F auna is a broad term encompassing all the animal organisms of an area, mammals, birds, reptiles, amphibians, insects, fish, different micro organisms and other species that are the study object of Zoology.

The rich Nature of Cyprus, and specifically fauna and flora, is mainly the result of species evolution over time, under the influence of climate and soil conditions, the island's geographical position and insular character - and hence relative isolation- and the human influence in relation to the limited extend of the land.

The diversity of landscapes with their special microclimatic and topographic features, the soil and geological diversity, the variety of vegetation associations, and forest and agricultural plant species, create a variety of ecological niches and habitats capable of meeting the biological needs of a large number of animal species.

Presently, about 30 mammal species, 25 reptiles and amphibians, 370 bird species, 250 fish species and around 6000 insect species are known to live in various habitats of the island.

Mammals

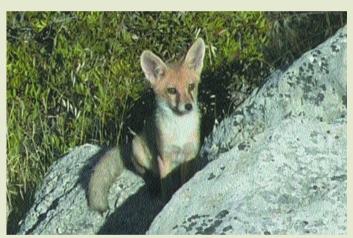
Archaeological evidence shows that various big mammal species like elephants and hippopotamus used to live on the island, thousands of years ago. Due to the absence of enemies and their special feeding habits, these species gradually evolved into pygmies adapting to the environment of the island. Shortly after the first humans settled on Cyprus, 8-10 thousand years ago, these species disappeared obviously as a result of intensive hunting. Skeletons of the pygmy elephant and hippopotamus have recently been found in caves in the Akrotiri area.

During the Neolithic and Chalcolithic periods, new mammal species appeared on the island such as the Mesopotamian deer (*Dama dama mesopotamica*), the Fallow deer (*Dama dama*), the Red deer (*Cervus elaphus*), the Marten (*Mustella nivalis*), the wild cat (*Felis silvestris*), the fox (*Vulpes vulpes*), the mouflon (*Ovis gmelini ophion*), the hare (*Lepus europaeus*) and various mice species.

Some mammal species had been brought by the first settlers of the island, as domestic animals. Many of them escaped and lived in the wild, but eventually became extinct after intensive hunting with few exceptions of species that survive on the island until today.

Bones of the Mesopotamian deer have been found in a number of areas of the island, which shows that this species was widespread. It became extinct relatively recently, probably 400 years ago, almost certainly as a result of continuous hunting.

The **Mouflon** (*Ovis gmelini ophion*), is a species of wild sheep that is endemic to Cyprus. It is the biggest wild mammal of the island and is a real treasure of the Cyprus forests. It is believed to have come to Cyprus as a domestic animal at around 8000 B.C. with the first humans, who arrived on the island. In the past, it was common on both mountain ranges, Troodos and Pentadaktylos. Uncontrolled hunting led to a dramatic decrease of the mouflon population. During the 1930s there were only 15 animals left, which found refuge in the Pafos forest. In view of the high risk of extinction, the



Fox-Vulpes vulpes indutus

whole Pafos state forest was designated a game reserve area and the mouflon population recovered. Today it numbers thousands of animals.

The **Fox** (*Vulpes vulpes indutus*) is an endemic subspecies of Cyprus and the only carnivorous mammal of the island. It can be found in many areas even though its population has been constantly declining over the last two decades. Ecologists consider the fox a useful animal with an important role in the ecosystems. In Cyprus, there is still great prejudice against this sympathetic animal.

The **Hare** (*Lepus europaeus cyprius*) is also an endemic subspecies. It is the main and biggest game species in



Egyptian fruit bat-Rousettus aegyptiacus

Cyprus. It can be found everywhere on the island in fairly large numbers.

Hemiechinus auritus dorotheae

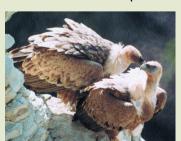
The **Hedgehog** (*Hemiechinus auritus dorotheae*) is another endemic subspecies of Cyprus. It is a nocturnal, shy species found in suitable habitats at 1600 m altitude above sea level.

The **Bat species** is one of the most strange but important animal groups of the Cyprus fauna. There are 16 bat species in Cyprus (one species belongs to Megahyroptera and the rest to Microhyroptera). Very few studies have been conducted, so far, on the biology of these species in Cyprus. Their role in the ecosystem is vital since the 15 species of Microhyroptera feed mainly on insects and only the **Egyptian fruit bat** (*Rousettus aegyptiacus*) feeds on mature fruits.

Birds

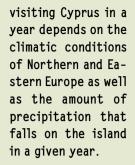
Cyprus is one of the most important migratory routes in Europe because of its geographical position. It is also considered as an area with rich avifauna, and an important bird area in Europe with high endemism.

