

NOTES ON THE DISTRIBUTION OF REPTILES AND AMPHIBIANS IN EGYPT

Ivan REHÁK and Dale J. OSBORN*

Department of Zoology, Charles University, Viničná 7, 128 44 Praha 2, Czechoslovakia

Abstract. Records of distribution for 36 species of Egyptian reptiles and amphibians are given based on collections made in the vicinities of Cairo, Asyut, Aswan, Abu Simbel, Hurghada and nearby islands, and in the Red Sea hills 50–60 km SW of Hurghada.

INTRODUCTION

Knowledge of the distribution of Egyptian herpetofauna still remains very incomplete. Only a few areas of Egypt, mainly lower Egypt, especially in the vicinity of Cairo, are well mapped with regard to the distribution of reptiles and amphibians. Basic publications dealing with the distribution of Egyptian herpetofauna are those by Anderson (1898) and Flower (1933). The distribution maps of individual species, based on collections obtained by the United States Naval Medical Research Unit No. 3, are available in Marx (1968). This paper also contains identification keys. Keys for squamats only are in Marx (1963). Additions to the distribution of the herpetofauna of eastern lower Egypt are given in Werner (1983). The latter also reviewed the literature dealing with the distribution of Egyptian herpetofauna. This paper presents our records of collections of Egyptian reptiles and amphibians, and comparisons with data of above mentioned authors are given. Occasional notes are added for several species.

MATERIALS AND METHODS

This paper is based on collections and observations made in Egypt by ReháK in July–August 1981 and August–September 1982 in the vicinities of Cairo, Asyut, Aswan, Abu Simbel, Hurghada and nearby islands of Giftun Saghir and Giftun Kebir; and by Osborn in May–June 1984 in the Red Sea Hills area of Gebel Shayib el Banat and the Qattar massive 50–60 km SW of Hurghada (between Lat. 26.55–27.05 N. and Long. 33.13–33.34 E.) and is referred to as the Shayib-Qattar area in the text.

The preserved specimens are in collections of the Department of Zoology, Charles University, Prague.

Several records of endangered and large species (e. g. marine turtles, *Crocodylus*, *Varanus*) are based on observations only or specimens killed by natives, and documented with photographs

Crocodylus niloticus Laurenti, 1768 Nile Crocodile

Specimens collected: 4 sp., north part of Nubian Lake (= Aswan reservoir), August 1981 1982, juveniles killed by fishermen.

At least 40 hatchlings and 3 subadults (up to two meters in length) collected by native fishermen in Nubian Lake were seen in August 1981 and August 1982. Crocodiles are killed for skins or other tourist souvenirs. Two subadults were observed near Aswan High Dam in 1981 and one in 1982.

* Home address: Ladova 7, 128 00 Praha 2, Czechoslovakia

Historically, the Nile Crocodile is well documented from Egypt up to the Nile Delta. However, its populations were very reduced in Egypt and Nubia (cf. Flower 1933), and Wermuth and Fuchs (1978) even gave its recent distribution in the Nile southwards from Khartoum which is not correct, of course, because the Nile Crocodile is distributed in Sudan in the Nile as far north of Khartoum as Wadi Halfa (Flower 1933, Reháček — unpublished data). Our data indicate that after the building of the High Dam and origin of the Nubian Lake with large unsettled areas and little influence by human activity, breeding populations of Nile Crocodiles were established here, and the High Dam now seems to be its northern limit.

Dermochelys coriacea (Linnaeus, 1766) — Leatherback

Specimen observed: 1 dead sp. on sea shore 5 km N of Hurghada, August 1981.

According to Marx (1968) the only record of this species from Egypt is a specimen from the Alexandria market mentioned by Flower (1933). Flower examined the carapace in the 1920 year and he pointed out the unclear origin of it. However, the exposition of the Biological Station in Ahaia near Hurghada shows two preserved Red Sea specimens, which indicate that the range of the Leatherback includes the Egyptian Red Sea as it is supported by our record, too.

Eretmochelys imbricata (Linnaeus, 1766) — Hawksbill Turtle

Specimens observed: 1 sp., Giftun Saghir Island near Hurghada, August, 1981; 1 sp., Hurghada 5 km N of, August 1981.

Known from the area (Flower 1933, Marx 1968). Souvenirs made from this turtle are often on sale in Hurghada.

Chelonia mydas (Linnaeus, 1758) — Green Turtle

Specimen observed: 1 dead sp., Giftun Kebabir Island near Hurghada, August 1981.

Known from the area (Flower 1933, Marx 1968). Souvenirs made from this turtle are often on sale in Hurghada.

