN
<LC>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|-----------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | SCINCIDAE |

Scientific Name: *Lygosoma bowringii* (Gunther, 1864)

English Name: Bowring's Supple Skink, Christmas Island Grass-skink

Local Name: Bowringer Anjan, Bowringer Nomonio Anjon

Synonym/s: *Eumeces bowringii* Günther, 1864
Euprepes (Riopa) punctatostratus Peters, 1871
Lygosoma bowringii Boulenger, 1887
Lygosoma comotti Boulenger, 1887 (vide Smith, 1935)
Lygosoma whiteheadi Mocquard, 1890
Riopa bowringi Smith, 1935
Riopa bowringi Taylor, 1963
Mochlus bowringi Ebenhard and Sjögren, 1984
Lygosoma bowringii Cogger, 1994
Riopa bowringii Chan-Ard *et al.*, 1999
Lygosoma bowringii Grossmann and Tillack, 2004
Riopa bowringii Bobrov and Semenov, 2008
Lygosoma bowringii Geissler *et al.*, 2012

Taxonomic Notes: Often it is misidentified as *Lygosoma albopunctata*.

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: *Lygosoma bowringii* is widely distributed in Bangladesh and no threat can be detected. Thus, the species is assessed as Least Concern.

Date Assessed: 20 October 2014

History

Regional Status: Not assessed (IUCN Bangladesh 2000b).



Lygosoma bowringii

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Geographic Range

Global: This species is known to occur in Australia, Bangladesh, Cambodia, China, Hong Kong, India, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand and Vietnam (Mahony and Reza 2007, <http://reptile-database.reptarium.cz/species?genus=Lygosoma&species=bowringii>. Downloaded on 06 February 2015).

Bangladesh: It is widely distributed (Mahony and Reza 2007, Hasan *et al.* 2014) except rivers and water bodies.

EOO: 2,22,509 km²

AOO: 1,32,741 km²

Population

Generation Time (Length): Not known

Total Population: Not known

No. of Sub-population: Not known

Trend: Presumably stable

Habitat and Ecology

The taxon is diurnal and semi-fossorial. It feeds on small insects specially ants (Chakma 2009, Hasan *et al.* 2014). Females lay 2-4 eggs at a time (Das 2002). It inhabits relatively open areas and also found near human settlements.



Assessor: Md. Abdur Razzaque Sarker

Scincella reevesii

Species ID: RE0061

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|-----------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | SCINCIDAE |

Scientific Name: *Scincella reevesii* (Gray, 1838)**English Name:** Reeve's Ground Skink, Reeve's Smooth Skink**Local Name:** Khato-pa Anjon, Lal-leji Anjon**Synonym/s:** *Tiliqua reevesii* Gray, 1838*Eumeces reevesii* Günther, 1864*Leiopisma reevesi reevesi* Smith, 1935*Scincella reevesi* Smith, 1935*Scincella reevesii* Cox *et al.*, 1998

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1**Justification:** The species is rather common and widely distributed in and around mixed evergreen forests of the northeast and southeast of Bangladesh, and there is no indication that its population is declining. Therefore, it qualifies for Least Concern Category.**Date Assessed:** 19 October 2014

History

Regional Status: It is not assessed by IUCN Bangladesh in 2000, because its occurrence in the country was not known at that time.

Geographic Range

Global: The species is native to Bangladesh, Cambodia, China, India, Lao PDR, Myanmar, Nepal, Thailand and Vietnam (<http://reptile-database.reptarium.cz/species?genus=Scincella&species=reevesii>. Downloaded on 20 September 2014).**Bangladesh:** It is found in and around mixed evergreen forests of the northeast and southeast of Bangladesh (Khan 2007, Chakma 2009, Hasan *et al.* 2014).*Scincella reevesii*

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EOO: 41,484 km²**AOO:** 10,624 km²

Population

Generation Time (Length): Not known**Total Population:** Not known**No. of Sub-population:** Not known**Trend:** Presumably stable

Habitat and Ecology

It inhabits moist forest-floor, grassy areas, rocky areas and dry stream beds in and around hill forests. This species is terrestrial and feeds on insects and worms from the ground. Its breeding habit is unknown, but the young are observed during June-July in Bangladesh (Chakma 2009). It is diurnal in habit but has been known to be active during night after burst of first monsoon and prefers hilly areas.

**Assessor:** M. Monirul H. Khan

Sphenomorphus maculatus

Species ID: RE0063

LEAST
CONCERN
<LC>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|-----------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | SCINCIDAE |

Scientific Name: *Sphenomorphus maculatus* (Blyth, 1853)

English Name: Spotted Litter Skink

Local Name: Chiti Bon Anchil, Chitra Buno Anjon

Synonym/s: *Lissonota maculata* Blyth, 1853

Hinulia maulata Theobald, 1868

Lygosoma maculatum Boulenger, 1887

Lygosoma mitanense Annandale, 1905

Sphenomorphus maculatus Pope, 1935

Lygosoma maculatum Smith, 1935

Sphenomorphus maculatus Taylor, 1963

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: The species is very common and widely distributed in and around mixed evergreen forests of the northeast and southeast, and deciduous forests of the Madhupur Tract in central parts of Bangladesh. There is no indication that its population is declining. Therefore, it is assessed as Least Concern.

Date Assessed: 19 October 2014

History

Regional Status: Not assessed (IUCN Bangladesh 2000b).

Geographic Range

Global: The species has been reported from Bangladesh, Bhutan, Cambodia, China, India, Malaysia, Myanmar, Nepal, New Guinea, Thailand, Tibet and Vietnam (<http://reptile-database.reptarium.cz/species?genus=Sphenomorphus&species=maculatus>. Downloaded on 20 August 2014).



Sphenomorphus maculatus

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Bangladesh: It is known to occur in mixed evergreen forests of the northeast, east, southeast and in some deciduous forests of central part in Bangladesh (Hasan et al. 2014, Khan 2015).

EOO: 73,502 km²

AOO: 11,936 km²

Population

Generation Time (Length): Not known

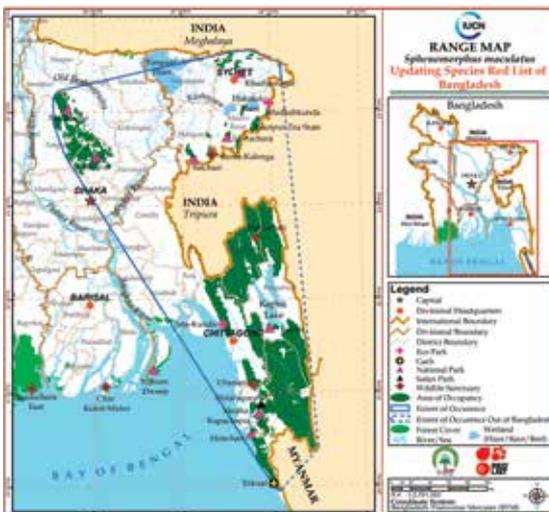
Total Population: Not known

No. of Sub-population: Not known

Trend: Presumably stable

Habitat and Ecology

In Bangladesh it inhabits moist forest-floor with leaf litter in mixed evergreen and deciduous forests. Elsewhere it is also known to occur in mangroves (Chakma 2009) but it has never been found in Bangladesh mangroves. The taxon is terrestrial and feeds on various types of ground insects, particularly grasshoppers, spiders and crickets. It is oviparous, the female lays 4-5 eggs in one clutch (Smith 1935).



Assessor: M. Monirul H. Khan

Argyrogena fasciolata

Species ID: RE0109

**LEAST
CONCERN
<LC>**

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|------------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | COLUBRIDAE |

Scientific Name: *Argyrogena fasciolata* (Shaw, 1802)

English Name: Banded Racer

Local Name: Dorakata Racer Shap, Bandkata Racer Shap

Synonym/s: *Coluber fasciolatus* Shaw, 1802

Coluber hebe Daudin, 1803

Coluber curvirostris Cantor, 1839

Zamenis fasciolatus Günther, 1865

Zamenis fasciolatus Boulenger, 1893

Zamenis fasciolatus Wall, 1921

Argyrogena rostrata Werner, 1924

Coluber fasciolatus Smith, 1928

Coluber fasciolatus Smith, 1943

Coluber fasciolata Wilson, 1967

Argyrogena fasciolatus Das, 1996

Argyrogena fasciolatus Sharma, 2004



Argyrogena fasciolata

© Pratik Pradhan

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: This species has a wide Extent of Occurrence and Area of Occupancy. It has been reported from the northwest and southwest (Khan 2008), and evergreen forests (Chakma 2009) of Bangladesh, also at Majherdiya char (char land in the Padma River) of Rajshahi district (B.B. Romon pers. comm.). It is also likely to occur in the northeast and southeast of the country (Hasan *et al.* 2014). As it does not qualify for any Threatened Category, it is assessed as Least Concern.

Date Assessed: 21 January 2015

History

Regional Status: Data Deficient (IUCN Bangladesh 2000b).

Geographic Range

Global: The species is known to occur in Bangladesh, India, Nepal, Pakistan and Sri Lanka (<http://reptile-database.reptarium.cz/species?genus=Argyrogena&species=fasciolata>. Downloaded on 30 May 2015). Bangladesh: It has been reported from the northwest, east and southwest (Khan 2008) of Bangladesh, evergreen forests (Chakma 2009) and Majherdiya char (char land in the Padma River) of Rajshahi district (B.B. Romon personal communication). It may also occur in the northeast and southeast of the country (Hasan *et al.* 2014).

EOO: 2,05,994 km²

AOO: 32,789 km²

Population

Generation Time (Length): Not known

Total Population: Not known

No. of Sub-population: Not known

Trend: Not known

Habitat and Ecology

Argyrogena fasciolata inhabits natural grassy lands, rodent burrows, under tree trunks and rock piles, dense bushes, forests, parks and gardens (Whitaker and Captain 2004, Chakma 2009). This terrestrial and diurnal species feeds on insects, frogs, rats and field mice. The females lay 2-7 eggs in October (Daniel 2002, Das 2002, Whitaker and Captain 2004).

Assessor: Mushfiq Ahmed



Ahaetulla nasuta

Species ID: RE0117

LEAST
CONCERN
<LC>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|------------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | COLUBRIDAE |

Scientific Name: *Ahaetulla nasuta* (Bonnaterre, 1790)
English Name: Vine Snake, Common vine Snake, Common Whip Snake, Long-nosed Tree Snake, Green vine snake, Long-nosed Whip Snake

Local Name: Sutanali Shap, Laodoga Shap

Synonym/s: *Coluber nasutus* Lacépède, 1789
Dryophis nasuta Lacépède, 1789
Coluber mycterizans Russell, 1796
Ahaetulla mycterizans Link, 1807
Dryinus nasutus Merrem, 1820
Dryiophis nasuta Schlegel, 1837
Dryinus nasutus Duméril and Bibron, 1854
Dryophis mycterizans Boulenger, 1890
Passerita nasuta Cochran, 1930
Dryophis nasutus Smith, 1943
Ahaetulla nasuta Manthey and Grossmann, 1997
Ahaetulla nasuta Cox *et al.*, 1998
Ahaetulla nasutus Sharma, 2004



Ahaetulla nasuta

© M K Hasan

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: *Ahaetulla nasuta* has been listed as Least Concern due to its large distribution range and also found in a variety of habitats including anthropogenically modified environment.

Date Assessed: 26 January 2015

History

Regional Status: Vulnerable (IUCN Bangladesh 2000b).

Geographic Range

Global: This species is known to occur in Bangladesh, Cambodia, India, Myanmar, Nepal, Sri Lanka, Thailand

and Vietnam (<http://reptile-database.reparium.cz/species?genus=Ahaetulla&species=nasuta>. Downloaded on 15 January 2015); possibly also occurs in Bhutan (Lenz 2012).

Bangladesh: It occurs all over the country (Khan 1982, Islam 2009, Hasan *et al.* 2014).

EOO: 2,20,533 km²

AOO: 1,36,299 km²

Population

Generation Time (Length): Not known

Total Population: Not known

No. of Sub-population: Not known

Trend: Not Known

Habitat and Ecology

Ahaetulla nasuta is diurnal and inhabits forest areas, plantations, croplands and variety of habitats under human pressure. This terrestrial and arboreal species is slow moving and camouflages in green leaves and twigs. It feeds mostly on lizards, snakes, small birds and small rodents, tadpoles, frogs and preying mantis (Smith 1943, Khan 1992, Das 2002, Whitaker and Captain 2004). During winter it fits its body along twigs in a vertical fashion on branches overhanging canals in the Sundarbans (Khan M.A.R. pers comm.). It is ovoviparous, mating takes place in June and 3-23 young are produced during March to December after 172 days of gestation period (Das 2002).



Assessor: Md. Tarik Kabir

LEAST
CONCERN
<LC>

Ahaetulla prasina

Species ID: RE0118

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|------------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | COLUBRIDAE |

Scientific Name: *Ahaetulla prasina* (Boie, 1827)**English Name:** Short-nosed Vine Snake, Asian Vine Snake, Boie's Whip Snake, Günther's Whip Snake, Oriental Whip Snake, Jade Vine Snake**Local Name:** Sutanoli Shap, Laodoga Shap.**Synonym/s:** *Coluber nasutus* Shaw, 1802*Coluber mycterizans* Raffles, 1822*Dryophis prasinus* Boie, 1827*Tragops xanthozonius* Duméril and Bibron, 1854*Tragops prasinus* Anderson, 1871*Dryophis prasinus* Boulenger, 1897*Ahaetulla prasina preocularis* Taylor, 1922*Dryophis prasinuschinensis* Mell, 1930*Ahaetulla prasina* Stejneger, 1933*Dryophis prasinus* Smith, 1943*Ahaetulla prasina* Mahanthey and Grossmann, 1997**Taxonomic Notes:** Four subspecies occur *A. p. prasina* (Boie, 1827); *A. p. preocularis* (Taylor, 1922); *A. p. suluensis* Gaulke, 1994; and *A. p. medioxima* Lazell, 2002 of which presumably *A. p. prasina* occurs in Bangladesh.

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1**Justification:** The species is not common but widely distributed in moist deciduous, mixed evergreen and mangrove forests with a large Extent of Occurrence and Area of Occupancy. So it is evaluated as Least Concern.**Date Assessed:** 26 January 2015

History

Regional Status: Data Deficient (IUCN Bangladesh 2000b)*Ahaetulla prasina*

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Geographic Range

Global: The species is known to occur in Bangladesh, Bhutan, Brunei Darussalam, Cambodia, China, India, Hong Kong, Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Singapore, Thailand and Vietnam (Thy *et al.* 2012, <http://reptile-database.reptaruin.cz/species/genus=Ahaetulla&species=prasina>. Downloaded on 23 January 2015).**Bangladesh:** It occurs in moist deciduous forests of Madhupur, mixed evergreen forests of Sylhet, Chittagong and Chittagong Hill Tracts and mangrove forests of the Sundarbans (Khan M.A.R. 1982, Khan M.M.H. 2008, Chakma 2009, Hasan *et al.* 2014).**EOO:** 1,30,778 km²**AOO:** 15,017 km²

Population

Generation Time (Length): Not known**Total Population:** Not known**No. of Sub-population:** Not known**Trend:** Presumably decreasing

Habitat and Ecology

Ahaetulla prasina inhabits bushes, scrubs and vegetations of moist deciduous, mixed evergreen and mangrove forests and found up to 1000 m. elevation (Thanchi). This diurnal species is mainly arboreal but comes down to forest floor for foraging. It mostly eats lizards, frogs and small birds. It is ovoviviparous, females give live birth-to 4-10 young in a litter (Whitaker and Captain 2004).**Assessor:** Md. Tarik Kabir

Boiga cyanea

Species ID: RE0122

LEAST
CONCERN
<LC>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|------------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | COLUBRIDAE |

Scientific Name: *Boiga cyanea* (Dumeril *et al.*, 1854)

English Name: Green Cat Snake

Local Name: Sabuj Phonomonsha Shap

Synonym/s: *Triglyphodon cyaneum* Duméril *et al.*, 1854

Dipsas nigromarginata Blyth, 1854

Dipsas hexagonatus Blyth, 1856

Dipsas cyanea Jan, 1863

Dipsas bubalina Günther, 1864

Dipsas hexagonatus Stoliczka, 1870

Dipsas hexagonata Anderson, 1871

Dipsas cyanea Boulenger, 1890

Dipsadomorphus cyanea Boulenger, 1896

Dipsadomorphus cyanea Evans, 1905

Boiga cyanea Wall, 1924

Boiga cyanea Smith, 1943



Boiga cyanea

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Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: This species has been assigned to Least Concern due to its wide range of distribution, adaptability to mixed evergreen and mangrove habitats and relatively its large population.

Date Assessed: 18 March 2015

History

Regional Status: Vulnerable (IUCN Bangladesh 2000b).

Geographic Range

Global: This species occurs in Bangladesh, Bhutan, Cambodia, China, India, Lao PDR, Malaysia, Myanmar, Nepal, Thailand and Vietnam (<http://reptile-database.reptarium.cz/species?genus=Boiga&species=cyanea>. Downloaded on 18 June 2015).

Bangladesh: It is found in mixed evergreen forests of northeast, east and southeast and mangrove forests of the Sundarbans (Hasan *et al.* 2014, Khan 2015).

EOO: 1,07,896 km²

AOO: 14,738 km²

Population

Generation Time (Length): Not known

Total Population: Presumably it has a large population.

No. of Sub-population: Not known

Trend: Not known

Habitat and Ecology

Boiga cyanea is a strictly forest dwelling species. Usually found in bushes, mature trees and small trees near streams (Chakma 2009, Hasan *et al.* 2014). It is arboreal, nocturnal and sluggish, spending most of the day resting in dark and shady places. Its food includes lizards, frogs, small birds, rodents and snakes. (Whitaker and Captain 2004, Das 2012, Hasan *et al.* 2014).



Assessor: Md. Kamrul Hasan

LEAST
CONCERN
<LC>

Chrysopelea ornata

Species ID: RE0115

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|------------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | COLUBRIDAE |

Scientific Name: *Chrysopelea ornata* (Shaw, 1802)**English Name:** Ornate Flying Snake, Golden Flying Snake**Local Name:** Kalnagini Shap, Kalnagini**Synonym/s:** *Coluber ornatus* Shaw, 1802*Coluber ibibiboca* Daudin, 1802*Chrysopelea ornata* Boie, 1827*Chrysopelea ornata* Wall, 1921*Chrysopelea ornata* Smith, 1943*Chrysopelea ornata lankavae* Deraniyagala, 1945*Chrysopelea ornata lankave* Kandamby, 1997*Chrysopelea ornata* Cox *et al.*, 1998*Chrysopelea ornata* Sang *et al.*, 2009*Chrysopelea ornata* Murthy, 2010**Taxonomic Notes:** It has three subspecies: *C. o. ornata* (Shaw, 1802); *C. o. ornatissima* Werner, 1925 and *C. o. sinhaleya* Deraniyagala, 1945.

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1**Justification:** *Chrysopelea ornata* is not a commonly sighted snake species in Bangladesh. It has a wide range of distribution in different forest habitats. So, this snake has large Extent of Occurrence and Area of Occupancy. Thus, it has been assessed as Least Concern.**Date Assessed:** 26 February 2015

History

Regional Status: Endangered (IUCN Bangladesh 2000b)

Geographic Range

Global: This species is reported from Bangladesh, Cambodia, China, Hong Kong, India, Lao PDR, Malaysia, Myanmar, Nepal, Philippines, Sri Lanka, Thailand*Chrysopelea ornata*

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and Vietnam (<http://reptile-database.reptarium.cz/species?genus=Chrysopelaspecies=ornata>. Downloaded on 14 February 2015).**Bangladesh:** It is known to occur in moist deciduous forests of Madhupur, mixed evergreen forests of Sylhet, Chittagong, Chittagong Hill Tracts, Cox's Bazar and mangrove forests of Sundarbans and homestead vegetation of Jessore, Khulna, Pirojpur, Barisal, Patuakhali (Khan 2004, Hasan *et al.* 2014, M.M. Rahman pers. comm.).**EOO:** 1,40,228 km²**AOO:** 25,120 km²

Population

Generation Time (Length): Not known**Total Population:** Not known**No. of Sub-population:** Not known**Trend:** Decreasing

Habitat and Ecology

Chrysopelea ornata inhabits forested areas (central, northeast, southeast and southwest), secondary growth and cultivated land, and near human settlement (Khan 1996, Chakma 2009, Hasan *et al.* 2014). This diurnal species is mostly arboreal found in low bushes and small trees. It feeds on frogs, lizards, small snakes, birds, bat, small rodents (Boulenger 1890, Daniel 2002, Das 2002). It is oviparous, females lay 6-20 eggs during May to June and eggs hatch out in 65-80 days (Das 2002, Whitaker and Captain 2004). It is found upto an elevation of 1000 m (Thanchi).**Assessor:** Md. Tarik Kabir

Coelognathus helena

Species ID: RE0103

LEAST
CONCERN
<LC>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|------------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | COLUBRIDAE |

Scientific Name: *Coelognathus helena* (Daudin, 1803)

English Name: Common Trinket Snake

Local Name: Pati Dudhraj Shap

Synonym/s: *Coluber helena* Daudin, 1803

Herpetodryas helena Schlegel, 1837

Cynophis bistrigatus Gray, 1849

Plagiodon helena Duméril and Bibron, 1854

Cynophis helena Günther, 1858

Cynophis helena Anderson, 1871

Coluber helena Boulenger, 1894

Coluber helena Wall, 1921

Elaphe helena Smith, 1943

Coelognathus helena Helfenberger, 2001

Elaphe helena Murthy, 2010



Coelognathus helena

© M K Hasan

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: The species is rare, but distributed in the mixed evergreen forests in the northeast, east and southeast of Bangladesh. There is no indication of threats that the species is declining. Therefore, it has been categorized as Least Concern.

Date Assessed: 26 February 2015

History

Regional Status: Endangered (IUCN Bangladesh 2000b).

Geographic Range

Global: This species is found in Bangladesh, India, Nepal and Sri Lanka. (<http://reptile-database.reptarium.cz/species?genus=Coelognathus&species=helena>. Downloaded on 12 February 2015, Possibly also occurs in Bhutan (Lenz 2012).

Bangladesh: The species was first recorded from Teknaf

region (Khan 1982). The taxon is distributed only in the mixed evergreen forests and their neighborhoods in the northeast, east and southeast of the country (Hasan *et al.* 2014).

EOO: 41,602 km²

AOO: 10,624 km²

Population

Generation Time (Length): Not known

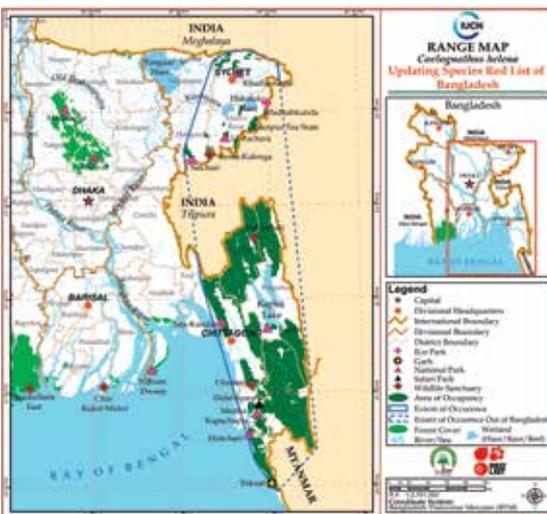
Total Population: Not known

No. of Sub-population: Not known

Trend: Probably stable

Habitat and Ecology

Coelognathus helena inhabits mixed evergreen forests, forest edges and cultivated fields surrounding forests. It feeds mainly on rodents but also on frogs, lizards and small birds when provoked it raises its head and forms S-shaped coils in a striking posture. The female lays 3 to 12 eggs in a clutch (Das 2002, Whitaker and Captain 2004).



Assessor: M. Monirul H. Khan

Coelognathus radiatus

Species ID: RE0102

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|------------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | COLUBRIDAE |

Scientific Name: *Coelognathus radiatus* (Boie, 1827)**English Name:** Copper-head Trinket Snake, Copperheaded Rat Snake, Radiated Rat Snake**Local Name:** Dudhraj Shap.**Synonym/s:** *Coluber radiatus* Boie, 1827*Coluber quadrifasciatus* Cantor, 1839*Tropidonotus quinque* Cantor, 1839*Coelognathus radiata* Fitzinger, 1843*Elaphis radiatus* Duméril, 1853*Spilotes radiatus* Günther, 1858*Elaphe radiata* Pope, 1929*Coelognathus radiatus* Cochran, 1930*Elaphe radiata* Smith, 1943*Coelognathus radiatus* Gumprecht, 2000*Elaphe radiatus* Murthy, 2010**Taxonomic Notes:** This species has been long included under the genus *Elaphe* (Smith 1943), but following Helfenberger (2001) and Utiger *et al.* (2005), the Oriental Rat Snakes have been assigned to the genus *Coelognathus*.

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1**Justification:** The species is widely distributed in Bangladesh in all terrestrial ecosystems, except the mangroves of the Sundarbans. There is no indication that the species is declining. Therefore, it has been categorized as Least Concern.**Date Assessed:** 26 February 2015

History

Regional Status: Endangered (IUCN Bangladesh 2000b)*Coelognathus radiatus*

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Geographic Range

Global: It is native to Bangladesh, Brunei Darussalam, Cambodia, China, Hong Kong, India, Indonesia, Lao PDR, Malaysia, Myanmar, Nepal, Singapore, Thailand and Vietnam (Nguyen *et al.* 2013, <http://reptile-database.reptarium.cz/species?genus=Coelognathus&species=radiatus>. Downloaded on 30 May 2015).**Bangladesh:** This snake has wide distribution in all terrestrial habitats but occurs in small numbers. Hence, not sighted regularly (Khan 1982, 2015, Hasan *et al.* 2014).**EOO:** 2,09,754 km²**AOO:** 1,27,906 km²

Population

Generation Time (Length): Not known**Total Population:** Not known**No. of Sub-population:** Not known**Trend:** Presumably stable

Habitat and Ecology

Coelognathus radiatus is nocturnal, lives close to cattle sheds, crop fields stored grain house, homestead vegetation and in all land based forests (Khan 1992). This species is terrestrial but swims and climbs well. It feeds on rodents, lizards, birds and sometimes also on frogs. Breeds year-round; lays 5-15 eggs in a clutch and can produce up to four clutches in a year (Das 2002, Whitaker and Captain 2004). When excited it coils the anterior part of its body in a series of S-shaped coils and opens its mouth in a threatening posture.**Assessor:** M. Monirul H. Khan

Dendrelaphis pictus

Species ID: RE0113

LEAST
CONCERN
<LC>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|------------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | COLUBRIDAE |

Scientific Name: *Dendrelaphis pictus* (Gmelin, 1789)
English Name: Painted Bronzeback, Common Bronze Back, Indonesian Bronze Back

Local Name: Dora Bet Anchra

Synonym/s: *Coluber pictus* Gmelin, 1789
Coluber decorus Shaw, 1802
Ahaetulla fasciata Link, 1807
Ahaetulla decorus Gray, 1825
Dendrelaphis decorus Fitzinger, 1826
Dendrophis pictus Boie, 1827

Taxonomic Notes: It is considered a polytypic species and at least seven subspecies and varieties are recognized but now most of the subspecies have been elevated to species level, but the systematics of this genus yet remains ambiguous and incomplete (Vogel and Rooijen 2008).

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: *The species* is found in almost all forested areas of the country. It is not a common species but considering wider distribution and degree of tolerance to habitat disturbance, it has been assessed as Least Concern.

History

Regional Status: Vulnerable (IUCN Bangladesh 2000b).

Geographic Range

Global: The species is known to occur in Bangladesh, Brunei Darussalam, Cambodia, China, Hong Kong, India, Indonesia, Lao PDR, Myanmar, Malaysia, Nepal, Philippines, Singapore, Thailand and Vietnam (<http://reptile-database.reptarium>).



Dendrelaphis pictus

© Tania Khan

cz/species?genus=Dendrelaphis&species=pictus.
 Downloaded on 06 September 2015).

Bangladesh: It is found in forests of Chittagong, Cox's Bazar, Chittagong Hill Tracts, Sylhet, Modhupur including Bhawal National Park and the Sundarbans (pers. obs., Hasan *et al.* 2014, Khan 2015)

EEO: 1,30,895 km²

AOO: 16,051 km²

Population

Generation Time (Length): Not known

Total Population: Not known

No. of Sub-population: Not known

Trend: Presumably decreasing

Habitat and Ecology

Dendrelaphis pictus is found in a variety of habitats including scrub, secondary forest, back-beach habitats as well as parks and gardens (Lim and Le 1989), and plantation and human habitation. The species is diurnal and arboreal; feeds mainly on frogs, tadpoles and lizards (Das 2002, Rooijen and Vogel 2008, Leong *et al.* 2009). It is a restless snake that moves very quickly. When threatened it inflates its body slightly to reveal bluish or turquoise skin underlying the body scales. It can leap from branch to branch; females lay 3-8 elongated eggs and incubation period is 85-126 days (Das 2002, 2010).



Assessor: Suprio Chakma

LEAST
CONCERN
<LC>

Dendrelaphis tristis

Species ID: RE0114

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|------------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | COLUBRIDAE |

Scientific Name: *Dendrelaphis tristis* (Daudin, 1803)**English Name:** Daudin's Bronzeback, Common Bronzeback Tree Snake**Local Name:** Shadharaon Geso Shap, Bet Anchra**Synonym/s:** *Coluber tristis* Daudin, 1803*Dipsas schokari* Kuhl, 1820*Leptophis mancas* Bell, 1825*Dendrophis maniar* Boie, 1827*Chrysopelea boiei* Smith, 1836*Dendrophis boii* Cantor, 1839*Dendrophis helena* Werner, 1893*Dendrelaphis tristis* Boulenger, 1894

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1**Justification:** This is the commonest of three species of tree snakes. So it has been assessed as Least Concern in view of its wide distribution in all types of forest and homestead orchards in Bangladesh.**Date Assessed:** 28 February 2015

History

Regional Status: Vulnerable (IUCN Bangladesh 2000b).

Geographic Range

Global: The taxon is found in Bangladesh, India, Myanmar, Nepal, Pakistan and Sri Lanka (<http://reptile-database.reptarium.cz/species?genus=Dendrelaphis&species=tristis>. Downloaded on 07 September 2015); possibly also occurs in Bhutan (Lenz 2012).**Bangladesh:** It is found all over the country in well vegetated areas from village groves to the forests, barring wetlands, offshore islands and crop fields (Chakma 2009, Khan 2015).*Dendrelaphis tristis*

© Sourav Mahmud

EOO: 2,22,509 km²**AOO:** 1,32,741 km²

Population

Generation Time (Length): Not known**Total Population:** Not known**No. of Sub-population:** Not known**Trend:** Presumably decreasing

Habitat and Ecology

Dendrelaphis tristis is found in both dense and open forests, garden and homestead orchards. It is diurnal and arboreal, moves very fast and can jump from one branch of trees to another (Whitaker and Captain 2004, Chakma 2009) up to 25 m (Das 2010). It is usually non-offensive. It eats frogs, lizards, geckos, bird eggs, small birds and rodents, and insects, even entering thatched houses to feed (Das 2002, Whitaker and Captain 2004). It is oviparous and females lay 6-8 eggs in tree holes, under dense leaf litter, cracks and deserted bird nests (pers. obs., *op. cit.*) and incubation takes 4-6 weeks (Das 2002).**Assessor:** Suprio Chakma

Lycodon aulicus

Species ID: RE0080

LEAST
CONCERN
<LC>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|------------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | COLUBRIDAE |

Scientific Name: *Lycodon aulicus* (Linnaeus, 1758)

English Name: Common Wolf Snake, Indain Wolf Snake

Local Name: Gharginni Shap

Synonym/s: *Coluber aulicus* Linnaeus, 1758

Natrix aulica Laurenti, 1768

Lycodon unicolor Boie, 1827

Lycodon subfuscus Cantor, 1839

Lycodon atropurpureus Cantor, 1839

Boaedon unicolor Duméril et al., 1854

Lycodon aulicum Duméril et al., 1854

Lycodon aulicus Günther, 1864

Lycodon atropurpureus Boulenger, 1891

Lycodon aulicus Boulenger, 1893

Taxonomic Notes: This species is often mistaken with common krait (*Bungarus caeruleus*) and its colouration is highly variable.



Lycodon aulicus

© Faysal Ahmad

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: This is a common species widely found throughout the country (Khan 1992, Hasan et al. 2014). It occurs in hill forests to lowland including degraded habitat such as plantations, cultivated areas, villages, and urban areas. It faces no major threats and is therefore assessed as Least Concern.

Date Assessed: 17 November 2014

History

Regional Status: Vulnerable (IUCN Bangladesh 2000b)

Geographic Range

Global: *Lycodon aulicus* is found in Bangladesh, Bhutan, China, Hong Kong, India, Indonesia, Mascarenes,

Malaysia, Myanmar, Nepal, Pakistan, Philippines, Seychelles, Sri Lanka, Thailand and Timor; introduced to Maldives and Mauritius (www.inaturalist.org/taxa/29574-Lycodon-aulicus. Downloaded on 04 October 2015).

Bangladesh: It is found all over Bangladesh.

EOO: 2,19,225 km²

AOO: 1,32,738 km²

Population

Generation Time (Length): Not known

Total Population: Not known

No of Sub-population: Not known

Trend: Decreasing

Habitat and Ecology

The species is found in a wide range of habitats such as lowland tropical forest and of disturbed habitat such as plantations, agricultural lands, villages, sub-urban and urban areas. The species is nocturnal and is both terrestrial, arboreal and capable of climbing up on vertical wall and pipe. (Whitaker and Captain 2004). It feeds on frogs, skinks and lizards (David and Vogel 1996, Das 2002).



Assessor: Shuprio Chakma

LEAST
CONCERN
<LC>

Lycodon jara

Species ID: RE0079

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|------------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | COLUBRIDAE |

Scientific Name: *Lycodon jara* (Shaw, 1802)**English Name:** Yellow-speckled Wolf Snake**Local Name:** Gharginni Shap**Synonym/s:** *Coluber jara* Shaw, 1802*Lycodon jara* Stoliczka, 1871*Lycophidion bipunctatum* Peters, 1863*Leptorhyaon jara* Theobald, 1868*Lycodon jara* Boulenger, 1893*Lycodon jara* Smith, 1943

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1**Justification:** *Lycodonjara* has been assessed as Least Concern due to its wide distribution across northeast and southeast parts of Bangladesh and its report from Savar of central Bangladesh (Hasan *et al.* 2014) indicates the distribution is wider than thought. Although the species is rare in Bangladesh (Hasan *et al.* 2014) but this snake is found in sundarban area means that it is adaptable to modified environments and at present is not thought to be affected by any major threat.**Date Assessed:** 17 November 2014

History

Regional Status: Vulnerable (IUCN Bangladesh 2000b)

Geographic Range

Global: This species is reported from Bangladesh, India and Nepal (Captain 2010, <http://reptile-database.reptarium.cz/species?genus=Lycodon&species=jara>)&HYPERLINK "http://reptile-database.reptarium.cz/species?genus=Lycodon&species=jara"&HYPERLINK "http://reptile-database.reptarium.cz/species?genus=Lycodon&species=jara"species=jara.*Lycodon jara*

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Downloaded on 15 November 2014); possibly also occurs in Bhutan (Lenz 2012).

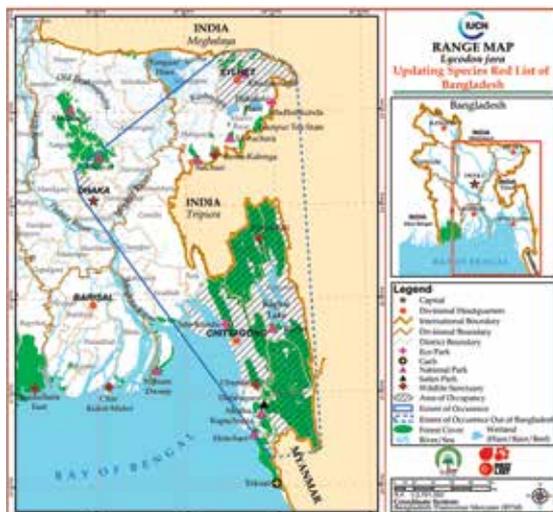
Bangladesh: It is known to occur in Chittagong, Chittagong Hill Tracts, Sylhet and Savar (Dhaka) (Hasan *et al.* 2014).**EOO:** 67,136 km²**AOO:** 20,805 km²

Population

Generation Time (Length): Not known**Total Population:** Not known**No. of Sub-population:** Not known**Trend:** Not known

Habitat and Ecology

This snake occurs in both forests and open landscapes, with bushes and sporadic trees, including agricultural lands (Das 2002). This taxon is nocturnal and feeds mainly on frogs and lizards. It is oviparous (Das 2002).

**Assessor:** Suprio Chakma

Lycodon zawi

Species ID: RE0082

LEAST
CONCERN
<LC>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|------------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | COLUBRIDAE |

Scientific Name: *Lycodon zawi* Slowinski *et al.*, 2001**English Name:** Zaw's Wolf Snake**Local Name:** Zaver Gharghinni Shap

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: The species is presumed to have a large population as it is frequently recorded from hill forests of northeast, east and southeast (Chakma 2009, Reza 2010, Rahman *et al.* 2013, Hasan *et al.* 2014). The habitat degradation is a plausible cause of decline, but it is unlikely to be declining fast enough to qualify for listing in any IUCN threatened category. So it is assessed as Least Concern.

Date Assessed: 17 November 2014

History

Regional Status: Not assessed before (IUCN Bangladesh 2000b).

Geographic Range

Global: This species occurs in Bangladesh (Chakma 2009), northeastern India and Myanmar (Wogan and Vogel 2012).**Bangladesh:** It is found in the mixed evergreen forests of Chittagong, and Sylhet.**EOO:** 33,921 km²**AOO:** 9,379 km²

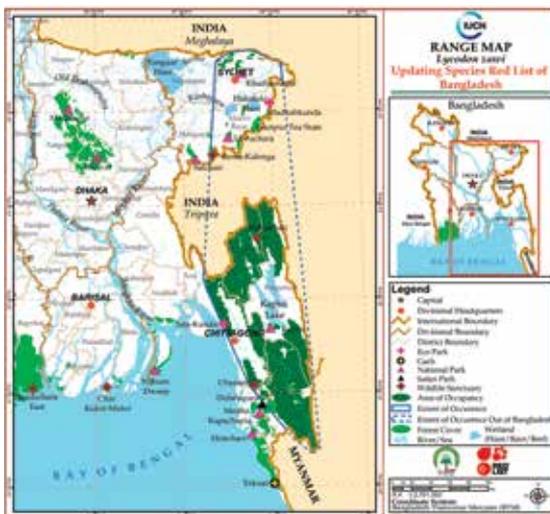
Population

Generation Time (Length): Not known**Total Population:** Not known**No. of Sub-population:** Probably stable**Trend:** Presumably stable*Lycodon zawi*

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Habitat and Ecology

This snake is sometimes found at daytime along the bridal paths in the mixed evergreen forests in the country, although it is more often seen along both dry and wet streams and their banks at night (M A R Khan pers. comm.). In Myanmar, the species was never observed in bamboo clump where the species was first described by Slowinski *et al.* (2001) but in Bangladesh it is observed inside bamboo forest patches (Suprio Chakma pers. obs. 2014). It is a nocturnal and feeds mainly on skinks and large insects (Slowinski *et al.* 2001).

**Assessor:** Suprio Chakma

LEAST
CONCERN
<LC>

Oligodon albocinctus

Species ID: RE0084

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|------------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | COLUBRIDAE |

Scientific Name: *Oligodon albocinctus* (Cantor, 1839)**English Name:** White-barred Kukri Snake**Local Name:** Sada-ber Kukri Shap, Pakra Udoy Kal**Synonym/s:** *Caronella albocincta* Cantor, 1839*Simotes punctulatus* Günther, 1864*Simotes albocinctus* Boulenger, 1890*Oligodon albocinctus* Wall, 1923*Oligodon albocinctus* Smith, 1943*Oligodon albocincta* Das, 1996*Oligodon albocinctus* Wallach *et al.*, 2014

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1**Justification:** Though this species is rare but both its Extent of Occurrence and Area of Occupancy are larger than the threshold level of threatened category. It occurs in widely separated populations. Apparently, there is no significant threat to decline in population. It does not fulfill any criteria to qualify for any threatened category, so it is assessed as Least Concern.**Date Assessed:** 23 December 2014

History

Regional Status: Data Deficient (IUCN Bangladesh 2000b)

Geographic Range

Global: This species is reported from Bangladesh, Bhutan, China, India, Myanmar and Nepal (<http://reptile-database.reptarium.cz/species?genus=Oligodon&species=albocinctus>. Downloaded on 15 November 2014).**Bangladesh:** It is known to occur in North Bengal (Rangpur) (Smith 1943), northeast, east and southeast of Bangladesh (Khan 1992, IUCN Bangladesh 2000, Hasan *et al.* 2014).*Oligodon albocinctus*

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EOO: 96,832 km²**AOO:** 12,931 km²

Population

Generation Time (Length): Not known**Total Population:** Not known**No. of Sub-population:** Not known**Trend:** Not known

Habitat and Ecology

It is a forest dwelling species but sometimes occurs in forest edges, scattered forests and tea gardens (Whitaker and Captain 2004, Kamruzzaman 2009, Hasan *et al.* 2014). The species is terrestrial, crepuscular (Das 2002) and probably nocturnal like other kukri snakes (Whitaker and Captain 2004, Kamruzzaman 2009, Hasan *et al.* 2013, 2014). It feeds on rodents, frogs, lizards, small snakes and their eggs (Das 2002).**Assessor:** Md. Kamrul Hasan

Oligodon cyclurus

Species ID: RE0083

LEAST
CONCERN
<LC>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|------------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | COLUBRIDAE |

Scientific Name: *Oligodon cyclurus* (Cantor, 1839)

English Name: Cantor's Kukri Snake

Local Name: Cantorer Kukri Shap, Banglar Udoy Kal

Synonym/s: *Coronella cyclura* Cantor, 1839

Coronella violacea Cantor, 1839

Simotes bicatenatus Günther, 1864

Simotes cochinchensis Günther, 1864

Simotes cyclurus Boulenger, 1890

Holarchus cyclurus Smith, 1920

Oligodon purpurascens Wall, 1923

Oligodon kheriensis Acharji and Ray, 1936

Simotes smithi Werner, 1925

Oligodon kheriensis Das, 1996

Oligodon cyclurus Green *et al.*, 2010



Oligodon cyclurus

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Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: Though this species is uncommon but it's both Extent of Occurrence and Area of Occupancy are larger than the threshold level of threatened category. As it is found in vast area, presumably it has a large population. Moreover, it has no significant threat to decline fast. So, it is assessed as Least Concern.

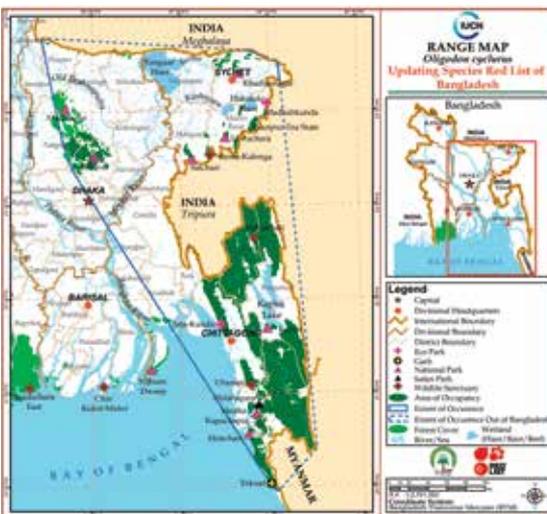
Date Assessed: 23 December 2014

History

Regional Status: Vulnerable (IUCN Bangladesh 2000b)

Geographic Range

Global: This species is known to occur in Bangladesh, Cambodia, China, India, LaoPDR, Myanmar, Nepal, Thailand and Vietnam (<http://reptile-database.reptarium.cz/species?genus=Oligodon&species=cyclurus>. Downloaded on 15 November 2014).



Bangladesh: It is known to occur in mixed evergreen forests of northeast and southeast; deciduous forest of Dhaka, Mymensingh and Gazni of Sherpur (Khan 1996, Hasan *et al.* 2014).

EOO: 79,242 km²

AOO: 11,399 km²

Population

Generation Time (Length): Not known

Total Population: Not known

No. of Sub-population: Not known

Trend: Not known

Habitat and Ecology

It inhabits primary forests, forest edges and scattered forests. It prefers termite mounds, tree holes and caves (Khan 1996, Das 2010, Hasan *et al.* 2014). It is a nocturnal species that feeds on small lizards, frogs, and rodents, small birds and their eggs (Whitaker and Captain 2004, Hasan *et al.* 2014). Very little information is available on its breeding but known to be oviparous (Whitaker and Captain 2004). It is nocturnal in habit.

Assessor: Md. Kamrul Hasan

LEAST
CONCERN
<LC>

Oligodon dorsalis

Species ID: RE0089

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|------------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | COLUBRIDAE |

Scientific Name: *Oligodon dorsalis* (Gray and Hardwicke, 1834)

English Name: Spot-tailed Kukri Snake, Bengalese Kukri Snake, Gray's Kikri Snake

Local Name: Phota-leji Kukri Shap, Banglar Udoy Kal

Synonym/s: *Elaps dorsalis* Gray and Hardwicke, 1834

Oligodon dorsalis Günther, 1858

Oligodon dorsalis Anderson, 1871

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: The species was founded based on specimen collected from Chittagong in 1834 (Smith 1943, Khan 1992). It is uncommon, but widely distributed in and around the mixed evergreen forests of northeast, east and southeast (Khan 1992, 2015; Hasan *et al.* 2014). There is no notable threat to the species and the population is not declining. Therefore, the species has been categorized as Least Concern.

Date Assessed: 23 December 2014

History

Regional Status: Vulnerable (IUCN Bangladesh 2000b).

Geographic Range

Global: It is native to Bangladesh, Bhutan, India (Northeast), Myanmar and Thailand (<http://retilde-database.reptarium.cz/species?genus=Oligodon&species=dorsalis>. Downloaded on 15 November 2014).

Bangladesh: Smith (1943) gave its range as Chittagong and Chittagong Hill Tracts. It occurs in the mixed evergreen forests of the northeast, east and southeast of Bangladesh that encompasses the Chittagong and Chittagong Hill Tracts regions, in addition to Sylhet region (Khan 1992,



Oligodon dorsalis

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2015; Hasan *et al.* 2014).

EOO: 41,602 km²

AOO: 10,624 km²

Population

Generation Time (Length): Not known

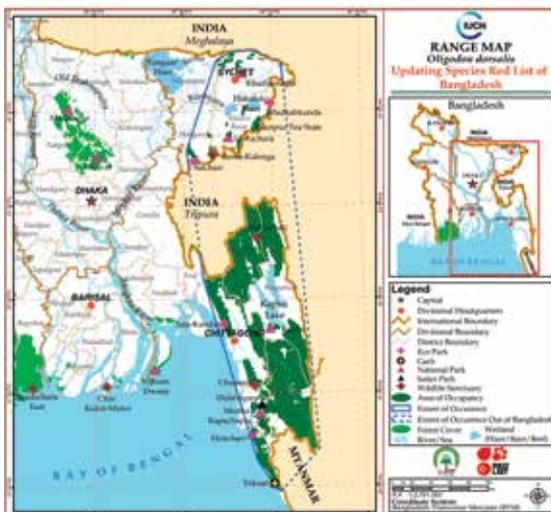
Total Population: It has a small population

No. of Sub-population: Presumably stable

Trend: Not known

Habitat and Ecology

It occurs in mixed evergreen forests as well as nearby plantation and tea gardens. This species is terrestrial and active during day as well as at dusk (Das 2002). Not much information is available on its habit. It forages on the shady forest floor and feeds mainly on small frogs and lizards, and eggs of other reptiles (Das 2002). When threatened it curls and inverts the tail to show the red underside of the tail. Females lay 3-9 eggs during late June (Das 2002).



Assessor: M. Monirul H. Khan

Ptyas mucosa

Species ID: RE0106

LEAST
CONCERN
<LC>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|------------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | COLUBRIDAE |

Scientific Name: *Ptyas mucosa* (Linnaeus, 1758)
English Name: Indian Rat Snake, Dhaman, Oriental Rat Snake

Local Name: Darash Shap

Synonym/s: *Coluber mucosus* Linnaeus, 1758

Natrix mucosa Laurenti, 1768

Coluber dhumna Cantor, 1839

Ptyas blumenbachii Fitzinger, 1843

Coryphodon blumenbachii Duméril and Bibron, 1854

Leptophis trifrenatus Hallowell, 1860

Ptyas mucosus Cope, 1861

Zamensis mucosus Boulenger, 1890

Zaocys mucosus Wall, 1914

Ptyas mucosus David and Das, 2004

Ptyas mucosa Wallach *et al.*, 2014



Ptyas mucosa

© M K Hasan

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: Oriental Rat Snake is found in almost all terrestrial and semi-aquatic environments in the country although not in great abundance. Hence, it is assessed as Least Concern.

Date Assessed: 22 January 2015

History

Regional Status: Vulnerable (IUCN Bangladesh 2000b).

Geographic Range

Global: The species is reported from Afghanistan, Bangladesh, Cambodia, China, India, Indonesia, Iran, Lao PDR, Myanmar, Sri Lanka, West Malaysia, Nepal, Pakistan, Taiwan, Thailand, Turkmenistan

and Vietnam (<http://reptile-database.reptarium.cz/species?genus=Ptyas&species=mucosa>. Downloaded on 16 February 2015).

Bangladesh: It is widely distributed from bushy city centers to the remotest villages and from near shore islands such as Hatiya and Sandwip to the highest peaks with vegetation in the Chittagong Hill Tracts region of the country (Husain 1974, Khan 1982, Islam 2009, Hasan *et al.* 2014).

