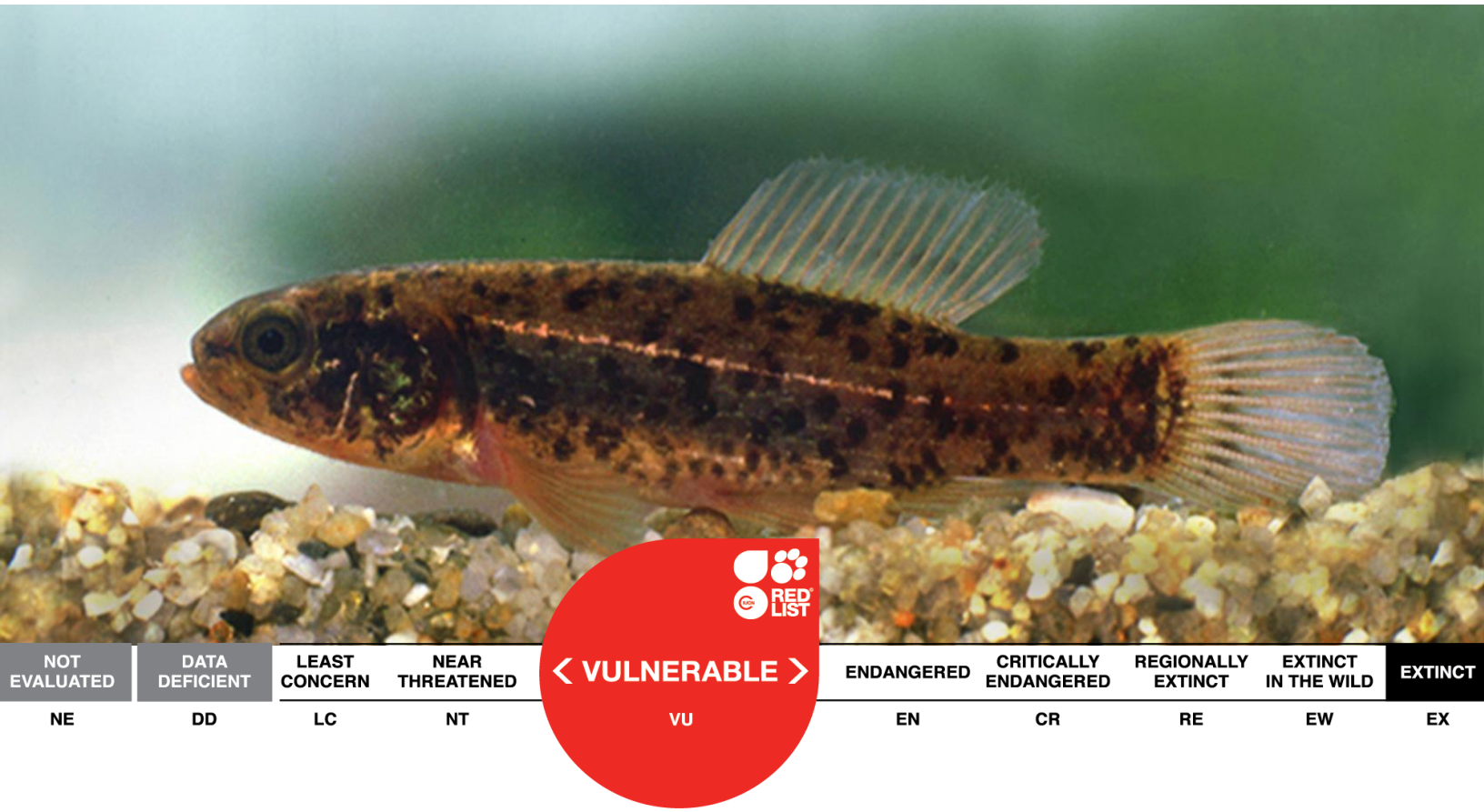
Austria’s biodiversity at risk

A call for action



Austria hosts a significant 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 Austria 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. Austria 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 Austria 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 Austria 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 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.

