

Cyprus' biodiversity at risk

A call for action



Cyprus hosts a large proportion of the species that are threatened at the European level, and has the important responsibility for protecting these species within its territory. Species in Cyprus require greater action to improve their status. While many species already receive some conservation attention, others do not. Species can be saved from extinction but this requires a combination of sound research and carefully coordinated efforts. Cyprus as an EU Member State has committed to halting biodiversity loss by 2020 but urgent action is needed to meet this target and better monitoring capacity is required to measure if the target is met.

Considerable conservation investment is needed from Cyprus to ensure that the status of European species improves in the long term. This document provides an overview of the conservation status of species in Cyprus based on the results of all European Red Lists completed to date. It does not provide the status of the species in the country, therefore we invite the reader to cross check national and sub-national Red Lists. Together, they can be used to help guide policies and local conservation strategies.

The European Red List

The European Red List of Species is a review of the conservation status of more than 6,000 species in Europe according to the IUCN Red List Categories and Criteria and the regional Red Listing guidelines. It identifies species that are threatened with extinction at the European level so that appropriate conservation actions can be taken to improve their status. The geographical scope is continent-wide, including European parts of the Russian Federation and Turkey as well as the Macaronesian Islands. The Caucasus region is not included.

To date, European regional assessments have been completed for all mammals, reptiles, amphibians, butterflies, dragonflies, freshwater fishes and freshwater molluscs and a selection of saproxylic beetles, terrestrial molluscs, and vascular plants. Assessments of pollinators, medicinal plants, birds and marine fishes are currently under development.

The European Red List is compiled by IUCN Global Species Programme, with funding from the European Commission.

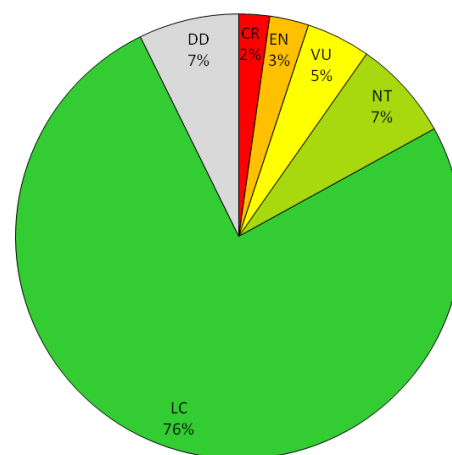
Conservation status

Cyprus is host to an estimated 8,733 species of animals and plants. This number represents 6% of the total species described for Europe and could represent less than 1% of the species in the world. According to the table below, approximately 8% of the species assessed by the European Red List of Species are present in Cyprus. For some of the taxonomic groups, the percentages of European species that occur in Cyprus are particularly high; such as dragonflies, reptiles and vascular plants.

Of the 495 species assessed that occur in Cyprus, the groups comprising the highest number of species are vascular plants, saproxylic beetles and butterflies. Of the total number of species assessed in the country 10%* are considered threatened and at least 7% are Near Threatened at the European level. Many of these species are endemic to Europe and are found nowhere else in the world.

Species that are considered threatened at the European level and occur in Cyprus are found mostly in shrublands, forests and wetlands. These ecosystems require particular attention in order to ensure the habitats of these sensitive species remain.

European status of species in Cyprus



Number of species assessed within each IUCN Red List category at the European level

Species group	No. of sp. in Europe	No. of sp. in Cyprus	% of European sp. occurring in Cyprus	No. of threatened sp. in Cyprus (status at European level)		
				CR	EN	VU
Mammals	233	25	11%	1	0	5
Reptiles	140	21	15%	0	2	0
Amphibians	83	3	4%	0	0	0
Freshwater fishes	522	11	2%	1	0	0
Butterflies	435	43	10%	0	0	0
Dragonflies	137	34	25%	0	0	2
Saproxylic beetles**	431	56	13%	2	6	2
Terrestrial molluscs**	1,233	40	3%	0	0	0
Freshwater molluscs	854	6	1%	0	0	1
Vascular plants**	1,826	256	14%	7	6	13
TOTAL	5,894	495	8%	11	14	23