EOO: 2,22,509 km²

AOO: 1,39,772 km²

Population

Generation Time (Length): Not known

Total Population: No information

No of Sub-population: Not known

Trend: Presumably decreasing

Habitat and Ecology

Ptyas mucosa is a non-venomous, fast moving, good climber and semi arboreal species that usually avoids human beings. Its major habitats include forests of all kinds, human habitations, village groves, crop fields, hay stores and large grain stores, unused ruins, rat holes and termite mounds. It also lives in tree hollows, rat holes and termite mounds. It is a good climber and a semi-arboreal opportunistic species that feeds on fishes, lizards, frogs, toads, small birds, nestlings and eggs of birds, rats, bats and small turtles (Whitaker and Captain 2004, Islam 2009). Males establish territories with a ritualistic show of strength by inter-weaving their bodies. This behavior is often mistaken as mating dance. Mating takes place in late spring and early summer, although reproduction takes place all year round in the tropical region. Several weeks after mating the female lays 5 to 25 eggs between March to September or even in the winter months and the incubation period lasts for 60-95 days (Das 2010).

Assessor: Jadab Kumar Biswas



LEAST
CONCERN
<LC>

Psammodynastes pulverulentus

Species ID: RE0116

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|---------------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | LAMPROPHIIDAE |

Scientific Name: *Psammodynastes pulverulentus* (Boie, 1827)

English Name: Common Mock Viper

Local Name: Pahari Shap

Synonym/s: *Psammophis pulverulenta* Boie, 1827
Dipsas ferruginea Cantor, 1839
Psammophis pulverulentus Dumeril and Bibron, 1854
Dipsas ferruginea Blyth, 1856
Psammodynastes pulverulentus Günther, 1858
Lycodon bairdii Steindachner, 1867
Psammodynastes pulverulentus, Boulenger, 1896
Psammodynastes pulverulentus, Stejneger, 1907
Psammodynastes pulverulentus, Smith, 1943
Psammodynastes pulverulentus Manthey and Grossman, 1997
Psammodynastes pulverulentus Ziegler, 2003

Taxonomic Notes: Two subspecies occur, *P. p. pulverulentus* (Boie, 1827) and *P. p. papenfussi* Zhao, 1995.

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: This species is sparsely distributed only in the mixed evergreen forests of Bangladesh. Its habitats are under high anthropogenic pressure but it has large Extent of Occurrence and Area of Occupancy. So, it is assessed as Least Concern.

Date Assessed: 26 February 2015

History

Regional Status: Data Deficient (IUCN Bangladesh 2000b).



Psammodynastes pulverulentus

© Tania Khan

Geographic Range

Global: This species is known to occur in Bangladesh, Bhutan, Cambodia, China, Hong Kong, Indonesia, India, Lao PDR, Malaysia, Myanmar, Nepal, Philippines, Taiwan, Thailand and Vietnam (<http://reptile-database.reptarium.cz/species?genus=Psammodynastes&species=pulverulentus>. Downloaded on 14 February 2015).

Bangladesh: It is known to occur in the mixed- evergreen forests of the northeast, east and southeast of Bangladesh (Hasan *et al.* 2014, Khan 2015). It is also found in the deciduous forest of Madhupur Hill Tract (M.M. Rahman pers. comm.).

EOO: 72,119 km²

AOO: 11,010 km²

Population

Generation Time (Length): Not known

Total Population: Not known

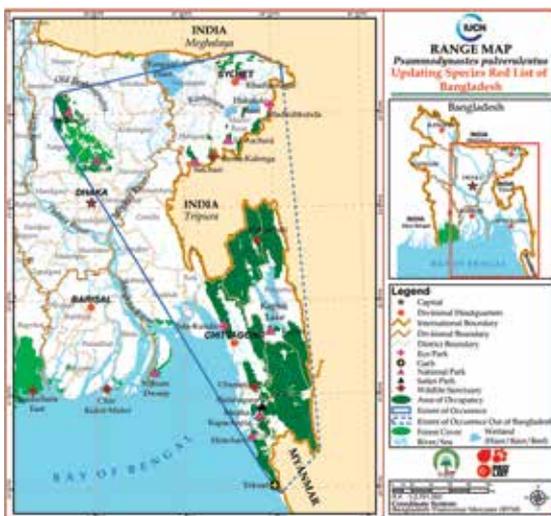
No. of Sub-population: Not known

Trend: Decreasing

Habitat and Ecology

Psammodynastes pulverulentus occurs in primary and secondary forests in hilly areas, also shrublands and grasslands. (www.biosch.hku.hk/ecology/hkreptiles/snake/Psammodynastes_pulverulentus.html. Downloaded on 10 February 2015). The species is ovoviparous giving birth to 3-10 young (Whitaker and Captain 2004, It is active in day and night and feeds on frogs, geckos and skinks. (www.ecologyasia.com/verts/snakes/common-mock-viper.htm. Downloaded on 10 February 2015).

Assessor: Md. Tarik Kabir



Amphiesma stolatum

Species ID: RE0092

LEAST
CONCERN
<LC>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|------------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | NATRICIDAE |

Scientific Name: *Amphiesma stolatum* (Linnaeus, 1758)

English Name: Striped Keelback, Buff Striped Keelback

Local Name: Dora Shap, Dagi Dhora Shap, Chilu Shap

Synonym/s: *Coluber stolatus* Linnaeus, 1758

Elaps bilineatus Schneider, 1801

Natrix stolatus Merrem, 1820

Tropidonotus stolatus Boie, 1827

Amphiesma stolatum Duméril et al., 1854

Tropidonotus stolatus Günther, 1864

Tropidonotus ruficeps Peters, 1869

Rhabdophis stolatus Wall, 1921

Amphiesma stolata Wall, 1921

Natrix stolata chinensis Mell, 1930

Natrix stolata Smith, 1943

Amphiesma stolata Das, 1996

Amphiesma stolatum David et al., 1998

Amphiesma stolatus Guo et al., 2014

Amphiesma stolatum Wallach et al., 2014

Taxonomic Notes: Guo et al. (2014) have split the taxon *Amphiesma* into three genera: *Amphiesma*, *Hebius* and *Herpetoreas*, and also recognized *A. stolatum* as *A. stolatus*.

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: As the species is common and widely distributed throughout the country, it is listed as Least Concern.

Date Assessed: 01 March 2015

History

Regional Status: Not Threatened (IUCN Bangladesh 2000b).



Amphiesma stolatum

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Geographic Range

Global: The species is native to Bangladesh, Bhutan, Cambodia, China, Hong Kong, India, Lao PDR, Myanmar, Nepal, Pakistan, Sri Lanka, Taiwan, Thailand and Vietnam (<http://reptile-database.reptarium.cz/species?genus=Amphiesma&species=stolatum>. Downloaded on 04 March 2015).

Bangladesh: It is one of the commonest snake species of the country being distributed throughout whole range of habitats, except the saltwater environment (Khan 1982, 2015).

EOO: 2,22,509 km²

AOO: 1,32,741 km²

Population

Generation Time (Length): Not known

Total Population: Not known

No. of Sub-population: Not known

Trend: Presumably declining

Habitat and Ecology

It inhabits grasslands, cultivated lands including rice fields, thick bushes, gardens both plains and hilly areas, low land forests, scattered forests, ponds, vicinity of lakes (Das 2002, Whitaker and Captain 2004, Chakma, 2009, Hasan et al. 2014). It is gentle but when alarmed flattens fore-body exhibiting inter-scale colours, and narrows its head to form a hood. Young of the species feed on insects, tadpoles, small toads and frogs; adults prefer frogs but also eat toads, snails, small lizards and rodents (Das 2002, Whitaker and Captain 2004, Chakma 2009). It is oviparous, females lay 3-15 eggs in a clutch that hatch out in 36-62 days, may produce two clutches in a year (Das 2002). It is diurnal.

Assessor: Farzana Islam



Atretium schistosum

Species ID: RE0101

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|------------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | NATRICIDAE |

Scientific Name: *Atretium schistosum* (Daudin, 1803)
English Name: Olive Keelback Water Snake, Olivaceous Keelback, Olive Keelback Wart Snake, Split Keelback Snake
Local Name: Maitta Shap
Synonym/s: *Coluber schistosus* Daudin, 1803
Tropidonotus moestus Cantor, 1839
Tropidonotus surgens Cantor, 1839
Tropidonotus schistosus Dumeril et al., 1854
Atretium schistosum Günther, 1864
Helicops schistosus Boulenger, 1890
Helicops schistosus Boulenger 1893
Helicops schistosus Wall, 1921
Atretium schistosum Smith, 1943
Atretium schistosum Das, 1996
Atretium schistosum Mattison, 2007



Atretium schistosum

© Sarjeev P

Downloaded on 30 May 2015; possibly also occurs in Bhutan Lenz 2012).

Bangladesh: It is widely distributed in freshwater bodies including wetlands and the man-made Katai Lake of Bangladesh (Khan M.A.R. 1982, Sarker and Sarker 1988), Khan M.M.H. 2008, Chakma 2009).

EOO: 2,15,854 km²

AOO: 11,864 km²

Population

Generation Time (Length): Not known

Total Population: Not known

No. of Sub-population: Not known

Trend: Presumably decreasing

Habitat and Ecology

Atretium schistosum can be treated as an amphibious one that spends most parts of its time in water with vegetation or muddy bottom. It often basks in sunlight on some floating object or vegetation and known to climb vertical bamboo lattice work used so frequently to cover the bathing areas in ponds (Khan 1987). The taxon is diurnal but seen at night also and mostly gentle. It aestivates during summer in deep inside muddy bottom in places where the wetland is susceptible to drying up. In other places it is active all year round. It mainly feeds on frogs, tadpoles, fishes, prawn and crabs catching them by a side-stroke motion. It is a good swimmer and also capable of climbing on low bushes (Chakma 2009). Females lay 10-35 eggs during December to April (Daniel 2002, Das 2002, Whitaker and Captain 2004).

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: The species has been assessed as Least Concern, as it has a wide distributional range in Bangladesh and has also been reported as very common (Khan M.A.R. 1982, Sarker and Sarker 1988, Khan M.M.H. 2008). No major threats have been reported and this species is not undergoing a significant population decline.

Date Assessed: 31 March 2015

History

Regional Status: Not Threatened (IUCN Bangladesh 2000b).

Geographic Range

Global: This species is reported from Bangladesh, India, Nepal and Sri Lanka (<http://reptile-database.reptarium.cz/species?genus=Atretium&species=schistosum>).



Assessor: Md. Tarik Kabir

Xenochrophis cerasogaster

Species ID: RE0100

LEAST
CONCERN
<LC>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|------------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | NATRICIDAE |

Scientific Name: *Xenochrophis cerasogaster* (Cantor, 1839)

English Name: Painted Keelback

Local Name: Kalo Mete Dhora, Kalo-pet Dhora Shap

Synonym/s: *Psammophis cerasogaster* Cantor, 1839

Tropidonotus cerasogaster Günther, 1859

Xenochrophis cerasogaster Günther, 1864

Amphiesma schistaceum Jan, 1865 (fide Smith, 1943)

Xenochrophis cerasogaster Boulenger, 1893

Xenochrophis cerasogaster Smith, 1943

Xenochrophis cerasogaster Das, 1996

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: The Extent of Occurrence and Area of Occupancy of this species is much larger than the threshold level of the threatened categories. This species can adapt to diverse habitats. Moreover, no hunting or trading is reported. Thus, it is assessed as Least Concern.

Date Assessed: 21 January 2015

History

Regional Status: Vulnerable (IUCN Bangladesh 2000b).

Geographic Range

Global: This species is known to occur in Bangladesh, India, Nepal, West Malaysia and Pakistan (<http://reptile-database.reptarium.cz/species?genus=Xenochrophis&species=cerasogaster>. Downloaded on 12 January 2015); possibly also occurs in Bhutan (Lenz 2012).

Bangladesh: It is known to occur in mixed evergreen forests of northeast and southeast. It is also recorded from



Xenochrophis cerasogaster

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the wetlands of Pabna, Chandpur and Moulvibazar districts (Hasan *et al.* 2014); Kamrangir-char of Dhaka (Sher Ibne Alam pers. comm.).

EOO: 96,545 km²

AOO: 17,027 km²

Population

Generation Time (Length): Not known

Total Population: Not known

No. of Sub-population: Not known

Habitat and Ecology

It inhabits a wide range of habitats including mixed evergreen forests, ponds, lakes, streams and marshy areas (Khan 1982, Kamruzzaman 2009, Hasan *et al.* 2014). It feeds mainly on frogs and fishes. No information is available on its breeding (Kamruzzaman 2009, Hasan *et al.* 2014). It is both diurnal and nocturnal in habit.



Assessor: Md. Kamrul Hasan

Xenochrophis piscator

Species ID: RE0098

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|------------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | NATRICIDAE |

Scientific Name: *Xenochrophis piscator* (Schneider, 1799)**English Name:** Checkered Keelback, Asiatic Water Snake**Local Name:** Dhora Shap**Synonym/s:** *Hydrus piscator* Schneider, 1799*Natrix piscator* Merrem, 1820*Tropidonotus quincunciatus* Schlegel, 1837*Tropidonotus piscator* Boulenger, 1893*Natrix piscator* Stejneger, 1907*Tropidonotus piscator* Wall, 1908*Nerodia (Tropidonotus) piscator* Wall, 1921*Xenochrophispiscator* Malnate and Minton, 1965*Natrix piscator* Smith, 1943*Xenochrophispiscator* Cox *et al.*, 1998*Xenochrophis piscator*

© Tania Khan

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1
Justification: This species has been assigned to Least Concern due to its wide range of distribution, common and adaptable to diverse habitats and relatively has large population.**Date Assessed:** 21 January 2015

History

Regional Status: Not Threatened (IUCN Bangladesh 2000b).

Geographic Range

Global: The species is known to occur in Afghanistan, Bangladesh, Bhutan, China, Indonesia, India, Lao PDR, Malaysia, Myanmar, Nepal, Pakistan, Singapore, Sri Lanka, Taiwan and Thailand (<http://reptile-database.reptarium.cz/species?genus=Xenochrophis&species=piscator>. Downloaded on 24 January 2015).**Bangladesh:** It is widely distributed all over Bangladesh (Husain 1974, Khan M.A.R. 1982, Khan M.M.H. 2008, Hasan *et al.* 2014)**EOO:** 2,22,509 km²**AOO:** 1,39,772 km²

Population

Generation Time (Length): Not known**Total Population:** It has a large population**No. of Sub-population:** Not known**Trend:** Presumably stable

Habitat and Ecology

It inhabits in all types of freshwater, brackishwater and coastal habitats with vegetation, countryside ponds, lakes, pools, fish farms, slow moving rivers, streams, submerged rice fields and marshes, villages, towns and cities (Khan 1987, Kamruzzaman 2009, Hasan *et al.* 2014). This snake is both diurnal and nocturnal. Young of this species feed on frog eggs, tadpoles, small frogs and insects while adults on fishes, frogs, lizards and also rodents, and birds (Whitaker and Captain 2004, Kamruzzaman 2009, Hasan *et al.* 2014). It breeds in December-March (Das 2002). Mating is known to take place from October and females with eggs are found during November to May with a gestation period of 55-67 days and lay 8-91 eggs (Daniel 2002). Incubation period is 37-51 days (Daniel 2002), 60-70 days (Whitaker and Captain 2004).**Assessor:** Md. Kamrul Hasan

Bungarus caeruleus

Species ID: RE0136

LEAST
CONCERN
<LC>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|----------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | ELAPIDAE |

Scientific Name: *Bungarus caeruleus* (Schneider, 1801)**English Name:** Common Krait, Common Indian Krait, Blue Krait, Indian krait**Local Name:** Kal Keutey, Shangkhamuti, Shakanon, Shiyar Chada, Kalach, Domnachiti**Synonym/s:** *Pseudoboa caerulea* Schneider, 1801*Boa lineata* Shaw, 1802*Bungarus arcuatus* Duméril and Bibron, 1854*Bungarus caeruleus* Duméril and Bibron, 1854*Bungarus caeruleus* Boulenger, 1890*Bungarus sidanus* Boulenger, 1897*Bungarus candidus* Wall, 1907*Bungarus caeruleus* Smith, 1943*Bungarus caeruleus* Welch, 1994*Bungarus caeruleus* Janzen *et al.*, 2007**Taxonomic Notes:** The species is sometimes mis-identified as Wall's Krait (*Bungarus walli*).

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1**Justification:** The species is widely distributed in Bangladesh with large Extent of Occurrence and Area of Occupancy; without any known major threat and it is not undergoing population decline, so it signifies as Least Concern.**Date Assessed:** 22 January 2015

History

Regional Status: Endangered (IUCN Bangladesh 2000b).

Geographic Range

Global: This species occurs in Afghanistan, Bangladesh, India, Pakistan, Nepal and Sri*Bungarus caeruleus*

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Lanka (<http://reptile-database.reptarium.cz/species?genus=Bungarus&species=caeruleus>). Downloaded on 05 January 2015); possibly also in Bhutan (Lenz 2012).**Bangladesh:** This species is widely distributed all over the country except Madhupur and Saint Martin's Island (Khan 1992) but rare in Chittagong region (Parvin 1999).**EOO:** 2,17,783 km²**AOO:** 1,39,294 km²

Population

Generation Time (Length): Not known**Total Population:** Not known**No. of Sub-population:** Not known**Trend:** Presumably stable

Habitat and Ecology

Bungarus caeruleus inhabits mainly open plains, termite mounds, rodent holes, piles of brick and rubble and even in rolled up carpets (Whitaker and Captain 2004). It prefers scrub jungles in the vicinity of human habitation, gardens, farms and dense forest (Chakma 2009). It is frequently found near or in water (Daniel 2002). This taxon is terrestrial, timid and docile. It is oviparous. Courtship occurs from February and March; females lay 6-15 eggs from March to May and stays with eggs during incubation (Daniel 2002, Das 2002). Its main food is snakes (even other kraits), lizards, rats and frogs (Whitaker and Captain 2004). It is crepuscular and nocturnal and found up to 10 m asl.

**Assessor:** Md. Mizanur Rahman

LEAST
CONCERN
<LC>

Bungarus fasciatus

Species ID: RE0137

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|----------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | ELAPIDAE |

Scientific Name: *Bungarus fasciatus* (Schneider, 1801)**English Name:** Banded Krait**Local Name:** Shangkhini, Shakini**Synonym/s:** *Pseudoboa fasciata* Schneider, 1801*Boa fasciata* Shaw, 1802*Bungarus annularis* Daudin, 1803*Aspidoclonion annulare* Wagler, 1830*Bungarus fasciatus* Cantor, 1847*Bungarus annularis* Duméril and Bibron, 1854*Bungarus fasciatus bifasciatus* Mell, 1929*Bungarus fasciatus insularis* Mell, 1930*Bungarus fasciatus fasciatus* Mell, 1931*Bungarus fasciatus* Smith, 1943*Bungarus fasciatus*

© M K Hasan

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1**Justification:** The species is widely distributed in Bangladesh and Occupies large Extent of Occurrence and Area of Occupancy. It has no known major threat and it is not undergoing population decline. So, it is assessed as Least Concern.**Date Assessed:** 22 January 2015

History

Regional Status: Endangered (IUCN Bangladesh 2000b)

Geographic Range

Global: This species is known to occur in Bangladesh, Bhutan, Brunei Darussalam, Cambodia, China (including Hong Kong), India, Indonesia (Borneo, Java, Kalimantan, Slak, Sumatra); Lao PDR, Macau, Malaysia, Myanmar, Nepal, Singapore, Sri Lanka, Thailand, and Vietnam (Stuart *et al.* 2013; <http://reptile-database.reptarium.cz/>

species?genus=Bungarus&species=fasciatus. Downloaded on 05 January 2015).

Bangladesh: It is widely distributed all over the country from the mangrove forests of the Sundarbans to the Teknaf Peninsula and from coastal Barisal, hilly Bandarban to Tetulia as well as in the countryside (Husain 1974, Khan 1982a, 1987, 1996).**EOO:** 2,22,509 km²**AOO:** 1,39,772 km²

Population

Generation Time (Length): Not known**Total Population:** Not known**No. of Sub-population:** Not known**Trend:** Presumably stable

Habitat and Ecology

Bungarus fasciatus is usually found in lowlands, agricultural lands, termite mounds, rodent holes, plain land near stagnant or flowing water, tidal floods, highly forested areas, swamps, river deltas, hill streams and in the vicinity of village or human habitation. It is timid and docile in nature. It lays 4-14 eggs in April and guards them until hatching (Whitaker and Captain 2004). It feeds on snakes, snake eggs, lizards, skinks, rats and fishes (Whitaker and Captain 2004). The species is nocturnal and commonly seen during rains. It is known from about 10 m above sea level.**Assessor:** Md. Mizanur Rahman

Hydrophis curtus

Species ID: RE0158

LEAST
CONCERN
<LC>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|----------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | ELAPIDAE |

Scientific Name: *Hydrophis curtus* (Shaw, 1802)

English Name: Shaw's Seasnake, Hardwicke's Sea Snake, Spine-bellied Sea Snake

Local Name: Boitha Tebi Shap

Synonym/s: *Lapemis curtus* Shaw, 1802

Lapemis hardwickii Gray, 1834

Hydrophis hardwickii Günther, 1864

Enhydris hardwickii Boulenger, 1896

Lapemis hardwickii Stejneger, 1907

Lapemis hardwickii Smith, 1943

Lapemis curtus hardwickii Maccarthy in Golay *et al.* 1993

Lapemis hardwickii Cogger, 2000

Lapemis hardwickii Ferner *et al.*, 2001

Lapemis curtus Lukoschek *et al.*, 2010

Hydrophis curtus Wallach *et al.*, 2014

Taxonomic Notes: Two species of the genus *Lapemis* can be considered, *L. curtus* is available in the Indian Ocean and *L. hardwickii* occurs in Southeast Asia and Australia (Smith 1926, Cogger 2000). However, Gritis and Voris (1990) examined the morphological variation of over 1,400 specimens across its geographic range and concluded it is most likely to be a single species.

Assessment Information

Red List Category & Criteria: Least Concern(LC) ver 3.1

Justification: It has a wide range of distribution in the coastal waters of the Bay of Bengal, there are no major threats other than some bycatch in fishing trawlers, which signifies it as Least Concern.

Date Assessed: 18 March 2015

History

Regional Status: Not assessed (IUCN Bangladesh 2000b).



Hydrophis curtus

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Geographic Range

Global: This species occurs in the coastal waters of Bangladesh, Arabian Gulf, India, and Southeast Asia, to Australia, New Guinea and New Caledonia (Minton 1975, Whitaker and Captain 2004).

Bangladesh: It is widely distributed in the Bay of Bengal (Khan 1992, 2015).

EOO: 1,08,115 km²

AOO: 93,633 km²

Population

Generation Time (Length): Not known

Total Population: Not known

No. of Sub-population: Not known

Trend: Not known

Habitat and Ecology

Lapemis curtus prefers shallow coastal waters and estuaries. However, one was found on land near back waters 2.4 km from the sea (Whitaker and Captain 2004). It is associated with many soft-sediment types including sand, muddy sand and mud (Heatwole 1975, Dunson 1975), and also over soft-sediments adjacent to coral reefs (Leviton *et al.* 2003). It is active by day and night (Leviton *et al.* 2003). It is a good swimmer and can also crawl slowly over land (Whitaker and Captain 2004). It feeds mainly on fishes of the families Clupeidae and Cynoglossidae in the western coast of India (Lobo *et al.* 2005, Muzaffar 2009). Mating occurs during early May to the end of July and gives live birth between March and June (Fry *et al.* 2001, Ward 2001).

Assessor: Md. Rezaul Karim

LEAST
CONCERN
<LC>

Hydrophis caeruleescens

Species ID: RE0153

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|----------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | ELAPIDAE |

Scientific Name: *Hydrophis caeruleescens* (Shaw, 1802)**English Name:** Malacca Sea Snake, Dwarf Sea Snake, Many Toothed Sea Snake**Local Name:** Malacca Shamudrik Shap, Chai-ronga Shamudrik Shap

Synonym/s: *Hydrus caeruleescens* Shaw, 1802
Hydrophis caeruleescens Gray, 1842
Hydrophis hybrida Schlegel, 1844
Hydrophis hybrida Fischer, 1856
Hydrophis protervus Jan, 1859
Hydrophis frontalis Jan, 1863
Hydrophis polydonta Jan, 1863
Polydontognathus caeruleescens Wall, 1921
Hydrus caeruleescens thai Smith, 1920
Aturia caeruleescens Welch, 1994
Polydontognathus caeruleescens Kharin, 2004
Hydrophis caeruleescens David *et al.*, 2004

Taxonomic Notes: Two distinct subspecies are recognized, the *H. c. caeruleescens* (Shaw, 1802) and the *H. c. hybridus* (Sciegel, 1844).

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: The species is widely distributed in the Bay of Bengal and there are no major threats, hence, the species is assessed as Least Concern.

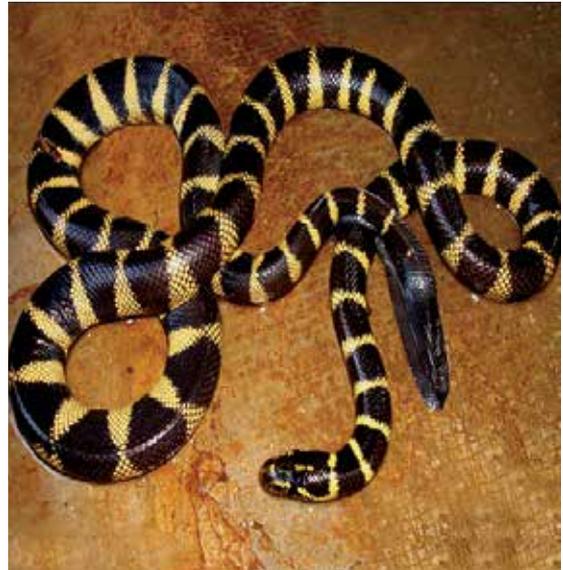
Date Assessed: 18 March 2015

History

Regional Status: Not assessed (IUCN Bangladesh 2000b).

Geographic Range

Global: The species is reported from Australia, Bangladesh, Cambodia, China, India, Indonesia, Malaysia, Myanmar,

*Hydrophis caeruleescens*

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Pakistan, Singapore, Sri Lanka, Thailand and Vietnam (Rasmussen *et al.* 2010, <http://reptile-database.reptarium.cz/species?genus=Hydrophis&species=caeruleescens> downloaded on 12 March 2015).

Bangladesh: It is known to occur in the Bay of Bengal (Khan 1987, Sarkar and Sarkar 1988).

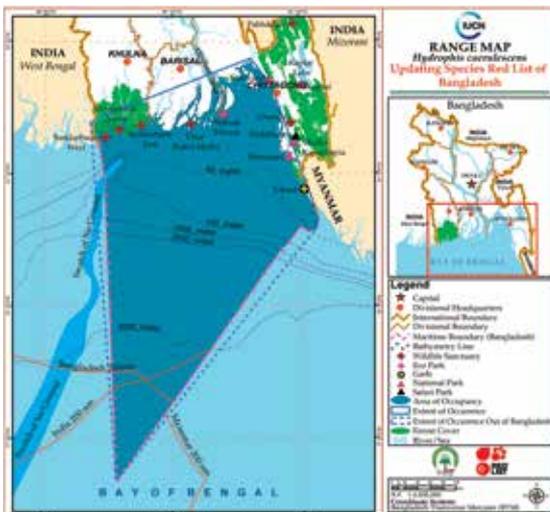
EOO: 1,40,239 km²**AOO:** 1,17,051 km²

Population

Generation Time (Length): Not known**Total Population:** Not known**No. of Sub-population:** Not known**Trend:** Not known

Habitat and Ecology

Hydrophis caeruleescens occurs in shallow coastal waters (Greer 2006). The species is a fish eater and eats mostly gobies (Greer 2006).

**Assessor:** Ibrahim Khalil Al Haidar

Hydrophis cyanocinctus

Species ID: RE0150

LEAST
CONCERN
<LC>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|----------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | ELAPIDAE |

Scientific Name: *Hydrophis cyanocinctus* Daudin, 1803

English Name: Annulated Sea Snake

Local Name: Kalo-holud Boloje Lathi Shap

Synonym/s: *Hydrophis cyanocinctus* Daudin, 1803

Leioselasma striata Lacépède, 1804

Hydrophis chital Rafinesque, 1817

Hydrophis striata Schlegel, 1837

Hydrophis subannulata Gray, 1849

Hydrophis westermanni Jan, 1859

Hydrophis trachyceps Theobald, 1868

Hydrophis crassicollis Anderson, 1871

Hydrophis tenuicollis Peters, 1873

Hydrophis taprobanica Haly, 1887

Hydrophis cyanocincta Boulenger, 1887

Distra cyanocincta Boulenger, 1896

Hydrophis cyanocinctus Smith, 1943



Hydrophis cyanocinctus

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Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: It has large Extent of Occurrence and Area of Occupancy, and it is widely distributed in the Bay of Bengal, hence it has been listed as Least Concern.

Date Assessed: 28 February 2015

History

Regional Status: Not assessed (IUCN Bangladesh 2000b)

Geographic Range

Global: This species is known to occur in Australia, Bahrain, Bangladesh, Cambodia, China, India (Andaman Is, Nicobar Is), Indonesia, Iran, Iraq, Kuwait, Malaysia, Myanmar, Oman, Pakistan, Palau, Philippines, Qatar, Saudi Arabia, Singapore, Sri Lanka, Taiwan (Province of China),

Thailand, United Arab Emirates and Vietnam (Rasmussen *et al.* 2010).

Bangladesh: It occurs along the coastal belt of the country and Sundarbans (Muzaffar 2009); also recorded from St. Martin's Island (Khan 1982, NCSIP-1, 2001).

EOO: 52,873 km²

AOO: 14,890 km²

Population

Generation Time (Length): Not known

Total Population: Not known

No. of Sub-population: Not known

Trend: Not known

Habitat and Ecology

Hydrophis cyanocinctus is found mostly in shallow and muddy mangrove areas (Muzaffar 2009). This is a naturally aggressive species and will readily bite when handled carelessly. It feeds on fishes, prawns, crabs and other crustaceans (Muzaffar 2009). It is viviparous and gives birth to 3-16 young (Minton 1966, Das 2002).



Assessor: Shawkat Imam Khan

LEAST
CONCERN
<LC>

Hydrophis fasciatus

Species ID: RE0152

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|----------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | ELAPIDAE |

Scientific Name: *Hydrophis fasciatus* (Schneider, 1799)**English Name:** Stripped Sea Snake, Banded Sea Snake**Local Name:** Lati Shap**Synonym/s:** *Hydrus fasciatus* Schneider, 1799*Disteria fasciata* Fitzinger, 1826*Pelamis lindsayi* Gray, 1831*Hydrophis gracilis* Schlegel, 1837*Aturia lindsayi* Gray, 1842*Hydrophis fasciatus* Duméril and Bibron, 1854*Hydrophis lindsayi* Anderson, 1871*Hydrophis fasciatus* Peters, 1872*Hydrophis fasciatus* Boulenger, 1896*Aturia fasciata* Wall, 1921*Micromastophis fasciatus* Prater, 1924*Hydrophis fasciatus* Smith, 1943

Taxonomic Notes: There are two closely related species *H. fasciatus* and *H. atriceps*. *H. atriceps* is only found in the east of Singapore and *H. fasciatus* in the west of Singapore (A. Rasmussen pers. comm. 2008 in Rasmussen and Lobo 2010).

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: This species is common and widespread along the coastal areas and estuaries of inshore and offshore of Bangladesh (Khan 1982, 1992; Khan 2008) with large Extent of Occurrence and Area of Occupancy. There are no major threats other than bycatch in fishing trawlers and coastal pollution. So, it has been assessed as Least Concern.

Date Assessed: 18 March 2015

History

Regional Status: Not assessed (IUCN Bangladesh 2000b).*Hydrophis fasciatus*

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Geographic Range

Global: The taxon is native to Arabian Peninsula, Australia, Bangladesh, Cambodia, China, India, Indonesia, Malaysia, Myanmar, New Guinea, Philippines, Thailand and Vietnam (Rasmussen and Lobo 2010, <http://reptile-database.reptarium.cz/species&genus=Hydrophis&species=fasciatus>. Downloaded on 23 June 2015.)

Bangladesh: The species is found all along the coastal areas of Bangladesh.

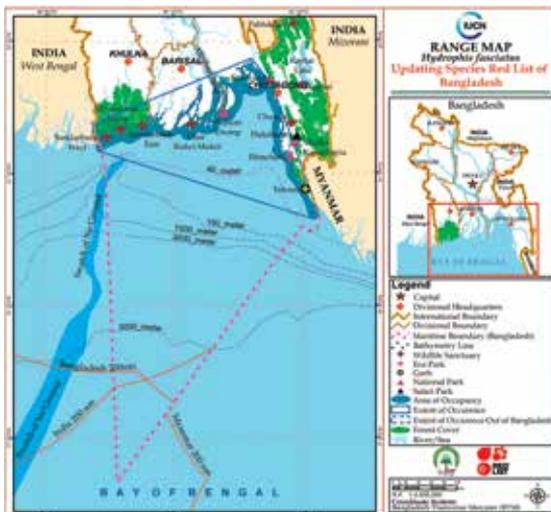
EOO: 46,971 km²AOO: 10,190 km²

Population

Generation Time (Length): Not known**Total Population:** Not known**No. of Sub-population:** Not known**Trend:** Not known

Habitat and Ecology

Hydrophis fasciatus inhabits shallow coastal waters (Khan 1992). This nocturnal species is marine and feeds on eel fishes. Its reproductive habit is not known (Das 2010).

**Assessor:** Md. Sakhawat Hossain

Hydrophis gracilis

Species ID: RE0154

LEAST
CONCERN
<LC>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|----------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | ELAPIDAE |

Scientific Name: *Hydrophis gracilis* (Shaw, 1802)
English Name: Graceful Small-headed Sea Snake, Slender Sea Snake, Narrow-headed Sea Snake, Common Small-headed Sea Snake

Local Name: Choto-matha Samudrik Shap

Synonym/s: *Hydrus gracilis* Shaw, 1802

Disteria gracilis Fitzinger, 1826

Microcephalophis gracilis Lesson, 1834

Thalassophis microcephala Schmidt, 1852

Hydrophis microcephalus Duméril, Bibron and Duméril, 1854

Hydrophis gracilis Duméril, Bibron and Duméril 1854

Hydrophis microcephala Fischer, 1856

Hydrophis gracilis Fischer, 1856

Hydrophis gracilis Günther, 1864

Hydrophis gracilis Boulenger, 1896

Microcephalophis gracilis Smith, 1943

Hydrophis gracilis Bauer and Vindum, 1990

Microcephalophis gracilis Das, 1996

Hydrophis gracilis Cogger, 2000

Microcephalophis gracilis Grossmann and Tillack, 2001

Hydrophis gracilis Leviton *et al.*, 2003

Hydrophis gracilis Rasmussen *et al.*, 2011

Taxonomic Notes: Some authors have also treated this species under the genus *Microcephalophis*

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: The species is widely distributed in the Bay of Bengal and there are no major threats for decline of its population, hence it is listed as Least Concern.

Date Assessed: 18 March 2015



Hydrophis gracilis

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History

Regional Status: Not assessed (IUCN Bangladesh 2000b).

Geographic Range

Global: The species occurs in Australia, Bahrain, Bangladesh, China, India, Indonesia, Iran, Iraq, Kuwait, Malaysia, Oman, Pakistan, Papua New Guinea, Philippines, Qatar, Saudi Arabia, Singapore, Sri Lanka, Taiwan (Province of China), Thailand, United Arab Emirates and VietNam (Guinea *et al.* 2010).

Bangladesh: It is very common in Chittagong region (Parvin 1999) and found in the Sundarbans but rarely (Khan 1992).

EOO: 60,744 km²

AOO: 14,267 km²

Population

Generation Time (Length): Not known

Total Population: Not known

No. of Sub-population: Not known

Trend: Not known

Habitat and Ecology

Hydrophis gracilis occurs in coastal mangrove swamps and coastal reefs; also in deeper turbid waters (Leviton *et al.* 2003, Greer 2006). The species is mainly a fish eater and eats mostly eels (Greer 2006).



Assessor: Ibrahim Khalil Al Haidar

Hydrophis nigrocinctus

Species ID: RE0149

LEAST
CONCERN
<LC>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|----------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | ELAPIDAE |

Scientific Name: *Hydrophis nigrocinctus* Daudin, 1803
English Name: Daudin's Sea Snake
Local Name: Daudiner Samudrik Shap
Synonym/s: *Hydrophis nigrocinctus* Daudin, 1803
Hydrophis nigrocinctus Duméril and Bibron, 1854
Melanomys taxnigrocinctus Wall, 1921
Hydrophis nigrocinctus Smith, 1943
Disteira nigrocincta Welch, 1994
Disteira nigrocincta Heatwole, 1999
Hydrophis nigrocinctus Sharma, 2004
Disteira walli Kharin, 2005
Disteira nigrocincta Kharin, 2005
Hydrophis nigrocinctus Rasmussen *et al.*, 2011

Taxonomic Notes: This species has also been treated under the genus *Disteira* by some researchers

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1
Justification: It has large Extent of Occurrence and Area of Occupancy and is widely distributed along the sea and coast of the Bay of Bengal falling in Bangladesh territory. It does not meet any threshold of the threatened categories. So, it has been assessed as Least Concern.
Date Assessed: 28 February 2015

History

Regional Status: Not Assessed (IUCN Bangladesh 2000b).

Geographic Range

Global: This species has been reported from Indian Ocean: Bangladesh, India, Malaysia, Myanmar, Sri Lanka

and Thailand (<http://reptile-database.reptarium.cz/species?genus=Hydrophis&species=nigrocinctus>. Downloaded on 21 February 2015).

Bangladesh: It is found in the Bay of Bengal and adjoining coasts (Muzaffar 2009) including the Sundarbans (Khan 2015).

EOO: 1,40,239 km²

AOO: 1,17,051 km²

Population

Generation Time (Length): Not known

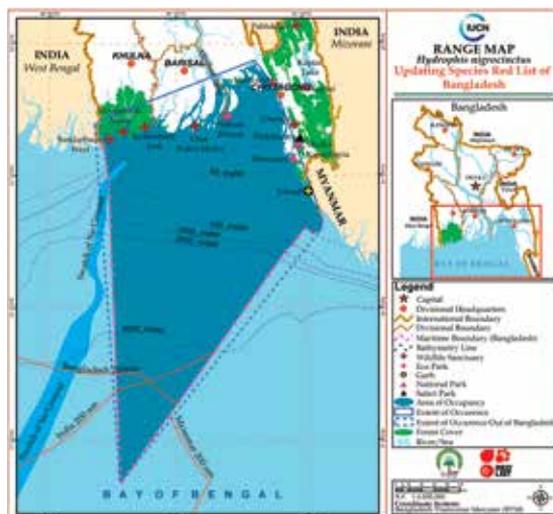
Total Population: Not known

No. of Sub-population: Not known

Trend: Not known

Habitat and Ecology

Hydrophis nigrocinctus apparently inhabits in deep waters with sandy substrates and is generally diurnal (Leviton *et al.* 2003).



Assessor: Shawkat Imam Khan

Hydrophis obscurus

Species ID: RE0151

LEAST
CONCERN
<LC>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|----------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | ELAPIDAE |

Scientific Name: *Hydrophis obscurus* Daudin, 1803
English Name: Russell's Sea Snake, Estuarine Sea Snake
Local Name: Lati Shap, Mohonar Lati Shap.
Synonym/s: *Hydrophis obscura* Daudin, 1803
Hydrophis cloris Daudin, 1803
Hydrophis subcinctus Gray, 1842
Hydrophis latifasciata Günther, 1864
Hydrophis cornata Günther, 1864
Hydrophis cornata Anderson, 1871
Porrecticollis obscurus Wall, 1921
Hydrophis obscurus Smith, 1943
Hydrophis obscurus Welch, 1994
Hydrophis obscura Das, 1996
Hydrophis obscurus Leviton *et al.*, 2003
Hydrophis obscura Murthy, 2010
Hydrophis obscurus Sanders *et al.*, 2013

species&genus=Hydrophis&species=obscurus.
 Downloaded on 23 June 2015).

Bangladesh: It occurs in the coastal areas and estuaries of Bangladesh along the coast of the Bay of Bengal.

EOO: 46,374 km²
AOO: 10,252 km²

Population

Generation Time (Length): Not known
Total Population: Not known
No. of Sub-population: Not known
Trend: Not known

Habitat and Ecology

Hydrophis obscurus inhabits brackish water around the mouth of rivers, large coastal lagoons and saltwater lakes (Das 2010). Its diet and reproductive habit have not been studied (Das 2010).

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: Usually common and most widespread along the coastal areas and estuaries of Bangladesh (Khan 1982, 1992) with large Extent of Occurrence and Area of Occupancy. No major threats are found other than bycatch in fishing trawlers and coastal pollution. So, it has been assessed as Least Concern.

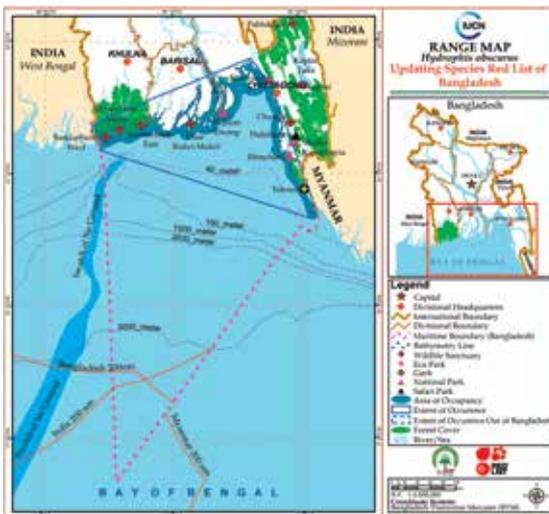
Date Assessed: 18 March 2015

History

Regional Status: Not assessed (IUCN Bangladesh 2000b).

Geographic Range

Global: It is found in Bangladesh, India, Myanmar, Sri Lanka and Thailand (Rasmussen and Lobo 2010, <http://reptile-database.reptarium.cz/>)



Assessor: Md. Sakhawat Hossain

LEAST
CONCERN
<LC>

Hydrophis platurus

Species ID: RE0159

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|----------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | ELAPIDAE |

Scientific Name: *Pelamis platurus* (Linnaeus, 1766)

English Name: Pelagic Sea Snake, Yellow-bellied Sea Snake

Local Name: Rangila Samudric Shap

Synonym/s: *Anguis platura* Linnaeus, 1766

Hydrus bicolor Schneider, 1799

Pelamis platurus [sic] Daudin, 1803

Pelamis bicolor Daudin, 1803

Pelamis ornata Gray, 1842

Pelamis bicolor Duméril et al. 1854

Hydrus platurus Boulenger, 1896

Hydrus platurus Stejneger, 1907

Pelamydrus platurus Stejneger, 1910

Pelamis platurus Smith, 1943

Pelamis platura Böhmé, 2003

Pelamis platyura [sic] Das and Yaakob, 2007

Hydrophis platurus Sanders et al., 2012

Taxonomic Notes: Though *Pelamis platurus* is still the most used scientific name by scientists today but used the incorrect ending *-us* instead of a feminine noun requires (Lanza and Boscherini 2000). There are a few recent examples of scientists beginning to use the grammatically correct name *Pelamis platura*, e.g., Bohme 2003 and the Reptile Database with its page headed *Pelamis platura* (Linnaeus 1766), which includes an extensive synonyms of the different scientific names which have been used for the yellow-bellied sea snake

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: Its wide range of distribution in the coastal areas of the Bay of Bengal within the territorial limits of Bangladesh signifies it as Least Concern.



Hydrophis platurus

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Date Assessed: 18 March 2015

History

Regional Status: Not assessed (IUCN Bangladesh 2000b).

Geographic Range

Global: The Yellow-bellied Sea Snake is most widely distributed species and occurs along the coasts of South and Southeast Asia to Australia, west coast of Africa, Red sea, east as far as the west coast of Central and South America and the Galapagos Islands (Whitaker and Captain 2004).

Bangladesh: It is widely distributed in the Bay of Bengal (Khan 1992).

EOO: 1,08,115 km²

AOO: 93,633 km²

Population

Generation Time (Length): Not known

Total Population: Not known

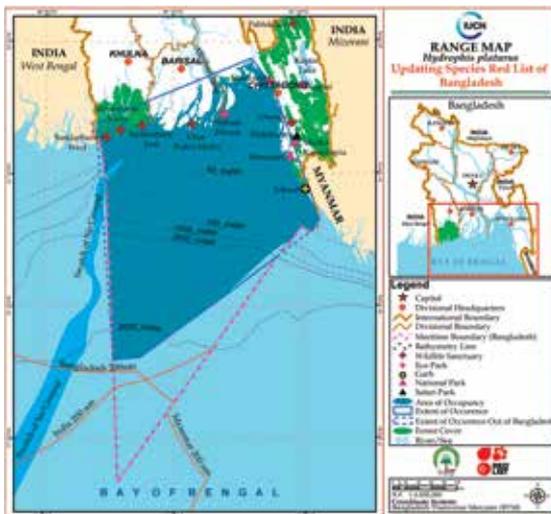
No. of Sub-population: Not known

Trend: Presumably stable

Habitat and Ecology

Pelamis platurus is a pelagic snake, usually found far out at sea and sometimes washed ashore (Whitaker and Captain 2004). Storm surge occasionally brings it along our coastal areas in Bangladesh (M A R Khan pers. comm.). It is active by day and spends night on the ocean bottom, occasionally rising to the surface to breathe (Pope 1937, Ernst 1980). It is helpless on land. It is a surface feeder (Whitaker and Captain 2004) and feeds only on fish (Klawe 1963). It is viviparous and gives birth to 2-6 live young (Whitaker and Captain 2004).

Assessor: Md. Rezaul Karim



Hydrophis schistosus

Species ID: RE0148

LEAST
CONCERN
<LC>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|----------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | ELAPIDAE |

Scientific Name: *Hydrophis schistosus* Daudin, 1803

English Name: Hook-nosed Sea Snake, Beaked Sea Snake, Common Sea Snake, Valakady Sea Snake.

Local Name: Borshinaak Shamudrik Shap, Hoogly Patee

Synonym/s: *Hydrophis schistosus* Daudin, 1803

Hydrus valakady Boie, 1827

Enhydrina valakadyen Gray, 1849
(emendation)

Hydrophis schistosus Duméril and Bibron, 1854

Enhydrina schistosa Stoliczka, 1870

Enhydrina schistosa Van Denburgh, 1895

Enhydrina valakadien Boulenger, 1896

Enhydrina schistosa Smith, 1943

Disteira schistosa McDowell, 1972

Disteira schistosa Rasmussen, 1997

Enhydrina schistosa Rasmussen *et al.*, 2011

Hydrophis schistosus Sanders *et al.*, 2012 [by implication]

Taxonomic Notes: Asian and Australian *Enhydrina schistosa* consist of two distinct lineages (Ukewela *et al.* 2013).

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: The species is common in its distributional range in a variety of habitats and has a large population without major threats, although it is captured as bycatch in trawl fisheries. Thus, it has been assessed as Least Concern.

Date Assessed: 22 January 2015

History

Regional Status: Not assessed (IUCN Bangladesh 2000b)



Hydrophis schistosus

© Faysal Ahmad

Geographic Range

Global: This species occurs in Australia, Bahrain, Bangladesh, Cambodia, China, India, Indonesia, Iran, Iraq, Kuwait, Malaysia, Myanmar, Oman, Pakistan, Papua New Guinea, Philippines, Qatar, Saudi Arabia, Singapore, Sri Lanka, Thailand, United Arab Emirates, Vietnam (Heatwole 1999, <http://reptile-database.reptarium.cz/species?genus=Hydrophis&species=schistosus>. Downloaded on 25 January 2015).

Bangladesh: The species is found in the Bay of Bengal, the Sundarbans, coastal waters and estuaries of the country (Khan 1982a, 2015).

EOO: 1,45,630 km²

AOO: 1,17,820 km²

Population

Generation Time (Length): Not known

Total Population: Not known

No. of Sub-population: Not known

Trend: Not known

Habitat and Ecology

Hydrophis schistosus inhabits shallow open sea, river mouths, estuaries, coastal lagoons and mangrove forests (Limpus 1975, Lim and Sawai 1975, Murthy 1977, Murthy and Rama Rao 1988, Venkateswarlu *et al.* 1995), prefers water depth from less than 5 m to 30 m (Leviton *et al.* 2003); over soft substrates such as mud and sand (Limpus 1975); from 3.7-22.2 m depth (Redfield *et al.* 1978); also found in freshwater lakes in Cambodia and India, and can travel up rivers (Rasmussen *et al.* 2010). It is active by day and night. It feeds mainly on catfishes, pufferfishes and occasionally other fishes, prawns and isopods (Carpenter *et al.* 2001, Heatwole 1999, Voris and Moffett 1981, Voris *et al.* 1978). Females mature at around 18 months and produce a first clutch at around 24 months (Marsh *et al.* 1993, Voris and Jayne 1979). Clutch size increases with the size of the female and can reach 30 or more (Rasmussen *et al.* 2010).

Assessor: Md. Abdur Razzaque Sarker



Enhydris enhydris

Species ID: RE0128

LEAST
CONCERN
<LC>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|--------------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | HOMALOPSIDAE |

Scientific Name: *Enhydris enhydris* (Schneider, 1799)
English Name: Common Smooth-scaled Water Snake, Rainbow Mud Snake, Rainbow Water Snake, Striped Water Snake, Smooth Water Snake

Local Name: Paina Shap, Huria, Ramdhonu Shap

Synonym/s: *Hydrus enhydris* Schneider, 1799
Hypsirhina enhydris Schneider, 1799
Hydrus atrocaeruleus Shaw, 1802
Coluber pythonissa Daudin, 1803
Hypsirhina bilineata Gray, 1842
Homalopsis enhydris Cantor, 1847
Hypsirhina enhydris Duméril and Bibron, 1854
Hypsirhina enhydris Jan, 1863
Enhydris enhydris Barbour, 1912
Enhydris enhydris Smith, 1943



Enhydris enhydris

© M K Hasan

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: This species is abundant throughout its extensive range and it occurs in a wide range of habitats particularly in wetlands, including countryside ponds and some paddy fields. So, the species is assessed as Least Concern.

Date Assessed: 18 March 2015

History

Regional Status: Not Threatened (IUCN Bangladesh 2000b).

Geographic Range

Global: It is recorded from Bangladesh, Cambodia, India, Indonesia, Lao PDR, Malaysia, Myanmar, Nepal, Pulau Bangka, Singapore (?), Sri Lanka, Thailand and Vietnam (<http://reptile-database.reptarium.cz/>)

species?genus=Enhydris&species=enhydris).