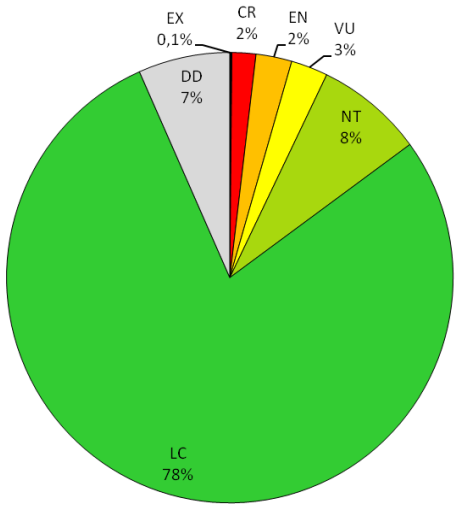
Conservation status

Austria is host to an estimated 67,000 species of animals and plants. This number represents 43% of the total species described for Europe and could represent more than 4% of the species in the world. According to the table below, approximately 24% of the species assessed by the European Red List of Species are present in Austria. For some of the taxonomic groups, the percentages of European species that occur in Austria are particularly high; such as dragonflies, saproxylic beetles and butterflies.

Of the 1,386 species assessed that occur in Austria, 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 about 8%* are considered threatened and almost 8% are Near Threatened at the European level, and two species are already Extinct. 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 Austria 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 Austria



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

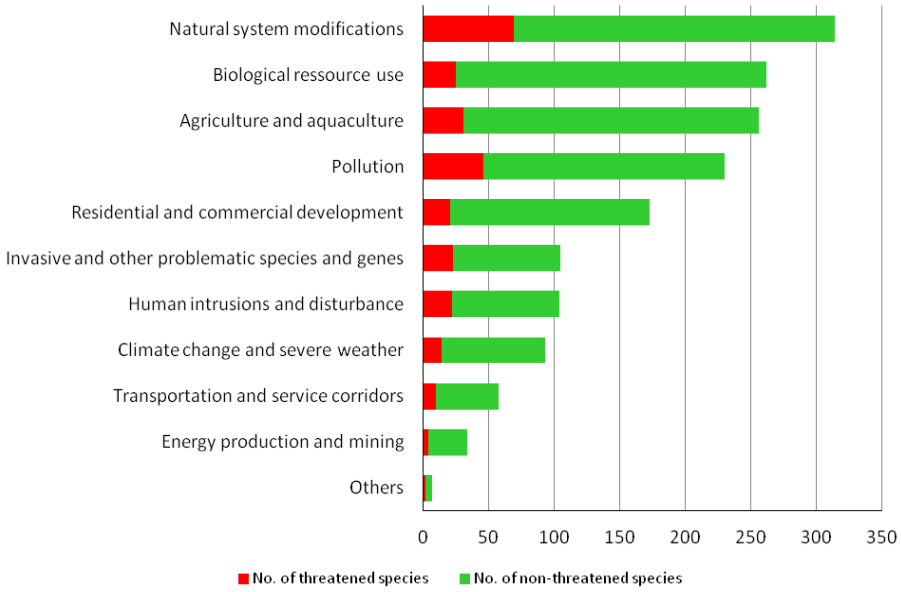
Species group	No. of sp. in Europe	No. of sp. in Austria	% of European sp. occurring in Austria	No. of threatened sp. in Austria (status at European level)		
				CR	EN	VU
Mammals	233	87	37%	2	0	3
Reptiles	140	15	11%	0	0	1
Amphibians	83	20	24%	0	0	0
Freshwater fishes	522	73	14%	3	2	6
Butterflies	435	199	46%	0	4	7
Dragonflies	137	77	56%	0	0	3
Saproxylic beetles**	431	215	50%	0	6	4
Terrestrial molluscs**	1,233	130	11%	1	4	3
Freshwater molluscs	854	122	14%	18	13	7
Vascular plants**	1,826	448	25%	0	7	3
TOTAL	**5,894**	**1,386**	**24%**	**24**	**36**	**37**

**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 Austria. For freshwater species, major threats include the over-extraction of water, which in many cases is further exacerbated by increasing droughts due to climate change, pollution and the introduction of alien species. Other major threats come from consumptive use of biological resources, farming and ranching as a result of agricultural expansion and intensification, and urbanization and tourism.

