

RED DATA BOOK
FOR THE
MALTESE ISLANDS

Edited by
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VERTEBRATES OTHER THAN BIRDS

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INTRODUCTION

Vertebrates are the most conspicuous of animals and the most familiar to people. Many vertebrates are large and require proportionately large home ranges. These two factors combine to make vertebrates among the most threatened of all Maltese animals; loss of habitat as more and more land is developed for human use reduces population size while many species are killed for no other reason than out of fear or ignorance or both. Threat through loss of habitat and human persecution are recurrent themes in the species list that follows. The choice of which species to include in this list was difficult to make - in reality, apart from fishes and rodent pests, all local vertebrates are under threat in some way since the overall population has declined in recent years. The species listed below are those which are threatened by some identifiable factor, those which are endemic, rare or otherwise of particular interest, and those which by virtue of the habitat they occupy are particularly vulnerable to interference.

SPECIES LIST

Class: ELASMOBRANCHII
Order: Euselachii
Family: Rajidae

Raja (Leucoraja) melitensis Clark Rest (MED)
(Maltese Brown Ray; Maltese: Rajja ta' Malta)

A ray first discovered in the 1920's in Maltese waters (Clark, 1926) and long considered a variety of the Brown Ray *Raja miraletus*. It is now known to be a good species which occurs only in the central Mediterranean between Tunisia and the Maltese Islands although there is one record from the Italian coast (Turchio, 1960). *Raja melitensis* is frequent in Maltese waters (Lanfranco, 1974).

Class: ACTINOPTERYGII
Order: Microcyprini
Family: Cyprinodontidae

Aphanius fesiatus Nardo V, Rest (MED+MI)
(Killifish; Maltese: Bużaqq)

This is the only true brackish-water fish in the Maltese Islands and apparently occurs as a local race (Darmanin, 1979). Populations are known from brackish-water inlets at Marsa, Salina, Kalafrana, Marsascala and Marsaxlokk and different sites appear to support different ecotypes (Zammit & Van Es, 1980). Populations have been introduced at a number of other sites including the Ghadira Nature Reserve. Except for the Ghadira population, which appears to be thriving, it is not known whether the other introduced populations have established themselves. Some of the natural populations are declining rapidly due to anthropogenic factors (e.g. hypersaline discharges from the reverse osmosis plant at Marsa; dredging and dumping at Marsaxlokk and Salina). An additional threat to the species is indiscriminate collecting by aquarists (Cilia, 1986).

Class: AMPHIBIA
 Order: Salientia
 Family: Discoglossidae

Discoglossus pictus pictus Otth V, Rest (MED+MT)
 [Painted Frog; Maltese: Żring]

The only amphibian to occur in the Maltese Islands (Lanfranco, 1955). Once common in all localities with some freshwater, it is now becoming more restricted due to habitat destruction, pollution and persistent persecution; a common 'sport' amongst local children is frog- and tadpole-hunting (Schembri, 1983a). The Painted Frog was originally thought to extend through western and southern Europe and Northwest Africa but recent studies have revealed that actually a number of distinct species exist. *Discoglossus pictus* is now known to have a much more restricted distribution, being present only in Sicily and the Maltese Islands (as the subspecies *pictus*), in Tunisia and Algeria (as the subspecies *auritus*) and in Morocco (as the subspecies *scovazzi*) (Lanza et al., 1986). All amphibians are listed in Appendix III (protected fauna) of the Berne Convention (1979).

Class: REPTILIA
 Order: Testudines
 Family: Cheloniidae

Caretta caretta (Linnaeus) V
 [Loggerhead Turtle; Maltese: Fekruna tal-Babar]

This species is indiscriminately fished for food, for its shell and sometimes also for sport; populations are declining all over the Mediterranean and this species is listed in the IUCN's Reptiles & Amphibians *Red Data Book* as 'depleted'. The Loggerhead originally used to breed on the sandy beach at Ramla in Gozo, but this nesting site was abandoned in the 1910's due to disturbance (Savona Ventura, 1979a). Given the present degree of use of this beach, it is unlikely that this site will be utilized again by these turtles. Listed in Appendix I of CITES (IUCN, 1973) and in the Bonn and Berne Conventions (1979).

