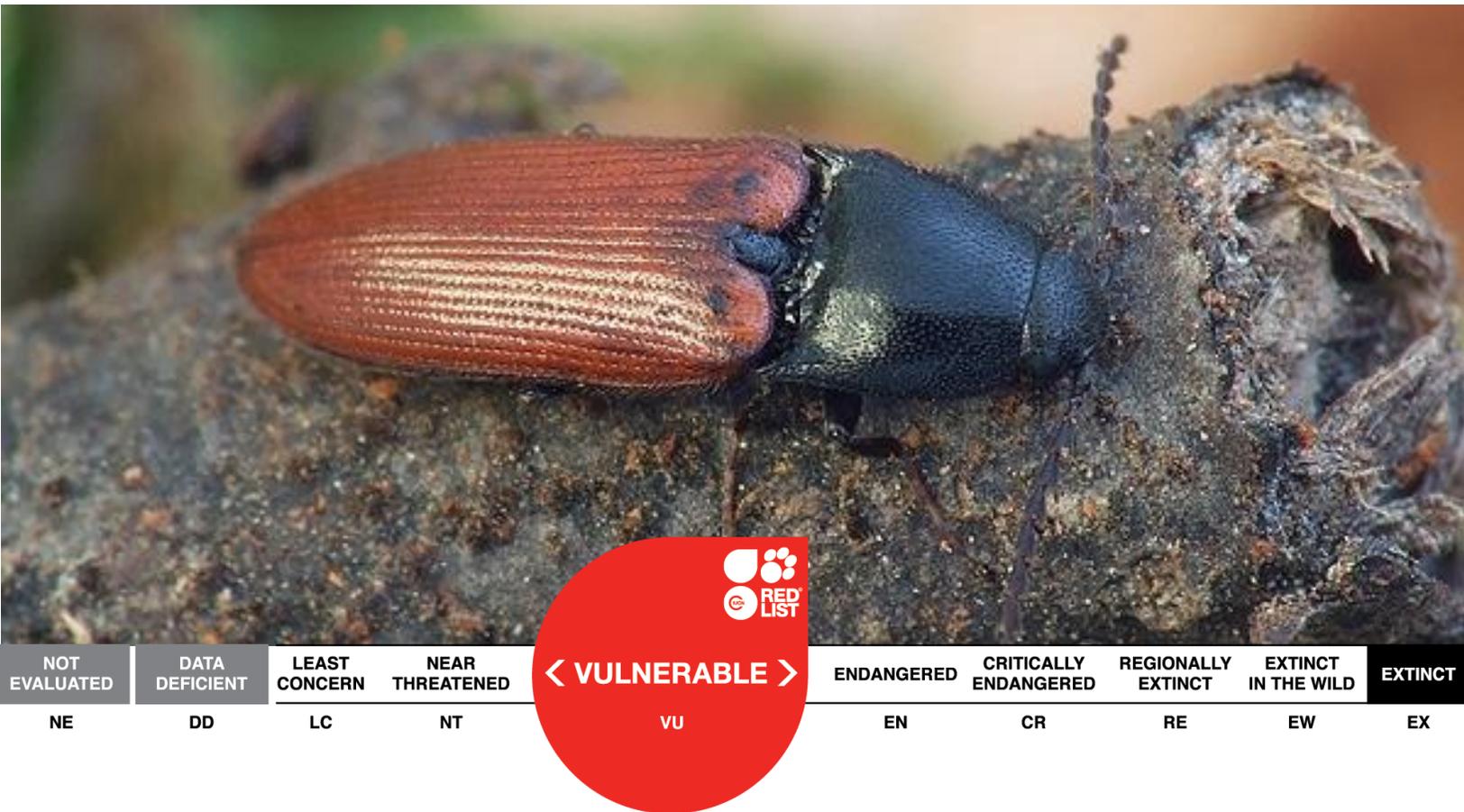


# Latvia's biodiversity at risk

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

Latvia 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 Latvia 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. Latvia 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 Latvia 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 Latvia 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 Europe and the IUCN's Global Species Programme, with funding from the European Commission.

