Lithuania’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

Lithuania 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 Lithuania 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. Lithuania 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 Lithuania 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 Lithuania 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.

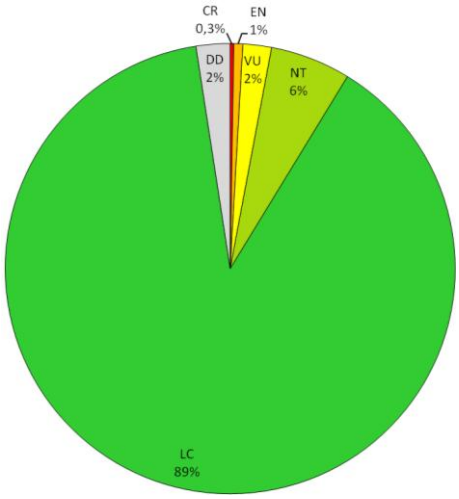
To date, European regional assessments have been completed for all mammals, reptiles, amphibians, butterflies, dragonflies, freshwater fishes and freshwater molluscs and a selection of saproxylic beetles, terrestrial molluscs, and vascular plants. Assessments of pollinators, medicinal plants, birds and 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

Lithuania is host to an estimated 30,000 species of animals and plants. This number represents 19% 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 13% of the species assessed by the European Red List of Species are present in Lithuania. For some of the taxonomic groups, the percentages of European species that occur in Lithuania are particularly high; such as dragonflies, butterflies and mammals.

European status of species in Lithuania



Of the 779 species assessed that occur in Lithuania, the groups comprising the highest number of species are vascular plants, dragonflies, butterflies and saproxylic beetles. Of the total number of species assessed in the country 3%* are considered threatened and at least 6% 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 Lithuania are found mostly in wetlands, forests and grasslands. These ecosystems require particular attention in order to ensure the habitats of these sensitive species remain.

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

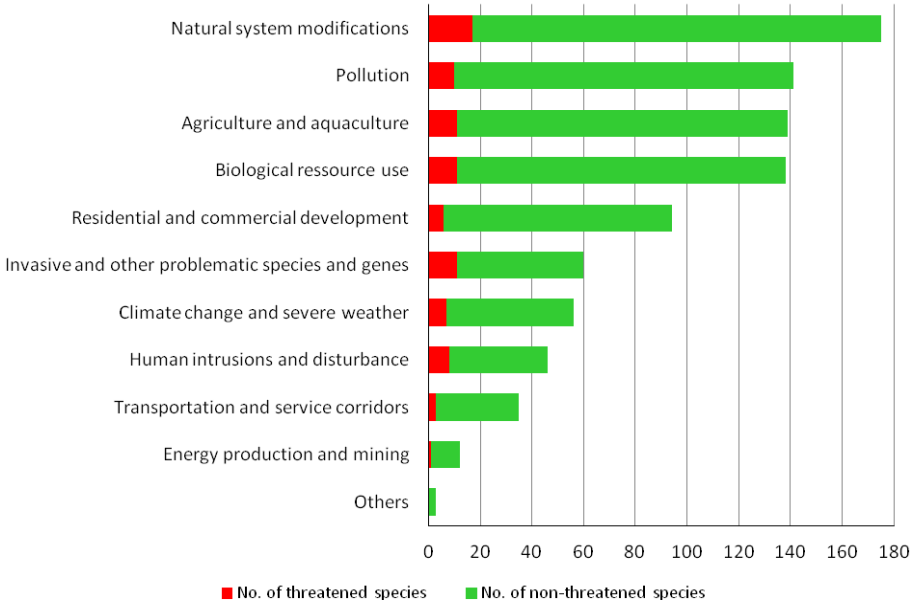
Species group	No. of sp. in Europe	No. of sp. in Lithuania	% of European sp. occurring in Lithuania	No. of threatened sp. in Lithuania (status at European level)		
				CR	EN	VU
Mammals	233	63	27%	0	1	3
Reptiles	140	7	5%	0	0	0
Amphibians	83	11	13%	0	0	0
Freshwater fishes	522	50	10%	1	0	1
Butterflies	435	116	27%	0	2	5
Dragonflies	137	137	45%	0	0	1
Saproxylic beetles**	431	107	25%	0	1	2
Terrestrial molluscs**	1,233	36	3%	0	0	2
Freshwater molluscs	854	64	7%	1	0	1
Vascular plants**	1,826	264	14%	0	1	1
TOTAL	**5,894**	**779**	**13%**	**2**	**5**	**16**

**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 Lithuania. For freshwater species, major threats include pollution due to agricultural and forestry effluents, abstraction of water from underground or from the streams. Other major threats come from logging and wood harvesting and residential and commercial development.

