

On the Lizards of Karachi Coast

Fahmida Iffat

Zoological Survey Department, Government of Pakistan, Karachi

Abstract

Surveys along the coastal stretch, from Sandspit to Cape Monze, were undertaken during March 2003 to March 2006, to study the species of lizards. A total of 11 species of lizards belonging to 6 genera were reported from the area.

Keywords: Karachi Coast, *Hemidactylus*, *Acanthodactylus*, *Mesalina*, *Agamura*, *Crossobamon*, *Varanus*.

Introduction

Karachi coast provides different habitats known for diverse faunal assemblages. Hawks Bay, Buleji, Paradise Point and Cape Monze are among the important sites along the coast of Karachi which are considered to have diverse terrestrial fauna including lizards.

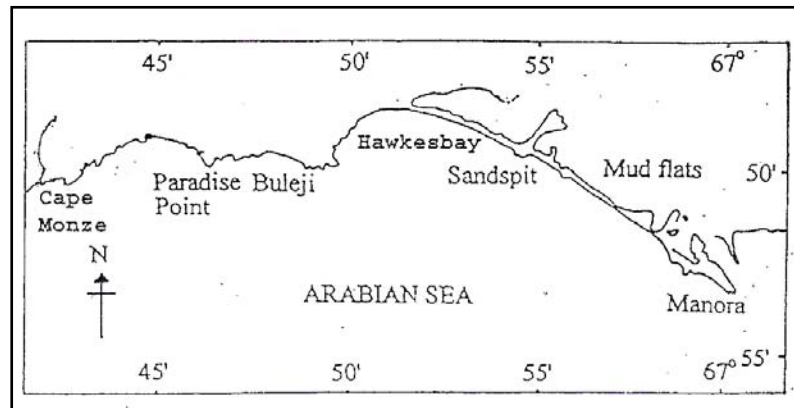


Fig. 1. Coast of Karachi showing surveyed area.

Lizards of Pakistan are known through the works of Auffenberg *et al* (1989, 1990), Boulenger (1890), Ghalib *et al* (1981), Iffat and Auffenberg (1988), Khan (1972, 2003), Khan and Mirza (1977), Khan and Nazia (2003), Khan *et al* (2005), Mertens (1969), Minton (1966), Rahman *et al* (2002) and Rahman and Papenfuss (2005). However, none of these studies covered coastal areas of Karachi except Khan *et al* (2005), who reported 4 species from the area. The present paper deals with the lizards of the coastal areas of Karachi, however, it does not cover mangroves and associate habitats.

Materials and Methods

The study was carried out along sandy/rocky belt of the Karachi coast, starting from Sandspit to Hawks Bay to Cape Monze (Fig. 1). The area consists of two prominent habitats for lizards i.e. buildings/huts/boulders along sea front, and sandy stretch and sandy/muddy/rocky areas above high water mark with patches of shrubs and other vegetations.

A number of field tours were conducted between March 2003 to March 2006, to observe the lizard species in the two habitats. Forceps and magnifying glass were used to study the morphological features. Identification of lizard was made using Minton (1966).

Results and Discussion

No lizards were observed from sandy/rocky area of sea front including inter-tidal zone. No marine lizard is known from the other regional countries as well. Buildings and other man made structures and natural boulders above the high water mark provide suitable abode for a number of *Hemidactylus* species. Following lizard species belonging to this genus are predominantly inhabiting buildings, wooden fixtures and boulders.

<i>Hemidactylus brooki</i> Gray	Spotted Indian gecko
<i>Hemidactylus flaviviridis</i> Ruppell	Yellow bellied house gecko
<i>Hemidactylus persicus</i> Anderson	<i>Persian gecko</i>
<i>Hemidactylus turcicus</i> (Linnaeus)	Mediterranean gecko
<i>Hemidactylus triedrus</i> (Daudin)	Blotched gecko

In the sandy/muddy/rocky areas above high water mark common plant species are *Acacia senegal*, *Euphorbia caducifolia*, *Prosopis spicigera*, *Ziziphus nummularia*, *Salvadora persica*, *Grewia tenax* and *Blepharis syndic* (Beg, 1966). Along the backwaters of Sandspit, there are mudflats with sparse mangroves. This area was observed to be inhabited by following lizards.