Bangladesh: It is known from all over Bangladesh.

EOO: 2,22,509 km²

AOO: 1,39,772 km²

Population

Generation Time (Length): Not known

Total Population: Not known

No. of Sub-population: Not known

Trend: Presumably stable

Habitat and Ecology

Enhydris enhydris uses a variety of stagnant and slow moving aquatic habitats ranging from paddy fields, canals and ditches to lakes and rivers. It inhabits relatively shallow freshwater environments with muddy substrata and can be found in urban areas. It appears to thrive in disturbed habitats. This species is very intolerant of salt water. Neonates are found in the mud-root tangle near water (Murphy 2007). The taxon is terrestrial and freshwater. It feeds almost exclusively on fish (Murphy 2007), but in lean periods it may also prey on lizards and frogs (Sharma 2002). Mating has been observed in October-November and gravid females give birth to 4-20 young during March (Whitaker and Captain 2004, Das 2010). It is known to be active during the early part of the night.



Assessor: Md. Abdur Razzaque Sarker

Gerada prevostiana

Species ID: RE0132

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|--------------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | HOMALOPSIDAE |

Scientific Name: *Gerada prevostiana* (Eydoux and Gervais, 1837)

English Name: Glossy Marsh Snake, Gerard's Water Snake, Cat-eyed Fishing Snake, Cat-eyed Water Snake

Local Name: Chokchoke Shap, Mohonar Shap, Paraboner Shap

Synonym/s: *Coluber (Homalopsis) prevostianus* Eydoux and Gervais, 1837

Campylodon prevostianum Duméril and Bibron, 1854

Geradia prevostiana Wall, 1905

Geradia prevostiana Wall, 1921

Geradia prevostiana Smith, 1943

Geradia prevostianus Das, 1996

Gerada prevostiana Manthey and Grossmann, 1997

Gerada prevostiana Cox *et al.*, 1998

Gerada prevostiana Sharma, 2004

Gerada prevostiana Murphy and Voris, 2014



Gerada prevostiana

© Faysal Ahmad

Geographic Range

Global: The species is known to occur in Bangladesh (Rahman *et al.* 2014); Cambodia, India, Indonesia, Malaysia, Myanmar, Philippines, Singapore, Sri Lanka and Thailand (<http://www.reptile-database.reptarium.cz/species?genus=Gerada&species=prevostiana>. Downloaded on 02 September 2015).

Bangladesh: This species is found throughout the coastal belt of Bangladesh (Khan 1982a, 2015; Rahman *et al.* 2014).

EOO: 46,374 km²

AOO: 10,091 km²

Population

Generation Time (Length): Not known

Total Population: Not known

No. of Sub-population: Not known

Trend: Not known

Habitat and Ecology

Gerada prevostiana inhabits coastal areas, mangroves, estuaries, and associated intertidal grassy vegetation and open mudflats (Whitaker and Captain 2004, Das 2010, Rahman *et al.* 2014). This species is aquatic and nocturnal in habit but sometimes active during day in the rain (Whitaker and Captain 2004, Das 2010, Rahman *et al.* 2014). Diet includes fish, shrimp, soft-shelled (freshly moulted) crabs and other aquatic animals (Whitaker and Captain 2004, Das 2010).

Assessment Information

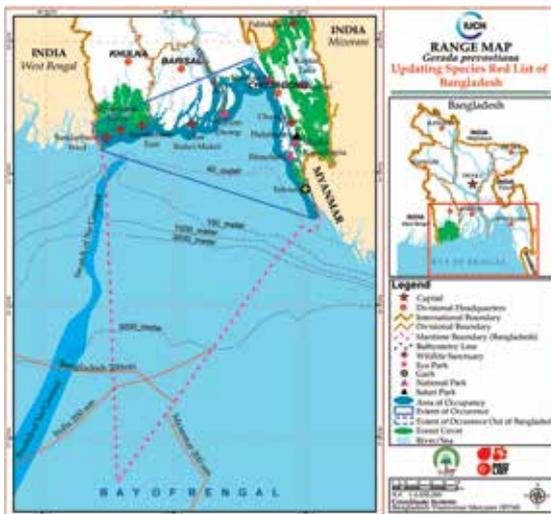
Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: The species is common and found throughout the coastal belt of Bangladesh as well as along the River Naaf draining into the Bay of Bengal by Teknaf Peninsula. There are no known threats to this species and therefore it is listed as Least Concern.

Date Assessed: 21 August 2015

History

Regional Status: Data Deficient (IUCN Bangladesh 2000b)



Assessor: Shahriar Ceaser Rahman

Pareas monticola

Species ID: RE0077

LEAST
CONCERN
<LC>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|--------------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | HOMALOPSIDAE |

Scientific Name: *Pareas monticola* (Cantor, 1839)

English Name: Assam Snail-eater Snake, Montane Slug-eating Snake

Local Name: Shamukh-khor Shap

Synonym/s: *Dipsas monticola* Cantor, 1839

Pareas monticola Günther, 1864

Amblycephalus monticola Wall, 1908

Pareas monticola Smith, 1943

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification The species is uncommon but widely distributed in and around mixed evergreen forests in the northeast and southeast of Bangladesh. There is no notable threat to the species and there is no indication that the population is declining. Therefore, it qualifies as Least Concern.

Date Assessed: 17 November 2014

History

Regional Status: Data Deficient (IUCN Bangladesh 2000b)

Geographic Range

Global: The species is native to Bangladesh, Bhutan, China, India, Myanmar and Thailand (<http://reptile-database.reptarium.cz/species?genus=Pareas>HYPERLINK "<http://reptile-database.reptarium.cz/> Downloaded on 20 February 2015).

Bangladesh: It is found in and around mixed evergreen forests in the northeast and southeast of Bangladesh (Khan 1982a, Hasan *et al.* 2014).



Pareas monticola

© Tania Khan

EOO: 35,483 km²

AOO: 10,546 km²

Population

Generation Time (Length): Not known

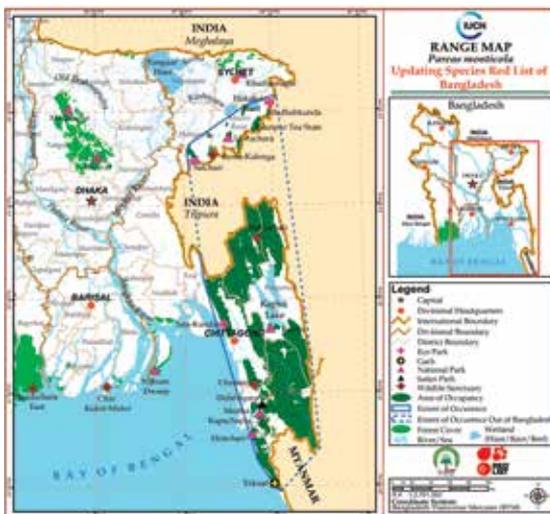
Total Population: Not known

No. of Sub-population: Not known

Trend: Presumably stable

Habitat and Ecology

This snake is partial to the mixed evergreen forests of the country. It is basically arboreal preferring low vegetation and feeds mainly on slugs and snails at night. It is oviparous and females lay up to 8 eggs (Das 2012). It is nocturnal in habit.



Assessor: Md. Abdur Razzaque Sarker

LEAST
CONCERN
<LC>

Trimeresurus albolabris

Species ID: RE0165

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|-----------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | VIPERIDAE |

Scientific Name: *Trimeresurus albolabris* Gray, 1842**English Name:** Green Pit Viper, Bamboo Pit Viper, White-lipped Tree Viper, Bamboo Snake**Local Name:** Shabuj Bora, Bansh Bora**Synonym/s:** *Trimeresurus albolabris* Gray, 1842 (unjustified emendation)*Trimeresurus albolabris* Gray, 1849*Lachesisgramineus albolabris* Mell, 1922*Trimeresurus albolabris* Pope and Pope, 1933*Trimeresurus albolabris albolabris* Kramer, 1977*Trimeresurus gramineus albolabris* Mell, 1929*Trimeresurus albolabrisalbolabris* Welch, 1994*Trimeresurus albolabris* Manthey and

Grossmann, 1997

Cryptelytrops albolabris Malhotra and Thorpe, 2004*Trimeresurus (Trimeresurus) albolabris* David *et al.*, 2011**Taxonomic Notes:** *Cryptelytrops insularis* was split from *C. albolabris* (Malhotra and Thorpe 2004).

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1**Justification:** The species is common and has a wide range of distribution in northeast, Chittagong, Cox's Bazar, Chittagong Hill Tracts and the Sundarbans, Hence, it is assessed as Least Concern.**Date Assessed:** 26 February 2015

History

Regional Status: Data Deficient (IUCN Bangladesh 2000b).*Trimeresurus albolabris*

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Geographic Range

Global: *Cryptelytrops albolabris* occurs in Bangladesh, Cambodia, China, Hong Kong, India, Indonesia, Lao PDR, Macao, Malaysia, Myanmar, Taiwan, Thailand and Vietnam (David and Vogel 2000, Stuart *et al.* 2012, <http://reptile-database.reptarium.cz/species?genus=Trimeresurus&species=albolabris>. Downloaded on 02 February 2015, http://biosch.hku.hk/ecology/hkreptilessnake/Trimeresurus_albolabris.html. Downloaded on 2 February 2015).**Bangladesh:** It is found in the mixed evergreen forests of the northeast, east and southeast of the country as well as in the mangrove forests of the Sundarbans only and not in other man-made mangroves (Chakma 2009, Hasan *et al.* 2014).**EOO:** 1,07,897 km²**AOO:** 14,738 km²

Population

Generation Time (Length): Not known**Total Population:** Not known**No. of Sub-population:** Not known**Trend:** Decreasing

Habitat and Ecology

Trimeresurus albolabris inhabits primary, secondary, degraded and mangrove forests, bushes, bamboo brakes and low tree branches 2-3 m above ground. The taxon is arboreal but also forages on ground. It feeds on frogs, lizards and other small vertebrates including rodents. It is viviparous, pairing takes place in May and giving birth two months later (http://biosch.hku.hk/ecology/hkreptilessnake/Trimeresurus_albolabris.html. Downloaded on 2 February 2015). Females produce 12-18 cm long adult-like 7-16 young at a time (Das 2002). It forages at night.**Assessor:** Md. Farid Ahsan

Trimeresurus erythrurus

Species ID: RE0164

LEAST
CONCERN
<LC>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|-----------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | VIPERIDAE |

Scientific Name: *Trimeresurus erythrurus* (Cantor, 1839)

English Name: Spot-tailed Pit Viper, Red tail Pit Viper, Bamboo Pit Viper

Local Name: Shabuj Bora

Synonym/s: *Trigonocephalus erythrurus* Cantor, 1839

Trimeresurus bicolor Gray, 1853

Trimeresurus erythrurus Günther, 1864

Trimeresurus carinatus Fayrer, 1874

Trimeresurus erythrurus Pope and Pope, 1933

Trimeresurus erythrurus Smith, 1943

Trimeresurus erythrurus Welch, 1994

Trimeresurus erythrurus Gumprecht *et al.*, 2004

Crytelytrops erythrurus Malhotra and Thorpe, 2004

Trimeresurus erythrurus David *et al.*, 2011

Taxonomic Notes: The species is quite similar with *T. albolabris*.

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: The species has a large Extent of Occurrence and Area of Occupancy. Despite habitat loss and degradation, it is unlikely to be undergoing population decline to qualify for a threatened category. So, it is assessed as Least Concern.

Date Assessed: 28 February 2015

History

Regional Status: Endangered (IUCN Bangladesh 2000b).

Geographic Range

Global: This species occurs in Bangladesh, India and Myanmar <http://reptile-database.reptarium.cz/>



Trimeresurus erythrurus

© Tania Khan

species?genus=Trimeresurus&species=erythrurus downloaded on 10 February 2015. It possibly also occurs in Bhutan and Nepal (Whitaker and Captain 2004) and Thailand (Pauwels *et al.* 2000).

Bangladesh: It is found in mixed evergreen forest areas of Sylhet, Chittagong and the Sundarbans (Khan 1982, Chakma 2009, Hasan *et al.* 2014).

EOO: 1,07,897 km²

AOO: 14,738 km²

Population

Generation Time (Length): Not known

Total Population: Not known

No. of Sub-population: Not known

Trend: Presumably stable.

Habitat and Ecology

Habitat of this species includes bamboo forests, trees, bushes, buttresses of mangrove trees and the ground near streams (Chakma 2009) as well as mangrove forests. This nocturnal species is arboreal and terrestrial (Auyila 2010). It feeds on small mammals, birds, lizards and frogs; females bear live young (Whitaker and Captain 2004).



Assessor: Md. Mizanur Rahman

LEAST
CONCERN
<LC>

Argyrophis diardii

Species ID: RE0069

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|-------------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | TYPHLOPIDAE |

Scientific Name: *Argyrophis diardii* (Schlegel, 1839)**English Name:** Diard's Blindsnake, Indochinese Blindsnake, Large Blind Snake, Large Wormsnake**Local Name:** Baro Dumukha Shap

Synonym/s: *Typhlops diardii* Schlegel, 1839
Argyrophis horsfieldii Gray, 1845
Typhlops striolatus Peters, 1861
Typhlops siamensis Günther, 1864
Typhlops barmanus Stoliczka, 1872
Typhlops diardi Boulenger, 1893
Typhlops tephrosoma Wall, 1908
Typhlops cinereus Wall, 1909
Typhlops fusconotus Brongersma, 1934
Typhlops labialis Waite, 1918
Typhlops diardii Smith, 1943
Asiatyphlops diardii Hedges *et al.*, 2014
Argyrophis diardii Pyron and Wallach, 2014

Taxonomic Notes: It has two subspecies: *T. d. diardi* Schlegel, 1839 and *T. d. platyventris* Khan, 1998.

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1**Justification:** This species is common and widely distributed throughout Bangladesh. It can be found in diverse habitats including urban areas. Moreover, it has no significant threat to decline fast. It does not fulfill any criteria to qualify for threatened category. So it is assessed as Least Concern.**Date Assessed:** 17 November 2014

History

Regional Status: Data Deficient (IUCN Bangladesh 2000b)*Argyrophis diardii*

© Faysal Ahmad

Geographic Range

Global: This species is reported from Bangladesh, Cambodia, China, India, Indonesia, Malaysia, Myanmar, Nepal, Pakistan, Papua New Guinea, Thailand and Vietnam (Khan 1998, Papenfuss 2010); possibly also occurs in Bhutan (Lenz 2012).**Bangladesh:** This species is widely distributed throughout Bangladesh (Islam 2009, Hasan *et al.* 2014).**EOO:** 2,22,509 km²**AOO:** 1,32,741 km²

Population

Generation Time (Length): Not known**Total Population:** As this species is common and widely distributed, presumably it has a large population.**No. of Sub-population:** Not known**Trend:** Presumably stable

Habitat and Ecology

This taxon is diurnal, fossorial and able to burrow in soft soil i.e., well adapted for burrowing life. It inhabits under dead, decaying leaves; comes out on surface after heavy rainfall (Islam 2009, Hasan *et al.* 2014). It feeds on ants, worms, small insects, and their eggs and larvae. Females lay 4-14 eggs from March-June (Whitaker and Captain 2004, Islam 2009, Hasan *et al.* 2014).

**Assessor:** Md. Kamrul Hasan

Ramphotyphlops braminus

Species ID: RE0068

LEAST
CONCERN
<LC>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|-------------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | TYPHLOPIDAE |

Scientific Name: *Ramphotyphlops braminus* (Daudin, 1803)

English Name: Brahminy Blind Snake, Common Worm Snake

Local Name: Dumukha Shap

Synonym/s: *Eryx braminus* Daudin, 1803

Tortrix russelli Merrem, 1820

Typhlops braminus Cuvier, 1829

Typhlops russeli Schlegel, 1839

Argyrophis truncatus Gray, 1845

Ophthalmidium tenue Hallowell, 1861

Typhlops braminus Boulenger, 1893

Typhlops limbricki Annandale, 1906

Typhlops braminus Smith, 1943

Onychocephalus capensis Smith, 1946

Typhlops pseudosaurus Dryden and Taylor, 1969

Typhlinabraminus McDowell, 1974

Ramphotyphlops braminus Nussbaum, 1980

Indotyphlops braminus Hedges *et al.*, 2014



Ramphotyphlops braminus

© M K Hasan

Geographic Range

Global: It is native to Africa and Asia; introduced worldwide (Whitaker and Captain 2004).

Bangladesh: It is widely distributed throughout terrestrial habitats in Bangladesh (Khan M.A.R. 1982, Khan, M.M.H. 2008, Hasan *et al.* 2014). It possibly does not occur in the offshore islands such as the Saint Martin's (M.A.R. Khan pers. comm.).

EOO: 2,22,509 km²

AOO: 1,32,741 km²

Population

Generation Time (Length): Not known.

Total Population: As this species is common and widely distributed, presumably it has a large population.

No. of Sub-population: Not known.

Trend: Presumably stable.

Habitat and Ecology

It inhabits slightly forested areas and also in human habitations. It's one of the favorite haunts is flower pots and usually found in moist areas under stones, banana plantation and other damp areas in gardens (M.F. Ahsan pers. comm., M.A.R. Khan pers. comm.). It is fossorial and diurnal. It is adapted to underground life and spends most of the time there. It feeds mainly on ants, termites, small insects and their eggs and larvae. Females are parthenogenic and lay 2-7 boiled rice like eggs (Frank Wall in Whitaker and Captain 2004).

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: This species is common and widely distributed throughout Bangladesh. It can be found in diverse habitats including urban environment. Moreover, it has no significant threat to decline fast. It does not fulfill any criteria to qualify for any IUCN threatened category. So it is evaluated as Least Concern.

Date Assessed: 17 November 2014

History

Regional Status: Not Threatened (IUCN Bangladesh 2000b).



Assessor: Md. Kamrul Hasan

LEAST
CONCERN
<LC>

Indotyphlops jerdoni

Species ID: RE0071

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|-------------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | TYPHLOPIDAE |

Scientific Name: *Indotyphlops jerdoni* (Boulenger, 1890)**English Name:** Jerdon's Worm Snake**Local Name:** Jerdoner Dumukha Shap**Synonym/s:** *Typhlops jerdoni* Boulenger, 1890*Typhlops jerdoni* Boulenger, 1893*Typhlops diversiceps* Annandale, 1912*Typhlops jerdoni* Smith, 1943*Typhlops jerdoni* McDiarmid *et al.*, 1999*Typhlops jerdoni* Das, 2003*Indotyphlops jerdoni* Hedges *et al.*, 2014

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1**Justification:** This species is common and widely distributed throughout Bangladesh. Moreover, it has no significant threat to decline fast. It does not fulfill any criteria to qualify for any threatened category. So it can be assessed as Least Concern.**Date Assessed:** 17 November 2014

History

Regional Status: It was not evaluated by IUCN Bangladesh in 2000b.

Geographic Range

Global: The species is known to occur in Bangladesh, Bhutan, India, Myanmar and Nepal (<http://reptile-database.reptarium.cz/species?genus=Indotyphlops&species=jerdoni>). Downloaded on 19 February 2015).**Bangladesh:** It is widely distributed throughout Bangladesh (Chakma 2009, Khan M A R 2015, Khan M.M.H. 2008).*Indotyphlops jerdoni*

© M. Monirul H. Khan

EOO: 2, 22,509 km²**AOO:** 1, 32,741 km²

Population

Generation Time (Length): Not known**Total Population:** As this species is widely distributed, presumably it has a large population.**No. of Sub-population:** Not known**Trend:** Presumably stable

Habitat and Ecology

It inhabits under fallen logs, leaf litter, under stones and inside dead trees (Chakma 2009, Hasan *et al.* 2014). This species is semi-fossorial. It presumably feeds on ants, termites, earthworms and small insects (Das 2002).**Assessor:** Md. Kamrul Hasan



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Caretta caretta

Species ID: RE0008

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|------------|-------------|
| ANIMALIA | CHORDATA | REPTILIA | TESTUDINES | CHELONIIDAE |

Scientific Name: *Caretta caretta* (Linnaeus, 1758)**English Name:** Loggerhead Sea Turtle, Logger-headed Sea Turtle, Logger headed Turtle**Local Name:** Mugurmatha Kachhim, Mugurmatha Samudrik Kachhim**Synonym/s:** *Testudo caretta* Linnaeus, 1758
Caretta caretta Smith, 1931**Taxonomic Notes:** Resemblance with olive Ridley turtle, but massive jaws and big head are remarkable for distinguishing it.

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1**Justification:** There are two sporadic reports: one case of egg laying as recorded at sandy beach of Saint Martin's Island in 1977 (M.A. Kader pers. comm.) but it was reported later (Bhuiya *et al.* 1985), and a second case record was made based on a dead specimen in Kossopia Island by Hatiya Island in Noakhali District in 1995 (Khan 1996). Based on these two reports it can be assessed as Data Deficient.
Date Assessed: 21 August 2014

History

Regional Status: Not assessed (IUCN Bangladesh 2000b)

Geographic Range

Global: It occurs throughout tropical and subtropical oceans worldwide, oceanic islands and coastal waters with sandy beaches (Marine Turtle Specialist Group 1996).**Bangladesh:** Two records are reported: one of laying eggs at Saint Martin Island of Cox's Bazar (Bhuiya *et al.* 1985) and the other stranded dead specimen at Kassopia Island by Hatiya of Noakhali (Khan 1996).

Caretta caretta

© Indraneil Das

EOO: Not known**AOO:** Not known

Population

Generation Time (Length): Not known**Total Population:** Not known**No of Sub-population:** Not known**Trend:** Decreasing

Habitat and Ecology

Generally *Caretta caretta* is omnivorous but specifically carnivorous. It eats algae, vascular plants, hard shelled prey (horseshoe crabs, bivalves, barnacles, other invertebrates (sponges, jelly-fishes, cephalopods, shrimps, insects, sea urchins) and vertebrates (fish, fish eggs, own hatchlings). Maturity age of the species varies from 10-30 years, but in captivity it is 16-17 years; reproductive life span (after reaching maturity) is estimated to be 32 years (Ernst *et al.* 1994, Spotila 2004). Breeding occurs round the year, but peaks between May and July, females' lay 23-198 (mean 115) eggs in a clutch and usually 2-5 clutches in a year (Duermit 2014). At 25°C, eggs hatch out by 65-70 days and at 35°C by 45 days (Ernst *et al.* 1994, Spotila 2004). Sexes of the offspring is temperature dependent, all males are produced at 24-26°C and all females are at 32-34°C and pivotal temperature is 28-30°C (Ernst *et al.* 1994, Spotila 2004, Duermit 2014). The estimated life span of the species is 30-62 years in the wild and 33 years in captivity (Duermit 2014).

**Assessor:** Md. Farid Ahsan

Calotes jerdoni

Species ID: RE0034

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Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|----------|
| ANIMALIA | CHORDATA | REPTILIA | RODENTIA | AGAMIDAE |

Scientific Name: *Calotes jerdoni* Günther, 1870

English Name: Green Garden Lizard, Jerdon's Forest Lizard

Local Name: Sabuj Girgiti

Synonym/s: *Calotes jerdoni* Günther, 1870

Calotes jerdonii Boulenger, 1885

Calotes yunnanensis Annandale, 1905

Calotes jerdoni Smith, 1935

Calotes jerdoni Wermuth, 1967

Calotes jerdoni Manthey and Schuster, 1999

Taxonomic Notes: It may be misidentified as the green morph of *Calotes versicolor*, which is found only in the northern part of the country.

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1

Justification: There is not enough data for evaluation, only a single citation from Panchagarh district in May 1988 (Khan 2004). So it is categorized as Data Deficient.

Date Assessed: 24 September 2014

History

Regional Status: Data Deficient (IUCN Bangladesh 2000b)

Geographic Range

Global: This taxon occurs in Afghanistan, Bangladesh, Bhutan, China (Southern), India, and Myanmar (<http://reptile-database.reptarium.cz/species?genus=Calotes&species=жердони>. Downloaded on 19 September 2014).

Bangladesh: There is only one sighting that was recorded in May, 1988 at Banglabandha of Panchagarh district (Khan 2004).



Calotes jerdoni

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EOO: Not known

AOO: Not known

Population

Generation Time (Length): Not known

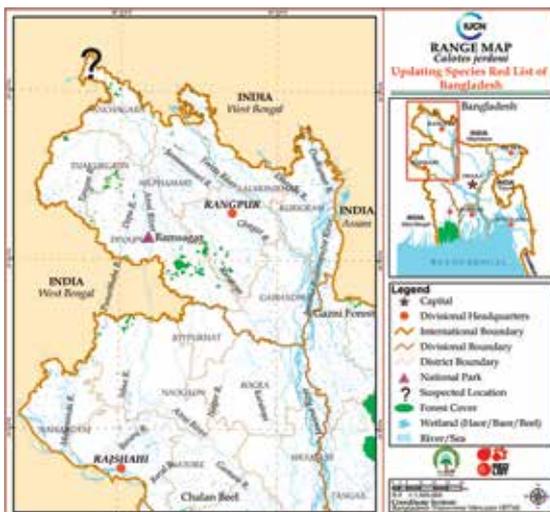
Total Population: Not known

No of Sub-population: Not known

Trend: Not known

Habitat and Ecology

Calotes jerdoni is a forest dweller and often seen in the bushes in open areas (Chakma 2009), mixed evergreen forest and undergrowth of forests. The species is diurnal and arboreal, breeds during August and female lays 12 eggs (Das 2002).



Assessor: Md. Mizanur Rahman

Calotes minor

Species ID: RE0039

DATA
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Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|------------|----------|
| ANIMALIA | CHORDATA | REPTILIA | TESTUDINES | AGAMIDAE |

Scientific Name: *Calotes minor* (Hardwicke and Gray, 1827)

English Name: Hardwicke's Bloodsucker, Lesser Agama

Local Name: Hardwicker Rochtochosh

Synonym/s: *Agama minor* Hardwicke and Gray, 1827
Laudakia minor Hardwicke and Gray, 1827
Acanthosaura minor Blyth, 1856
Brachysaura ornata Blyth, 1856
Charasia ornata Blyth, 1856
Brachysaura ornata Stoliczka, 1872
Charasia ornata Boulenger, 1885
Agama minor Smith, 1935
Laudakia minor Das, 1996
Agama minor Wermuth, 1967
Brachysaura minor Manthey and Schuster, 1999
Calotes minor Deepak et al. 2015



Calotes minor

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Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1

Justification: This species is listed as Data Deficient as it is known only from the holotype, which was collected from Chittagong (Hardwicke and Gray 1827, Smith 1935). Since then there is no second report either from Chittagong or from other areas of Bangladesh is available. It is unclear whether the specimen was collected from there or locality record is erroneous (Khan 2010).

Date Assessed: 24 September 2014

History

Regional Status: It is not assessed (IUCN Bangladesh 2000b).

Geographic Range

Global: It is known to occur in Bangladesh, India and Pakistan (Khan and Papenfuss 2010). This species is the most widely distributed lizard in the subcontinent but, its range is severely fragmented (Khan 2010).

Bangladesh: It has only one record from the holotype, which was collected from Chittagong (Hardwicke and Gray 1827, Smith 1935). It is not clear whether the specimen was collected from there or the locality record is erroneous (Khan 2010).

EOO: Not known

AOO: Not known

Population

Generation Time (Length): Not known

Total Population: Not known

No of Sub-population: Not known

Trend: Not known

Habitat and Ecology

Calotes minor has diverse habitats: arid environments such as dry forest, desert, sand mixed rocky area with scrubby vegetation, thorn field in subtropical temperate environments, with extreme weather conditions in the Indo-Gangetic plain (Khan 2010). The species is usually terrestrial but can climb up on low vegetation (Khan 2010). Diet includes different kinds of arthropods: beetles, termites, centipedes, spiders, ants, grasshoppers, butterflies, etc.; mating in July-August (Khan 2010). It is diurnal in habit.



Assessor: Suprio Chakma

Draco blanfordii

Species ID: RE0037

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Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|----------|
| ANIMALIA | CHORDATA | REPTILIA | RODENTIA | AGAMIDAE |

Scientific Name: *Draco blanfordii* (Blanford, 1878).**English Name:** Blanford's Flying Lizard, Blanford's Gliding Lizard**Local Name:** Uranto Tiktiki, Urukku Tiktiki**Synonym/s:** *Draco major* Blanford, 1878*Draco blanfordii* Boulenger, 1885*Draco cyanolaemus* Boulenger, 1908 (fide Hennig 1936)*Draco blanfordi* Smith, 1935*Draco blanfordii*, Taylor, 1963*Draco blanfordi* blanfordi, Musters, 1983*Draco blanfordi* Ahsan, 1992*Draco blanfordii*, Manthey and Grossmann, 1997*Draco blanfordii*, Cox *et al.*, 1998*Draco blanfordi*blanfordi, Manthey and Schuster, 1999*Draco blanfordii* Barts and Wilms, 2003**Taxonomic Notes:** The subspecies recorded from Bangladesh was *Draco blanfordii norvillii* (Alcock 1895) (Ahsan 1992).

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1**Justification:** The type specimen was collected from Chittagong Hill Tracts (Smith 1935) and the verified preserved specimen was collected from Galimpur village of Sylhet (Ahsan 1992). These two records indicate its reasonably wide distribution range in Bangladesh that also present large Extent of Occurrence and Area of Occupancy. Besides no further sighting record is available so far that signifies the species as Data Deficient.**Date Assessed:** 24 September 2014

History

Regional Status: Critically Endangered (IUCN Bangladesh 2000b)

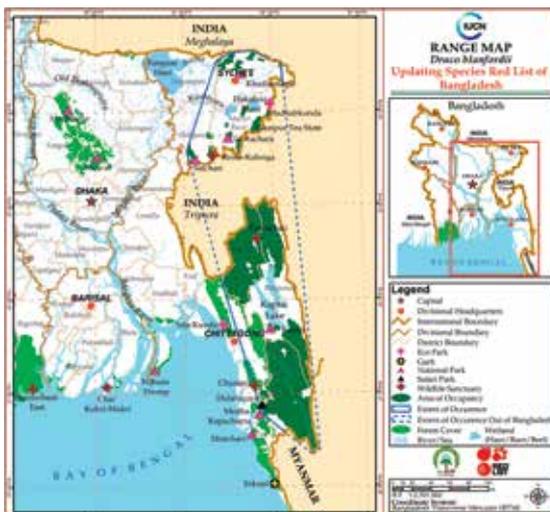
Geographic Range

Global: It is found in Bangladesh, China (SW Yunnan), India, W Malaysia (incl. Pulau Langkawi, Pulau Singa Besar), Myanmar, and E Thailand, Vietnam (<http://reptile-database.reptarium.cz/species?genus=Draco&species=blanfordii>). Downloaded on 03 September 2014).**Bangladesh:** The verified specimen was from Galimpur village (Sylhet) (Ahsan 1992). It occurs in Chittagong Hill Tracts and Sylhet forests (see Smith 1935, *cf.* Chakma 2009)**EOO:** Not known**AOO:** Not known

Population

Generation Time (Length): Not known**Total Population:** Not known**No of Sub-population:** Not known**Trend:** Decreasing

Habitat and Ecology

Draco blanfordii is an arboreal and forest dweller species of mixed evergreen forests. The species is both terrestrial, and diurnal. It inhabits large trees in dense forests and nearby plantations. Highly camouflaging and difficult to trace except when it opens the gular pouch. It glides between trees using wing-like patagial membranes and feeds on ants and other small insects.**Assessor:** Md. Farid Ahsan

Asymblepharus sikkimensis

Species ID: RE0056

**DATA
DEFICIENT
<DD>**

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|-----------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | SCINCIDAE |

Scientific Name: *Asymblepharus sikkimensis* (Blyth, 1864)

English Name: Sikkim Ground Skink, Bronzy-brown Skink

Local Name: Sikkim Anjon

Synonym/s: *Mocoo sikkimensis* Blyth, 1854

Tiliqua schlegelii Günther, 1860

Eumeces schlegelii Günther, 1864

Lygosoma sikkimense Boulenger, 1887

Leiolopisma sikkimense Smith, 1935

Scincella sikkimensis Das, 1996

Asymblepharus sikkimensis Gruber in

Schleich and Kästle, 2002

Taxonomic Notes: Morphological appearance of the species is very similar to Reeve's Ground Skink (*Scincella reevesi*) and Spotted Litter Skink (*Sphenomorphus maculatus*). *Scincella reevesi* reported from Bangladesh and India actually represents as *Sphenomorphus maculatus* (Mahony *et al.* 2009).

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1

Justification: None of the authors (e.g., Khan 1982a, Sarker and Sarker 1988, Khan 2008, Kabir *et al.* 2009, Hasan *et al.* 2014) have cited the occurrence of *Asymblepharus sikkimensis* in Bangladesh but Smith (1935, p 301) mentioned its occurrence in upper Bengal, which is Rangpur of present Bangladesh. Furthermore, this species seems to be a complex one and there is taxonomical debate (see taxonomical notes), so it is necessary to have its confirmation record with voucher specimen. Until this debate is settled, the species may be assessed as Data Deficient.

Date Assessed: 17 November 2014



Asymblepharus sikkimensis

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History

Regional Status: Not assessed (IUCN Bangladesh 2000b)

Geographic Range

Global: This species occurs in Bangladesh (Rangpur), Bhutan, China, India and Nepal (<http://reptile-database.reptarium.cz/species?genus=Scincella&species=reevesii>. Downloaded on 15 October 2015).

Bangladesh: It is reported from Upper Bengal (Smith 1935) which is now Rangpur.

EOO: Not known

AOO: Not known

Population

Generation Time (Length): Not known

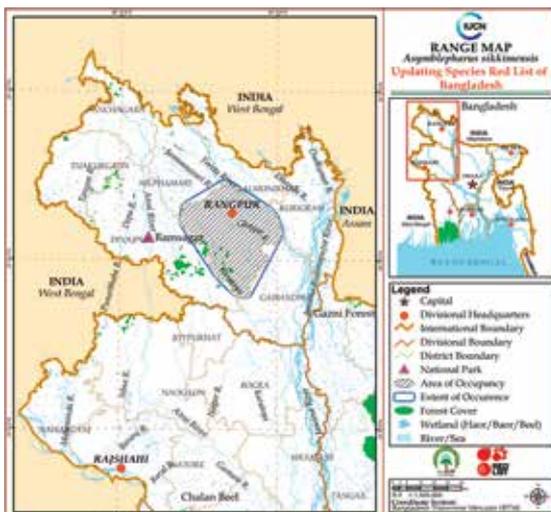
Total Population: Not known

No. of Sub-population: Not known

Trend: Not known

Habitat and Ecology

Asymblepharus sikkimensis inhabits forest litter. Outside Bangladesh it is found mainly in tropical and temperate broad-leaved forests (Das 2002). This species is terrestrial, diurnal and insectivorous (Das 2002). It is oviparous and females lay 3-8 eggs (Smith 1935, Das 2002).



Assessor: Suprio Chakma

DATA
DEFICIENT
<DD>

Python molurus

Species ID: RE0072

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|------------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | PYTHONIDAE |

Scientific Name: *Python molurus* (Linnaeus, 1758)**English Name:** Indian Python, Black-tailed Python, Indian Rock Python, Asian Rock Python, Rock Python**Local Name:** Ajogor, MoyalShap**Synonym/s:** *Coluber molurus* Linnaeus, 1758*Boa ordinata* Schneider, 1801*Boa cineræ* Schneider, 1801*Python tigris* Daudin, 1803*Python tigriscastaneus* Daudin, 1803*Python molurus* Gray, 1842*Python molurus* Boulenger, 1893*Python molurus* Wall, 1921*Python molurus molurus* Stull, 1935*Python molurus pimbura* Deraniyagala, 1945*Python molurus* Kluge, 1993*Python molurus molurus* Barone, 2004*Python molurus* Jacobs *et al.*, 2009**Taxonomic Notes:** Two subspecies are recognized:

Python molurus molurus (Linnaeus, 1758) and *P. m. bivittatus* Kuhl, 1820 and now these two are distinguished as separate species as *P. molurus* (Linnaeus, 1758) and *P. bivittatus* Kuhl, 1820 (Jacobs *et al.* 2009). Another subspecies *Python molurus pimbura* Deraniyagala, 1945 is thought to have stemmed from the alias given in Sri Lanka, however the *pimbura*, or Ceylonese Python is no longer considered a valid subspecies registered as the same animal (Jacobs *et al.* 2009).

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1**Justification:** The species is known to occur in north-west of Bangladesh and possibly also in southwest. As the two subspecies (*P. m. bivittatus* and *P. m. molurus*) has got the rank of species (*P. bivittatus* and *P. molurus*) and we do not*Python molurus*

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know much about the status of *P. molurus* in Bangladesh, so it is assessed as Data Deficient.

Date Assessed: 17 November 2014

History

Regional Status: Endangered (IUCN Bangladesh 2000b).

Geographic Range

Global: The species is known from Bangladesh, Bhutan, India, Myanmar, Pakistan, Nepal, Sri Lanka and Vietnam (<http://reptile-database.reptarium.cz/species?genus=Python&species=molurus>. Downloaded on 12 November 2014).

Bangladesh: It is found in northwest Bangladesh and possibly in the Sundarbans' Mangrove Forest (Khan 1986, 1992, 1996).

EOO: Not known**AOO:** Not known

Population

Generation Time (Length): Not known**Total Population:** Not known**No. of Sub-population:** Not known**Trend:** Decreasing

Habitat and Ecology

It inhabits woodlands, grasslands, swamps, marshes, forests, arid scrub jungles, rainforests and rocky foothills. Sometimes it can be found in abandoned mammal burrows, hollow trees, dense water reeds and mangrove thickets (Whitaker 1978). This species is lethargic and slow moving, exhibits timidity and rarely try to attack even when attacked. It is more nocturnal than diurnal, fond of water and a good swimmer and may remain submerged for long time as well a good tree climber. It is an ambush hunter and kill preys through constrict coiling. Diet consists of small to large mammals (rodents, fruit bats, jackal, civets, deer and wild boar) and also birds (Whitaker 1978). It is oviparous. Females lay up to 100 eggs in March-June (Whitaker 1978) and remained coiled over them for 60 to 80 days (until eggs hatched out) to raise little temperature through muscular contractions to help in incubation (Whitaker and Captain 2004).

Assessor: Md. Farid Ahsan

Eryx conicus

Species ID: RE0074

DATA DEFICIENT
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Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|--------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | BOIDAE |

Scientific Name: *Eryx conicus* (Schneider, 1801)

English Name: Common Sand Boa, Rough-scaled Sand-boa, Rough-tailed Sand boa

Local Name: Balu Bora

Synonym/s: *Boa conica* Schneider, 1801

Erix bengalensis Cuvier, 1837

Eryx conicus Duméril and Bibron, 1844

Gongylophis conicus Boulenger, 1892

Eryx conicus Boulenger, 1893

Eryx conicus Smith, 1943

Gongylophis conicus Tokar, 1995

Eryx conicus Bauer, 1998

Gongylophis conicus McDiarmid *et al.*, 1999

Eryx conicus Schneider, 1801



Eryx conicus

© Md. Farid Ahsan

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1

Justification: The possible distribution of this species is large and it does not meet any criteria of the Threatened Category. But there are only a few records of the species from Bangladesh and not much data is available. So, it has been assessed as Data Deficient.

Date Assessed: 30 April 2015

History

Regional Status: Data Deficient (IUCN Bangladesh 2000b).

Geographic Range

Global: This taxon occurs in Bangladesh (Khan 2015), India, Nepal, Pakistan and Sri Lanka (<http://reptile-database.reptarium.cz/species?genus=Eryx&speies=conicus>. Downloaded on 06 October 2015).

Bangladesh: There are only two confirmed sightings,

Tangail (K.Z. Husain pers. comm. with M.F. Ahsan) and Naogaon (F. Ahmad pers. comm.) of this species. It may also be found in south and eastern part of the country (Ahsan 2009).

EOO: Not known

AOO: Not known

Population

Generation Time (Length): 28.2 years (in captivity) (<http://indiabiodiversity.org/species/show/238860>. Downloaded on 20 September 2015).

Total Population: Not known

No. of Sub-population: Not known

Trend: Not known

Habitat and Ecology

Eryx conicus is generally considered to be present in the arid areas, but it has also been found in luxuriant vegetated areas (Ahsan 2009). This species is mainly nocturnal but also hunts during the day. It feeds on insects, frogs, lizards, snakes, small birds and rodents (Whitaker and Captain 2004). It is ovoviparous and the females produce 6-8 young during May-July (*op. cit.*). In captivity two females gave birth to 16 (8+8) young at Rajshahi suburb in Bangladesh (B.B.Romon pers. comm.)



Assessor: Tania Khan

DATA
DEFICIENT
<DD>

Blythia reticulata

Species ID: RE0119

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|------------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | COLUBRIDAE |

Scientific Name: *Blythia reticulata* (Blyth, 1854)**English Name:** Iridescent Snake, Blyth's Reticulate Snake**Local Name:** Chok-chokey Shap, Blyth-er Chok-chokey Shap

Synonym/s: *Calamaria reticulata* Blyth, 1854
Blythia reticulata Theobald, 1868
Blythia reticulata, Boulenger, 1893
Blythia reticulata Wall, 1908
Aproaspidopa anticursorum Annandale, 1912
Blythia reticulata Smith, 1943
Blythia reticulata Das, 1996

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver. 3.1**Justification:** This species is listed as Data Deficient because not enough information is available on its natural history, population status and distribution.**Date Assessed:** 18 March 2015

History

Regional Status: It was not assessed (IUCN Bangladesh 2000b).

Geographic Range

Global: This species is found in Bangladesh (Rahman *et al.* 2013); China, India and Myanmar (<http://www.reptile-database.reptarium.cz/species?genus=Blythia&species=reticulata>. Downloaded on 01 September 2015).

Bangladesh: This species is recorded from Lawachara National Park (pers. obs.). It is likely to occur in other mixed evergreen forests in the northeast and southeast.

*Blythia reticulata*

© Ashok Captain

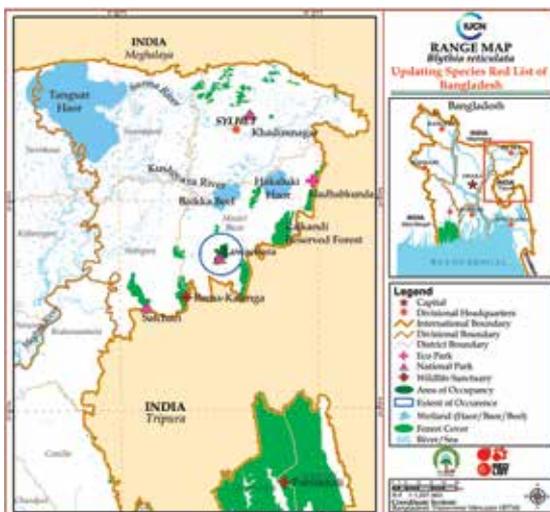
EOO: Not known**AOO:** Not known

Population

Generation Time (Length): Not known**Total Population:** Not known**No. of Sub-population:** Not known**Trend:** Not known

Habitat and Ecology

Blythia reticulata inhabits the mixed evergreen forests. The species is terrestrial, fossorial and nocturnal in habit (Rahman *et al.* 2013), found under logs and decaying vegetation. It eats earthworms and females lay up to 6 eggs (Whitaker and Captain 2004). It has been recorded up to 70 m above mean sea level.

**Assessor:** Shahriar Ceaser Rahman

Dendrelaphis cyanochloris

Species ID: RE0112

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<DD>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|------------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | COLUBRIDAE |

Scientific Name: *Dendrelaphis cyanochloris* (Wall, 1921)**English Name:** Wall's Bronzeback**Local Name:** Jolpai Geso Shap, Jolpai-ronga Bet Anchra**Synonym/s:** *Dendrophis pictus cyanochloris* Wall, 1921*Dendrophis boiga cyanochloris* Meise and

Henning, 1921

Ahaetulla cyanochloris Smith, 1940*Ahaetulla cyanochloris* Smith, 1943*Dendrelaphis cyanochloris* Manthey and

Grossmann, 1997

Dendrelaphis cyanochloris Cox *et al.*, 1998**Taxonomic Notes:** *Dendrelaphis cyanochloris* is oftenconfused with *D. formosus* ([http://](http://reptile-database.reptarium.cz/)reptile-database.reptarium.cz/

species?genus=Dendrelaphis&species=cyanochloris.

Downloaded on 06 September 2015).

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1**Justification:** *Dendrelaphis cyanochloris* has been assessed as Data Deficient in view of its lack of distributional data except one record from Ruma of Bandarban (Hasan *et al.* 2014). It is likely to occur in other areas of Chittagong and Chittagong Hill Tracts where similar habitats are available but this needs to be confirmed.**Date Assessed:** 28 February 2015

History

Regional Status: Not assessed before because it was not in the list of Bangladesh.

Geographic Range

Global: The taxon is reported from Bangladesh,*Dendrelaphis cyanochloris*

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India, Lao PDR, Malaysia, Myanmar and Thailand (<http://reptile-database.reptarium.cz/species?genus=Dendrelaphis&species=cyanochloris>. Downloaded on 06 September 2015); it possibly also occurs in Bhutan (Lenz 2012).**Bangladesh:** It has been reported from Bandarban (Hasan *et al.* 2014).**EOO:** Not known**AOO:** Not known

Population

Generation Time (Length): Not known**Total Population:** Not known**No. of Sub-population:** Not known**Trend:** Not known

Habitat and Ecology

D. cyanochloris inhabits mainly in primary and mature secondary forests, low bushes and trees (Whitaker and Captain 2004, Chakma 2009). This species is diurnal and arboreal; eats frogs, garden lizards, geckos and small birds; can leap from branch to branch and females lay 3-5 elongated eggs (Whitaker and Captain 2004).**Assessor:** Suprio Chakma

DATA
DEFICIENT
<DD>

Elachistodon westermanni

Species ID: RE0135

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|------------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | COLUBRIDAE |

Scientific Name: *Elachistodon westermanni* Reinhardt, 1863**English Name:** Indian Egg-eater, Westermann's Snake, Indian Egg-eating Snake.**Local Name:** Dimkhor Shap

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1**Justification:** Sufficient information is not available to evaluate this species since its occurrence in Rangpur (see Smith 1943). Hence it is categorized as Data Deficient.**Date Assessed:** 28 February 2015

History

Regional Status: Data Deficient (IUCN Bangladesh 2000b).

Geographic Range

Global: The occurrence of this species has been reported from Bangladesh, India and Nepal (Srinivasulu *et al.* 2013); possibly also occurs in Bhutan (Lenz 2012).**Bangladesh:** This species has doubtful occurrence in Bangladesh. There is no record of this species after the holotype was collected from Rangpur (Smith 1943). But a specimen was collected from Rangpur in 1875 on the basis of which the species was established (Khan 1992).**EOO:** Not known**AOO:** Not known

Population

Generation Time (Length): Not known**Total Population:** Not known**No. of Sub-population:** Not known**Trend:** Not known*Elachistodon westermanni*

© Parag Dandge

Habitat and Ecology

Elachistodon westermanni is terrestrial and semi-arboreal; inhabits both dry and moist broadleaf forests, hilly areas and also recorded from urban areas (Tikadar 1983, Srinivasulu *et al.* 2013). It is also known to occur in dry thorny scrub land and deciduous forest (R. Vyas pers. comm. February 2011 in Srinivasulu *et al.* 2013). No information is available on its habit and habitat in Bangladesh. In other parts of its range it is gentle and inoffensive, feeds mainly on bird eggs and frogs (Tikadar 1983). It is a diurnal species (Srinivasulu *et al.* 2013).**Assessor:** Md. Kamrul Hasan

Liopeltis calamaria

Species ID: RE0111

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Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|------------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | COLUBRIDAE |

Scientific Name: *Liopeltis calamaria* (Gunther, 1858)
English Name: Lesser Stripe-necked Snake, Calamaria Reed Snake, Reed-Like Stripe-Necked Snake

Local Name: Choto Daghi-gola Shap

Synonym/s: *Cyclophis calamaria* Günther, 1858

Cyclophis calamaria Günther, 1858

Ablabes calamaria Boulenger, 1890

Liopeltis calamaria Wall, 1921

Liopeltis calamaria Smith, 1943

Liopeltis calamaria Das, 1996

Liopeltis calamaria Karunarathna and

Amarasinghe, 2011

Taxonomic Notes: The Asian genera *Liopeltis* Fitzinger, 1843 and *Gongylosoma* Fitzinger, 1843 as recognized at start of 2013 have had a chequered taxonomic history, as outlined by Leviton (1964) for *Liopeltis* and Grismer *et al.* (2003) for *Gongylosoma*

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1

Justification: There is only one report of its presence in the mixed evergreen forests of Bangladesh (Khan 1982a), which means the forests of Sylhet and Chittagong revenue Divisions. There is no other information on it. So, it is assessed as Data Deficient.

Date Assessed: 26 February 2015

History

Regional Status: Data Deficient (IUCN Bangladesh 2000b)

Geographic Range

Global: The species occurs in Bangladesh, India, Sri Lanka (Smith 1943, Khan 1982a, <http://en.wikipedia.org/Liopeltis>,



Liopeltis calamaria

© Pradeep Kulkarni

calamaria. Downloaded on 22 June 2015);and possibly also occurs in Bhutan (Lenz 2012).

Bangladesh: It is rare in the mixed evergreen forests (Khan 1982a).

EOO: Not known

AOO: Not known

Population

Generation Time (Length): Not known

Total Population: Not known

No. of Sub-population: Not known

Trend: Not known

Habitat and Ecology

Liopeltis calamaria is a diurnal, forest-dwelling species and possibly terrestrial.



Assessor: Mohammad Abdul Wahed Chowdhury

DATA
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Oligodon arnensis

Species ID: RE0088

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|------------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | COLUBRIDAE |

Scientific Name: *Oligodon arnensis* (Shaw, 1802)

English Name: Banded Kukri, Common Kukri Shap, Yellow-speckled Wolf Snake,

Local Name: Gharginni Shap

Synonym/s: *Coluber arnensis* Shaw, 1802

Coluber russelii Daudin, 1803

Coronella russelii Schlegel, 1837

Simotes russelii Duméril *et al.*, 1854

Simotes albiventer Günther, 1864

Simotes russelii Jan, 1865

Simotes arnensis Boulenger, 1890

Simotes arnensis Wall, 1908

Oligodon arnensis Smith, 1943

Oligodon arnensis Wallach *et al.*, 2014

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1

Justification: Smith (1943) mentioned its range of occurrence up to Bengal (Kaliganj of Rangpur district of present Bangladesh). Khan (1992) mentioned it to be present in the north Bengal, Greater Mymensingh and Sylhet Districts. Rashid (1982) collected the first specimen of it from Sylhet. The species occurs in mixed evergreen forests of northeast Bangladesh (IUCN Bangladesh 2000, Kamruzzaman 2009, Hasan *et al.* 2014). Considering the above information it is assessed as Data Deficient.

