

Belgium'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

Belgium 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 Belgium 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. Belgium 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 Belgium 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 Belgium 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.

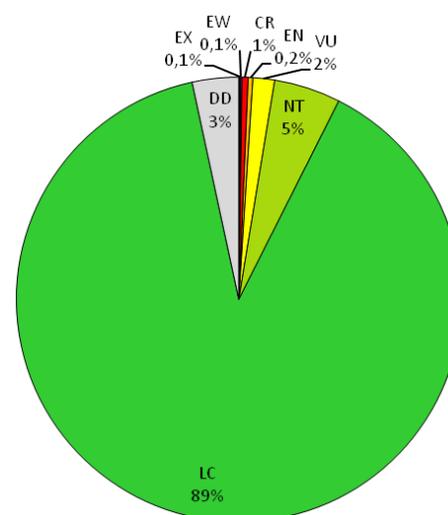
Conservation status

Belgium is host to an estimated 34,176 species of animals and plants. This number represents 22% 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 15% of the species assessed by the European Red List of Species are present in Belgium. For some of the taxonomic groups, the percentages of European species that occur in Belgium are particularly high; such as dragonflies, mammals and saproxylic beetles.

Of the 889 species assessed that occur in Belgium, the groups comprising the highest number of species are vascular plants and saproxylic beetles. Of the total number of species assessed in the country approximately 2%* are considered threatened and at least 5% are Near Threatened at the European level, one species is Extinct in the Wild and one species is 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 Belgium 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 Belgium



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 Belgium	% of European sp. occurring in Belgium	No. of threatened sp. in Belgium (status at European level)		
				CR	EN	VU
Mammals	233	69	30%	1	0	4
Reptiles	140	7	5%	0	0	0
Amphibians	83	16	19%	0	0	0
Freshwater fishes	522	48	9%	1	0	0
Butterflies	435	93	21%	0	2	5
Dragonflies	137	66	48%	0	0	1
Saproxylic beetles**	431	116	27%	0	0	1
Terrestrial molluscs**	1,233	57	5%	0	1	2
Freshwater molluscs	854	74	9%	2	0	1
Vascular plants**	1,826	343	19%	0	0	0
TOTAL	5,894	889	15%	4	3	14

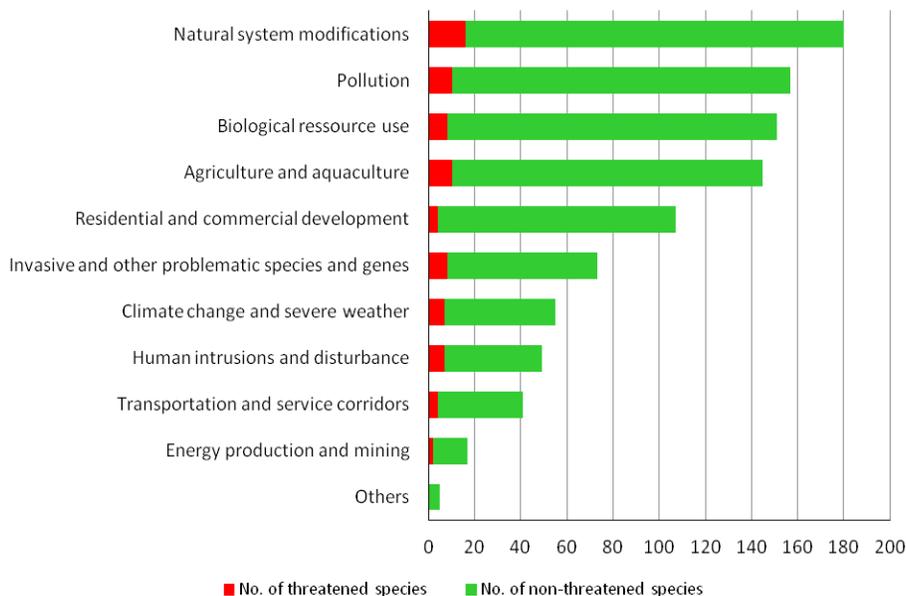
**Not comprehensively assessed, selected species only.