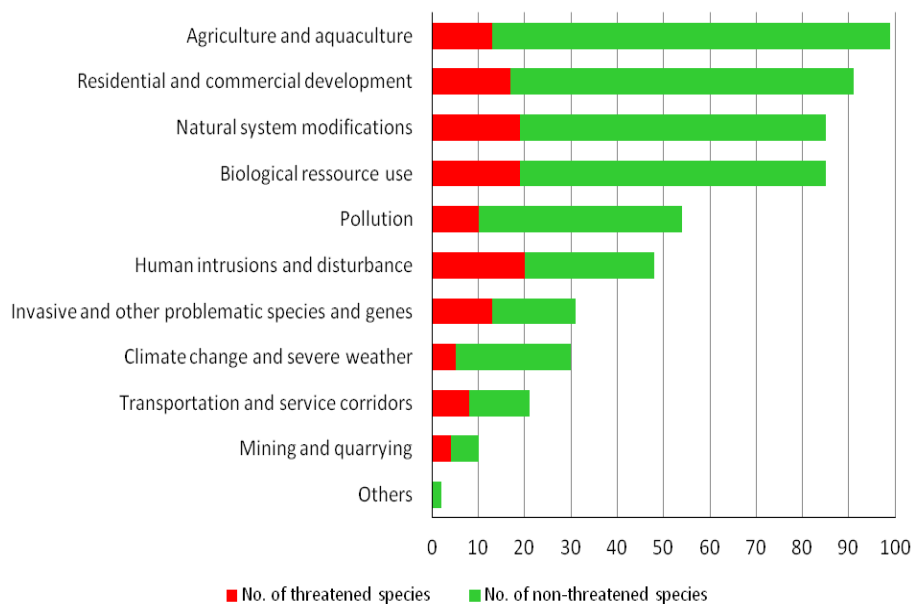
**Not comprehensively assessed, selected species only.

This table does not include the Not Applicable (NA) species in Europe (species introduced after AD 1500 or species of marginal occurrence). The data are based on the results of the European Red List (European region wide assessment).

Major threats

Habitat loss, fragmentation and degradation as a result of agricultural expansion and intensification are the most significant threat at the European level to species that occur in Cyprus. For freshwater species, major threats include the over-extraction of water, which in many cases is further exacerbated by pollution and the introduction of alien species. Other major threats come from urbanization and tourism.

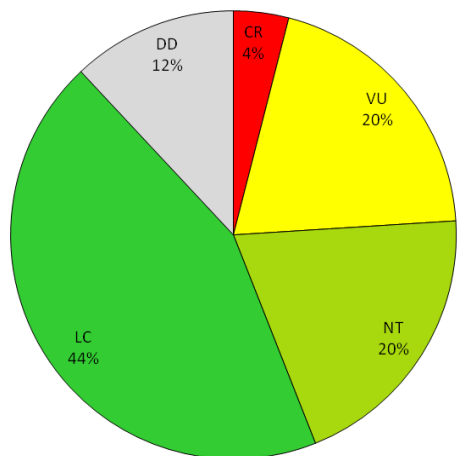
Major threats at the European level to species occurring in Cyprus