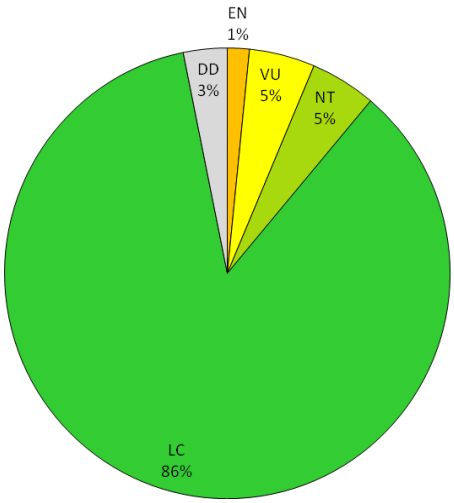
Major threats at the European level to species occurring in Lithuania



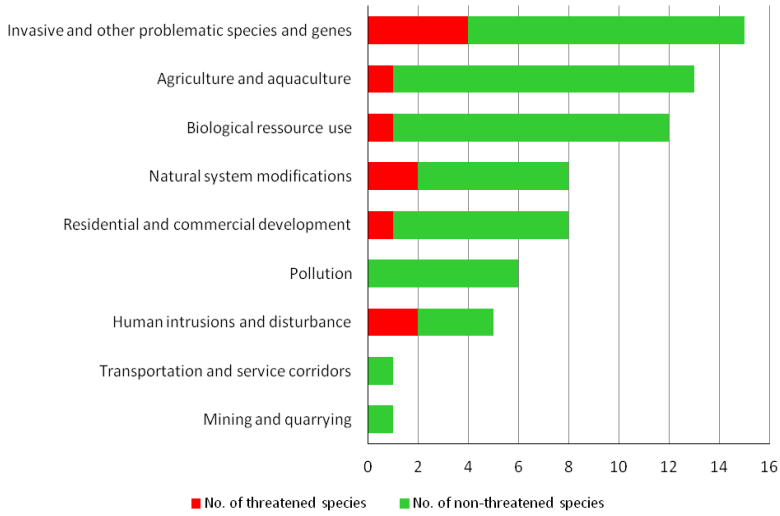
Mammals

Lithuania hosts 27% of all the mammals that occur in Europe. Of these 63 species of mammals, 7%* are threatened at the European level and at least an additional 5% are considered Near Threatened. The major threats at the European level that can possibly (or potentially) affect mammals in Lithuania are invasive and other problematic species, both native and non-native. Mammal populations are also highly threatened mainly by habitat degradation due to agriculture expansion and intensification. Natural system modifications, urban development and pollution caused by industrial and agricultural effluents.