Date Assessed: 23 December 2014

History

Regional Status: Data Deficient (IUCN Bangladesh 2000b).



Oligodon arnensis

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Geographic Range

Global: The taxon is reported from Bangladesh (Khan 1982, Hasan *et al.* 2014), Bhutan, India, Nepal, Pakistan and Sri Lanka (<http://reptile-database.reptarium.cz/species?genus=Oligodon&species=arnensis>. Downloaded on 05 September 2015).

Bangladesh: It is possibly occurs in Rangpur, Mymensingh, definitely in Sylhet (Rashid 1982) and northern mixed evergreen forests (Khan 1982a, Hasan *et al.* 2014).

EOO: Not known

AOO: Not known

Population

Generation Time (Length): Not known

Total Population: Not known

No. of Sub-population: Not known

Trend: Not known

Habitat and Ecology

Habitat of *Oligodon arnensis* includes variety of forests including rainforest, dry, mixed and moist deciduous forests, scrub forests, agricultural lands, etc. It is found in dense vegetation having loose roots, loose soil, garden, rocky terrain, etc. (Sharma *et al.* 2014); termite mounds, caves, crevices, tree holes and old houses (Whitaker and Captain 2004). The species is nocturnal and crepuscular in habit (Whitaker and Captain 2004) although most activities occur during day (Das 2002). Young of the species eat insects and their larvae, spiders and gekko eggs; adults feed on reptile eggs, geckos, skinks and small mice; clutches comprise 3-9 eggs (Whitaker and Captain 2004).

Assessor: Suprio Chakma



Oligodon taeniolatus

Species ID: RE0086

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Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|------------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | COLUBRIDAE |

Scientific Name: *Oligodon taeniolatus* (Jerdon, 1853)**English Name:** Streaked Kukri Snake, Russell's Kukri Snake, Loos Snake**Local Name:** Russel-er Kukri Shap**Synonym/s:** *Coronella taeniolata* Jerdon, 1853*Oligodon subgriseus* Günther, 1864*Oligodon subgriseus* Wall, 1905*Oligodon elliotii* Wall, 1909*Oligodon taeniolatus* Smith, 1943*Oligodon taeniolatus* Wallach *et al.*, 2014

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1**Justification:** The species is uncommon but widely distributed (Khan 2004, Hasan *et al.* 2014). Only one specimen was collected from Adampur of Moulavibazar (Mahony *et al.* 2009). However, no specimen is documented from Lawachara National Park (Rahman *et al.* 2013). The information is insufficient, so the species is assessed as Data Deficient.**Date Assessed:** 17 December 2014

History

Regional Status: Vulnerable (IUCN Bangladesh 2000b).

Geographic Range

Global: The taxon is reported from Afghanistan, India, Iran, Nepal, Pakistan, Sri Lanka, Turkmenistan (Papenfuss *et al.* 2010, <http://reptile-database.reptarium.cz/species?genus=Oligodon&species=taeniolatus>. Downloaded on 05 September 2015).**Bangladesh:** Khan (1992) conjectured it to be present in Bangladesh that was only confirmed by a specimen*Oligodon taeniolatus*

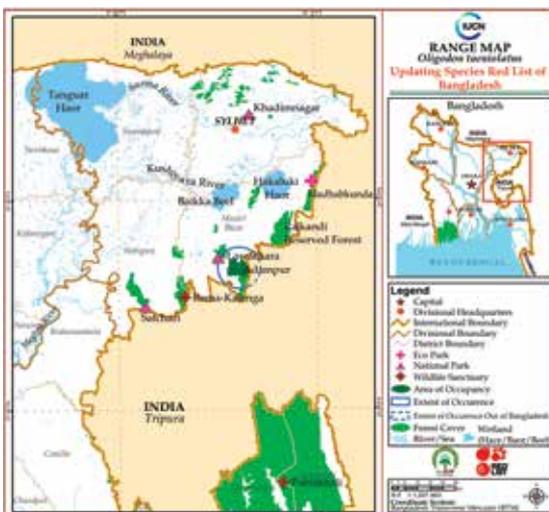
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collection from Adampur of Kamalgonj Upazila of Moulvibazar District (Mahony *et al.* 2009).**EOO:** Not known**AOO:** Not known

Population

Generation Time (Length): Not known**Total Population:** Not known**No. of Sub-population:** Not known**Trend:** Not known

Habitat and Ecology

Oligodon taeniolatus occurs in both forests and open landscapes, in bushes with few sporadic trees including agricultural lands (Das 2002). This species is both diurnal and nocturnal but more active during dusk (Whitaker and Captain 2004). Young individuals feed on insects, grubs and spiders (*op. cit.*), adults eat eggs of reptiles, lizards and frogs (Das 2002). Females lay 3-9 eggs in late June (Das 2002).**Assessor:** Suprio Chakma

DATA
DEFICIENT
<DD>

Oreocryptophis porphyraceus

Species ID: RE0105

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|------------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | COLUBRIDAE |

Scientific Name: *Oreocryptophis porphyraceus* (Cantor, 1839)

English Name: Bamboo Trinket Snake, Red Bamboo Snake, Black-banded Trinket Snake

Local Name: Rangila Arbila

Synonym/s: *Coluber porphyraceus* Cantor, 1839
Coluber porphyraceus Anderson, 1871
Alabes porphyraceus Boulenger, 1890
Coluber porphyraceus Boulenger, 1894
Coluber porphyraceus Wall, 1908
Elaphe porphyracea Van Denburgh, 1909
Elaphe porphyracea Schulz, 1996
Elaphe porphyracea Manthey and Grossmann, 1997
Oreophis porphyraceus Utiger *et al.*, 2002
Oreophis porphyraceus David *et al.*, 2004
Oreocryptophis porphyraceus Utiger *et al.*, 2005 (nom. nov.)
Oreophis porphyraceus Mattison, 2007
Oreocryptophis porphyraceus Ziegler *et al.*, 2007

Taxonomic Notes: Of the eight subspecies, possibly *O. porphyraceus porphyraceus* (Cantor, 1839) occurs in Bangladesh.

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1

Justification: Only one road killed specimen of *Oreocryptophis porphyraceus* was found in Lawachara National Park (Rahman *et al.* 2013) and no other information is available of this species from Bangladesh. So it has been assessed as Data Deficient.

Date Assessed: 18 March 2015



Oreocryptophis porphyraceus

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History

Regional Status: It was not assessed (IUCN Bangladesh 2000b).

Geographic Range

Global: It is known to occur in Bangladesh (Rahman *et al.* 2013), Bhutan, Cambodia ?, China, Hong Kong, India, Indonesia, Lao PDR, Malaysia, Myanmar, Nepal, Singapore, Taiwan, Thailand, Tibet and Vietnam (<http://reptile-database.reptarium.cz/species?genus=Oreocryptophis&species=porphyraceus>). Downloaded on 03 September 2015).

Bangladesh: There is only one record of a road-killed specimen found in Lawachara National Park (Rahman *et al.* 2013). This species is likely to occur in the mixed evergreen forests of northeast and southeast of the country.

EOO: Not known

AOO: Not known

Population

Generation Time (Length): Not known

Total Population: Not known

No. of Sub-population: Not known

Trend: Not known

Habitat and Ecology

O. porphyraceus inhabits mixed evergreen forests (Rahman *et al.* 2013) and mid-hills to montane forests with low vegetation (Das 2010). This species is subfossorial (Das 2010), often found under logs and rocks (Rahman *et al.* 2013). It is diurnal and arboreal, eats small mammals like voles and shrews, females lay 2-5 eggs and incubation period is 50-60 days (Das 2010).

Assessor: Shahriar Ceaser Rahman



Sibynophis sagittarius

Species ID: RE0091

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Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|------------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | COLUBRIDAE |

Scientific Name: *Sibynophis sagittarius* (Cantor, 1839)
English Name: Cantor's Black-headed Snake
Local Name: Kalomatha Shap, Cantorer Kalomatha Shap
Synonym/s: *Calamaria sagittaria* Cantor, 1839
Enicognathus grayi Jan, 1866
Enicognathus braconnieri Jan, 1866
Polyodontophis sagittarius Boulenger, 1890
Sibynophis sagittarius Smith, 1943

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1
Justification: The species has only one confirmed record from Rajshahi University campus, Rajshahi (Khan 1982a). Its potential habitats have not been surveyed properly, so the actual status and distribution of the species is not known. Therefore, the species has been categorized as Data Deficient.

Date Assessed: 14 December 2014

History

Regional Status: Data Deficient (IUCN Bangladesh 2000b)

Geographic Range

Global: The species is known to occur in Bangladesh, Bhutan, India, Malaysia, Myanmar and Thailand (<http://retilite-database.reptarium.cz/species?genus=Sibynophis&species=sagittarius>). Downloaded on 15 November 2014).

Bangladesh: It is known to occur only from Rajshahi (Khan 1982a), but might occur across the entire northwestern region of Bangladesh (Hasan *et al.* 2014).

EOO: Not known

AOO: Not known



Sibynophis sagittarius

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Population

Generation Time (Length): Not known

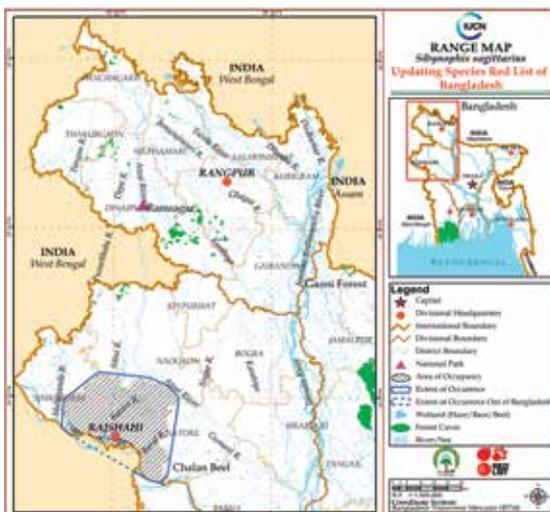
Total Population: Not known

No. of Sub-population: Not known

Trend: Not known

Habitat and Ecology

It inhabits forests (Das 2002), prefers dry areas. Although in the Bangladesh context, this does not seem to be true as the lone collected specimen came from moist area of a pond bank covered with dry and decaying waterhyacinth (Khan 1992). The species is terrestrial. Not much information is available on its habit. It feeds on skinks, frogs, insects and smaller snakes (Das 2002). The female lays up to 6 eggs in a clutch (*op. cit.*) It is diurnal and terrestrial.



Assessor: M. Monirul H. Khan

Sibynophis subpunctatus

Species ID: RE0090

**DATA
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<DD>**

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|------------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | COLUBRIDAE |

Scientific Name: *Sibynophis subpunctatus* (Duméril *et al.* 1854)

English Name: Duméril's Black-headed Snake, Jerdon's Many-toothed Snake

Local Name: Kalomatha Dhora Shap, Bohudonti Shap

Synonym/s: *Oligodon subpunctatus* Duméril and Bibron, 1854
Polyodontophis subpunctatus Boulenger, 1890
Sibynophis subpunctatus Schmidt, 1926

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1

Justification: The species is expected to occur in Bangladesh (although Whitaker and Captain [2004] have mentioned its distribution); particularly in the northeast and/or southeast. There is one record from southwest of the country (Khan 2008). Therefore, the species has been categorized as Data Deficient.

Date Assessed: 14 December 2014

History

Regional Status: Data Deficient (IUCN Bangladesh 2000b).

Geographic Range

Global: This species is known to occur in Bangladesh, India, Myanmar Nepal and Sri Lanka (Whitaker and Captain 2004). There is no confirmed record of this species from Bangladesh.

Bangladesh: It has one report from southwest of the country (Khan 2008) but it may be found in the forests of northeast and southeast (Hasan *et al.* 2014).

EOO: Not known

AOO: Not known



Sibynophis subpunctatus

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Population

Generation Time (Length): Not known

Total Population: Not known

No. of Sub-population: Not known

Trend: Not known

Habitat and Ecology

It inhabits forests, both hills and plains (Das 2002). The taxon is terrestrial and forages in leaf litter, and under stones and logs to hunt gecko, lizards, skinks, small snakes and insects (Das 2002, Whitaker and Captain 2004). It is oviparous and females lay 2-6 eggs in a clutch (*op. cit.*). It is both diurnal and nocturnal (Whitaker and Captain 2004).



Assessor: M. Monirul H. Khan

Amphiesma platyceps

Species ID: RE0093

DATA DEFICIENT
 <DD>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|------------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | NATRICIDAE |

Scientific Name: *Amphiesma platyceps* (Blyth, 1854)

English Name: Himalayan Mountain Keelback

Local Name: Himalayer Dhora Shap

Synonym/s: *Tropidonotus platyceps* Blyth, 1854

Zamenis himalayanus Steindachner, 1867

Tropidonotus himalayanus Anderson, 1871

Tropidonotus platyceps Boulenger, 1893

Tropidonotus firthi Wall, 1914

Rhabdophis platyceps Wall, 1923

Natrix platyceps Shaw et al., 1939

Natrix platyceps Smith, 1943

Amphiesma platyceps Malnate, 1960

Amphiesma platyceps Das, 1996

Herpetoreas platyceps Guo et al., 2014

Amphiesma platyceps Wallach et al., 2014

Taxonomic Notes: Guo et al. (2014) have split the taxon *Amphiesma* into three genera: *Amphiesma*, *Hebius* and *Herpetoreas*, and also recognized *A. platyceps* as *Herpetoreas platyceps*.

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1

Justification: The species is very rare and little information available on the occurrence and distribution in Bangladesh. Therefore, it is assessed as Data Deficient.

Date Assessed: 01 March 2015

History

Regional Status: It is not assessed (IUCN Bangladesh in 2000b).

Geographic Range

Global: The species is reported from Bangladesh,



Amphiesma platyceps

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Bhutan, China, India, Myanmar, Nepal and Pakistan (<http://reptile-database.reptarium.cz/species?genus=Herpetoreas&species=platyceps>. Downloaded on 04 March 2015).

Bangladesh: It is likely to occur in the northwest and northern parts of the country (Khan 2008).

EOO: Not known

AOO: Not known

Population

Generation Time (Length): Not known

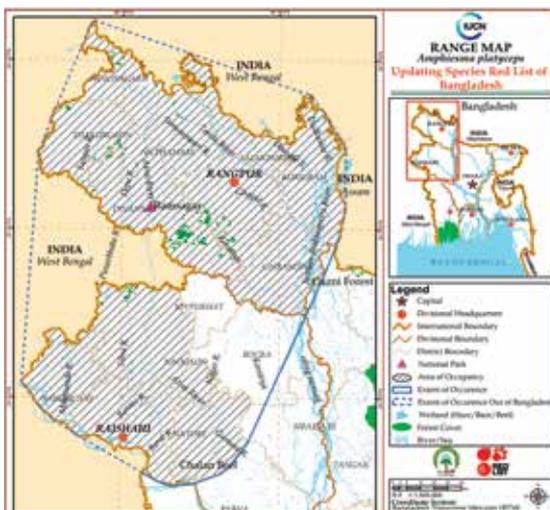
Total Population: Not known

No. of Sub-population: Not known

Trend: Presumably declining

Habitat and Ecology

It prefers hilly areas, forest edges, unlogged forests, agricultural fields and proximity of the human settlement (Das 2002). It feeds on fishes, frogs, skinks, snakes and their eggs and also on small mammals (Das 2002, Whitaker and Captain 2004, Chakma 2009). The species is oviparous, females lay 2 eggs (Das 2002).



Assessor: Farzana Islam

DATA
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<DD>

Hebius xenura

Species ID: RE0094

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|------------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | NATRICIDAE |

Scientific Name: *Hebius xenura* (Wall, 1907)**English Name:** Wall's Keelback, Cherrapunji Keelback**Local Name:** Cherrapunjir Dhora Shap, Pahari Maity Shap**Synonym/s:** *Tropidonotus xenura* Wall, 1907*Natrix xenurus* Wall, 1923*Natrix xenura* Smith, 1943*Paranatrix xenura* Mahendra, 1984*Amphiesma xenura* Das, 1996*Amphiesma xenura* David *et al.*, 2007*Hebius xenura* Guo *et al.*, 2014**Taxonomic Notes:** Guo *et al.* (2014) have split the taxon *Amphiesma* into three genera: *Amphiesma*, *Hebius* and *Herpetoreas*, and recognized *A. xenura* as *Hebius xenura*.

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1**Justification:** As the species is rare, recorded only from the mixed evergreen forests of the northeast and southeast region of the country (Chakma 2009, Hasan *et al.* 2014) and lacks information on its population status, breeding and feeding behavior, the species is listed as Data Deficient.**Date Assessed:** 19 March 2014

History

Regional Status: This taxon is not assessed by IUCN Bangladesh 2000b.

Geographic Range

Global: The species occurs in Bangladesh, India and Myanmar (Chakma 2009, <http://reptile-database.reptarium.cz/species?genus=Hebius&species=xenura>. Downloaded on 15 March 2015).*Hebius xenura*

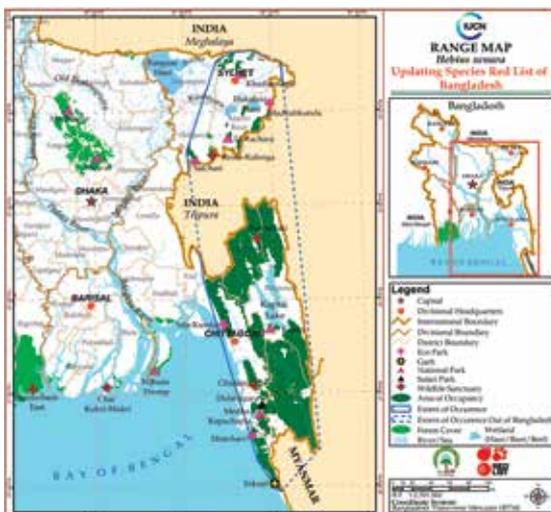
© Tania Khan

Bangladesh: The taxon is rarely found and recorded only from the mixed evergreen forests of the northeast and southeast region of the country (Chakma 2009, Hasan *et al.* 2014).**EOO:** Not known**AOO:** Not known

Population

Generation Time (Length): Not known**Total Population:** Not known**No. of Sub-population:** Not known**Trend:** Presumably declining

Habitat and Ecology

It is a forest dwelling species and prefers vicinity of creeks and streams (Chakma 2009, Das 2010, Hasan *et al.* 2014). Very little information is available on its diet and breeding behavior. It probably feeds on small frogs and skinks. It is known to be oviparous (Chakma 2009, Hasan *et al.*, 2014). It is diurnal in habit.**Assessor:** Farzana Islam

Xenochrophis flavipunctatus

Species ID: RE0099

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Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|------------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | NATRICIDAE |

Scientific Name: *Xenochrophis flavipunctatus*
(Hallowell, 1860)

English Name: Yellow-spotted Keelback, Yellow-spotted Keelback Water Snake

Local Name: Holdey-chiti Dhora Shap

Synonym/s: *Amphiesma flavipunctatum* Hallowell, 1860
Natrix piscator flavipunctata Smith, 1943
Xenochrophis flavipunctatus Manthey and Grossmann, 1997
Xenochrophis flavipunctatus Pauwels *et al.*, 2000
Xenochrophis flavipunctatus Vogel and David, 2006

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1

Justification: This species has recently been reported from a single site in Bandarban (Hasan *et al.* 2014). Sufficient information is not available to assess this species. Thus, it is recorded as Data Deficient.

Date Assessed: 22 January 2015

History

Regional Status: It is not assessed (IUCN Bangladesh in 2000b).

Geographic Range

Global: This species has been reported from Bangladesh, Cambodia, China, Hong Kong, India, Indonesia, LaoPDR, Malaysia, Myanmar, Taiwan, Thailand and Vietnam (Stuart *et al.* 2012, <http://reptile-database.reptarium.cz/species?genus=Xenochrophis&species=flavipunctatus>. Downloaded on 12 January 2015); possibly also occurs in Bhutan (Lenz 2012).



Amphiesma platyceps

© W.Wüster

Bangladesh: Recorded only from a single site from Matamuhuri, Bandarban in 2012 by Sharhiar Caesar Rahman (Hasan *et al.* 2014). It may occur in other mixed evergreen forests in the southeast part of the country.

EOO: Not known

AOO: Not known

Population

Generation Time (Length): Not known

Total Population: Not known

No. of Sub-population: Not known

Trend: Not known

Habitat and Ecology

It inhabits marshy areas, streams and creeks in other parts of its range (Das 2002), terrestrial, freshwater, semi-aquatic species occurs in slow rivers and streams, marshes, swamps, flooded rice fields, ponds, lakes, and ditches (Stuart *et al.* 2012). It is diurnal and active at dusk (<http://reptile-database.reptarium.cz/species?genus=Xenochrophis&species=flavipunctatus>. Downloaded on 12 January 2015). It feeds on fish and frogs (Stuart *et al.* 2012).



Assessor: Md. Kamrul Hasan

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Pseudoxenodon macrops

Species ID: RE0175

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|--------------------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | PSEUDOXENODONTIDAE |

Scientific Name: *Pseudoxenodon macrops* (Blyth, 1854)**English Name:** False Cobra, Large-eyed False Cobra, Large-eyed Bamboo Snake, Big-eyed Bamboo Snake, Mock Cobra.**Local Name:** False Gokhra, Micha Gokhra, Barochokhi Pahabri Shap

Synonym/s: *Tropidonotus macrops* Blyth, 1854
Xenodon macrophthalmus Günther, 1858
Tropidonotus sikkimensis Anderson, 1871
Tropidonotus macrophthalmus Anderson, 1871
Pseudoxenodon macrops Boulenger, 1893
Tropidonotus macrops Wall, 1908
Pseudoxenodon macrops Smith, 1943

Taxonomic Notes: Three subspecies are recognized: *Pseudoxenodon m. macrops* (Blyth, 1854), *P. m. sinensis* (Boulenger, 1904) and *P. m. fukiensis* Pope, 1928 (<http://reptiles-databas.reptarium.cz/species?genus=Pseudoxenodon&species=macrops>. Downloaded on 08 September 2015), of which the first one probably occurs in Bangladesh (M.F. Ahsan pers. comm.).

Assessment Information

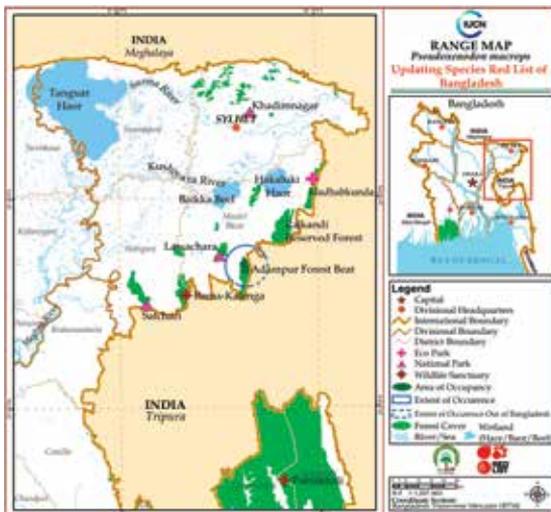
Red List Category & Criteria: Data Deficient (DD) ver 3.1

Justification: *Pseudoxenodon macrops* has recently been recorded near a stream at Adampur Forest Beat of Rajkandi Reserve Forest in Moulvibazar District and no other information is available about this species in Bangladesh. It is the only observation so far; therefore, it has been assessed as Data Deficient.

Date Assessed: 30 April 2015

History

Regional Status: It is not assessed (IUCN Bangladesh 2000b).

*Pseudoxenodon macrops*

© Tania Khan

Geographic Range

Global: It is known to occur in Bangladesh (pers. obs.), China, India, Lao PDR, Malaysia, Myanmar, Nepal, Thailand and Vietnam (Wogan *et al.* 2012).

Bangladesh: It is recorded from Adampur Forest Beat area (Rajkandi Reserved Forest) of Moulvibazar District.

EOO: Not known**AOO:** Not known

Population

Generation Time (Length): Not known**Total Population:** Not known**No. of Sub-population:** Not known**Trend:** Not known

Habitat and Ecology

Pseudoxenodon macrops inhabits mixed evergreen forests and often found near forest streams. This species is diurnal and mostly terrestrial (Whitaker and Captain 2004). When alarmed, it flattens neck and raises its head frequently to display a hood, which looks like that of a cobra (*op. cit.*). Diets include mostly frogs but also eat lizards, geckos and shrews (Whitaker and Captain 2004, Das 2010), the taxon is oviparous and females lay 6-10 eggs (Whitaker and Captain 2004).

Assessor: Tania Khan

Calliophis melanurus

Species ID: RE0141

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Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|----------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | ELAPIDAE |

Scientific Name: *Calliophis melanurus* (Shaw, 1802)
English Name: Slender Coral Snake, Indian Coral Snake
Local Name: Soru Probal Shap
Synonym/s: *Coluber melanurus* Shaw, 1802
Vipera trimaculata Daudin, 1803
Calliophis trimaculatus Boulenger, 1896
Calliohis trimaculatus Wall, 1906
Calliohis melanurus Smith, 1943
Calliophis melanurus Welch, 1994
Hemibungarus melanurus Schleich and Kästle, 2000
Calliophis melanurus Slowinski *et al.*, 2001
Calliohis melanurus Smith *et al.*, 2012

Taxonomic Notes: Two subspecies are recognized: *C. m. melanurus* (Shaw, 1802) and *C. m. sinhaleyus* Deraniyagala, 1951.

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1

Justification: The species has just a few confirmed records to be assessed under any Threatened Category, so it has been evaluated as Data Deficient.

Date Assessed: 18 March 2015

History

Regional Status: Data Deficient (IUCN Bangladesh 2000b).

Geographic Range

Global: The species occurs in Bangladesh, India and Sri Lanka (<http://reptile-database.com>. Downloaded on 04 March 2015); possibly also in Bhutan (Lenz 2012).

Bangladesh: It is found in mixed evergreen forests of northeast and southeast (Hasan *et al.* 2014), mixed



Calliophis melanurus

© Indraneil Das

evergreen forests of Chittagong (Khan 2015) and Srimongal (M RKhanPers. comm. in Khan 2015).

EOO: Not known

AOO: Not known

Population

Generation Time (Length): Not known

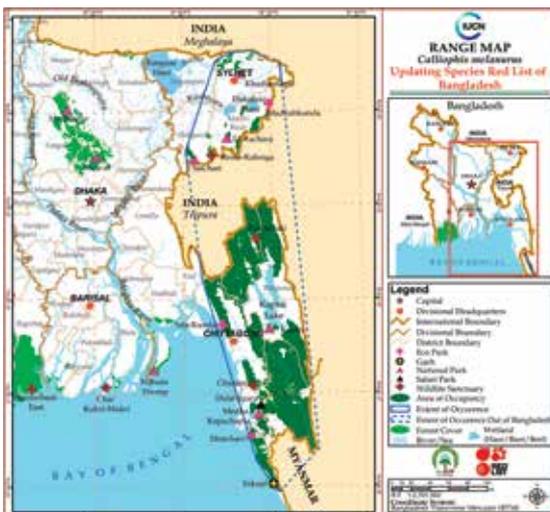
Total Population: Not known

No. of Sub-population: Not known

Trend: Not known

Habitat and Ecology

Calliophis melanurus inhabits under leaf litter and logs in plain land and hills in wild; burrows under sand in captivity (Whitaker and Captain 2004). It is sluggish during day (Chakma 2009). It raises and coils the tail when disturbed. It is oviparous (Smith 1943) and females lay 2-6 eggs (Whitaker and Captain 2004).



Assessor: Md. Mizanur Rahman

Hydrophis cantoris

Species ID: RE0155

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Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|----------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | ELAPIDAE |

Scientific Name: *Hydrophis cantoris* Gunther, 1864

English Name: Gunther's Sea Snake, Cantor's Narrow-headed Sea Snake, Small-headed Sea Snake

Local Name: Cantorer Shoru-matha Samudrik Shap, Cantorer Lathi Shap, Choto-matha Shap

Synonym/s: *Hydrophis cantoris* Günther, 1864
Hydrophis cantoris Anderson, 1871
Distira gillespieae Boulenger, 1899
Distira gillespieae Wall, 1905
Microcephalophis cantoris Wall, 1921
Microcephalophis cantoris Smith, 1943
Microcephalophis cantoris Corkill and Cochrane, 1966
Microcephalophis cantoris Das, 1996
Hydrophis cantoris Leviton *et al.*, 2003
Hydrophis (Microcephalophis) cantoris Kharin, 2004
Hydrophiscantoris David *et al.*, 2004

Taxonomic Notes: This species is sometimes placed under the genus *Microcephalophis*

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1

Justification : Occurrence of this species is confirmed from Sundarbans and Chittagong marine waters of the Bay of Bengal (Smith 1926, 1943; Khan 1992) but no other information is available from the country, so, it has been assessed as Data Deficient.

Date Assessed: 18 February 2015

History

Regional Status: Not evaluated (IUCN Bangladesh 2000b).

Geographic Range

Global: It is found in Bangladesh, India, Malaysia, Myanmar, Pakistan, Sri Lanka and Thailand (Heatwole 1999, Rasmussen *et al.* 2010).

Bangladesh: It is found in the Sundarbans and coastal waters of the Bay of Bengal (Smith 1926, 1943; Khan 1992).

EOO: Not known

AOO: Not known

Population

Generation Time (Length): Not known

Total Population: Not known

No. of Sub-population: Not known

Trend: Not known

Habitat and Ecology

Hydrophis cantoris inhabits shallow coastal waters over soft bottom substrates (Leviton *et al.* 2003). The female is larger than the male (Heatwole 1999), ovoviviparous and the clutch size comprise 6-10 (Heatwole 1999, Das 2010). It feeds on eel and marine invertebrates (Das 2010). It is active both by day and night.



Assessor: Md. Abdur Razzaque Sarker

Hydrophis lapemoides

Species ID: RE0174

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Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|----------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | ELAPIDAE |

Scientific Name: *Hydrophis lapemoides* (Gray, 1849)

English Name: Arabian Gulf Sea Snake, Persian Gulf Sea Snake

Local Name: Not known

Synonym/s: *Aturia lapemoides* Gray, 1849

Hydrophis lapemoides Günther, 1864

Hydrophis holdsworthii Günther, 1872

Hydrophis stewartii Anderson, 1872

Hydrophis dayanus Stoliczka 1872 (fide Boulenger, 1890)

Distira lapemoides Werner, 1895

Distira lapemoides Wall, 1909

Hydrophis lapemoides Smith, 1943

Aturia lapemoides Welch, 1994

Chitulia lapemoides Kharin and Dotsenko, 2012

Hydrophis lapemoides Sanders *et al.*, 2012

Chitulia (Chitulia) lapemoides Kharin, 2012

Chitulia lapemoides Wallach *et al.*, 2014



Hydrophis lapemoides

© Aaron Savio Lobo

Geographic Range

Global: This species is reported from Bahrain, Bangladesh, India, Iran, Iraq, Kuwait, Malaysia, Myanmar, Oman, Pakistan, Qatar, Saudi Arabia, Singapore, Sri Lanka, Thailand, United Arab Emirates (Smith 1926, Rasmussen 1993, Rasmussen *et al.* 2010, <http://reptile-database.reptarium.cz/species?genus=Hydrophis&species=lapemoides>. Downloaded on 28 January 2015, Wallach *et al.* 2014).

Bangladesh: This species is not known from Bangladesh, but probably occurs in the coastal waters (e.g., Sundarbans, Chittagong, Cox's Bazar and St. Martin's Island) of Bay of Bengal. Nearest place that it is reported from is Puri, Odisha, India. (Smith 1926, Rasmussen 1993, Wallach *et al.* 2014.) Its occurrence in Bangladesh has been assumed (Rasmussen 1993, Rasmussen *et al.* 2010).

EOO: Not known

AOO: Not known

Population

Generation Time (Length): Not known

Total Population: Not known

No. of Sub-population: Not known

Trend: Not known

Habitat and Ecology

Hydrophis lapemoides is a marine species, inhabiting Open Ocean with gravel substrate and near coastal harbor (Rasmussen 1993). It mainly feeds on fish and females bear 2-4 embryos during September to November (Rasmussen 1993).

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1

Justification: It is reported from Puri, Odisha near the Bay of Bengal that indicates its occurrence in the coast and the Bay of Bengal of Bangladesh but needs further confirmation (Rasmussen 1993). Thus, this specie is listed as Data Deficient.

Date Assessed: 26 April 2015

History

Regional Status: Not evaluated (IUCN Bangladesh 2000b).



Assessor: Md. Abdur Razzaque Sarker

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Hydrophis stricticollis

Species ID: RE0157

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|----------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | ELAPIDAE |

Scientific Name: *Hydrophis stricticollis* Günther, 1864**English Name:** Collared Sea Snake, Bengal Sea Snake**Local Name:** Not Known**Synonym/s:** *Hydrophis stricticollis* Günther, 1864*Hydrophis obscurus* Boulenger, 1896*Hydrophis stricticollis* Smith, 1943*Aturia stricticollis* Welch, 1994*Hydrophis stricticollis* Leviton *et al.*, 2003*Chitulia stricticollis* Kharin, 2005*Chitulia stricticollis* Kharin and Dotsenko, 2012*Hydrophis stricticollis* Sanders *et al.*, 2012**Taxonomic Notes:** This species has also been treated under the genus *Chitulia*.

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1**Justification:** There is lone information about the occurrence of this species in the Bay of Bengal part within the Chittagong (A. Rasmussen pers. comm. 2009 in Rasmussen and Lobo 2010). No other report on this species from Bangladesh is available, so, it is assessed as Data Deficient.**Date Assessed:** 18 March 2015

History

Regional Status: Not assessed (IUCN Bangladesh 2000b).

Geographic Range

Global: The species is reported from Bangladesh, India, Myanmar and Sri Lanka (Rasmussen and Lobo 2010).**Bangladesh:** The species is quite common in Chittagong (Bangladesh) and about 50 specimens were captured in

two bag nets in 1991 (A. Rasmussen pers. comm. 2009 in Rasmussen and Lobo 2010).

EOO: Not known**AOO:** Not known

Population

Generation Time (Length): Not known**Total Population:** There is very little population information for this species there is single record of capture of approximately 50 specimens from two bag nets in 1991 in the Chittagong region (A. Rasmussen pers. comm. 2009 in Rasmussen and Lobo 2010). However, none has recorded it since then.**No. of Sub-population:** Not known**Trend:** Not known

Habitat and Ecology

Little is known about the habitat preference of *Hydrophis stricticollis*. It is recorded from soft muddy bottoms in turbid waters (A. Rasmussen pers. comm. 2009 in Rasmussen and Lobo 2010). It spends most of its time in near-shore waters but may venture up to 50 km in the open sea or into rivers it feeds entirely on fish (Rasmussen and Lobo 2010). Its active period is not known.**Assessor:** Selina Sultana**Associate Assessor/s:** Ashis Kumar Datta and Mohammed Noman

Sinomicrurus macclellandi

Species ID: RE0142

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Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|----------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | ELAPIDAE |

Scientific Name: *Sinomicrurus macclellandi* (Reinhardt, 1844)**English Name:** Macclelland's Coral Snake**Local Name:** Probal Shap**Synonym/s:** *Elaps macclellandii* Reinhardt, 1844*Elaps personatus* Blyth, 1855*Callophis annularis* Günther, 1864*Calliophis macclellandii* Stejneger, 1907*Micrurus macclellandii* Welch, 1994*Calliophis macclellandi* Cox *et al.*, 1998*Sinomicrurus macclellandi* Slowinski *et al.*, 2001*Hemibungarus macclellandii* Orlov *et al.*, 2003*Sinomicrurus macclellandi* Ziegler *et al.*, 2007**Taxonomic Notes:** Four subspecies are recognized: (1) *S. m. macclellandi* (Reinhardt, 1844); (2) *S. m. jawasakii* (Maki, 1935); (3) *S. m. swinhoi* Van Denburgh, 1912, and (4) *S. m. univirgatus* (Günther, 1858).

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1**Justification:** The species has a few confirmed records to be assessed under any Threatened Category, so it has been evaluated as Data Deficient.**Date Assessed:** 18 March 2015

History

Regional Status: Not evaluated (IUCN Bangladesh 2000b)

Geographic Range

Global: The species is known to occur in Bangladesh, China, India, Japan, Myanmar, Nepal, Taiwan, Thailand and Vietnam (<http://reptile-database.reptarium.cz/species?genus=Sinomicrurus&species=macclellandi>. Downloaded on 04 March 2015).*Sinomicrurus macclellandi*

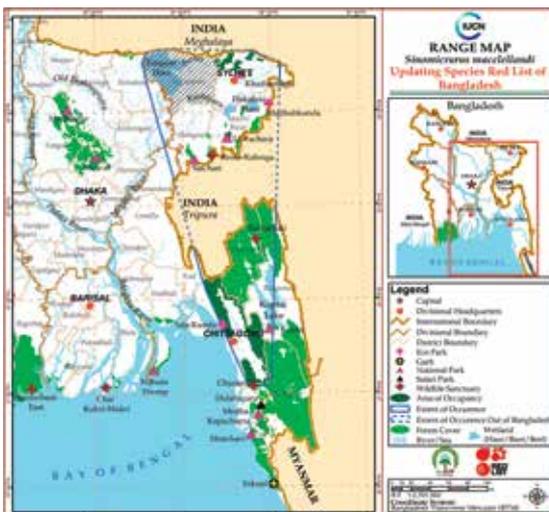
© Md. Mizanur Rahman

Bangladesh: The species was first recorded from the Hazarikhil Forest in the Chittagong Forest Division by Khan (1982). It is known to occur in mixed evergreen forests of Chittagong and Sylhet (Khan 2015); Lawachara National Park (Hasan *et al.* 2014) and Sunamganj (M.M. Rahman pers. obs.).**EOO:** Not known**AOO:** Not known

Population

Generation Time (Length): Not known**Total Population:** Not known**No. of Sub-population:** Not known**Trend:** Not known

Habitat and Ecology

Sinomicrurus macclellandi is crepuscular and nocturnal in habit and inhabits hilly and forested areas (Whitaker and Captain 2004). The taxon is secretive; usually inoffensive and sluggish by day; flatten the body, lifts and curls its tail when disturbed (Whitaker and Captain 2004). It feeds on snakes and small lizards; females lay 6-14 eggs (Whitaker and Captain 2004).**Assessor:** Md. Mizanur Rahman

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Ferania sieboldii

Species ID: RE0130

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|----------|--------------|
| ANIMALIA | CHORDATA | REPTILIA | SQUAMATA | HOMALOPSIDAE |

Scientific Name: *Ferania sieboldii* (Schlegel, 1837)

English Name: Siebold's Mud Snake, Siebold's Smooth-water Snake, Siebold's Water Snake

Local Name: Sibolder Jalojo Shap, Painna Shap

Synonym/s: *Ferania sieboldii* Schlegel, 1837

Homalopsis sieboldii Schlegel, 1837

Trigonurus sieboldii Schlegel, 1837

Trigonurus sieboldii Duméril and Bibron, 1854

Ferania sieboldii Günther, 1864

Hypsirhina sieboldii Jan, 1868

Ferania sieboldii Anderson, 1871

Hypsirhina sieboldii Wall, 1908

Enhydris sieboldii Smith, 1943

Ferania sieboldii Kumar *et al.*, 2012

Taxonomic Notes: The asymmetrically arranged dark-brown body marking appears like Sand Boa but the scales are smooth.

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1

Justification: There is only one confirmed record of *Enhydris sieboldii* from Munshiganj (Muntaquim 1979).

Considering the poorly known species from Bangladesh it has been assessed as Data Deficient.

Date Assessed: 18 March 2015

History

Regional Status: Not Threatened (IUCN Bangladesh 2000b).

Geographic Range

Global: This species has been reported from Bangladesh, India, Malaysia, Myanmar and Nepal (Murphy 2007, <http://reptile-database.reptarium.cz/>)



Ferania sieboldii

© Abhijit Das

species?genus=*Ferania*&speciessieboldii. Downloaded on 21 June 2015.)

Bangladesh: It is present in the wetlands of the country (Khan 1987). It may be found in the northeast and southeast of the country (Smith 1943, Murphy and Lobo 2010, Hasan *et al.* 2014, <http://indiansnakes.org/content/siebolds-water-snake>. Downloaded on 21 June 2015).

EOO: Not known

AOO: Not known

Population

Generation Time (Length): Not known

Total Population: Not known

No. of Sub-population: Not Known

Trend: Not Known

Habitat and Ecology

Enhydris sieboldii mainly inhabits freshwater wetlands including canals and ponds. It feeds on freshwater fishes, frogs and toads (Whitaker and Captain 2004). The female bears up to 7 live young around July (Whitaker and Captain 2004, <http://indiansnakes.org/content/siebolds-water-snake>. Downloaded on 21 June 2015). It is diurnal in habit (Whitaker and Captain 2004).



Assessor: Suprio Chakma

PART 2: AMPHIBIANS

INTRODUCTION



1. INTRODUCTION

The word 'amphibian' means two-lives, one in the water and one on the land. As the name suggests, amphibians are the vertebrates that serve as the bridge between the aquatic and terrestrial ecosystems. They have played the key role in the evolution of land vertebrates since they were the first ones to reach the land, although not becoming fully terrestrial. Amphibians are 'cold-blooded' or poikilothermic vertebrates with smooth or rough skin, rich in glands which keep it moist. Except the caecilians, amphibians (i.e. frogs, toads and salamanders) have paired limbs and naked skin. The caecilians have scales that are hidden in the skin. When they hatch from their eggs, amphibians have gills so they can breathe in the water. They also have fins to help them swim, just like fish. Later, their bodies change, growing legs and lungs enabling them to live on the land. Most of the amphibian species live in and around wetlands but many species have adapted themselves to terrestrial and arboreal habitats. No matter where the adult amphibians live, water is essential for the early part of their life cycle. Amphibians feed mainly on insects and other invertebrates, thus playing a vital role in pest control. An amphibian's skin absorbs air and water. This makes them very sensitive to air and water pollution.

There are three types of amphibians: frogs, salamanders and caecilians. Frogs are amphibians of the order Anura, characterized generally by having short bodies, webbed fingers and toes, bulging eyes, and no tail. Frogs are good jumpers with long powerful

legs. Toads are a type of frog. Salamanders, on the other hand, are apparently like lizards with skinny bodies, short legs and long tails. They can re-grow lost limbs and other body parts. Caecilians are very peculiar amphibians that do not have legs or arms. They look a lot like snakes or worms. They have a strong skull and a pointed nose to enable them to dig burrows through the soil.

The importance of amphibians in maintaining the ecological balance was well-understood during the 1970s-1980s when population of bull frogs sharply dropped in response to the capture from the wild and export. As a result of which the insect pest populations boomed, forcing the country to import surplus insecticides from abroad, costing more money than the income from frog leg export.

Amphibians love water, moisture and warmth. Therefore, Bangladesh offers ideal habitats for a wide range of amphibian species. Bangladesh is situated between the Himalayan mountains and the Bay of Bengal (20°34"N-26°33"N, 88°01"E-92°41"E). The total area of the country is 147,570 km² of which about 85% are plain lands and the rest are hills and hillocks. The climate is tropical monsoon, with annual rainfall normally ranging 1,100-5,700 mm, temperature 11-34°C and relative humidity 55-88%. The country is exceptionally rich in wildlife and other biodiversity as a consequence of its location in the subtropical belt at the confluence of two major biotic subregions of the Oriental Region: Indo-Himalayas and Indo-China

(Stanford 1991). Moreover, the Chittagong Hill Tracts form the western end of Indo-Burma Biodiversity Hotspot one of the 35 most biodiverse areas on earth (Myers *et al.* 2000). Main concentration of wildlife in Bangladesh are in the natural forests and wetlands.



Khare's Stream Frog (*Pterorana khare*) is globally Vulnerable and nationally Critically Endangered species of amphibian that occurs in the Chittagong Hill Tracts. © M. Monirul H. Khan

The taxonomy and nomenclature of amphibians are slightly variable in different publications and websites. This book has followed the taxonomy and nomenclature of Frost (2013), which has also been followed by Hasan *et al.* (2014).

1.1. Diversity and Endemism

A total of 49 species of amphibian have so far been recorded in Bangladesh, which are documented by specimens and/or photographic records (Hasan *et al.* 2014). The actual number of amphibian species in the country, however, is expected to be double than the confirmed number of species. Several specimens of amphibians have been documented, but still remained unidentified. The recent advancement of molecular taxonomy has opened up a new frontier to discover the cryptic species that were very difficult to segregate from the morphologically similar kin species. Moreover, vast areas of Bangladesh, viz. the forests and wetlands of the Chittagong Hill Tracts and Greater

Sylhet regions, and the deciduous forests of the central, northern and northwestern Bangladesh, have remained least explored where many species new for Bangladesh can be expected. The recent record of globally Vulnerable (IUCN 2015) Khare's Stream Frog



Caecilian (*Ichthyophis cf. garoensis*) is a secretive fossorial species of amphibian that is nationally Data Deficient and known to occur only in the Chittagong Hill Tracts. © M. Monirul H. Khan

(*Pterorana khare*) in the Chittagong Hill Tracts (Khan 2012) is an example of Bangladesh's potential as the home of diverse amphibian species. This species was considered endemic to Northeast India. Its occurrence in the Chittagong Hill Tracts has increased its known global range and offered a wider scope for its conservation.

At least four cryptic species (Asmat's Cricket Frog *Fejervarya asmati*, Coastal Bull Frog *Hoplobatrachus litoralis*, Mymensingh Microhylid Frog *Microhyla mymensinghensis* and Chittagong Microhylid Frog *M. mukhlesuri*) have been split and reported from Bangladesh that have not yet been reported from other neighbouring countries (Howlader 2011, Hasan *et al.* 2012, Hasan *et al.* 2014), so these frogs can be considered as endemic to Bangladesh. However, these are not rare but cryptic, so it is very likely that these occur in the neighbouring countries, particularly in India and Myanmar, since vast habitats similar to those in Bangladesh also exist in these countries.

1.2. Habitats

The four main habitat types available in Bangladesh are: (i) forests – totally covering 1.45 million hectares (ha) or 9.82% of Bangladesh, including mangrove (0.71 million ha, of which 0.58 million ha are the Sundarbans and the rest are planted mangroves), mixed evergreen (0.55 million ha) and deciduous (0.12 million ha) forests; (ii) wetlands – totally covering 2.90 million ha or 19.65% of Bangladesh, including rivers (0.48 million ha), estuarine areas (0.55 million ha) and the rest (1.87 million ha) are floodplains that annually gets near complete inundation, lakes and marshlands; (iii) bushy, grassy and bamboo-covered areas – totally cover 0.80 million ha or 5.42% of Bangladesh, most of which (0.73 million ha) are found in the Chittagong Hill Tracts region and officially designated as ‘Unclassed State Forests’ and (iv) homestead vegetation – totally cover 0.27 million ha or 1.83% of Bangladesh. Other major land uses are housing areas



Mixed evergreen forest (Rheingkeong)

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(0.15 million ha or 1.02% of Bangladesh) and agricultural fields (9.19 million ha or 62.26% of Bangladesh), which are not considered as good habitats for some amphibians (Kabir *et al.* 2009, Khan 2014) (Figure 1).



Mangrove swamp forest (Sundarbans)

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All the three forest types in Bangladesh, especially the mixed-evergreen forests, support a number of amphibian species that do not occur in any other habitat types. Some of these, like tree frogs, litter frogs and caecilians are known to be habitat specialists and cannot survive if the habitat is modified. The painted frogs, on the other hand, take shelter on tree-holes, so they also occur in forests and wooded areas. Among the wetlands majority of amphibians, particularly bull frogs, skipper frog and cricket frogs prefer stagnant or slow-flowing water. These have strong affinity to water and often seen floating on the water surface. The Skipper Frog (*Euphlyctis cyanophlyctis*) is



Freshwater swamp forest (Ratargul)

© M. Monirul H. Khan

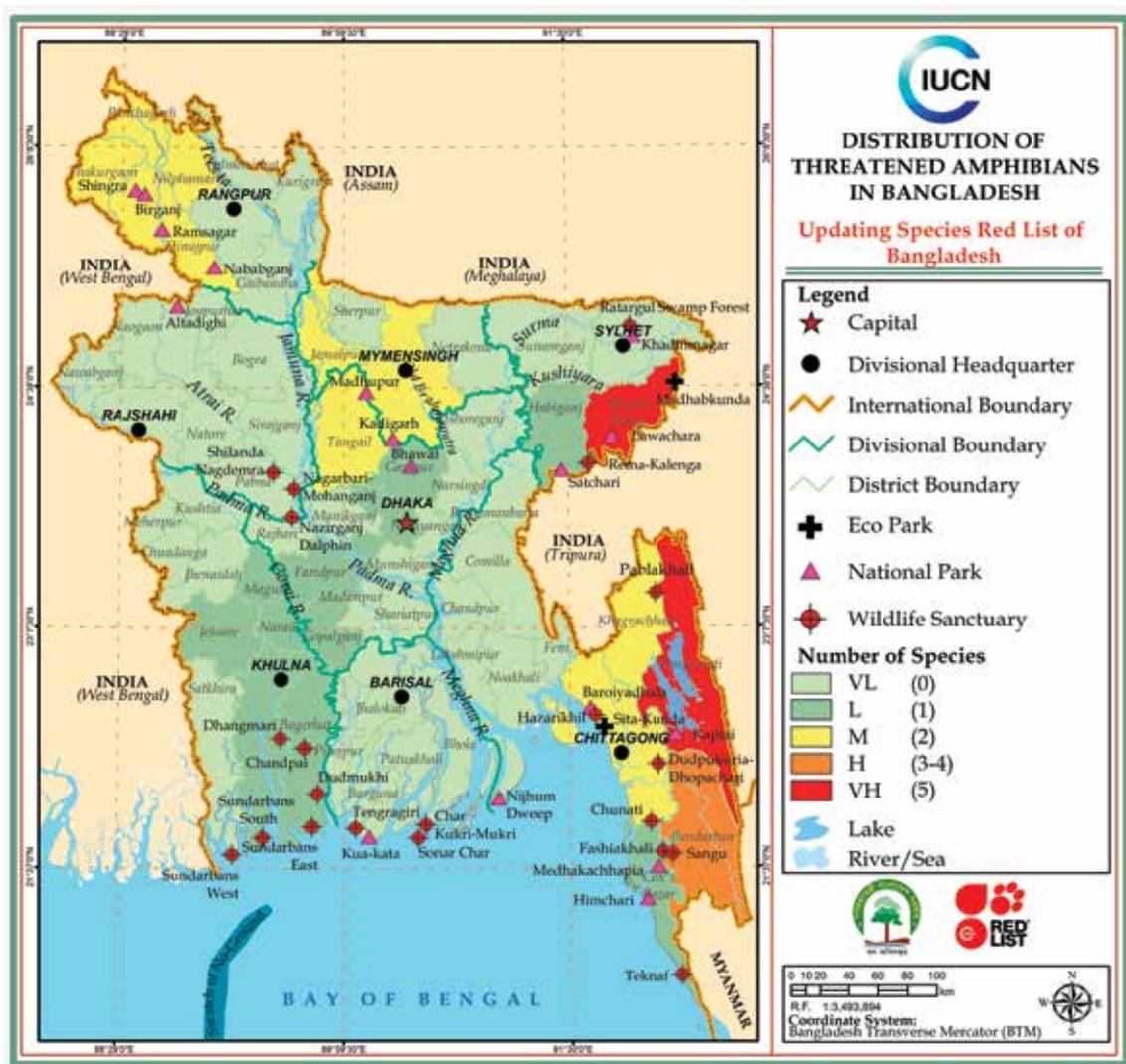


Figure 1: Distribution of treated amphibians in Bangladesh.

the commonest and most widely distributed species in Bangladesh that occur in all types of wetlands, including along the shoreline of the Bay of Bengal. The bushy, grassy and bamboo-covered areas are preferable habitats for microhylid frogs, tree frogs and a few cricket frog species. In the homestead vegetation no rare frogs are found, but toads, cricket frogs and Common Tree Frog (*Polypedates leucomystax*) prefer the homestead vegetation. In all habitat types amphibians will prefer the microhabitats on the basis of moisture, temperature, sunlight penetration, predation pressure and anthropogenic disturbance. Moreover, even the apparently suitable habitats can be avoided by amphibians due to the indiscriminate use of insecticides and other agrochemicals.



