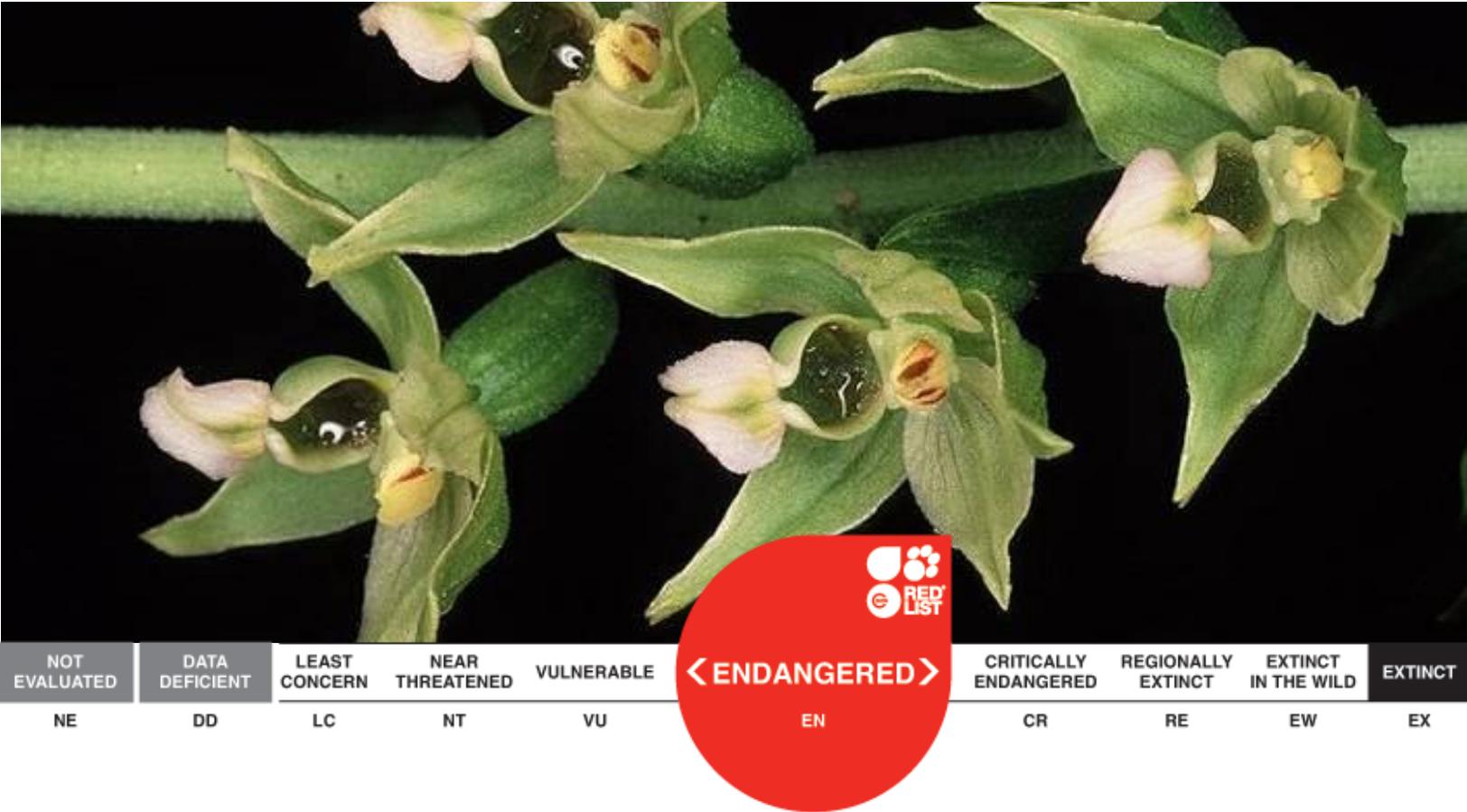


Slovakia's biodiversity at risk

A call for action



NOT EVALUATED	DATA DEFICIENT	LEAST CONCERN	NEAR THREATENED	VULNERABLE	< ENDANGERED >	CRITICALLY ENDANGERED	REGIONALLY EXTINCT	EXTINCT IN THE WILD	EXTINCT
NE	DD	LC	NT	VU	EN	CR	RE	EW	EX

Slovakia 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 Slovakia 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. Slovakia 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 Slovakia 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 Slovakia 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.