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 Belgium. 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 the consumptive use of natural resources, and farming and ranching as a result of agricultural expansion and intensification, urbanization and tourism.

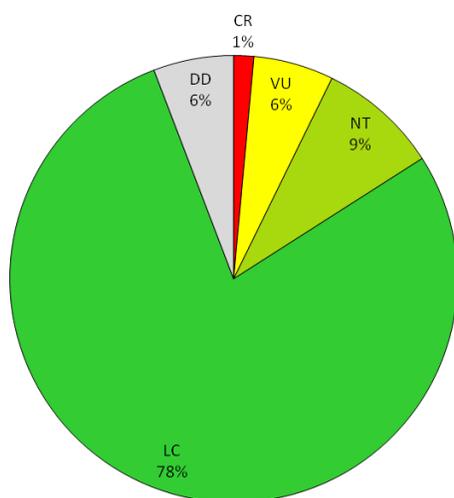
Major threats at the European level to species occurring in Belgium



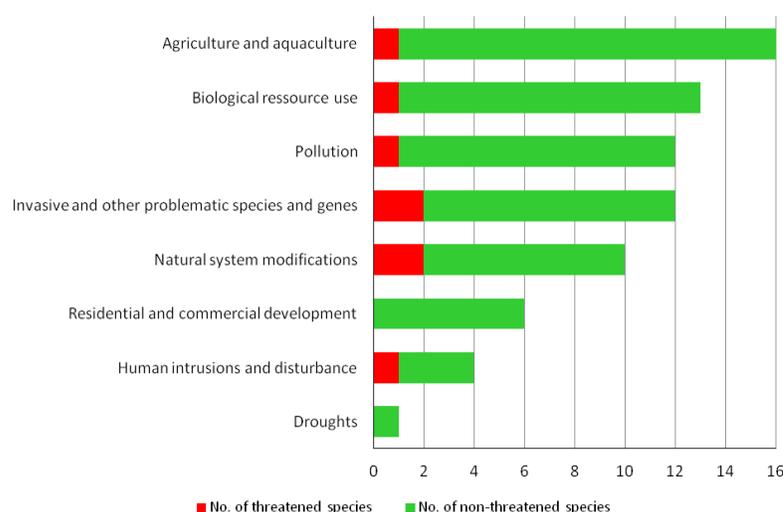
Mammals

Belgium hosts 30% of all the mammals that occur in Europe. Of these 69 species of mammals, 8%* are threatened at the European level and at least an additional 9% are considered Near Threatened. The major threats at the European level that can possibly (or potentially) affect mammals in Belgium are agricultural expansion and intensification as well as hunting, trapping, logging and wood harvesting. Invasive and other problematic species, both native and non-native also pose serious threats to mammals in the country.