Chelonia mydas (Linnaeus) RE
 [Green Turtle; Maltese: Fekruna tal-Babar]

Very occasionally occurs in Maltese waters. Since local fishermen do not make any distinction between this species and the Loggerhead, it is taken when encountered for the same purposes: as an article of food, for the shell and for sport. Listed in the IUCN's Reptiles & Amphibians *Red Data Book* as 'depleted', in Appendix I of CITES (IUCN, 1973), and in the Bonn and Berne Conventions (1979).

Lepidochelys kempii (Garman) I
[Kemp's Ridley; Maltese: Fekruna tal-Bahari]

An Atlantic species that has to date been taken once only from the Mediterranean, when a specimen was captured off the northeastern coast of Malta in 1929 (Brongersma & Carr, 1983). It is not known whether this is an accidental occurrence or whether Kemp's Ridley does occasionally enter the Mediterranean. Listed in the IUCN's Reptiles & Amphibians *Red Data Book* as 'critically endangered', in Appendix I of CITES (IUCN, 1973), and in the Bonn and Berne Conventions (1979).

Family: Dermochelyidae

Dermochelys coriacea (Linnaeus) E
[Leatherback Turtle; Maltese: Fekruna tal-Bahari]

Occasionally occurs in Maltese waters (Lanfranco, 1983) and when encountered, usually landed by fishermen often to be used as bait. Listed in the IUCN's Reptiles & Amphibians *Red Data Book* as 'critically endangered', in Appendix I of CITES (IUCN, 1973), and in the Bonn and Berne Conventions (1979).

Order: Squamata
Family: Gekkonidae

Tarentola mauritanica (Linnaeus) V
[Moorish Gecko; Maltese: Wizgħa tal-Kampanja]

Hemidactylus turcicus turcicus (Linnaeus) V
[Turkish Gecko; Maltese: Wizgħa tad-Djar]

Both species are widespread in the Maltese Islands and until recently, both were quite common. Populations are now declining somewhat due to destruction of habitat and human persecution; there exists a local belief that geckoes are associated with skin diseases (Savona Ventura, 1983a). All reptiles are listed in Appendix III (protected fauna) of the Berne Convention (1979).

Family: Chamaeleonidae

Chamaeleo chamaeleon (Linnaeus) V, Rest (MI)
[Mediterranean Chameleon; Maltese: Kamaleont]

The Chameleon is not an indigenous species in the Maltese Islands but a number of individuals were imported from North Africa and released in a garden at St. Julians around 1880, from where they escaped and spread. The Chameleon now occurs in scattered populations in localities possessing some tree or shrub cover (Lanfranco, 1966; Savona Ventura, 1975). Specimens are collected from the wild to be kept as pets or sold in markets (Schembri, 1983b). Listed in Appendix II (strictly protected

fauna) of the Berne Convention (1979); all *Chamaeleo* species are listed in Appendix II of CITES (IUCN, 1973).

Family: Lacertidae

Podarcis filfolensis (Bedriaga) Rest (MED)
[Maltese Wall Lizard; Maltese: Gremxula]

Podarcis filfolensis, the only lacertid to inhabit the Maltese Islands, is a Pelagio-Maltese endemism with five named geographical races, one of which, *P.f. laurentimuellerei*, occurs on the Pelagian Islands of Linosa and Lampione, and the other four restricted to various islands of the Maltese group (Lanza, 1972). The lizards are common where found although destruction of habitat has caused some populations to decline. The populations of the smaller islands are very small and therefore highly vulnerable to any man-made or natural disasters. Listed in Appendix II (strictly protected fauna) of the Berne Convention (1979).

P.f. filfolensis (Bedriaga) ●(Filfla), V, Rest (MI)

This is the nominate subspecies which inhabits the island of Filfla, a rock slightly more than 2ha in area, situated some 4km off the southern coast of Malta.

P.f. generalensis (Gulia) ●(Fungus Rock), V, Rest (MI)

Found only on Fungus Rock (or General's Rock), a small rock some 0.7ha in area just off the coast of Dwejra in Gozo.

P.f. kieselbachi (Fejérváry) ●(Selmunett Islands), V, Rest (MI)

Occurs on Selmunett Islands (also known as St. Paul's Islets), small rocks with a total area just over 10ha, off the coast of Tal-Biata in northeastern Malta.