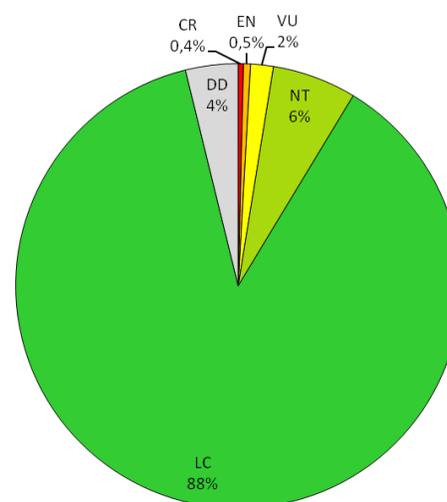
## Conservation status

Latvia is host to an estimated 27,443 species of animals and plants. This number represents 17% 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 Latvia. For some of the taxonomic groups, the percentages of European species that occur in Latvia are particularly high; such as dragonflies, saproxylic beetles, mammals and butterflies.

Of the 786 species assessed that occur in Latvia, 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 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 Latvia 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 Latvia



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 Latvia	% of European sp. occurring in Latvia	No. of threatened sp. in Latvia (status at European level)		
				CR	EN	VU
Mammals	233	61	26%	1	0	2
Reptiles	140	7	5%	0	0	0
Amphibians	83	12	14%	0	0	0
Freshwater fishes	522	47	9%	1	0	1
Butterflies	435	107	25%	0	2	5
Dragonflies	137	58	42%	0	0	0
Saproxylic beetles**	431	127	29%	0	1	2
Terrestrial molluscs**	1,233	35	3%	0	0	1
Freshwater molluscs	854	70	8%	1	0	1
Vascular plants**	1,826	262	14%	0	1	1
<b>TOTAL</b>	<b>5,894</b>	<b>786</b>	<b>13%</b>	<b>3</b>	<b>4</b>	<b>13</b>

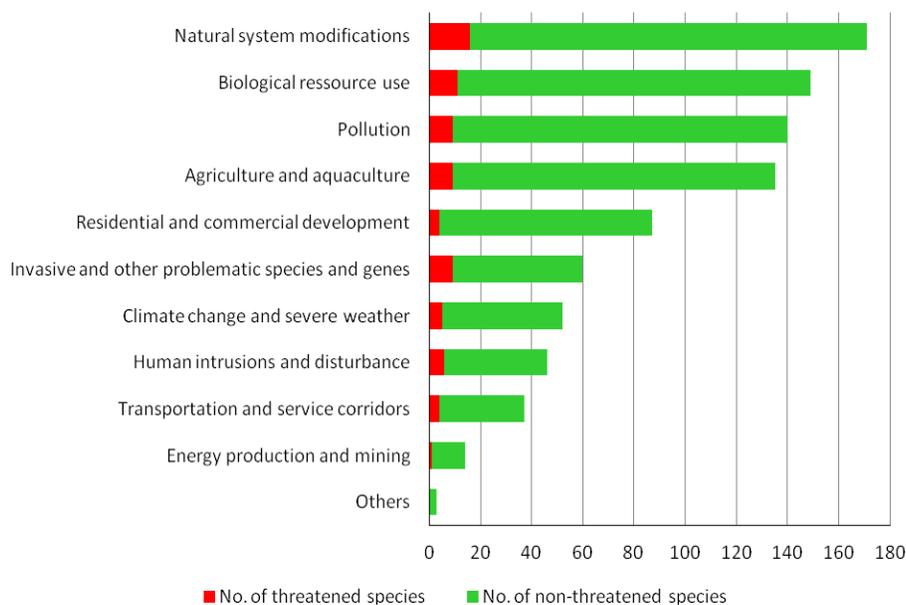
\*\*Not comprehensively assessed, selected species only.

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 Latvia. For freshwater species, major threats include water pollution caused by agricultural and forestry effluents, natural systems modifications and agricultural expansion and intensification. Other major threats come from logging and wood harvesting and urban and touristic development.