Ptyodactylus hasselquisti (Donndorff, 1798) — Fan-footed Gecko

Specimens collected: 4 sp., Aswan, August 1981; Shayib-Qattar area — 1 sp., Bir Rushweid, 29. 5. 1984; 1 sp., Wadi Kohila, 31. 5. 1984; 1 dead sp., ridge between Wadi Abu Erin and Wadi Abu Teen, N. E. Gebel Shayib at 1,510 m, 13. 5. 1984.

Common in Aswan area. The nearest Nile Valley localities given by Marx (1968) are 600 km north. Flower (1933) mentioned the occurrence of the species in areas of Asyut, Qena and Aswan. Eastern Desert localities according to Marx (1968) are Bir Murra cca 200 km SE Aswan; Wadi Atalla, 150 km SW Hurghada; some localities near the Cairo-Suez Road; and Wadi Quiseb 270 km NNW Hurghada. Our Red Sea records help fill a gap between these localities.

Tarentola annularis (Geoffroy, 1823) — White-spotted Gecko

Specimen collected: 1 sp., Giza, September 1982.

Known from the area (Flower 1933, Marx 1968).

Agama agama spinosa Gray, 1931 — Gray's Agama

Specimens collected: Shayib-Qattar area — 1 sp., Wadi Showak, 1,300 m, 26. 5. 1984; 1 sp., Wadi Showak, 1,230 m, 26. 5. 1984; 1 sp., Wadi Ghoza, 29. 5. 1984; 1 sp., Wadi Qattar, 670 m, 5. 6. 1984; 1 sp., Wadi Naql Tayd, branch of Wadi Qattar, 700 m, 5. 6. 1984.

Known from the area. Marx (1968) gives the locality Gebel Qattar. Goodmann (1986) listed a sight record near Gebel Migif, 24.47 N, 34.42 E.

Agama sinaita Heyden, 1827 — Sinai Agama

Specimens collected: Shayib-Qattar area — 1 sp., Wadi Showak near junction with Wadi Anfei, 28. 5. 1984; 1 sp., Wadi Umm Muneib, 510 m, 1. 6. 1984; 2 sp., Wadi Umm Muneib junction with Wadi Qattar, 1. 6. 1984.

Known from the area. Marx (1968) gives the near southern locality, Wadi Abu Shih. Another older Eastern Desert records are mentioned by Flower (1933).

Uromastyx aegyptius (Forsk. 1775) — Egyptian Dabb-lizard

Specimens collected: 4 sp., Cairo, July 1981.

Known from the area (Flower 1933, Marx 1968, Werner 1983).

Acanthodactylus boskianus asper (Audouin, 1829) — Bosc's Lizard

Specimens collected: Shayib-Qattar area — 1 sp., Wadi Showak, 740 m, 23. 5. 1984; 1 sp., Wadi Showak near junction with Wadi Anfei, 28. 5. 1984; 1 sp., Wadi Greygar, 28. 5. 1984; 1 sp., Wadi Gozah, 28. 5. 1984; 1 sp., Wadi Umm Disi, 540 m, 31. 5. 1984; 1 sp., Wadi Umm Muneib junction with Wadi Qattar, 1. 6. 1984.

Our records between localities Fawakhir Mine 70 km S and Wadi el Nil cca 300 km NW of Hurghada given by Marx (1968) are evidence for a wider distribution of this lizard in the Red Sea area.

Eremias mucronata (Blanford, 1870) — Anseba Lizard

Specimen collected: 1 sp., Wadi Umm Muneib, 510 m, 1. 6. 1984.

Marx (1968) gives no records on distribution of this lizard from Egypt, but records it from Halaib, Sudan, 640 km SE of Hurghada. Our record lies inside the known area of distribution of the species range from Sinai south to Eritrea and Somalilands as it is presented by Marx (1968). However, Flower (1933) pointed out that old Sinai record of the species is doubtful. In this case our record represents great extension of known range of the species to the north, and it is evidence to consider the Anseba Lizard as a member of Egyptian herpetofauna.

Varanus griseus (Daudin, 1803) — Desert Monitor

Specimens collected: 4 sp., Giza, September 1981

Known from the area (Flower 1933, Marx 1968).

Varanus niloticus (Linnaeus, 1766) — Nile Monitor

Specimens observed: 1 sp., east bank of the Nubian Lake, September 1982.

Two Nile Monitors killed by fishermen were seen in Aswan in September 1982, both evidently of Nubian origin. Marx (1968) did not record this lizard from Egypt.

However, the species is known to occur in the Nubian Nile Valley, and even in the Egyptian Nile Valley as north as Giza (Flower 1933).

Chalcides ocellatus (Forsk. 1775) — Ocellated Skink

Specimens collected: 9 sp., Cairo and Giza, August, 1981.

Known from the area (Flower 1933, Marx 1968, Werner 1983).

Mabuya quinquetaeniata (Lichtenstein, 1823) — Bean Skink

Specimens collected: 1 sp., Abu Tig near Asyut, July 1981; 1 sp., Abu Simbel, Nubia, August 1981.