P.f. maltensis Mertens ●(Malta, Gozo, Comino)

Populates the main islands of Malta, Gozo and Comino. There is some indication that the population of *P. filfolensis* of the islet of Cominotto off the west coast of Comino, is different from the ssp. *maltensis* (Savona Ventura, 1983b).

Family: Scincidae

Chalcides ocellatus tiligugu (Gmelin) V, Rest (MED)
[Ocellated Skink; Maltese: Xahmet l-Art]

Apart from the Maltese Islands, this subspecies occurs also in North Africa (Algeria and Tunisia), Sardinia, Sicily and several minor islands. Locally it is quite common but populations are declining due to habitat destruction and human persecution; there is a popular but mistaken belief that skinks are harmful. All reptiles are listed in Appendix III (protected fauna) of the Berne Convention (1979).

Order: Ophidia
Family: Colubridae

- Coluber algirus* (Jan) V, Rest (MED+MI)
[Algerian Whip-snake; Maltese: Serp]
- Coluber viridiflavus carbonarius* Bonaparte V
[Black Whip-snake; Maltese: Serp Iswed]
- Elaphe situla leopardina* (Bonaparte) V, Rest (MED)
[Leopard Snake; Maltese: Lifghal]
- Telescopus fallax fallax* (Fleischmann) V, Rest (MED+MI)
[Cat Snake; Maltese: Serp]

For *Coluber algirus*, the Maltese Islands are the only European station of this essentially Northwest African species. *Elaphe situla leopardina* is an eastern Mediterranean (Balkan) subspecies that in the Central Mediterranean is found in southern Italy, eastern Sicily and the Maltese Islands. *Telescopus fallax fallax* is similarly an eastern Mediterranean (Balkan) species whose only Central Mediterranean station is the Maltese Islands (Lanza, 1972). The Algerian Whip-snake and the Cat Snake are rare species locally; the other two are widespread and relatively common. All four species suffer from loss of habitat and from human persecution. There is a popular local belief that all snakes are dangerous. *Elaphe situla* is listed in Appendix II (strictly protected fauna) of the Berne Convention (1979); all other snakes are listed in Appendix III (protected fauna).

Class: MAMMALIA
Order: Insectivora
Family: Erinaceidae

- Erinaceus algirus* Duvernoy & Lereboullet I
[Algerian Hedgehog; Maltese: Qanfud]

Only one species of hedgehog occurs in the Maltese Islands (Lanfranco, 1969). In some rural areas it is persecuted because of a mistaken belief that it steals milk from domestic sheep and goats (J. Sultana, personal communication). More importantly, large numbers of hedgehogs are killed each year by motor vehicles on country roads. This and habitat destruction are contributing to a reduction in the local hedgehog populations.

Family: Soricidae

- Suncus etruscus* (Savi) V(?)
[Pygmy White-toothed Shrew; Maltese: Ġurdien ta' Halqu Twill]
- Crocidura suaveolens* Pallas V, Rest (MI-Gozo?)
[Lesser White-toothed Shrew]
- Crocidura russula* (Hermann) I, Rest (MI) (?)
[Greater White-toothed Shrew]

Three species of shrews are known to occur in the Maltese Islands, of which the commonest and most widespread is the Pygmy White-toothed Shrew. The Lesser White-toothed Shrew has to date been definitely recorded only from the island of Gozo where it is rarer than *Suncus etruscus*. The Greater White-toothed Shrew is also known only from the island of Gozo and appears to be the rarest of the local shrews, it being known only from a few skull remains extracted from owl pellets (Schembri & Schembri, 1979). All Soricidae are listed in Appendix III (protected fauna) of the Berne Convention (1979).

