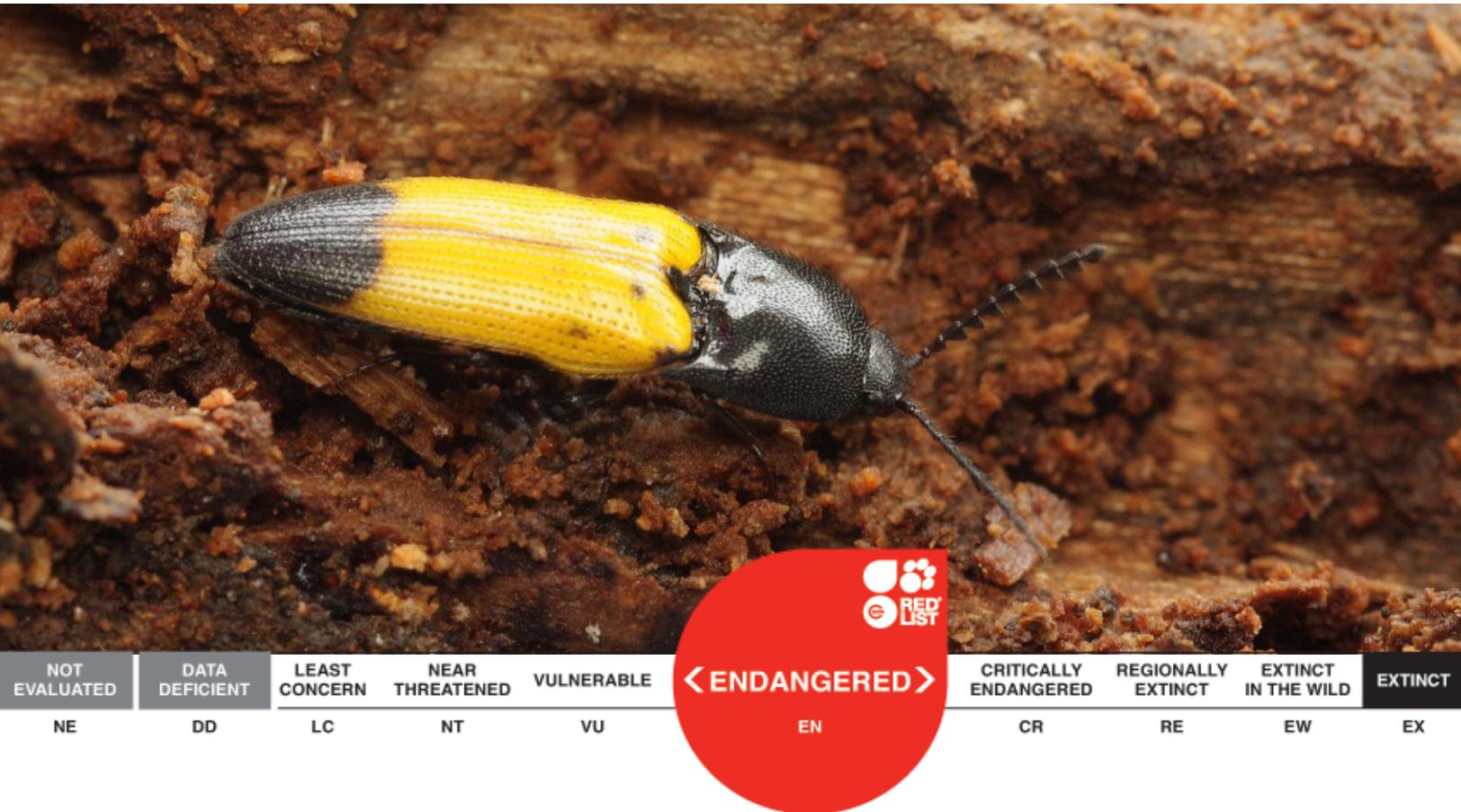


Hungary's biodiversity at risk

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

Hungary 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 Hungary 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. Hungary 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 Hungary 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 Hungary 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.