Status at European level



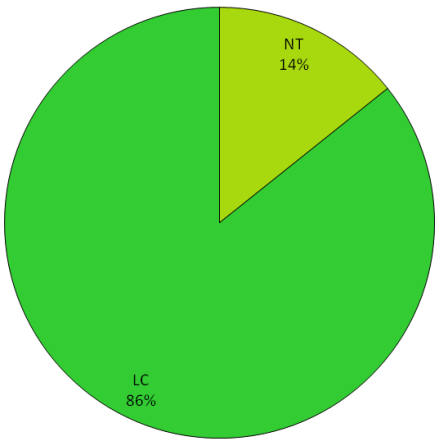
Threats at European level



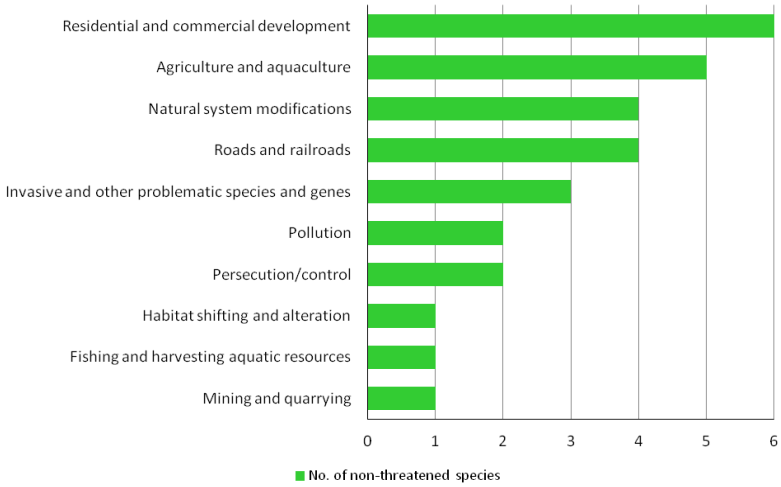
Reptiles

Reptile species in Lithuania represent 5% of all the reptiles in Europe. The conservation status of reptiles in Lithuania based on the European Red List data is relatively good since none of them are considered threatened and only 14% are classified as Near Threatened. 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 Lithuania may be threatened by human persecution and control, especially snakes.

Status at European level



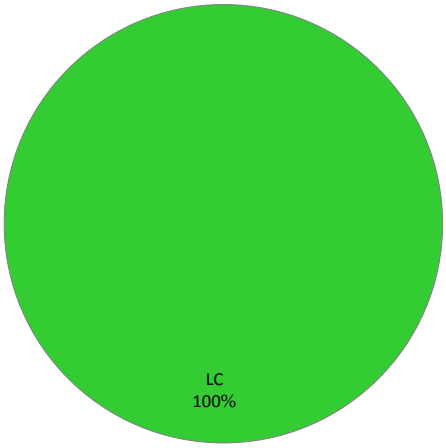
Threats at European level



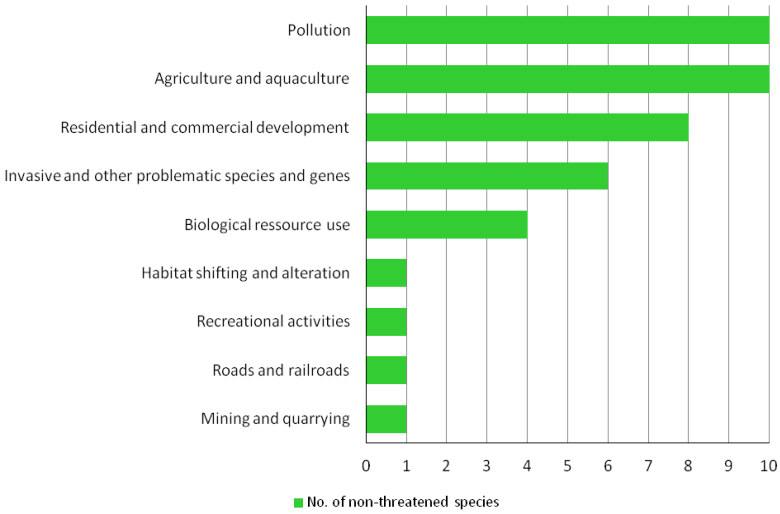
Amphibians

Amphibians in Lithuania represent 13% of all amphibians occurring in Europe. The conservation status of amphibians in Lithuania 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 by agrochemicals.

