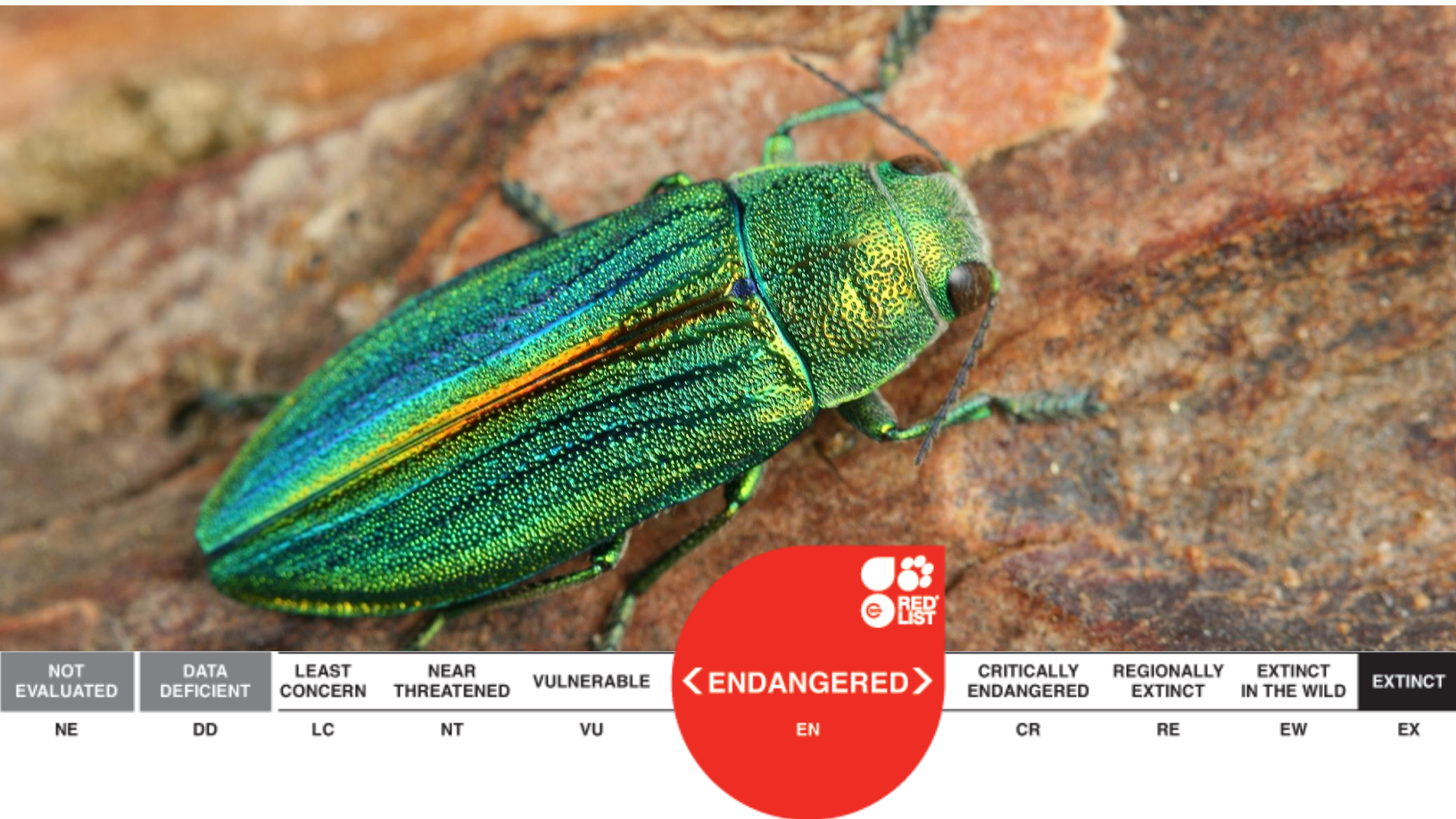


# Poland's biodiversity at risk

A call for action



Poland 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 Poland 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. Poland 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 Poland 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 Poland 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.