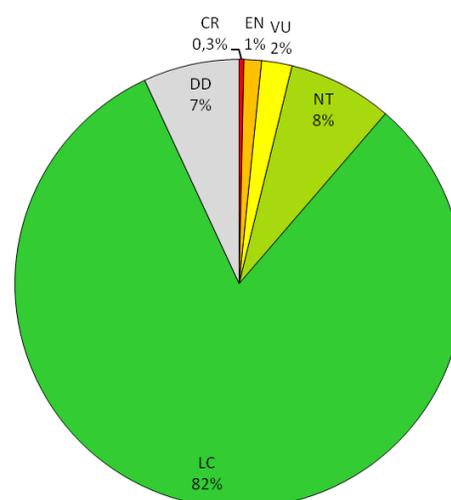
Conservation status

Slovakia is host to an estimated 40,000 species of animals and plants. This number represents 25% of the total species described for Europe and could represent more than 2% of the species in the world. According to the table below, approximately 20% of the species assessed by the European Red List of Species are present in Slovakia. For some of the taxonomic groups, the percentages of European species that occur in Slovakia are particularly high; such as dragonflies, saproxylic beetles and butterflies.

Of the 1,183 species assessed that occur in Slovakia, 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 4%* are considered threatened and at least 8% 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 Slovakia are found mostly in forests, wetlands and grasslands. These ecosystems require particular attention in order to ensure the habitats of these sensitive species remain.

European status of species in Slovakia



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 Slovakia	% of European sp. occurring in Slovakia	No. of threatened sp. in Slovakia (status at European level)		
				CR	EN	VU
Mammals	233	84	36%	1	0	5
Reptiles	140	12	9%	0	0	0
Amphibians	83	19	23%	0	0	0
Freshwater fishes	522	67	13%	2	1	2
Butterflies	435	168	39%	0	4	6
Dragonflies	137	73	53%	0	0	2
Saproxylic beetles**	431	227	53%	0	6	5
Terrestrial molluscs**	1,233	74	6%	0	0	2
Freshwater molluscs	854	81	9%	1	1	1
Vascular plants**	1,826	378	21%	0	3	3
TOTAL	5,894	1,183	20%	4	15	26

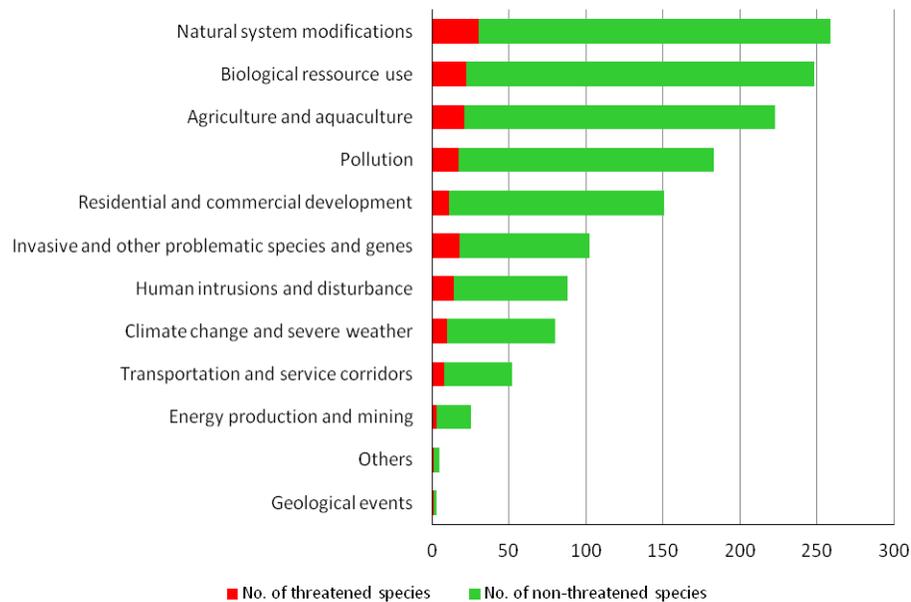
**Not comprehensively assessed, selected species only.