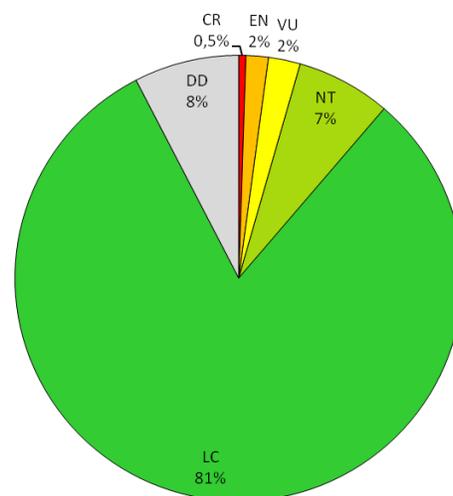
Conservation status

Hungary is host to an estimated 53,000 species of animals and plants. This number represents 34% of the total species described for Europe and could represent more than 3% 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 Hungary. For some of the taxonomic groups, the percentages of European species that occur in Hungary are particularly high; such as saproxylic beetles, dragonflies, and butterflies.

Of the 1,173 species assessed that occur in Hungary, 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 5%* 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 Hungary are found mostly in wetlands, forests and grasslands. These ecosystems require particular attention in order to ensure the habitats of these sensitive species remain.

European status of species in Hungary



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 Hungary	% of European sp. occurring in Hungary	No. of threatened sp. in Hungary (status at European level)		
				CR	EN	VU
Mammals	233	76	33%	1	0	4
Reptiles	140	14	10%	0	0	1
Amphibians	83	18	22%	0	0	0
Freshwater fishes	522	66	13%	3	2	4
Butterflies	435	156	36%	0	4	5
Dragonflies	137	65	47%	0	0	2
Saproxylic beetles**	431	206	48%	0	5	3
Terrestrial molluscs**	1,233	73	6%	0	0	2
Freshwater molluscs	854	80	9%	1	2	3
Vascular plants**	1,826	419	23%	1	6	3
TOTAL	5,894	1,173	20%	6	19	27

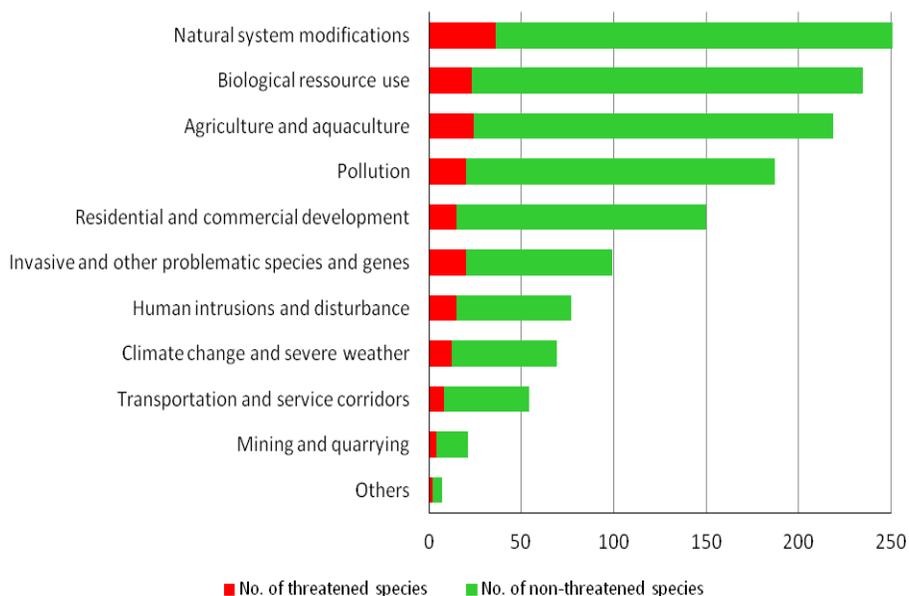
**Not comprehensively assessed, selected species only.

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 Hungary. For freshwater species, major threats include the over-extraction of water, pollution caused by agricultural and forestry effluents and expansion and intensification of agricultural activities. Other major threats come from farming and ranching, habitat degradation caused by inappropriate ecosystem management and invasive and other problematic species both native and non-native.

