

THE SURVEY
OF
WESTERN PALESTINE.

THE FAUNA AND FLORA OF PALESTINE.

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REPTILIA.

ORDER, OPHIDIA.

FAMILY, TYPHLOPIDÆ.

1. *Typhlops syriacus*. Jan. Icon. Oph., p. 15, livr. 3. Figured, Lortet. Arch. Mus. H. N. Lyon, t. iii., pl. xix.

This blind burrowing Snake is very common all over the country. Dr. Lortet mentions that it is also found in Mesopotamia. The species east of the Tigris (*T. persicus*) is distinct. It is nocturnal or crepuscular, and feeds on worms and very small insects.

2. *Onychocephalus simoni*. Böttg. Ber. Senck. Nat. Gesells. Frankf., 1878-79, p. 58.

This Blindworm, about six inches long, was found by Hans Simon both at Jaffa and at Caiffa. These are the only specimens known.

FAMILY, ELAPOMORPHIDÆ.

3. *Microelaps muelleri*. Böttg. Ber. Senck. Ges., 1879-80, p. 137. Lortet. Rept. de Syrie., pl. xix., fig. 2.

This graceful little Snake, about sixteen inches long, black, with white rings from head to tail, is found in the hill country of Judea and Galilee. The type is from Jerusalem. Dr. Lortet also found it near Lattakieh.

FAMILY, OLIGODONTIDÆ.

4. *Rhyncocalamus melanocephalus*. Günther. P. Z. S., 1864, p. 491.

PLATE XVI., FIG. 1.

The new genus, *Rhyncocalamus*, was established by Dr. Günther (P. Z. S., 1864, p. 491), for the reception of this species, brought by me from the neighbourhood of Lake Huleh. It has since been found by Dr. Lortet, both near Jericho and near the Lake of Gennesaret. It thus inhabits the whole Jordan valley. The Family in the Old World is represented by over fifty species, inhabiting South-eastern Asia and its islands. Only one species is found as far west as Persia.

FAMILY, COLUBRIDÆ.

5. *Ablabes coronella*. (Schlegel. Essai. s. l. phys. de Serp., Bnd. 2, s. 48.) Lortet. Rept. de Syrie, pl. xix., fig. 3.

This prettily marked Snake is common in every part of the country; found in Lebanon, Hermon, Huleh, Gennesaret, Tyre, and Nablus. It lives under stones, and is most rapid in its movements. It is widely distributed on the eastern Mediterranean shores.

6. *Ablabes modestus*. (Martin. P. Z. S., 1838, p. 82) = *Eirenis rothii*. Jan.

Found throughout Galilee, and in Lebanon and Hermon. It is of a brilliant yellow colour, with bluish metallic sheen on the back, which disappears after death. *Eirenis rothii*, Jan., Dr. Günther does not consider specifically distinct.

This species has been found in Syria, the Caucasus, Mesopotamia and Persia.

7. *Ablabes fasciatus*. (Jan. Arch. Zool. Genov. ii., p. 260.)

This Snake, originally described from Palestine, is also found in Persia. It inhabits dry stony places on the hills, and is not common. I am not aware of specimens having been procured in other countries, though it doubtless will be found in the intervening regions of Syria and Mesopotamia.

8. *Ablabes decemlineatus*. Dum. and Bibr. Erp. Gen. vii., p. 327.

Collected in Galilee, on the Plain of Phœnicia, under Lebanon, and at Huleh.

This species differs constantly from *Ab. modestus* in having the posterior and anterior chin-shields of equal length, while in *Ab. modestus* the anterior are much longer than the posterior. Moreover, it never has the black markings on the head and neck.

9. *Ablabes collaris*. (Ménétr. Cat. Rais., No. 228, p. 67.)

This species, very closely allied to the last, is found on the coast near Beyrout.

It was originally described from the Caucasus, and inhabits also Mesopotamia and Persia.

10. *Coronella austriaca*. Dum. et Bibr. vii., p. 610.

This Snake has been found near Beyrout, and elsewhere in Palestine.

It has an extensive range through Central and Southern Europe, especially the eastern part, the Caucasus, Persia, Egypt and Algeria.

11. *Coluber æsculapii*. Sturm's Fauna, iii., Heft. ii., f. a.

This European Snake has been found near Beyrout.

It is local in many parts of Central and Southern Europe, and in Transcaucasia.

12. *Coluber quadrilineatus*. Pall. Zoog. Ross.-As. iii., p. 40.

This Snake occurs in Northern Palestine. It inhabits the Caucasus and Southern Russia, Greece and Turkey, and is said to be found also in Sicily.