Status at European level



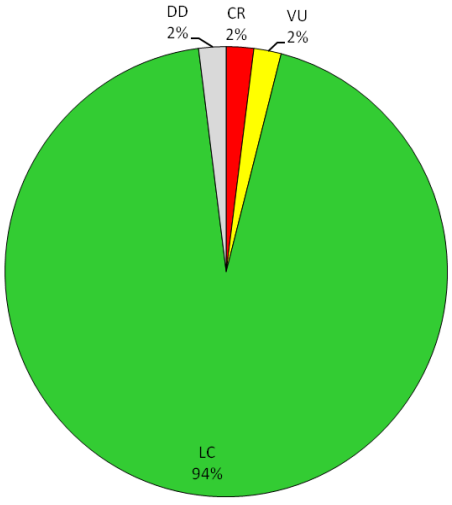
Threats at European level



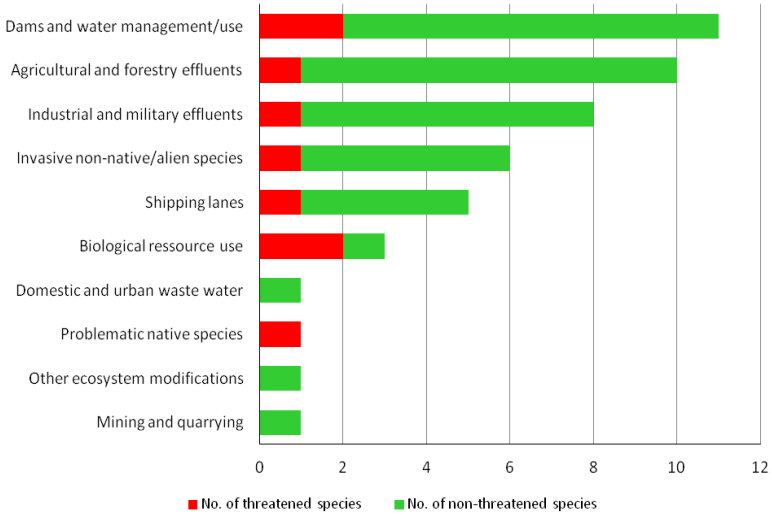
Freshwater fishes

Freshwater fishes are one of the most threatened groups at the European level. Four percent* of the species that occur in Lithuania 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 water pollution, specially the one coming from agricultural and industrial effluents. Change of water flow patterns due to dam construction, Invasive and other problematic species, both native and non-native also pose serious threats to freshwater fishes in the country.

Status at European level



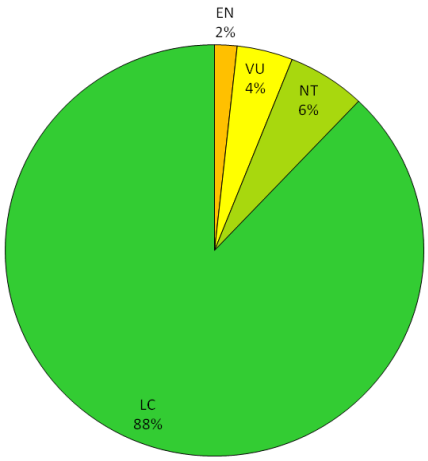
Threats at European level



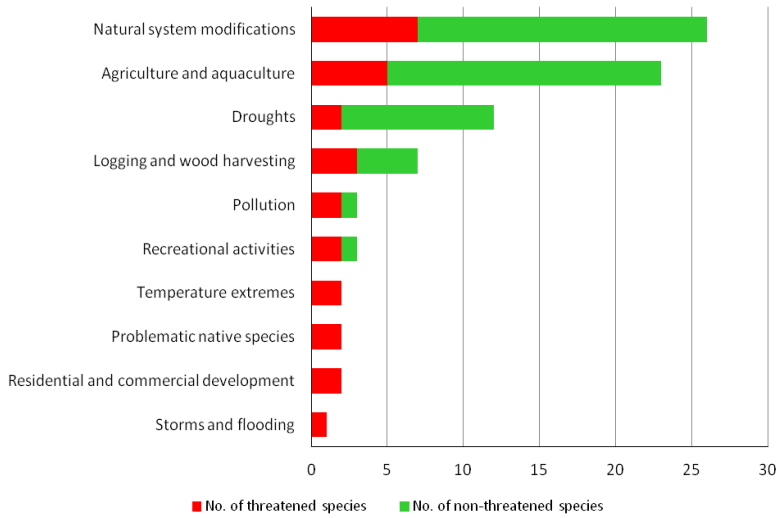
Butterflies

Lithuania hosts 27% of all butterfly species in Europe and 7%* of them are considered threatened at the European level. The conservation status of butterflies in Lithuania based on the European Red List data is relatively good since 6% of butterfly species are classified as Near Threatened, and 88% are considered as Least Concern. 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. Habitat degradation caused by inappropriate ecosystem management and agriculture intensification, increasing droughts and fires are the main threats to this group.