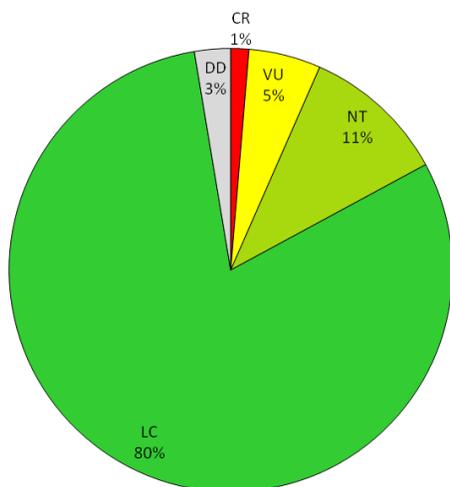
Major threats at the European level to species occurring in Hungary



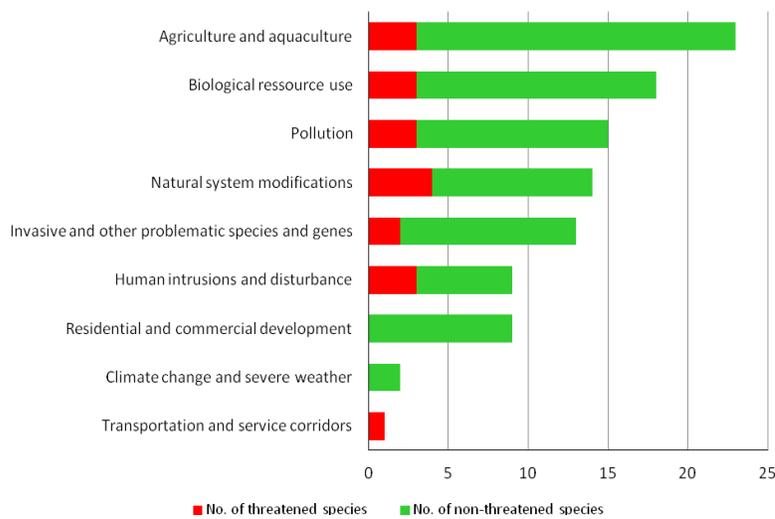
Mammals

Hungary hosts 33% of all the mammals that occur in Europe. Of these 76 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 Hungary are conversion of land due to agro-industry farming and pollution caused by agricultural and forestry effluents. Mammal populations are also highly threatened mainly by hunting, trapping, logging and wood harvesting and invasive and other problematic species.

Status at European level



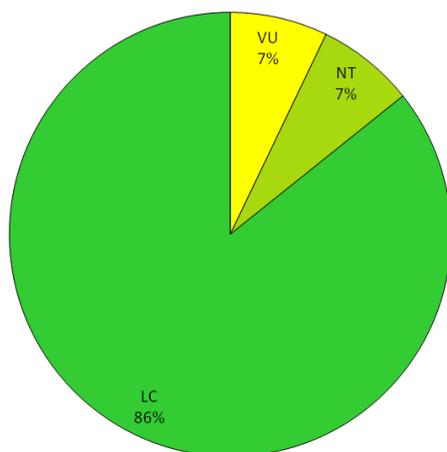
Threats at European level



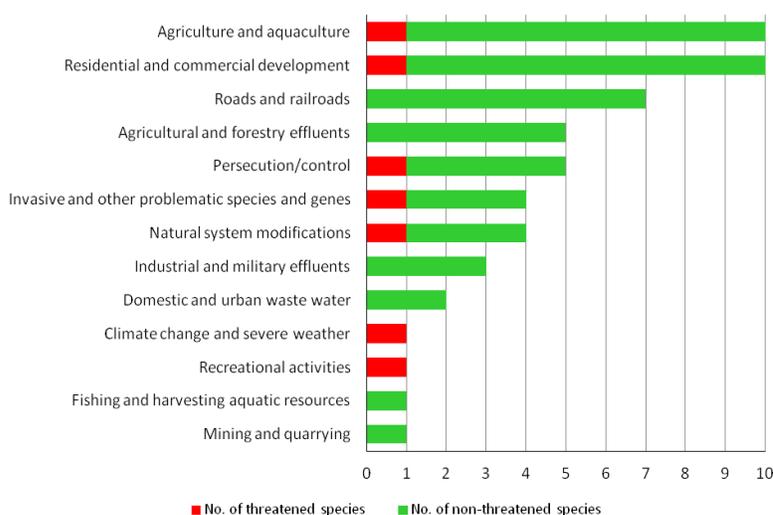
Reptiles

Reptile species in Hungary represent 10% of all the reptiles in Europe. Seven percent* of the reptile species that occur in Hungary 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. It is also interesting to note that at least 36% of the reptile species in Hungary may be threatened by human persecution and control, especially snakes and vipers.