13. *Zamenis diadema*. (Schl. Ess. Phys. Serp. ii., p. 148) = *Periops parallelus*. Geoffr.

Found on the Phœnician and Philistian plains. This species has a wide range, from North-west India through Persia and Mesopotamia. It has been noticed also on the eastern shores of the Caspian.

It is rather a handsome Snake, and very gentle, never attempting to bite. Its food consists of small insects.

14. *Zamenis ventrimaculatus*. Gray. Ind. Zool. ii., pl. lxxx., fig. 1.

Found round the Dead Sea.

This Snake extends from Baluchistan through Persia into Egypt, but in each country the varieties are more or less distinctly marked. The Palestine form is the true typical *Z. ventrimaculatus*.

15. *Zamenis caudelineatus*. Günther. Cat. Col. Sn. Br. Mus., p. 104.

This Snake has a wide range through the country in stony places. I have taken it near Jerusalem and Nazareth, and drew a gigantic specimen out of a chink in the masonry of Hiram's Tomb, above Tyre, hybernating in December.

It is found in Transcaucasia, Persia, and in the region east of the Caspian.

16. *Zamenis viridiflavus*. Dum. and Bibr. vii., p. 686 = *Z. atrovirens*. Shaw.

This very large species is abundant among brushwood throughout the country, both in the Jordan valley and on the hills. It climbs the trees, and is most destructive, devouring the nestlings of the arboreal-breeding birds.

It is common throughout Southern Europe.

17. *Zamenis viridiflavus*, var. *carbonarius*. Bonap. Amph. Europ., p. 435.

This, which is really only a black race of the preceding species, is very common in the warmer parts of the country. In the Jordan valley it is the commonest, but it also occurs on the maritime plains, where the other is much more abundant.

18. *Zamenis dahlia*. Dum. and Bibr. Erp. Gén. vii., p. 692. Lortet. Rept. de Syrie, pl. xix., fig. 4.

This, one of the most graceful of Snakes, attains a length of over three feet.

It is not found in the hills, but abounds among grass and bushes, and

in moist, but not marshy places. I never noticed it among stones or rocks. When alarmed it glides away among the grass, and may be traced by the gentle motion of the blades over its sinuous track.

This Snake has rather a wide range, from Dalmatia and Greece to Persia, and northward to the Talisch mountains near the Caspian.

19. *Zamenis ravergeri*. (Ménétr. Cat. Rais., p. 69.)

Common among the rushes and rank herbage round the extinct crater which forms the little Lake Phiala, now Birket er Ram. I do not presume to say whether this is a species or a mere variety of *Z. caudælineatus*. Both forms, however, are found.

20. *Zamenis algira*. (Jan.) (Lortet. Poiss. et Rept. du lac de Tiberiade, p. 88.)

Found by the banks of the rivers, the Litany, Nahr el Khebir, and others.

This Snake did not occur to myself.

21. *Tropidonotus hydrus*. (Pall. Itin. i., p. 459, No. 18.)

This water Snake swarms not only in the lakes, but in little ponds and ditches throughout the country. It is especially abundant in Lake Phiala.

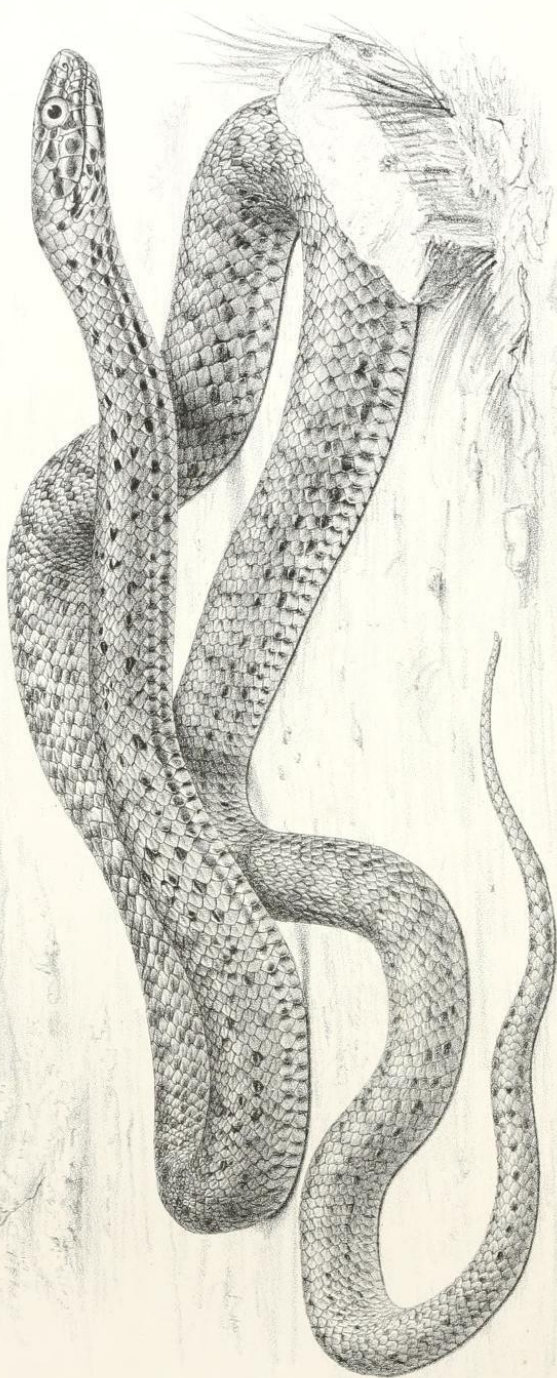
It is found round the Caspian and Black Seas, as well as in Northern Syria.