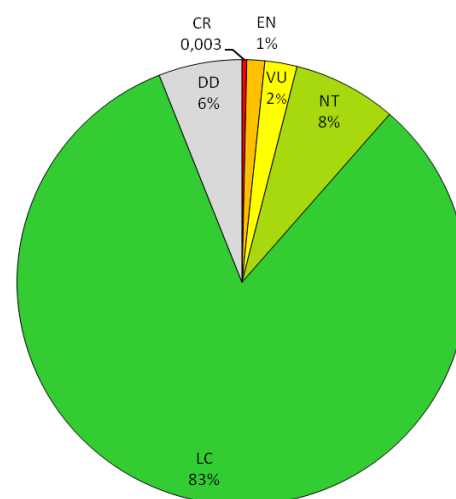
## Conservation status

Poland is host to an estimated 63,000 species of animals and plants. This number represents 40% 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 20% of the species assessed by the European Red List of Species are present in Poland. For some of the taxonomic groups, the percentages of European species that occur in Poland are particularly high; such as dragonflies, saproxylic beetles and mammals.

Of the 1,167 species assessed that occur in Poland, 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 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 Poland are found mostly in forests, grasslands and wetlands. These ecosystems require particular attention in order to ensure the habitats of these sensitive species remain.

European status of species in Poland



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 Poland	% of European sp. occurring in Poland	No. of threatened sp. in Poland (status at European level)		
				CR	EN	VU
Mammals	233	93	40%	2	2	5
Reptiles	140	8	6%	0	0	0
Amphibians	83	16	19%	0	0	0
Freshwater fishes	522	76	15%	1	1	1
Butterflies	435	148	34%	0	4	6
Dragonflies	137	71	52%	0	0	1
Saproxylic beetles**	431	197	46%	0	5	4
Terrestrial molluscs**	1,233	77	6%	0	0	2
Freshwater molluscs	854	81	9%	1	1	1
Vascular plants**	1,826	400	22%	0	2	7
<b>TOTAL</b>	<b>5,894</b>	<b>1,167</b>	<b>20%</b>	<b>4</b>	<b>15</b>	<b>27</b>

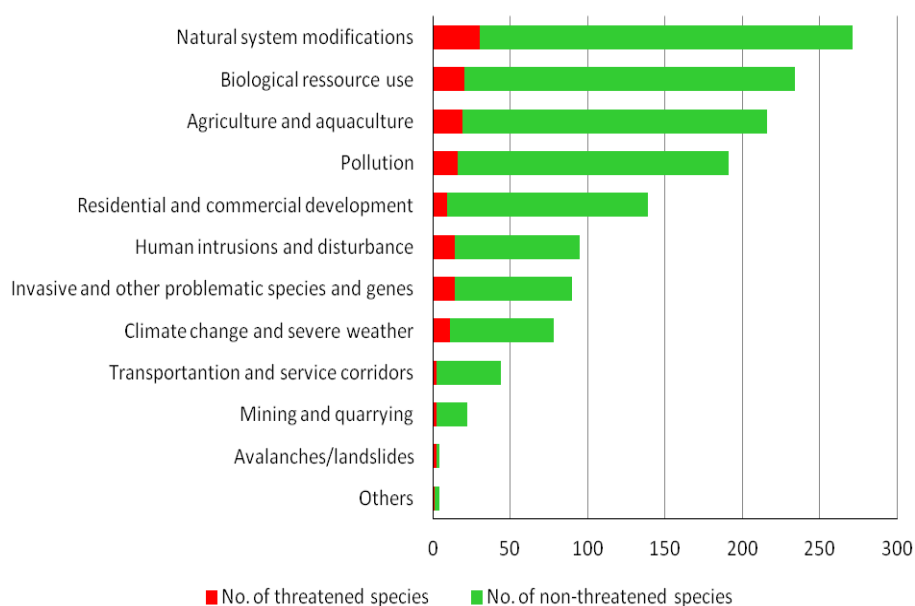
\*\*Not comprehensively assessed, selected species only.