Status at European level



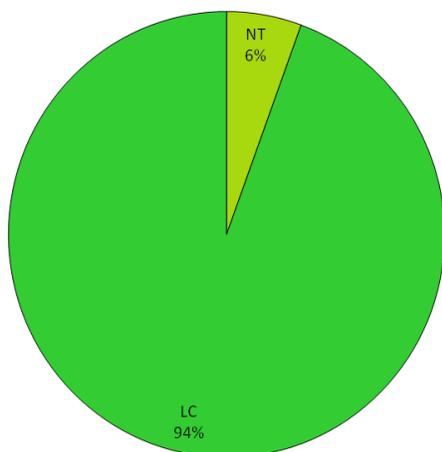
Threats at European level



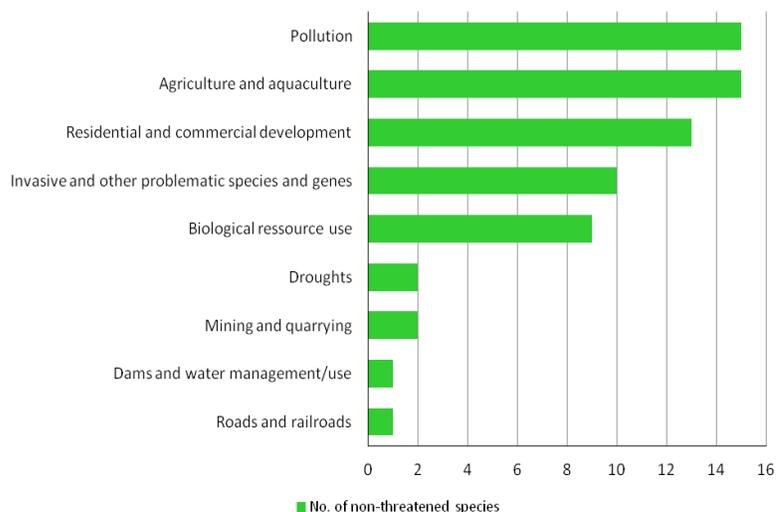
Amphibians

Amphibians in Hungary represent 22% of all amphibians occurring in Europe. The conservation status of amphibians in Hungary based on the European Red List data is relatively good since approximately 94% of the species are classified as Least Concern. 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 caused by agricultural and forestry effluents.