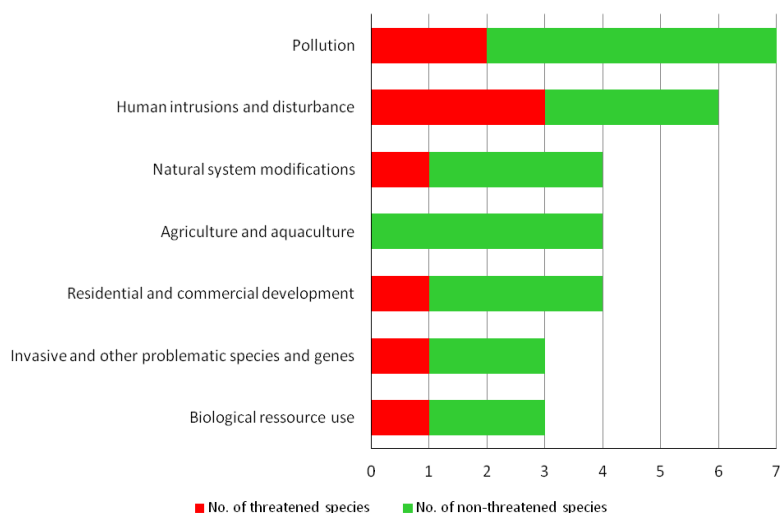
Mammals

Cyprus hosts 11% of all the mammals that occur in Europe. Of these 25 species of mammals, 27%* are threatened at the European level and at least an additional 20% are considered Near Threatened. The major threat at the European level that can possibly (or potentially) affect mammals in Cyprus is pollution, caused mainly by agricultural and forestry effluents. Populations of bats in Cyprus are also highly threatened by human intrusions and disturbance in caves.

Status at European level



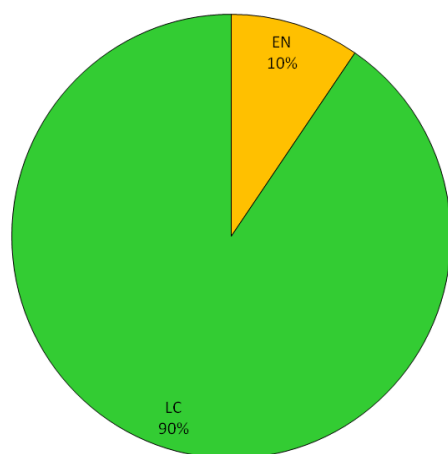
Threats at European level



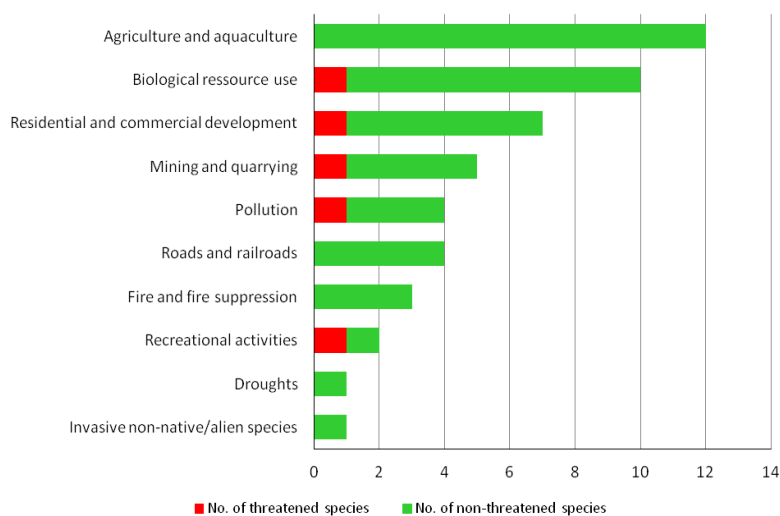
Reptiles

Reptile species in Cyprus represent 15% of all the reptiles in Europe. Ten percent* of the reptile species that occur in Cyprus are considered threatened at the European level. Habitat loss, fragmentation and degradation especially due to agricultural intensification and urbanization are the main threats to this group at the European level. Logging and wood harvesting also pose serious threats. It is also interesting to note that 24% of the reptile species in Cyprus may be threatened by human persecution and control, especially snakes and vipers.