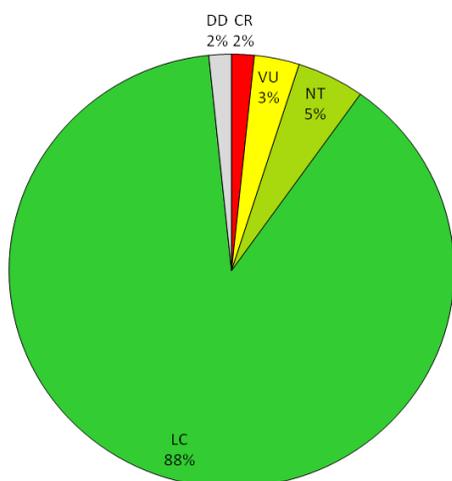
**Major threats at the European level to species occurring in Latvia**



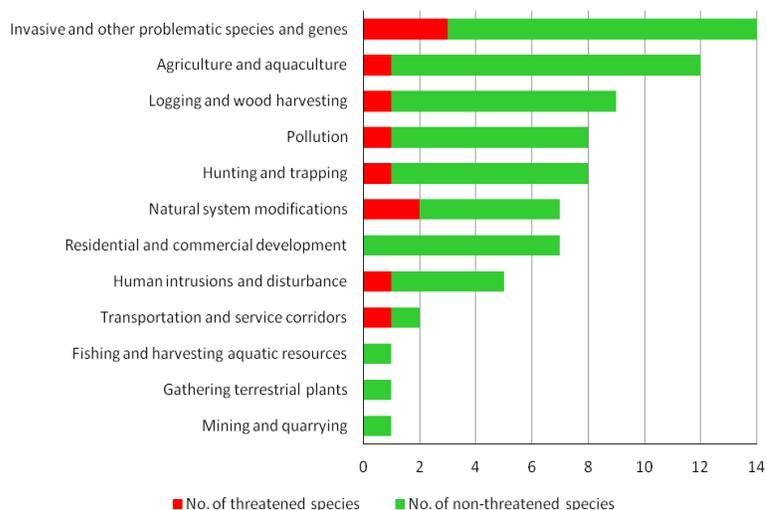
## Mammals

Latvia hosts 26% of all the mammals that occur in Europe. Of these 61 species of mammals, 5%\* 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 Latvia are invasive and other problematic species, both native and non-native. Mammal populations are also highly threatened mainly by agricultural expansion and intensification. Hunting, trapping, logging and wood harvesting also pose serious threats to mammals in the country.