Status at European level



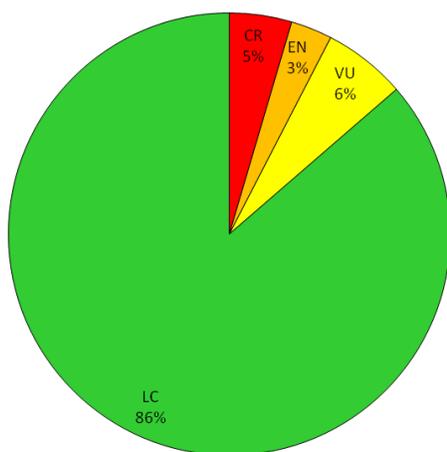
Threats at European level



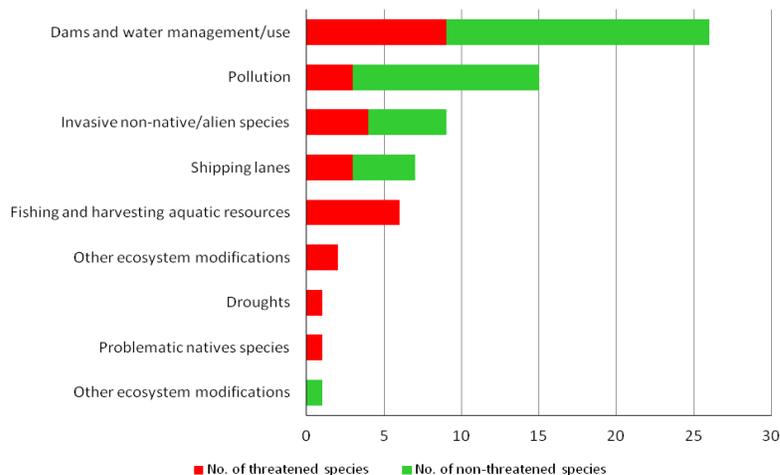
Freshwater fishes

Freshwater fishes are one of the most threatened groups at the European level. Fourteen percent* of the species that occur in Hungary 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 characteristic of freshwater rivers due to dam construction. Pollution caused by agricultural and forestry effluents and invasive non native species also pose threats to this group.

Status at European level



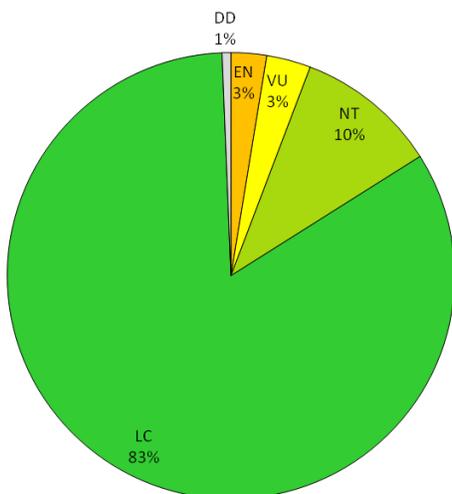
Threats at European level



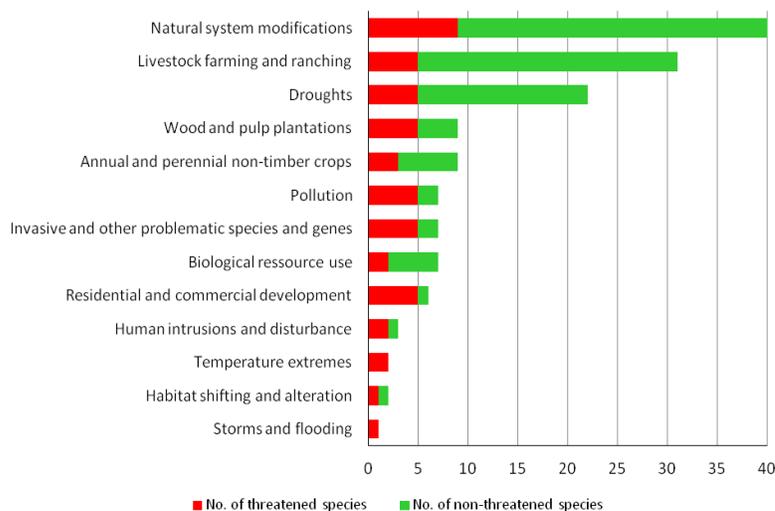
Butterflies

Hungary hosts 36% of all butterfly species in Europe and 6%* of them are considered threatened at the European level. The mountainous areas of Hungary have a rich variety of butterfly species as well as a high number of endemic species. The conservation status of butterflies in Hungary 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