Böttger unites this and the following species.

22. *Tropidonotus tessellatus*. Laur. Schinz. Faun. Europ. ii., p. 39.

This Snake, which attains a considerable size, is of a greyish green colour, with black spots, living among the thistles and herbage, generally in marshy places. Dr. Lortet found it near the Nahr el Khebir, as well as on the plain of Gennesaret, and in gardens at Sidon. It feeds chiefly on small Mammals.

This Snake inhabits all Southern Europe, from Spain to Greece. Syria appears to be its Eastern limit.



H. Mulsant del. et lith.

COELEPELTIS LACERTINA.

Mulsant. Brev. imp.

23. *Tropidonotus natrix*. (Linn. Syst. Nat. i., p. 380.) Ringed Snake.

Our well known common Snake, found throughout the whole of Europe and Asia Minor, did not come under my own observation, but is reported from Palestine by Böttger, Fr. Müller, and Bedriaga.

This is its furthest extension southwards and eastwards.

FAMILY, PSAMMOPHIDÆ.

24. *Cælopettis lacertina*. Wagl. Syst. Amphib., p. 189.

PLATE XIV.

This rock and desert Snake, a native of North Africa, Arabia, and Persia, is not uncommon. I found it near Jerusalem, and in Galilee. But it seems to be equally common round the Lake of Gennesaret and Lake Huleh, where Dr. Lortet collected it.

25. *Psammophis moniliger*. Daud. Rept. vii., p. 69.

Found among the scrub at Tiberias, where it hunts for its prey. Dr. Lortet also obtained it at Solomon's Pools, near Jerusalem, on an olive tree. It hides among the leaves of trees and bushes, and darts upon birds or mice from its retreat. In these habits it resembles its congener, *P. leithi*, from Persia.

FAMILY, DIPSIDIDÆ.

26. *Tachymenis vivax*. (Fitz. Neue Classif. Rept., p. 57.)

This pretty species, of a bluish-grey colour, with black spots, is common under stones. Noticed near Jerusalem, Tabor, Tiberias, and other places.

It appears to be crepuscular or nocturnal in its habits, feeding chiefly on lizards.

This Snake inhabits South-eastern Europe from Illyria eastwards, the countries bordering on the Black Sea and the Caspian, Syria and Egypt.

FAMILY, ERYCIDÆ.

27. *Eryx jaculus*. (Linn. Syst. Nat. i., pp. 390, 391.)

This Snake was first noticed by Hasselquist in the Holy Land. It is common, but so rapid in its movements that it is not easily captured. It feeds on myriopodes and beetles.

Eryx jaculus is an inhabitant of Greece, Turkey, and the islands of Asia Minor and the Caspian region, Syria and Egypt. Persia appears to be its Eastern limit.

FAMILY, ELAPIDÆ.

28. *Naja haje*. (Linn. Syst. Nat. i., p. 387.) The Cobra.

Happily the Hooded Cobra is rare in Palestine. I am not aware of its occurrence in the cultivated districts, but in the plains and downs beyond Beersheba it is well known. I met with it near Gaza, on the sandy plain.

The Hooded Cobra is a native of Egypt and of the deserts of the Sahara. In India it is represented by an allied species, *Naja tripudians*. The Cobras are the most deadly of venomous serpents.

FAMILY, VIPERIDÆ.

29. *Vipera euphratica*. Martin. P. Z. S., 1838, p. 82.

This large Viper, one of the most poisonous of its family, was first described from the Euphrates. I found it in Galilee. Dr. Lortet also procured it near Jericho, so that it is probably generally distributed through the country.

