

Impact of human activities on the deer population

The natural habitat of deer is lost due to expansion of agricultural land and settlements at the expense of natural ecosystems. So the deer gets isolated in small-scale habitats and is unable to move and spread as a species to new habitats. Poaching continues to be a major threat and limits population numbers and spreading of red deer in Greece. Particularly in the area of Parnitha National Park, on –unfortunately- no few occasions, abandoned dogs organized in packs in their effort to find food attacked and killed deer. Injuries and deaths of deer from road accidents in the national and regional networks have also been observed.

Protection and management

The deer is protected by Greek legislation; the Forest Code prohibits deer hunting or keeping deer in captivity or commercially exploiting the species without special permission. The legislation, however, should be strengthened to take into account the increased need for protection and management of the species because, unlike in many European countries in which deer is not endangered, in Greece it is threatened with extinction and is classified as “critically endangered”.

At the international level, the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) has set stringent restrictions on wildlife trade, so that a specific authorization by the competent forestry authority is required to import, export and generally move deer. The deer is listed as a “protected animal species” according to the Berne Convention on the Conservation of European Wildlife and Natural Habitats (also known as the Bern Convention).

The research program “Ecological Research of Red Deer on Mount Parnitha” (2007 - 2009) recorded significant data on the deer population of Mount Parnitha, the most important population of red deer in Greece, their spread and effect in reforestations. “A Special plan for the systematic monitoring of Parnitha deer” was also developed in order to protect this deer population. The plan guidelines are currently used by the Management Body of National Forest Park of Parnitha record the status and possible trend changes in the deer population and their habitat preferences.



For the preservation of deer of Parnitha and its spread in new habitats it is necessary, among other measures, to:

- **Keep better watch of the area** to limit poaching and activities (e.g. off-road vehicles) which disturb and annoy the animals.
- **Create a center for care**, handling and genetic control of animals.
- **Increase awareness of the public**, especially the residents and visitors. The red deer are not pets and should not be fed.
- **Enforce the Regulation of the National Park:** Parnitha is a region with unique characteristics and our behavior must conform with the rules intended for its protection.
- **To strengthen and enforce relevant legislation concerning trading, hunting, handling, keeping in captivity and liberating animals.**

This brochure is based on data and information material by WWF Hellas developed under the program

*“Ecological Research of Mount Parnitha Red Deer”
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Cervus elaphus

Red deer: once common
now rare and
endangered



CERVUS ELAPHUS





Description: It has a long neck, broad chest and legs long and strong. The legs end in two claws and two atrophied nails. His head has a longish shape with rather large ears and a bare snout. Around the tail a yellowish-gray spot can be noticed called the mirror (in roe deer and fallow deer, the other two species of deer that live in Greece the mirror is white). The male has antlers that are shed every year. The young deer have white spots on the back that disappear as they grow older.

Weight: Males from 75 to 340kg, females 56 to 254kg.

Lifespan: Up to 27 years although most animals live less than 15 years.

Food: Branches, tree leaves and various herbs. It is considered a browsing animal.

Reproduction: Pregnancy lasts 240 to 262 days. They lay one (rarely two) young deer in late April - mid May. The young breastfeed and remain with their mother until they are 2 years old.

Habitat: Deer in Greece live mainly in the forests. In other parts of the world we can meet them in a wide variety of habitats.

Populations in Greece: The largest deer population is located in the National Park of Parnitha. A small deer population lives in Rodopi. Deer from Parnitha have been transported to state farms in Kozani, Chrysopigi-Serres, Monastery Agathonos Fthiotida, Kalousi Patras and then released in controlled hunting areas for hunting purposes. Enrichment of existing populations with some animals has occurred in the area of Raftanaion-Pramanton-Epirus while in different regions in the country individuals keep deer in captivity and breeding centers.



Distribution map of Red Deer (IUCN 2009)



The deer across the world

The red deer lives and breeds in Europe, North Africa, Central Asia, Siberia, the Far East and North America. Deer have also been introduced by humans in various other parts of the world (Latin America, Oceania). Deer populations live in areas from sea level to high mountain picks, up to about 2.500 m.

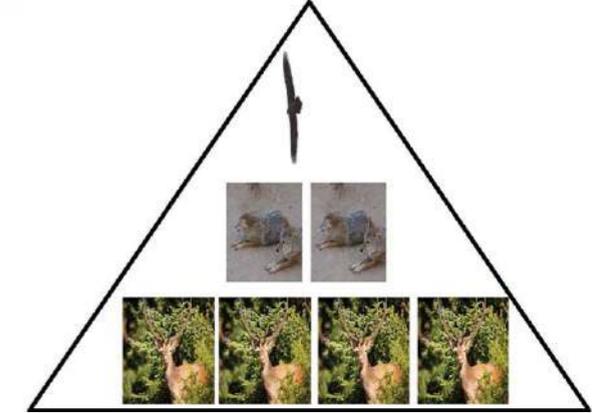
The isolation of a species plays an important role in the fascinating process of evolution. The red deer changed when some populations were isolated in the Balkans during the last glacial period. This means that specific populations of the Balkans have a particular genetic trait that sets it apart from the other groups.

The Red Deer in Greece

The red deer (*Cervus elaphus*) along with roe deer (*Capreolus capreolus*) and fallow (*Dama dama*), are the only species of the family of deer living in Greece. Their presence in Greece at historic times has been confirmed.

The red deer once lived throughout mainland Greece. Within a few decades, however, its populations have shrunk to such an extent that the species is considered Critically Endangered in Greece. Already, in the 1960's deer were confined to the peninsula of Sithonia (Chalkidiki), in Rodopi near the border with Bulgaria and Parnitha. Small numbers of deer were also bred in a few farms. In the '90s the Sithonia deer population disappeared due to the opening of mountain roads that facilitated the work of poachers. The protected population of Parnitha is today the most vigorous and important in the country.

According to the results of the three-year study titled 'Ecological Research of Mount Parnitha Red Deer', in 2009



The deer as a grazer has a decisive participation and affects the structure of the food pyramid.

were found without young ones in the summer of 2009.

Findings of geological surveys and reports of tourists about the existence of deer in the wider Attica region, confirm their timeless presence in prehistoric and historic times. When a few deer were introduced in 1908 in the royal estate of Tatoi it is not certain that the local deer population was already extinct. Other deer imports followed during the 20th century from Denmark and –more importantly– from neighboring Balkan countries. However, according to some scholars, all animals were imported from areas where the same subspecies of deer lives (i.e. *Cervus elaphus hippelaphus*).

The red deer is the largest herbivore in Greece. As an integral part of Greek nature it can play an essential role in the formation and evolution of ecosystems, more so nowadays, when free stock raising is gradually abandoned. Especially in Parnitha deer as a large herbivore, contributing decisively in managing the vegetation, consuming potentially flammable matter and ultimately protecting the forest from wildfires. On the other hand, large predators and vultures—who are also threatened with extinction nowadays—could find support for their survival in the presence of deer.

the number of red deer in Parnitha was no more than 600. It also appears that the deer population, although not under pressure by natural predators (e.g. wolf, bear) has not increased significantly in the period since the previous 1994 census. Deer are found from the Lake Marathon in the east to mount Pastra in the west. In winter the animals live in an area of about 36.000 hectares, while in the summer the majority of deer lives in a limited area of about 4.450 hectares toward the highest points of the mountain (700-1400 m) in the interstices in the forest, at plane meadows and plateaus. The deer also seem to prefer and concentrate in relatively few and isolated places of Mount Parnitha, away from any human disturbance. The ratio of male - female deer is almost 1:1. However, about half of adult females