**Status at European level**



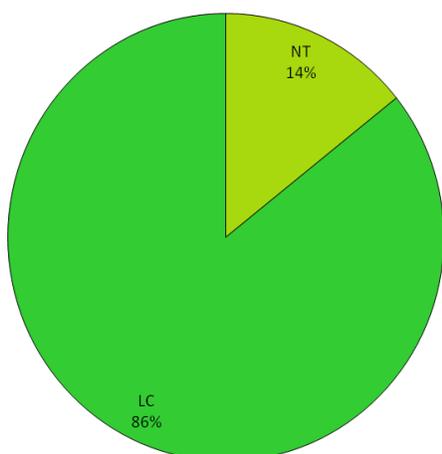
**Threats at European level**



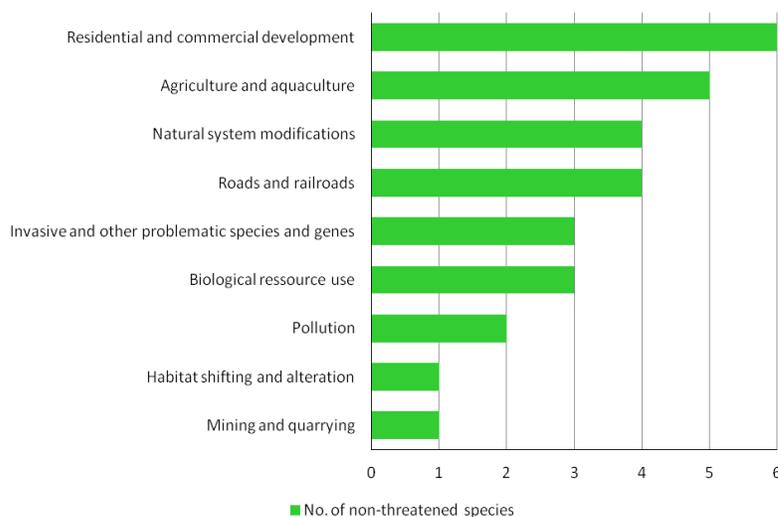
## Reptiles

Reptile species in Latvia represent 5% of all the reptiles in Europe. The conservation status of reptiles in Latvia 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 Latvia may be threatened by human persecution and control, especially snakes.

**Status at European level**



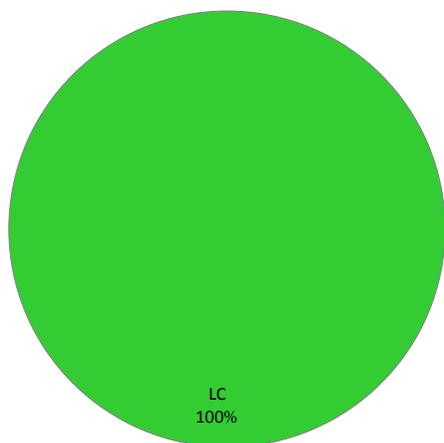
**Threats at European level**



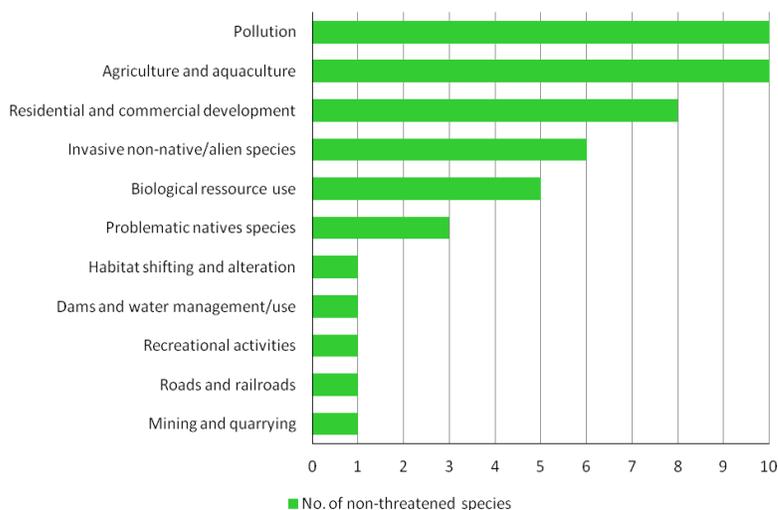
## Amphibians

Amphibians in Latvia represent 14% of all amphibians occurring in Europe. The conservation status of amphibians in Latvia 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 as a result of agricultural expansion and intensification and water pollution caused by agricultural and industrial effluents.