It inhabits also Transcaucasia and Persia. It basks in the sand, and conceals itself in little tufts of herbage, preying on small quadrupeds.

30. *Vipera ammodytes*. (Linn. Syst. Nat. i., p. 376.)

This Viper appears to inhabit the higher ground. I obtained it on the lower slopes of Lebanon.



R. Minter del. et lith.

DABOIA XANTHINA.

Minter, Bros. imp.

It is a native of Eastern and South-eastern Europe from the north of Italy, Austria, and through Greece. I do not find it recorded from Persia, though it has been met with in the Transcaucasian Provinces of Russia.

31. *Daboia xanthina*. Gray. Cat. Sn. Br. Mus., p. 24.

PLATE XV.

I twice obtained this poisonous Serpent, once on the Plain of Acre, and once near Tiberias. On one occasion it had swallowed a full-grown hare whole, and was unable to move. On the other it had just struck a quail, which dropped down dead as I came up with it, with no other mark of injury than a slight scratch close to the tip of its wing.

It is very interesting to find this peculiarly Indian, and not African, genus in Palestine. It has also been found near Lake Urumiah, in Armenia.

32. *Cerastes hasselquistii*. Strauch. Syn. d. Viperid., p. 112.

The Horned Cerastes, well known as an inhabitant of Egypt and the Libyan desert, is also found in the desert country of Southern Judæa. I have known my horse rear and shake with terror on descrying this little but deadly Serpent, coiled up in the depression of a camel's footmark, on the path before us.

The Persian species has been discriminated as *C. persicus*. The Cerastes is not known further east.

33. *Echis arenicola*. Boie. Isis, 1827, p. 558.

This poisonous little Serpent I have frequently found on the dry sands both north and west of the Dead Sea, but not in the upper country.

It is an African species, well known in Egypt, and differs very slightly from the Indian *Echis carinata*, which occurs as far west as Persia.

ORDER, LACERTILIA.

FAMILY, AMPHISBÆNIDÆ.

1. *Amphisbæna cinerea*. (Vaud.) Dum. and Bibr., vol. v., p. 500.

Not uncommon under stones on the Plain of Gennesaret and on the maritime plains. The same species occurs in Spain and Barbary, as well as in Asia Minor, Rhodes, and Cyprus.

FAMILY, MONITORIDÆ.

2. *Psammosaurus scincus*. (Merrem. *Isis*, vi., p. 688.) The Warran.

This well-known huge Lizard we found near Engedi. The Arabs give the name of *Warran* both to this and the following species.

It is found all through North Africa, the Sahara, and Egypt.

3. *Monitor niloticus*. Geoffr. Rept. Egypte, i., 121, t. 3, f. 1.

The Nilotic Monitor inhabits the region to the south of the Dead Sea, and the Southern Judæan desert.

It is an inhabitant of Africa generally.

FAMILY, LACERTIDÆ.

4. *Lacerta viridis*. L. S. N. Petiv. Gaz., t. 95, f. 1. Green Lizard.