Status at European level



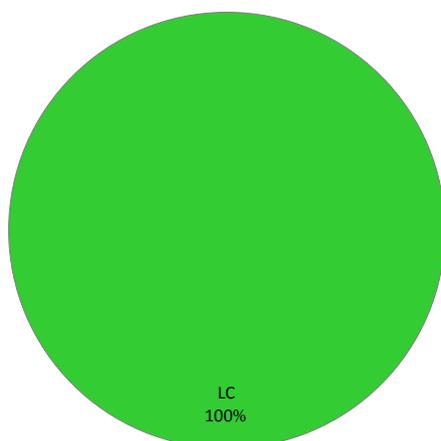
Threats at European level



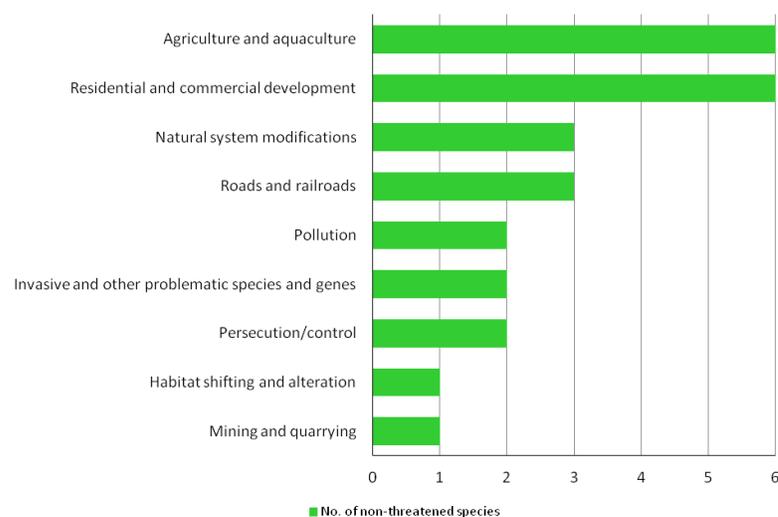
Reptiles

Reptile species in Belgium represent 5% of all the reptiles in Europe. The conservation status of reptiles in Belgium based on the European Red List data is relatively good since none of them are considered threatened and all are classified as Least Concern 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 29% of the reptile species in Belgium may be threatened by human persecution and control, especially snakes and vipers.

Status at European level



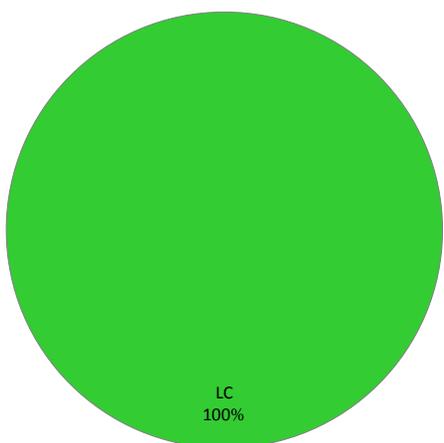
Threats at European level



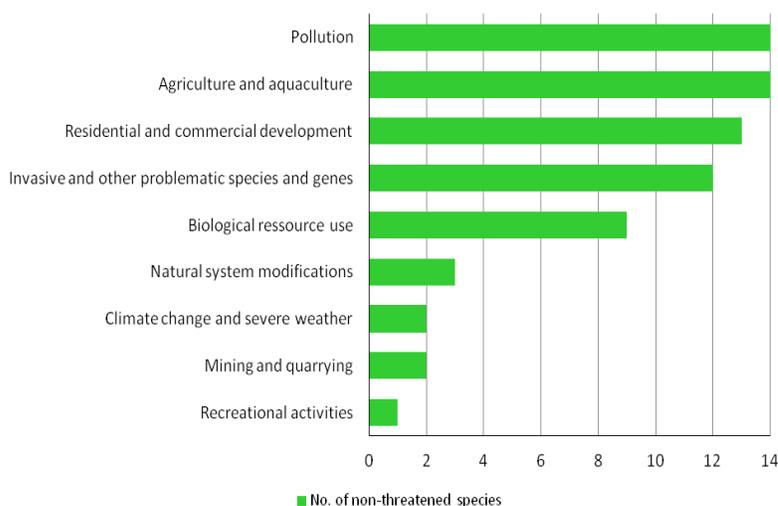
Amphibians

Amphibians in Belgium represent 19% of all amphibians occurring in Europe. The conservation status of amphibians in Belgium based on the European Red List data is relatively good since none of them are considered threatened and all are classified as Least Concern at the European level. The main threat to this group at the European level is water quality deterioration due to agricultural and forestry effluents. Habitat loss, fragmentation and degradation especially caused by agricultural intensification and urbanization are also threats to this group.