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 are the most significant threats at the European level to species that occur in Slovakia. For freshwater species, major threats include the declining in water quality caused by agricultural and forestry effluents and abstraction of water from underground or from the streams and rivers themselves. Other major threats come from natural system modification, logging and wood harvesting, agricultural expansion and intensification and urbanization.

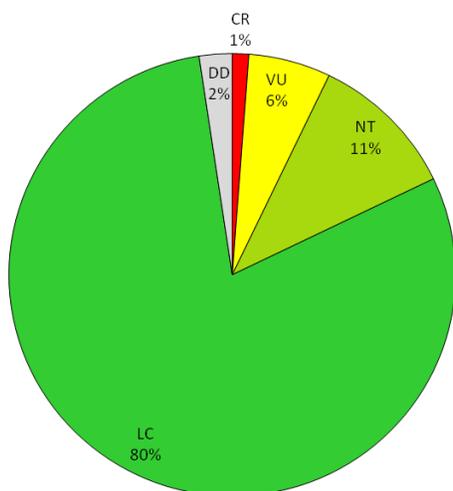
Major threats at the European level to species occurring in Slovakia



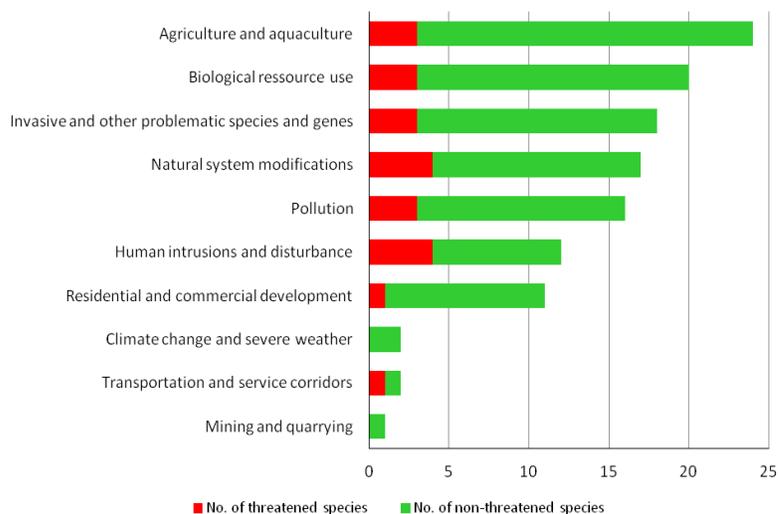
Mammals

Slovakia hosts 36% of all the mammals that occur in Europe. Of these 84 species of mammals, 7%* are threatened at the European level and at least an additional 11% are considered Near Threatened. The major threats at the European level that can possibly (or potentially) affect mammals in Slovakia are agricultural expansion and intensification. Mammal populations are also highly threatened mainly by livestock farming and ranching, invasive and other problematic species and agricultural and forestry effluents. Hunting and trapping, also pose serious threats to mammals in the country.

