

AMPHIBIANS AND REPTILES ON THE SPANISH ISLAND OF MALLORCA

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INTRODUCTION

The island was visited for seven days in the company of three ornithologists, commencing the 4th of May, 1986, during which there was something of a heat wave. Mid-day air temperatures averaged 85°F; the average for this time of year normally being in the mid-60°F. Every day was hot and sunny with slight breezes which were stronger near the coast. Ca'n Picafort, a quiet resort in the N.E. was used as a base and a car was hired to make the most of the short time available. A small publication entitled 'A Guide to Bird-Watching in Mallorca' proved to be an excellent guide to the various habitats on the island.

GEOGRAPHY

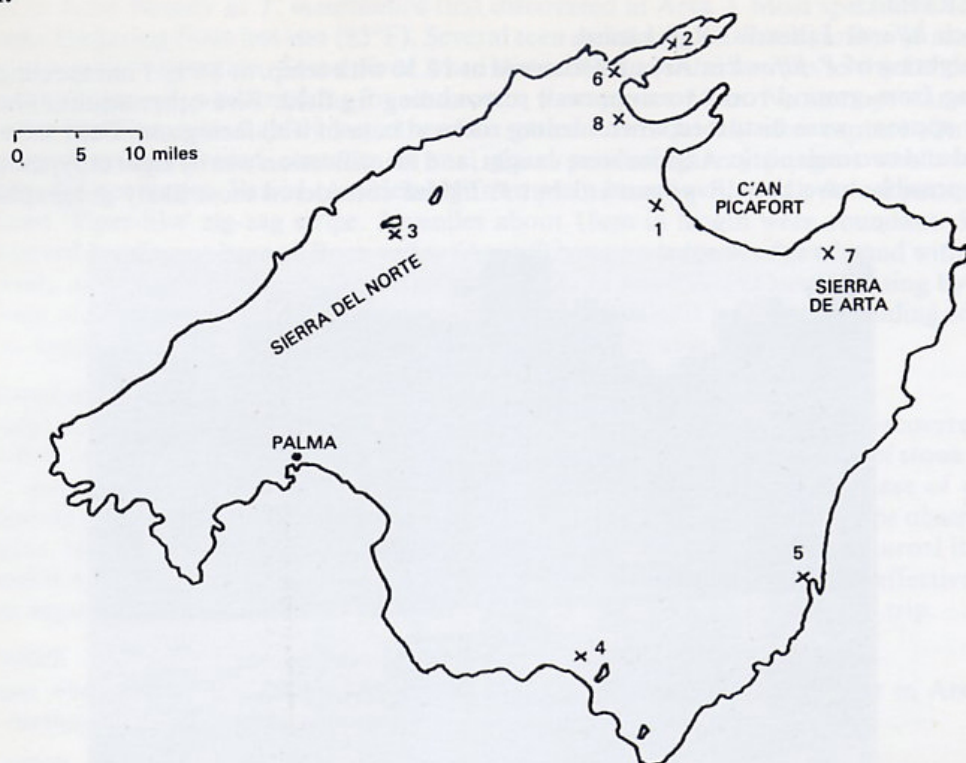
Mallorca covers an area of 1,405 square miles, about the same size as Cornwall, and is the largest of the Balearic Islands. The heavy tourist industry which gives many people their only image of the island is concentrated mainly on the S.W. coast, the remainder of the island being largely unaffected consisting of a large fertile plain called 'Es Pla' irrigated by subterranean water deposits. Most of the island is cultivated and abounds with orchards, fields and vineyards creating a 'semi-natural' habitat. Along the western coast runs the Sierra del Norte, a tree studded high mountain range rising to 1,443 metres with spectacular valleys. A smaller mountain range in the east, the Arta mountains rise to 560 metres. Just north of the Arta lie the Albufera and Albufureta marshes. The climate is typically Mediterranean, characterized by hot, dry, sunny summers, and moist warm winters.

PRINCIPAL SITES

- AREA 1 Albufera marshes. Extensive marshland with streams and ditches. Disused salt pans near main road.
- AREA 2 Casas Vegas. Road to Cap Formentor. Surrounding hills consist of dense vegetation and scrub. Dry area with many stone walls.
- AREA 3 Embalse de Cuber. Large reservoir in valley near Puig Major (1443m). Streams and small marshy area. Stone walls.
- AREA 4 Salinas de Levante. Salt pans with surrounding brackish water-ways. Stone walls.
- AREA 5 Porto Colom. Rocky cliffside. Scrub. Stone walls.
- AREA 6 Boca Valley. Mountain valley with rocky scrub land, streams. Orchards at base of valley. Stone walls.
- AREA 7 Arta mountains. Orchards. Fields. Stone walls.
- AREA 8 Albufureta marshes. Typical marsh land. Streams. Stone walls.