Moist deciduous forest (Madhupur)

© M. Monirul H. Khan

Based on the species diversity and abundance as well as the occurrence of nationally threatened species the best areas, or 'hotspots', for amphibians in Bangladesh are the mixed evergreen forests of the Greater Sylhet and Chittagong Hill Tracts. Although these areas are primarily evergreen forest patches, there are different types of small and large wetlands within and around the forests, making ideal habitats for various species of amphibians. Moreover, the high rate of annual rainfall ensures the availability of water and humidity even in the dry season.



Freshwater wetland (Tanguar Hoar)

© M. Monirul H. Khan



Bamboo grove (Sylhet)

© M. Monirul H. Khan



STATUS OF AMPHIBIANS IN BANGLADESH



2. STATUS OF AMPHIBIANS IN BANGLADESH

2.1. Major Findings

The assessments of amphibian species was based on reliable published and unpublished information available during the assessment process. Please see the pages 11-24 in 'Part-1: Reptiles' for assessment methods. None of the amphibian species were declared extirpated in Bangladesh but a significant proportion (20.41%) of species has been identified as threatened (i.e. Critically Endangered, Endangered or Vulnerable). Moreover, 12.24% species has been identified as Data Deficient, because not enough data were available to properly assess the status of these (Table 1). It is feared that many of the species in

2.2. History of National Assessment

Extirpation of wildlife, particularly the charismatic and flagship species of wildlife, is a big concern for Bangladesh since the country has already lost a number of species. Therefore, it was realized that identifying the threatened species at the national level is the key first step in guiding the conservation and management policies and attempts. The global assessment, which is being done since the 1950s, does not properly reflect the extinction risk of a species in a country. Many species are not globally threatened but are nationally

Table 1. Number of amphibian species under the different categories according to the assessment of 2015.

| Order | Total Species | RE | CR | EN | VU | Total Threatened Species | Proportion (% of 49) | NT | LC | DD | NE | Total Excluding Threatened Species | Proportion (% of 49) |
|-------------|---------------|----|----|----|----|--------------------------|----------------------|----|----|----|----|------------------------------------|----------------------|
| Anura | 47 | 0 | 1 | 3 | 5 | 9 | 18.37% | 6 | 27 | 5 | 0 | 38 | 77.55% |
| Gymnophiona | 2 | 0 | 1 | 0 | 0 | 1 | 2.04% | 0 | 0 | 1 | 0 | 1 | 2.04% |
| Total | 49 | 0 | 2 | 3 | 5 | 10 | 20.41% | 6 | 27 | 6 | 0 | 39 | 79.59% |

Status Code: RE-Regionally Extinct, CR-Critically Endangered, EN-Endangered, VU-Vulnerable, NT-Near Threatened, LC-Least Concern, DD-Data Deficient, NE-Not Evaluated

Data Deficient category are actually threatened but awaiting confirmation from the future field data.

The distribution patterns of the threatened species show that majority of the threatened species are concentrated in the southeast and northeast of Bangladesh. These two areas are unique in a sense that unlike the rest of Bangladesh, these two areas are hilly having wide variation of altitude, together with a range of habitats like mixed evergreen forests, bamboo groves, grasslands, lakes, rivers and streams. These are the most biodiverse areas in Bangladesh and the last strongholds of a number of nationally threatened species.

threatened. Most of the threatened amphibians of Bangladesh are not threatened globally.

The first attempt of the national assessment of vertebrates under five groups, viz. mammals, birds, reptiles, amphibians and fish, were taken up by IUCN-Bangladesh, together with the experts of the relevant fields, in late 1990s. Notably, according to this assessment the proportion of threatened species was 36%, whereas in the assessment of 2015 the proportion of threatened species is 20% (Table 2).

Table 2. Number of amphibian species under different categories in 2000 and 2015.

| Year | Total Species | RE | CR | EN | VU | Total Threatened Species | Proportion (%) | NT | NO | LC | DD | Total Excluding Threatened Species | Proportion (%) |
|------|---------------|----|----|----|----|--------------------------|----------------|-----|-----|-----|----|------------------------------------|----------------|
| 2000 | 22 | 0 | 0 | 3 | 5 | 8 | 36.36% | N/A | 7 | N/A | 7 | 14 | 63.63% |
| 2015 | 49 | 0 | 2 | 3 | 5 | 10 | 20.41% | 6 | N/A | 27 | 6 | 39 | 79.59% |

Status Code: RE-Regionally Extinct, CR-Critically Endangered, EN-Endangered, VU-Vulnerable, NT-Near Threatened, NO-Not Threatened, LC-Least Concern, DD-Data Deficient, NE-Not Evaluated

The current initiative of ‘Updating Species Red List of Bangladesh’ was started in 2013 with the financial support of the Forest Department. This national Red Listing not only included the five vertebrate groups (i.e. mammals, birds, reptiles, amphibians and freshwater fish) that were assessed earlier, but also included two new groups (i.e. crustaceans and butterflies).

2.3. Challenges of National Assessment

The biggest challenge of assessing the amphibians of Bangladesh was the lack of information, together with the validity of the available information. Except a few common species that occur in a wide range of habitats, amphibians are generally secretive and nocturnal or crepuscular. Some (particularly the species under the genera *Philautus*, *Chiromantis* and *Microhyla*) are very small and remain active only during the rainy season. Taxonomic debates on some species complex and the occurrence of cryptic species make the assessment very difficult. Moreover, there are just a handful of experts on amphibians in Bangladesh to assess the species.

There are quite a few publications on amphibian status and distribution in Bangladesh (e.g. Khan 1982, 2015; IUCN-Bangladesh 2000, Asmat 2007, Khan 2008, Kabir *et al.* 2009, Hasan *et al.* 2014). These lists have included some species for which there is no evidence of occurrence but these are likely to occur in Bangladesh. Two separate lists of amphibians have given in Hasan *et al.* (2014): one listed a total of 49 species for which there is evidence (publication, specimen or photo) and another listed 22 species for which there is no evidence of occurrence but are likely to occur in Bangladesh. The first

49 species, for which any direct evidence of occurrence exist, were assessed and others were excluded. The problem is, this list of 49 species excludes some of the species (viz. Short-headed Burrowing Frog *Sphaerotheca breviceps*, Kemp’s Tree Toad *Pedostibes kempfi* and Marbled Balloon Frog *Uperodon systoma*) that are included in more than one national checklists. Moreover, for some other species there is no doubt of the occurrence in Bangladesh but no information is available on their exact Extent of Occurrence and Area of Occupancy, so those were assessed as under Data Deficient category. In case of some species that are categorized as Data Deficient, it is feared that these are, in reality, threatened (even Critically Endangered) but did not qualify to any threatened category due to lack of information. Therefore, these should not be considered as the species with no threat and should be given the same degree of attention as the threatened taxa, at least until the necessary information is gathered and their status are assessed.



Large Tree Frog (*Rhacophorus maximus*) is nationally Vulnerable species of amphibian that occurs in the mixed evergreen forests of the southeast and northeast of Bangladesh. © M. Monirul H. Khan

2.4. Threats

The biggest threat to amphibians in Bangladesh is the loss, degradation and conversion of all types of natural habitats. The natural forests, wetlands and other habitats are continuously being converted into agricultural lands, human habitations and industrial areas. As a result, the amphibians of those areas either got completely wiped out or moved elsewhere where most of them starved to death. Some habitats are degraded or converted in a way so that the areas significantly reduced their capacities to support amphibians. For instance, when a natural wetland is converted for commercial fish culture the area still remains as a wetland but reduces its capacity to support amphibians, barring the generalized species that can be found in almost all aquatic environment.

The industrial and household pollutants and litter are often disposed in the natural environment, particularly in the water. This pollutes the entire ecosystem of the surroundings and in the downstream areas. Since the amphibians depend on the water in many ways, the pollution directly affects the amphibian populations. As a consequence, the amphibians are killed, their breeding is hampered and their food is diminished.

The indiscriminate use of insecticides and other agrochemicals is a big threat to amphibians. These chemicals are widely used in the agricultural fields in the plains and in the hills. Previously these chemicals were not used in the hilly areas in the southeast and northeast of the country but due to the development of transport system these have reached virtually all over the country. In the tea gardens surrounding the natural and semi-natural forest patches of Greater Sylhet not only the insecticides but herbicides are used. All the agrochemicals are washed by the rain water and spread in the surrounding areas, including the natural forests and wetlands, as run off. Since the insects are the principal food of amphibians, they get poisoned by feeding on

poisoned insects. Even if the poison dose is small, the amphibians eventually die or fall sick due to biological magnification of the poison.

In the narrow creeks of the Sundarbans and in hill streams in the northeast and southeast of Bangladesh poison fishing is occasionally practiced. This is mainly done secretly in the Government-owned forested areas where fishing is officially prohibited. In this process the poison is poured into the water so that all the poisoned fish and shrimp float on the surface and people can easily harvest them in a short period of time. In this process the non-target frogs and tadpoles also die.

In the hills (Chittagong Hill Tracts and Greater Sylhet) and plains (Greater Mymensingh and Greater Rangpur) where good number of people of small ethnic groups are living, the bull frogs, particularly the Indian Bull Frog (*Hoplobatrachus tigerinus*), are heavily hunted for meat. In the Chittagong Hill Tracts, the frogs are sold in the local markets with relatively high price. In the rainy season of 2015, the market rate of Indian Bull Frog was BDT 200/kg whereas the market rate of pork of domestic pig was BDT 250/kg (M.M.H. Khan pers. obs.). The demand is so high that bull frogs have become rare in the Chittagong Hill Tracts and the supply mainly comes from the nearby districts like Feni, Comilla and Chittagong. All types of aquatic organisms, including the frogs and their tadpoles, are captured by mosquito nets and consumed in the Chittagong Hill Tracts. Even the rare Marbled Cascade Frog (*Amolops marmoratus*) is hunted for meat in the rocky streams of high hills. On the other hand, the Garo people of Greater Mymensingh and Santal people of Greater Rangpur hunt bull frogs at night by using a powerful torch. The toads, tree frogs and smaller terrestrial frogs, however, are relatively safe from hunting. In the riparian areas even the Bengali people use Skipper Frog (*Euphlyctis cyanophlyctis*) as the live bait in large hooks set mainly for large catfishes, but this is not a big problem since it is not done in large scale.



In the Chittagong Hill Tracts the Indian Bull Frog (*Hoplobatrachus tigerinus*) is hunted (left side photo) not only for household consumption, but also for sale in the market (right side photo)

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Indiscriminate introduction and expansion of alien/invasive as well as exotic species of animals and plants in different ecosystems is a notable threat to the native amphibians and other wildlife. Some carnivorous fish like African catfish and piranha were indiscriminately introduced in the wetlands that eventually spread across the country by flood water. These carnivorous fish not only feed on frogs and their tadpoles, but also on all native aquatic organisms including the native fish. Similarly, the indiscriminate plantation of exotic tree species like acacia, eucalyptus and teak are responsible for severely altering the vegetation composition, together with reducing the soil moisture and humus, making the areas inhospitable for tree frogs, litter frogs and microhylids.

The lack of proper focus on amphibians in the acts and policies of the government, together with the passive public support for amphibian conservation are major hindrances to amphibian conservation. There are several acts and policies regarding wildlife, biodiversity, forests and environment but none of these have properly highlighted the needs of amphibian conservation nor there is any clear guideline of punishment for killing amphibians and destroying their habitats. The mass people and even the media, on the other hand, are not much aware of the roles that amphibians are playing, such as their role in insect pest control. Therefore, most stakeholders are not much interested in amphibian conservation.

Table 3. Threatened Amphibians in Bangladesh.

Status Code: CR-Critically Endangered, EN-Endangered, VU-Vulnerable, LC-Least Concern, DD-Data Deficient

| Sl. No | Order | Family | Scientific Name | English Name | Local_Name | National Status | Global Status | Species ID |
|--------|-------------|----------------|-----------------------------|---|---|-----------------|---------------|------------|
| 1 | Anura | Ranidae | <i>Pterorana khare</i> | Khare's Stream Frog, Indian Flying Frog | Chamra-jhola Bang ('Vun-dor' in Bawm language), Uranta Bang | CR | VU | AM0029 |
| 2 | Gymnophiona | Chikilidae | <i>Chikila fulleri</i> | Fuller's Caecilian, Kuttal Caecilian | Lawacharar Chikila | CR | DD | AM0006 |
| 3 | Anura | Rhacophoridae | <i>Chiromantis doriae</i> | Doriae's Pigmy Tree Frog | Doriaer Khudey Gecho Bang, Doriar Bamon Gecho Bang | EN | LC | AM0044 |
| 4 | Anura | Rhacophoridae | <i>Philautus andersoni</i> | Anderson's Bush Frog | Andersoner Gecho Bang, Andersoner Jhupbashi Bang | EN | LC | AM0049 |
| 5 | Anura | Rhacophoridae | <i>Theloderma asperum</i> | Pied Warty Tree Frog, Hill Garden Bug-eyed Frog, Bird Poop Frog, Warty Tree Frog | Pakhir Bishthha Bang | EN | LC | AM0047 |
| 6 | Anura | Microhylidae | <i>Kaloula taprobanica</i> | Sri Lankan Painted Frog, Sri Lankan Bullfrog | Chittrito Venpu Bang, Balun Bang, Rangin Venpu Bang | VU | LC | AM0038 |
| 7 | Anura | Microhylidae | <i>Uperodon globulosus</i> | Baloon Frog, Indian Globular Frog, Indian Balloon Frog, Grey Balloon Frog, Greater Balloon Frog | Baloon Bang, Photka Bang, Phola Bang | VU | LC | AM0036 |
| 8 | Anura | Dicroglossidae | <i>Limnonectes laticeps</i> | Flat-headed Frog, Corrugated Frog, Rivulet Frog, Broad-headed Frog, Khasi Wart Frog | Chaptamatha Bang, Chaptamatha Kula Bang | VU | LC | AM0021 |
| 9 | Anura | Ranidae | <i>Amolops marmoratus</i> | Marbled Cascade Frog, Beautiful Stream Frog, Torrent Frog, Cascade Frog | Jhorna Sundari Bang, Jharna Bang | VU | LC | AM0025 |
| 10 | Anura | Rhacophoridae | <i>Rhacophorus maximus</i> | Large Tree Frog | Oghalok Bang (Chakma), Nepaler or Boro Gecho Bang | VU | LC | AM0046 |



CONSERVATION AND RECOMMENDATIONS



3. CONSERVATION AND RECOMMENDATIONS

3.1. Conservation

In Bangladesh, the amphibians get legal protection under a number of acts, viz. Wildlife Act, 1974/2012; Forest Act, 1927/2010 and Bangladesh Environment Conservation Act, 1995. Bangladesh is also a signatory to conservation related international conventions and treaties, like Convention on Biological Diversity (CBD), Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), Convention on Wetlands of International Importance, especially as Waterfowl Habitat (Ramsar Convention), and Convention Concerning the Protection of the World Cultural and Natural Heritage (World Heritage Convention) under which the country is committed to conserve the biodiversity, including the amphibians.

Throughout the country there is a network of insufficiently managed national protected areas covering many areas that are hotspots for amphibians. There are 17 National Parks and 21 Wildlife Sanctuaries (including one marine sanctuary) which are the main protected areas. Moreover, there are other kinds of protected areas like Eco-Parks, Safari Parks, Botanical Gardens, Community Conservation Areas, Ecologically Critical Areas, etc. Protected area is generally defined as an area of land and/or sea especially dedicated to the protection of biological diversity and of natural and associated cultural resources and managed through legal or other effective means. A significant improvement in the legal status of the protected areas occurred after the

formulation and implementation of Bangladesh Wildlife Act in 1974, which was replaced by the new Wildlife Act in 2012. The National Parks, Wildlife Sanctuaries, Eco-Parks, Safari Parks, Botanical Gardens, Community Conservation Areas, etc., are defined and declared under this Act. National Parks are comparatively large areas of outstanding scenic and natural beauty with the primary object of protection and preservation of scenery, flora and fauna in the natural state to which access for public recreation, education and research may be allowed. Wildlife Sanctuaries are areas closed to hunting, shooting or trapping of wild animals and declared as undisturbed breeding grounds, primarily for the protection of wildlife, inclusive of all natural resources, such as vegetation, soil and water. The total area of all National Parks (45,746.51 ha) and Wildlife Sanctuaries (220,252.44 ha, excluding the marine sanctuary) is 265,998.95 ha, which is 1.80% of the total area of Bangladesh. We have one World Heritage Site (Sundarbans - three terrestrial wildlife sanctuary areas only) and two Ramsar Sites (Tanguar Haor and the entire Sundarbans).

Bangladesh has limited institutional capacity (Government Departments, Non-Governmental Organizations, Universities, research institutions, etc.) and limited education and training facilities for the development of conservation and management of wildlife and wildlife habitats that covers amphibians. There are, however, very limited human resources who are educated and trained on various aspects of amphibian biology, management and conservation.

3.2. Recommendations

The Red Listing of species serves as an indicator of the level of extinction risk of the species. The national Red List assessment, together with the periodic updates, are necessary to ensure the adaptive conservation and management. Labeling some species as Critically Endangered, Endangered and Vulnerable are easily communicable to the mass people and serves as a tool to raise public awareness for threatened species conservation. The Convention on Biological Diversity, to which Bangladesh is a signatory, encourages the Contracting Parties to identify components of biological diversity important for its conservation and sustainable use, paying particular attention to those requiring urgent conservation measures and those which offer the greatest potential for sustainable use. Through the Forest Department the Government of Bangladesh should continue their support so that the status can be updated periodically and new taxa can be brought under the assessment. IUCN-Bangladesh should find a mechanism to make it a continuous process. The assessment information that will be uploaded on the web and will be accessible to all can be the basis of a continuous updating process where everyone can add information, which can be verified by experts and the web information is revised accordingly.

Despite their importance in maintaining the ecological balance, amphibians are much smaller than most of the mammals, birds and reptiles, so they are not normally used as a flagship or charismatic species. Therefore, instead of species-based approach, the ecosystem-based approach should be taken to conserve them. If we are to select the flagship or charismatic species of amphibians for Bangladesh, we should select any of the nationally Critically Endangered and Endangered species, viz. Khare's Stream Frog (*Pterorana khare*), Fuller's Caecilian (*Chikila fulleri*), Doriae's Tree Frog (*Chiromantis doriae*), Anderson's Bush Frog (*Philautus andersoni*)

and Pied Warty Tree Frog (*Theلودerma asperum*). Based on the threat categories of different amphibian species, the habitats with high densities of threatened species should be conserved. In a densely populated country like Bangladesh, maintaining an effective and well-managed network of protected areas is the best way to conserve the amphibians and other biodiversity in the long-term. Moreover, strategically chosen new areas need to be included in the protected area system. These are representative areas of all ecosystems (terrestrial and aquatic) and biodiversity rich areas that are not yet in the protected area network. If the best of all the diverse habitat types are conserved, all the varied species of amphibians will be conserved within these areas.

Strict implementation of Bangladesh Environment Conservation Act should be ensured to stop all kinds of pollution, particularly the industrial pollution. The garments, tannery and other industries that produce harmful pollutants must have a functional pollution treatment plant. For the control of household pollutants and indiscriminate litter disposal the people should be made aware, the local government should maintain a periodic pollutant and litter collection system and the Act should be implemented strictly.

The insecticides, together with all agrochemicals, should be used according to the proper guidelines. The use of all types of agrochemicals should be banned in the landscapes of major protected areas, together with the water catchment areas within or outside the protected areas. Moreover, poison fishing should be completely eliminated from all over Bangladesh. The mass people should be made aware of it so that they also resist the people who might attempt to do it.

The commercial harvesting and marketing of frogs should be stopped by the strict implementation of law. For the people of small



Indian Bull Frog (*Hoplobatrachus tigerinus*) is a common amphibian of Bangladesh that plays vital role in crop pest control

© M. Monirul H. Khan

ethnic groups who traditionally consume the frogs, soft policy like awareness raising should be followed. Moreover, alternate sources of cheap protein like carp and tilapia fish culture, poultry and pig farming should be supported.

The alien/invasive species of animals and plants should be strictly banned and the exotic species that are introduced to increase the productivity should be strictly controlled. The exotic species should be banned in and around the protected areas and open waters.

Regular monitoring and research on different aspects of amphibians, particularly the taxonomy, role in pest control, population trends, breeding and conservation needs

should be studied. Moreover, the national capacity must be built so that amphibian research, conservation and management can be done as necessary.

Broad-based awareness and advocacy to mass people, media and policymakers are needed for ensuring effective conservation and management of amphibians and their major habitats including the protected areas. Their roles in pest control and maintaining the ecological balance should be conveyed to people. Moreover, the laws and policies should give proper focus on amphibian conservation and the implementing agencies should be informed about it.

SPECIES PROFILE



CRITICALLY ENDANGERED

< CR >

Pterorana khare

Species ID: AM0029

CRITICALLY
ENDANGERED
<CR>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|-------|---------|
| ANIMALIA | CHORDATA | AMPHIBIA | ANURA | RANIDAE |

Scientific Name: *Pterorana khare* Kiyasetuo and Khare, 1986

English Name: Khare's Stream Frog, Indian Flying Frog

Local Name: Chamra-jhola Bang ('Vun-dor' in Bawm language), Uranta Bang

Assessment Information

Red List Category & Criteria: CR B2ab (iii) ver 3.1

Justification: Listed as Critically Endangered, because only one individual was found in a single location in Ruma, Bandarban, for only once (Khan 2013). Therefore, the known AOO is very small and continuing decline of the quality of habitat is evident. It has not been found elsewhere in the Chittagong Hill Tracts despite the fact that most of the potential habitats were searched. Presumably it has a very restricted distribution in the location where it was found, because it is a globally Vulnerable species and was known to have restricted distribution in Northeast India.

Date Assessed: 24 August 2014

History

Regional Status: It has not yet been evaluated (IUCN Bangladesh 2000).

Geographic Range

Global: This species is found in Bangladesh and India (Dutta *et al.* 2004, Khan 2013).

Bangladesh: Only one individual of *Pterorana khare* was found in a hill stream in Ruma, Bandarban, in October 2012, during a night search. The local Bawm tribesmen had informed that they rarely see it and hunt it for meat, which they call 'vun-dor', meaning 'loose skin' (Khan 2013).

EOO: 314 km²



Pterorana khare

© M. Monirul H. Khan

AOO: 4 km²

Population

Generation Time (Length): Not known

Total Population: Not known

No of Sub-population: Not known

Trend: Presumably declining.

Habitat and Ecology

This species can glide to some distance by expanding the skin flap on the lateral sides of the body, which is a key character of the species. Probably feeds on small aquatic organisms. Nothing is known about its breeding. It inhabits rapidly flowing water streams with rocks in hilly areas. This species occurs on or close to ground or water surface in and around hill streams. This frog is active at night.



Assessor: M. Monirul H. Khan

Chikila fulleri

Species ID: AM0006

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|-------------|------------|
| ANIMALIA | CHORDATA | AMPHIBIA | GYMNOPHIONA | CHIKILIDAE |

Scientific Name: *Chikila fulleri* Alcock, 1904**English Name:** Fuller's Caecilian, Kuttal Caecilian**Local Name:** Lawacharar Chikila**Synonym/s:** *Gegeneophis fulleri* Alcock, 1904*Herpele fulleri* Alcock, 1904

Taxonomic Notes: The species was established in 1904 as *Herpele fulleri*. Later on in 1968 the name changed to *Gegeneophis fulleri*, and in 2012 the name was changed again to *Chikila fulleri* following the establishment of a new genus *Chikila*.

Assessment Information

Red List Category & Criteria: CR B1 (D) ver 3.1

Justification: *Chikila fulleri* has been so far found only in an area of just a few square kilometres. Habitat alterations, both natural and man-made can wipe out the population as it is found only in a single stream of Lawachara NP and its EOO is 40.36 km² that meets the threshold <100 km² in the Criterion B1 and as only a single dead individual and two live individuals were found during the expedition, it meets the Criterion D. The total number of individuals is presumably <50.

Date Assessed: 26 June 2014

History

Regional Status: It has not yet been assessed (IUCN Bangladesh in 2000).

Geographic Range

Global: This species is found in Bangladesh and India.

Bangladesh: *Chikila fulleri* has so far been recorded from mixed evergreen forests in the Lawachara NP in Moulvibazar District.

*Chikila fulleri*

© Tania Khan

EOO: 40 km²**AOO:** 26 km²

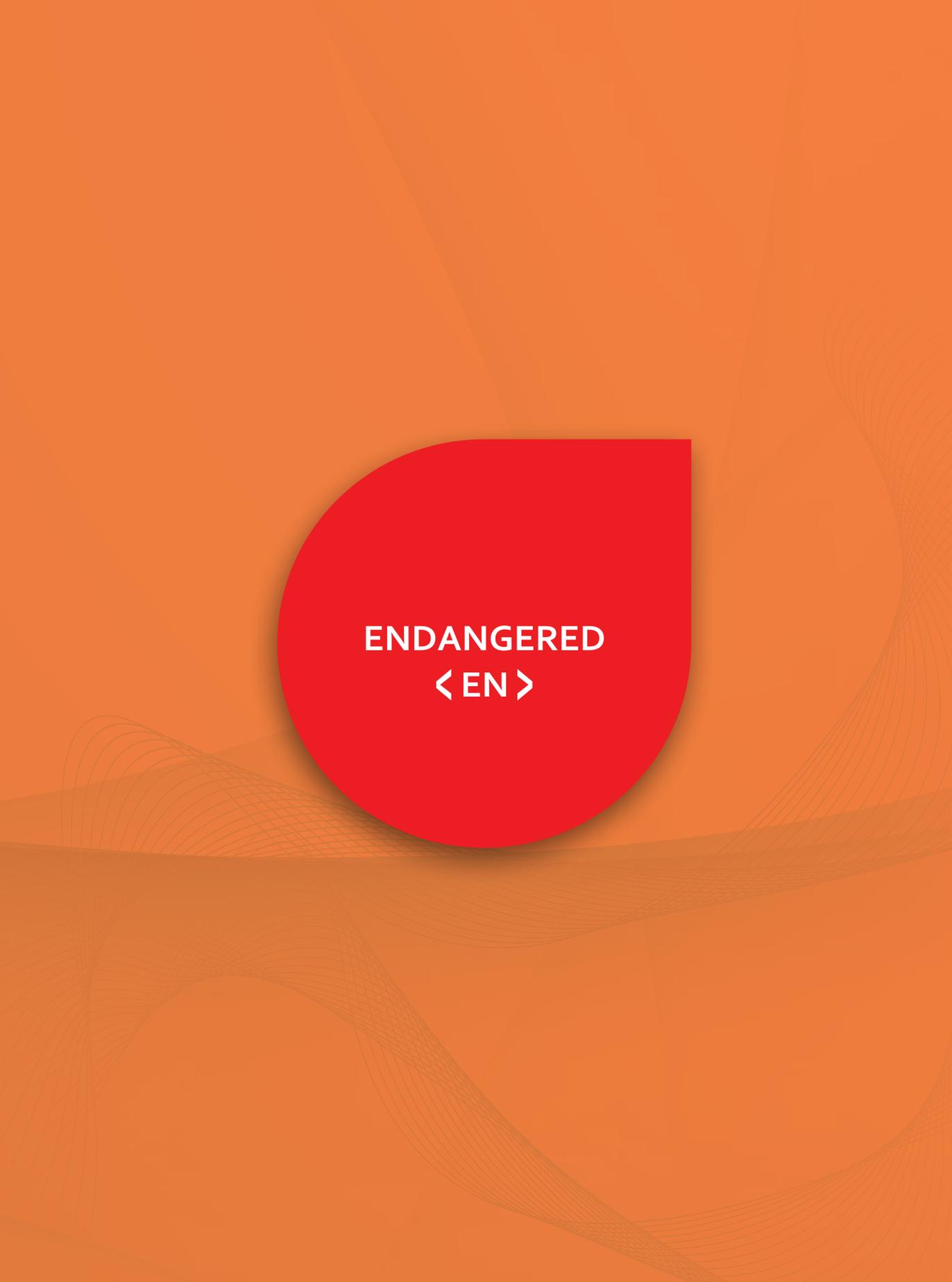
Population

Generation Time (Length): Not known**Total Population:** Not known**No of Sub-population:** Not known**Trend:** Not known

Habitat and Ecology

This caecilian is purely subterranean and is apparently nocturnal. Contrary to popular belief and literature *C. fulleri* appeared active during the winter (two live specimens were dug out in Dec 2012) although others have considered it to be hibernating during winter, roughly from November to February (Khan 2015). *Chikila fulleri* prefers lower banks of forest streams having mixture of sand and soft mud, abundant decayed leaf and forest debris. Found within 10-15 cm of depth of the stream bank (Khan 2015).

**Assessor:** Tania Khan

A red teardrop-shaped graphic is centered on an orange background. The background features faint, wavy, light-colored lines that create a sense of movement and depth. The text is centered within the red shape.

ENDANGERED
< EN >

Chiromantis doriae

Species ID: AM0044

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|-------|---------------|
| ANIMALIA | CHORDATA | AMPHIBIA | ANURA | RHACOPHORIDAE |

Scientific Name: *Chiromantis doriae* Boulenger, 1893**English Name:** Doriae's Pigmy Tree Frog**Local Name:** Doriaer Khudey Gecho Bang, Doriar Bamon Gecho Bang**Synonym/s:** *Chirixalus doriae* Boulenger, 1893*Philautus doriae* Cochran, 1927*Chirixalus doriae* Bourret, 1942*Chiromantis doriae* Frost *et al.* 2006

Assessment Information

Red List Category & Criteria: EN B1,2ab (i,ii,iii) ver 3.1**Justification:** This species is very rare and recorded from only two locations. Its EOO and AOO satisfy the c Criteria of Endangered Category. Moreover, the EOO and AOO are known to be declining rapidly. Therefore, it has listed as Endangered.**Date Assessed:** 23 October 2014

History

Regional Status: It has not yet been assessed (IUCN Bangladesh 2000).

Geographic Range

Global: This species is found in Bangladesh, Cambodia, China, India, Lao PDR, Myanmar, Thailand and Vietnam (Wenhao *et al.* 2009).**Bangladesh:** *Chiromantis doriae* is found in Greater Sylhet region (Hasan *et al.* 2010, 2014; Tania Khan pers. comm.).**EOO:** 670 km²**AOO:** 28 km²*Chiromantis doriae*

© M K Hasan

Population

Generation Time (Length): Not known**Total Population:** Not known**No of Sub-population:** Not known**Trend:** Not known

Habitat and Ecology

This species inhabits bushes and thickets. It feeds mainly on insects. This frog breeds during heavy rainfall, usually during June-July (Hasan *et al.* 2014). This tree frog is active at night.**Assessor:** Md. Kamrul Hasan

Philautus andersoni

Species ID: AM0049

ENDANGERED
<EN>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|-------|---------------|
| ANIMALIA | CHORDATA | AMPHIBIA | ANURA | RHACOPHORIDAE |

Scientific Name: *Philautus andersoni* Ahl, 1927**English Name:** Anderson's Bush Frog**Local Name:** Andersoner Gecho Bang, Andersoner Jhup-bashi Bang**Synonym/s:** *Ixalus tuberculatus* Anderson, 1879*Rhacophorus andersoni* Ahl, 1927*Philautus andersoni* (Ahl, 1927)*Theلودerma andersoni* (Ahl, 1927)

Assessment Information

Red List Category & Criteria: EN B2ab (iii) ver 3.1**Justification:** This frog is listed as Endangered, because all records are only in and around Kaptai NP, Rangamati, although the species might occur in other suitable habitats in the southeast. Therefore, the known AOO is small, and continuing decline of the quality of habitat is evident.**Date Assessed:** 22 January 2015

History

Regional Status: It has not yet been assessed (IUCN Bangladesh 2000).

Geographic Range

Global: This species is found in Bangladesh, China, India and Myanmar (van Dijk *et al.* 2004).**Bangladesh:** *Philautus andersoni* is found in and around Kaptai NP, Rangamati (Khan 2012). It has not yet found anywhere else, but might occur in other suitable habitats in the southeast.**EOO:** 312 km²**AOO:** 95 km²*Philautus andersoni*

© M. Monirul H. Khan

Population

Generation Time (Length): Not known**Total Population:** Not known**No of Sub-population:** Not known**Trend:** Not known

Habitat and Ecology

This frog prefers undergrowth of the evergreen and mixed evergreen forests. It sits on leaves as well as on twigs.

Philautus andersoni feeds on small insects. It breeds in rainy season, probably from April to June (Hasan *et al.* 2014). This frog is active at night.**Assessor:** M. Monirul H. Khan

Theلودerma asperum

Species ID: AM0047

ENDANGERED
<EN>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|-------|---------------|
| ANIMALIA | CHORDATA | AMPHIBIA | ANURA | RHACOPHORIDAE |

Scientific Name: *Theلودerma asperum* Boulenger, 1886**English Name:** Pied Warty Tree Frog, Hill Garden Bug-eyed Frog, Bird Poop Frog, Warty Tree Frog**Local Name:** Pakhir Bistha Bang**Synonym/s:** *Ixalus asper* Boulenger, 1886*Rhacophorus asperimus* Ahl, 1927**Taxonomic Notes:** This species is sometimes confused with *Philautus albopunctatus*.

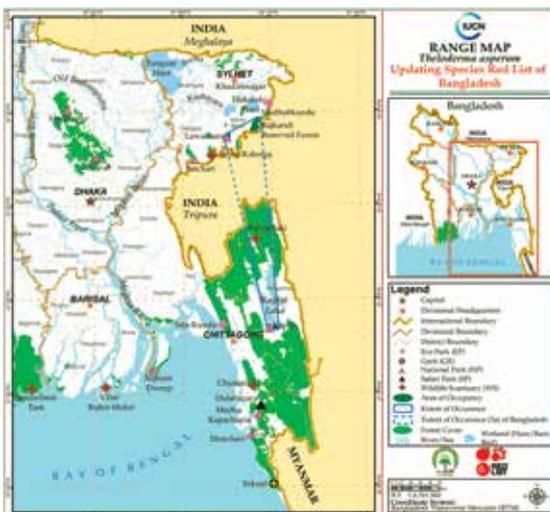
Assessment Information

Red List Category & Criteria: EN B2ab (i) ver 3.1**Justification:** This species has a few records in two forests in the northeast (Lawachara and Adampur) and one forest in the southeast (Kaptai). It was recorded for the first time in Bangladesh in 2012 (T. Khan pers. comm.). Habitat loss is going on in all three forests where the species is known to occur. Therefore, the species has been categorized as Endangered.**Date Assessed:** 21 September 2014

History

Regional Status: It has not yet been assessed (IUCN Bangladesh 2000).

Geographic Range

Global: This species is found in Bangladesh, Cambodia, China, India, Indonesia, Lao PDR, Malaysia, Myanmar, Thailand and Vietnam (Lau *et al.* 2004).**Bangladesh:** *Theلودerma asperum* is found in some mixed evergreen forest patches of Greater Sylhet and Chittagong Hill Tracts (M.M.H. Khan pers. comm.).**EEO:** 5,910 km²**AOO:** 179 km²*Theلودerma asperum*

© Tania Khan

Population

Generation Time (Length): Not known**Total Population:** Not known**No of Sub-population:** Not known**Trend:** Not known

Habitat and Ecology

This frog inhabits in bushes and undergrowths close to the stream of mixed evergreen forests (Hasan *et al.* 2014). Roosts on the leaf of undergrowths of mixed evergreen forests. Sometimes it also roosts in between the leaves of undergrowths. It is usually encountered on low vegetation, in leaf litter or tree stumps but may spend most of its life in water-filled tree cavities (Orlov 1997). It breeds in the tree hollows, small rainwater pools or water-filled containers. Female lays 5-6 eggs in rainy season, incubation period is 8-10 days and metamorphosis takes place in 56-70 days (Hasan *et al.* 2014). This frog is active both at day and early night time.

Assessor: Tania Khan

A vibrant yellow background with a large red teardrop-shaped graphic in the center. The teardrop shape is filled with a solid red color and has a white shadow effect. Inside the red shape, the words "VULNERABLE" and "<VU>" are written in white, bold, uppercase letters. The background is decorated with faint, wavy, light green lines that create a sense of movement and depth.

VULNERABLE
<VU>



Kaloula taprobanica

Species ID: AM0038

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|-------|--------------|
| ANIMALIA | CHORDATA | AMPHIBIA | ANURA | MICROHYLIDAE |

Scientific Name: *Kaloula taprobanica* Parker, 1934

English Name: Sri Lankan Painted Frog, Sri Lankan Bullfrog

Local Name: Chittrito Venpu Bang, Balun Bang, Rangin Venpu Bang

Synonym/s: *Kaloula pulchra taprobanica* Parker, 1934
Kaloula taprobanica Dutta and Manamendra-Arachchi, 1996

Assessment Information

Red List Category & Criteria: VU B2ab (iii) ver 3.1

Justification: Assessed as Vulnerable from its rarity with the known limited AOO despite the fact that it has relatively wide EOO in Bangladesh. It is, however, unlikely to be declining fast enough to qualify for listing in a higher threatened category.

Date Assessed: 15 December 2014

History

Regional Status: It has not yet been assessed (IUCN Bangladesh 2000).

Geographic Range

Global: This species is found in Bangladesh, India, Nepal and Sri Lanka (Inger *et al.* 2004).

Bangladesh: *Kaloula taprobanica* is found in Madhupur forest of central part (Reza and Mahony 2007, Hasan *et al.* 2014); northern Panchagarh in the northwest and Narail and Mongla in the southwest (Hasan *et al.* 2014).

EOO: 49,154 km²

AOO: 4,344 km²



Kaloula taprobanica

© M. Monirul H. Khan

Population

Generation Time (Length): Not known

Total Population: Not known

No of Sub-population: Not known

Trend: Not known

Habitat and Ecology

This species is terrestrial, fossorial and sluggish in habit. It comes out during the breeding season in June-July in stagnant and temporary water bodies. It feeds on various insects, but prefers termites. This frog inhabits in tree trunks and prefers termite mounds, but found in a wide variety of habitats including dry forests, plantation, wetlands and areas close to human habitation. It is generally found under leaf-litter, in loose soil, and under logs and other ground cover (Robert *et al.* 2004). It comes down from the tree trunk like a palm-climber and when dug out it swells up and secretes a white slimy fluid through the skin (Chakma 2009). Mating and laying of eggs take place in water and tadpoles are bottom dwellers (Chakma 2009). It has been recorded from sea level up to 200 m above mean sea level in India, and from sea level up to 1,300 m above mean sea level in Sri Lanka (Robert *et al.* 2004). This frog is active at night.



Assessor: Md. Farid Ahsan



Limnonectes laticeps

Species ID: AM0021

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|-------|----------------|
| ANIMALIA | CHORDATA | AMPHIBIA | ANURA | DICROGLOSSIDAE |

Scientific Name: *Limnonectes laticeps* Boulenger, 1882
English Name: Flat-headed Frog, Corrugated Frog, Rivulet Frog, Broad-headed Frog, Khasi Wart Frog, Southern Big-headed Frog

Local Name: Chaptamatha Bang, Chaptamatha Kula Bang

Synonym/s: *Limnonectes (Limnonectes) laticeps* Dubois, 1987,
Rana taylorana Dubois, 1986,
Rana (Limnonectes) laticeps Dubois 1981,
Rana (Rana) laticeps Boulenger, 1920
Rana laticeps Boulenger, 1882,
Polypedates affinis Boulenger, 1882

Assessment Information

Red List Category & Criteria: VU B1,2 b (i,ii,iii) ver 3.1

Justification: *Limnonectes laticeps* is listed as Vulnerable because both the EOO and AOO qualify for the Vulnerable category threshold and known locations are very limited. The quality of habitat is also declining.

Date Assessed: 24 August 2014

History

Regional Status: It has not yet been assessed (IUCN Bangladesh 2000).

Geographic Range

Global: This species is found in Bangladesh, Brunei Darussalam, Indonesia, India, Malaysia, Myanmar and Thailand (van Dijk *et al.* 2009).

Bangladesh: *Limnonectes laticeps* is found in Lawachara NP, Kaptai NP and Sangu WS.

EOO: 11,596 km²



Limnonectes laticeps

© M. Monirul H. Khan

AOO: 576 km²

Population

Generation Time (Length): Not known

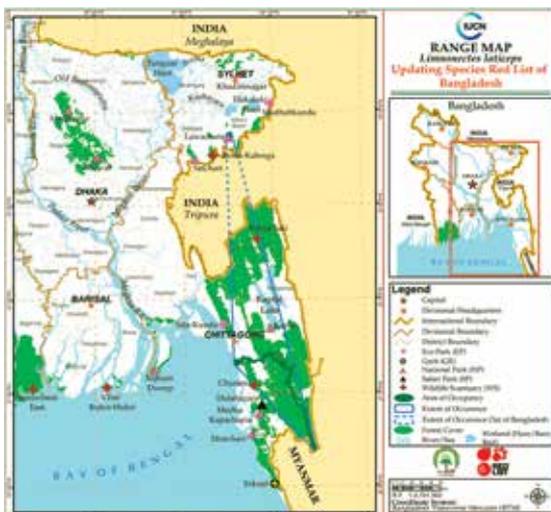
Total Population: Not known

No of Sub-population: Not known

Trend: Not known

Habitat and Ecology

This frog is terrestrial and prefers shallow freshwater streams. When disturbed, it always tries to retreat under leaf litter. Natural habitats of *Limnonectes laticeps* are subtropical and tropical dry lowland grasslands and freshwater marshes. It also occurs in small and shallow streams in forests, in pools in swampy areas and in seepage areas near streams in primary forests in hilly areas. This frog prefers small, clear streams in forests or rain puddles along the bridal paths. It occurs up to an elevation of 1,500 m above mean sea level.



Assessor: Mohammad Abdul Wahed Chowdhury

Amolops marmoratus

Species ID: AM0025

VULNERABLE
 <VU>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|-------|---------|
| ANIMALIA | CHORDATA | AMPHIBIA | ANURA | RANIDAE |

Scientific Name: *Amolops marmoratus* Blyth, 1855
English Name: Beautiful Stream Frog, Torrent Frog, Cascade Frog

Local Name: Jhorna Sundari Bang

Synonym/s: *Ixalus argus* Annandale, 1912

Polypedates afghana Günther, 1858

Rana latopalmata Boulenger, 1882

Rana senchalensis Chanda, 1987

Amolops nepalicus Yang, 1991

Amolops (Amolops) marmoratus Dubois, 1992



Amolops marmoratus

© M. Monirul H. Khan

Assessment Information

Red List Category & Criteria: VU A1ad ver 3.1

Justification: *Amolops marmoratus* has restricted distributional range since it has narrow habitat preference when the adults and tadpoles are commonly harvested by local ethnic people. It can be inferred that its AOO and number of mature individuals from selected areas are under continuous decline. Therefore, the species is categorized as Vulnerable.

Date Assessed: 17 November 2014

History

Regional Status: It has not yet been assessed (IUCN Bangladesh 2000).

Geographic Range

Global: This frog is found in Bangladesh, Bhutan, China, India, Myanmar, Nepal and Thailand (van Dijk *et al.* 2004).

Bangladesh: The species has been reported from the Chittagong Hill Tracts (Asmat 2009), possibly occurs in the

mixed-evergreen forest of Moulvibazar District bordering India.

EOO: 12,739 km²

AOO: 6,334 km²

Population

Generation Time (Length): Not known

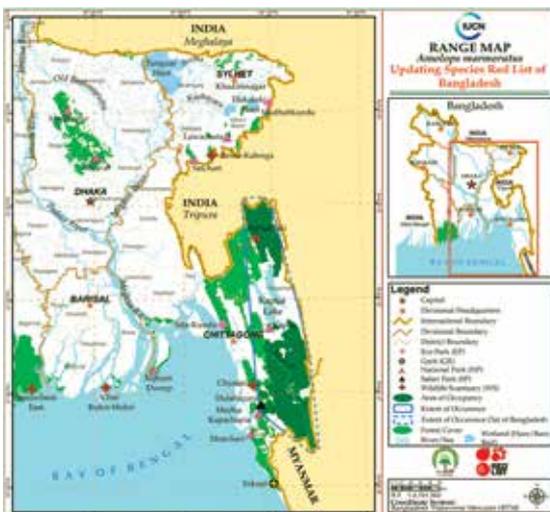
Total Population: Not known

No of Sub-population: Not known

Trend: Not known

Habitat and Ecology

It breeds in rocky streams in fast flowing water. It conceals itself in rock crevices. When disturbed it jumps into the fast flowing water. Its breeding takes place in the peak of the monsoon. *Amolops marmoratus* is found in mixed-evergreen forests. It is a habitat specialist; found only in rocky, fast flowing streams and often observed near waterfalls. It occurs at 100-2,000 m from asl.



Assessor: Shahriar Caesar Rahman

A red teardrop-shaped graphic is centered on a light green background. The background features faint, wavy, concentric lines that create a sense of depth and movement. The text is white and centered within the red shape.

NEAR THREATENED
< NT >

Xenophrys parva

Species ID: AM0005

NEAR
THREATENED
<NT>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|-------|--------------|
| ANIMALIA | CHORDATA | AMPHIBIA | ANURA | MEGOPHYRIDAE |

Scientific Name: *Xenophrys parva* Boulenger, 1893

English Name: Crown Frog, Mountain Horned Frog

Local Name: Mukut Bang, Bormi or Belcha-pa Bang (Bengali name)

Synonym/s: *Xenophrys monticola* Günther, 1864
Leptobrachium parvum Boulenger, 1893
Xenophrys monticola Boulenger, 1882
Megalophrys parva Boulenger, 1908
Megophrys parva Bourret, 1942

Assessment Information

Red List Category & Criteria: Near Threatened (NT) ver 3.1

Justification: This frog is widely distributed in the hill forests of Chittagong and Chittagong Hill Tracts as well as in Greater Sylhet, but rarely encountered. The taxon has relatively wide EOO. The rate of habitat declined in the past due to drying up of hill forest streams is a plausible cause of decline. It is also suspected that the habitat declining factors may not be reduced in near future, but it is unlikely to make the species threatened at the moment. Therefore, the species has been categorized as Near Threatened.

Date Assessed: 26 June 2014.

History

Regional Status: It has not yet been assessed (IUCN Bangladesh 2000).

Geographic Range

Global: This species is found in Bangladesh, Bhutan, China, India, Lao PDR, Myanmar, Nepal, Thailand and Vietnam (van Dijk *et al.* 2004).



Xenophrys parva

© M. Monirul H. Khan

Bangladesh: *Xenophrys parva* is reported from Chittagong Hill Tracts, Chittagong and Greater Sylhet. It is common in Madhabkunda Eco-park (Khan 2015).

EOO: 13,320 km²

AOO: 2,722 km²

Population

Generation Time (Length): Not known

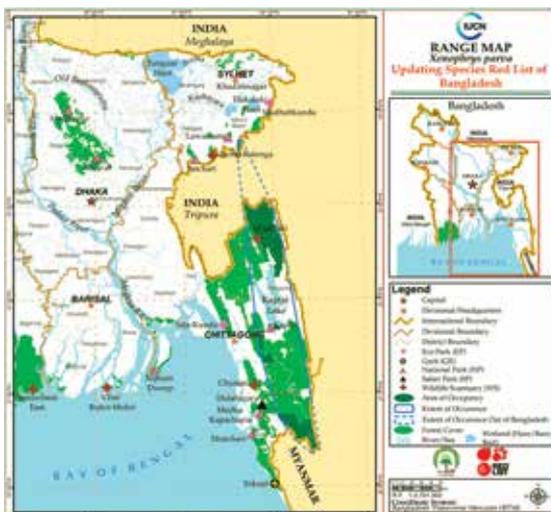
Total Population: Not known

No of Sub-population: Not known

Trend: Not known

Habitat and Ecology

It is terrestrial but can be found on vegetation above the ground level. Breeding call of this species is heard during monsoon. It lives in mixed evergreen hill forests, particularly in rocky stream beds as well as in built up area around rocky hills. It occurs up to 2,500 m above mean sea level. This frog is active both at night and day time.