Status at European level



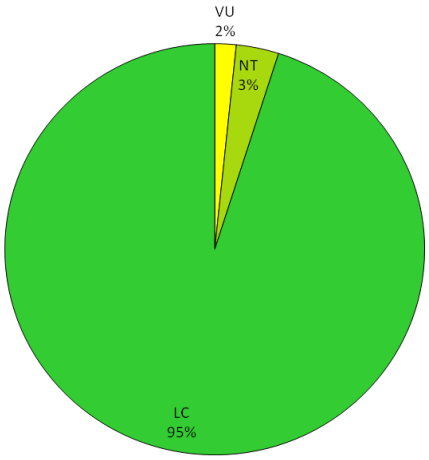
Threats at European level



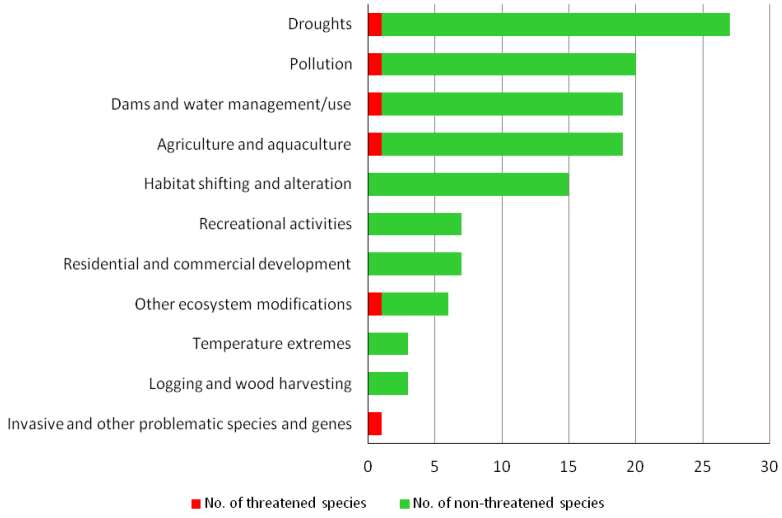
Dragonflies

Forty-five percent of all the dragonflies in Europe are present in Lithuania. Two percent* of the dragonflies that occur in Lithuania are considered threatened at the European level. This group is adversely affected by desiccation caused by dry weather and increased water abstraction of ground water. River species are also affected by water quality deterioration due to agricultural effluents and habitat degradation as a result of agricultural expansion and intensification.