Status at European level



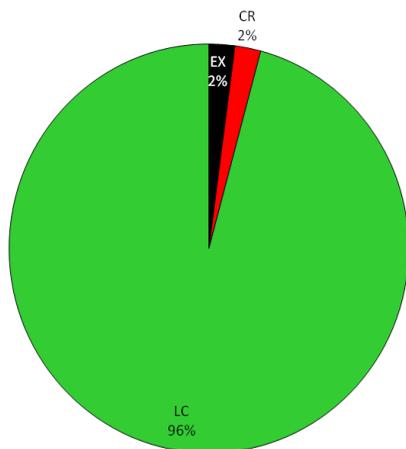
Threats at European level



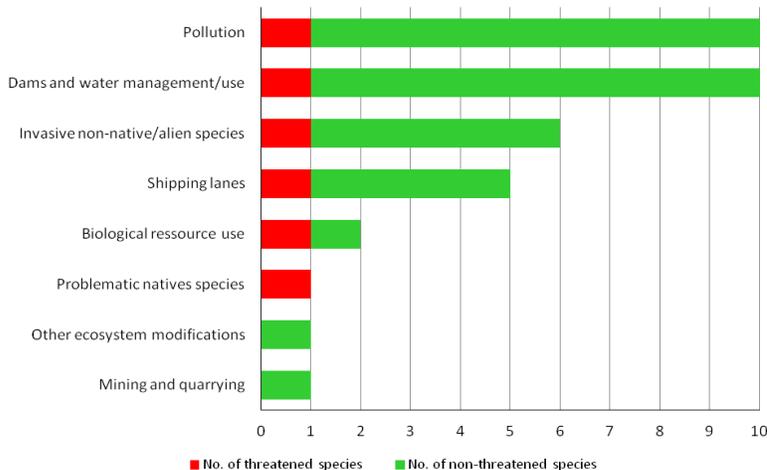
Freshwater fishes

Freshwater fishes are one of the most threatened groups at the European level. Two percent* of the species assessed in Belgium are considered threatened at the European level and one species, *Coregonus oxyrinchus*, has already gone Extinct. The most important threat to this group at the European level is the change of water flow patterns due to dam construction and operation and the abstraction of water from underground or from the streams and rivers themselves. Declining water quality in freshwater rivers caused by agricultural and forestry effluents also pose serious problems to freshwater fishes in the country.

Status at European level



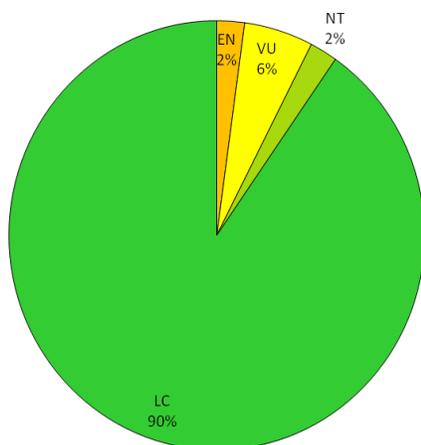
Threats at European level



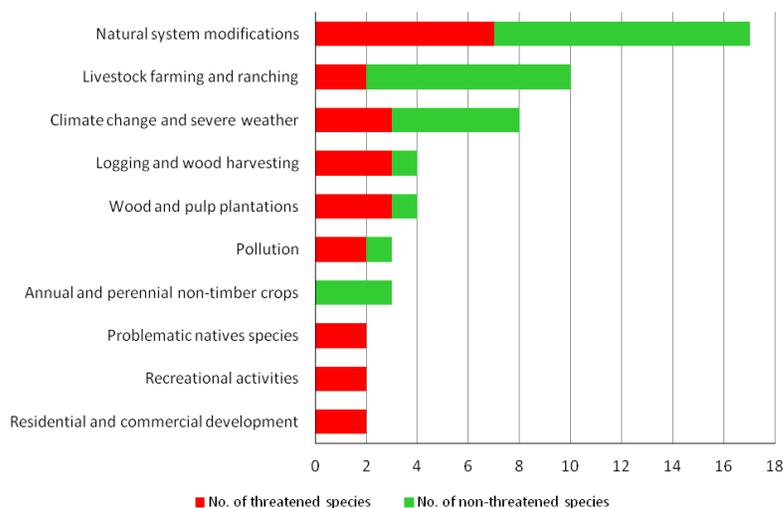
Butterflies

Belgium hosts 21% of all butterfly species in Europe and 8%* of them are considered threatened at the European level. The conservation status of butterflies in Belgium based on the European Red List is good since approximately 90% 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