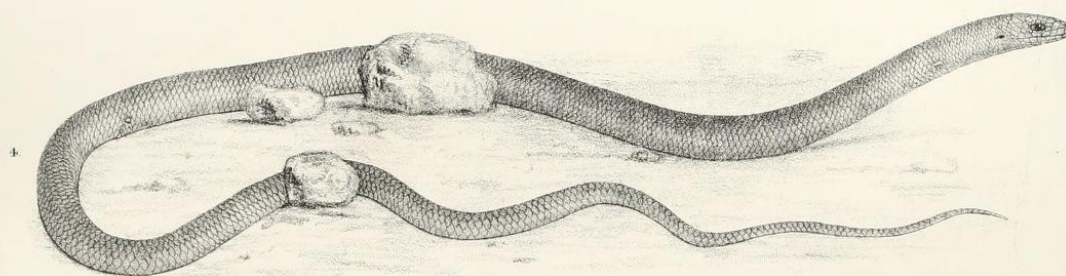
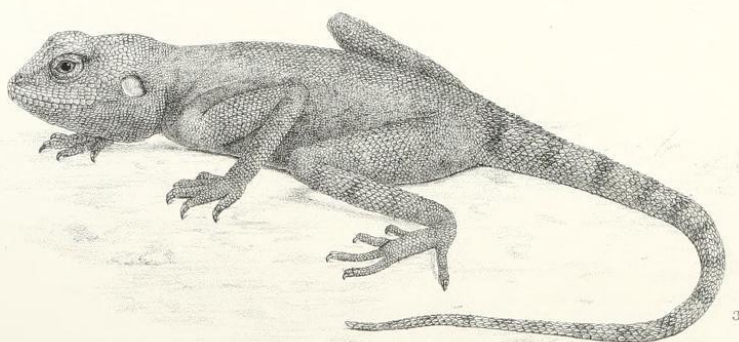
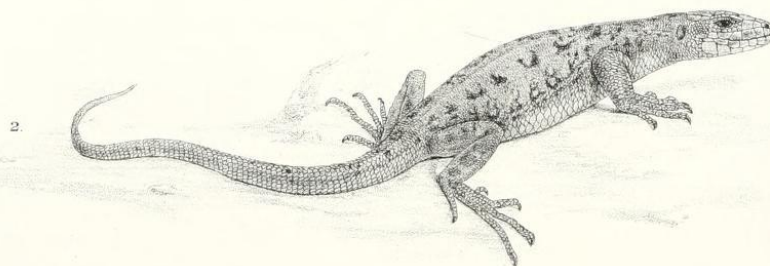
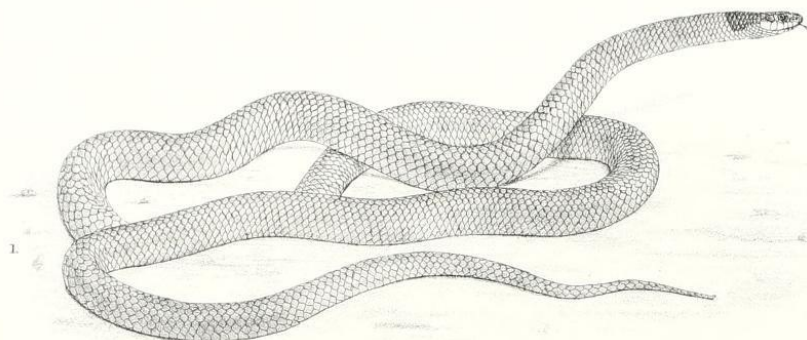
The Green Lizard is most abundant in every part of the country.

It is an inhabitant of all Central and Southern Europe, North Africa, Asia Minor, Transcaucasia, and North Persia.

5. *Lacerta strigata*. Eichw. Zool. Spec. iii., p. 189.

This species is very close to the Green Lizard, but always smaller. It is not so common as the former species.

It is recorded from Greece, Asia Minor, Persia, and Syria.



R. Minter del. et lith.

Minter Bros. imp.

1. RHYNOCALAMUS MELANOCEPHALUS 2. ZOOTOCA TRISTRAMI.
3. TRAPELUS SINAITA. 4. SEPS MONODACTYLUS.

6. *Lacerta judaica*. Camerano. Atti. Accad. Sci., Torino, Bd. 13.

This species has been separated by its describer from *Z. muralis*, with which it had previously been confounded.

It appears to be generally spread over Palestine from the Lebanon to Jerusalem, but only in the upper and hilly country.

Beyond these limits it is only known from Cyprus.

7. *Lacerta levis*. Gray. Ann. and Mag. N. H. i., p. 279.

Collected near Jerusalem and in the Plains of Jericho.

It is a South European species.

8. *Lacerta agilis*. Linn. Syst. Nat. i., p. 363. Sand Lizard.

Found in every part of the hill country and maritime plains.

It inhabits all the mountainous and hilly districts of Europe and the Caucasus.

9. *Zootoca taurica*. (Pall. Zool. Ross.-Asiat. iii., p. 30.)

Found in the Phœnician plain and all round the base of Lebanon.

It is a native also of Greece and some of its islands, of the Crimea, and of the Caucasus.

10. *Zootoca muralis*. (Laur. S. 61, 160, t. i., f. 4.)

Very common in the north of Palestine, but not observed by us in the south.

Found at Beyrout, Sidon, Tyre, and Lake Huleh.

The same Lizard, with slight variation (var. *fusca*, var. *neapolitana*), inhabits all South Europe and South-western Asia, including Armenia and North Persia.

11. *Zootoca tristrami*. Günther. P. Z. S., 1864, p. 491.

PLATE XVI., FIG. 2.

This new species was collected by us in the Lebanon district.

It has not yet occurred elsewhere.

12. *Zootoca deserti*. Günther. P. Z. S., 1859, p. 470.

This Lizard was first discovered by me in an oasis of the African Sahara. We again collected it on the plains beneath Hermon and Lebanon.

13. *Acanthodactylus scutellatus*. Audouin. Descr. Egypte, i. 172. Suppl. t. i., f. 7.