Status at European level



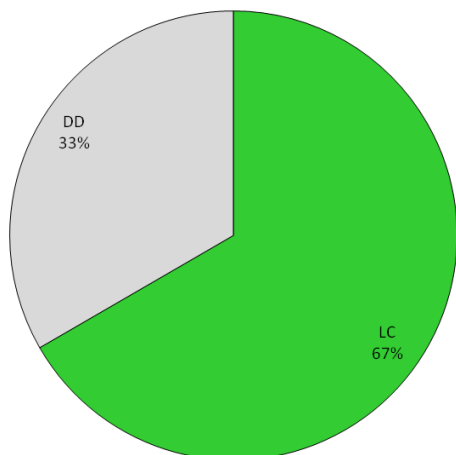
Threats at European level



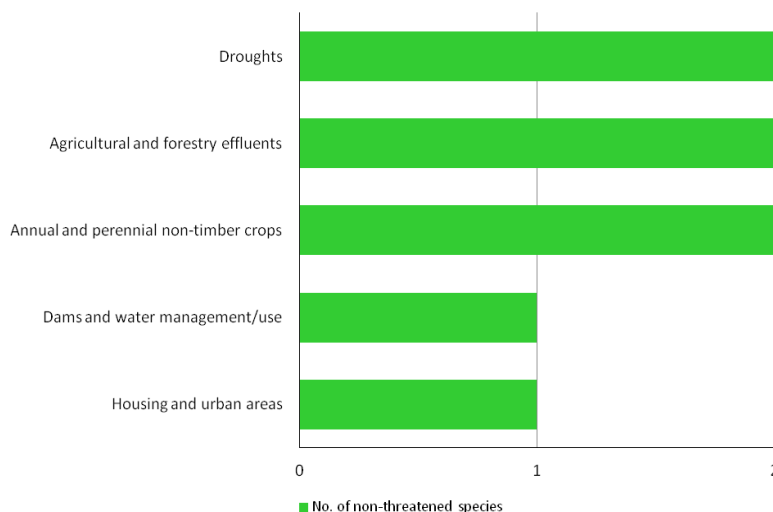
Amphibians

Amphibians in Cyprus represent 4% of all amphibians occurring in Europe. More studies of amphibians species are needed as 33% are classified as Data Deficient at the European level. The main threat to this group at the European level is the loss and degradation of suitable breeding habitat mainly due to desiccation caused by dry weather. Water pollution caused by agricultural and forestry effluents also pose threat to this group.

Status at European level



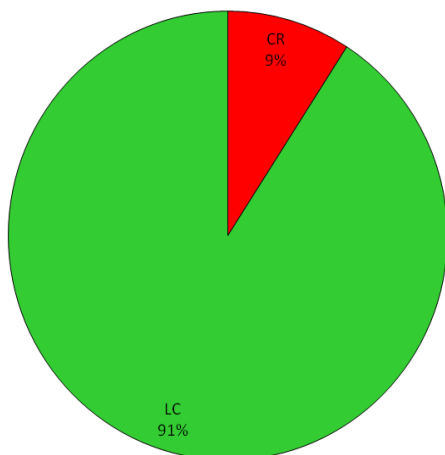
Threats at European level



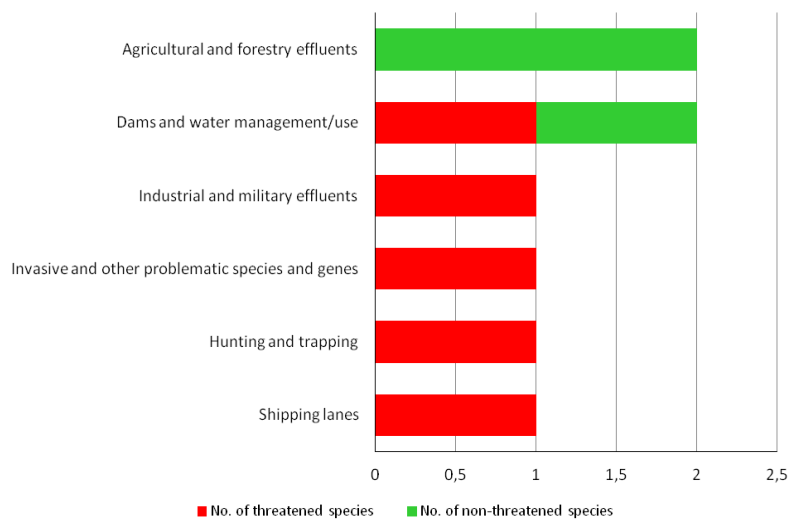
Freshwater fishes

Freshwater fishes are one of the most threatened groups at the European level. Nine percent* of the species that occur in Cyprus are threatened and classified as Critically Endangered at the European level. The most important threat to this group at the European level is the decline of water quality caused by agricultural and forestry effluents. This group is also affected by ecosystem modifications such as the construction of dams and reservoirs.