Status at European level



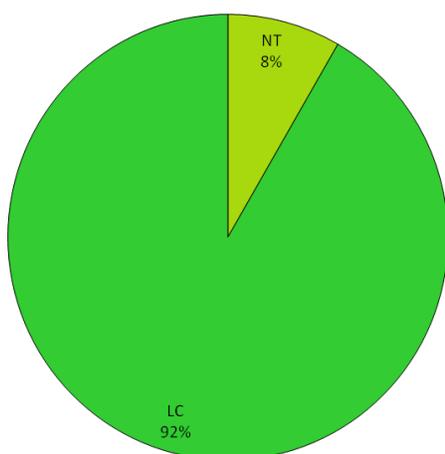
Threats at European level



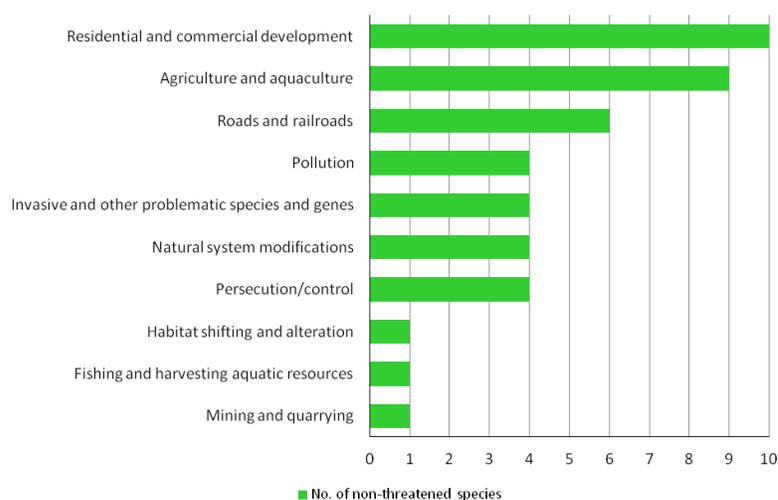
Reptiles

Reptile species in Slovakia represent 9% of all the reptiles in Europe. The conservation status of reptiles in Slovakia based on the European Red List is relatively good since none of them are considered threatened, 8% are classified as Near Threatened and 92% as Least Concern. Habitat loss, fragmentation and degradation especially due to agricultural intensification and urbanization are the main threats to this group at the European level. It is also interesting to note that at least 33% of the reptile species in Slovakia may be threatened by human persecution and control, especially snakes.

Status at European level



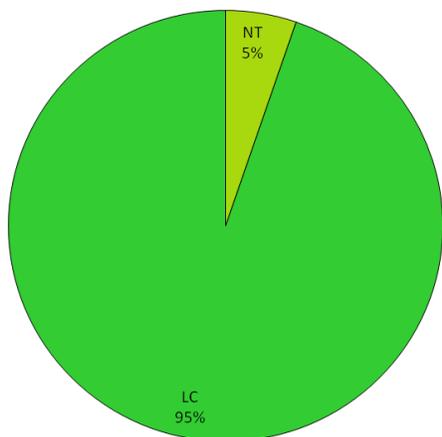
Threats at European level



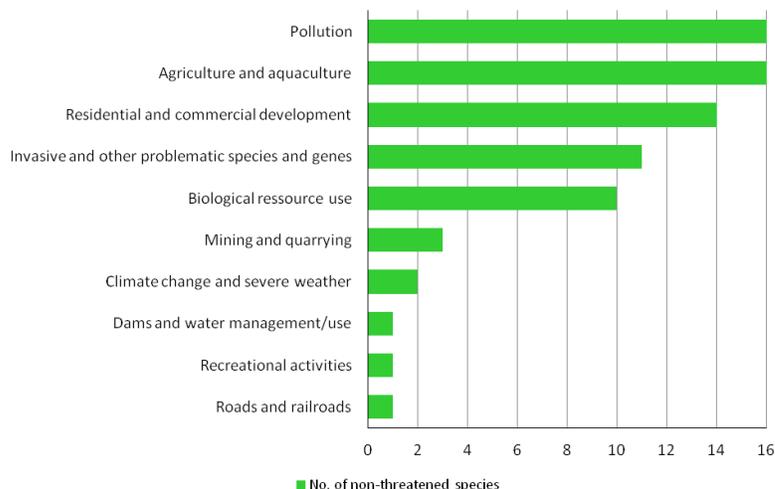
Amphibians

Amphibians in Slovakia represent 23% of all amphibians occurring in Europe. The conservation status of amphibians in Slovakia based on the European Red List data is relatively good since none of them are considered threatened at the European level and 5% are classified as Near Threatened. The main threat to this group at the European level is the loss and degradation of suitable breeding habitat mainly due to agricultural activities and water pollution by agricultural and forestry effluents.