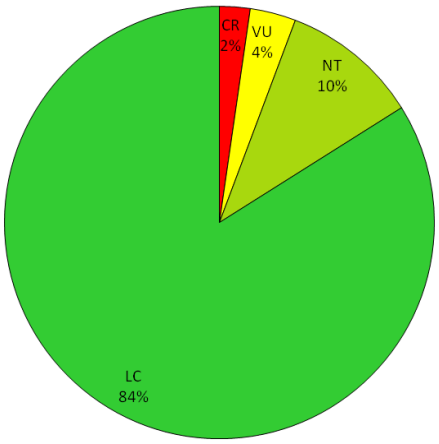
Major threats at the European level to species occurring in Austria



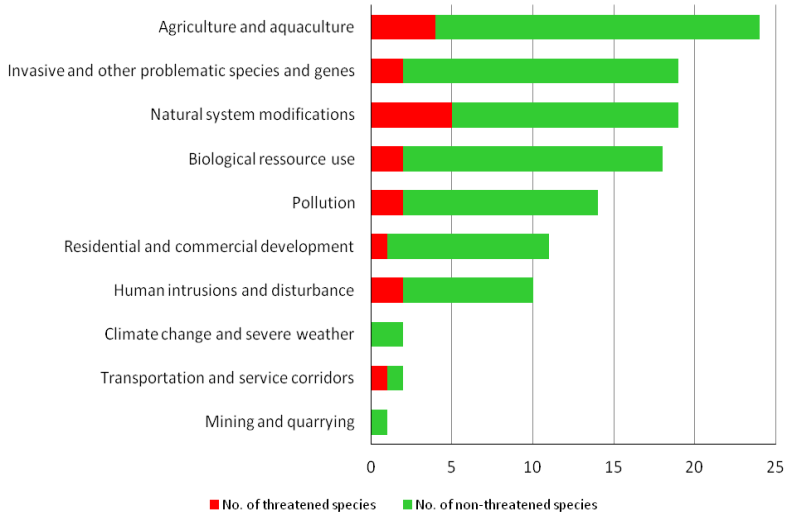
Mammals

Austria hosts 37% of all the mammals that occur in Europe. Of these 87 species of mammals, 6%* are threatened and at least an additional 10% are considered Near Threatened at the European level. The major threats at the European level that can possibly (or potentially) affect mammals in Austria are habitat loss due to agricultural expansion and invasive and other problematic species, both native and non-native. Mammal populations are also highly threatened mainly by natural system modifications. The consumptive use of natural resources such as wood or animal products also poses serious threats to mammals in the country.