Status at European level



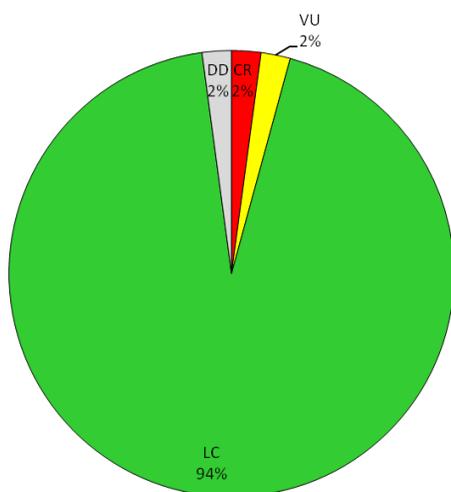
Threats at European level



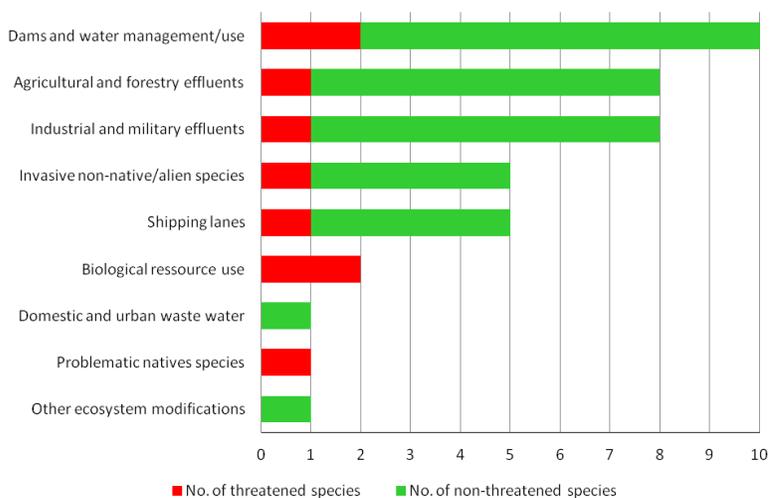
## Freshwater fishes

Freshwater fishes are one of the most threatened groups at the European. Four percent\* of the species that occur in Latvia 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%. Modification of the physical and chemical characteristics of freshwater rivers and lakes due to dam construction are the main threats to this group at the European level. Declining in water quality caused by domestic waste water and agricultural and industry effluents is also a main threat.

Status at European level



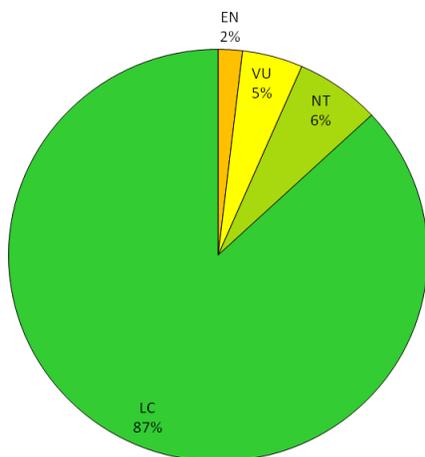
Threats at European level



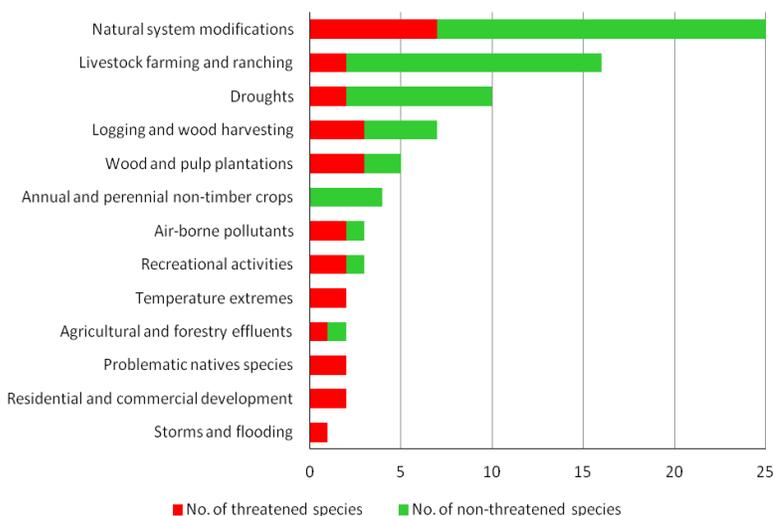
## Butterflies

Latvia hosts 25% of all butterfly species in Europe and 7%\* of them are considered threatened at the European level. The conservation status of butterflies in Latvia based on the European Red List data is relatively good since approximately 87% 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**