Assessor: Suprio Chakma

Kaloula pulchra

Species ID: AM0037

NEAR
THREATENED
<NT>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|-------|--------------|
| ANIMALIA | CHORDATA | AMPHIBIA | ANURA | MICROHYLIDAE |

Scientific Name: *Kaloula pulchra* Gray, 1831
English Name: Painted Bullfrog, Asian Painted Frog,
Local Name: Venpu Bang
Synonym/s: *Auletris bilineatus* Van-Ernest, 1800
Kaloula pulchra Gray, 1831
Hylaedactylus bivittatus Cantor, 1847
Callula pulchra Günther, 1864
Caloula pulchra Stoliczka, 1870
Calohyla pulchra Peters and Doria, 1878
Callula macrodactyla Boulenger, 1887
Kaloula pulchra Barbour, 1909
Callula (Kallula) pulchra Bourret, 1927
Kaloula pulchra pulchra Parker, 1934
Kaloula pulchra hainana Gressitt, 1938
Kaloula pulchra macrocephala Bourret, 1942
Kaloula aureata Nutphund, 2001
Kaloula macrocephala Ohler, 2003

Assessment Information

Red List Category & Criteria: Near Threatened (NT) ver 3.1

Justification: It is common but with limited distribution and it is unlikely to be declining fast enough to qualify for listing in a threatened category. Thus it is categorized as Near Threatened.

Date Assessed: 15 December 2014

History

Regional Status: It has been assessed as Vulnerable (IUCN Bangladesh 2000).

Geographic Range

Global: This species is found in Bangladesh, Cambodia, China, India, Indonesia, Lao PDR, Malaysia, Myanmar,



Kaloula pulchra

© Tania Khan

Nepal, Singapore, Thailand and Vietnam (Kuangyang *et al.* 2009).

Bangladesh: It is found in and around mixed-evergreen forests of east, northeast and southeast as well as near human habitations in the hill districts. (Hasan *et al.* 2014, Khan 1982, 1987, 2015, Sarker *et al.* 2013,); and in Saint Martin's Island (S.C. Rahman pers. comm.).

EOO: 41,602 km²

AOO: 10,623 km²

Population

Generation Time (Length): Not known

Total Population: Not known

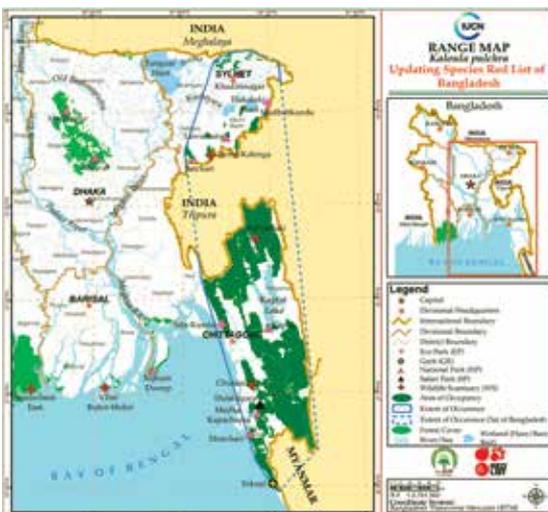
No of Sub-population: Not known

Trend: Not known

Habitat and Ecology

This species is terrestrial and fossorial in habit. It feeds on insects; mainly ants. It calls after the first heavy monsoon showers in April-May and breeds in small pools, usually seasonal rain pools, or ponds during April to mid-June, and July-August in Thanchi, Bandarban, and Hnila, Cox's Bazar (Asmat 2009, M.A.R. Khan pers. comm.). It can burrow and/or climb into shrubby trees. It may live for as long as 10 years (Snider and Bowler 1992). This frog inhabits forests and agricultural lands including wetlands, riverbanks, forest edges and vegetation covered areas around homestead. In the breeding pool it keeps its belly full of air and remains afloat almost motionless for hours on (M.A.R. Khan pers. comm.). It occurs up to 750 m above sea level (Kuangyang *et al.* 2009). This frog is active at night.

Assessor: Md. Farid Ahsan



Hoplobatrachus litoralis

Species ID: AM0023

NEAR
THREATENED
<NT>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|-------|----------------|
| ANIMALIA | CHORDATA | AMPHIBIA | ANURA | DICROGLOSSIDAE |

Scientific Name: *Hoplobatrachus litoralis* Hasan, Kuramoto, Islam, Alam, Khan, and Sumida 2012

English Name: Coastal Bullfrog

Local Name: Upokulio Sona Bang, Bangladesher Upokulio Kola Bang

Taxonomic Notes: The species has just been founded in 2012 based on specimens collected from Cox's Bazar District in Bangladesh. As it has not yet been reported from any other country it can safely be considered as an endemic species to Bangladesh.

Assessment Information

Red List Category & Criteria: Near Threatened (NT) ver 3.1

Justification: *Hoplobatrachus litoralis* is commonly found in the southeastern Cox's Bazar District and the Chittagong Hill Tracts. While evaluating against the criteria in terms of population and geographic range, the species does not qualify for any threshold level, but it was close to meet the criteria due to its known distribution only to the southeast of Bangladesh and the hunting pressure. Therefore, the species has been categorized as Near Threatened.

Date Assessed: 10 March 2015

History

Regional Status: It has not yet been evaluated by IUCN Bangladesh in 2000.

Geographic Range

Global: This frog is still known to be endemic to Bangladesh (Hasan *et al.* 2012), but very likely to occur in India and Myanmar.



Hoplobatrachus litoralis

© M K Hasan

Bangladesh: *Hoplobatrachus litoralis* has been recorded from southeastern Cox's Bazar District (Hasan *et al.* 2012), and the entire Chittagong Hill Tracts region (Hasan *et al.* 2014).

EOO: 22,810 km²

AOO: 14,851 km²

Population

Generation Time (Length): Not known

Total Population: Not known

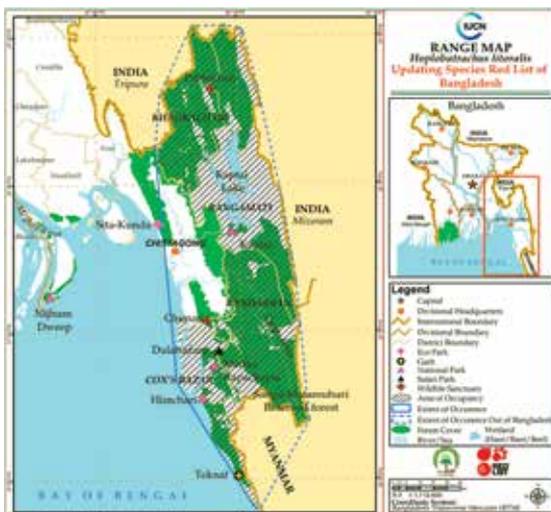
No of Sub-population: Not known

Trend: Not known

Habitat and Ecology

It feeds on a variety of insects, earthworms, small fishes and small snakes and breeds during May-July. The advertisement calls are low-pitched groans emitted at about 4.4 seconds intervals. *Hoplobatrachus litoralis* prefers habitats include vegetated, marshy ditches/ponds, wetlands created by hill streams, base of mountains having different soil texture from the mainland Bangladesh (Hasan *et al.* 2012). From sea level in Cox's Bazar to the hill tracts, possibly up to 500 m above mean sea level (Hasan *et al.* 2012, M.A.R. Khan pers. comm.).

Assessor: Rukshana Sultana



Hoplobatrachus crassus

Species ID: AM0024

NEAR
THREATENED
<NT>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|-------|----------------|
| ANIMALIA | CHORDATA | AMPHIBIA | ANURA | DICROGLOSSIDAE |

Scientific Name: *Hoplobatrachus crassus* Jerdon, 1853**English Name:** Jerdon's Bullfrog**Local Name:** Ramchagol-daka Sona Bang, Bon Bhawa Bang, Jerdoner Kula Bang**Synonym/s:** *Rana crassa* Jerdon, 1854*Rana (Hoplobatrachus) ceylonicus* Günther, 1872*Limnonectes (Hoplobatrachus) crassus* Dubois, 1987*Hoplobatrachus crassus* Dubois, 1992

Assessment Information

Red List Category & Criteria: Near Threatened (NT) ver 3.1**Justification:** *Hoplobatrachus crassus* has been reported from four locations: Sundarbans, Dinajpur, hilly areas of Mymensingh and Netrakona, and Madhupur Tract. Although its EOO and AOO are larger than the threshold level, it is known to be rare and the qualities of habitats are degrading. Thus the species is categorized as Near Threatened.**Date Assessed:** 10 March 2015

History

Regional status: It has been assessed as Data Deficient (IUCN Bangladesh in 2000).

Geographic Range

Global: This frog is found in Bangladesh, India, Nepal and Sri Lanka (Padhye *et al.* 2008).**Bangladesh:** *Hoplobatrachus crassus* has been reported from northern, central southeastern and southwestern parts of Bangladesh (Alam *et al.* 2008, Al-Razi *et al.* 2014, Asmat *et al.* 2003, Khan 2015, Sarker *et al.* 2012).*Hoplobatrachus crassus*

© M K Hasan

EOO: 77,356 km²**AOO:** 8,849 km²

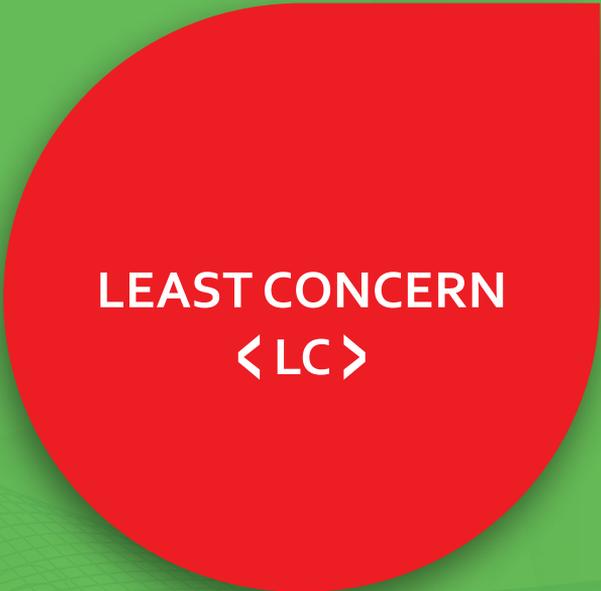
Population

Generation Time (Length): Not known**Total Population:** Not known**No of Sub-population:** Not known**Trend:** Not known

Habitat and Ecology

It feeds primarily on different types of insects, also on earthworms, small frogs, skinks, etc. During breeding season the male utters loud calls like that of a goat. It breeds in rainwater pools and in harvested paddy fields mainly during June-July (Daneils 2005, Chakma 2009, Hasan *et al.* 2014). *Hoplobatrachus crassus* inhabits lowland forests, grasslands, marshy areas bordering villages in the Bagherhat District and paddy fields (Daneils 2005, Chakma 2009, Hasan *et al.* 2014, Khan 2015).

**Assessor:** Rukshana Sultana

A red teardrop-shaped graphic element with a rounded top and a pointed bottom, centered on the page. It contains white text.

LEAST CONCERN
< LC >

Duttaphrynus melanostictus

Species ID: AM0010

LEAST
CONCERN
<LC>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|-------|-----------|
| ANIMALIA | CHORDATA | AMPHIBIA | ANURA | BUFONIDAE |

Scientific Name: *Duttaphrynus melanostictus* (Schneider, 1799)

English Name: Asian Common Toad, Common Toad, Asian Toad

Local Name: Kuno Bang, Kona Bang

Synonym/s: *Bufo melanostictus* Schneider, 1799
Bufo tienhoensis Bourret, 1937
Docidophryne melanostictus Bourret, 1942
Ansonia kamblei Ravichandran and Pillai, 1990
Bufo melanostictus hazarensis Khan, 2001
Duttaphrynus melanostictus Frost *et al.* 2006

Taxonomic Notes: This species is widely distributed and probably a species complex.

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: *Duttaphrynus melanostictus* is widely distributed in Bangladesh and is tolerant of broad range of habitat types. It appears that the population is stable and no notable threats identified. Therefore, it is listed as Least Concern.

Date Assessed: 26 Jun 2014

History

Regional Status: It has been assessed as Least Concern (IUCN Bangladesh in 2000).

Geographic Range

Global: This species is found in Bangladesh, Cambodia, China, India, Indonesia, Lao PDR, Malaysia, Myanmar, Nepal, Papua New Guinea, Pakistan, Singapore, Sri Lanka, Thailand and Vietnam (van Dijk *et al.* 2004).



Duttaphrynus melanostictus

© Tania Khan

Bangladesh: *Duttaphrynus melanostictus* is the commonest amphibian and found throughout Bangladesh from mainland to coastal areas, offshore islands and hill country as well as in all terrestrial forest ecosystems (Asmat 2009; Khan 1982, 1987, 2015; Khan 2008, Pratihari *et al.* 2014).

EEO: 2,22,509 km²

AOO: 1,32,741 km²

Population

Generation Time (Length): Not known

Total Population: Not known

No of Sub-population: Not known

Trend: Not known

Habitat and Ecology

This toad is terrestrial and sometimes found underground in burrows and leaf litters. This toad is active at night. It is basically insectivorous but can consume any small animal that moves within its tongue flicking range that would be captured and devoured by it even if that included baby snakes. It breeds almost all year round barring the peak of winter when it leads a kind of dormant life but does not hibernate. Mating female lays eggs in skeins of beaded strings of jelly attached to some aquatic vegetation in still and slow-moving water bodies (Khan 1987). *Duttaphrynus melanostictus* inhabits in human dominated agriculture landscapes, urban areas, mixed-evergreen and deciduous forests of plains, hills and in the coastal areas.

Assessor: Shahriar Caesar Rahman



LEAST
CONCERN
<LC>

Duttaphrynus stomaticus

Species ID: AM0014

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|-------|-----------|
| ANIMALIA | CHORDATA | AMPHIBIA | ANURA | BUFONIDAE |

Scientific Name: *Duttaphrynus stomaticus* Lütken, 1864**English Name:** Marbled Toad**Local Name:** Marble Kuno Bang, Khoshkhoshe Bang**Synonym/s:** *Bufo andersonii* Lütken, 1864*Bufo pentarinus* Lütken, 1864*Bufo stomaticus* Lütken, 1864*Bufo stomaticus peninsularis* Lütken, 1864*Bufo andersonii* Murray, 1884*Bufo stomaticus* Frost *et al.*, 2006*Duttaphrynus stomaticus* van *et al.*, 2009

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1**Justification:** *Duttaphrynus stomaticus* is a rare species but widely distributed in Bangladesh; its population is stable and no notable threat was identified. Therefore, it is listed as Least Concern.**Date Assessed:** 23 October 2014

History

Regional Status: It has not yet been assessed (IUCN Bangladesh 2000).

Geographic Range

Global: This species is found in Afghanistan, Bangladesh, India, Iran, Nepal, Oman and Pakistan (Stöck *et al.* 2009).**Bangladesh:** *Duttaphrynus stomaticus* is distributed through central and south-western parts of Bangladesh, particularly Chars of the Ganges-Brahmaputra-Meghna River Systems; also recorded from Rajshahi, Rangpur and Sundarbans (Asmat 2009, Alam *et al.* 2012, Pratihari *et al.* 2014, Hasan *et al.* 2014, Khan 2015).*Duttaphrynus stomaticus*

© M. Monirul H. Khan

EOO: 82,486 km²AOO: 17,528 km²

Population

Generation Time (Length): Not known**Total Population:** Not known**No of Sub-population:** Not known**Trend:** Not known

Habitat and Ecology

It is a nocturnal, terrestrial and insectivorous toad. This species is occasionally found in burrows and leaf litters. It comes out of its hiding soon after sundown and keeps eating insects and worms (Khan 2015). This toad is known to breed in still and slow-flowing water bodies.

**Assessor:** Shahriar Caesar Rahman

Leptobrachium smithi

Species ID: AM0039

LEAST
CONCERN
<LC>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|-------|--------------|
| ANIMALIA | CHORDATA | AMPHIBIA | ANURA | MEGOPHYRYDAE |

Scientific Name: *Leptobrachium smithi* Matsui, Mabhatabhata, and Panha, 1999

English Name: Smith's Litter Frog, Red-eyed Frog

Local Name: Lal-chokh Bang

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: This frog is widely distributed in the hilly areas of north, east and southeast of the country with a substantial population in the hilly forests in Sylhet Division. Assessed as Least Concern considering its wide distribution, tolerance of a degree of habitat modification and presumed large population. The habitat degradation is a plausible cause of decline, but it is unlikely to be declining fast enough to qualify for listing in any threatened category.

Date Assessed: 15 August 2014

History

Regional Status: It has not yet been assessed (IUCN Bangladesh 2000).

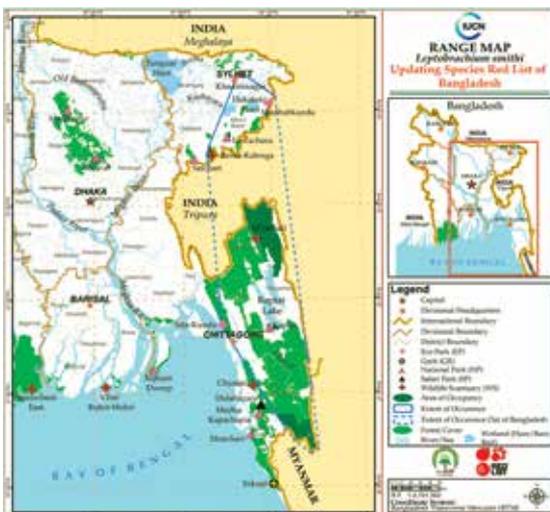
Geographic Range

Global: This species is found in Bangladesh, India, Myanmar, Malaysia, Thailand and Lao PDR (van Dijk *et al.* 2014).

Bangladesh: *Leptobrachium smithi* is found in and around the forest patches in Chittagong, Chittagong Hill Tracts and Sylhet Division (Asmat *et al.* 2003, Asmat 2009; Khan 2010, 2015). The species is likely to occur in the north of Greater Mymensingh, but needs confirmation.

EOO: 27,317 km²

AOO: 2,625 km²



Leptobrachium smithi

© Tania Khan

Population

Generation Time (Length): Not known

Total Population: Not known

No of Sub-population: Not known

Trend: Not known

Habitat and Ecology

This frog occurs in and around mixed evergreen forests. It is found in forest litter in areas with considerable undergrowth vegetation. This species is arbo-terrestrial and nocturnal. It has very loud breeding call that is frequently heard during monsoon (May-August). It usually calls from above the ground and tree trunks that starts around sundown. It is often encountered along streams and forest paths when mating pairs spend appreciable time in slow moving streams (M.A.R. Khan pers. comm.). It occurs up to 1,350 m above sea level (van Dijk *et al.* 2014).

Assessor: Suprio Chakma

Microhyla mymensinghensis

Species ID: AM0031

LEAST
CONCERN
<LC>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|-------|--------------|
| ANIMALIA | CHORDATA | AMPHIBIA | ANURA | MICROHYLIDAE |

Scientific Name: *Microhyla mymensinghensis* Hasan *et al.*, 2014

English Name: Mymensingh Microhylid Frog,
Moymonsingh's Narrow-mouthed Frog

Local Name: Mymensingher Laubichi Bang,
Moymonsingher Cheena Bang

Taxonomic Notes: This species is often confused with *Microhyla ornata* and *M. mukhlesuri*.

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: It is distributed across a wide range and presumably has a large population. Its EOO and AOO are much larger than the threshold level. Moreover, it has no significant threat to qualify for any of the threatened categories. Therefore, it has been categorized as Least Concern.

Date Assessed: 17 November 2014

History

Regional Status: It has not yet been assessed (IUCN Bangladesh 2000).

Geographic Range

Global: It is found in Bangladesh, but might occur in neighbouring countries (Hasan *et al.* 2014).

Bangladesh: *Microhyla mymensinghensis* is recorded from Mymensingh, Netrakona, Sunamganj and Sylhet districts (Hasan *et al.* 2014) as well as from deciduous forests of Madhupur and mixed evergreen forests of northeast (Hasan *et al.* 2014) and southeast (M.K. Hasan pers. comm.).



Microhyla mymensinghensis

© M K Hasan

EOO: 77,586 km²

AOO: 22,452 km²

Population

Generation Time (Length): Not known

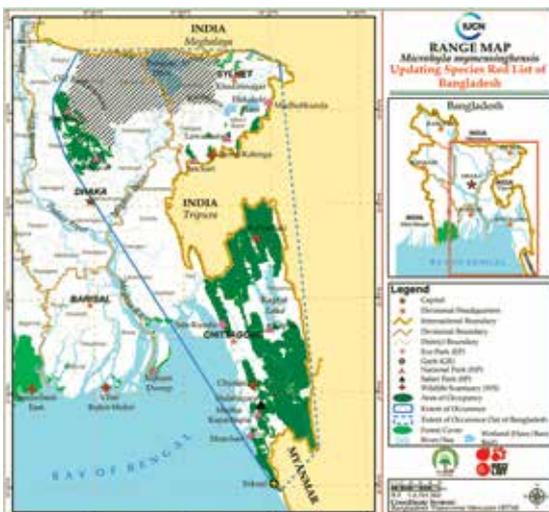
Total Population: Not known

No of Sub-population: Not known

Trend: Presumably stable

Habitat and Ecology

This frog occurs in wet and shady forest floor. It feeds on small insects (Hasan *et al.* 2014). It is terrestrial, usually prefers wet grasses and loose soil. This microhylid is active at night.



Assessor: Md. Kamrul Hasan

Microhyla ornata

Species ID: AM0032

LEAST
CONCERN
<LC>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|-------|--------------|
| ANIMALIA | CHORDATA | AMPHIBIA | ANURA | MICROHYLIDAE |

Scientific Name: *Microhyla ornata* Duméril & Bibron, 1841

English Name: Ornate Microhylid Frog

Local Name: Choto Laubichi Bang, Cheena Bang

Synonym/s: *Diplopelma carnaticum* (Jerdon, 1854)
Diplopelma ornatum (Duméril & Bibron, 1841)
Engystoma carnaticum Jerdon, 1854
Engystoma malabaricum Jerdon, 1854
Engystoma ornatum Duméril & Bibron, 1841
Microhyla carnatica (Jerdon, 1854)
Siphneus ornatum (Duméril & Bibron, 1841)
Microhyla ornata Boulenger, 1882

Taxonomic Notes: This species is often confused with *Microhyla mymensinghensis* and *Microhyla mukhlesuri* (Hasan *et al.* 2014).

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: This species is the commonest and most widely distributed microhylid in the country. Moreover, there is no significant threat to it, so it does not fulfill any criteria to qualify for any threatened category. Thus the species is categorized as Least Concern.

Date Assessed: 24 August 2014

History

Regional Status: It has been assessed as Vulnerable (IUCN Bangladesh 2000).

Geographic Range

Global: The species is found in Bangladesh, India, Bhutan, Nepal, Pakistan and Sri Lanka (Dutta *et al.* 2008).

Bangladesh: *Microhyla ornata* is widely distributed in Bangladesh.



Microhyla ornata

© M K Hasan

EOO: 2,22,509 km²

AOO: 1,36,929 km²

Population

Generation Time (Length): Not known

Total Population: Not known

No of Sub-population: Not known

Trend: Not known

Habitat and Ecology

It occurs in diverse habitats including forests, grasslands, agricultural fields, and urban and sub-urban areas (Hasan *et al.* 2014). It feeds on ants and small insects and breeds between May and July. This frog is nocturnal, but also active diurnally during the rainy season when it produces incessant calls mimicking the calls of the cicadas or crickets (Hasan *et al.* 2014, Khan 1987).



Assessor: Md. Kamrul Hasan

Euphlyctis cyanophlyctis

Species ID: AM0007

LEAST
CONCERN
<LC>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|-------|----------------|
| ANIMALIA | CHORDATA | AMPHIBIA | ANURA | DICROGLOSSIDAE |

Scientific Name: *Euphlyctis cyanophlyctis* Schneider, 1799

English Name: Skipper Frog, Skittering Frog

Local Name: Kotkoti Bang

Synonym/s: *Rana cyanophlyctis* Schneider, 1799

Bufo cyanophlyctis Daudin, 1802

Bufo cyanophlyctis Merrem, 1820

Rana bengalensis Gray, 1830

Rana leschenaultia Duméril and Bibron, 1841

Rana benghalensis Kelaart, 1853

Dicroglossus adolfi Günther, 1860

Euphlyctis leschenaultii Fitzinger, 1861

Rana cyanophlyctis Boulenger, 1920

Dicroglossus cyanophlyctis Deckert, 1938

Occidozyga cyanophlyctis Dubois, 1987

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: *Euphlyctis cyanophlyctis* is a widely distributed species and there is no notable threat observed or reported unless local consumption in hilly region. Therefore, it is listed as Least Concern species.

Date Assessed: 26 June 2014

History

Regional Status: It has been assessed as Not Threatened (IUCN Bangladesh 2000).

Geographic Range

Global: This species is found in Afghanistan, Bangladesh, Bhutan, India, Iran, Myanmar, Nepal, Pakistan, Sri Lanka and Vietnam (Khan *et al.* 2009).

Bangladesh: *Euphlyctis cyanophlyctis* has the widest distribution of all the frogs of the country, ranging from the



Euphlyctis cyanophlyctis

© M K Hasan

coastal areas to the hilly terrain in Bandarban District (Alam *et al.* 2008, Khan 1987, 2015, Mahony and Reza 2008; Mahony *et al.* 2009, Chakma 2009, Howlader *et al.* 2015).

EEO: 2,22,509 km²

AOO: 1,39,772 km²

Population

Generation Time (Length): Not known

Total Population: Not known

No of Sub-population: Not known

Trend: Not known

Habitat and Ecology

This frog is aquatic and insectivorous in habit. This frog is both nocturnal and diurnal. It is active all year round, even when the temperature dips down to 10°C in winter. It prefers roadside ditches, paddy fields, fish ponds and wetlands for breeding. *Euphlyctis cyanophlyctis* is widespread in aquatic and semi-aquatic habitats. Even it lives and breeds in the most polluted drains of Dhaka and other cities (Khan 2015).



Assessor: Mohammad Abdul Wahed Chowdhury

LEAST
CONCERN
<LC>

Euphlyctis hexadactylus

Species ID: AM0008

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|-------|----------------|
| ANIMALIA | CHORDATA | AMPHIBIA | ANURA | DICROGLOSSIDAE |

Scientific Name: *Euphlyctis hexadactylus* Lesson, 1834
English Name: Green Frog, Green Pond Frog, Indian Five-fingered Frog, Six-toe Green Frog.

Local Name: Shobuj Bang

Synonym/s: *Rana hexadactyla* Lesson, 1834
Dactylethra bengalensis Duméril and Bibron, 1841
Rana robusta Blyth, 1855
Phrynoderma cutiporum Fitzinger, 1861
Rana (rana) hexadactyla Boulenger, 1920;
Rana (Dicroglossus) hexadactyla Dubois 1974
Rana (Euphlyctis) hexadactyla Dubois, 1981
Occidozyga (Euphlyctis) hexadactyla Dubois, 1987
Euphlyctis hexadactylus Dubois, 1992

Taxonomic Notes: Molecular evidence suggest that the population of this species in Bangladesh represent a different cryptic species (Alam *et al.* 2008, Hasan *et al.* 2012).

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: *Euphlyctis hexadactylus* is listed as Least Concern in the view of its wide distribution, and presumed large stable population. Moreover no viable threats were identified that might consider to qualify any criteria of any threatened category.

Date Assessed: 26 June 2014

History

Regional Status: It has been assessed as Endangered (IUCN Bangladesh 2000).



Euphlyctis hexadactylus

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Geographic Range

Global: This species is found in Bangladesh, India, Nepal, Pakistan and Sri Lanka (Dutta and Manamendra-Arachchi 2004).

Bangladesh: *Euphlyctis hexadactylus* is widely distributed in the coastal districts and large wetlands in Barisal, Dhaka and Khulna Divisions (Chakma 2009, Hasan *et al.* 2012, Hossain *et al.* 2014; Khan 1982, 1987, 2015; Mahoney *et al.* 2009; Reza 2010) and also found in large wetlands, called 'haors', in Greater Sylhet region.

EOO: 1,10,674 km²

AOO: 63,107 km²

Population

Generation Time (Length): Not known

Total Population: Not known

No. of Sub-population: Not known

Trend: Not known

Habitat and Ecology

Euphlyctis hexadactylus is aquatic, nocturnal and diurnal in habit. The diet of adult frog is unusual in that plant leaves and some flowers constitute a large part of its diets. However, it also consumes invertebrates and small vertebrates. Juveniles, however, are insectivores. During winter it often basks on the bank of water bodies, in addition to floating on water surface and resting on leaves of aquatic plants (Das 1996, Khan 1987).

Assessor: Mohammad Abdul Wahed Chowdhury



Fejervarya asmati

Species ID: AM0015

LEAST
CONCERN
<LC>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|-------|----------------|
| ANIMALIA | CHORDATA | AMPHIBIA | ANURA | DICROGLOSSIDAE |

Scientific Name: *Fejervarya asmati* Howlader, 2011

English Name: Asmat's Cricket Frog, Bangladeshi Cricket Frog

Local Name: Asmater Jhi-jhi Bang

Synonym/s: *Zakerana asmati* Howlader, 2011

Taxonomic Notes: This species possibly corresponds to *F. syhadrensis* from the southeastern part of Bangladesh (Hasan *et al.* 2012). Until further research in the neighbouring territories of Indian States of Assam, Meghalaya, Tripura and West Bengal confirms its presence there, *F. asmati* is the first reported endemic vertebrate in Bangladesh.

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: *Fejervarya asmati* is very common and found in a wide range of habitats throughout Bangladesh. The population is known to be stable and no notable threats were identified. Therefore, the species is listed as Least Concern.

Date Assessed: 15 February 2015

History

Regional Status: It has not yet been assessed (IUCN Bangladesh 2000).

Geographic Range

Global: Until further research in the neighbouring territories of Indian States of Assam, Meghalaya, Tripura and West Bengal confirms its presence there, *F. asmati* is the first reported endemic vertebrate in Bangladesh.

Bangladesh: *Fejervarya asmati* is widely distributed in



Fejervarya asmati

© M K Hasan

Bangladesh. Type locality is Chittagong University Campus, Chittagong (Howlader 2011, Sarker and Howlader 2011, Sarker *et al.* 2012) but has also been found from much wider areas in Bangladesh (Hasan *et al.* 2014).

EOO: 2,22,509 km²

AOO: 1,39,772 km²

Population

Generation Time (Length): Not known

Total Population: Not known

No of Sub-population: Not known

Trend: Not known

Habitat and Ecology

This frog is active at night and feeds on insects. It's breeding starts in May and continues up to July (Howlader 2011, Hasan *et al.* 2014). *Fejervarya asmati* inhabits forest edges, agricultural fields, scattered forest floors and wet grasslands (Howlader 2011, Hasan *et al.* 2014). This frog occurs from 17 to 44 m above mean sea level (Sarker and Howlader 2011, Sarker *et al.* 2012).



Assessor: Mohammad Abdul Wahed Chowdhury

LEAST
CONCERN
<LC>

Fejervarya cancrivora

Species ID: AM0020

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|-------|----------------|
| ANIMALIA | CHORDATA | AMPHIBIA | ANURA | DICROGLOSSIDAE |

Scientific Name: *Fejervarya cancrivora* Gravenhorst, 1829**English Name:** Crab-eating Frog, Marsh Frog, Brackish Water Frog, Mangrove Frog**Local Name:** Kakrabhuk Bang**Synonym/s:** *Rana cancrivora* Gravenhorst, 1829*Rana cancrivora* Annandale, 1918*Rana crancrivora* Boulenger, 1920*Rana cancrivora* Dunn, 1928*Rana cancrivora raja* Smith, 1930;*Dicroglossus cancrivorous* Deckert, 1938*Euphlyctis cancrivora* Dubois, 1981*Limnonectes cancrivora* Dubois, 1987*Fejervarya raja* Iskandar, 1998*Fejervarya cancrivora* Iskandar, 1998**Taxonomic Notes:** Molecular evidence suggested that the populations of this species from Bangladesh consist of considerable number of cryptic species (Hasan *et al.* 2014).

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1**Justification:** *Fejervarya cancrivora* is a widely distributed species with a large consistent population and there is no significant threat. Thus the species is listed as Least Concern.**Date Assessed:** 26 August 2014

History

Regional Status: It has not yet been assessed (IUCN Bangladesh 2000).

Geographic Range

Global: This species is found in Bangladesh, Cambodia, China, India, Indonesia, Lao PDR, Malaysia, Philippines,*Fejervarya cancrivora*

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Singapore, Thailand and Vietnam.

Bangladesh: *Fejervarya cancrivora* is widely distributed in coastal areas of Bangladesh; also occurs in hills up to 1300 m above mean sea level and plains of northeast and southeast (Hasan *et al.* 2012, Hasan *et al.* 2014, Khan 2015).**EOO:** 1,07,897 km²**AOO:** 8,595 km²

Population

Generation Time (Length): Not known**Total Population:** Not known**No of Sub-population:** Not known**Trend:** Not known

Habitat and Ecology

This frog is terrestrial and feeds on insects, crabs and other invertebrates. It is the only frog species in the country that can breed in semi-saline or brackish water at ease. Other than the natural mangroves, it also thrives in man-made environments such as wet paddy fields. It breeds all year round but most active at the beginning of the wet season. The call sounds like a rapid throat gargle. *Fejervarya cancrivora* is usually found in mangrove swamps, grasslands, marshy areas, forest floors, muddy embankments and agricultural lands, (Hasan *et al.* 2014, Khan 2015). This frog is active at night. It has been seen basking in sunlight on the banks of canals for an appreciable period when body had been partly covered with mud (M.A.R. Khan pers. comm.)

**Assessor:** Mohammad Abdul Wahed Chowdhury

Fejervarya nepalensis

Species ID: AM0017

LEAST
CONCERN
<LC>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|-------|----------------|
| ANIMALIA | CHORDATA | AMPHIBIA | ANURA | DICROGLOSSIDAE |

Scientific Name: *Fejervarya nepalensis* Dubois, 1975

English Name: Nepal Wart Frog, Nepal Cricket Frog

Local Name: Nepali Jhi-Jhi Bang, Nepaler Kot-koti Bang, Nepaler Cricket Bang

Synonym/s: *Rana nepalensis* Dubois, 1975

Rana (Fejervarya) nepalensis Dubois, 1984

Euphylyctis nepalensis Poynton and Broadley, 1985

Limnonectes (Fejervarya) nepalensis Dubois, 1987

Fejervarya nepalensis Iskandar, 1998

Zakerana nepalensis Howlader, 2011

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: *Fejervarya nepalensis* is common and widely distributed in the country. Moreover, there is no significant threat that can qualify it to the threatened category. Thus it is considered as Least Concern.

Date Assessed: 24 August 2014

History

Regional Status: It has not yet been assessed (IUCN Bangladesh 2000).

Geographic Range

Global: This species is found in Bangladesh, Bhutan, India and Nepal.

Bangladesh: *Fejervarya nepalensis* is widely distributed in Bangladesh (Rasel *et al.* 2007, Hasan *et al.* 2014).

EOO: 2,22,509 km²

AOO: 1,36,929 km²



Fejervarya nepalensis

© M K Hasan

Population

Generation Time (Length): Not known

Total Population: Not known

No of Sub-population: Not known

Trend: Not known

Habitat and Ecology

It occurs in diverse habitats, including forest edges, scattered forest floors and also in plain lands. This frog prefers wet grasslands and agricultural lands. Being terrestrial it feeds mainly on insects. The breeding period is said to be from May to July.



Assessor: Rukshana Sultana

LEAST
CONCERN
<LC>

Fejervarya pierrei

Species ID: AM0016

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|-------|----------------|
| ANIMALIA | CHORDATA | AMPHIBIA | ANURA | DICROGLOSSIDAE |

Scientific Name: *Fejervarya pierrei* Dubois, 1975**English Name:** Pierre's Cricket Frog, Pierre's Wart Frog**Local Name:** Pierrer Jhi-jhi Bang, Pierrer Kotkoti Bang**Synonym/s:** *Rana pierrei* Dubois, 1975*Fejervarya pierrei* Dubois, 1975*Rana (Euphlyctis) pierrei* Dubois, 1980*Rana (Fejervarya) pierrei* Dubois, 1984*Euphlyctis pierrei* Poynton and Broadley, 1985*Limnonectes (Fejervarya) pierrei* Dubois, 1987*Zakerana pierrei* Howlader, 2011

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1**Justification:** *Fejervarya pierrei* is widely distributed species in Bangladesh. Presumably it has large population and is unlikely to be declining fast enough to qualify for listing in a threatened category. Therefore, it is listed as Least Concern species.**Date Assessed:** 15 February 2015

History

Regional Status: It has not yet been assessed (IUCN Bangladesh 2000).

Geographic Range

Global: This species is found in Bangladesh, Bhutan, China, India and Nepal (Shrestha and Ohler 2004).**Bangladesh:** *Fejervarya pierrei* is widely distributed, particularly in the plains and hills of Bangladesh (Hasan *et al.* 2014, Khan 2015, Rasel *et al.* 2007, Sarker and Howlader 2011) except the southwest.*Fejervarya pierrei*

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EOO: 2,22,509 km²**AOO:** 1,36,929 km²

Population

Generation Time (Length): Not known**Total Population:** Not known**No of Sub-population:** Not known**Trend:** Not known

Habitat and Ecology

Terrestrial frog and feeds mainly on insects. Breeding starts in May and continues up to July. Female releases eggs in stagnant rain water (Hasan *et al.* 2014). *Fejervarya pierrei* inhabits forest edges, agricultural lands, marshy grasslands, paddy fields, forest streams and floors of degraded forests (Hasan *et al.* 2014, Khan 2015). It occurs at <500 m above mean sea level. This frog is active at night. However, during monsoon it comes out of hiding in and around feebly flowing water bodies.

**Assessor:** Mohammad Abdul Wahed Chowdhury

Fejervarya syhadrensis

Species ID: AM0018

LEAST
CONCERN
<LC>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|-------|----------------|
| ANIMALIA | CHORDATA | AMPHIBIA | ANURA | DICROGLOSSIDAE |

Scientific Name: *Fejervarya syhadrensis* Annandale, 1919
English Name: Bombay Wart Frog, Hill Cricket Frog, Long-legged Cricket Frog, Small Cricket Frog, Southern Cricket Frog, Syhadra Frog

Local Name: Dakshinatter Jhi-Jhi Bang, Syhadra Jhi-Jhi Bang, Bon Jhi-Jhi Bang

Synonym/s: *Rana limnocharis* var. *syhadrensis* Annandale, 1919

Rana syhadrensis Dubois, 1975

Limnonectes syhadrensis Dubois, 1992

Fejervarya syhadrensis Iskander, 1998

Taxonomic Notes: Molecular evidence suggested that population of *F. syhadrensis* from southeastern part of Bangladesh resembled *F. asmati* (Hasan *et al.* 2012). Further taxonomical studies are needed to resolve the glitch.

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: *Fejervarya syhadrensis* is very common and widely distributed. Moreover, there are no significant threats. Thus the species is listed as Least Concern.

Date Assessed: 24 August 2014

History

Regional Status: It has not yet been assessed (IUCN Bangladesh 2000).

Geographic Range

Global: This frog is found in Bangladesh, India, Nepal and Pakistan.

Bangladesh: *Fejervarya syhadrensis* is widely distributed in Bangladesh (Rasel *et al.* 2007, Chakma 2009).



Fejervarya syhadrensis

© M K Hasan

EEO: 2,22,509 km²

AOO: 1,39,772 km²

Population

Generation Time (Length): Not known

Total Population: Not known

No of Sub-population: Not known

Trend: Not known

Habitat and Ecology

This frog is terrestrial and feeds on insects. Its breeding has been recorded from May to July (Chakma 2009). It occurs in diverse habitats including dense forests, forest edges and scattered forests, forest streams, agricultural lands and also found in human habitation. It prefers stagnant water but moist grasslands away from the water. This frog is active at night.



Assessor: Rukshana Sultana

LEAST
CONCERN
<LC>

Fejervarya teraiensis

Species ID: AM0019

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|-------|----------------|
| ANIMALIA | CHORDATA | AMPHIBIA | ANURA | DICROGLOSSIDAE |

Scientific Name: *Fejervarya teraiensis* Dubois, 1984**English Name:** Terai Wart Frog, Terai Cricket Frog**Local Name:** Torai Jhi-Jhi Bang, Boro Kot-koti Bang**Synonym/s:** *Rana teraiensis* Dubois, 1984*Limnonectes (Fejervarya) teraiensis* Dubois, 1987*Fejervarya teraiensis* Iskandar, 1998*Zakerana teraiensis* Howlader, 2011

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1**Justification:** *Fejervarya teraiensis* is common and widely distributed in diverse habitats. Moreover, there is no significant threat to it. Thus it is categorized as Least Concern.**Date Assessed:** 17 November 2014

History

Regional Status: It has not yet been assessed (IUCN Bangladesh 2000).

Geographic Range

Global: This species is found in Bangladesh, Bhutan, India and Nepal (Bordoloi *et al.* 2009).**Bangladesh:** *Fejervarya teraiensis* is widely distributed in Bangladesh (Rasel *et al.* 2007; Sarker 2012, 2013; Hasan *et al.* 2014).**EOO:** 2,22,509 km²**AOO:** 1,39,772 km²*Fejervarya teraiensis*

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Population

Generation Time (Length): Not known**Total Population:** Not known**No of Sub-population:** Not known**Trend:** Not known

Habitat and Ecology

This frog is terrestrial and feeds on insects. Its breeding starts in May and ends in July (Hasan *et al.* 2014). *Fejervarya teraiensis* occurs in diverse habitats including agricultural lands, forest edges and scattered forest floors and also found in paddy fields (Hasan *et al.* 2014) as well as in the hills (M.A.R. Khan pers. comm.). This frog is active at night.

**Assessor:** Rukshana Sultana

Hoplobatrachus tigerinus

Species ID: AM0022

LEAST
CONCERN
<LC>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|-------|----------------|
| ANIMALIA | CHORDATA | AMPHIBIA | ANURA | DICROGLOSSIDAE |

Scientific Name: *Hoplobatrachus tigerinus* Daudin, 1802

English Name: Indian Bullfrog, Bull Frog, Golden Frog, Tiger Frog, Tiger Peters Frog

Local Name: Sona Bang, Kola Bang, Bhawa Bang

Synonym/s: *Dicroglossus tigrinus* (Daudin, 1802)

Rana tigrina Merrem, 1820

Rana picta Gravenhorst, 1829

Rana (Fejervarya) tigrina Bolkay, 1915

Rana (Rana) tigrina Boulenger, 1920

Euphyctis tigrina Poynton and Broadley, 1985

Tigrina tigrina Fei *et al.* 1990

Hoplobatrachus tigerinus Dubois, 1992

Taxonomic Notes: Molecular evidence suggesting cryptic species within the populations in Bangladesh (Including *H. littoralis*) (Hasan *et al.* 2014).

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: *Hoplobatrachus tigerinus* is very common and most widely distributed throughout the country, from the offshore island of the Saint Martin's to the hilly district of Bandarban. Moreover, there is no significant threat and decline of populations despite the fact that it is hunted for meat in the hills. Thus the species is listed as Least Concern.

Date Assessed: 17 November 2014

History

Regional Status: It has been assessed as Not Threatened (IUCN Bangladesh 2000).



Hoplobatrachus tigerinus

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Geographic Range

Global: This frog is found in Afghanistan, Bangladesh, India, Myanmar, Nepal and Pakistan (Padhye *et al.* 2008).

Bangladesh: *Hoplobatrachus tigerinus* is possibly the most widely distributed large frog that occurs all over Bangladesh (Chakma 2009; Hasan *et al.* 2014; Husain 1974; Khan 1982, 1987, 2015).

EOO: 2,22,509 km²

AOO: 1,39,772 km²

Population

Generation Time (Length): Not known

Total Population: Not known

No of Sub-population: Not known

Trend: Not known

Habitat and Ecology

It is terrestrial and feeds on different types of insects; also eats crabs, rats, shrews, small birds, chicks, small snakes, skinks, etc. Tadpoles are mainly carnivorous, feeding on insect larvae and algae. Main breeding period is during south western monsoon from late May to early September. It spends most of the daytime hiding under moist trash, bushes by water bodies and thickets by streams, or even under stones (Husain 1974, Khan 1987, Chakma 2009, Hasan *et al.* 2014). *Hoplobatrachus tigerinus* is found from brackish water zone in southern part of the country to the pools and puddles in the north and east of Bangladesh. Many lives in the capital city of Dhaka (Chakma 2009, Husain 1974, Khan 1987).

Assessor: Rukshana Sultana



LEAST
CONCERN
<LC>

Microhyla berdmorei

Species ID: AM0034

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|-------|----------------|
| ANIMALIA | CHORDATA | AMPHIBIA | ANURA | DICROGLOSSIDAE |

Scientific Name: *Microhyla berdmorei* Blyth, 1856

English Name: Berdmore's Narrow-mouthed Frog

Local Name: Baro Laubichi Bang

Synonym/s: *Microhyla malcolmi* Cochran, 1927

Microhyla fowleri Taylor, 1934

Diplopelma berdmorei Theobald, 1873

Engystoma berdmorei Blyth, 1856

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: A widely distributed species in the central, eastern, northeastern and southeastern parts of Bangladesh. There is no notable threat affecting the populations. Thus the species is listed as Least Concern.

Date Assessed: 26 January 2015

History

Regional Status: It has not yet been assessed (IUCN Bangladesh 2000).

Geographic Range

Global: The species is found in Bangladesh, Cambodia, China, India, Indonesia, Malaysia, Myanmar, Thailand, Lao PDR and Vietnam (van Dijk *et al.* 2009).

Bangladesh: *Microhyla berdmorei* is found in the deciduous and mixed evergreen forests of the central, eastern, northeastern and southeastern parts of Bangladesh (Asmat *et al.* 2003, Asmat 2009, Hasan *et al.* 2014, Khan 2015).

EOO: 93,049 km²

AOO: 36,293 km²



Microhyla berdmorei

© M K Hasan

Population

Generation Time (Length): Not known

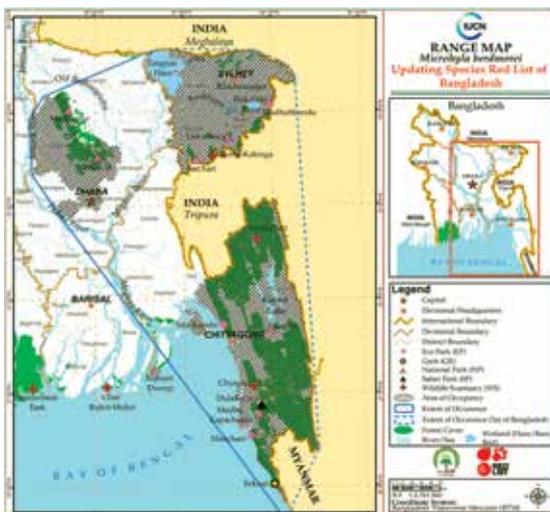
Total Population: Not known

No of Sub-population: Not known

Trend: Not known

Habitat and Ecology

It prefers wet forest floor with leaf litter, but also occurs on banks of fresh water bodies. Preferably it occurs in areas up to 200 m above sea level. It feeds mainly on ants, ant eggs and small insects. It breeds in winter, mainly during November-February. This microhylid is usually active at night and sometimes, at daytime.



Assessor: Mohammad Abdul Wahed Chowdhury

LEAST
CONCERN
<LC>

Clinotarsus alticola

Species ID: AM0026

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|-------|---------|
| ANIMALIA | CHORDATA | AMPHIBIA | ANURA | RANIDAE |

Scientific Name: *Clinotarsus alticola* Boulenger, 1882**English Name:** Point-nosed Frog, Hill Frog, High-altitude Frog**Local Name:** Suchalo-Matha Bang**Synonym/s:** *Hylorana pipiens* Jerdon, 1870*Rana alticola* Boulenger, 1882*Rana (Hylarana) alticola* Bourret, 1942*Nasirana alticola* Frost *et al.*, 2006*Clinotarsus alticola* Stuart, 2008**Taxonomic Notes:** Presumably a species complex that needs further taxonomic revision.

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1**Justification:** *Clinotarsus alticola* is common and widely distributed within the hill ranges of the northeast, east and southeast of the country. There are no notable threats and there is no significant trend of population decline. Thus the species is categorized as Least Concern.**Date Assessed:** 17 November 2014

History

Regional Status: It has not yet been assessed (IUCN Bangladesh 2000).

Geographic Range

Global: This species is found in Bangladesh, India, Myanmar and Thailand (van Dijk *et al.* 2004).**Bangladesh:** This species is found in the northeast and southeast of Bangladesh (Khan 2004, 2010, 2015; Khan 2008, Chakma 2009, Mahony *et al.* 2009).*Clinotarsus alticola*

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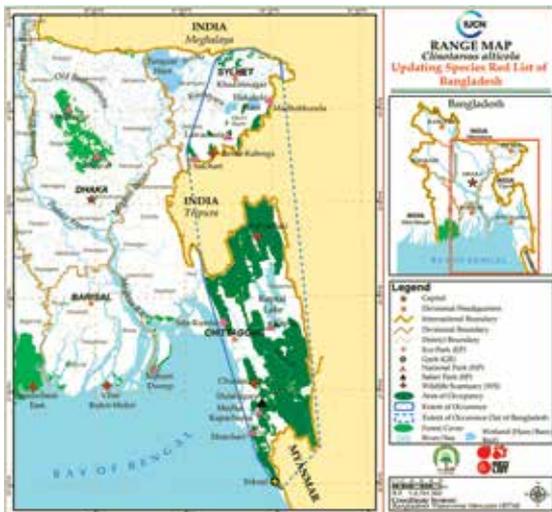
EOO: 41,602 km²**AOO:** 10,624 km²

Population

Generation Time (Length): Not known**Total Population:** Not known**No of Sub-population:** Not known**Trend:** Not known

Habitat and Ecology

Clinotarsus alticola is found in mixed-evergreen forests and the edges of hill forest streams (Chakma 2009). It is nocturnal, solitary, and prefers rocky hilly areas, hill streams, pools and moss covered steep banks. Dozens of it have been found congregating at night in the Madhabkunda pool below the waterfall of the same name during monsoon and late rains in October (M.A.R. Khan pers. comm.). Breeding occurs at the end of monsoon. It occurs up to 150 m asl.