Status at European level



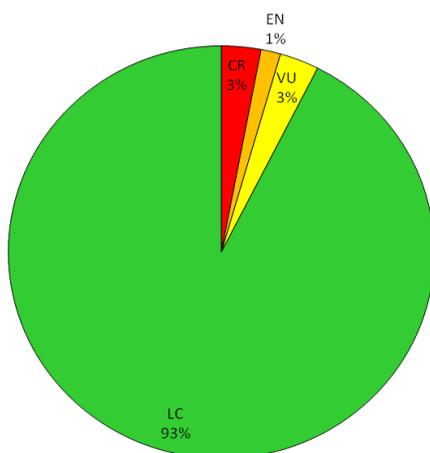
Threats at European level



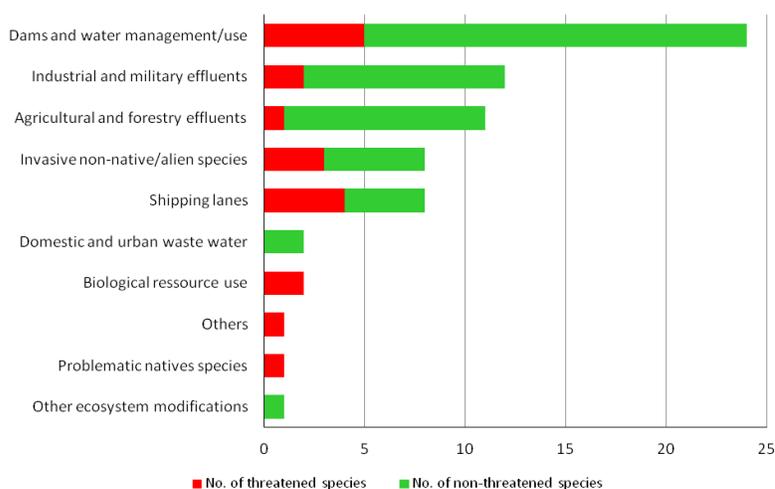
Freshwater fishes

Freshwater fishes are one of the most threatened groups at the European level. Seven percent* of the species that occur in Slovakia are threatened at the European level, while the percentage of total threatened species that is observed in the European region is 40%*. Additionally, freshwater fishes have a high percentage of endemism in the European region: up to 80%. The most important threat to this group at the European level is the modification of the physical and chemical characteristics of freshwater rivers and lakes due to dam construction. Water pollution caused by industrial and military effluent is also a main threat to this group.

Status at European level



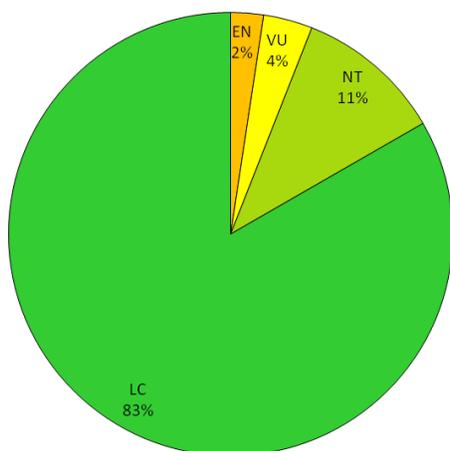
Threats at European level



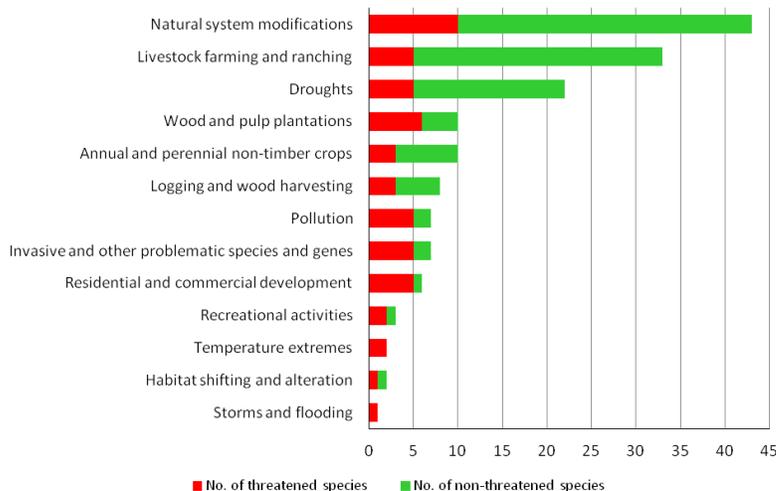
Butterflies

Slovakia hosts 39% of all butterfly species in Europe and 6%* of them are considered threatened at the European level. The mountainous areas of Slovakia have a rich variety of butterfly species as well as a high number of endemic species. The conservation status of butterflies in Slovakia based on the European Red List data is relatively good since approximately 83% 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