This Egyptian and North African species has been found near Beyrout by Dr. Lortet.

14. *Acanthodactylus savignii*. Audouin. Descr. Egypte, i. 172. Suppl. t. i., f. 8.

Collected in various localities on the coast by Böttger and Schrader. Its range extends from Palestine along the African coast to Algeria.

15. *Acanthodactylus boskianus*. (Daud. Rept. iii. 188.)

This species has a wider range than the last, being found not only in North Africa, but in Asia Minor. It does not appear to reach Northern Persia.

I have not myself found it, but it is among collections at Beyrout.

16. *Eremias guttulata*. (Licht. Doubl. 101.)

Found by Dr. Lortet near Beyrout.

It is an inhabitant of North Africa, from Algiers to Egypt.

17. *Mesalina pardalis*. (Licht. Doubl. 99.)

This Lizard was taken by me near Beersheba in the sandy plain.

It is very common in Egypt and Aleria, extends through Arabia, and was found by Mr. Blanford throughout Persia.

18. *Ophiops* (*Ophisops*, err.) *elegans*. Ménétr. Cat. Rais., p. 63.

This is a very common species of Lizard everywhere except in the Jordan valley.

It extends throughout Asia Minor, the Taurid, and the whole of Persia.

19. *Ophiops schluëteri*. Böttger. Ber. Senck. Nat. Ges., 1879-80, p. 176.

This species, which differs considerably from *O. elegans*, has been described from specimens collected by Schrader near Beyrout and in Cyprus, where it appears common. It has not yet been recorded from other localities.

FAMILY, ZONURIDÆ.

20. *Pseudopus apoda*. (Pall. N. Com. Petrop. xix. 435, t. 9-10.)

I procured this Lizard on Mount Hermon. Dr. Lortet found it in other places as well.

It is not an African species, but extends from Istria through the mountain ranges of Turkey, Greece, and Asia Minor to Transcaucasia.

FAMILY, GYMNOPHTHALMIDÆ.

21. *Ablepharus pannonicus*. Licht. Doubl. 103.

Several specimens were taken near Caiffa by Böttger.

It inhabits Hungary, Rumelia, Greece, Cyprus, Asia Minor, and North Persia.

FAMILY, SCINCIDÆ.

22. *Scincus officinalis*. Laur. Syn. 55.

The Egyptian Skink is given by Böttger. It inhabits North-east Africa, *i.e.*, Egypt, Nubia, and Abyssinia, and in Asia extends into Arabia and Syria.

23. *Euprepes fellowsii*. Gray. Cat. Liz., p. 113.

This species, described by Dr. Gray from Xanthus, Asia Minor, was found by me in every part of the country, from Dan to Beersheba.

24. *Euprepes septemlineatus*. Reuss. Mus. Senck. i. 47.

This Lizard, described originally from Abyssinia, has also been found in Arabia, Persia, the Caucasus, Syria, and the Lebanon.

25. *Euprepes savignii*. Audouin. Rept. Egypte, 117, t. 2, ff. 3, 4.

Occurs on the coast. It has not been noticed elsewhere in Asia, and is an African species.

26. *Euprepes vittatus*. (Oliv. Voy. ii. 58, t. 29, f. 1.)

This Skink has been obtained in considerable numbers from Beyrout by Böttger. It has an immense range for a Lizard, but strictly Ethiopian,

being found in West Africa and the Cape, as well as in Egypt, whence it was first described.

27. *Eumeces pavimentatus*. Geoffr. Desc. Egypte, p. 135.

I found this Skink on rough ground near the Dead Sea. It was also collected on the coast by Dr. Lortet and others, and by Simon at Jerusalem.

It inhabits the North African countries from Morocco to Egypt, and Asia as far as the east of the Caspian and Baluchistan.

28. *Anguis fragilis*. Linn. Syst. Nat. i., p. 392. Blind Worm.

The familiar Blind Worm or Slow Worm was collected in Palestine by Müller.

It inhabits the whole of Europe, Transcaucasia, and North Persia.

The South Persian form has been separated by Dr. Anderson.

FAMILY, OPHIOMORIDÆ.

29. *Ophiomorus miliaris*. (Pall. Reis. ii., 718.)

I collected this species in various parts of the north. It extends from the Caucasus westwards into the Taurid, and is also found in Greece and Algeria.

FAMILY, SEPIDÆ.

30. *Gongylus ocellatus*. (Forsk. F. Arab. 13.)

This Lizard swarms in every part of the country, mountain, or deep valley, in dry places among stones. The varieties of colour are endless in this species.

