

“Now Paul gathered a bundle of sticks and laid them on the fire, when a viper came out because of the heat and fastened on his hand. When the natives saw the creature hanging from his hand, they said to one another: “Surely this man is a murderer, for though he has escaped the sea, Justice does not let him live.” But he shook off the creature into the fire and suffered no harm” (Acts 28, 3–5)

# MALTESE SNAKES

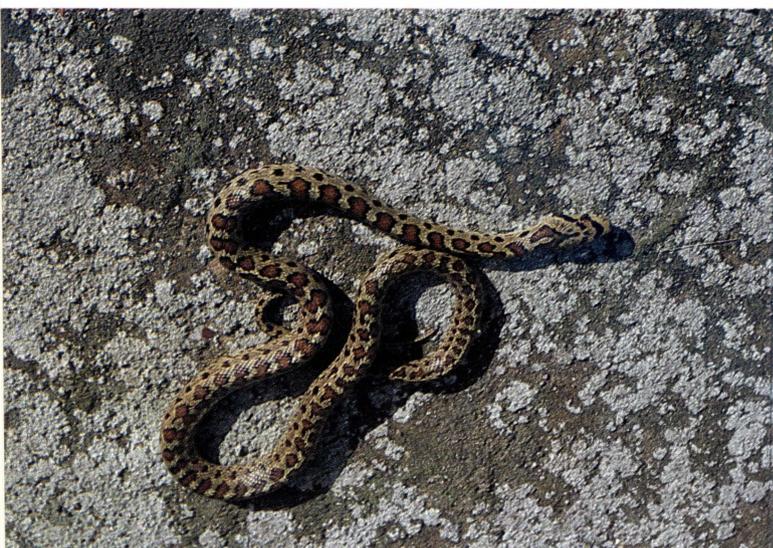
Thus runs the account of St. Paul the Apostle’s encounter with a snake following his shipwreck on Malta in A.D. 61. Apart from being the earliest record of snakes on our Islands, this episode has given rise to a large number of legends, sayings and superstitions. Perhaps the most famous of these is that the Apostle banished all poisonous species from the Islands or at least rendered them harmless. It is certainly true that all Maltese snakes are harmless, however, contrary to popular belief, a poisonous species does occur in Malta, although this is not a viper. The identity of the “viper” which bit the Apostle has led to much debate. Some maintain that

it was a harmless local species which the writer of the Acts mistook for a viper; others say that in those days vipers may have occurred in the Maltese Islands and then later died out (miraculously or otherwise). The intention of this article is not to discuss the folklore associated with Maltese snakes but rather to give some factual information about the species currently living on our Islands and perhaps dispel some of the misconceptions and undeserved loathing towards these animals shown by most people.

Four species of snakes are found in the Maltese Islands. The largest species is the Black Whip Snake (scientifically: *Coluber viridiflavus*; Maltese: “Serp Iswed”). This snake grows to a length of 100–150 cm and outside Malta up to 200 cm. In the Maltese Archipelago it is the commonest species and occurs on all three main islands. Elsewhere it is known from Sicily, all Italy, Corsica and Sardinia and part of Central Europe. Over most of this range the animals are coloured a greenish-yellow (hence *viridiflavus*) with dark green or black crossbars. In Southern Italy, Sicily and in Malta the animals are almost entirely black on their upper surface and for this reason are given the subspecific name *carbonarius* from which both the English and Maltese common names derive. In Malta, juvenile Black Whip Snakes are coloured differently from the adults being of a predominantly greyish colour with darker markings.

Also common and found on all three main islands is the Leopard Snake (*Elaphe situla*; Maltese: “Lifgha”), a brightly coloured species growing to between 50–100 cm. Outside Malta this species occurs in Eastern Sicily, Southern Italy, the East Adriatic coast, south of the Balkans and in Asia Minor. As with the previous species, the Leopard Snake shows different colour patterns in different parts of its geographical range. In Malta most individuals are of a pale ground colour with rust-brown markings edged with black. These markings are reminiscent of the spots of the leopard and the race found in the Maltese Islands is called *leopardina*.