Very dense local populations were observed in vicinity of Abu Simbel. Known from both areas (Flower 1933, Marx 1968).

Scincus scincus (Linnaeus, 1758) — Sandfish

Specimens collected: 4 sp., Giza, September 1982.

Known from the area (Marx 1968, Werner 1983).

Chamaeleo chamaeleon (Linnaeus, 1758) — Common Chamaeleon

Specimens collected: 3 sp., Alexandria, August 1981.

Known from the area (Marx 1968).

Eryx colubrinus (Linnaeus, 1758) — Theban Sand-Boa

Specimens collected: 5 sp., Faiyum, September 1982.

In early September some females observed were highly gravid. Known from the area (Marx 1968).

Eryx jaculus (Linnaeus, 1758) — Javelin Sand-Boa

Specimens collected: 6 sp., Tahreer, August 1982.

Known from the area (Marx 1968). For data on behavior and breeding of the Egyptian Javelin Sand-Boas in captivity see Reháček (1984).

Coluber florulentus Geoffroy, 1827 — Flowered Snake

Specimen collected: 1 sp., Abu Rawash near Giza, July 1981.

Known from the locality (Marx 1968).

Coluber rogersi (Anderson, 1893) — Rogers's Snake

Specimen collected: 1 sp., Shayib-Qattar area — Wadi Showak, 710 m, 27. 5. 1984.

Our record is new for the area. Marx (1968) gave no records in the Red Sea area. The nearest locality is from Cairo-Suez road, about 380 km NW. Flower (1933) gave other records from the desert hills east of Cairo, and he mentioned old Anderson's record (1893) from Shaloof, near Suez.

Dasypeltis scabra (Linnaeus, 1758) — Egg-eating Snake

Specimen examined: 1 sp., collected by natives in Faiyum, September 1982.

Marx (1968) gave no record for this snake. Flower (1933) cited only old record given by Anderson (1898). It seems extremely rare in Egypt.

Lytorhynchus diadema (Duméril et Bibron, 1854) — Diademed Sand-Snake

Specimen collected: 1 sp., Giza, August 1982.

Known from the area (Flower 1933, Marx 1968).

Malpolon moilensis (Reuss, 1834) — Moila Snake

Specimen collected: 1 sp., Giza, July 1981.

Known from the area (Marx 1968).

Psammophis shokari (Forsk., 1775) — Afro-Asian Sand Snake

Specimen collected: 1 sp., Giza, July 1981.

Known from the area (Flower 1933, Marx 1968, Werner 1983).

Psammophis aegyptius Marx, 1958 — Saharan Sand-Snake

Specimens collected: Shayib-Qattar area — 1 sp., Wadi Showak, 710 m, 27. 5. 1984; 1 sp., Wadi Gozah, 810 m, 28. 5. 1984; 1 sp., Wadi Qattar, 590 m, 1. 6. 1984.

Specimen from W. Gozah was collected from a Yassar tree (*Moringa peregrina*), and a young bird was removed from its stomach. The specimen from W. Qattar was from an acacia tree. Marx (1968) recorded single specimen from Red Sea area, Wadi Abu Shih 60 km south of our localities. Our records indicate wider distribution of the Saharan Sand-Snake in Red Sea Hills.

Psammophis sibilans (Linnaeus, 1758) — African Beauty Snake

Specimens collected: 2 sp., Giza, September 1982:

Known from the area (Flower 1933, Marx 1968, Werner 1983).

Spalerosophis diadema cliffordi (Schlegel, 1837) — Clifford's Royal Snake

Specimens collected: 5 sp., Giza and Cairo, August-September 1982.

Known from the area (Flower 1933, Marx 1968).

Telescopus dhara obtusus (Reuss, 1834) — Egyptian Cat-Snake

Specimen collected: 1 sp., Giza, July 1981.

Known from the area (Flower 1933, Marx 1968, Werner 1983).

Naja haje (Linnaeus, 1758) — Egyptian Cobra

Specimens collected: 2 sp., Faiyum, August 1981.

Known from the area (Flower 1933, Marx 1968).

Walterinnesia aegyptia Lataste, 1887 — Innes's Snake

Specimen examined: 1 sp. from vicinity of Suez collected by natives, September 1982.

Known from the area (Flower 1933, Marx 1968). It seems extremely rare.

Cerastes cerastes (Linnaeus, 1758) — Horned Viper

Specimens collected: 1 sp., Abu Simbel, Nubia, August 1981; 1 sp., Cairo, August 1981.