Status at European level



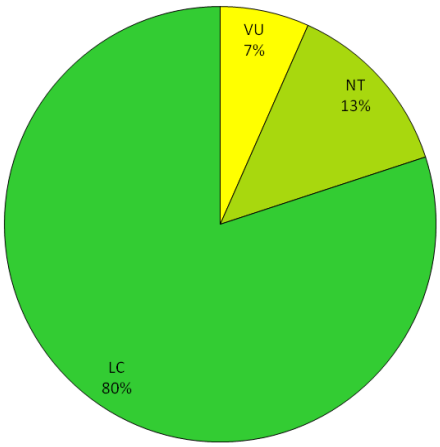
Threats at European level



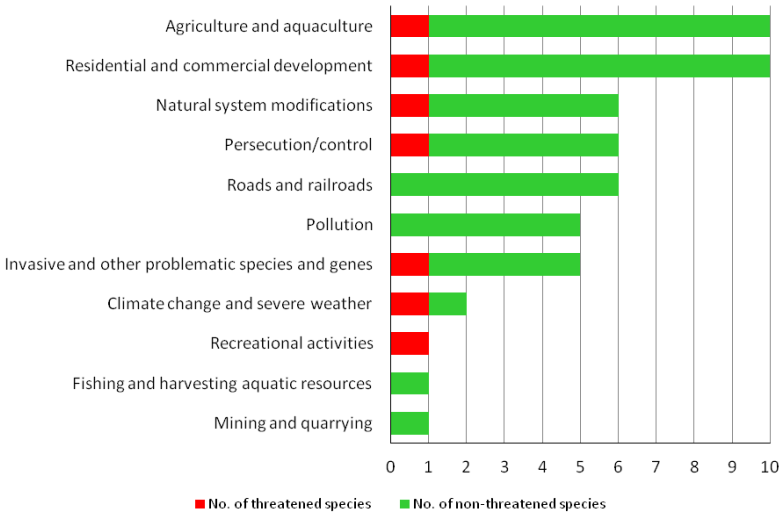
Reptiles

Reptile species in Austria represent 11% of all the reptiles in Europe. Seven percent* of the reptile species that occur in Austria 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 40% of the reptile species in Austria may be threatened by human persecution and control, especially snakes and vipers.

Status at European level



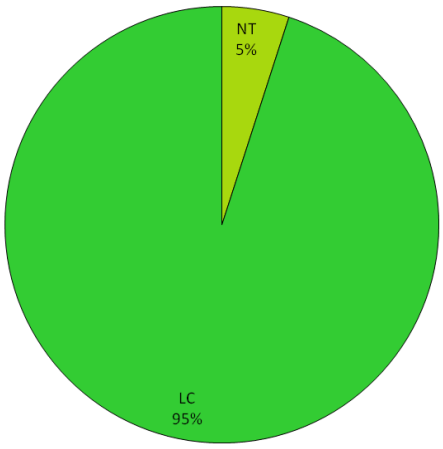
Threats at European level



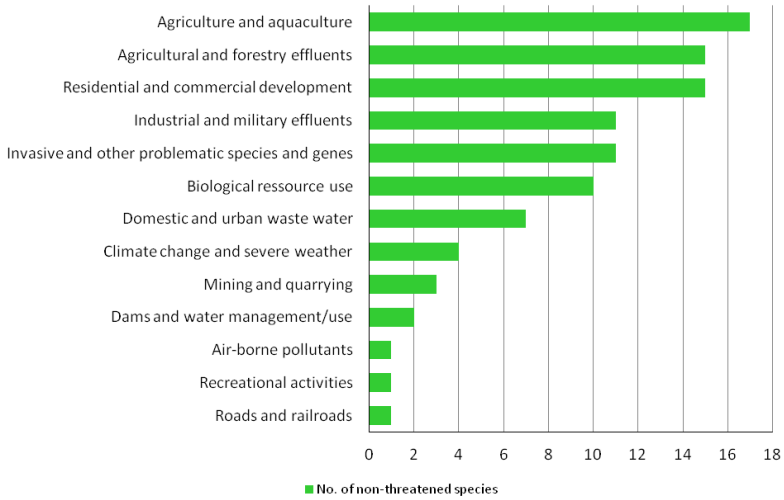
Amphibians

Amphibians in Austria represent 24% of all amphibians occurring in Europe. The conservation status of amphibians in Austria based on the European Red List data is relatively good since none of the species that occur in Austria are listed under a threatened category and only 5% of the species are Near Threatened 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 agricultural activities. Water pollution caused by agricultural and forestry effluents also cause serious problems to this group.