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 Poland. For freshwater species, major threats include water pollution caused by agricultural and forestry effluents and natural system modifications. Other major threats come from logging and wood harvesting, livestock farming and ranching and agricultural expansion and intensification.

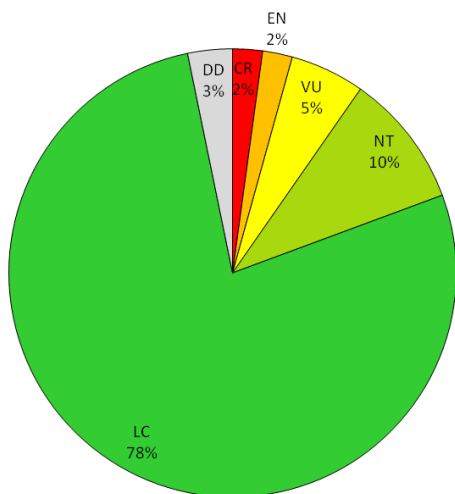
**Major threats at the European level to species occurring in Poland**



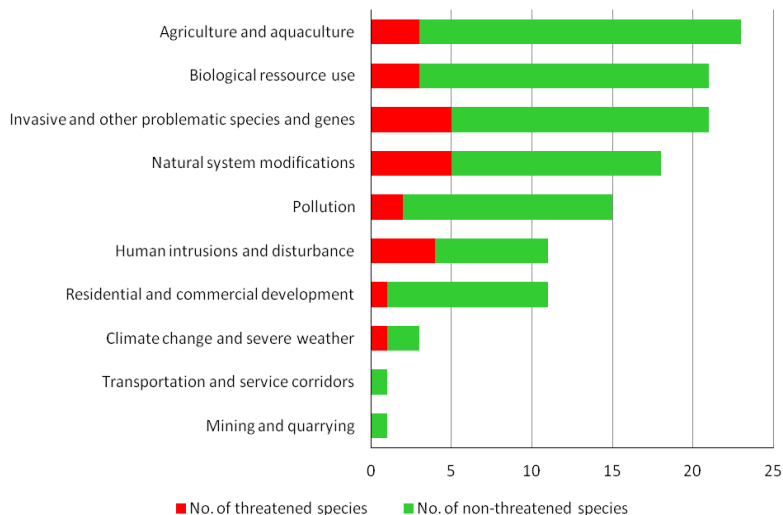
## Mammals

Poland hosts 40% of all the mammals that occur in Europe. Of these 93 species of mammals, 10%\* are threatened at the European level and at least an additional 10% are considered Near Threatened. The major threats at the European level that can possibly (or potentially) affect mammals in Poland are livestock farming and ranching, agricultural expansion and intensification and hunting and trapping of terrestrial animals. Mammal populations are also highly threatened mainly by water pollution caused by agricultural and forestry effluents and invasive and other problematic species. Logging and wood harvesting and natural system modifications also pose serious threats to mammals in the country.