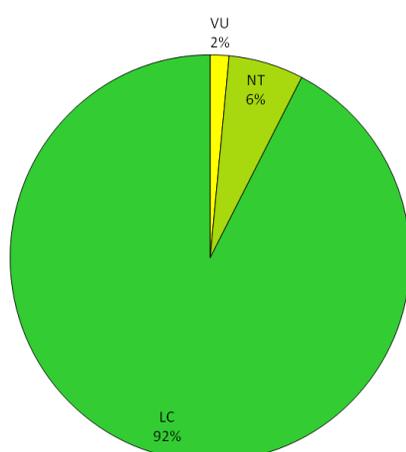
Threats at European level



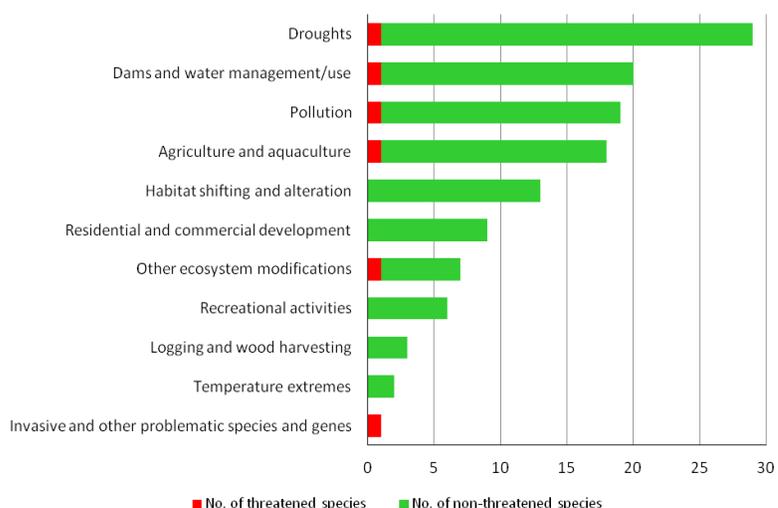
Dragonflies

Forty-eight percent of all the dragonflies in Europe are present in Belgium. Two percent* of dragonfly species are considered threatened and 92% are classified as Least Concern 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



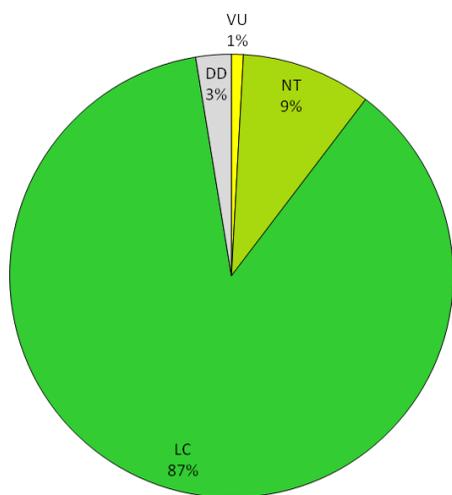
Threats at European level



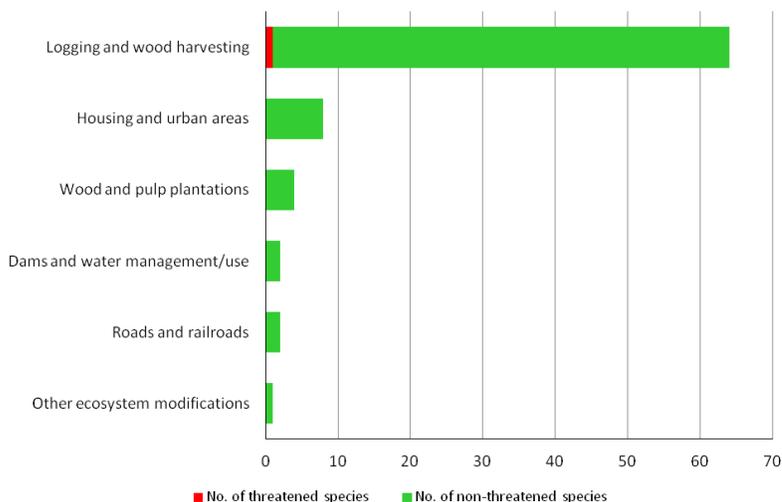
Saproxylic beetles

Twenty-seven percent of the beetle species assessed by the European Red List are present in Belgium. Approximately 1%* of the species in this group is considered threatened and 87% are classified as Least Concern 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