Status at European level



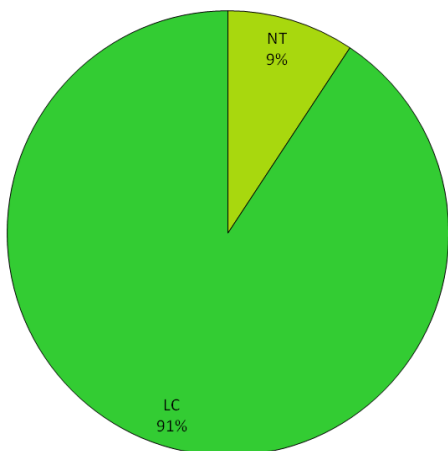
Threats at European level



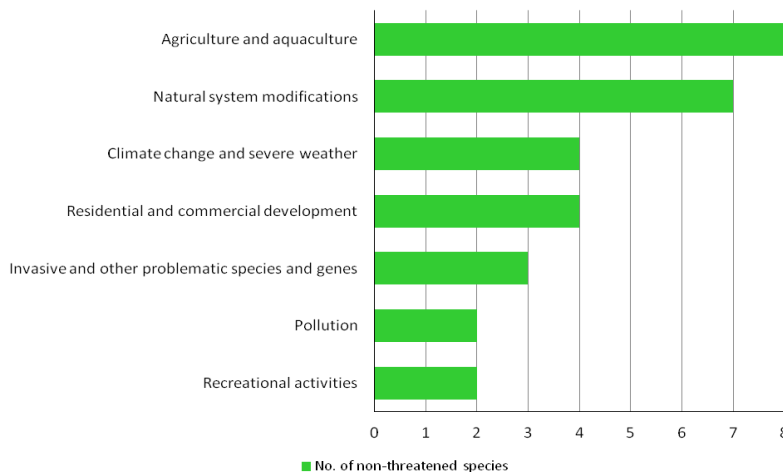
Butterflies

Cyprus hosts 10% of all butterfly species in Europe. None of these species is considered threatened and only 9% are classified as Near Threatened at the European level. The conservation status of butterflies in Cyprus based on the European Red List data is relatively good since approximately 91% of the species are classified as Least Concern. However, butterflies have very specific food and habitat requirements at different stages of their life cycle so they are very sensitive to changes in their environment, especially to habitat management such as overgrazing, undergrazing or changes in forestry practices.

