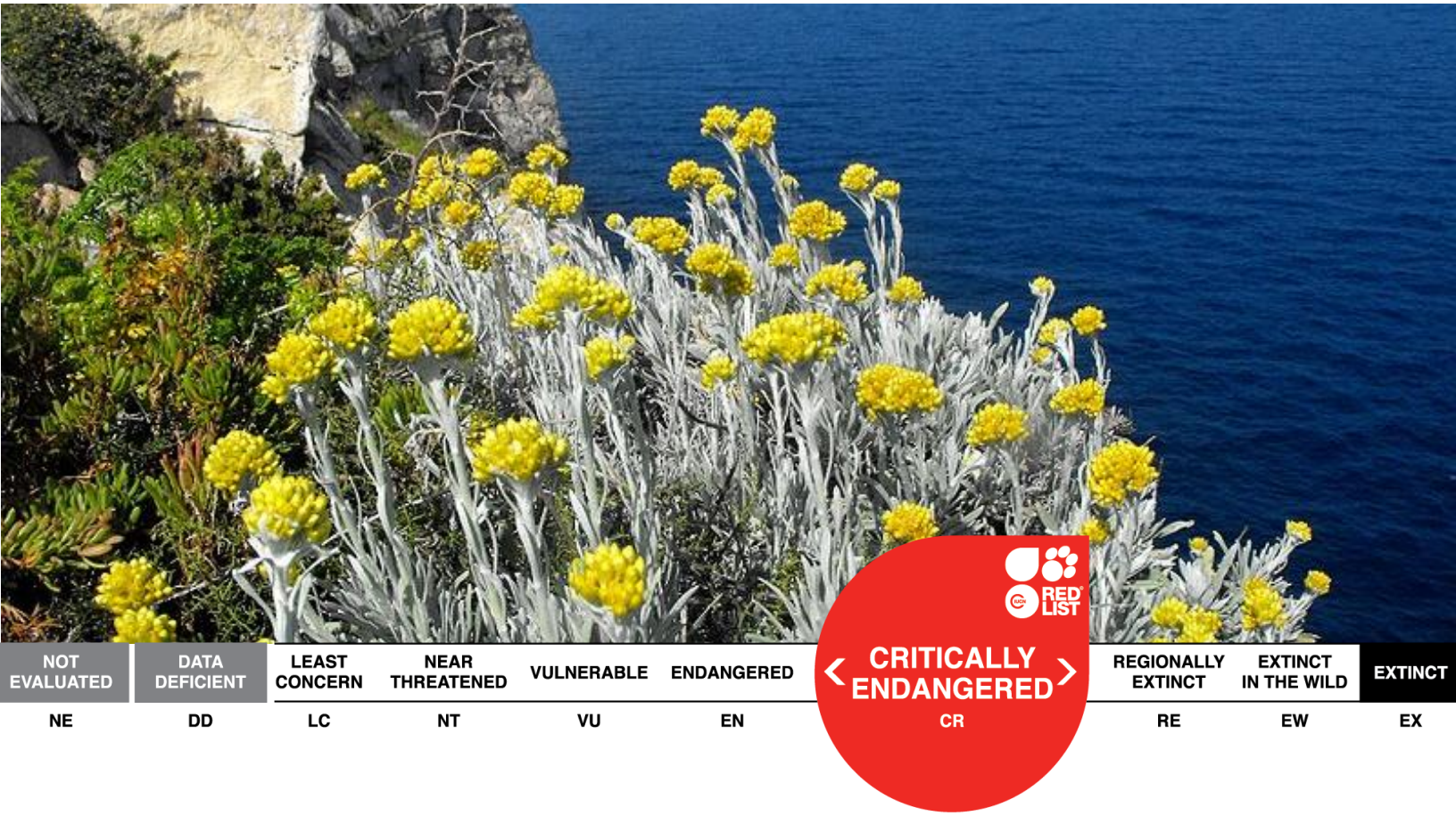
Malta's biodiversity at risk

A call for action



Malta 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 Malta 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. Malta 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 Malta 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 Malta 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.