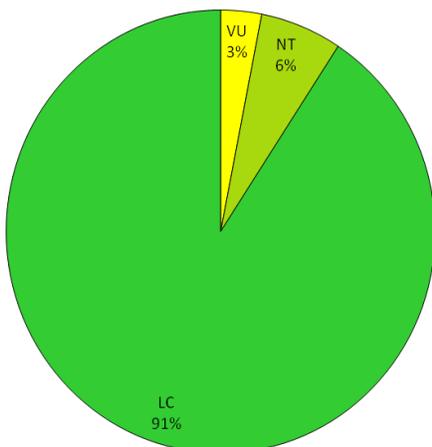
Threats at European level



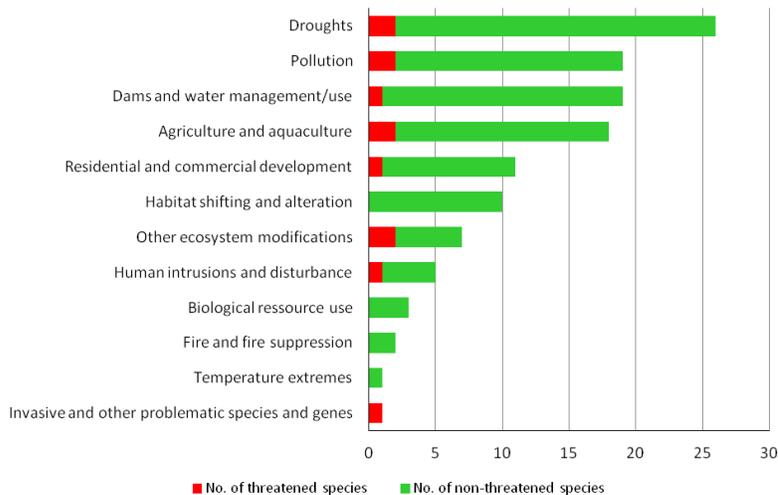
Dragonflies

Forty-seven percent of all the dragonflies in Europe are present in Hungary. Three percent* of dragonfly species that occur in Hungary are considered threatened and 6% 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 construction of dams and reservoirs and water quality deterioration caused by agricultural and forestry effluents.

Status at European level



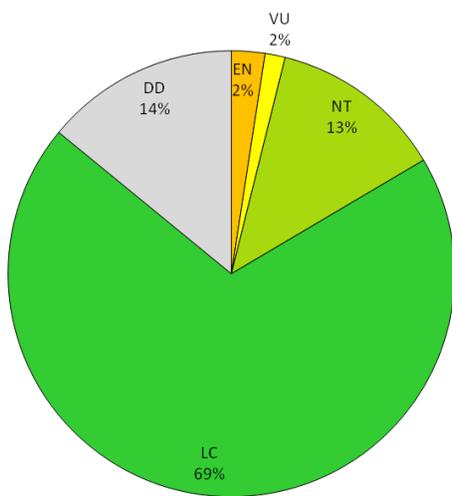
Threats at European level



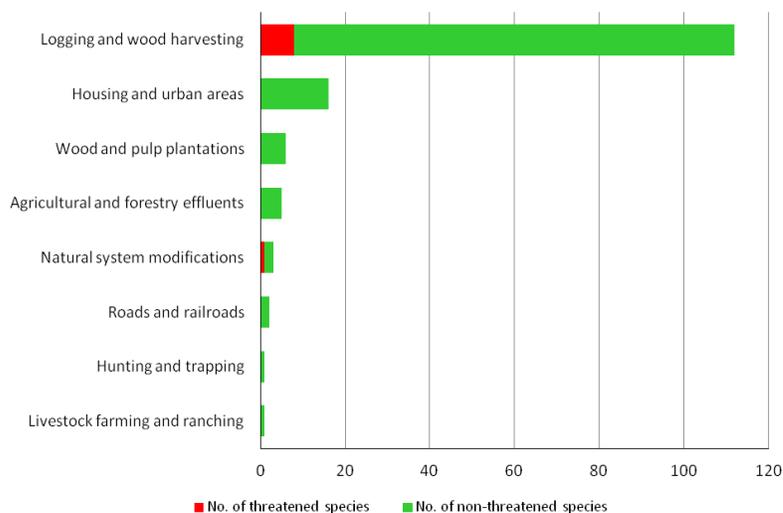
Saproxylic beetles

Forty-eight percent of the beetle species assessed by the European Red List are present in Hungary. Approximately 5%* 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. None of the species are Critically Endangered and 13% of them are considered as Near Threatened at the European level. 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