Status at European level



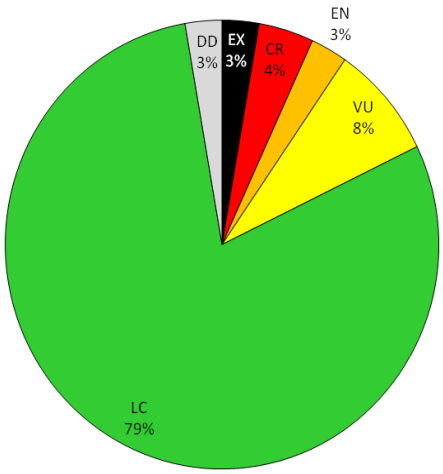
Threats at European level



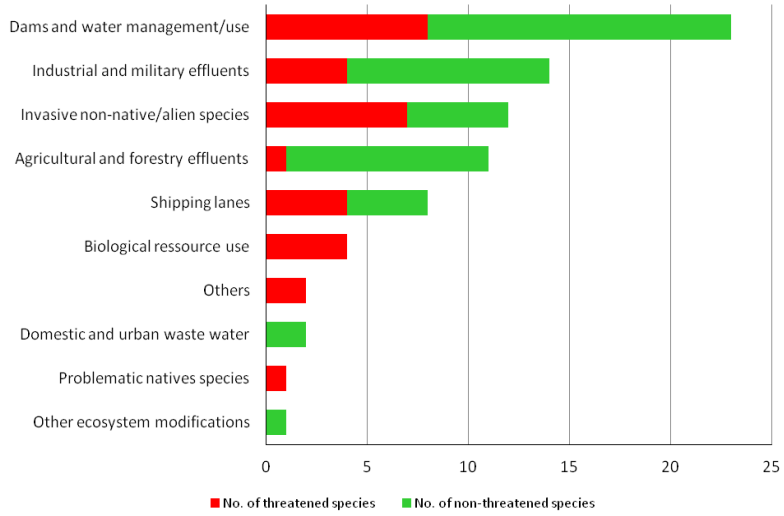
Freshwater fishes

Freshwater fishes are one of the most threatened groups at the European level and the second most threatened group in Austria. Sixteen percent* of the species that occur in Austria are threatened at the European level, and two species, *Coregonus gutturosus* and *Salvelinus profundus* have already gone Extinct. Additionally, freshwater fishes have a high percentage of endemism in the European region: up to 80%. The subalpine lakes in Austria are considered one of the most important hotspots for endemism in central Europe. The most important threats to this group at the European level are the abstraction of water from underground or from the streams and rivers themselves and water pollution caused by industrial and military effluents.

Status at European level



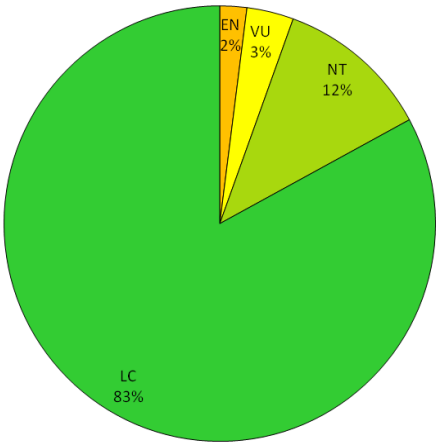
Threats at European level



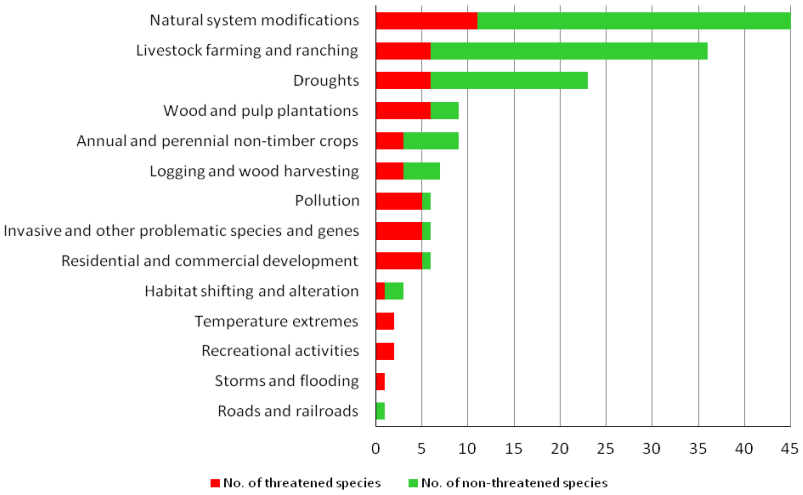
Butterflies

Austria hosts 46% of all butterfly species in Europe and approximately 6%* of them are considered threatened at the European level. In central Europe, most threatened species can be found in areas like eastern Austria. The conservation status of butterflies in Austria 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