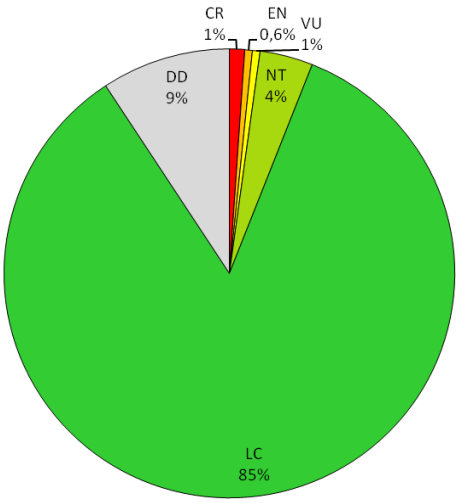
Conservation status

Malta is host to an estimated 4,500 species of animals and plants. This number represents 3% of the total species described for Europe and represent less than 1% of the species in the world. According to the table below, approximately 6% of the species assessed by the European Red List of Species are present in Malta. For some of the taxonomic groups, the percentages of European species that occur in Malta are particularly high; such as vascular plants, dragonflies and mammals.

Of the 368 species assessed that occur in Malta, the groups comprising the highest number of species are vascular plants, mammals and terrestrial molluscs. Of the total number of species assessed in the country 2%* are considered threatened and at least 4% 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 Malta are found mostly in marine/coastal areas and shrublands. These ecosystems require particular attention in order to ensure the habitats of these sensitive species remain.

European status of species in Malta



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

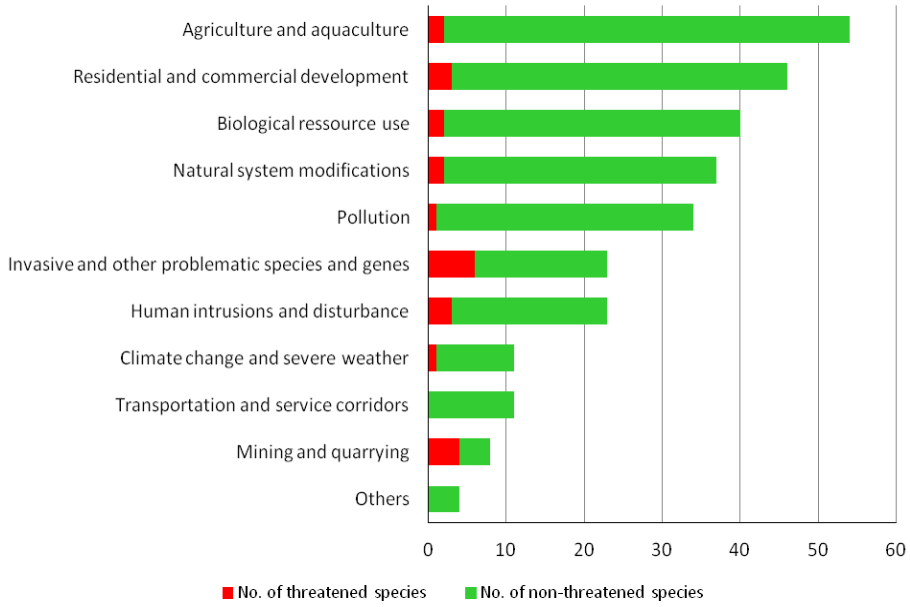
Species group	No. of sp. in Europe	No. of sp. in Malta	% of European sp. occurring in Malta	No. of threatened sp. in Malta (status at European level)		
				CR	EN	VU
Mammals	233	22	9%	1	0	1
Reptiles	140	6	4%	0	0	0
Amphibians	83	2	2%	0	0	0
Freshwater fishes	522	1	0.2%	0	0	0
Butterflies	435	18	4%	0	0	0
Dragonflies	137	14	10%	0	0	0
Saproxylic beetles**	431	20	5%	0	0	0
Terrestrial molluscs**	1,233	21	2%	0	0	0
Freshwater molluscs	854	12	1%	0	0	0
Vascular plants**	1,826	252	14%	3	2	1
TOTAL	**5,894**	**368**	**6%**	**4**	**2**	**2**

**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 caused by agriculture expansion and intensification are the most significant threats at the European level to species that occur in Malta. For freshwater species, major threats include pollution caused by agricultural and forestry effluents. Other major threats come from farming and ranching as a result of agricultural expansion and intensification, urbanization and tourism.