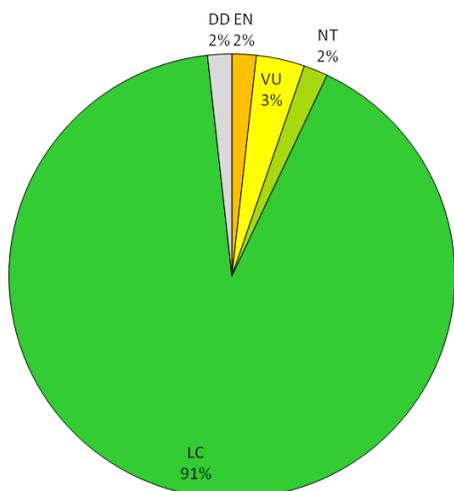
Threats at European level



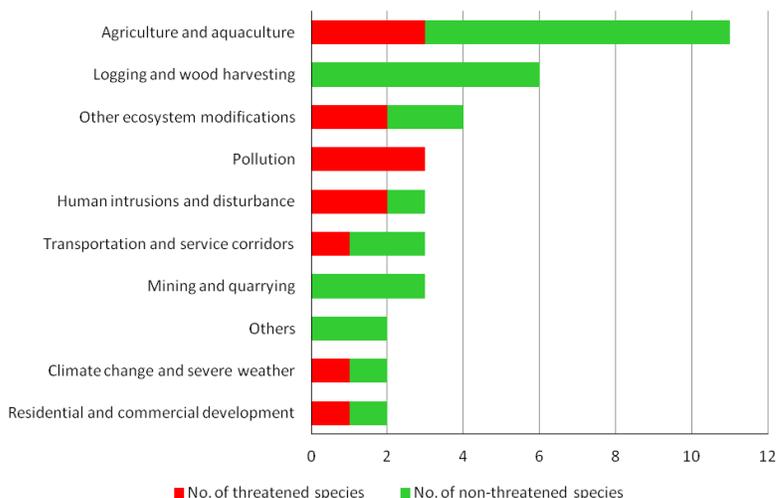
Terrestrial molluscs

This group has the third highest percentage of threatened species in Belgium. Five percent* of the terrestrial molluscs assessed that are present in Belgium are threatened and 2% are Near Threatened at the European level. The major threat to this group at the European level is the continuous destruction of suitable habitat due to agriculture and aquaculture as well as logging and wood harvesting.