**Status at European level**



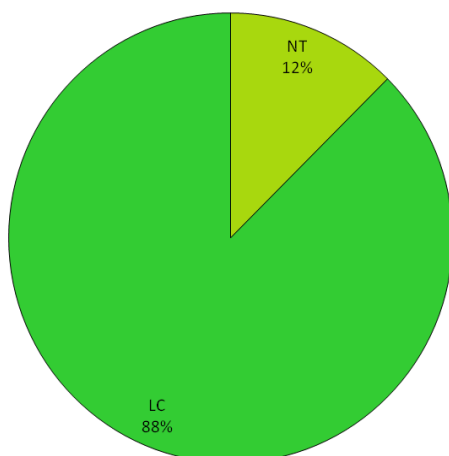
**Threats at European level**



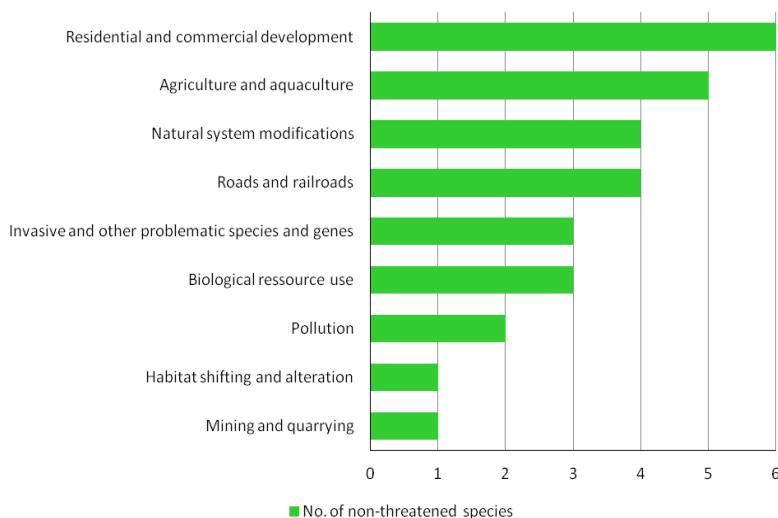
## Reptiles

Reptile species in Poland represent 6% of all the reptiles in Europe. The conservation status of reptiles in Poland based on the European Red List data is relatively good since none of them are considered threatened, 12% are classified as Near Threatened and 88% as Least Concern. Habitat loss, fragmentation and degradation especially due to urbanization and agricultural intensification are the main threats to this group at the European level. It is also interesting to note that at least 25% of the reptile species in Poland may be threatened by human persecution and control, especially snakes.

**Status at European level**



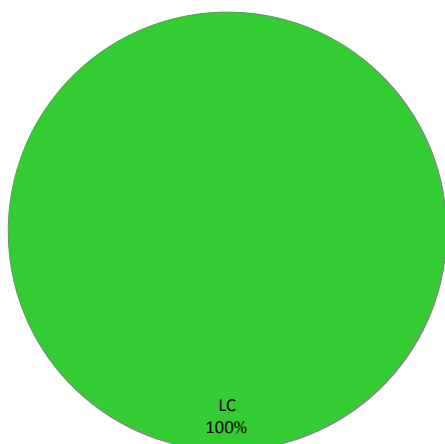
**Threats at European level**



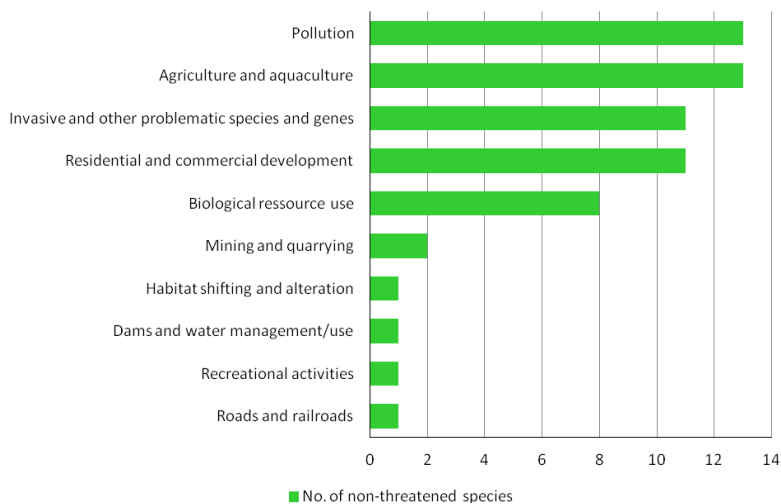
## Amphibians

Amphibians in Poland represent 19% of all amphibians occurring in Europe. The conservation status of amphibians in Poland based on the European Red List data is relatively good since none of them are considered threatened and all 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. Livestock farming and ranching and invasive species also pose threats to this group.