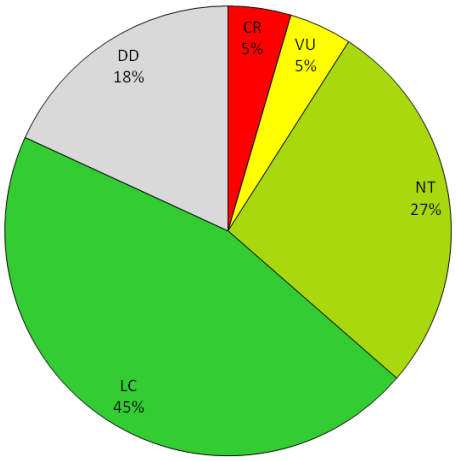
Major threats at the European level to species occurring in Malta



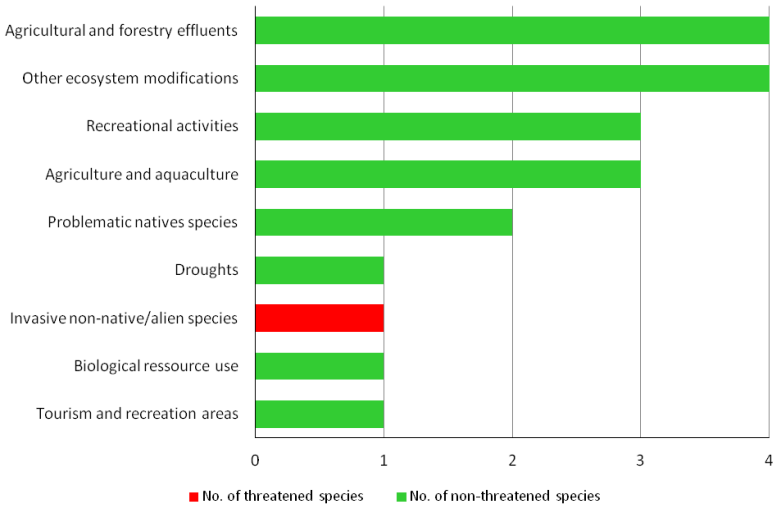
Mammals

Malta hosts 9% of all the mammals that occur in Europe. Of these 22 species of mammals, 11%* are threatened at the European level and at least an additional 27% are considered Near Threatened. The major threats at the European level that can possibly (or potentially) affect mammals in Malta are invasive and other problematic species, both native and non-native. Mammal populations are also highly threatened mainly by pollution caused by agricultural and forestry effluents. Natural system modifications, human intrusions and agricultural expansion and intensification also pose serious threats to mammals in the country.