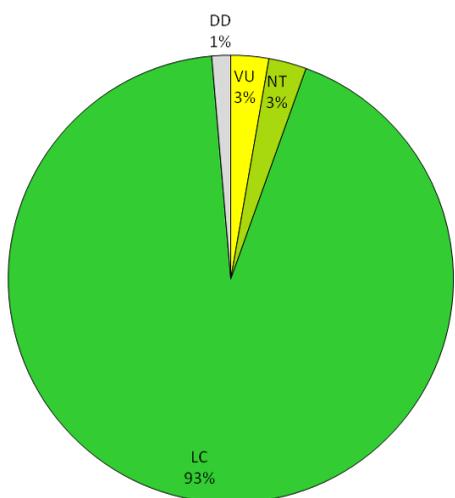
Threats at European level



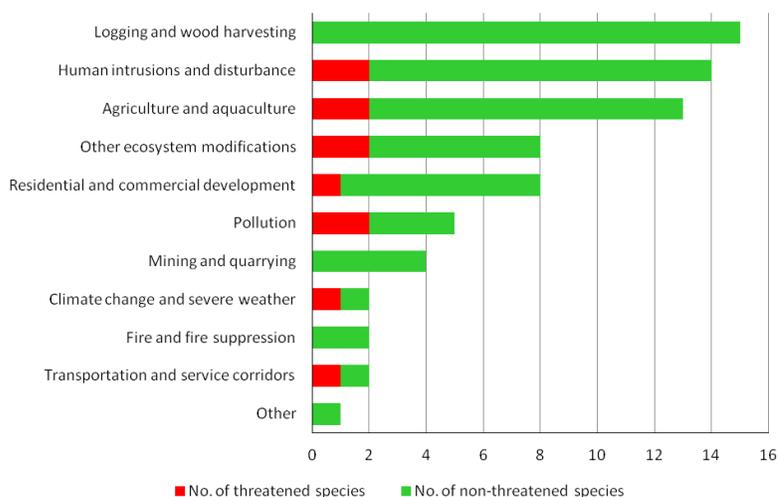
Terrestrial molluscs

Three percent* of the terrestrial molluscs assessed that are present in Hungary are threatened and 3% are Near Threatened at the European level. The major threat to this group at the European level is habitat loss due to logging and wood harvesting. Habitat degradation due to human intrusions for recreational activities, agricultural expansion and inappropriate ecosystem management also pose threats to this group.

Status at European level



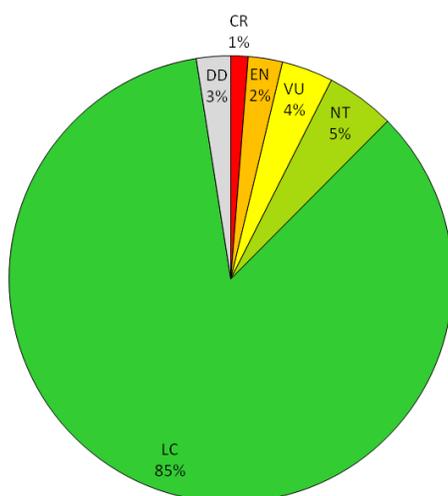
Threats at European level



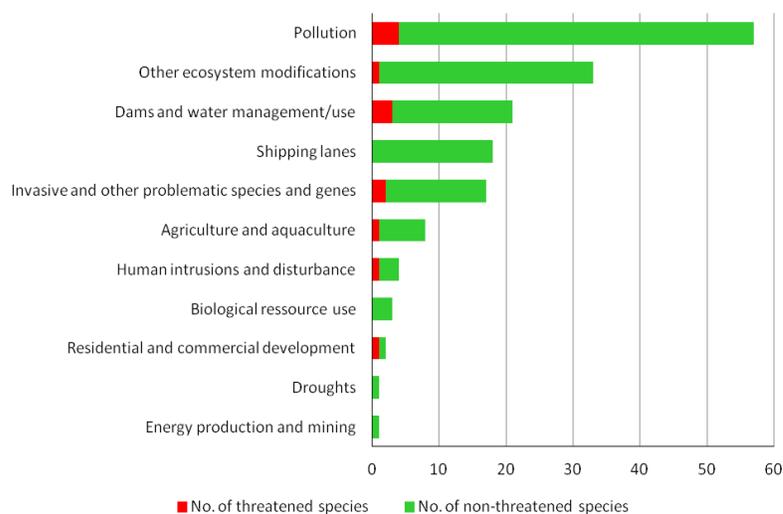
Freshwater molluscs

Eight percent* of freshwater molluscs assessed that are present in Hungary are threatened at the European level. Declining water quality in freshwater rivers and lakes caused by agricultural and forestry effluents is the main threat to this group at the European level. Water abstraction and habitat degradation caused by transport in freshwater waterways are also one of the major threats at the European level.