<i>Acanthodactylus cantoris</i> Gunther	Indian fringe toed lizard
<i>Calotes versicolor</i> (Daudin)	Indian garden lizard
<i>Mesalina watsonana</i> Stoliczka	Long tailed desert lacerta
<i>Agamura persica</i> (Dumeril)	Blunt tailed spider gecko
<i>Crossobamon orientalis</i> (Blanford)	Sindh sand gecko
<i>Varanus bengalensis</i> (Daudin)	Indian monitor

A total of 11 species of lizards inhabit the coastal areas along Karachi coast. There is a need to conduct similar studies in the other areas along the coast of Pakistan, which will be helpful in understanding the biodiversity and interaction of various species inhabiting the coastal regions of Pakistan.

Acknowledgement

The author expresses sincere gratitude to Dr. M. Zaheer Khan, University of Karachi, for providing some literature and confirming the identification of some species.

References

- Auffenberg, W., Rahman, H., Iffat, F. and Perveen, Z. 1989. A study of *Varanus flavescens* (Sauria Varanidae). Bombay Nat. Hist. Soc. 86: 286-307.
- Auffenberg, W., Rahman, H., Iffat, F. and Perveen, Z. 1990. Notes on the biology of *Varanus griseus* (Sauria, Varanidae). Bombay Nat. Hist. Soc. 87: 26-36
- Beg, A.R. 1966. Wildlife habitats of Pakistan. Pakistan Forest Institute, Peshawar.
- Boulenger, G.A 1890. Fauna of British India, including Ceylon and Burma: Reptile and Batrachia, London.
- Ghalib, S.A., Rahman, H., Iffat, F. and Hasnain, S.A., 1981 A Checklist of reptiles of Pakistan. Rec. Zool. Sur. Pakistan 8: 37-59.
- Iffat, F. and Auffenberg, W. 1988 New reptile records for Pakistan, *Agama Minor*. Sauria 19: 61.
- Khan, M. S., 1972 Checklist and key to the lizards of Jhang district, West Pakistan. Herpetologica 28 94-98.
- Khan M. S., 2003. Question of generic designation of angular toed geckos of Pakistan with description of three new genera (Reptilian: Geckonidae). Nat. Hist. Wildl. 2: 1-9
- Khan, M. S. and Mirza M. R., 1977 An annotated checklist and key to the reptiles of Pakistan Part-II: Sauria (Lacertilia). Biologia 23: 41-64.
- Khan, M. Z., Hussain, B. and Ghalib, S. A. 2005 Current status of reptilian fauna along Karachi coast with special reference to marine turtles. Nat Hist. Wildl. 4: 127-130.
- Khan, M. Z. and Nazia, M., 2003. Current population status of diurnal lizard of Karachi, Pakistan. Russian Herpet. 10: 241-244.
- Mertens, R., 1969. Die Amphibian and Reptilia, West Pakistan. Stuttgarter Beiter Naturkunde, No.197:1-96
- Minton, S. A., 1966 A contribution to the herpetology of West Pakistan. Bull. Amer. Mus. Nat. Hist. 134: 24-184

Rehman, H. and Papenfuss, T. J., 2005 An up-to-date checklist of reptilian fauna of Balochistan. Nat. Hist. Wildl. 4: 131-136.

Rehman, H., Ahmad, S. I. and Fakhri, S., 2002. Home range and growth rate of fringe toad sand lizard (*Acanthodactylus cantoris*) at Hawksbay area, Karachi. Rec. Zool. Sur. Pakistan 14 49-54.