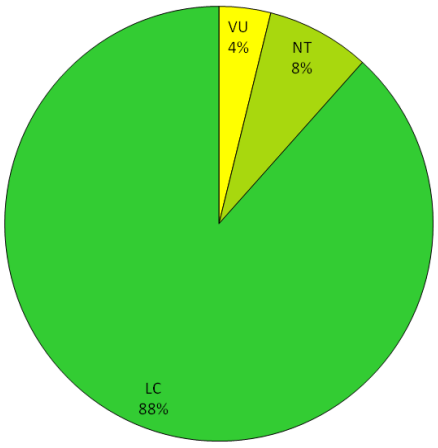
Threats at European level



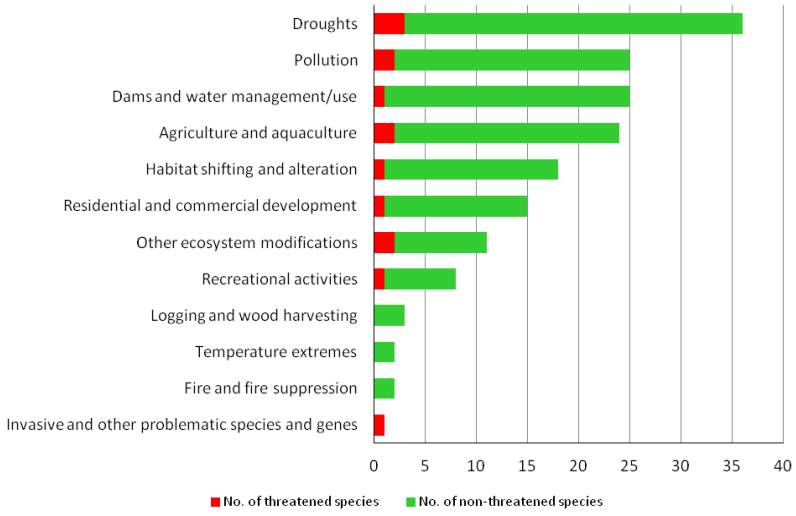
Dragonflies

Fifty-six percent of all the dragonflies in Europe are present in Austria. Four percent* of dragonfly species 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