Status at European level



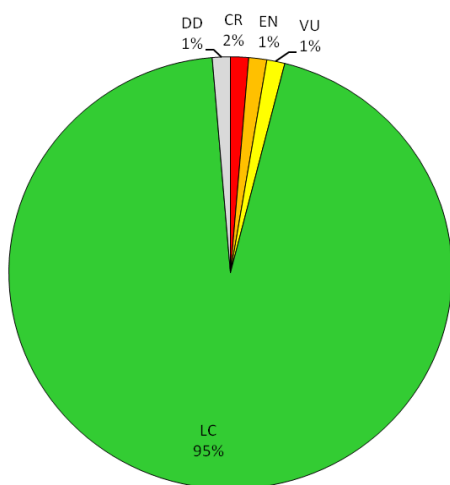
Threats at European level



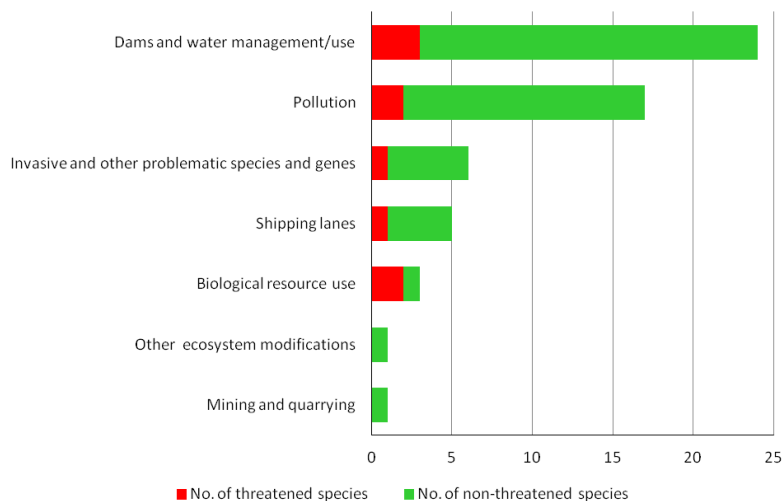
## Freshwater fishes

Freshwater fishes are one of the most threatened groups at the European level. Four percent\* of the species that occur in Poland 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 physical and chemical characteristics of freshwater rivers and lakes due to dam construction and pollution caused by agricultural and forestry effluents.

Status at European level



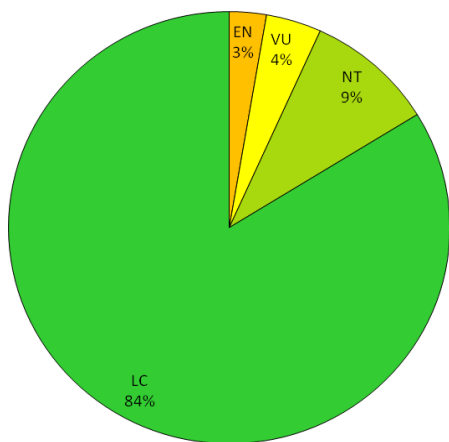
Threats at European level



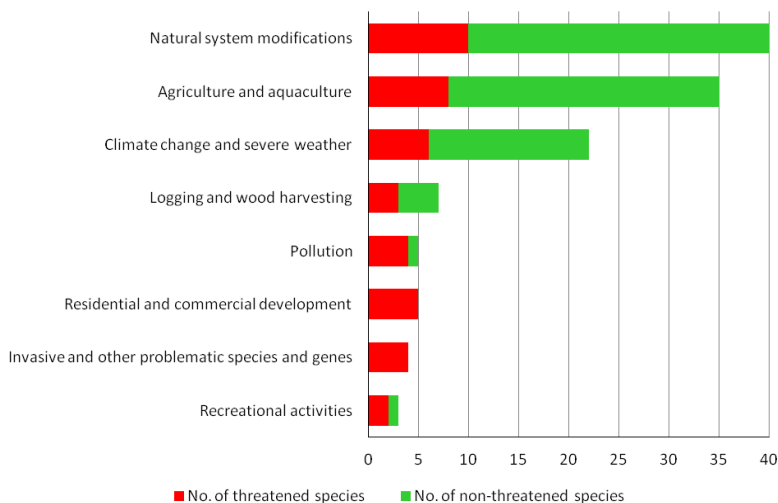
## Butterflies

Poland hosts 34% of all butterfly species in Europe and 7%\* of them are considered threatened at the European level. The distribution of butterflies in Europe shows that most threatened species can be found in eastern Poland. The conservation status of butterflies in Poland based on the European Red List data is relatively good since approximately 84% 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**