Status at European level



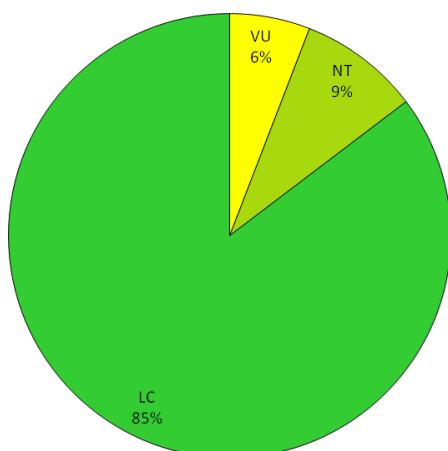
Threats at European level



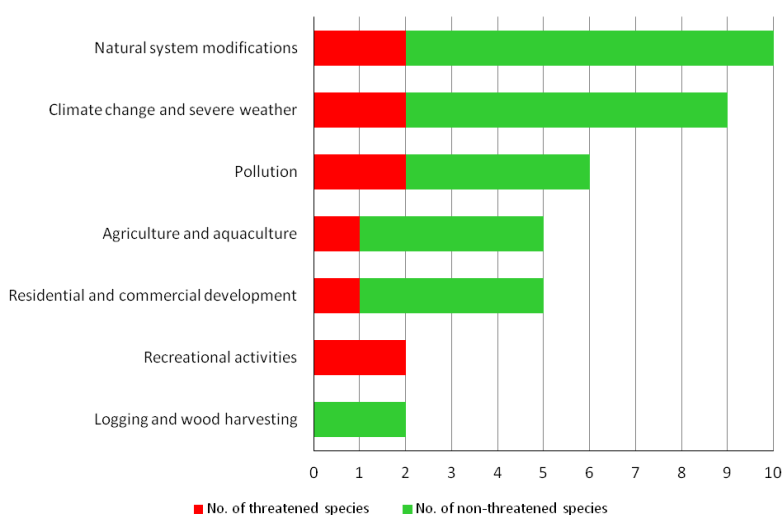
Dragonflies

Twenty-five percent of all the dragonflies in Europe are present in Cyprus. Six percent* of dragonfly species that occur in Cyprus are considered threatened at the European level. This group is adversely affected by desiccation caused by dry weather, fires and increased water extraction for irrigation and human consumption. River species are also affected by ecosystem modifications such as the construction of dams and reservoirs and water quality deterioration.

Status at European level



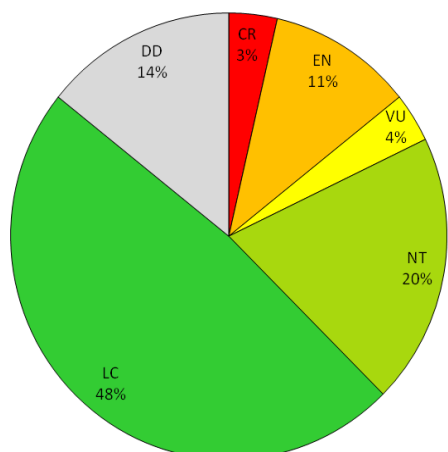
Threats at European level



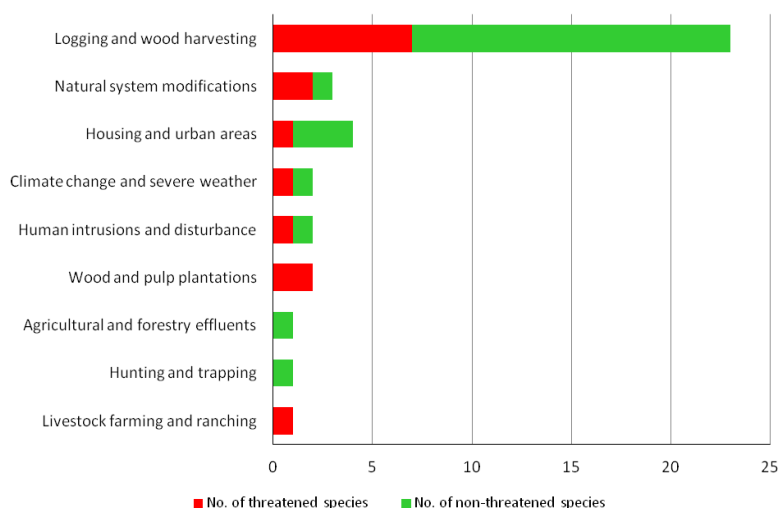
Saproxylic beetles

Thirteen percent of the beetle species assessed by the European Red List are present in Cyprus. Approximately 21%* of the species in this group are considered threatened at the European level, while the percentage of total threatened species that is observed in the European region is 11%*. Three percent of them are classified as Critically Endangered and 20% are considered as Near Threatened at the European level. This group is very dependent on the dynamics of tree aging and wood decay processes. The major threat to this group is logging and wood harvesting; therefore these beetles require sensitive conservation management of tree populations irrespective of their situation.