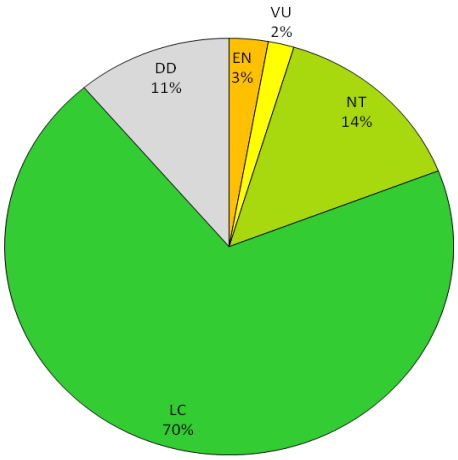
Threats at European level



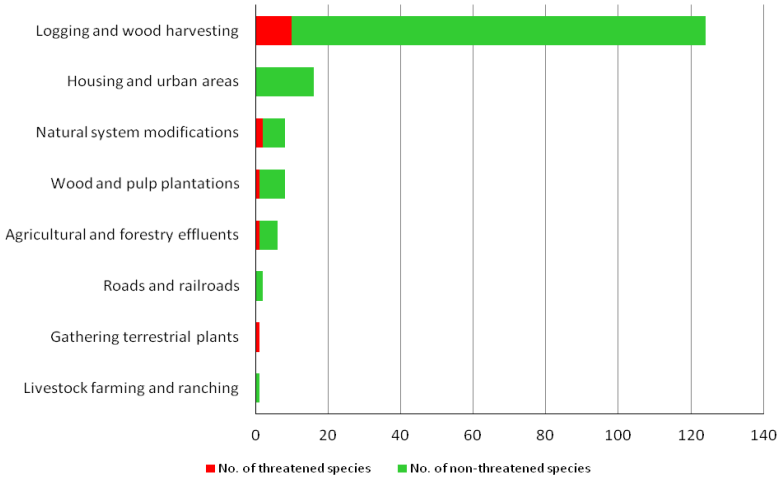
Saproxylic beetles

Fifty percent of the beetle species assessed by the European Red List are present in Austria. 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, and none of them are Critically Endangered. Fourteen percent of them are considered as Near Threatened at the European level. Saproxylic beetles 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



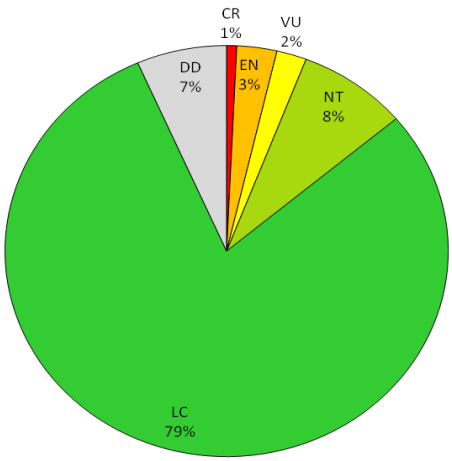
Threats at European level



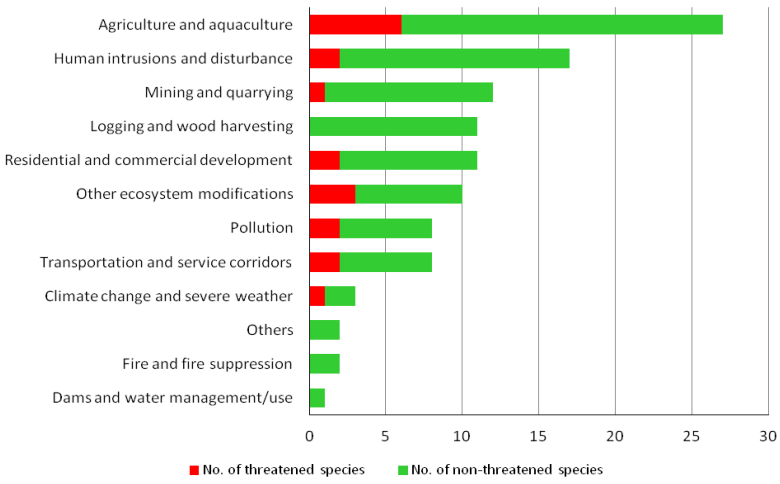
Terrestrial molluscs

Eleven percent of the terrestrial molluscs assessed by the European Red List are present in Austria. Seven percent* of the terrestrial molluscs assessed that occur in Austria are threatened at the European level. The major threat to this group at the European level is continuous destruction of suitable habitat from agriculture. Human intrusions and mineral extraction to provide construction material also pose serious problems.