Status at European level



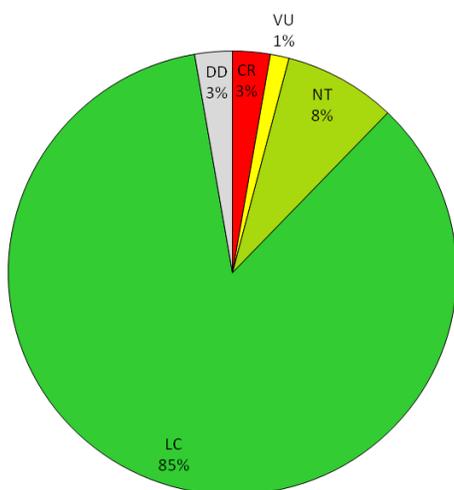
Threats at European level



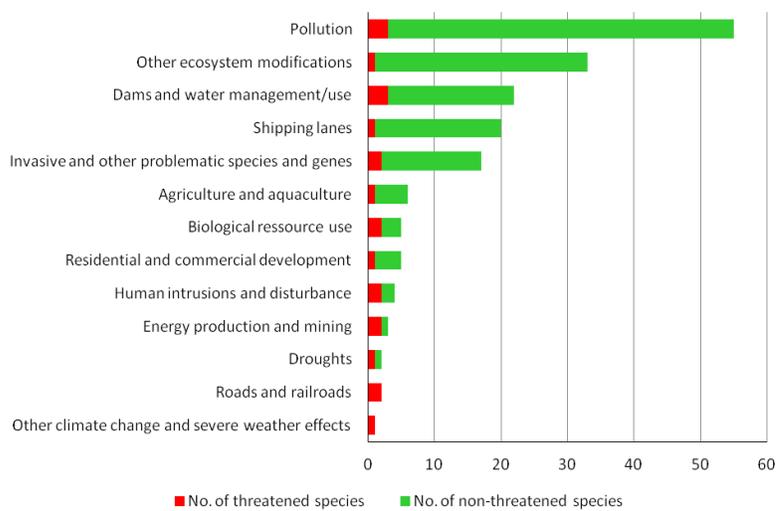
Freshwater molluscs

Nine percent of all the freshwater molluscs in Europe are present in Belgium. Four percent* of the species in this group are considered Threatened and 85% are classified as Least Concern at the European level. The main threat to this group at the European level is water especially the one coming from agricultural effluents and domestic and urban wastewater. Modification of the physical and chemical characteristics of freshwater rivers and lakes due to dam construction and other ecosystem modifications are also one of the major threats at the European level.

Status at European level



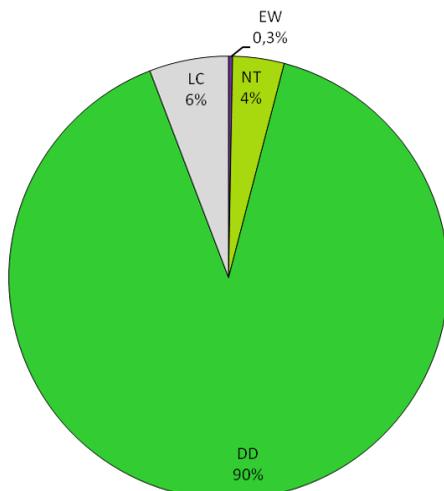
Threats at European level



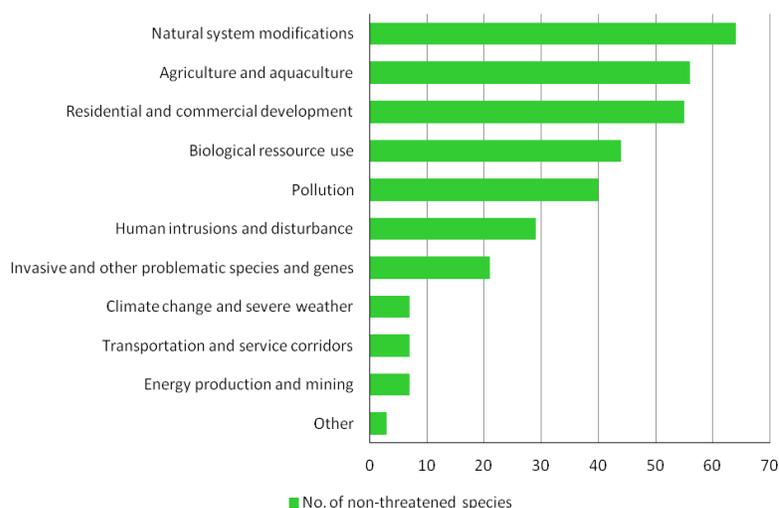
Vascular plants

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 343 species are found in Belgium, which represent 19% of the total of species assessed in Europe. Belgium also has a high rate of endemic aquatic plant species. The conservation status of vascular plants in Belgium is relatively good since none of them are considered threatened at the European level, but one species has already gone Extinct. For terrestrial plants, natural system modification has the worst impacts. For aquatic species, water pollution is the worst 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 Prof. Dr. Jürgen Geist (*Margaritifera margaritifera*)

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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.