(Areas shown in Figure 1.)

Figure 1.



SPECIES LIST

RANIDAE

Rana ridibunda. Marsh Frog.

First located in Area 1 where it was heard calling. Very numerous in this marshy region. Active at day and at night. Area 3; next to dam in small marshy area at bottom of trickling mountain stream; numerous juveniles present. Area 6; established in private pond next to orchard at entrance to Boca valley where one pair was observed in mating activity. Further up the valley literally thousands of 1-2cm tadpoles to be seen in mountain stream, though no adult frogs were seen in same stream or immediate area. Numerous adults and juveniles observed in river beside road going through Area 8. None found far from water.

GEKKONIDAE

Tarentola mauritanica. Moorish Gecko.

The most frequently encountered reptile on the island. First found at Area 3 where six adults, measuring about 12cm, were discovered when turning rocks on slope above marshy area. Also present on a stone wall beside track leading towards dam. Area 4; under stones in rock piles between the salt pans. Several adults found by turning rocks and one observed basking in mid-day sun (Temp. 84°F) on top of rock pile; this gecko being diurnal as well as nocturnal, usually in cooler weather. Several captured for close examination. Variation in colour minimal, typically grey to brown with occasional specimens being almost black. Ventral surface 'yellowish' and red spots between toes. Abundant in Area 5 under rocks and between stones of walls. Young geckos 4-5cm head to tip of tail, captured. Remains of hard shelled eggs found under rocks. Very common throughout Area 6 in stone walls. Numerous juveniles and one seen basking on a tree. Healthy population in roadside stone walls in Area 7. Very large (15cm) specimen basking on roadside vegetation beside orchard with no rock cover in immediate area. Road through Area 8 to Pollença, geckoes common in stone walls. Found in six of the eight sites investigated. Several individuals were minus their tails. One observed in Area 6 in the bill of a Hoopoe, just one of many predatory birds on the island.

LACERTIDAE

Podarcis lilfordi. Lilford's Wall Lizard.

Only sighting of *P. lilfordi* in Area 2. Observed at 12.30 with temp. at 84°F. First specimen seen running from ground rocks to stone wall surrounding fig field. Five other adults, 17cm and under approx., were disturbed when turning rocks at base of wall facing sun. Four were green-backed and two melanistic. As none were caught, and identification was by sight only, the colony could possibly have been *P. pityusensis* but *P. lilfordi* considered most likely geographically.

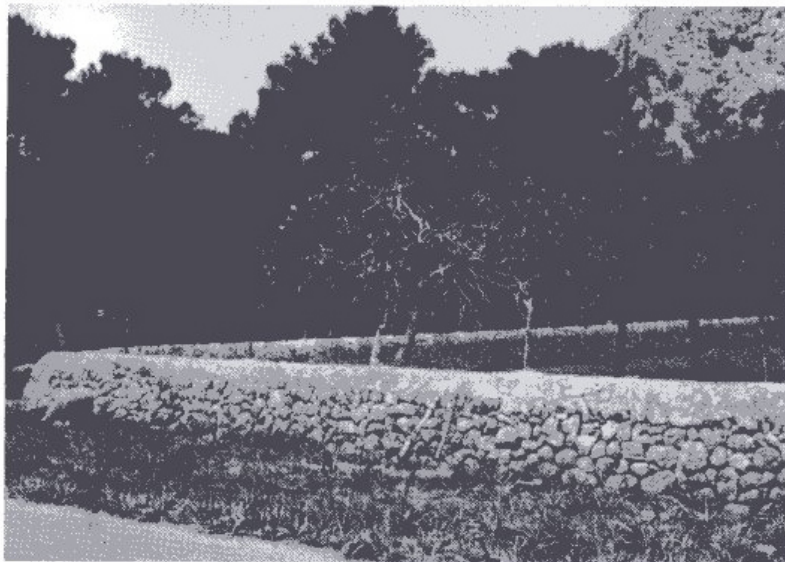


Plate 1. View of stone wall in Area 2 where *Podarcis lilfordi* colony was found. These stone walls are found all over the island, many inhabited by *Tarentola mauritanica*.