Status at European level



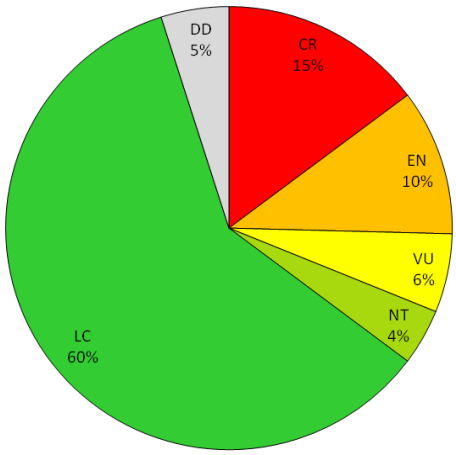
Threats at European level



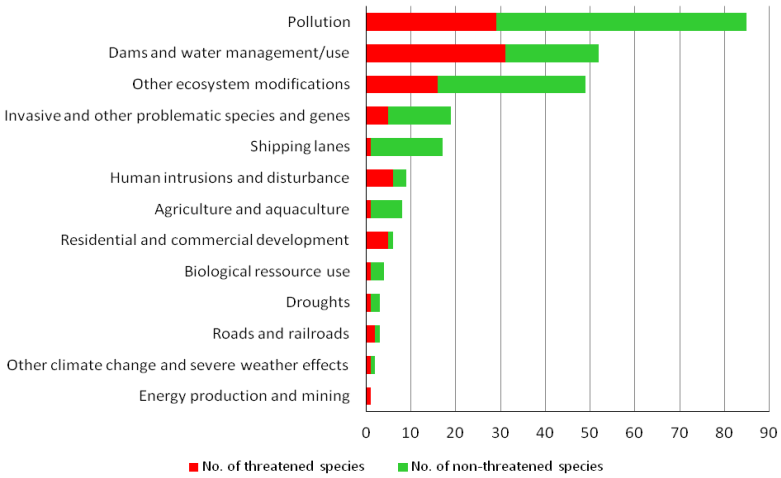
Freshwater molluscs

Thirty-three percent* of freshwater molluscs that occur in Austria are 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. Modification of the physical and chemical characteristics of freshwater rivers and lakes due to dam construction and water abstraction is also one of the major threats.

Status at European level



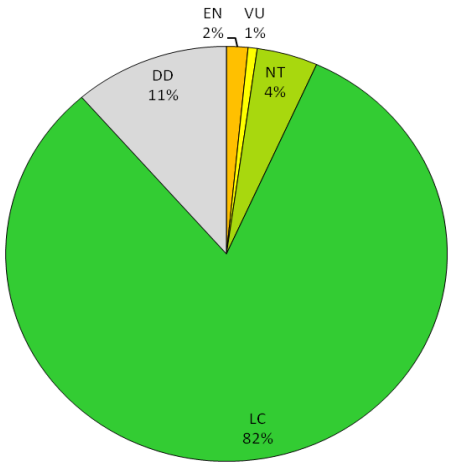
Threats at European level



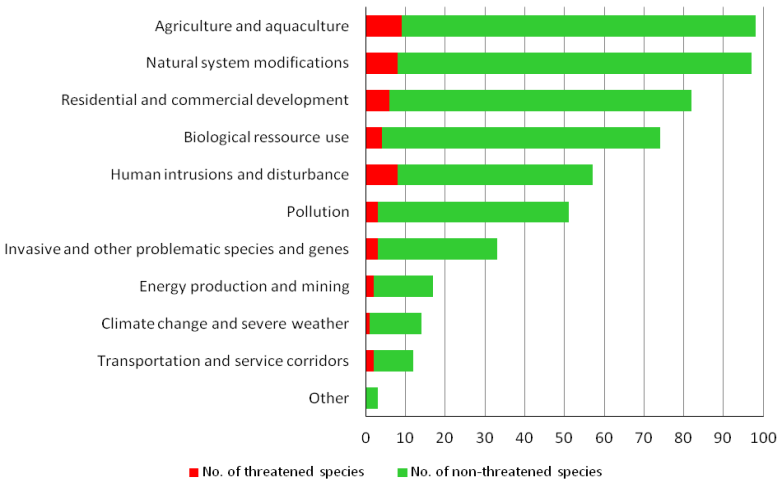
Vascular plants

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 448 species are found in Austria, which represent 25% of the total of species assessed in Europe. Austria is also one of the countries that have a high number of endemic species in Central Europe. Three percent* of the 448 vascular plant species assessed in Austria are considered threatened at the European level. For terrestrial plants, intensified livestock farming, especially intensive grazing activities and increasing urbanization 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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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 Saproxylic Beetles*. Office for Official Publications of the European Communities, Luxembourg.

van Swaay, C., Cuttelod, A., Collins, S., Maes, D., López Munguira, 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.