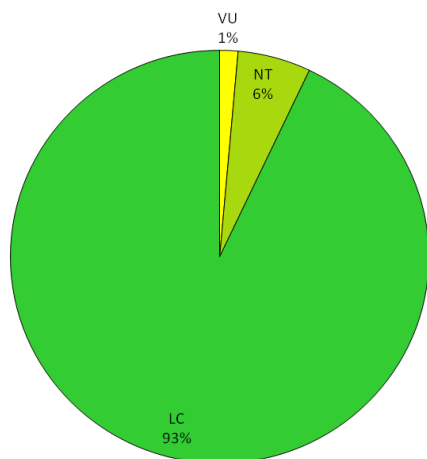
**Threats at European level**



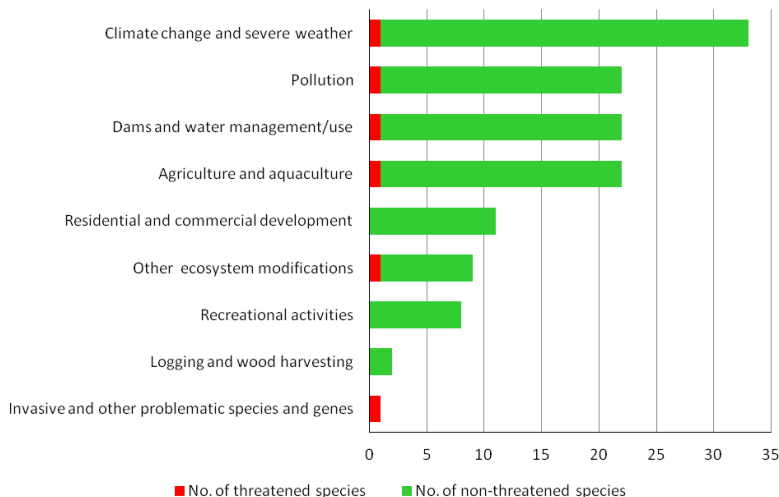
## Dragonflies

Fifty-two percent of all the dragonflies in Europe are present in Poland. One percent\* of the dragonfly species that occur in Poland 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 the construction of dams and reservoirs and water quality deterioration.

**Status at European level**



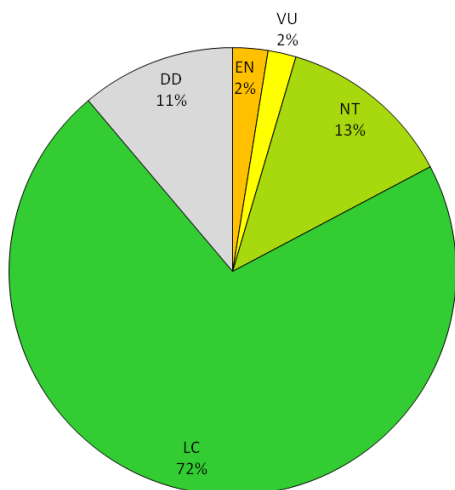
**Threats at European level**



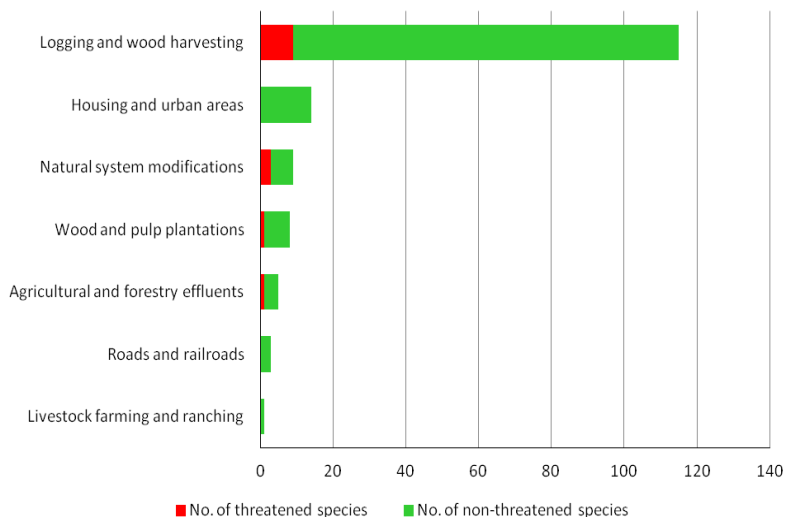
## Saproxylic beetles

Forty-six percent of the beetle species assessed by the European Red List are present in Poland. 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. 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