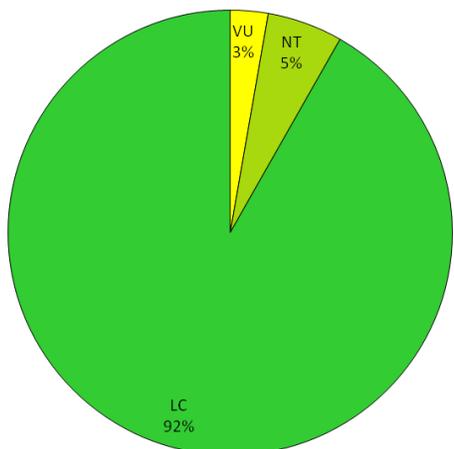
Threats at European level



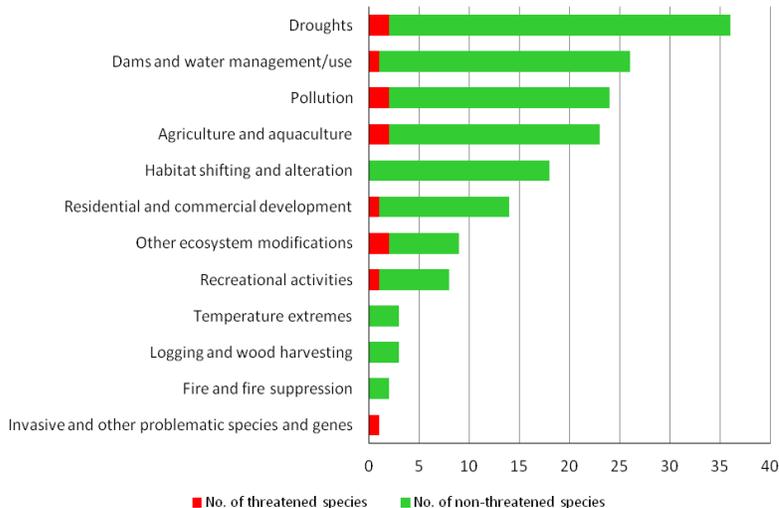
Dragonflies

Fifty-three percent of all the dragonflies in Europe are present in Slovakia. In Slovakia, 3%* of dragonfly species are considered threatened and 5% are classified as Near 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