The species is recorded from Cairo and east of Cairo (Flower 1933, Marx 1968, Werner 1983). From the Nile Valley in Nubia two specimens from west bank of Nile are recorded cca 180 km NE from Abu Simbel. In Sudan records are for Sudan Nubia (Corkill 1935), which indicates a wider distribution of the species in Nubia. A very dense population was observed in vicinity of Abu Simbel in August 1981.

Cerastes vipera (Linnaeus, 1758) — Lesser Cerastes Viper

Specimens collected: 1 sp., Giza, August 1981.

Known from the area (Flower 1933, Marx 1968).

Echis coloratus Günther, 1878 — Burton's Carpet-Viper

Specimens collected: Shayib-Qattar area — 1 sp., Wadi Umm Muneib, 510 m, 1. 6. 1984; 1 sp., Wadi Kohila, 770 m, 30. 5. 1984; 1 sp., Wadi Abu Erin near junction with Wadi Umm Anib, 590 m, 15. 6. 1984.

Marx (1968) records a specimen from a nearby locality, Wadi Fatiri and another one cca 260 km SE (Sukkari mine), which indicate wider distribution of the species in the Red Sea Hills area.

Ptychadena mascareniensis (Duméril et Bibron, 1841) — Mascarene Frog

Specimens collected: 1 sp., Asyut, July 1981.

Marx (1968) gives no record from Upper Egypt, his nearest records are from vicinity of Giza cca 300 km N from Asyut. Flower (1933) gives the nearest records from the areas of Qena and of Edfu in Upper Egypt.

Bufo regularis Reuss, 1834 — Egyptian Square-marked Toad

Specimen collected: 1 sp., Abu Simbel, Nubia, August 1981.

Marx (1968) gives no Nubian record. The southernmost record given by him is from Luxor cca 390 km N from Abu Simbel. Flower (1933) mentioned the wide distribution of the species in Upper Egypt and Nubia along the Nile Valley from Beni Suef to Aswan and Wadi Halfa.

SUMMARY

Records on distribution of 34 species of Reptiles and of 2 species of Amphibians are given on recent distribution of Egyptian herpetofauna. If compared with faunistic records given by Marx (1968) and Werner (1983) the total of 24 species is recorded from areas given also by these authors. For 12 species records from other areas are given, especially for the Red Sea area, Upper Egypt and Nubia. The

records include data on the species very rarely referred in the literature from the Egypt, e. g. *Dermochelys coriacea*, *Eremias mucronata*, *Dasypeltis scabra*, *Walterinnesia aegyptia*; on the endangered forms, e. g. *Crocodylus niloticus*, *Chelonia mydas*, *Eretmochelys imbricata*, *Varanus griseus*, *Varanus niloticus*, *Uromastyx aegyptius*, *Eryx colubrinus*, *Eryx jaculus*; and the data giving the evidence of the wider distribution of several species if compared with literature data, e. g. *Coluber rogersi*, *Psammophis aegyptius*, *Echis coloratus*.

Data on the distribution of Egyptian herpetofauna are relatively richer in Lower Egypt, and very scanty for Upper Egypt and Nubia. In the latter of interest is the situation in Nubian lake area, where for instance after construction of the High Dam large unsettled areas occur, and a situation-remains convenient for existence of such great forms as Nile Crocodiles.

REFERENCES

- Anderson, J., 1898: Zoology of Egypt: Volume First. Reptilia and Batrachia. Quarto volume. London (Bernard Quaritch), 436 pp. (sec. Flower 1933).
- Corkill, N. L., 1935: Notes on Sudan Snakes. A guide to the species represented in the collection in the Natural History Museum Khartoum. 40 pp.
- Flower, S. S., 1933: Notes on the recent reptiles and amphibians of Egypt, with a list of the species recorded from that Kingdom. *Proc. Zool. Soc. London*, 1933: 48—581.
- Goodman, S. M., 1986: Identification of mammalian prey remains in owl pellets from the central Red Sea Mountains. *Mammalia*, 50/3: 401—403.
- Marx, H., 1963: Keys to the lizards and snakes of Egypt. Research report NM 005 050.39.45, NAMRU-3, Cairo, Egypt, 8 pp.
- Marx, H., 1968: Checklist of the reptiles and amphibians of Egypt. Special Publication, United States Naval Medical Research Unit Number Three, Cairo, Egypt U. A. R., 91 pp.
- Rehák, I., 1984: Zkušnosti s egyptskými hroznýšky. *Akvárium Terárium*, 27/3/: 31—32.
- Wermuth, H. et K. Fuchs, 1978: Bestimmen von Krokodilen und ihrer Häute. Gustav Fischer Verlag. Stuttgart-New York. 100 pp.
- Werner, Y. L., 1983: Lizards and snakes from Eastern Lower Egypt in the Hebrew University of Jerusalem and Tel Aviv University, with range extensions. *Herp. Review*, 14(1): 29—31.

Received September 10, 1987; accepted March 10, 1988