**Assessor:** Shahriar Caesar Rahman

Humerana humeralis

Species ID: AM0013

LEAST
CONCERN
<LC>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|-------|---------|
| ANIMALIA | CHORDATA | AMPHIBIA | ANURA | RANIDAE |

Scientific Name: *Humerana humeralis* Boulenger, 1887
English Name: Bhamo Frog, Boulenger's Green Frog
Local Name: Shukor Daka Bang, Sobuj Bang, Myanrarer Bhamo Bang
Synonym/s: *Rana humeralis* Boulenger, 1887
Rana (Hylorana) humeralis Boulenger, 1920
Hylorana humeralis Deckert, 1938
Rana (Humerana) humeralis Dubois, 1992
Humerana humeralis Frost *et al.* 2006

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1
Justification: The species has a wide range of distribution and no significant threats are known to be affecting the populations. Thus the species is listed as Least Concern.

Date Assessed: 26 June 2014

History

Regional Status: It has not yet been assessed (IUCN Bangladesh 2000).

Geographic Range

Global: The species is known to occur in Bangladesh, India, Myanmar and Nepal (van Dijk *et al.* 2004).

Bangladesh: *Humerana humeralis* is found in mixed-evergreen forests of Chittagong and Sylhet (particularly low lands, swamps, marshes or ponds), Chandpur, Dhaka, Narayanganj and Rangpur areas.

EOO: 1,32,585 km²

AOO: 30,511 km²



Humerana humeralis

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Population

Generation Time (Length): Not known

Total Population: Not known

No of Sub-population: Not known

Trend: Not known

Habitat and Ecology

This species feeds on insects and other invertebrates. It can climb up on bush, shrubs and trees. Breeding season starts from June and lasts up to August, during the peak of the rainy season. Male frog starts calling to attract female from the submerged vegetation or edge of water. The maturity time scale and viability of tadpoles are unknown. In winter it hides itself under leaf litter. It inhabits swamps, marshes, ponds, streams and other water bodies associated with short to medium length vegetation. It is often found in riparian forest zones. It occurs upto 15-150 m above mean sea level. This frog is active at daytime and in the evening.



Assessor: Animesh Ghose

LEAST
CONCERN
<LC>

Hylarana leptoglossa

Species ID: AM0027

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|-------|---------|
| ANIMALIA | CHORDATA | AMPHIBIA | ANURA | RANIDAE |

Scientific Name: *Hylarana leptoglossa* Cope, 1868

English Name: Cope's Frog, Cope's Assam Frog

Local Name: Murgi Daka Bang

Synonym/s: *Hylarana leptoglossa* Cope, 1868

Rana leptoglossa Annandale, 1917

Sylvirana leptoglossa Frost *et al.*, 2006

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: *Hylarana leptoglossa* is widely distributed in the country and it is not facing any significant threat. Thus the species is listed as Least Concern.

Date Assessed: 24 August 2014

History

Regional Status: It has not yet been assessed (IUCN Bangladesh 2000).

Geographic Range

Global: This frog is found in Bangladesh, India, Myanmar and Thailand (van Dijk *et al.* 2004).

Bangladesh: *Hylarana leptoglossa* is widely distributed throughout the country, rather partial to deciduous and mixed evergreen forests as well as in well vegetated areas of the countryside (Asmat *et al.* 2003, Chakma 2009, Hasan *et al.* 2011, Hasan *et al.* 2014, Khan 2015, Mahony and Reza 2007, Romer 1949).

EOO: 55,093 km²

AOO: 1,626 km²



Hylarana leptoglossa

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Population

Generation Time (Length): Not known

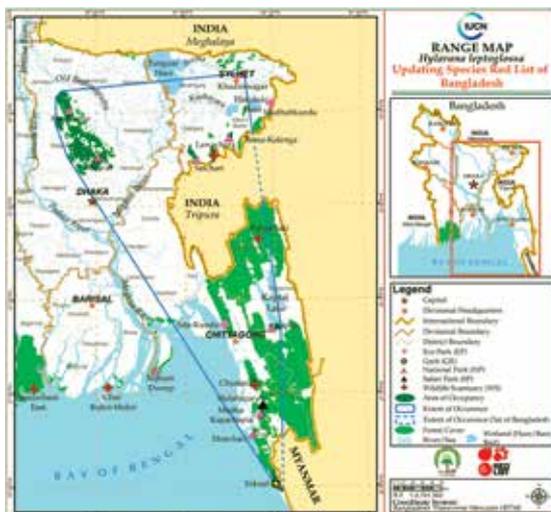
Total Population: Not known

No of Sub-population: Not known

Trend: Not known

Habitat and Ecology

It is terrestrial; feeds on insects, earthworms and other small invertebrates, and breeds during May-August (Chakma 2009, Hasan *et al.* 2014). *Hylarana leptoglossa* is found in and around the deciduous and mixed evergreen forests as well as bamboo groves in some villages. This frog is active at night.



Assessor: Ali Ahmed

Hylarana tytleri

Species ID: AM0012

LEAST
CONCERN
<LC>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|-------|---------|
| ANIMALIA | CHORDATA | AMPHIBIA | ANURA | RANIDAE |

Scientific Name: *Hylarana tytleri* Theobald 1868
English Name: Yellow-striped Frog, Bengal Leaping Frog
Local Name: Pana Bang, Kad Bang
Synonym/s: *Rana tytleri*, Boulenger, 1882
Lymnodytes tytleri Mason, 1882
Rana (Hylarana) tytleri Ohler and Mallick, 2002
Hylarana tytleri Che *et al.*, 2007

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: *Hylarana tytleri* is widespread in Bangladesh and no viable threats found. Thus it is listed as Least Concern.

Date Assessed: 26 Jun 2014

History

Regional Status: It has been assessed as Vulnerable (IUCN Bangladesh 2000).

Geographic Range

Global: This species is found in Bangladesh, India and Nepal (Dutta *et al.* 2004).

Bangladesh: *Hylarana tytleri* is widely distributed in all freshwater wetlands, with some vegetation, in Bangladesh (Asmat *et al.* 2003, Chakma 2009, Howlader 2010; Khan 1982, 2015; Mahony *et al.* 2009, Sarker and Howlader 2012, Selim *et al.* 2013, Hasan *et al.* 2014). Possibly rare or absent in the coastal brackish water wetlands.

EOO: 1,73,953 km²

AOO: 1,36,929 km²



Hylarana tytleri

© M K Hasan

Population

Generation Time (Length): Not known

Total Population: Not known

No of Sub-population: Not known

Trend: Not known

Habitat and Ecology

This frog is semi-terrestrial and nocturnal. It prefers the leaves of aquatic vegetation such as the water hyacinth, *Ipomoea* spp., *Typha* sp., *Phragmites* sp., etc., for hiding. After heavy rainfall it is found in damp places, logs and jute stick lattice by the human settlement. This frog feeds mainly on insects and their larvae when it breeds during south west monsoon, ranging from June to August (Chakma 2009; Khan 1987, 2010, 2015).



Assessor: Ali Ahmed

Sylvirana nigrovittata

Species ID: AM0028

LEAST
CONCERN
<LC>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|-------|---------|
| ANIMALIA | CHORDATA | AMPHIBIA | ANURA | RANIDAE |

Scientific Name: *Sylvirana nigrovittata* (Blyth, 1855)

English Name: Dark-sided Frog, Black-spotted Frog

Local Name: Maitta Bang, Kalofuta Bang

Synonym/s: *Limnodytes nigrovittatus* Blyth, 1855

Hylorana nigrovittata Anderson, 1871

Rana (Hylorana) nigrovittata Boulenger, 1920

Rana (Sylvirana) nigrovittata Dubois, 1992

Sylvirana nigrovittata Frost *et al.*, 2006

Taxonomic Notes: *Sylvirana nigrovittata* is considered as a species complex in Bangladesh and populations in Bangladesh show morphological differences from those found in other Southeast Asian countries (Mahony *et al.* 2009, Chakma 2009).

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: *Sylvirana nigrovittata* is widely distributed within the mixed evergreen forest belts in the Sylhet and Chittagong divisions. Also it has no known serious threat. Thus the species is listed as Least Concern.

Date Assessed: 24 August 2014

History

Regional Status: It has not yet been assessed (IUCN Bangladesh 2000).

Geographic Range

Global: This species is found in Bangladesh, Cambodia, China, India, Indonesia, Lao PDR, Malaysia, Myanmar, Nepal, Thailand and Vietnam (van Dijk *et al.* 2004).

Bangladesh: *Sylvirana nigrovittata* is found in south-eastern hilly region of Chittagong and Chittagong Hill Tracts



Sylvirana nigrovittata

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(Mahony *et al.* 2009, Chakma 2009, Hasan *et al.* 2014) and in Greater Sylhet hill forests (Khan 2015).

EOO: 29,920 km²

AOO: 19,487 km²

Population

Generation Time (Length): Not known

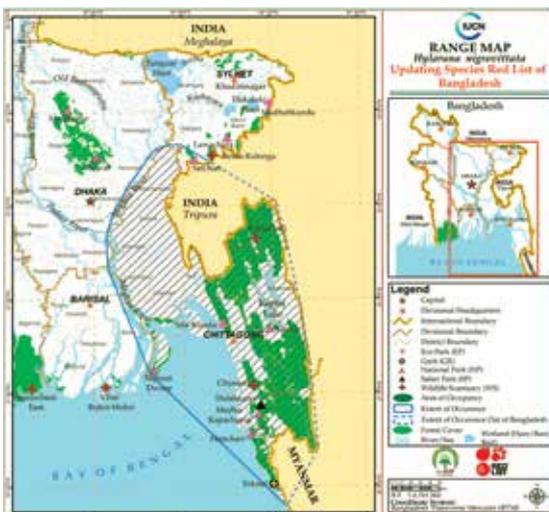
Total Population: Not known

No of Sub-population: Not known

Trend: Not known

Habitat and Ecology

This frog is terrestrial, and prefers to moist and wet areas. Its breeding calls heard in November and December (Chakma 2009, Hasan *et al.* 2014). *Sylvirana nigrovittata* is found in forest floor, stream beds and temporary pools formed along paths that cut across forest holding terrain (Chakma 2009, Hasan *et al.* 2014). It is active at night.



Assessor: Ali Ahmed

Chiromantis simus

Species ID: AM0043

LEAST
CONCERN
<LC>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|-------|---------------|
| ANIMALIA | CHORDATA | AMPHIBIA | ANURA | RHACOPHORIDAE |

Scientific Name: *Chiromantis simus* Annandale, 1915**English Name:** Annandale's Pigmy Tree Frog**Local Name:** Bohu-dagi Khudey Gecho Bang, Ashamer Bamon Gecho Bang**Synonym/s:** *Chirixalus simus* Annandale, 1915*Philautus simus* Cochsan, 1927*Rhacophorus simus* Ahl, 1931*Chiromantis simus* Frost *et al.*, 2006

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1**Justification:** Though this species is rare but found in a wide range of mixed evergreen forest habitats of northeast and southeast, and Madhupur forest in the central part of the country. Its EOO and AOO are much larger than the threshold level for any threatened category. Moreover, there is no record of hunting or trade affecting this species. Thus it is listed as Least Concern.**Date Assessed:** 21 September 2014

History

Regional Status: It has not yet been assessed (IUCN Bangladesh 2000).

Geographic Range

Global: This species is found in Bangladesh and India (Dutta *et al.* 2004).**Bangladesh:** *Chiromantis simus* is found in the forests of northeast, southeast and central part (Hasan *et al.* 2014). It is common around Thanchi township in Bandarban District (Khan 2015).*Chiromantis simus*

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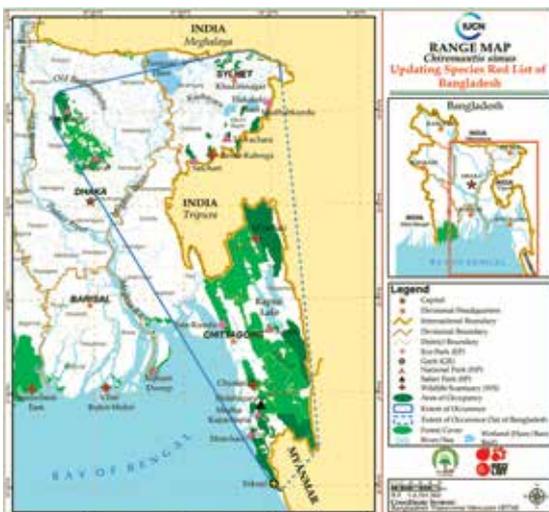
EOO: 72,103 km²**AOO:** 4,748 km²

Population

Generation Time (Length): Not known**Total Population:** Not known**No of Sub-population:** Not known**Trend:** Not known

Habitat and Ecology

This species inhabits forest undergrowth and bush. It usually found in forest edges. This frog feeds on small insects. Breeds in monsoon usually from May to July (Chakma 2009, Hasan *et al.* 2014). It is active at night.

**Assessor:** Md. Kamrul Hasan

Chiromantis vittatus

Species ID: AM0042

LEAST
CONCERN
<LC>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|-------|---------------|
| ANIMALIA | CHORDATA | AMPHIBIA | ANURA | RHACOPHORIDAE |

Scientific Name: *Chiromantis vittatus* Boulenger, 1887

English Name: Two-striped Pigmy Tree Frog

Local Name: Dui-dagi Khudey Gecho Bang, Ashamer Khudey Gecho Bang, Banshi Gecho Bang

Synonym/s: *Ixalus vittatus* Boulenger, 1887

Chirixalus vittatus Liem, 1970

Chiromantis vittatus Frost *et al.* 2006

Feihyla vittata Fei *et al.* 2010

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: This species is rare, but found in a wide range of mixed evergreen forest habitats of northeast and southeast. Its EOO and AOO are much larger than the threshold level of any threatened category. Moreover, there is no record of hunting or trade affecting this species. Thus it is listed as Least Concern.

Date Assessed: 23 October 2014

History

Regional Status: It has not yet been assessed (IUCN Bangladesh 2000).

Geographic Range

Global: *Chiromantis vittatus* is found in Bangladesh, Cambodia, China, India, Lao PDR, Myanmar, Thailand, and Vietnam (Lau *et al.* 2004).

Bangladesh: This frog is found in mixed evergreen forests and surrounding areas in Chittagong and Sylhet divisions (Chakma 2009, Kabir *et al.* 2010, Hasan *et al.* 2014).

EOO: 41,602 km²

AOO: 10,626 km²



Chiromantis vittatus

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Population

Generation Time (Length): Not known

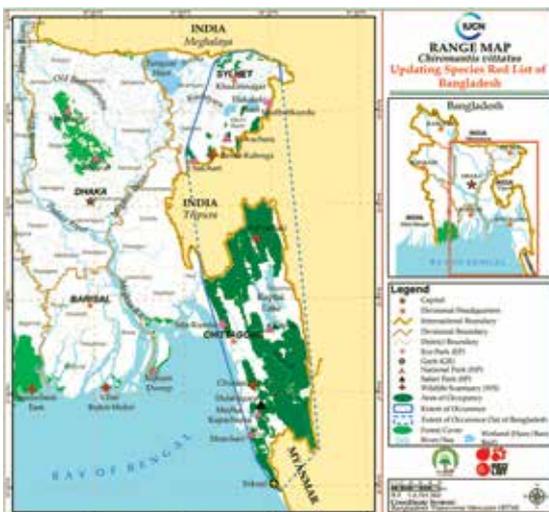
Total Population: Not known

No of Sub-population: Not known

Trend: Not known

Habitat and Ecology

This frog inhabits forest undergrowth and bush. It is commonly found in forest edges. Feeds on small insects. It breeds in monsoon, usually from May to July (Hasan *et al.* 2014). This frog is active at night.



Assessor: Md. Kamrul Hasan

Polypedates leucomystax

Species ID: AM0040

LEAST
CONCERN
<LC>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|-------|---------------|
| ANIMALIA | CHORDATA | AMPHIBIA | ANURA | RHACOPHORIDAE |

Scientific Name: *Polypedates leucomystax*
Gravenhorst, 1829

English Name: Common Tree Frog, Four-lined Tree Frog,
White-lipped Tree Frog

Local Name: Dorakata Gecho Bang, Pati Gecho Bang

Synonym/s: *Hyla leucomystax* Gravenhorst, 1829

Polepedates leucomystax Tschudi, 1838

Polypedates quadrilinaeta Günther, 1859

Rhacophorus leucomystax Boulenger, 1889

Polypedates leucomystax Dutta, 1997

Taxonomic Notes: *Polypedates leucomystax* represents a complex of poorly known cryptic species. A comprehensive taxonomic revision is needed.

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: This species is widely distributed throughout the country. Its EOO and AOO are much larger than the threshold level of threatened categories and there is no significant threat affecting this species. Thus it is listed as Least Concern.

Date Assessed: 22 January 2015

History

Regional Status: It has been assessed as Not Threatened (IUCN Bangladesh 2000).

Geographic Range

Global: This species is found in Bangladesh, Brunei Darussalam, Cambodia, China, India, Indonesia, Lao PDR, Malaysia, Myanmar, Nepal, Philippines, Singapore, Thailand, Vietnam and Japan (Diesmos *et al.* 2004).



Polypedates leucomystax

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Bangladesh: *Polypedates leucomystax* is widely distributed all over the country, from the coastal areas to the hilltops (Khan 1982, 1987, 2015; Chakma 2009, Hasan *et al.* 2014, Sarker and Howlader 2012).

EOO: 2,21,137 km²

AOO: 1,36,929 km²

Population

Generation Time (Length): Not known

Total Population: Not known

No of Sub-population: Not known

Trend: Not known

Habitat and Ecology

This frog is highly adaptable and inhabits in diverse habitats, including primary and secondary forests, bushes, tree holes, homestead gardens and human habitations. It hides in bushes, leaves or tree barks, in countryside latrine, behind toilet flash tank in ground floor houses in certain cities, cattle sheds, etc., during the day becoming active at dusk. It feeds on a variety of insects and breeds in monsoon, usually from May to July (Hasan *et al.* 2014; Khan 1982, 1985, 2015). This frog is active at night.

Assessor: Md. Kamrul Hasan



LEAST
CONCERN
<LC>

Polypedates maculatus

Species ID: AM0041

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|-------|---------------|
| ANIMALIA | CHORDATA | AMPHIBIA | ANURA | RHACOPHORIDAE |

Scientific Name: *Polypedates maculatus* Gray, 1830**English Name:** Maculated Tree Frog, Indian Tree Frog, Spotted Tree Frog**Local Name:** Chitra Gecho Bang, Gecho Bang**Synonym/s:** *Hyla maculata* Gray, 1830*Polypedates maculatus* Günther, 1859*Rhacophorus maculatus* Boulenger, 1882*Polypedates maculatus* Dutta, 1997**Taxonomic Notes:** Considered a species complex and very hard to differentiate from *Polypedates leucomystax*. A comprehensive taxonomic revision is needed.

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1**Justification:** This species is distributed in a large area of the country. Its EOO and AOO are much larger than the threshold level of threatened categories. There is no significant threat affecting this species. Thus it is listed as Least Concern.**Date Assessed:** 26 June 2014

History

Regional Status: It has been assessed as Not Threatened (IUCN Bangladesh 2000).

Geographic Range

Global: *Polypedates maculatus* is found in Bangladesh, Bhutan, India, Nepal and Sri Lanka (Dutta *et al.* 2004).**Bangladesh:** This frog is widely distributed in all habitats in Bangladesh, from the coastal areas to the high hill forests and in the countryside (Chakma 2009, Hasan *et al.* 2014; Khan 1982, 1987, 2015).*Polypedates maculatus*

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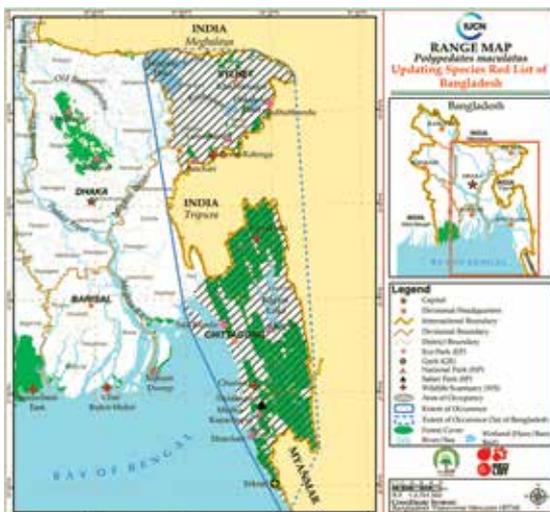
EOO: 2,21,137 km²**AOO:** 1,36,929 km²

Population

Generation Time (Length): Not known**Total Population:** Not known**No of Sub-population:** Not known**Trend:** Not known

Habitat and Ecology

This frog is highly adaptable and inhabits in diverse habitats, including primary and secondary forests, bushes, homestead gardens and human habitations. It roosts underside of leaves, barks or tree branches during the day. This frog feeds mainly on insects. This frog breeds during south west monsoon, ranging from May to August. A mating pair builds a foam nest on leaves, branches overhanging any pool or large water bodies and lays eggs in it where these get fertilized almost instantly. The eggs soon hatch out and larvae drop down to the water body below (Chakma 2009, Hasan *et al.* 2014; Khan 1982, 1987, 2015). This frog is active at night.

Assessor: Md. Kamrul Hasan

Rhacophorus bipunctatus

Species ID: AM0045

LEAST
CONCERN
<LC>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|-------|---------------|
| ANIMALIA | CHORDATA | AMPHIBIA | ANURA | RHACOPHORIDAE |

Scientific Name: *Rhacophorus bipunctatus* Ahl, 1927
English Name: Twin-spotted Tree Frog, Two-spotted Tree Frog

Local Name: Dui-phota Gecho Bang; Lalpa Gecho Bang

Synonym/s: *Rhacophorus maculatus* Anderson, 1871
Rhacophorus bimaculatus Boulenger, 1882
Rhacophorus bipunctatus Ahl, 1927
Rhacophorus reinwardtii bipunctatus Wolf, 1936
Rhacophorus htunwini Wilkinson *et al.*, 2005
Rhacophorus bipunctatus Bordoloi, Bortamuli and Ohler, 2007

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: A common species in the mixed evergreen forests of Chittagong, Chittagong Hill Tracts and Greater Sylhet areas. The species is also found in degraded forests and plantations. Due to tolerance of habitat modification, presumed large population and unlikely to be declining fast enough within 10 years to qualify for listing in any of the threatened categories. Thus it is listed as Least Concern.

Date Assessed: 30 October 2014

History

Regional Status: It has not yet been assessed (IUCN Bangladesh 2000).

Geographic Range

Global: This species is found in Bangladesh, China, India, Malaysia, Myanmar and Thailand (Ohler *et al.* 2008).

Bangladesh: *Rhacophorus bipunctatus* occurs in the



Rhacophorus bipunctatus

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mixed evergreen forests, including secondary forests, in the, northeast and southeast of Bangladesh (Reza and Mukul 2009, Khan 2015).

EEO: 35,483 km²

AOO: 10,549 km²

Population

Generation Time (Length): Not known

Total Population: Not known

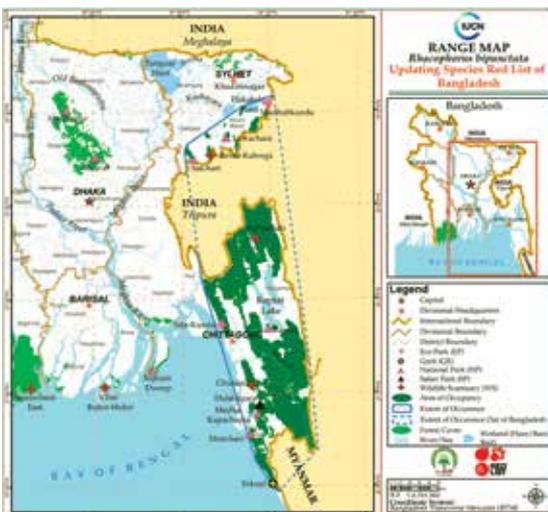
No of Sub-population: Not known

Trend: Not known

Habitat and Ecology

This species is exclusively arboreal but noted basking on vegetation, close to ground level, during December in Lawachara NP (M.A.R. Khan pers. comm.). It breeds during the south west monsoon by larval development in rain pools and standing water in streams and tree hollows in forests. Foam nests formed by the mating pair on tree branches overhanging shallow moving or stagnant water. It occurs upto 2,200 m above mean sea level in India (Ohler *et al.* 2008). This frog is active at night.

Assessor: Suprio Chakma





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Kalophrynus interlineatus

Species ID: AM0035

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Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|-------|--------------|
| ANIMALIA | CHORDATA | AMPHIBIA | ANURA | MICROHYLIDAE |

Scientific Name: *Kalophrynus interlineatus* (Blyth, 1855)
English Name: Stripe Sticky Frog, Striped Sticky Frog, Spotted Narrow-mouthed Frog, Piebald Narrow-mouthed Frog, Bubble-nest Frog, Blyth's Microhylid Frog, and Orang Sticky Frog
Local Name: Aonor Bang, Soru Mukho Bang
Synonym/s: *Diplopelma interlineatum* Anderson, 1871
Berdmorea interlineata Stoliczka, 1872
Calophrynus interlineata Theobald, 1882
Kalophrynus pleurostigma interlineatus Parker, 1934
Kalophrynus interlineatus Matsui, Chan-ard and Nabhitabhata, 1996
Kalophrynus orangensis Dutta, Ahmed and Das, 2000

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1

Justification: It is a rare species and there are only two records from Madhupur NP (Mahony and Reza 2007, M.M.H. Khan pers. obs.), but it may occur in the northeast and southeast forests of the country. The status of this species in Bangladesh is not clearly known. Thus it is listed as Data Deficient.

Date Assessed: 24 September 2014

History

Regional Status: It has not yet been assessed (IUCN Bangladesh 2000).

Geographic Range

Global: The species is found in Bangladesh, Cambodia, China, Lao PDR, Myanmar, Thailand and Vietnam (van Dijk *et al.* 2004).



Kalophrynus interlineatus

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Bangladesh: *Kalophrynus interlineatus* is generally not a common species, not even at breeding aggregations, and populations appear to be localized within its range of Madhupur NP (Mahony and Reza 2007, M.M.H. Khan pers. obs., Chakma 2009).

EOO: 100 km²

AOO: 84 km²

Population

Generation Time (Length): Not known

Total Population: Not known

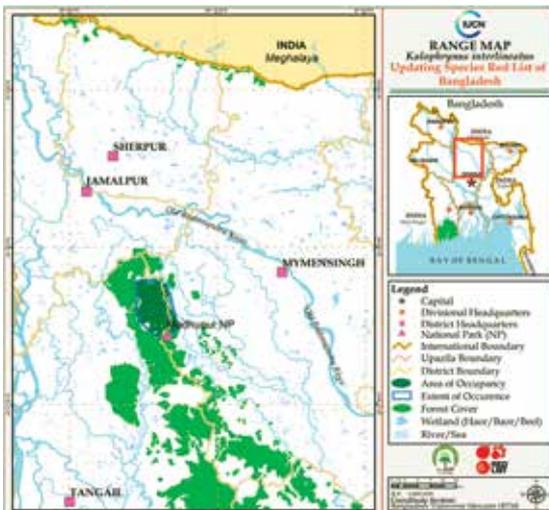
No of Sub-population: Not known

Trend: Not known

Habitat and Ecology

It inhabits grasslands, shrubs and deciduous forests, and is also found on the edges of rainforest (Chan-ard *et al.* 1999). It is also found in degraded forests as well as abandoned and cultivated fields. It occurs from lowlands up to 900 m above sea level (Peter *et al.* 2009). Adult feeds on ants, termites, woodlice and small cockroaches; in captivity, it also accepts *Chironomus* larvae. Breeds from late spring to summer in areas where patches of seasonal marshlands are formed. It breeds in small temporary rain pools or freshwater marshes (Peter *et al.* 2004). It breeds in rainy season usually during June-July (Hasan *et al.* 2014). It is nocturnal and crepuscular.

Assessor: Md. Farid Ahsan



DATA
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Microhyla mukhlesuri

Species ID: AM0030

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|-------|--------------|
| ANIMALIA | CHORDATA | AMPHIBIA | ANURA | MICROHYLIDAE |

Scientific Name: *Microhyla mukhlesuri* Hasan *et al.*, 2014
English Name: Chittagong Microhylid Frog, Mukhlesur's Narrow-mouthed Frog

Local Name: Mukhlesurer Laubichi Bang, Mukhlesurer Cheena Bang (Khan 2015)

Taxonomic Notes: This species is often confused with *Microhyla ornata*. It is a newly described taxon based on molecular analysis (Hasan *et al.* 2014).

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1

Justification: A recently described species and very little is known about its distribution. Moreover, it is often confused with *Microhyla ornata*, making its assessment difficult. Therefore, it has been categorized as Data Deficient.

Date Assessed: 17 November 2014

History

Regional Status: It has not yet been assessed (IUCN Bangladesh 2000).

Geographic Range

Global: This species is found in Bangladesh, but might also occur in neighbouring countries (Hasan *et al.* 2014).

Bangladesh: *Microhyla mukhlesuri* is reported from Rangunia, Chittagong, but might occur in other mixed evergreen forests of northeast and southeast (Hasan *et al.* 2014).

EOO: 458 km²

AOO: 348 km²

*Microhyla mukhlesuri*

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Population

Generation Time (Length): Not known

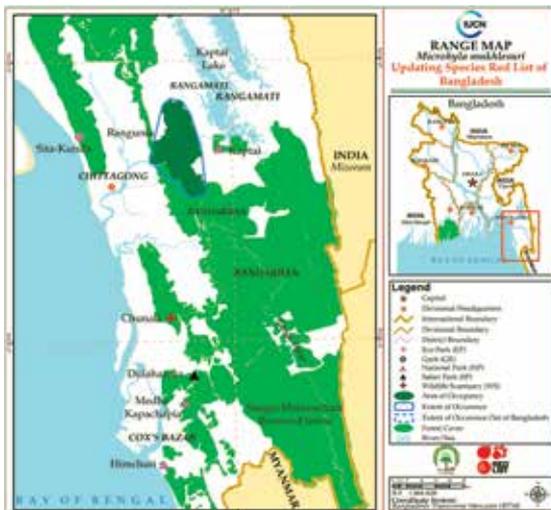
Total Population: Not known

No of Sub-population: Not known

Trend: Not known

Habitat and Ecology

It is terrestrial and very little is known about its habit (Hasan *et al.* 2014). Like other microhylids it is presumably feeds on small insects. Holotype was collected from wet grass near a pond where the soil was wet and slightly loose (Hasan *et al.* 2014). No further information is available. This frog is active at night.



Assessor: Md. Kamrul Hasan

Hylarana nicobariensis

Species ID: AM0001

DATA DEFICIENT <DD>

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|-------|---------|
| ANIMALIA | CHORDATA | AMPHIBIA | ANURA | RANIDAE |

Scientific Name: *Hylarana nicobariensis* Stoliczka, 1870

English Name: Nicobarese Frog, Nicobar Island Frog, Nicobar Cricket Frog, Nicobar Frog

Local Name: Nicobarer Bang

Synonym/s: *Auletris bilineatus* Van-Ernest, 1800

Hyla bilineata Van-Ernest, 1800

Hylorana nicobariensis Stoliczka, 1870

Rana erythraea variety *elongata* Werner, 1892

Rana javanica Horst, 1883

Rana lemniscata Boettger, 1893

Rana macularia variety *javanica* Horst, 1883

Rana nicobariensis Stoliczka, 1870

Rana suluensis Taylor, 1920

Sylvirana nicobariensis Stoliczka, 1870



Hylarana nicobariensis

© M. Monirul H. Khan

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1

Justification: Listed as Data Deficient, because only two individuals were found in a single location in Roangchari, Bandarban, for only once (Khan 2012). Although the known AOO is very small and continuing decline of the quality of habitat is evident, the species is look-alike of a few other species found in the area. Thus it is listed as Data Deficient.

Date Assessed: 25 June 2014

History

Regional Status: It has not yet been assessed (IUCN Bangladesh 2000).

Geographic Range

Global: This species is found in Bangladesh, India, Thailand, Malaysia, Indonesia, Brunei Darussalam and The Philippines (Diesmos *et al.* 2009).



Bangladesh: Only two individuals of *Hylarana nicobariensis* were found in a small ditch at the top of a bushy and cultivated hill in Roangchari, Bandarban, in November, 2010, during a night search (Khan 2012). It is likely to occur in other similar habitats of the Chittagong Hill Tracts.

EOO: 314 km²

AOO: 4 km²

Population

Generation Time (Length): Not known

Total Population: Not known

No of Sub-population: Not known

Trend: Not known

Habitat and Ecology

This species calls during the dusk and at night. Feeds on small aquatic organisms. Not much is known about its breeding. Males call from ditches, flooded fields and ponds. The species breeds in rainwater ponds, flooded fields, lowland swamps, tree holes and roadside ditches (Chanda 2002). This frog occurs in a variety of habitats like bushy and grassy vegetation in and around freshwater swamps, low-hill forests, swamp forests, secondary growths and human-dominated areas with sufficient vegetation and water. In Bangladesh it was reported only from a small wetland situated in a hilltop. This frog is active at night.

Assessor: M. Monirul H. Khan

Hylarana taipehensis

Species ID: AM0011

DATA DEFICIENT
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Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|-------|---------|
| ANIMALIA | CHORDATA | AMPHIBIA | ANURA | RANIDAE |

Scientific Name: *Hylarana taipehensis* van Denburgh, 1909

English Name: Two-striped Grass Frog, Taipei Frog

Local Name: Sobuj Dhani Bang, Dui-dagi Sobuj Bang

Synonym/s: *Rana taipehensis* van Denburg, 1909

Hylarana taipehensis Bourret, 1937

Hylarana (Tenuirana) taipehensis Fei *et al.*, 2005

Hylarana taipehensis Chen *et al.*, 2007

Taxonomic Notes: *Hylarana taipehensis* from South Asia are now included within *Hylarana tytleri* (Ohler and Mallick 2002). Molecular evidence showed an unnamed population of this species is a cryptic species that closely resembles to *H. macrodactyla* or a new species (Hasan *et al.* 2012).

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1

Justification: Although many researchers by photographs claimed this species' occurrence in Bangladesh, there are debates on its taxonomy (Ohler and Mallick 2002, Hasan *et al.* 2012). The species needs proper taxonomic verification. Thus it is listed as Data Deficient.

Date Assessed: 26 June 2014

History

Regional Status: It has been assessed as Endangered (IUCN Bangladesh 2000).

Geographic Range

Global: This species is found in Bangladesh, Cambodia, China, India, Lao PDR, Myanmar, Thailand and Vietnam (van Dijk *et al.* 2004).



Hylarana taipehensis

© MK Hasan

Bangladesh: *Hylarana taipehensis* is found almost all over the country barring the coastal areas and salt water environs but always in small numbers. It prefers all freshwater wetlands with vegetation, and deciduous and mixed evergreen forest ecosystems of the country (Feeroz *et al.* 2011, 2012, 2013; Hasan *et al.* 2012, Kabir *et al.* 2009, Khan 2015, Khan 2009). Possibly due to its close similarity with other leaf frogs it is overlooked and thus least reported.

EOO: 1,00,320 km²

AOO: 7,284 km²

Population

Generation Time (Length): Not known

Total Population: Not known

No of Sub-population: Not known

Trend: Not known

Habitat and Ecology

This frog is terrestrial and insectivorous in habitat.

Presumably inhabits in open grasslands, swampy areas, also in dense area of paddy field. Breeding reported in April. The species occurs in paddy, marshes and grasslands of flood prone areas. This frog is active at night.

Assessor: Ali Ahmed



Odorrana chloronota

Species ID: AM0004

DATA DEFICIENT
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Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|-------|---------|
| ANIMALIA | CHORDATA | AMPHIBIA | ANURA | RANIDAE |

Scientific Name: *Odorrana chloronota* Günther, 1876

English Name: Green-backed Stream Frog, Copper-cheeked Frog

Local Name: Sabuj-pith Jhorna Bang

Synonym/s: *Polypedates chloronotus* Günther, 1876

Huia chloronata Günther, 1876

Rana chloronata Boulenger, 1882

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1

Justification: This species is known from only one location. It is listed as Data Deficient, because the present information is not sufficient to assess the status of this species.

Date Assessed: 26 June 2014

History

Regional Status: It has not yet been assessed (IUCN Bangladesh 2000).

Geographic Range

Global: This species is found in Bangladesh, Cambodia, China, India, Myanmar, Lao PDR, Thailand and Vietnam (Lau *et al.* 2004).

Bangladesh: *Odorrana chloronota* has been reported for a few times from different parts of Rajkandi Reserved Forest (M.A. Aziz pers. comm., A.H. Chowdhury pers. comm., T. Khan pers. comm.).

EOO: 91 km²

AOO: 73 km²



Odorrana chloronota

© Md. Abdul Aziz

Population

Generation Time (Length): Not known

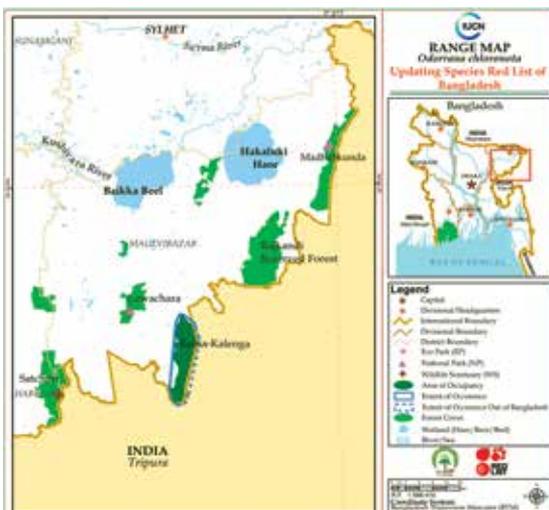
Total Population: Not known

No of Sub-population: Not known

Trend: Not known

Habitat and Ecology

Not much known about its breeding. It occurs in moist and deciduous forests, usually moist areas around waterfalls, in water on rocks in midstream or along the stream banks.



Assessor: Suprio Chakma

DATA
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Ichthyophis cf. garoensis

Species ID: AM0009

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------|-------------|--------------|
| ANIMALIA | CHORDATA | AMPHIBIA | GYMNOPHIONA | ICHTHYOPIDAE |

Scientific Name: *Ichthyophis cf. garoensis* Pillai & Ravichandran, 1999

English Name: Garo Hills Caecilian

Local Name: Shinglornoor (Mro), Garo Paharer Kencho-Uvochar

Taxonomic Notes: The taxonomic status of this species is unclear (Dutta *et al.* 2004). It needs further taxonomic studies to properly identify this species that has recently been found in Bangladesh.

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1

Justification: So far, only one specimen of it has collected from Sangu-Matamuhri Reserved Forest, Alikadam, under Bandarban District (S.C. Rahman pers. comm.) and tentatively considered it as *Ichthyophis cf. garoensis*. Nothing else is known about it from Bangladesh. Thus it is listed as Data Deficient.

Date Assessed: 26 June 2014

History

Regional Status: It has not yet been assessed (IUCN Bangladesh 2000).

Geographic Range

Global: This recently described species is endemic to North east India in the states of Assam and Meghalaya. It is known with certainty from the Garo Hills in Meghalaya (at Anogiri Lake and Tura), and specimens have also been reported from Assam at around 100 m asl (Dutta *et al.* 2013). This statement is possibly not wholly true as the lone specimen collected from Bangladesh is very similar to it

*Ichthyophis cf. garoensis*

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and has been provisionally considered as *Ichthyophis cf. garoensis*. So, its global range includes Bangladesh and India.

Bangladesh: Only one specimen was collected from Alikadam, Bandarban. Most likely to occur in other districts in the Chittagong Hill Tracts.

AOO: 763 km²

EOO: 1,045 km²

Population

Generation Time (Length): Not known

Total Population: Not known

No of Sub-population: Not known

Trend: Not known

Habitat and Ecology

Ichthyophis cf. garoensis leads a subterranean life. It inhabits mixed evergreen forests being partial to wet banks of streams and wetlands in the valleys. Not much is known about its feeding and breeding.



Assessor: Shahriar Caesar Rahman



Kaloula pulchra

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APPENDICES



Appendix-i

Status of Reptiles in Bangladesh (arranged in taxonomic order)

Status Code: RE-Regionally Extinct, CR-Critically Endangered, EN-Endangered, VU-Vulnerable, NT-Near Threatened, LC-Least Concern, DD-Data Deficient, NE-Not Evaluated

| Sl. No. | Order | Family | Scientific Name | English Name | Status in Bangladesh | Global Status | Species ID | Page No. |
|---------|------------|--------------|---------------------------------|--|----------------------|---------------|------------|-------------------|
| 1 | Testudines | Testudinidae | <i>Indotestudo elongata</i> | Elongated Tortoise, Yellow-headed Tortoise | CR | EN | RE0010 | 45, 32 |
| 2 | Testudines | Testudinidae | <i>Manouria emys</i> | Asian Giant Tortoise, Burmese Brown Tortoise | CR | EN | RE0011 | 32, 46 |
| 3 | Testudines | Geoemydidae | <i>Batagur baska</i> | Batagur, Common Batagur, Four-toed Terrapin, River Terrapin, Mangrove Terrapin, Asian River Terrapin | CR | CR | RE0002 | 32, 40, 47 |
| 4 | Testudines | Geoemydidae | <i>Batagur dhongoka</i> | Three-striped Roofed Turtle, Three-striped Roof Turtle | CR | EN | RE0003 | 32, 48 |
| 5 | Testudines | Geoemydidae | <i>Batagur kachuga</i> | Bengal Roof Turtle, Red-crowned Roofed Turtle | CR | CR | RE0004 | 32, 49 |
| 6 | Testudines | Geoemydidae | <i>Cuora amboinensis</i> | Malayan Box Turtle, Domed Malayan Box Turtle, Southeast Asian Box Turtle, South Asian Box Turtle, Amboina Box Turtle | VU | VU | RE0005 | 74, 90 |
| 7 | Testudines | Geoemydidae | <i>Cuora mouhotii</i> | Keeled Box Turtle, Jagged-shelled Turtle, Keel-backed Terrapin | CR | EN | RE0007 | 50, 32 |
| 8 | Testudines | Geoemydidae | <i>Cyclemys gemeli</i> | Asian Leaf Turtle | VU | NE | RE0172 | 75, 34 |
| 9 | Testudines | Geoemydidae | <i>Geoclemys hamiltonii</i> | Black Spotted Pond Turtle, Black Pond Turtle, Spotted Pond Turtle, Indian Spotted Turtle, Spotted River Terrapin | EN | VU | RE0016 | 63, 33 |
| 10 | Testudines | Geoemydidae | <i>Hardella thurjii</i> | Crowned River Turtle, Brahminy River Turtle | EN | VU | RE0017 | 64, 33 |
| 11 | Testudines | Geoemydidae | <i>Heosemys depressa</i> | Arakan Forest Turtle | CR | CR | RE0171 | 51, 9, 28, 32, 40 |
| 12 | Testudines | Geoemydidae | <i>Melanochelys tricarinata</i> | Tricarinate Hill Turtle, Three-keeled Land Tortoise, Three-keeled Tortoise, Three-keeled Land Turtle | VU | VU | RE0006 | 34, 76 |
| 13 | Testudines | Geoemydidae | <i>Melanochelys trijuga</i> | Pond Tortoise, Indian Black Turtle | NT | NT | RE0018 | 86 |
| 14 | Testudines | Geoemydidae | <i>Morenia petersi</i> | Yellow Turtle, Indian Eyed Turtle | NT | VU | RE0019 | 87 |
| 15 | Testudines | Geoemydidae | <i>Pangshura smithii</i> | Brown Roofed Turtle, Common Brown Roofed Turtle | NT | NT | RE0020 | 88 |
| 16 | Testudines | Geoemydidae | <i>Pangshura sylhetensis</i> | Sylhet Roofed Turtle, Assam Roofed Turtle, Khasi Hills Terrapin, Assam Sawback | CR | EN | RE0001 | 32, 40, 52 |
| 17 | Testudines | Geoemydidae | <i>Pangshura tecta</i> | Roofed Turtle, Indian Roofed Turtle | LC | LC | RE0021 | 40, 105 |
| 18 | Testudines | Geoemydidae | <i>Pangshura tentoria</i> | Indian Tent Turtle, Tent Turtle, Deccan Saw-backed Terrapin, South Indian Roofed Turtle | NT | LC | RE0022 | 89 |
| 19 | Testudines | Trionychidae | <i>Amyda cartilaginea</i> | Asiatic Softshell Turtle, Southeast Asian Softshell Turtle, Malayan Softshell Turtle | CR | VU | RE0027 | 7, 9, 32, 40, 53 |

| Sl. No. | Order | Family | Scientific Name | English Name | Status in Bangladesh | Global Status | Species ID | Page No. |
|---------|------------|----------------|-------------------------------------|--|----------------------|---------------|------------|------------|
| 20 | Testudines | Trionychidae | <i>Chitra indica</i> | Narrow-headed Softshell Turtle, Indian Narrow-headed Softshell Turtle | CR | EN | RE0031 | 32, 40, 54 |
| 21 | Testudines | Trionychidae | <i>Lissemys punctata</i> | Spotted Flapshell Turtle, Indian Flap-shelled Turtle | LC | LC | RE0032 | 40, 106 |
| 22 | Testudines | Trionychidae | <i>Nilssoniana gangetica</i> | Ganges Soft-shell Turtle, Indian Softshell Turtle | EN | VU | RE0028 | 33, 65 |
| 23 | Testudines | Trionychidae | <i>Nilssoniana hurum</i> | Peacock Soft-shelled Turtle, Indian Peacock Soft shell Turtle, Brown Soft shell Turtle | LC | VU | RE0029 | 107 |
| 24 | Testudines | Trionychidae | <i>Nilssoniana nigricans</i> | Black Softshell Turtle, Black Soft-shell Turtle, Bostami Turtle, Chittagong Mud Turtle, Chittagong Softshell Turtle, Sacred Turtle, Dark Soft shell Turtle | EN | CR | RE0030 | 9, 33, 66 |
| 25 | Testudines | Trionychidae | <i>Pelochelys cantorii</i> | Asian Giant Softshell Turtle, Cantor's Giant Softshell Turtle, Frog-faced Softshell Turtle | CR | EN | RE0012 | 32, 55 |
| 26 | Testudines | Cheloniidae | <i>Caretta caretta</i> | Loggerhead Sea Turtle, Logger headed Sea Turtle, Loggerhead Turtle | DD | VU | RE0008 | 170 |
| 27 | Testudines | Cheloniidae | <i>Chelonia mydas</i> | Green Sea Turtle, Green Turtle, Black (sea) Turtle, Pacific Green Turtle | CR | EN | RE0009 | 32, 56 |
| 28 | Testudines | Cheloniidae | <i>Eretmochelys imbricata</i> | Hawksbill Turtle, Hawksbill Sea Turtle | CR | CR | RE0023 | 33, 57 |
| 29 | Testudines | Cheloniidae | <i>Lepidochelys olivacea</i> | Olive Ridley Sea Turtle, Pacific Ridley Sea Turtle | VU | VU | RE0024 | 34, 77 |
| 30 | Testudines | Dermochelyidae | <i>Dermochelys coriacea</i> | Leatherback Sea Turtle | CR | VU | RE0025 | 33, 58 |
| 31 | Squamata | Agamidae | <i>Calotes emma</i> | Forest Crested Lizard, Emma Gray's Forest Lizard, Spiny-headed Forest Lizard | LC | NE | RE0033 | 108 |
| 32 | Squamata | Agamidae | <i>Calotes jerdoni</i> | Green Garden Lizard, Jerdon's Forest Lizard | DD | NE | RE0034 | 170 |
| 33 | Squamata | Agamidae | <i>Calotes minor</i> | Hardwicke's Bloodsucker, Lesser Agama | DD | DD | RE0039 | 171 |
| 34 | Squamata | Agamidae | <i>Calotes versicolor</i> | Common Garden Lizard, Garden Lizard, Bloodsucker | LC | NE | RE0035 | 109, 4 |
| 35 | Squamata | Agamidae | <i>Draco blanfordii</i> | Blanford's Flying Lizard, Blanford's Gliding Lizard | DD | NE | RE0037 | 172 |
| 36 | Squamata | Agamidae | <i>Draco maculatus</i> | Spotted Flying Lizard, Asian Gliding Lizard | EN | LC | RE0036 | 33, 67 |
| 37 | Squamata | Agamidae | <i>Eublepharis hardwickii</i> | Chittagong Leopard Gecko, Eastern Indian Leopard Gecko, Indian Leopard Gecko | NE | LC | RE0049 | |
| 38 | Squamata | Agamidae | <i>Ptyctolaemus gularis</i> | Blue-throated Lizard, Green Fan-throated Lizard, Throated Agama | EN | NE | RE0038 | 33, 68 |
| 39 | Squamata | Gekkonidae | <i>Cyrtodactylus ayeerwadyensis</i> | Ayeerwady Bent-toed Gecko, Ayeerwady Bow-fingered Gecko | LC | DD | RE0047 | 110 |
| 40 | Squamata | Gekkonidae | <i>Gekko gekko</i> | Tokay Gecko | LC | NE | RE0048 | 31, 11 |