It inhabits all the islands of the Mediterranean, Canaries, and Madeiras, all North Africa from Morocco to Egypt and Sennaar, Arabia, Syria, and Persia.

31. *Seps monodactylus*. Günther. P. Z. S., 1864, p. 491.

PLATE XVI., FIG. 4.

This new species I discovered first near Nazareth, and afterwards at Lake Huleh, and under Hermon. Böttger has since collected it at Jaffa and Caiffa.

It has not been noticed out of Palestine.

32. *Sphaenops capistratus*. Wagl. Syst., p. 161.

Collected by Dr. Böttger at Jaffa.

It has a wide range in North Africa from Senegal to Egypt.

FAMILY, GECKONIDÆ.

33. *Ptyodactylus hasselquisti*. (Schneid. Amph. ii., 13.) The Gecko.
Extremely abundant in every part of the country.

Its only other known habitat is Egypt.

34. *Hemidactylus verruculatus*. Cuv. R. A. ii. 54.

Found in every part of the country.

This Lizard is spread over all the countries bordering the Mediterranean, north and south; in Africa as far south as Senaar; and in Asia it inhabits Arabia Petrea, and, according to Duméril, Persia also.

35. *Stenodactylus guttatus*. Cuv. R. A. ii. 58.

Found in the Ghor, north of the Dead Sea.

It is an Egyptian and Arabian species.

36. *Platydactylus mauritanicus*. (Linn. Syst. Nat. i., p. 361.)

Found by Dr. Buch in Syria and Arabia, and is probably the species taken by Dr. Lortet near Tiberias.

It has been noted from all the countries bordering the Mediterranean.

37. *Gymnodactylus geckoïdes*. Spix. Braz. 17, t. 18, f. 1.

Found by me on Mount Carmel. It occurs in Greece and European Turkey and in Asia Minor, but has not yet been observed in Africa.

38. *Gymnodactylus kotschy*. Steindachner. Sitz.-Ber. Akad. Wiss. Wien., vol. lxii., p. 329.

Discovered by Simon at Caiffa, and by Dr. Böttger at Beyrout.

It has been obtained in Persia, Cyprus, Asia Minor, and the Cyclades, and also is said to be from Egypt and Senegambia.

FAMILY, AGAMIDÆ.

39. *Trapelus sinaiticus*. (Heyden. Rüpp. Zool. N. Afr. vol. x., f. 3.)

PLATE XVI., FIG. 3.

Extremely abundant in the Jordan valley, and especially round the Dead Sea.

It is a native of the whole of Arabia, Egypt, and Senaar.

40. *Trapelus ruderatus*. (Oliv. Voy. Ottom. ii. 428, t. 29, f. 3.)

This species occurs in most parts of Palestine.

It extends from Algeria eastwards to Mesopotamia.

41. *Stellio cordylina*. (Laur. Syn. 47.)

This is the common Gecko of every part of the country, running about on rocks, walls, and trunks of trees throughout the summer.

This well-known species inhabits Greece and its islands, Asia Minor, and Armenia, Arabia and Egypt.

N.B.—I am satisfied that I have observed at least three other species of *Stellio*, or of genera closely allied to it, but have not preserved specimens.

42. *Uromastix spinipes*. Merrem. Tent. 56.

The Mastiguer inhabits the Southern desert of Judæa.

It is a native of North Africa, the Sahara, and Egypt.

43. *Uromastix ornatus*. Rüpp. Zool. N. Afr. i., t. 1.

I met with this North African species in the Southern Desert.

FAMILY, CHAMELEONIDÆ.

44. *Chameleo vulgaris*. Daud. Rept. iv. 181.

The Chameleon is very common throughout every part of the country, but flourishes especially in the Ghor and Gennesaret.

This well-known and interesting creature is found in Southern Spain, all through North Africa as far as the White Nile, and in Asia Minor, Syria and Arabia.

ORDER, CROCODILIA.

FAMILY, CROCODILIDÆ.

Crocodilus vulgaris. Cuv. Oss. Foss. v. 42. The Crocodile.

It was long questioned whether it were possible that the Crocodile was still to be found in Palestine. That it had formerly existed there seemed evident, both from tradition and from the fact that a river rising in a swamp to the south of Mount Carmel, and entering the sea at the north of the Plain of Sharon, is known as the Zerka, or Crocodile River. It is mentioned by Pliny and Strabo, and Pococke, in the last century, speaks of its capture. I had often heard of it from the Arabs, who aver that it frequently steals their young kids when they go to water in the marshes; and I saw footprints in the mud, near the head marshes not far from Samaria, which left not the smallest doubt that a Crocodile of large size had been there very shortly before. The promise of a reward produced its effect, and very soon after a fine specimen was brought by my friends into Nazareth, in a state of such decay that only the bones and the head could be preserved. It measured 11 feet 6 inches in length, and the skull, which is before me as I write, is 19.5 inches long. When I look at my Crocodile's head, brought home by myself, and read the long disquisitions written in various languages as to the possibility of the Crocodile inhabiting Palestine, I feel that an ounce of fact is worth a ton of theory.