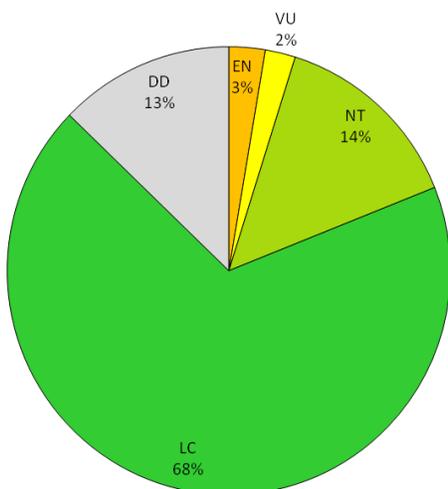
Threats at European level



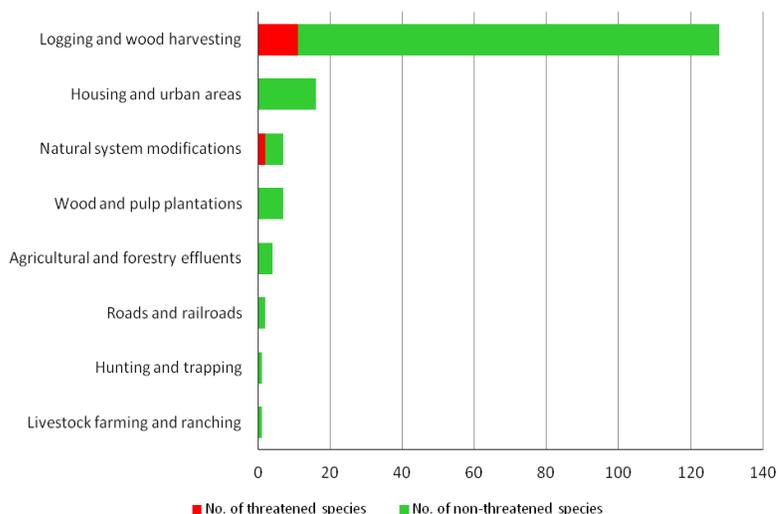
Saproxylic beetles

Fifty-three percent of the beetle species assessed by the European Red List are present in Slovakia. Approximately 6%* of the species in this group are considered threatened at the European level, which is less than half of the percentage of threatened saproxylic beetle species in Europe and none of the species in this group are Critically Endangered. Slovakia is also an area of high species richness. The species in this group are 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



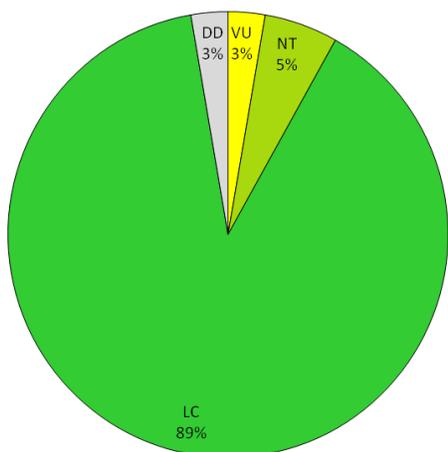
Threats at European level



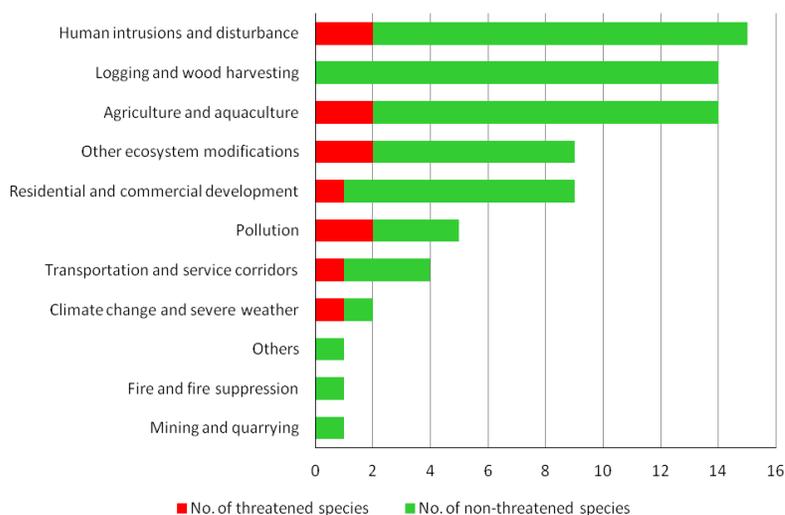
Terrestrial molluscs

Three percent* of the terrestrial molluscs assessed that are present in Slovakia are threatened and 5% are Near Threatened at the European level. The major threat to this group at the European level is continuous destruction of suitable habitat caused by human intrusions for recreational activities. Logging and wood harvesting, agricultural expansion and intensification and natural ecosystem management also pose threats to this group.