| Sl. No. | Order | Family | Scientific Name | English Name | Status in Bangladesh | Global Status | Species ID | Page No. |
|---------|----------|------------|----------------------------------|--|----------------------|---------------|------------|----------|
| 41 | Squamata | Gekkonidae | <i>Hemidactylus bowringii</i> | Oriental Leaf-toed Gecko, House lizard | LC | NE | RE0041 | 112 |
| 42 | Squamata | Gekkonidae | <i>Hemidactylus brookii</i> | Brook's House Gecko | LC | NE | RE0042 | 113 |
| 43 | Squamata | Gekkonidae | <i>Hemidactylus flaviviridis</i> | House Lizard, Yellow-green House Lizard, Northern House Gecko | LC | NE | RE0043 | 114 |
| 44 | Squamata | Gekkonidae | <i>Hemidactylus frenatus</i> | Common House Gecko | LC | LC | RE0044 | 115 |
| 45 | Squamata | Gekkonidae | <i>Hemidactylus gamotii</i> | Garnot's House Gecko, Indo-Pacific Gecko | LC | NE | RE0045 | 116 |
| 46 | Squamata | Gekkonidae | <i>Hemidactylus platyurus</i> | Flat-tailed Gecko | LC | NE | RE0040 | 117 |
| 47 | Squamata | Lacertidae | <i>Takydromus khasiensis</i> | Khasi Hills Long-tailed Lizard | LC | NE | RE0050 | 118 |
| 48 | Squamata | Scincidae | <i>Asymblepharus sikkimensis</i> | Sikkim Ground Skink, Bronzy-brown Skink | DD | NE | RE0056 | 173 |
| 49 | Squamata | Scincidae | <i>Eutropis carinata</i> | Common Skink, Brahminy Skink, Common Grass Skink, Keeled Indian Skink, Keeled Grass Skink | LC | LC | RE0057 | 119 |
| 50 | Squamata | Scincidae | <i>Eutropis dissimilis</i> | Striped Skink, Striped Grass Mabuya | LC | NE | RE0058 | 120 |
| 51 | Squamata | Scincidae | <i>Eutropis macularia</i> | Bronze Grass Skink | LC | NE | RE0059 | 121 |
| 52 | Squamata | Scincidae | <i>Eutropis multifasciata</i> | Many-lined Sun Skink, Common Sun Skink, East Indian Brown Mabuya, Javan Sun Skink | LC | NE | RE0060 | 122 |
| 53 | Squamata | Scincidae | <i>Lygosoma albopunctata</i> | White-spotted Supple Skink | LC | NE | RE0052 | 123 |
| 54 | Squamata | Scincidae | <i>Lygosoma bowringii</i> | Bowring's Supple Skink, Christmas Island Grass-skink | LC | NE | RE0053 | 124 |
| 55 | Squamata | Scincidae | <i>Lygosoma lineolatum</i> | Striped Writhing Skink, Lined Supple Skink | NT | LC | RE0054 | 90 |
| 56 | Squamata | Scincidae | <i>Lygosoma punctata</i> | Spotted Supple Skink, Common Dotted Garden Skink, Common Snake Skink, Punctate Supple Skink | EN | NE | RE0055 | 33, 69 |
| 57 | Squamata | Scincidae | <i>Scincella reevesii</i> | Reeve's Ground Skink, Reeve's Smooth Skink | LC | NE | RE0061 | 125 |
| 58 | Squamata | Scincidae | <i>Sphenomorphus indicus</i> | Himalayan Litter Skink, Indian Forest Skink | DD | NE | RE0062 | 174 |
| 59 | Squamata | Scincidae | <i>Sphenomorphus maculatus</i> | Spotted Litter Skink | LC | NE | RE0063 | 126 |
| 60 | Squamata | Scincidae | <i>Tropidophorus assamensis</i> | Water Skink, Northeastern Water Skink | VU | NE | RE0064 | 34, 78 |
| 61 | Squamata | Anguidae | <i>Dopasia gracilis</i> | Asian Glass Lizard, Burmese Glass Lizard | CR | NE | RE0051 | 33, 59 |
| 62 | Squamata | Varanidae | <i>Varanus bengalensis</i> | Bengal Lizard, Bengal Monitor, Bengal Monitor Lizard, Clouded Monitor, Common Indian Monitor, Indian Monitor | NT | LC | RE0065 | 91 |

| Sl. No. | Order | Family | Scientific Name | English Name | Status in Bangladesh | Global Status | Species ID | Page No. |
|---------|----------|---------------|---------------------------------|--|----------------------|---------------|------------|---------------|
| 63 | Squamata | Varanidae | <i>Varanus flavescens</i> | Yellow Monitor, Yellow Land Lizard, Yellow Monitor Lizard, Yellow Lizard, Golden Monitor, Calcutta Oval-grain Lizard, Indian Oval-grain Lizard, Ruddy Snub-nosed Monitor | NT | LC | RE0066 | 92 |
| 64 | Squamata | Varanidae | <i>Varanus salvator</i> | Ring Lizard, Water Monitor, Common Water Monitor, Asian Water Monitor, Two-banded Monitor, Rice Lizard, Plain Lizard, No-Mark Lizard | VU | LC | RE0067 | 34, 79 |
| 65 | Squamata | Acrochordidae | <i>Acrochordus granulatus</i> | Wart Snake, Marine File Snake, Little Wartsnake, Small Warty Snake, Little Filesnake | NE | LC | RE0076 | - |
| 66 | Squamata | Pythonidae | <i>Python bivittatus</i> | Burmese Python, Rock Python, Indian Rock Python | VU | VU | RE0173 | 8, 34, 40, 80 |
| 67 | Squamata | Pythonidae | <i>Python molurus</i> | Indian Python, Black-tailed Python, Indian Rock Python, Asian Rock Python, Rock Python | DD | LC | RE0072 | 175 |
| 68 | Squamata | Pythonidae | <i>Malayopython reticulatus</i> | Reticulated Python, (Asiatic) Reticulated Python | CR | NE | RE0073 | 33, 40, 60 |
| 69 | Squamata | Boidae | <i>Eryx conicus</i> | Common Sand Boa, Rough-scaled Sand-boa, Rough-tailed Sand boa | DD | NE | RE0074 | 176 |
| 70 | Squamata | Colubridae | <i>Argyrogena fasciolata</i> | Banded Racer | LC | NE | RE0109 | 127 |
| 71 | Squamata | Colubridae | <i>Ahaetulla nasuta</i> | Vine Snake, Common vine Snake, Common Whip Snake, Long-nosed Tree Snake, Green vine snake, Long-nosed Whip Snake | LC | NE | RE0117 | 128 |
| 72 | Squamata | Colubridae | <i>Ahaetulla prasina</i> | Short-nosed Vine Snake, Asian Vine Snake, Boie's Whip Snake, Günther's Whip Snake, Oriental Whip Snake, Jade Vine Snake | LC | LC | RE0118 | 129 |
| 73 | Squamata | Colubridae | <i>Blythia reticulata</i> | Iridescent Snake, Blyth's Reticulate Snake | DD | DD | RE0119 | 177 |
| 74 | Squamata | Colubridae | <i>Boiga cyanea</i> | Green Cat Snake | LC | NE | RE0122 | 130 |
| 75 | Squamata | Colubridae | <i>Boiga cynodon</i> | Bengal Cat Snake, Dog-toothed Cat Snake, Large Blunt-headed Tree Snake | NE | LC | RE0126 | - |
| 76 | Squamata | Colubridae | <i>Boiga gokool</i> | Eastern Cat Snake, Arrow-backed Tree Snake | NT | NE | RE0120 | 93 |
| 77 | Squamata | Colubridae | <i>Boiga multomaculata</i> | Large-spotted Cat Snake, Many-spotted Cat Snake, Marbled Cat-eyed Snake | NE | NE | RE0125 | - |
| 78 | Squamata | Colubridae | <i>Boiga ochracea</i> | Tawny Cat Snake, Wall's Cat Snake, Nicobar Cat Snake | NT | LC | RE0121 | 94 |
| 79 | Squamata | Colubridae | <i>Boiga siamensis</i> | Eyed Cat Snake | EN | NE | RE0124 | 33, 70 |
| 80 | Squamata | Colubridae | <i>Boiga trigonata</i> | Common Indian Cat Snake | NE | LC | RE0123 | - |

| Sl. No. | Order | Family | Scientific Name | English Name | Status in Bangladesh | Global Status | Species ID | Page No. |
|---------|----------|------------|-----------------------------------|---|----------------------|---------------|------------|----------|
| 81 | Squamata | Colubridae | <i>Chrysopelea ornata</i> | Ornate Flying Snake, Golden Flying Snake | LC | NE | RE0115 | 131 |
| 82 | Squamata | Colubridae | <i>Coelognathus helena</i> | Common Trinket Snake | LC | NE | RE0103 | 132 |
| 83 | Squamata | Colubridae | <i>Coelognathus radiatus</i> | Copper-head Trinket Snake, Copperheaded Rat Snake, Radiated Rat Snake | LC | LC | RE0102 | 133 |
| 84 | Squamata | Colubridae | <i>Dendrelaphis cyanochloris</i> | Wall's Bronzeback | DD | LC | RE0112 | 178 |
| 85 | Squamata | Colubridae | <i>Dendrelaphis pictus</i> | Painted Bronzeback, Common Bronze-back, Indonesian Bronze Back | LC | NE | RE0113 | 134 |
| 86 | Squamata | Colubridae | <i>Dendrelaphis tristis</i> | Daudin's Bronzeback, Common Bronzeback Tree Snake | LC | NE | RE0114 | 135 |
| 87 | Squamata | Colubridae | <i>Elachistodon westermanni</i> | Indian Egg-eater, Westermann's Snake, Indian Egg-eating Snake. | DD | LC | RE0135 | 179 |
| 88 | Squamata | Colubridae | <i>Gonyosoma prasina</i> | Green Trinket Snake, Green Bush Rat Snake, Green Ratsnake | NE | NE | RE0104 | - |
| 89 | Squamata | Colubridae | <i>Liopeltis calamaria</i> | Lesser Stripe-necked Snake, Calamaria Reed Snake, Reed-Like Stripe-Necked Snake | DD | NE | RE0111 | 180 |
| 90 | Squamata | Colubridae | <i>Liopeltis frenatus</i> | Gunther's Stripe-necked Snake, Striped-neck snake | NE | LC | RE0110 | - |
| 91 | Squamata | Colubridae | <i>Lycodon aulicus</i> | Common Wolf Snake, Indain Wolf Snake | LC | NE | RE0080 | 136 |
| 92 | Squamata | Colubridae | <i>Lycodon fasciatus</i> | Banded Wolf Snake | NE | NE | RE0081 | - |
| 93 | Squamata | Colubridae | <i>Lycodon jara</i> | Yellow-speckled Wolf Snake | LC | LC | RE0079 | 137 |
| 94 | Squamata | Colubridae | <i>Lycodon zawi</i> | Zaw's Wolf Snake | LC | LC | RE0082 | 138 |
| 95 | Squamata | Colubridae | <i>Oligodon albocinctus</i> | White-barred Kukri Snake | LC | NE | RE0084 | 139 |
| 96 | Squamata | Colubridae | <i>Oligodon arnensis</i> | Banded Kukri, Common Kukri Shap, Yellow-speckled Wolf Snake, | DD | NE | RE0088 | 181 |
| 97 | Squamata | Colubridae | <i>Oligodon cinereus</i> | Black-barred Kukri Snake | EN | LC | RE0085 | 34, 71 |
| 98 | Squamata | Colubridae | <i>Oligodon cyclurus</i> | Cantor's Kukri Snake | LC | LC | RE0083 | 140 |
| 99 | Squamata | Colubridae | <i>Oligodon dorsalis</i> | Spot-tailed Kukri Snake, Bengalese Kukri Snake, Gray's Kikri Snake | LC | NE | RE0089 | 141 |
| 100 | Squamata | Colubridae | <i>Oligodon taeniolatus</i> | Streaked Kukri Snake, Russell's Kukri Snake, Loos Snake | DD | LC | RE0086 | 182 |
| 101 | Squamata | Colubridae | <i>Oligodon theobaldi</i> | Theobald's Kukri Snake, Mandalay Kukri Snake | NE | LC | RE0087 | - |
| 102 | Squamata | Colubridae | <i>Oreocryptophis porphyracus</i> | Bamboo Trinket Snake, Red Bamboo Snake, Black-banded Trinket Snake | DD | NE | RE0105 | 183 |
| 103 | Squamata | Colubridae | <i>Ptyas korros</i> | Chinese Rat Snake, Indo-chinese Rat Snake | NT | NE | RE0107 | 95 |

| Sl. No. | Order | Family | Scientific Name | English Name | Status in Bangladesh | Global Status | Species ID | Page No. |
|---------|----------|--------------------|-------------------------------------|--|----------------------|---------------|------------|----------|
| 104 | Squamata | Colubridae | <i>Ptyas mucosa</i> | Indian Rat Snake, Dhaman, Oriental Rat Snake | LC | NE | RE0106 | 142 |
| 105 | Squamata | Colubridae | <i>Ptyas nigromarginata</i> | Green Rat snake, Black-bordered Rat Snake | VU | NE | RE0108 | 34, 81 |
| 106 | Squamata | Colubridae | <i>Sibynophis sagittarius</i> | Cantor's Black-headed Snake | DD | NE | RE0091 | 184 |
| 107 | Squamata | Colubridae | <i>Sibynophis subpunctatus</i> | Duméril's Black-headed Snake, Jerdon's Many-toothed Snake | DD | NE | RE0090 | 185 |
| 108 | Squamata | Lamprophiidae | <i>Psammodynastes pulverulentus</i> | Common Mock Viper | LC | NE | RE0116 | 143 |
| 109 | Squamata | Natricidae | <i>Amphiesma platyceps</i> | Himalayan Mountain Keelback | DD | NE | RE0093 | 186 |
| 110 | Squamata | Natricidae | <i>Amphiesma stolatum</i> | Striped Keelback, Buff Striped Keelback | LC | NE | RE0092 | 144 |
| 111 | Squamata | Natricidae | <i>Hebius xenura</i> | Wall's Keelback, Cherrapunji Keelback | DD | NE | RE0094 | 187 |
| 112 | Squamata | Natricidae | <i>Atrretium schistosum</i> | Olive Keelback Water Snake, Olivaceous Keelback, Olive Keelback Wart Snake, Split Keelback Snake | LC | LC | RE0101 | 145 |
| 113 | Squamata | Natricidae | <i>Rhabdophis himalayanus</i> | Himalayan Keelback, Orange-collared Keelback | VU | NE | RE0096 | 34, 82 |
| 114 | Squamata | Natricidae | <i>Rhabdophis subminiatus</i> | Red-necked Keelback | NT | LC | RE0095 | 96 |
| 115 | Squamata | Natricidae | <i>Trachischium monticola</i> | Assam oriental Slender Snake | NE | NE | RE0127 | - |
| 116 | Squamata | Natricidae | <i>Xenochrophis cerasogaster</i> | Painted Keelback | LC | NE | RE0100 | 146 |
| 117 | Squamata | Natricidae | <i>Xenochrophis flavipunctatus</i> | Yellow-spotted Keelback, Yellow-spotted Keelback Water Snake | DD | LC | RE0099 | 188 |
| 118 | Squamata | Natricidae | <i>Xenochrophis piscator</i> | Checkered Keelback, Asiatic Water Snake | LC | NE | RE0098 | 147 |
| 119 | Squamata | Pseudoxenodontidae | <i>Pseudoxenodon macrops</i> | False Cobra, Large-eyed False Cobra, Large-eyed Bamboo Snake, Big-eyed Bamboo Snake, MockCobra. | DD | LC | RE0175 | 9, 189 |
| 120 | Squamata | Elapidae | <i>Bungarus caeruleus</i> | Common Krait, Common Indian Krait, Blue Krait, Indian krait | LC | NE | RE0136 | 148 |
| 121 | Squamata | Elapidae | <i>Bungarus fasciatus</i> | Banded Krait | LC | LC | RE0137 | 149 |
| 122 | Squamata | Elapidae | <i>Bungarus lividus</i> | Lesser Black Krait | NT | NE | RE0138 | 28, 97 |
| 123 | Squamata | Elapidae | <i>Bungarus niger</i> | Grater Black Krait, Black Krait | NT | NE | RE0139 | 98 |
| 124 | Squamata | Elapidae | <i>Bungarus walli</i> | Wall's Krait | NT | NE | RE0140 | 99 |
| 125 | Squamata | Elapidae | <i>Calliophis melanurus</i> | Slender Coral Snake, Indian Coral Snake | DD | NE | RE0141 | 190 |
| 126 | Squamata | Elapidae | <i>Hydrophis cantoris</i> | Gunther's Sea Snake, Cantor's Narrowed-headed Sea Snake, Small-headed Sea Snake | DD | DD | RE0155 | 191 |
| 127 | Squamata | Elapidae | <i>Hydrophis cyanocinctus</i> | Annulated Sea Snake | LC | LC | RE0150 | 152 |

| Sl. No. | Order | Family | Scientific Name | English Name | Status in Bangladesh | Global Status | Species ID | Page No. |
|---------|----------|--------------|---------------------------------|---|----------------------|---------------|------------|----------|
| 128 | Squamata | Elapidae | <i>Hydrophis caeruleus</i> | Malacca Sea Snake, Dwarf Sea Snake, Many Toothed Sea Snake | LC | LC | RE0153 | 151 |
| 129 | Squamata | Elapidae | <i>Hydrophis curtus</i> | Shaw's Seasnake, Hardwicke's Sea Snake, Spine-bellied Sea snake | LC | NE | RE0158 | 150 |
| 130 | Squamata | Elapidae | <i>Hydrophis fasciatus</i> | Stripped Sea Snake, Banded Sea Snake | LC | LC | RE0152 | 153 |
| 131 | Squamata | Elapidae | <i>Hydrophis gracilis</i> | Graceful Small-headed Sea Snake, Slender Sea Snake, Narrow-headed Sea Snake, Common Small-headed Sea Snake | LC | LC | RE0154 | 154 |
| 132 | Squamata | Elapidae | <i>Hydrophis nigrocinctus</i> | Daudin's Sea Snake | LC | DD | RE0149 | 155 |
| 133 | Squamata | Elapidae | <i>Hydrophis lapemoides</i> | Arabian Gulf Sea Snake, Persian Gulf Sea Snake | DD | LC | RE0174 | 192 |
| 134 | Squamata | Elapidae | <i>Hydrophis ornatus</i> | Ornate Reef Sea Snake, Ornate Sea Snake | NE | LC | RE0156 | - |
| 135 | Squamata | Elapidae | <i>Hydrophis obscurus</i> | Russell's Sea Snake, Estuarine Sea Snake | LC | LC | RE0151 | 156 |
| 136 | Squamata | Elapidae | <i>Hydrophis platurus</i> | Pelagic Sea Snake, Yellow-bellied Sea Snake | LC | NE | RE0159 | 157 |
| 137 | Squamata | Elapidae | <i>Hydrophis schistosus</i> | Hook-nosed Sea Snake, Beaked Sea Snake, Common Sea Snake, Valakadyn Sea Snake. | LC | LC | RE0148 | 158 |
| 138 | Squamata | Elapidae | <i>Hydrophis stokesii</i> | Stokes' Sea Snake, large-headed Sea Snake | NE | NE | RE0160 | - |
| 139 | Squamata | Elapidae | <i>Hydrophis stricticollis</i> | Collared Sea Snake, Bengal Sea Snake | DD | DD | RE0157 | 193 |
| 140 | Squamata | Elapidae | <i>Laticauda colubrina</i> | Yellow-lipped Sea Krait, Columbrine Sea Krait | NE | LC | RE0147 | - |
| 141 | Squamata | Elapidae | <i>Laticaudata laticaudata</i> | Blackbanded Sea Krait, Brown-lipped Sea Krait | NE | LC | RE0146 | - |
| 142 | Squamata | Elapidae | <i>Naja kaouthia</i> | Monocled Cobra, Monocellate Cobra | NT | LC | RE0144 | 10, 100 |
| 143 | Squamata | Elapidae | <i>Naja naja</i> | Binocellate Cobra, Spectacled Cobra, Asian Cobra, Indian Cobra | NT | NE | RE0143 | 101 |
| 144 | Squamata | Elapidae | <i>Ophiophagus hannah</i> | King Cobra | VU | VU | RE0145 | 34, 83 |
| 145 | Squamata | Elapidae | <i>Sinomicrurus maclellandi</i> | Maclelland's Coral Snake | DD | NE | RE0142 | 194 |
| 146 | Squamata | Homalopsidae | <i>Cerberus rynchops</i> | Dog-faced water snake, Asian Bockadam, Bockadam Snake, New Guinea Bockadam | LC | LC | RE0131 | 159 |
| 147 | Squamata | Homalopsidae | <i>Enhydryis enhydryis</i> | Common Smooth-scaled Water Snake, Rainbow Mud Snake, Rainbow Water Snake, Striped Water Snake, Smooth Water Snake | LC | LC | RE0128 | 160 |
| 148 | Squamata | Homalopsidae | <i>Ferania sieboldi</i> | Siebold's Mud Snake, Siebold's Smooth-water Snake, Siebold's Water Snake | DD | LC | RE0130 | 195 |

| Sl. No. | Order | Family | Scientific Name | English Name | Status in Bangladesh | Global Status | Species ID | Page No. |
|---------|------------|--------------|--------------------------------|---|----------------------|---------------|------------|----------------|
| 149 | Squamata | Homalopsidae | <i>Fordonia leucobalia</i> | Crab-eating Snake, Crab-eating Water Snake, Fordons' Water Snake, Mangrove Snake, The Fordonia, The Plain Fordonia, White-bellied Freshwater Snake, White-bellied Mangrove Snake, White-bellied Water Snake | NT | LC | RE0133 | 102 |
| 150 | Squamata | Homalopsidae | <i>Gerada prevostiana</i> | Glossy Marsh Snake, Gerard's Water Snake, Cat-eyed Fishing Snake, Cat-eyed Water Snake | LC | LC | RE0132 | 161 |
| 151 | Squamata | Homalopsidae | <i>Homalopsis buccata</i> | Banded Swamp Snake, Dog-face Water Snake, Linne's Water Snake, Masked Water Snake, Puff-faced Water Snake, Puff-face Water Snake | NE | LC | RE0134 | - |
| 152 | Squamata | Pareatidae | <i>Pareas margaritophorus</i> | Darjeeling Snail-eater | NE | LC | RE0078 | - |
| 153 | Squamata | Pareatidae | <i>Pareas monticola</i> | Assam Snail-eater, Montane Slug-eating Snake | LC | NE | RE0077 | 162 |
| 154 | Squamata | Viperidae | <i>Daboia russellii</i> | Russell's Viper, Indian Russell's Viper, Common Russell's Viper | NT | LC | RE0161 | 103 |
| 155 | Squamata | Viperidae | <i>Ovophis monticola</i> | Mountain Pit Viper | NE | LC | RE0166 | - |
| 156 | Squamata | Viperidae | <i>Protobothrops jerdonii</i> | Jerdon's Pitviper, Oriental Pitviper, and Yellow Speckled Lancehead | NE | LC | RE0167 | - |
| 157 | Squamata | Viperidae | <i>Trimeresurus albolabris</i> | Green Pit Viper, Bamboo Pit Viper, White-lipped Tree Viper, Bamboo Snake | LC | LC | RE0165 | 163 |
| 158 | Squamata | Viperidae | <i>Trimeresurus erythrus</i> | Spot-tailed Pit Viper, Red tail Pit Viper, Bamboo Pit Viper | LC | LC | RE0164 | 164 |
| 159 | Squamata | Viperidae | <i>Trimeresurus gramineus</i> | Common Bamboo Viper, Bamboo Pit Viper, Indian Tree Viper, Green Pit Viper | NE | LC | RE0162 | - |
| 160 | Squamata | Viperidae | <i>Trimeresurus popeiorum</i> | Pope's Pit Viper, Pope's Tree Viper, Pope's Bamboo Pit Viper | VU | LC | RE0163 | 34, 84 |
| 161 | Squamata | Typhlopidae | <i>Argyrophis diardii</i> | Diard's Blindsnake, Indochinese Blindsnake, Large Blind Snake, Large Wormsnake | LC | LC | RE0069 | 165 |
| 162 | Squamata | Typhlopidae | <i>Indotyphlops braminus</i> | Brahminy Blind Snake, Common Worm Snake | LC | NE | RE0068 | 166 |
| 163 | Squamata | Typhlopidae | <i>Indotyphlops jerdoni</i> | Jerdon's Worm Snake | LC | NE | RE0071 | 167 |
| 164 | Squamata | Typhlopidae | <i>Indotyphlops porrectus</i> | Slender Worm Snake | NE | NE | RE0070 | - |
| 165 | Crocodylia | Crocodylidae | <i>Crocodylus palustris</i> | Mugger, Muggar, Broad-snouted Crocodile, Marsh Crocodile | RE | VU | RE0168 | 27, 40, 43 |
| 166 | Crocodylia | Crocodylidae | <i>Crocodylus porosus</i> | Salt-water Crocodile, Estuarine Crocodile | EN | LC | RE0169 | 34, 72 |
| 167 | Crocodylia | Gavialidae | <i>Gavialis gangeticus</i> | Gharial, Indian Gharial, Fish-eating Crocodile, Gavial, Long-nosed Crocodile | CR | CR | RE0170 | 33, 39, 40, 61 |

Appendix-ii

Status of Amphibians in Bangladesh (arranged in taxonomic order)

Status Code: CR-Critically Endangered, EN-Endangered, VU-Vulnerable, NT-Near Threatened, LC-Least Concern, DD-Data Deficient, NE-Not Evaluated

| Sl. No. | Order | Family | Scientific Name | English Name | Status in Bangladesh | Global Status | Species ID | Page No. |
|---------|-------------|----------------|-----------------------------------|--|----------------------|---------------|------------|--------------------|
| 1 | Gymnophiona | Ichthyophiidae | <i>Ichthyophis cf. garoensis</i> | Garo Hills Caecilian | DD | DD | AM0009 | 273 |
| 2 | Gymnophiona | Chikilidae | <i>Chikila fulleri</i> | Fuller's Caecilian, Kuttal Caecilian | CR | DD | AM0006 | 211, 216, 221 |
| 3 | Anura | Bufoidea | <i>Duttaphrynus melanostictus</i> | Asian Common Toad, Common Toad, Asian Toad | LC | LC | AM0010 | 198,240 |
| 4 | Anura | Bufoidea | <i>Duttaphrynus stomaticus</i> | Marbled Toad | LC | LC | AM0014 | 241 |
| 5 | Anura | Dicroglossidae | <i>Euphlyctis cyanophlyctis</i> | Skipper Frog, Skittering Frog | LC | LC | AM0007 | 246 |
| 6 | Anura | Dicroglossidae | <i>Euphlyctis hexadactylus</i> | Green Frog, Green Pond Frog, Indian Five-fingered Frog, Six-toe Green Frog | LC | LC | AM0008 | 247 |
| 7 | Anura | Dicroglossidae | <i>Fejervarya asmati</i> | Asmat's Cricket Frog, Bangladeshi Cricket Frog | LC | NE | AM0015 | 200,248 |
| 8 | Anura | Dicroglossidae | <i>Fejervarya cancrivora</i> | Crab-eating Frog, Marsh Frog, Brackish Water Frog, Mangrove Frog | LC | LC | AM0020 | 249 |
| 9 | Anura | Dicroglossidae | <i>Fejervarya nepalensis</i> | Nepal Wart Frog, Nepal Cricket Frog | LC | LC | AM0017 | 250 |
| 10 | Anura | Dicroglossidae | <i>Fejervarya pierrei</i> | Pierre's Cricket Frog, Pierre's Wart Frog | LC | LC | AM0016 | 251 |
| 11 | Anura | Dicroglossidae | <i>Fejervarya syhadrensis</i> | Bombay Wart Frog, Hill Cricket Frog, Long-legged Cricket Frog, Small Cricket Frog, Southern Cricket Frog, Syhadra Frog | LC | LC | AM0018 | 252 |
| 12 | Anura | Dicroglossidae | <i>Fejervarya teraiensis</i> | Terai Wart Frog, Terai Cricket Frog | LC | LC | AM0019 | 253 |
| 13 | Anura | Dicroglossidae | <i>Hoplobatrachus crassus</i> | Jerdon's Bullfrog | NT | LC | AM0024 | 236 |
| 14 | Anura | Dicroglossidae | <i>Hoplobatrachus litoralis</i> | Coastal Bullfrog | NT | NE | AM0023 | 200,235 |
| 15 | Anura | Dicroglossidae | <i>Hoplobatrachus tigerinus</i> | Indian Bullfrog, Bull Frog, Golden Frog, Tiger Frog, Tiger Peters Frog | LC | LC | AM0022 | 209, 210, 217, 254 |
| 16 | Anura | Dicroglossidae | <i>Ingerana borealis</i> | Boreal Floating Frog, Northern Frog, Rotung Oriental Frog | NT | VU | AM0002 | 237 |
| 17 | Anura | Dicroglossidae | <i>Limnonectes laticeps</i> | Flat-headed Frog, Corrugated Frog, Rivulet Frog, Broad-headed Frog, Khasi Wart Frog | VU | LC | AM0021 | 211,229 |
| 18 | Anura | Dicroglossidae | <i>Microhyla berdmorei</i> | Berdmore's Narrow-mouthed Frog | LC | LC | AM0034 | 255 |
| 19 | Anura | Dicroglossidae | <i>Occidozyga lima</i> | Puddle Frog, Floating Frog, Java Frog, Pearly Skin Puddle Frog | LC | LC | AM0003 | 256 |

| Sl. No. | Order | Family | Scientific Name | English Name | Status in Bangladesh | Global Status | Species ID | Page No. |
|---------|-------|---------------|----------------------------------|---|----------------------|---------------|------------|--------------------|
| 20 | Anura | Ranidae | <i>Amolops marmoratus</i> | Marbled Cascade Frog, Beautiful Stream Frog, Torrent Frog, Cascade Frog | VU | LC | AM0025 | 209, 211, 230 |
| 21 | Anura | Ranidae | <i>Clinotarsus alticola</i> | Point-nosed Frog, Hill Frog, High-altitude Frog | LC | LC | AM0026 | 257 |
| 22 | Anura | Ranidae | <i>Humerana humeralis</i> | Bhamo Frog, Boulenger's Green Frog | LC | LC | AM0013 | 258 |
| 23 | Anura | Ranidae | <i>Hylarana leptoglossa</i> | Cope's Frog, Cope's Assam Frog | LC | LC | AM0027 | 259 |
| 24 | Anura | Ranidae | <i>Hylarana nicobariensis</i> | Nicobarese Frog, Nicobar Island Frog, Nicobar Cricket Frog, Nicobar Frog | DD | LC | AM0001 | 270 |
| 25 | Anura | Ranidae | <i>Hylarana taipehensis</i> | Two-striped Grass Frog, Taipei Frog | DD | LC | AM0011 | 271 |
| 26 | Anura | Ranidae | <i>Hylarana tytleri</i> | Yellow-striped Frog, Bengal Leaping Frog | LC | LC | AM0012 | 260 |
| 27 | Anura | Ranidae | <i>Odorrana chloronota</i> | Green-backed Stream Frog, Copper-cheeked Frog | DD | LC | AM0004 | 272 |
| 28 | Anura | Ranidae | <i>Pterorana khare</i> | Khare's Stream Frog, Indian Flying Frog | CR | VU | AM0029 | 200, 211, 216, 220 |
| 29 | Anura | Ranidae | <i>Sylvirana nigrovittata</i> | Dark-sided Frog, Black-spotted Frog | LC | LC | AM0028 | 261 |
| 30 | Anura | Microhylidae | <i>Kalophrynus interlineatus</i> | Stripe Sticky Frog, Striped Sticky Frog, Spotted Narrow-mouthed Frog, Piebald Narrow-mouthed Frog, Bubble-nest Frog, Blyth's Microhylid Frog, Orang Sticky Frog | DD | LC | AM0035 | 268 |
| 31 | Anura | Microhylidae | <i>Kaloula pulchra</i> | Painted Bullfrog, Asian Painted Frog | NT | LC | AM0037 | 234,274 |
| 32 | Anura | Microhylidae | <i>Kaloula taprobanica</i> | Sri Lankan Painted Frog, Sri Lankan Bullfrog | VU | LC | AM0038 | 211,227 |
| 33 | Anura | Microhylidae | <i>Microhyla mukhlesuri</i> | Chittagong Microhylid Frog, Mukhlesur's Narrow-mouthed Frog | DD | NE | AM0030 | 269 |
| 34 | Anura | Microhylidae | <i>Microhyla mymensinghensis</i> | Mymensingh Microhylid Frog, Moymonsingh's Narrow-mouthed Frog | LC | NE | AM0031 | 200,243 |
| 35 | Anura | Microhylidae | <i>Microhyla ornata</i> | Ornate Microhylid Frog | LC | LC | AM0032 | 244 |
| 36 | Anura | Microhylidae | <i>Microhyla rubra</i> | Red Microhylid Frog | LC | LC | AM0033 | 245 |
| 37 | Anura | Microhylidae | <i>Uperodon globulosus</i> | Baloon Frog, Indian Globular Frog, Indian Balloon Frog, Grey Balloon Frog, Greater Balloon Frog | VU | LC | AM0036 | 211,228 |
| 38 | Anura | Megophriidae | <i>Leptobranchium smithi</i> | Smith's Litter Frog, Red-eyed Frog | LC | LC | AM0039 | 242 |
| 39 | Anura | Megophriidae | <i>Xenophrys parva</i> | Crown Frog, Mountain Horned Frog | NT | LC | AM0005 | 233 |
| 40 | Anura | Rhacophoridae | <i>Chiromantis doriae</i> | Doriae's Pigmy Tree Frog | EN | LC | AM0044 | 211, 216, 223 |

| Sl. No. | Order | Family | Scientific Name | English Name | Status in Bangladesh | Global Status | Species ID | Page No. |
|---------|-------|---------------|--------------------------------|--|----------------------|---------------|------------|---------------|
| 41 | Anura | Rhacophoridae | <i>Chiromantis simus</i> | Annandale's Pigmy Tree Frog | LC | LC | AM0043 | 262 |
| 42 | Anura | Rhacophoridae | <i>Chiromantis vittatus</i> | Two-striped Pigmy Tree Frog | LC | LC | AM0042 | 263 |
| 43 | Anura | Rhacophoridae | <i>Philautus andersoni</i> | Anderson's Bush Frog | EN | LC | AM0049 | 211, 216, 224 |
| 44 | Anura | Rhacophoridae | <i>Polypedates leucomystax</i> | Common Tree Frog, Four-lined Tree Frog, White-lipped Tree Frog | LC | LC | AM0040 | 264 |
| 45 | Anura | Rhacophoridae | <i>Polypedates maculatus</i> | Maculated Tree Frog, Indian Tree Frog, Spotted Tree Frog | LC | LC | AM0041 | 265 |
| 46 | Anura | Rhacophoridae | <i>Raorchestes parvulus</i> | Dwarf Bush Frog, Karin Bubble Nest Frog | NT | LC | AM0048 | 238 |
| 47 | Anura | Rhacophoridae | <i>Rhacophorus bipunctatus</i> | Twin-spotted Tree Frog, Two-spotted Tree Frog | LC | LC | AM0045 | 212,266 |
| 48 | Anura | Rhacophoridae | <i>Rhacophorus maximus</i> | Large Tree Frog | VU | LC | AM0046 | 211,231 |
| 49 | Anura | Rhacophoridae | <i>Theleoderma asperum</i> | Pied Warty Tree Frog, Hill Garden Bug-eyed Frog, Bird Poop Frog, Warty Tree Frog | EN | LC | AM0047 | 211, 216, 225 |

Appendix-iii

Sample Assessment Sheet

Updating Species Red List of Bangladesh Assessment Sheet

Name of Species:

Species ID:

Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|---------|--------|-------|-------|--------|
| | | | | |

Scientific Name:

Species Authority:

English Name:

Local Name:

Synonym/s:

Taxonomic Notes:

Assessment Information

Red List Category
& Criteria (Status):

Justification:

Level of Assessment:

Date Assessed:

History:

Geographic Range

Global Range

Global Status

Global Population

Local Range Description:

Presence in Protected Areas:

Extent of Occurrence

Area of Occupancy

Range Map:

Population

Generation Time (Length)

Total Population

No. of Sub-population

Trend

Habitat and Ecology

Habit

Habitat

Niche

Elevation

Home Range

Active Period

| Threats | |
|---------------------|--|
| Habitat Destruction | |
| Trade | |
| Hunting/Poaching | |
| Other 1 | |
| Other 2 | |

| Conservation Actions | |
|----------------------|--|
| Wildlife Legislation | |
| CITES | |
| Other 1 | |
| Other 2 | |

| Recommendations | |
|-----------------|--|
| Research | |
| Management | |
| Captive stocks | |
| Other 1 | |
| Other 2 | |

| Sources/References | |
|--------------------|--|
| | |
| | |
| | |
| | |
| | |

| Citation (To be filled up by Lead Assessor) | |
|---|--|
| | |

| Name of the Contributors | |
|--------------------------|--|
| Assessor: | |
| Associate Assessor/s: | |
| Reviewer/s: | |
| Facilitator: | |

Signature of the Assessor

Signature of the Lead Assessor

Population and Population Size (Criteria A, C and D)

The term 'population' is used in a specific sense in the Red List Criteria that is different to its common biological usage. Population is here defined as the total number of individuals of the taxon. For functional reasons, primarily owing to differences between life forms, population size is measured as numbers of mature individuals only. In the case of taxa obligately dependent on other taxa for all or part of their life cycles, biologically appropriate values for the host taxon should be used.

Subpopulations (Criteria B and C)

Subpopulations are defined as geographically or otherwise distinct groups in the population between which there is little demographic or genetic exchange (typically one successful migrant individual or gamete per year or less).

Mature individuals (Criteria A, B, C and D)

The number of mature individuals is the number of individuals known, estimated or inferred to be capable of reproduction. When estimating this quantity, the following points should be borne in mind:

- Mature individuals that will never produce new recruits should not be counted (e.g. densities are too low for fertilization).
- In the case of populations with biased adult or breeding sex ratios, it is appropriate to use lower estimates for the number of mature individuals, which take this into account.
- Where the population size fluctuates, use a lower estimate. In most cases this will be much less than the mean.
- Reproducing units within a clone should be counted as individuals, except where such units are unable to survive alone (e.g. corals).
- In the case of taxa that naturally lose all or a subset of mature individuals at some point in their life cycle, the estimate should be made at the appropriate time, when mature individuals are available for breeding.
- Re-introduced individuals must have produced viable offspring before they are counted as mature individuals.

Generation (Criteria A, C and E)

Generation length is the average age of parents of the current cohort (i.e. newborn individuals in the population). Generation length therefore reflects the turnover rate of breeding individuals in a population. Generation length is greater than the age at first breeding and less than the age of the oldest breeding individual, except in taxa that breed only once. Where generation length varies under threat, the more natural, i.e. predisturbance, generation length should be used.

Reduction (Criterion A)

A reduction is a decline in the number of mature individuals of at least the amount (%) stated under the criterion over the time period (years) specified, although the decline need not be continuing. A reduction should not be interpreted as part of a fluctuation unless there is good evidence for this. The downward phase of a fluctuation will not normally count as a reduction.

Continuing decline (Criteria B and C)

A continuing decline is a recent, current or projected future decline (which may be smooth, irregular or sporadic) which is liable to continue unless remedial measures are taken. Fluctuations will not normally count as continuing declines, but an observed decline should not be considered as a fluctuation unless there is evidence for this.

Extreme fluctuations (Criteria B and C)

Extreme fluctuations can be said to occur in a number of taxa when population size or distribution area varies widely, rapidly and frequently, typically with a variation greater than one order of magnitude (i.e. a tenfold increase or decrease).

Severely fragmented (Criterion B)

The phrase 'severely fragmented' refers to the situation in which increased extinction risk to the taxon results from the fact that most of its individuals are found in small and relatively isolated subpopulations (in certain circumstances this may be inferred from habitat information). These small subpopulations may go extinct, with a reduced probability of recolonization.

Extent of occurrence (Criteria A and B)

Extent of occurrence is defined as the area contained within the shortest continuous imaginary boundary which can be drawn to encompass all the known, inferred or projected sites of present occurrence of a taxon, excluding cases of vagrancy. This measure may exclude discontinuities or disjunctions within the overall distributions of taxa (e.g. large areas of obviously unsuitable habitat) (but see 'area of occupancy', below). Extent of occurrence can often be measured by a minimum convex polygon (the smallest polygon in which no internal angle exceeds 180 degrees and which contains all the sites of occurrence).

Area of occupancy (Criteria A, B and D)

Area of occupancy is defined as the area within its 'extent of occurrence' (see point 9 above) which is occupied by a taxon, excluding cases of vagrancy. The measure reflects the fact that a taxon will not usually occur throughout the area of its extent of occurrence, which may contain unsuitable or unoccupied habitats. In some cases (e.g. irreplaceable colonial nesting sites, crucial feeding sites for migratory taxa) the area of occupancy is the smallest area essential at any stage to the survival of existing populations of a taxon. The size of the area of occupancy will be a function of the scale at which it is measured, and should be at a scale appropriate to relevant biological aspects of the taxon, the nature of threats and the available data. To avoid inconsistencies and bias in assessments caused by estimating area of occupancy at different scales, it may be necessary to standardize estimates by applying a scale-correction factor. It is difficult to give strict guidance on how standardization should be done because different types of taxa have different scale-area relationships.

Location (Criteria B and D)

The term 'location' defines a geographically or ecologically distinct area in which a single threatening event can rapidly affect all individuals of the taxon present. The size of the location depends on the area covered by the threatening event and may include part of one or many subpopulations. Where a taxon is affected by more than one threatening event, location should be defined by considering the most serious plausible threat.

Quantitative analysis (Criterion E)

A quantitative analysis is defined here as any form of analysis which estimates the extinction probability of a taxon based on known life history, habitat requirements, threats and any specified management options. Population viability analysis (PVA) is one such technique. Quantitative analyses should make full use of all relevant available data. In a situation in which there is limited information, such data as are available can be used to provide an estimate of extinction risk (for instance, estimating the impact of stochastic events on habitat). In presenting the results of quantitative analyses, the assumptions (which must be appropriate and defensible), the data used and the uncertainty in the data or quantitative model must be documented.

Benign introduction

An attempt to establish a taxon, for the purpose of conservation, outside its recorded distribution but within an appropriate habitat and ecogeographical area; a feasible conservation tool only when there is no remaining area left within a taxon's historic range (IUCN 1998).

Breeding population

A (sub) population that reproduces within the region, whether this involves the entire reproductive cycle or any essential part of it.

Conspecific population

Populations of the same species; here applied to any taxonomic unit at or below the species level.

Downlisting and uplisting

The process for adjusting the Red List Category of a regional population according to a decreased or increased risk of extinction; downlisting refers to a reduced extinction risk and uplisting to an increased extinction risk.

Endemic taxon

A taxon naturally found in any specific area and nowhere else; this is a relative term in that a taxon can be endemic to a small island, to a country, or to a continent.

Global population

Total number of individuals of a taxon (see Population).

Metapopulation

A collection of subpopulations of a taxon, each occupying a suitable patch of habitat in a landscape of otherwise unsuitable habitat. The survival of the metapopulation is dependent on the rate of local extinctions of occupied patches and the rate of (re-) colonization of empty patches (Levins 1969, Hanski 1999).

Natural range

Range of a taxon, excluding any portion that is the result of an introduction to a region or neighbouring region. The delimitation between wild and introduced populations within a region may be based on a pre-set year or event, but this decision is left to the regional Red List authority.

Population

This term is used in a specific sense in the IUCN Red List Criteria (IUCN 2001, 2012), different from its common biological usage. Population is defined as the total number of individuals of the taxon. Within the context of a regional assessment, it may be advisable to use the term global population for this. In the Guidelines the term population is used for convenience, when reference is made to a group of individuals of a given taxon that may or may not interchange propagules with other such entities (see Regional population and Subpopulations).

Propagule

A living entity capable of dispersal and of producing a new mature individual (e.g. a spore, seed, fruit, egg, larva, or part of or an entire individual). Gametes and pollen are not considered propagules in this context.

Region

A subglobal geographical area, such as a continent, country, state, or province.

Regional assessment

Process for determining the relative extinction risk of a regional population according to the Guidelines.

Regional population

The portion of the global population within the area being studied, which may comprise one or more subpopulations.

Rescue effect

Process by which immigrating propagules result in a lower extinction risk for the target population.

Sink

An area where the local reproduction of a taxon is lower than local mortality. The term is normally used for a subpopulation experiencing immigration from a source where the local reproduction is higher than the local mortality

Subpopulations

Geographically or otherwise distinct groups in the (global) population between which there is little demographic or genetic exchange (typically one successful migrant individual or gamete per year or less; IUCN 2001, 2012); a subpopulation may or may not be restricted to a region.

Taxon

A species or infra specific entity whose extinction risk is being assessed.

Vagrant

A taxon that is currently found only occasionally within the boundaries of a region (see Visitor). Visitor (also, visiting taxon)

A taxon that does not reproduce within a region but regularly occurs within its boundaries either now or during some period of the last century. Regions have several options on how to decide the boundaries between visitors and vagrants, e.g. using a preset percentage of the global population found in the region or predictability of occurrence.

Wild population

A population within its natural range in which the individuals are the result of natural reproduction (i.e. not the result of human-mediated release or translocation); if a population is the result of a benign introduction that is now or has previously been successful (i.e. self-sustaining), the population is considered wild.

Appendix-v

SUMMARY OF THE FIVE CRITERIA (A-E) USED TO EVALUATE IF A TAXON BELONGS IN AN IUCN RED LIST THREATENED CATEGORY (CRITICALLY ENDANGERED, ENDANGERED OR VULNERABLE)¹.

| A. Population size reduction. Population reduction (measured over the longer of 10 years or 3 generations) based on any of A1 to A4 | | | |
|---|---|---|---|
| | Critically Endangered | Endangered | Vulnerable |
| A1 | ≥ 90% | ≥ 70% | ≥ 50% |
| A2, A3 & A4 | ≥ 90% | ≥ 50% | ≥ 30% |
| <p>A1 Population reduction observed, estimated, inferred, or suspected in the past where the causes of the reduction are clearly reversible AND understood AND have ceased.</p> <p>A2 Population reduction observed, estimated, inferred, or suspected in the past where the causes of reduction may not have ceased OR may not be understood OR may not be reversible.</p> <p>A3 Population reduction projected, inferred or suspected to be met in the future (up to a maximum of 100 years) [(a) cannot be used for A3].</p> <p>A4 An observed, estimated, inferred, projected or suspected population reduction the time period must include both the past and the future (up to a max. of 100 years in future), and where the causes of reduction may not have ceased OR may not be understood OR may not be reversible.</p> | <i>based on any of the following:</i> | | <p>(a) direct observation [except A3]</p> <p>(b) an index of abundance appropriate to the taxon</p> <p>(c) a decline in area of occupancy (AOO), extent of occurrence (EOO) and/or habitat quality</p> <p>(d) actual or potential levels of exploitation</p> <p>(e) effects of introduced taxa, hybridization, pathogens, pollutants, competitors or parasites.</p> |
| B. Geographic range in the form of either B1 (extent of occurrence) AND/OR B2 (area of occupancy) | | | |
| | Critically Endangered | Endangered | Vulnerable |
| B1. Extent of occurrence (EOO) | < 100 km ² | < 5,000 km ² | < 20,000 km ² |
| B2. Area of occupancy (AOO) | < 10 km ² | < 500 km ² | < 2,000 km ² |
| AND at least 2 of the following 3 conditions: | | | |
| (a) Severely fragmented OR Number of locations | = 1 | ≤ 5 | ≤ 10 |
| (b) Continuing decline observed, estimated, inferred or projected in any of: (i) extent of occurrence; (ii) area of occupancy; (iii) area, extent and/or quality of habitat; (iv) number of locations or subpopulations; (v) number of mature individuals | | | |
| (c) Extreme fluctuations in any of: (i) extent of occurrence; (ii) area of occupancy; (iii) number of locations or subpopulation; (iv) number of mature individuals | | | |
| C. Small population size and decline | | | |
| | Critically Endangered | Endangered | Vulnerable |
| Number of mature individuals | < 250 | < 2,500 | < 10,000 |
| AND at least one of C1 or C2 | | | |
| C1. An observed, estimated or projected continuing decline of at least (up to a max. of 100 years in future): | 25% in 3 years or 1 generation (whichever is longer) | 20% in 5 years or 2 generation (whichever is longer) | 10% in 10 years or 3 generation (whichever is longer) |
| C2. An observed, estimated, projected or inferred continuing decline AND at least 1 of the following 3 conditions: | | | |
| (a) (i) Number of mature individuals in each subpopulation | ≤ 50 | ≤ 250 | ≤ 1,000 |
| (ii) % of mature individuals in one subpopulation = | 90-100% | 95-100% | 100% |
| (b) Extreme fluctuations in the number of mature individuals | | | |
| D. Very small or restricted population | | | |
| | Critically Endangered | Endangered | Vulnerable |
| D. Number of mature individuals | < 50 | < 250 | D1. < 1,000 |
| D2. <i>Only applies to the VU category</i> Restricted area of occupancy or number of locations with a plausible future threat that could drive the taxon to CR or EX in a very short time. | | | D2. typically: AOO < 20km ² or number of locations ≤ 5 |
| E. Quantitative Analysis | | | |
| | Critically Endangered | Endangered | Vulnerable |
| Indicating the probability of extinction in the wild to be: | ≥ 50% in 10 years or 3 generation, whichever is longer (100 years max.) | ≥ 20% in 20 years or 5 generation, whichever is longer (100 years max.) | ≥ 0% in 100 years |

¹ Use of this summary sheet requires full understanding of the IUCN Red List Categories and Criteria and Guidelines for Using the IUCN Red List Categories and Criteria. Please refer to both documents for explanations of terms and concepts used here.

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| 30 | W. Wüster | | 188 |
| 31 | www.reptarium.cz | | 81, 153, 154, 157 |
| 32 | www.indiansnake.org | | 150 |
| 33 | www.snakebd.com | | 151 |
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Strengthening Regional Co-operation for Wildlife Protection (SRCWP) Project

The Strengthening Regional Co-operation for Wildlife Protection (SRCWP) project, the first World Bank supported regional project in South Asia, aims to build country capacity and incentives for tackling the illegal wildlife trade and other selected regional conservation threats to habitats in border areas. The project was launched in 2011 in Bangladesh and Nepal in the first phase and Bhutan joined in the second phase to bring regional collaboration in combating wildlife crime through strengthened legislative and regulatory frameworks and well-equipped specialized agencies and systems, as well as relevant training and awareness programmes for staff responsible for enforcement of wildlife law and regulations. The project is also supporting the strengthening of the South Asia Wildlife Enforcement Network (SAWEN) which was established by SAARC countries in 2011 to combat wildlife crime in South Asia region.

The Bangladesh Forest Department (BFD) is implementing the project through a partnership with research institutes, universities and environmental NGOs. A total of 36 sub-projects have been supported to improve the management of protected areas and conservation of flagship species through a landscape approach. Some of the sub-projects are addressing human-wildlife conflict through engagement with the local communities and civil society to foster an enduring culture of wildlife stewardship and protection. The regional wildlife project has supported the establishment of a Wildlife Crime Control Unit (WCCU) within the Wildlife Circle, three Wildlife divisions in the Forest Department, and a Wildlife Center to undertake training, research, education and awareness on the issues of wildlife conservation and protection.



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