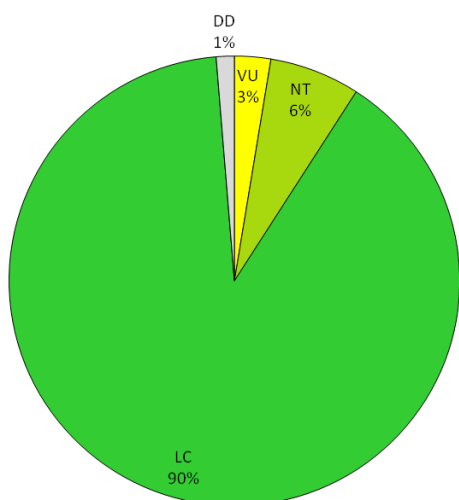
Threats at European level



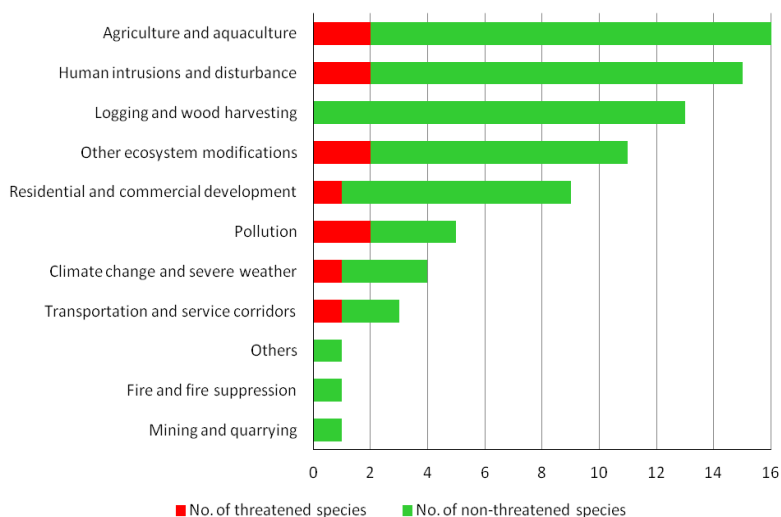
## Terrestrial molluscs

Three percent\* of the terrestrial molluscs assessed that are present in Poland are threatened and 6% are Near Threatened at the European level. The major threat to this group at the European level is continuous destruction of suitable habitat from human intrusions and disturbance for recreational activities and agricultural expansion and intensification. Natural system modifications and logging and wood harvesting are also main threats to this group.