The two remaining species are the Cat Snake (*Telescopus fallax*) and the Algerian Whip Snake (*Coluber algirus*), both known simply as “Serp” in Maltese. In the Maltese Archipelago, both species are found only on the Island of Malta and both are uncommon. These two snakes are similar in colouring and in size, growing to a length of 75–100 cm. The Algerian Whip Snake has a brownish ground colour with black bars on the back while the Cat Snake has a greyish ground colour with brown bars on the back. The latter species can be easily distinguished, however, by the vertical pupils; in all other Maltese snakes the pupils are round. Apart from Malta, the Cat Snake occurs along the East Adriatic coast, South of the Balkans, and in Southwest Asia. The Algerian Whip Snake is a Northwest African



(Top) The brightly-coloured Leopard Snake, voracious hunter of mice

(Bottom) The Black Whip Snake – our largest and commonest species

species for which the Maltese Islands constitute the only European station.

For both species Malta is outside the main area of distribution and for this reason it is suspected that these two snakes are not indigenous but were introduced by man and then became naturalized. Writing in 1939, Professor John Borg (*Archivium Melitense* 10:191 – 197) is of the opinion that both species were imported into Malta with consignments of firewood during World War I and became established in the vicinity of the then fuel-yard of the War Department at Floriana. To date, most records of these species come from the northeastern part of Malta which certainly fits in with Borg's view that the species spread out from Floriana. On the other hand since these snakes have retiring habits, and may easily be confused with other species, especially if only a fleeting glimpse is caught of the animal, they may be far more widespread than is thought. The Cat Snake may well be indigenous.

All four species of Maltese snakes are found in habitats which are sunny and contain rocks and stones for the snakes to hide under. Typical habitats include rubble walls, stone screes, road banks, field edges, valley sides, old building sites and ruins. The Black Whip Snake is active during the day; the Leopard Snake and the Algerian Whip Snake are also active during the day but may also hunt at dusk. The Cat Snake differs from the rest in hunting mainly at twilight and during the night. All four snakes take small rats, mice, other snakes, lizards, nestlings and frogs in varying proportions depending on the size and species of snake: the Leopard Snake takes mainly rodents while the Cat Snake takes mainly lizards. The two Whip Snakes are very aggressive animals and subdue the prey by biting it and holding it in their coils before swallowing it, often alive. The Leopard Snake is similar but may constrict the prey before swallowing it. The Cat Snake uses a different method. This species has poison fangs situated at the back of the upper jaw. When the prey is caught, the snake bites it and waits for the venom to take effect, usually a few minutes only in the case of a small lizard. Although poisonous, the Cat Snake is not dangerous. The venom is very weak, only just strong enough to kill a lizard. Also, because the fangs are at the back of the mouth, the snake cannot usually open its mouth wide enough to bring them into play when biting anything large.

All four Maltese species are oviparous, that is, they lay eggs. We know very little about when our snakes breed, how many eggs are laid, or how long these take to hatch. Elsewhere the snakes start breeding in spring and lay eggs in early summer. The two Whip Snakes lay 5 – 15 eggs, the Leopard Snake 2 – 7, while the Cat Snake 7 – 8. They have a soft leathery shell and hatch into miniature versions of the adults.

(Top) Poisonous but harmless, the rare Cat Snake

(Bottom) Another rare species, the Algerian Whip Snake, possibly introduced from Northwest Africa

Our snakes have few natural enemies. Probably the most important are other snakes, particularly large Whip Snakes which prey on smaller individuals. Other animals which may eat snakes include rats, the hedgehog and the weasel. By far the most dangerous, however, is man. The snake population of our Islands has been adversely affected by destruction of habitats and the widespread use of pesticides. Also taking a heavy toll of these animals is the popular practice of killing any snake encountered on grounds that snakes are "dangerous", "evil" or "harmful". This is far from the truth: our snakes will not attack unless cornered and provoked, are not dangerous, and have no significance as pests.

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#### FURTHER READING

- Despott, G. (1915) The reptiles of the Maltese Islands. *The Zoologist* 891 (19): 321 – 326.
- Lanfranco, G. (1955) Reptiles and amphibians of the Maltese Islands. *Malta Year Book* 1955: 198 – 203.
- Lanfranco, G. (1957) Reptiles of Malta. V. (Snakes). *The Sunday Times of Malta*, 1.12.57 p. 5.
- Lanfranco, G. (1976) Studying Maltese snakes. *The Times of Malta* 2.8.76 p. 5.
- Lanza, B. (1972) Gli anfibi e i rettili delle isole circumsiciliane. *Lav.Soc.ital.Biogeog.* n.ser. 3: 755 – 804.
- Savona Ventura, C. (1976) The snakes of the Maltese Islands. *The Times of Malta* 19.4.76 p. 11.