Order: Chiroptera
Family: Rhinolophidae

Rhinolophus ferrumequinum (Schreber) RR
[Greater Horseshoe Bat; Maltese: Farfett il-Lejl tan-Naghla Kbir]

Rhinolophus hipposideros (Beckstein) V
[Lesser Horseshoe Bat; Maltese: Farfett il-Lejl tan-Naghla Żghir]

Family: Vespertilionidae

Myotis blythi punicus Felten V, Rest (MED)
[Lesser Mouse-eared Bat; Maltese: Farfett il-Lejl Widnet il-Ġurdien]

Myotis myotis (Borkhausen) V
[Greater Mouse-eared Bat; Maltese: Farfett il-Lejl Widnet il-Ġurdien Kbir]

Plecotus austriacus (Fisher) V
[Grey Long-eared Bat; Maltese: Farfett il-Lejl tal-Widnejn Kbar]

Miniopterus schreibersi (Kuhl) R
[Schreiber's Bat; Maltese: Farfett il-Lejl ta' Xrajber]

Pipistrellus pipistrellus (Schreber) V
[Common Pipistrelle; Maltese: Pipistrelli]

Pipistrellus kuhli (Kuhl) R
[Kuhl's Pipistrelle; Maltese: Pipistrelli ta' Kuhl]

Vespertilio serotinus (Schreber) RR
[Serotine; Maltese: Serotin]

Nyctalus noctula (Schreber) RR
[Noctule; Maltese: Noktula]

All Maltese bats are threatened as their roosting places, which include caves and old buildings, are removed or disturbed, while they are also occasionally aimlessly persecuted (Lanfranco, 1969). A marked decrease in the overall bat population has been observed in recent years. One species is of particular interest: apart from the Maltese Islands, *Myotis blythi punicus* occurs only in Corsica, Sardinia and parts of

northern Tunisia (Felten et al., 1977). All species except *Pipistrellus pipistrellus* are listed in Appendix II (strictly protected fauna) of the Berne Convention (1979); *Pipistrellus pipistrellus* is listed in Appendix III (protected fauna).

Order: Rodentia
Family: Muridae

Apodemus sylvaticus (Linnaeus) I
[Wood Mouse; Maltese: Ġurdien tar-Raba']

Recorded a few times only from the Maltese Islands (Lanfranco, 1969; Savona Ventura, 1981) but may be much commoner than existing records indicate because it is easily confused with *Mus musculus* which is very common.

Order: Carnivora
Family: Mustelidae

Mustela nivalis (Linnaeus) RR(?)
[Weasel; Maltese: Ballottra]

The only native terrestrial carnivore in the Maltese Islands; very infrequently seen although this may be partly due to its retiring habits. The status of this species is not really known but given the increasing development of the countryside, the local weasel population may be declining due to loss of habitat. Listed in Appendix III (protected fauna) of the Berne Convention.

Order: Pinnipedia
Family: Phocidae

Monachus monachus (Hermann) RR, Rest (MED)
[Mediterranean Monk Seal; Maltese: Monka]

Very occasionally, individuals are sighted in Maltese waters; most of these are senselessly killed. The Mediterranean Monk Seal is one of the most seriously threatened animals in Europe, with fewer than 500 individuals surviving. This species and its habitat are both strictly protected under the Berne Convention (Council of Europe, 1985) and listed also in the Bonn Convention (1979). All species of the genus *Monachus* are listed in Appendix I of the CITES Convention (IUCN, 1973).

Order: Cetacea
Family: Delphinidae

Delphinus delphis (Linnaeus) V
[Common Dolphin; Maltese: Denfil]

Tursiops truncatus (Montagu) V
[Bottle-nosed Dolphin; Maltese: Denfil Geddumu Qasir]

Grampus griseus (Cuvier) V
[Risso's Dolphin; Maltese: Denfil ta' Risso]

Globicephala melana (Traill) V
[Long-finned Pilot Whale]

Pseudorca crassidens (Owen)
(False Killer Whale; Maltese: Pseudorkal)

V

Family: Phocoenidae

Phocoena phocoena (Linnaeus)
(Porpoise; Maltese: Denfil Iswed)

RR

Dolphins are common in Maltese waters but since they are notoriously difficult to identify, little information about the individual species concerned is available and the status of most is unknown; all are however threatened due to human persecution, often for no other reason than 'sport' (Lanfranco, 1969; Savona Ventura, 1979b). *Delphinus delphis*, *Tursiops truncatus* and *Phocaena phocaena* are listed in Appendix II (strictly protected fauna) of the Berne Convention (1979); all other species are listed in Appendix III (protected fauna).

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