Status at European level



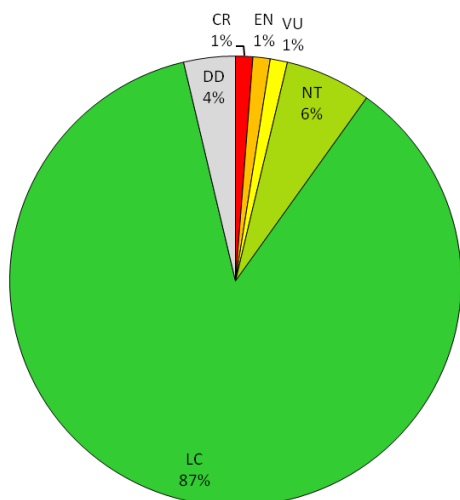
Threats at European level



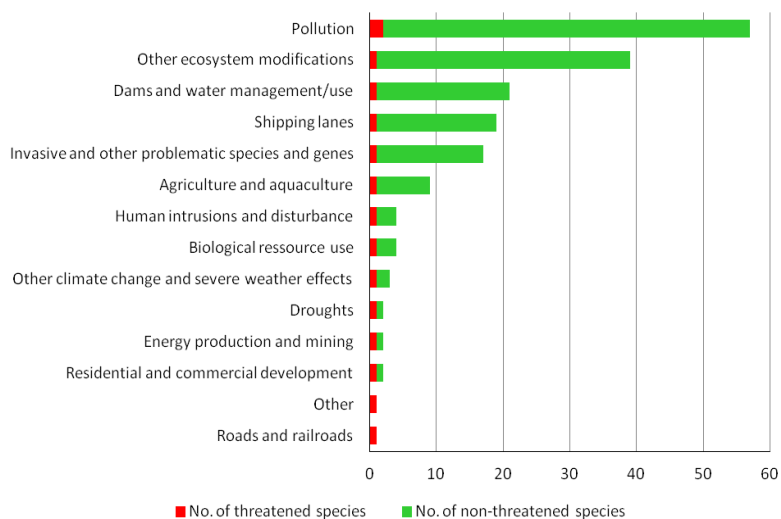
## Freshwater molluscs

Four percent\* of freshwater molluscs that occur in Poland are threatened at the European level. Water pollution, especially the one coming from agricultural effluents and nutrient loads is the main threat to this group at the European level. Ecosystem modifications such as the construction of dams, the abstraction of water from underground or from the streams and river themselves for domestic and agricultural use, shipping lanes and invasive non native species also pose threats to this group at the European level.

Status at European level



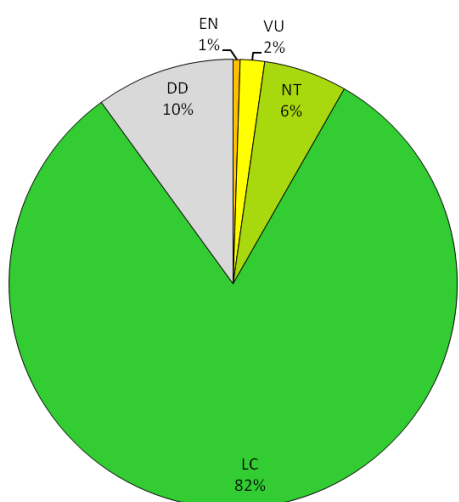
Threats at European level



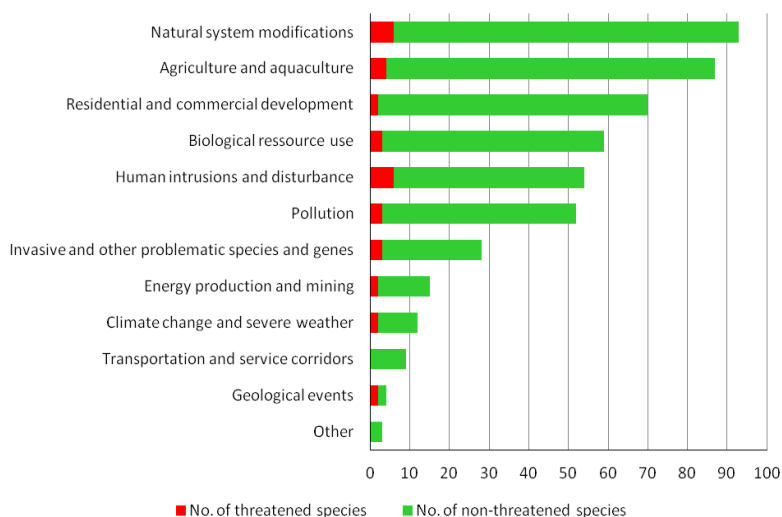
## Vascular plants

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 400 species are found in Poland, which represent 22% of the total of species assessed in Europe. Three percent\* of the 400 vascular plant species assessed in Poland are considered threatened at the European level. For terrestrial plants, natural system modifications, urban and touristic development and agricultural expansion have the worst impacts. For aquatic species, direct habitat loss caused by inappropriate ecosystem management and pollution caused by agricultural and forestry effluents, 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 Nikola Rahme (*Buprestis splendens*)

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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.