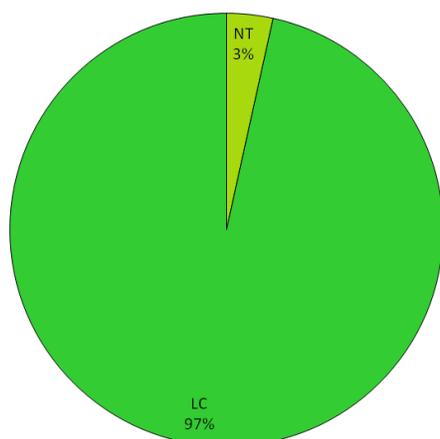
**Threats at European level**



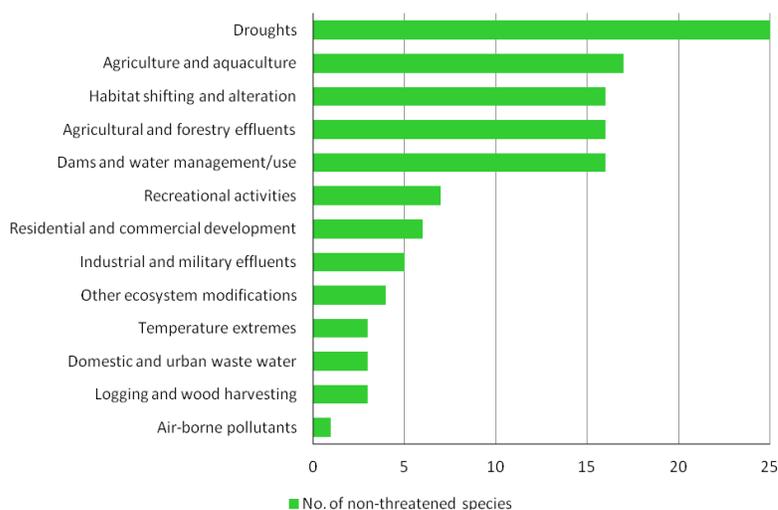
## Dragonflies

Forty-two percent of all the dragonflies in Europe are present in Latvia. The conservation status of dragonflies in Latvia based on the European Red List data is relatively good since approximately 97% of the species are classified as Least Concern. This group is adversely affected by desiccation caused by dry weather, fires and increased water extraction. River species are also affected by ecosystem modifications such as the construction of dams and reservoirs and water quality deterioration. Habitat alteration caused by agricultural expansion and intensification also pose threats to this group.

**Status at European level**



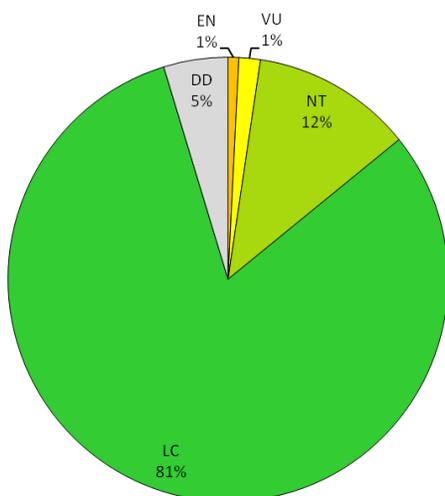
**Threats at European level**



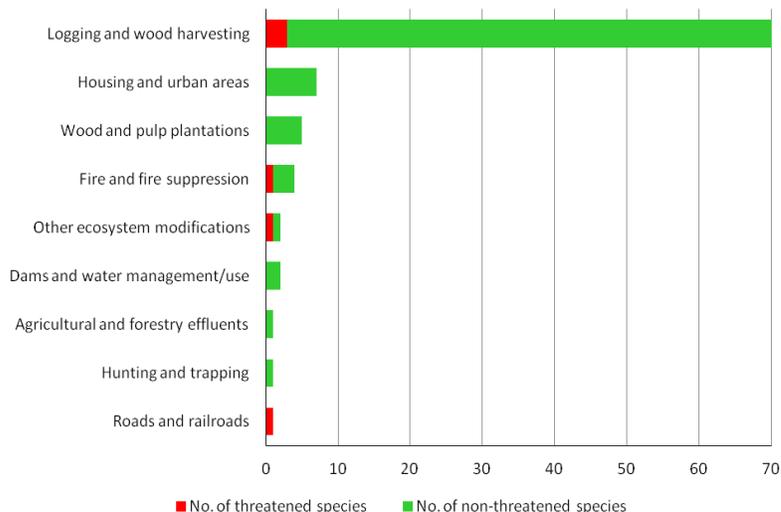
## Saproxylic beetles

Twenty-nine percent of the beetle species assessed by the European Red List are present in Latvia. Approximately 2%\* 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 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