Status at European level



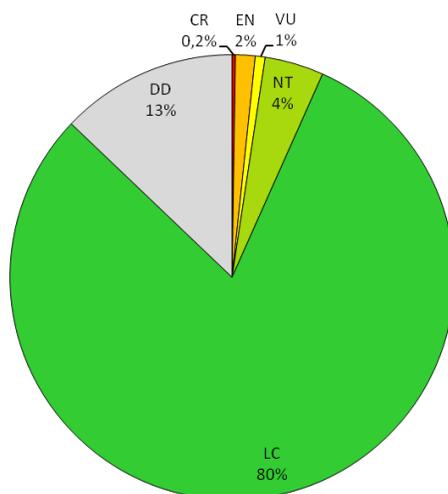
Threats at European level



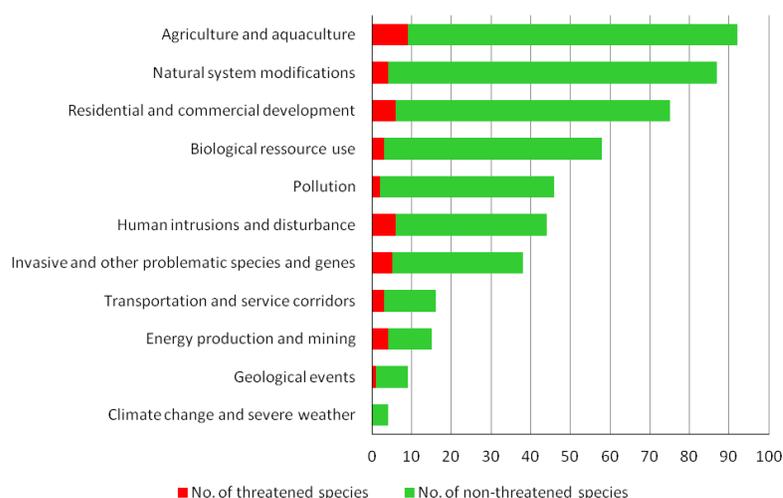
Vascular plants

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 419 species are found in Hungary, which represent 23% of the total of species assessed in Europe. A high concentration of threatened species can be found in the Pannonian Plain in Hungary. Three percent* of the 419 vascular plant species assessed in Hungary are considered threatened at the European level. For terrestrial plants, habitat loss and degradation due to agricultural expansion and intensification have the worst impacts. For aquatic species, direct habitat loss caused by natural or semi-natural ecosystems “management” and agricultural expansion and intensification are the main threats.

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 Nicolas Goux and Hervé Brustel (*Ampedus quadrisignatus*)

REFERENCES

- Bilz, M., Kell, S. P., Maxted, N. and Lansdown, R.V. 2011. *European Red List of Vascular Plants*. Publications Office of the European Union, Luxembourg.
- Cox, N.A. and Temple, H.J. 2009. *European Red List of Reptiles*. Office for Official Publications of the European Communities, Luxembourg.
- Cuttelod, A., Sheddon, M and E. Neubert. 2011. *European Red List of Non-marine Molluscs*. Publications Office of the European Union, Luxembourg.
- Freyhof, J. and Brooks, E. 2011. *European Red List of Freshwater Fishes*. Publications Office of the European Union, Luxembourg.
- Kalkman, V.J., Boudot, J-P., Bernard, R., Conze, K-J., De Knijf, G., Dyatlova, E., Ferreira, S., Jović, M., Ott, J., Riservato, E. and Sahlén, G. 2010. *European Red List of Dragonflies*. Office for Official Publications of the European Communities, Luxembourg.
- Nieto, A and Alexander, K.N.A. 2009 *European Red List of Saproxyllic Beetles*. Office for Official Publications of the European Communities, Luxembourg.
- van Swaay, C., Cuttelod, A., Collins, S., Maes, D., López Manguira, M., Šašić, M., Settele, J., Verovnik, R., Verstrael, T., Warren, M., Wiemers, M. and Wynhoff, I. 2010. *European Red List of Butterflies*. Office for Official Publications of the European Communities, Luxembourg.
- Temple, H.J. and Terry, A. 2009. *The status and distribution of European mammals*. Office for Official Publications of the European Communities, Luxembourg.
- Temple, H.J. and Cox, N.A. 2009. *European Red List of Amphibians*. Office for Official Publications of the European Communities, Luxembourg.

*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.