Mr. McGregor believes he saw a Crocodile in the Kishon, on the Plain of Acre. This is not impossible, though it has never been reported to be found to the north of Carmel. No doubt the Crocodiles in the Zerka must be very few in number, and on the verge of extinction.

Palestine is the only country beyond the limits of Africa where the Egyptian Crocodile is found, but it inhabits all the great rivers and the coast of the whole of that Continent, from the Nile to the Cape; and occurs along the whole west coast as well as in the upper waters of the feeders of the Niger.

ORDER, CHELONIA.

FAMILY, TESTUDINIDÆ.

1. *Testudo ibera*. Pall. Zoog. Ross.-As. iii., p. 18. Mauritanian Tortoise.

This is the common Tortoise of the Holy Land, and is found in every part of the country, quite irrespective of the nature of the soil, till we reach Hebron. The hill country of Judæa appears to be its southern limit, south of which and of the Dead Sea it does not occur.

It is the common Tortoise of Barbary, of the Caucasus, Asia Minor, Mesopotamia, Persia, and Syria. To the south of Palestine it is replaced by the following species.

2. *Testudo kleinmanni*. Lortet. Poissons de Syrie, p. 90. Kleinmann's Tortoise.

This species, which has generally been confounded with *T. marginata*, is the Tortoise of the region between Hebron and Beersheba, and of the Arabah, south of the Dead Sea. It inhabits the whole of the Sinaitic Peninsula, as far as Egypt, where also in sandy districts it is very common.

Kleinmann's Tortoise has no posterior tubercles on the thigh. The carapace is extremely convex, especially at the juncture of the posterior third with the two anterior thirds. The marginal plates are expanded, almost horizontal in the adults, nearly vertical in young specimens. The nuchal plate is small and pointed. The sub-caudal plate is rhomboidal, forming behind a strongly marked angle, extending distinctly beyond the marginal plates. This plate is generally single, but sometimes there are traces of a suture, as in *T. græca*. Marginal plates, eleven; median plates, including the nuchal and the caudal, seven; lateral plates, four on each side.

Testudo marginata has been stated to be a native of Palestine; but probably Kleinmann's Tortoise has been mistaken for it. I formerly erroneously stated that *T. græca* was found, mistaking for it *T. ibera*,

Dr. Lortet is satisfied that neither *T. græca* nor *T. marginata* have as yet been found in Syria.

3. *Emys caspica*. (Gmel. Syst. Nat. i., p. 1041.) Dum. et Bib., vol. ii., p. 235. Terrapin.

The Terrapin swarms in all the streams and pools of Palestine. In the larger lakes it grows to a great size, and is a pest to the collector and sportsman, seizing and dragging under water any killed or wounded bird with extraordinary promptness.

The Terrapin is found in Greece, Asia Minor, Northern Syria, and the Caucasus, as well as all round the Caspian.

4. *Emys europæa*. (Dum. et Bib., vol. ii., p. 220.) European Terrapin.

This large Water Tortoise inhabits the lakes of Gennesaret and Huleh, where it attains a great size.

It is found throughout Southern and Eastern Europe, excepting Spain, and also in Asia Minor, and as far as the Caspian.

FAMILY, TRIONYCHIDÆ.

5. *Trionyx ægyptiacus*. Geoff. Descr. de l'Egypte. Egyptian Soft Tortoise.

This Tortoise has not yet been observed in the Jordan valley, but occurs in the Litany and the Nahr el Kelb (Böttger).

It is a native of the Nile.

FAMILY, CHELONIIDÆ.

6. *Chelonia caretta*. (Linn. Syst. Nat. i., p. 351.) = *Thalassochelys caouana*. Bonnatt. Loggerhead Turtle.

This Turtle is not uncommon on the coast. I have seen it brought in by fishermen at Sidon.

The Loggerhead is found throughout the southern side of the Mediterranean, and ranges through all the warmer Atlantic seas. It is well known in the West Indies.

7. *Chelone viridis*. Schneider. Allg. Naturg. d. Schildkr., p. 299.

A single example of this rare Turtle, taken off Beyrout, is in the Frankfurt Museum.