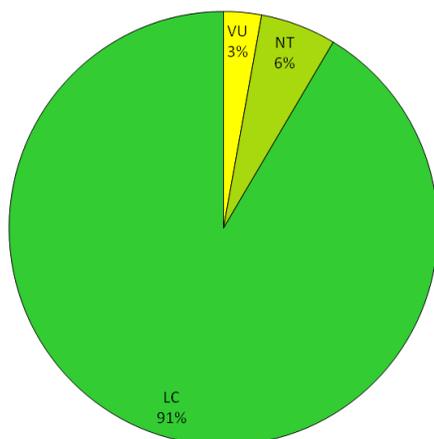
Threats at European level



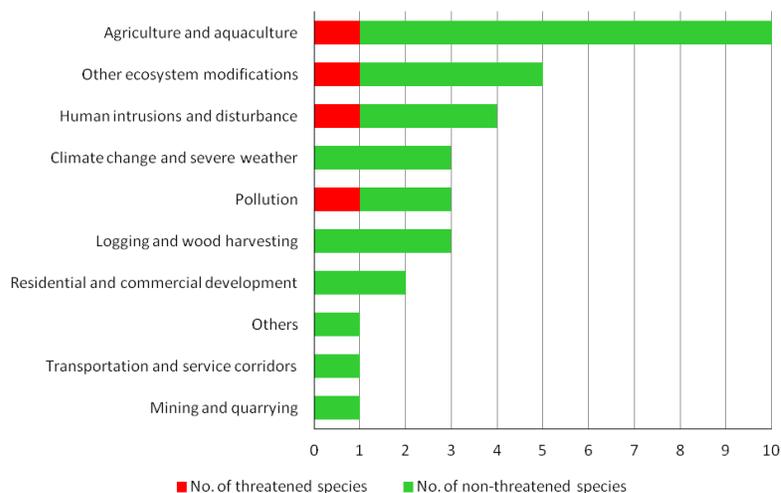
## Terrestrial molluscs

Three percent\* of the terrestrial molluscs assessed that are present in Latvia are considered threatened and 6% are classified as Near Threatened at the European level. The major threat to this group at the European level is the continuous destruction of suitable habitat as a result of agricultural expansion and intensification.

