Fourth National Report to the United Nations Convention on Biological Diversity



CYPRUS

DEPARTMENT OF ENVIRONMENT MINISTRY OF AGRICULTURE, NATURAL RESOURCES AND ENVIRONMENT

NICOSIA, SEPTEMBER 2010

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Executive Summary

Introduction

Cyprus, the third largest island in the Mediterranean is situated just 65 km south of Turkey and 105 km west of Syria. It has an area of 9.251 km² with its greatest length approximately 225 km and its greatest width approximately 96 km. It is endowed with a great variety of landscapes ranging from mountainous regions and plains to an extensive coastal line which is extremely irregular in outline.

Its insular character, the varied climate, geology and topography along with the long history of human activities dating back to 8200 AD, have shaped the landscape and created a wide variety of natural, semi-natural and anthropogenic habitats where a large number of plant and animal species prosper. In Cyprus, as in the rest of Europe, agriculture dominates much of the landscape, extending over half of the island's territory and comprises mainly rain fed but also irrigated, crops. Small fields with a diversity of arable land and tree crops, such as the traditional olive groves, carob trees and vineyards, create a mosaic of landscapes, ideal for many wildlife species, particularly birds and reptiles. Much of this agricultural land consists of areas of small holdings with a mixture of ploughed crops, vineyards and tree orchards, most farmed in a traditional (non-intensive) way. Very often agricultural land, especially on mountains, alternates with fallow or abandoned land, colonized by shrubby or phryganic vegetation, which further diversifies habitat conditions.

Natural vegetation is made up primarily of extensive, natural pine forests, evergreen, sclerophyllous shrubs (maquis) and phrygana, while other vegetation types occupy more specialized habitats like riverine vegetation along streams, hasmophytes on cliffs, hygrophilous vegetation in water flooded sites etc. In total, 48 habitat types are known to exist on the island providing refuge to a large number of endemic, rare and otherwise important species.

Status, Trends and Threats to Biodiversity

Cyprus is considered as biodiversity "hotspot" area (Myers *et al.* 2000), as it is the only centre of birds endemism in Europe and the Middle East. Also six out of its 11 wild mammals are endemic and sub-endemic, whereas it is a centre of insects endemism and plant diversity. Consequently, the percentage of Cyprus endemism regarding plants, calculating all the taxonomical levels, is among the highest in Europe.

The natural wealth of the island, its ecosystems, habitats, flora and fauna, is the result of evolution, the influence of special climatic, geological and soil conditions, topography and morphology, the proximity to the three continents (Europe, Asia, Africa), its the long isolation as an island and the influence of man.

Considering the terrestrial ecosystem in total, 48 habitat types are known so far to exist on the island, 14 of which are priority habitat types, according the Habitats Directive of the European Union, including 4 endemic habitat types: Serpentinophilous grasslands of Cyprus (62B0*), Peat grasslands of Troodos (6460*), Scrub forest of *Quercus alnifolia* (9390*) and *Cedrus brevifolia* forests (9590*).

The flora of Cyprus comprises about 1738 indigenous taxa including 143 endemics. There are also hundreds of cultivated species many of which are adventives. About 238 indigenous plant taxa have been classified as threatened during a recently implemented project by a group of government departments and NGOs, based on the IUCN Red List criteria. About 32 mammal taxa (including 18 bats, 3 dolphins, and 1 seal) are known to exist, of which 2 are endemic (mice) and 2 subendemic (muflon and hedgehog). Birds include 385 species of which 2 are endemic and 4 subspecies. There are 22 reptiles, including 2 endemic species and 3 amphibian species. Marine fish species include more than 80 taxa. More than 5.000 insect species have been recorded so far, including many endemics. Mushrooms, bryophytes and lichens have not been adequately studied but there is evidence that numerous species exist.

The present trend in biodiversity shows signs of improvement, after a long period of decline during the 20th century. This positive trend is largely the result of coordinated efforts by the competent government departments, NGOs and the measures taken after Cyprus's accession into EU, mainly with the establishment of the Natura 2000 network, but also with the enactment and enforcement of relevant legislation.

The main threats to the biodiversity of the island are a result of human activities caused by urban and tourism (mainly by the coast) development, infrastructure, grazing, and rural area abandonment.

Costal habitats have suffered serious destruction and reduction, with consequence of biodiversity loss. The increase of land demand for the tourism development, the land use changes that led to fragmentation of habitats, as well as habitat loss, placed excessive pressure on biodiversity. Many coastal habitats, such as dune habitats and coastal marshes, have been compromised or destroyed.

The construction of dams, overexploitation of water and the diversion of water for irrigation has adverse impacts on the ecology of the rivers and riparian ecosystems.

Furthermore the abandonment of traditional subsistence and the development of intensive agriculture, the use of agrochemicals, along with land-use changes, influenced negatively the agroecosystems and the species that live there.

Illegal trapping of some species (with the use of nets and limesticks) is also a serious problem.

The main threats to biodiversity include the following:

• Rapidly expanding construction industry especially for the tourist industry along the coastline, as well as an extensive road network. (highways and rural roads)

- Rural abandonment leading to the loss of indigenous species which are dependent on traditional agriculture but also of local varieties of crop plants.
- Overexploitation of the scarce underground and surface water resources
- Climatic change which is reflected in the reduction of the average annual precipitation by 16% over the last century and increase in average annual temperatures by 1 ^oC.
- Forest and wild fires in general
- Invasive species both plant and animal.
- Non-sustainable agricultural practices locally, especially in irrigated crops
- Overgrazing, locally
- Overexploitation of fisheries stocks
- Pollution of soil, air and water caused by industrial, domestic and farming activities

National Strategies Related to Biodiversity

Cyprus has not yet prepared a comprehensive Biodiversity Action Plan, however the related national policies (Sustainable Development Strategy, Forest Policy, Agriculture Policy, Water Policy and Fisheries Policy etc.), safeguard the biodiversity of the Island. Also National Action plans such as the Desertification Action Plan that are in the process of being implemented, include measures that will further guarantee the biodiversity protection.





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