Status at European level



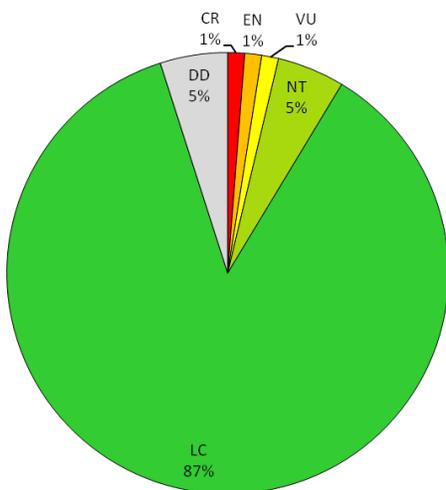
Threats at European level



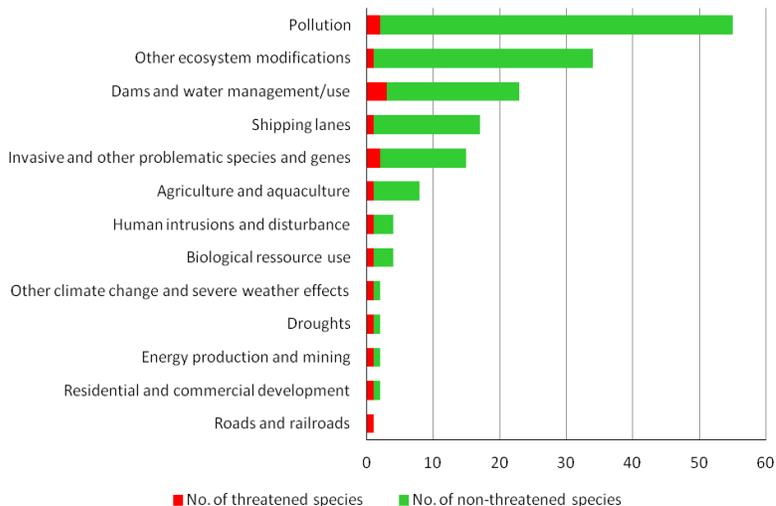
Freshwater molluscs

Four percent* of the freshwater molluscs assessed that are present in Slovakia are threatened and 5% are Near Threatened at the European level. Declining water quality in freshwater rivers and lakes caused by agricultural activities is the main threat to this group at the European level. Natural system modification, shipping lanes and abstraction of water from underground or from the streams and rivers themselves are also main threats to this group.

Status at European level



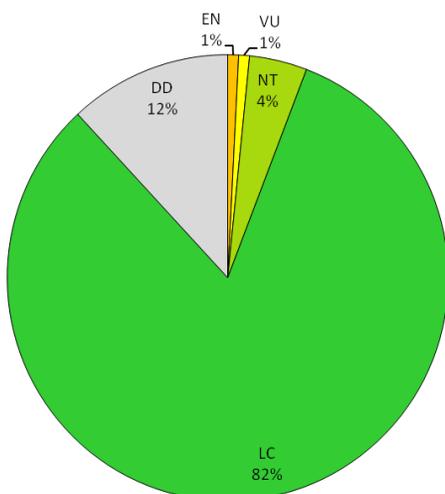
Threats at European level



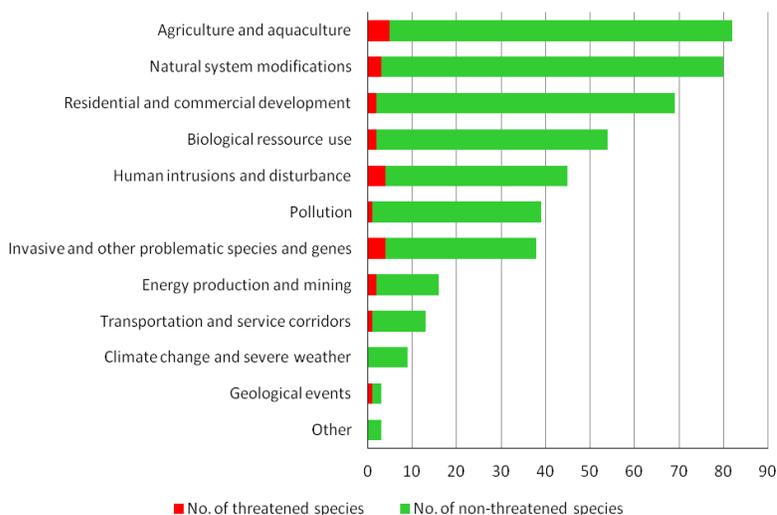
Vascular plants

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 378 species are found in Slovakia, which represent 21% of the total of species assessed in Europe. Two percent* of the 378 vascular plant species assessed in Slovakia are considered threatened at the European level. For terrestrial plants, urbanization and harvesting have the worst impacts. For aquatic species, direct habitat loss caused by natural system modification and agricultural expansion and intensification 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 Attila Molnár (*Epipactis tallosii*)

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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.