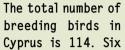
The number of bird species recorded until now in Cyprus



Griffon vulture-Gyps fulvus

is 370. Of those, 53 are permanent residents while the remaining 317 are migrants. Of the migratory birds, 237 are common visitors and the remaining 80 are rare or very rare visitors. The number of the migratory birds







Grey heron-Ardea cinerea

of the permanent residents are endemic (2 species and 4 subspecies) as follows:

- ⇒ Cyprus warbler (Sylvia melanothorax)
- ⇒ Cyprus wheatear (Oenanthe cypriaca)
- ⊃ **Short-toed treecreeper** (Certhia brachydactyla dorotheae)
- ⊃ **Jay** (Garrulus glandarius glaszneri)
- ⊃ Scops owl (Otus scops cyprius)
- ⊃ Coal tit (Parus ater cypriotes)

Migration is a phenomenon, repeated nearly the same period every year. Weather conditions during migration, both in autumn and spring are characterized by light winds, perfect visibility and



Long-eared owl-Asio otus



Cyprus warbler-Sylvia melanothorax

low cloud cover, conditions that are favourable for birds during their migration journeys from Europe to Africa and back.

Reptiles and Amphibians

There are 22 reptiles and 3 amphibian species living in Cyprus. They include 3 turtle species, 11 species of lizards (4 endemic subspecies) and 8 snake species, which include one endemic species and two endemic subspecies. Three of the snakes found in Cyprus are poisonous but only one can be harmful to man.

Three frog species are included in the amphibian: The Tree frog (Hyla savignyi), the Marsh frog (Rana ridibunda) and the Green toad (Bufo viridis).

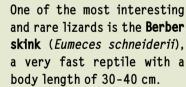
The native turtle species, include two marine species the **Green turtle** (Chelonia mydas) and the Common turtle



(Caretta caretta), which visit the sandy beaches of Cyprus to lay their eggs. The third turtle species is the European pond turtle (Mauremis caspica rivulata) which is under threat in Cyprus because of habitat loss and the

drying out of many rivers of the island. It lives in rivulets with low water speed, with rich vegetation

cover, in the vicinity of Nicosia and Polis tis Chrysochou.



European pond turtle -Mauremis caspica rivulata

A very common reptile is the Agama lizard (Laudakia stellio cypriaca). It is also very

fast, occurring in a wide range of habitats with dry conditions.

The endemic Cyprus whip snake (Heirophis cypriensis) is found mainly in the Pafos forest. It has a long thin body with a length of about 75 cm. Its colour is dark grey or black. It is not a poisonous snake and feeds mainly on



Agama lizard-Laudakia stellio cypriaca

lizards. It was identified as an endemic species in 1983.

The Large whip snake (Dolichophis jugularis) is the most common snake of the island. It is not poisonous and its colour is black. It is a very well known snake, which can live even in gardens keeping



Large whip snake-Dolichophis jugularis

them clean from other snakes and mice, as it feeds on them.

A very common snake is the **Blunt-nosed viper** (Macrovipera lebetina). It is the most dangerous snake of the island with a very strong poison, this being the reason that is under constant persecution from people everywhere.

Two rare snakes of the island are the Cat snake (Telescopus fallax cyprianus) and the Cyprus Grass snake (Natrix natrix cypriaca) which was re-discovered in 1992 after 30 years with no records. It is confined to four locations of the island and is strictly protected.

Insects

Scientific knowledge on insect species is comparatively poor in Cyprus, with the exception of certain groups, like butterflies and insects with agricultural interest. Up to date, records and studies indicate that the number of insects presently known from Cyprus is about 6000. One of the most important groups of insects, are butterflies which belong to the order of Lepidoptera. There are 52 butterfly species in Cyprus, of which 9 are endemic. Many other insect species are endemic and the most important habitats of those species are protected.



Butterfly-Charaxes iasius



Freshwater crab-Potamon potamios

Threats and protection

Animal life in Cyprus faces many threats, some of which are common worldwide. The relatively small area of the country poses additional pressures especially for species that are hunted. The main threats are habitat loss, illegal hunting and possibly over-hunting, misuse of pesticides and tourist development.

Significant steps are being taken during the last years for the protection of many fauna species, such as the designation and management of protected areas containing important habitats and species, measures to halt illegal hunting, determination of the Important Bird Areas (IBAs) in Cyprus, submission of the Cyprus' NATURA 2000 network to the European Union, elaboration of management plans targeting threatened species, specific research and management projects like the turtle project at Akamas, the Griffon vulture project, LIFE projects etc.

Fauna of Cyprus

| Category | Species | Number of species | Total |
|------------|------------------|----------------------|------------------|
| | Mouflon | 1 | |
| Mammals | Fox | 1 | 30 |
| | Hare | 1 | |
| | Hedgehog | 1 | |
| | Mice | 6 | |
| | Bats | 16 | |
| | Sea1 | 1 | |
| | Dolphins | 3 | |
| Birds | 61 Families | 370 | 370 |
| Reptiles | Snakes | 8 | |
| | Lizards | 11 | 22 |
| | Turtles | 3 | |
| Amphibians | Frogs | 3 | 3 |
| Fishes | Fishes | 250 | 250 |
| Insects | Butterflies | 52 | Around 6000 |
| | Microlepidoptera | 461 | 7 ii Juliu Juliu |





The fauna of Cyprus







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