Status at European level



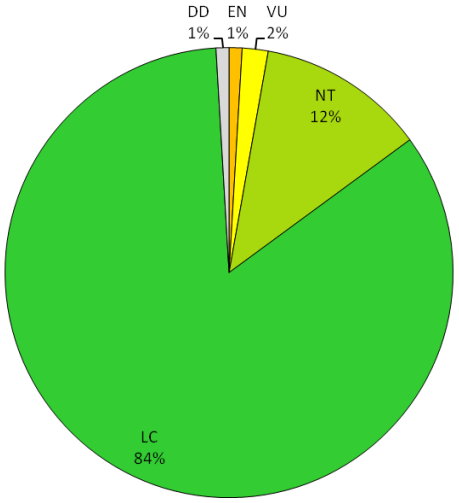
Threats at European level



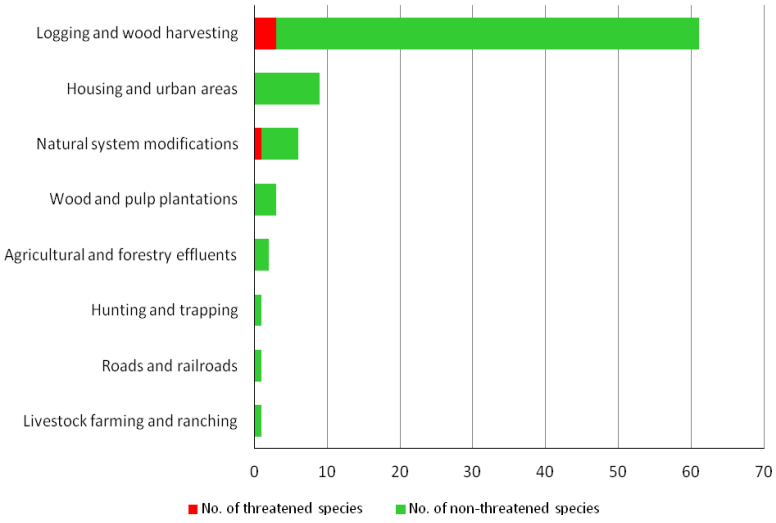
Saproxylic beetles

Twenty-five percent of the beetle species assessed by the European Red List are present in Lithuania. Approximately 3%* 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. Twelve percent of them are considered as Near Threatened. The 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



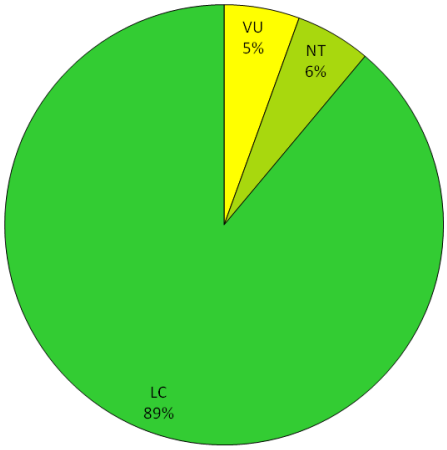
Threats at European level



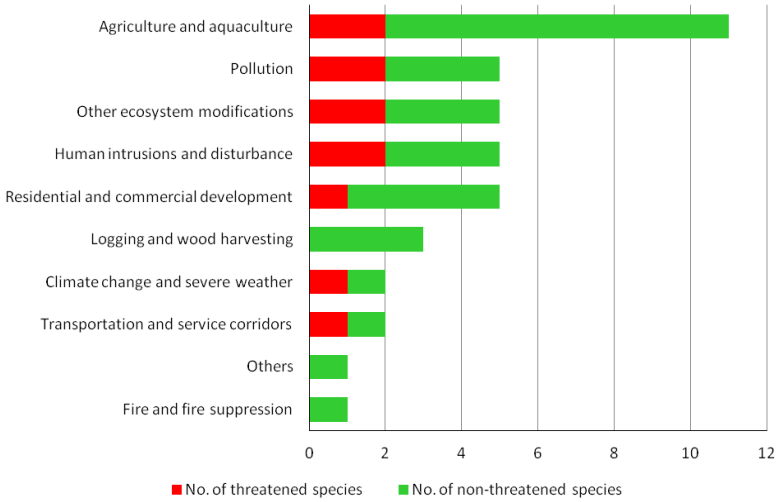
Terrestrial molluscs

Six percent* of the terrestrial molluscs assessed that are present in Lithuania are threatened and 6% are Near Threatened at the European level. The major threat to this group at the European level is habitat loss and degradation as a result of agricultural expansion and intensification and natural or semi natural ecosystem management.