Status at European level



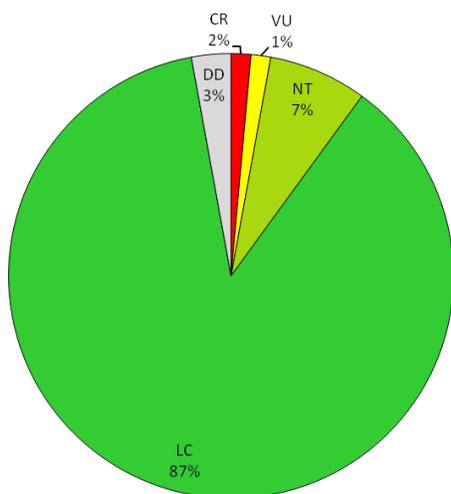
Threats at European level



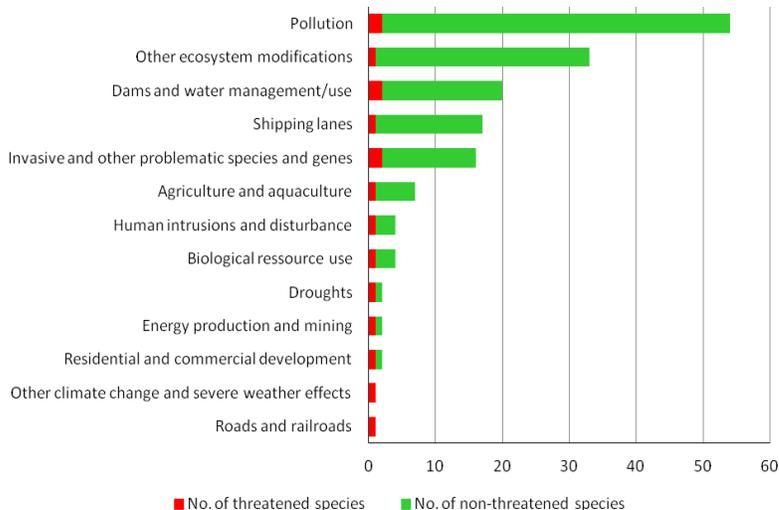
## Freshwater molluscs

Eight percent of all the freshwater molluscs in Europe are present in Latvia. Three percent\* of the species in this group are considered threatened and 7% 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. Habitat degradation caused by inappropriate ecosystem management also poses threat to this group.

**Status at European level**



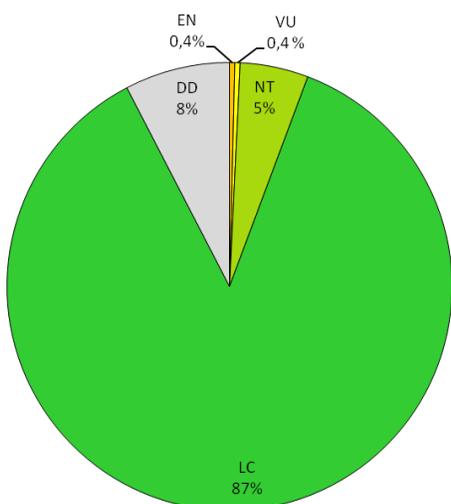
**Threats at European level**



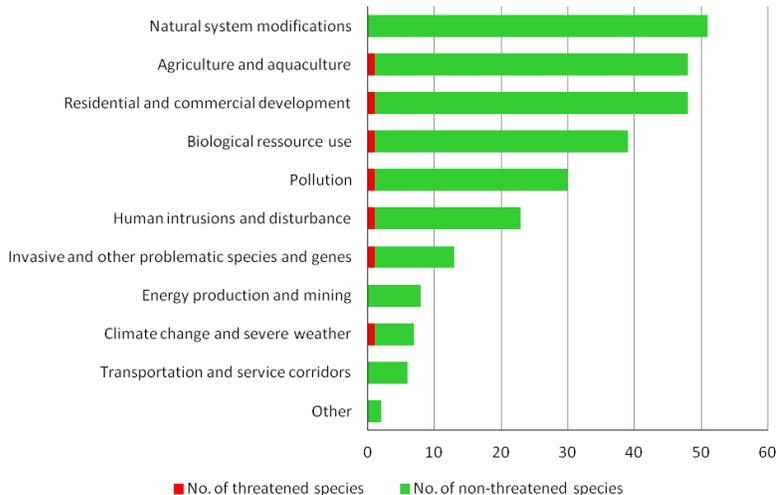
## Vascular plants

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 262 species are found in Latvia, which represent 14% of the total of species assessed in Europe. One percent\* of 262 vascular plant species assessed in Latvia are considered threatened at the European level. For terrestrial plants, natural system modification has the worst impacts. For aquatic species, direct habitat loss caused by inappropriate ecosystem management and declining water quality caused by agricultural effluents are the worst threats.

**Status at European level**



**Threats at European level**





## INTERNATIONAL UNION FOR CONSERVATION OF NATURE © May 2013

Document prepared by Andrea Pino del Carpio, Silvia Sánchez, Ana Nieto and Melanie Bilz  
European Union Representative Office  
Boulevard Louis Schmidt 64  
1040 Brussels, Belgium  
+32 2 739 03 13

For more information please contact: [ana.nieto@iucn.org](mailto:ana.nieto@iucn.org)

<http://ec.europa.eu/environment/nature/conservation/species/redlist> and  
<http://www.iucnredlist.org/europe>

The European Red List is a project funded by the European Commission.  
Cover photo by Tamás Németh (*Ampedus hjortii*).

## 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.