Status at European level



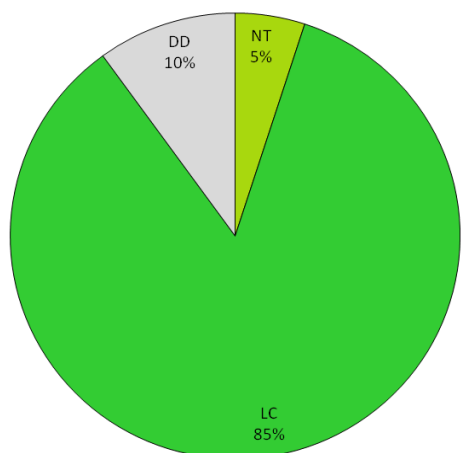
Threats at European level



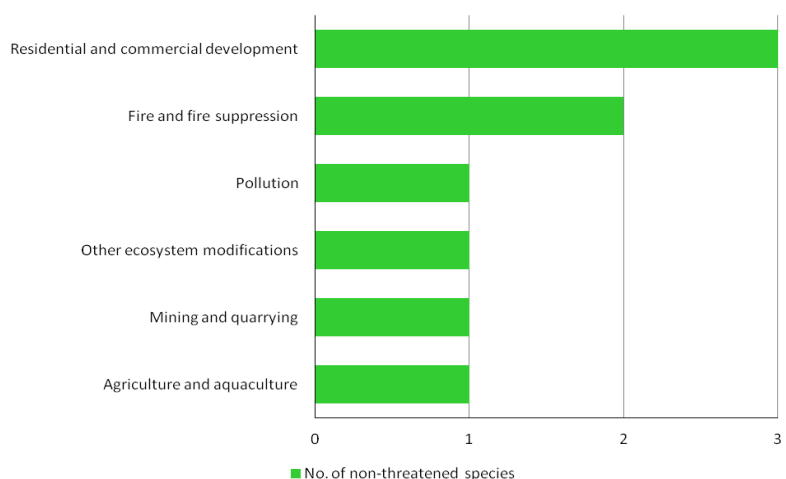
Terrestrial molluscs

The conservation status of terrestrial molluscs in Cyprus based on the European Red List data is relatively good since approximately 5% of the species are considered as Near Threatened and 91% are classified as Least Concern. The major threat to this group at the European level is continuous destruction of suitable habitat from increased overflow of settlements into the countryside.