Plate 2. Small marshy area with trickling stream in Area 3. *Natrix maura* and *Rana ridibunda* were abundant. *T. mauritanica* was also to be found among the rocks.

COLUBRIDAE

Natrix maura. Viperine Snake.

Fairly common wherever there was fresh water. First specimen spotted making for cover when disturbed near track parallel to stream in middle of Area 1. This 30cm snake was very dark with no distinct dorsal markings. *N. maura* very common in this area following the stream towards the "lone pine", and in other waterways through the Albufera. 28cm specimen seen moving off when

disturbed in same vicinity as *T. mauritanica* first discovered in Area 3. Most specimens found under rocks sheltering from hot sun (85°F). Several seen swimming on water surface of marshy area and in aquatic vegetation. Some dived when disturbed and others swam to thicker cover. Biggest snake captured, while making for reed cover, was approx. 55cm. No attempt was made to bite when handled, hissed softly but otherwise settled down quickly after capture. On first being grasped several voided contents of anal gland producing very pungent smell which fortunately did not linger. Varied considerably from plain brown with weak dorsal pattern to well defined 'Viper-like' zig-zag stripe. Juveniles about 18cm in length were abundant. 50cm adult observed hunting at base of Boca valley (Area 6) lying on ledge at edge of pond with fore part of body and head submerged. Struck unsuccessfully at small *R. ridibunda* passing by and when aware of my presence swam round pond scattering frogs as it went before finding cover. Found in Areas 1, 3, 6 and 8, where *R. ridibunda* and fish are also abundant.

Macroprotodon cucullatus. False Smooth Snake.

Also known as the Hooded Snake or Cowl Snake. One adult of approx. 50cm discovered at Porto Colom (Area 5) at 15.45, Temp. 86°F. Found when rock was turned at base of stone wall where *T. mauritanica* is common. Swiftly made good its escape into crack at base of wall. Illustration on plate 38 of Arnold, Burton and Ovenden Field Guide is identical to one observed. This elusive, rear fanged venomous snake, the only member of its genus, is a nocturnal lizard hunter and is not dangerous to man owing to the small size of its head preventing effective use of venom apparatus. Being an 'ophiophile' this sighting was the high spot of the trip.

TORTOISES

None were observed by the author but ornithologists reported seeing a tortoise in Area 2. *Testudo hermanni* and *T. graeca* are known to occur on the island.

TERRAPINS

None seen by the author but two separate reports given. One specimen reported having been captured in a scoop net by party of children on school nature trip. This was described as "being about 15cm head to tail with bright yellowish marks on back of shell". Possibly *Mauremys caspica* has been introduced to the island from the mainland. The above reported specimen was found in the canal between the main road and Albufera marshes near the "Orange Bridge". The second reported turtle was also seen in Area 1.

NOTE

All lengths quoted were of the whole animal, that is, from snout to tail tip. Needless to say any rocks turned, etc. should be left as they were originally found and any habitat disturbance kept to a minimum.

DISCUSSION

The reptile life in other Mediterranean countries I have visited has been dominated chiefly by 'Wall Lizards' with Geckos turning up occasionally. On Mallorca I was surprised to find the reverse was true. The species most frequently seen was *T. mauritanica* which is one of the most prolific species I have ever encountered. *Lacertidae* were apparently scarce on the island, only one colony being found. No Turkish Geckos, *Hemidactylus turcicus*, were found, although they are reported to be similar in habits to *T. mauritanica*. This could be a case of one species thriving at the expense of another. *N. maura* was, as expected, abundant, as were *R. ridibunda*. Other species not seen included *Bufo viridis*, the Green Toad and *Hyla meridionalis*, the Stripeless Tree Frog. As both species are nocturnal and no searching was carried out in suitable habitats after sunset this is understandable. The terrapin reports were very interesting and I would be very grateful if anyone reading this account, who has more knowledge of its occurrence on Mallorca, would let me know. Perhaps the most pleasing aspect of the trip was that the island, apart from the S.W. corner, was not a haven for tourists only but largely unspoilt and a haven for nature and naturalists of all categories.

REFERENCES

- Arnold, E.N., Burton, J.A., Ovenden, D.W. (1978). *A Field Guide to the Reptiles and Amphibians of Europe*. London/Glasgow; Collins.
- Phelps, T. (1981). *Poisonous Snakes*. Blandford Press.
- Watkinson, E. (2nd ed., 1983). *A Guide to Bird-Watching in Mallorca*. J.G. Sanders.