Status at European level



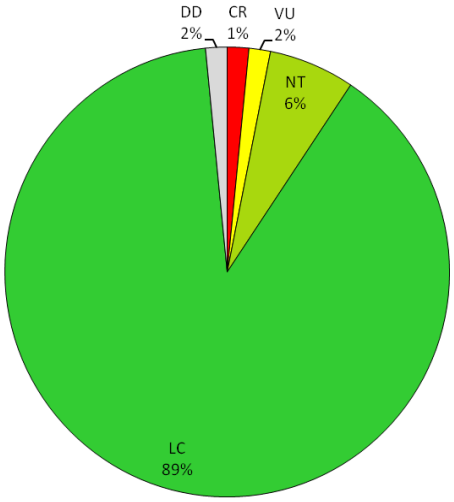
Threats at European level



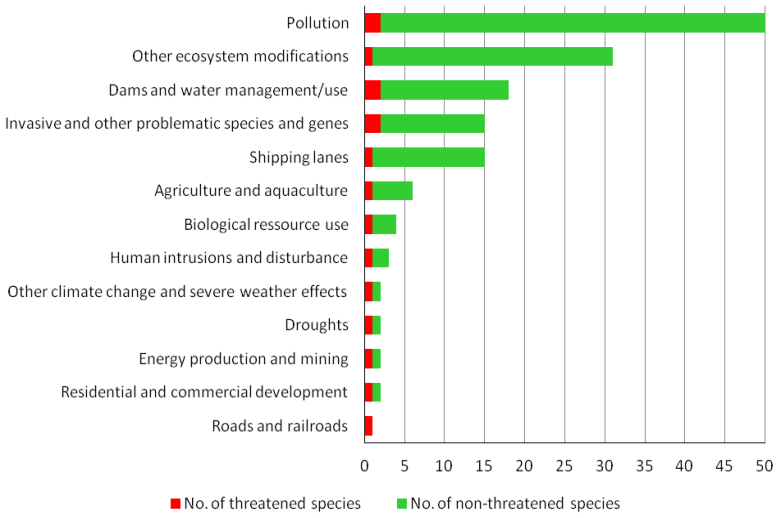
Freshwater molluscs

Seven percent of all the freshwater molluscs in Europe are present in Lithuania. Three percent* of the species in this group are considered threatened and 6% are classified as Near Threatened at the European level. Water pollution, especially the one coming from agricultural effluents and domestic and urban wastewater 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 other ecosystem modifications are also one of the major threats.

Status at European level



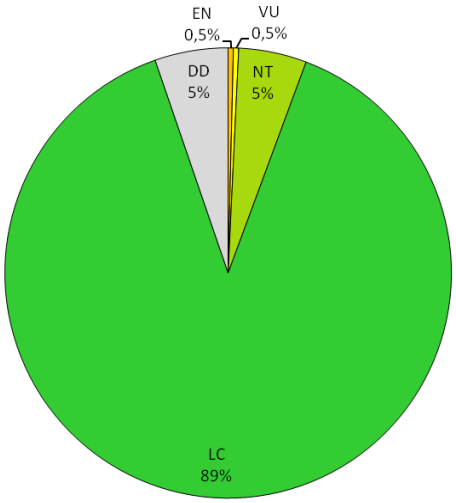
Threats at European level



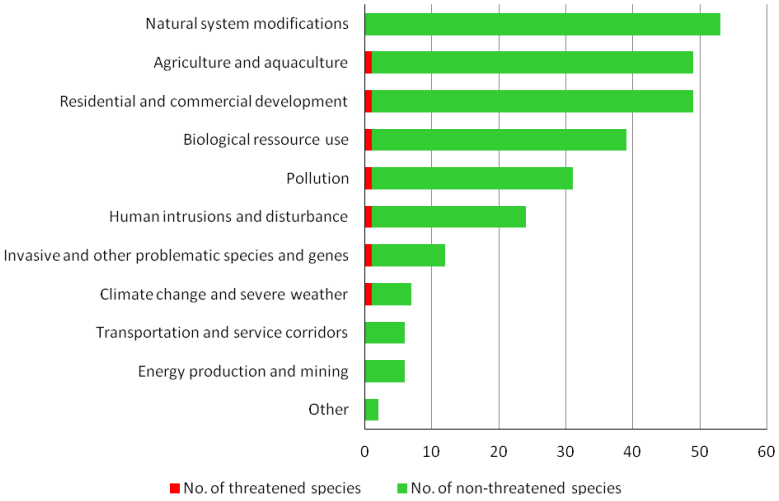
Vascular plants

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 264 species are found in Lithuania, which represent 14% of the total of species assessed in Europe. One percent* of the 264 vascular plant species assessed in Lithuania are considered threatened at European level. For terrestrial plants, poor management of natural ecosystems and urban development have the worst impacts. For aquatic species, water quality deterioration 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 Amadej Trnkoczy (*Agrimonia eupatoria*)

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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.