Status at European level



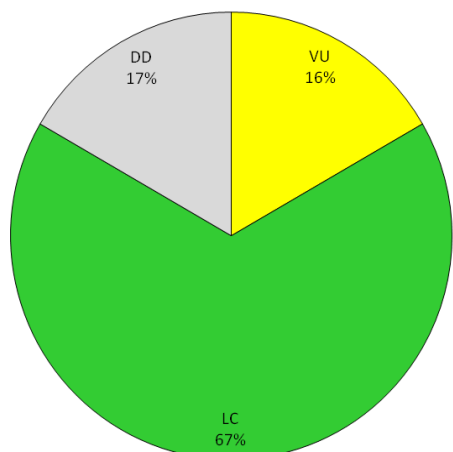
Threats at European level



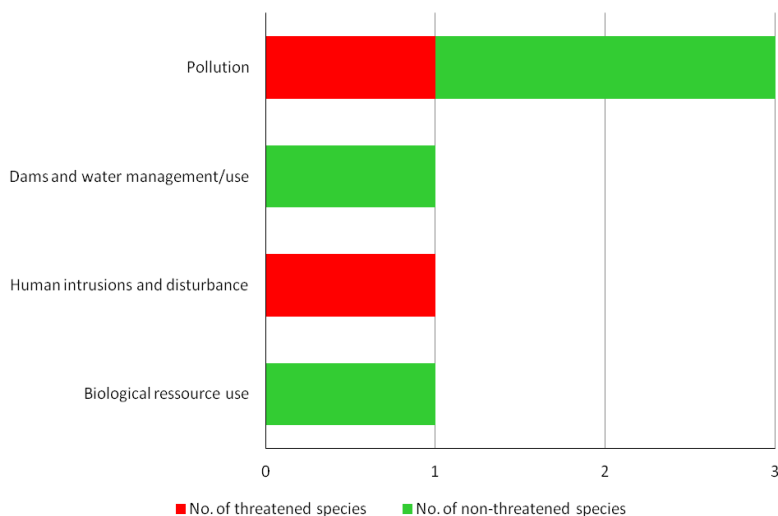
Freshwater molluscs

Twenty percent* of the freshwater molluscs that occur in Cyprus are threatened at the European level. Declining water quality in freshwater rivers and lakes, caused by agricultural activities and domestic and urban waste water, is the main threat to this group at the European level. Water abstraction, human intrusion for recreational activities and hunting and trapping are also major threats at the European level.

Status at European level



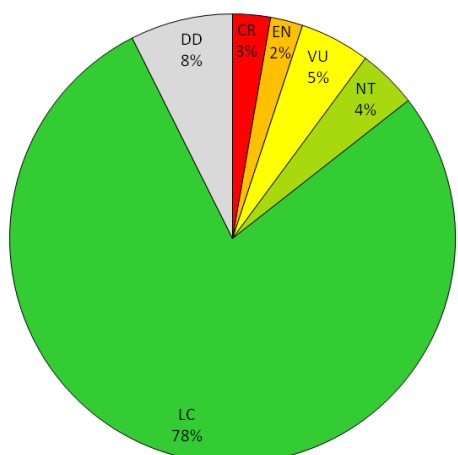
Threats at European level



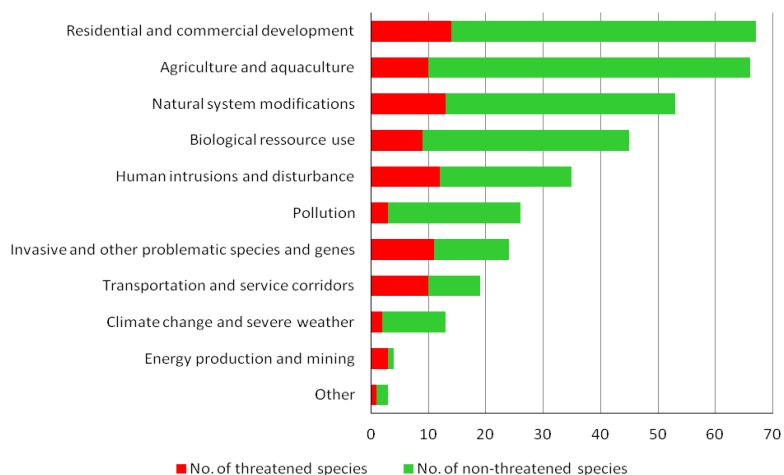
Vascular plants

At European level, priority crop wild relatives, aquatic plants and all species included in the annexes of the Habitats Directive, Bern Convention and CITES have been assessed. A total of 256 species are found in Cyprus, which represent 14% of the total of species assessed in Europe. Eleven percent* of the 256 vascular plant species assessed in Cyprus are considered threatened at the European level. For terrestrial plants, intensified livestock farming, especially intensive grazing activities have the worst impacts. For aquatic species, direct habitat loss caused by draining for development, agriculture and pasture is the main threat.

Status at European level



Threats at European level





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<http://ec.europa.eu/environment/nature/conservation/species/redlist> and
<http://www.iucnredlist.org/europe>

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Cover photo by Joxerra Aihartza (*Myotis capaccini*)

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*The proportion of threatened species in this document is calculated as follows: (EW + CR + EN + VU) / (total number of species assessed - EX - RE - DD). Since the number of threatened species is often uncertain because it is not known whether DD species are actually threatened or not, this formula considers that DD species are equally threatened as data sufficient species.