Status at European level



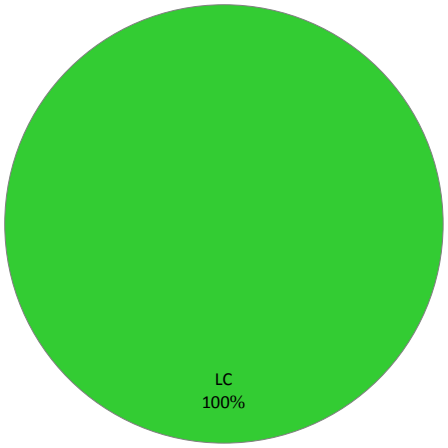
Threats at European level



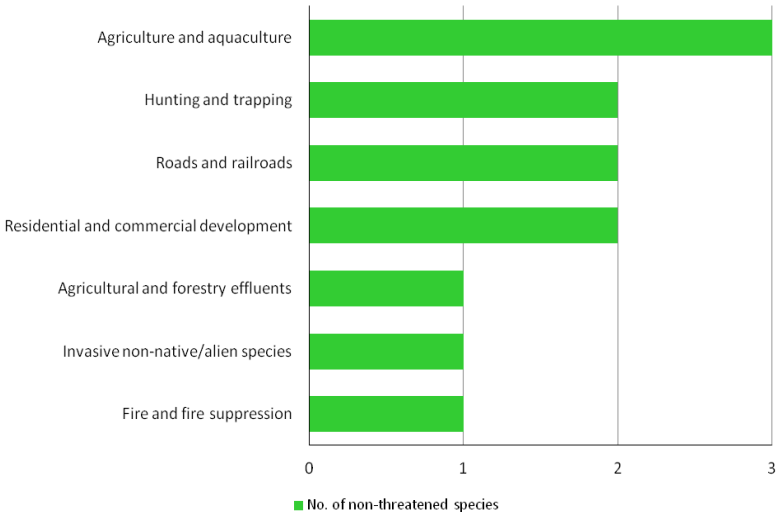
Reptiles

Reptile species in Malta represent 4% of all the reptiles in Europe. The conservation status of reptiles in Malta based on the European Red List data is relatively good since none of them are considered threatened and all are classified as Least Concern. 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 33% of the reptile species in Malta are threatened by human persecution and control, especially snakes.

Status at European level



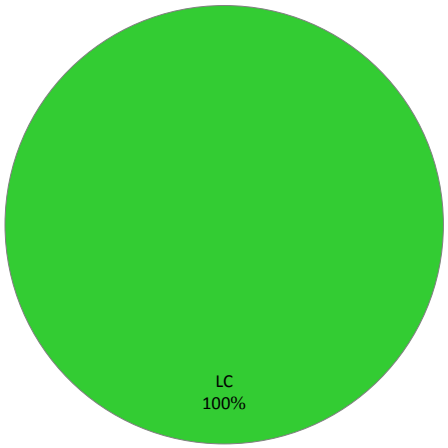
Threats at European level



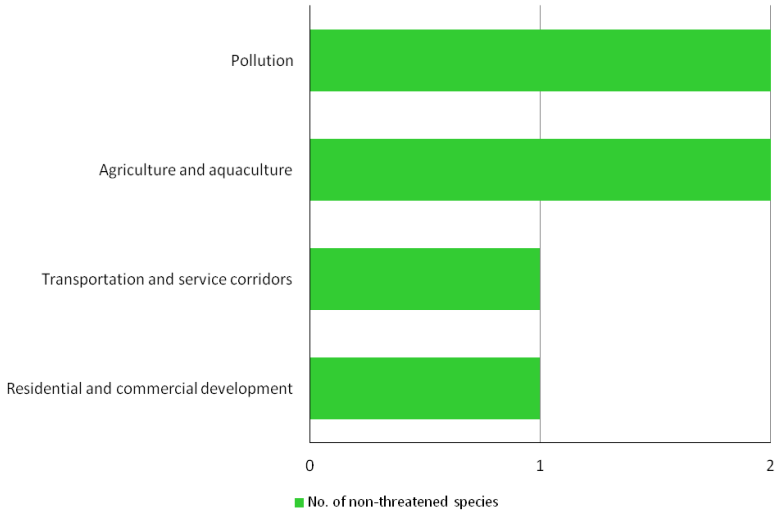
Amphibians

Amphibians in Malta represent 2% of all amphibians occurring in Europe. The conservation status of amphibians in Malta 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 pollution caused by agricultural effluents and agricultural expansion and intensification.

Status at European level



Threats at European level



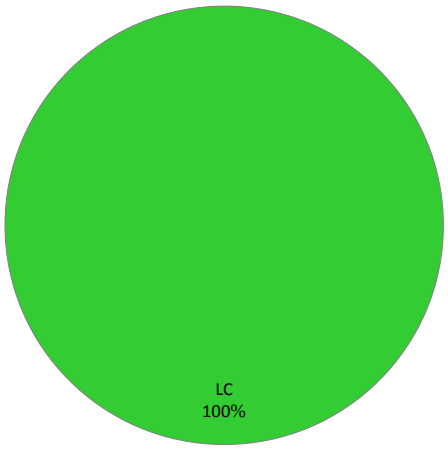
Freshwater fishes

Freshwater fishes are one of the most threatened groups at the European level. 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%. Malta only hosts one species of freshwater fishes which is classified as Least Concern at the European level. The major threat for this species at the European level is pollution caused by agricultural and forestry effluents.

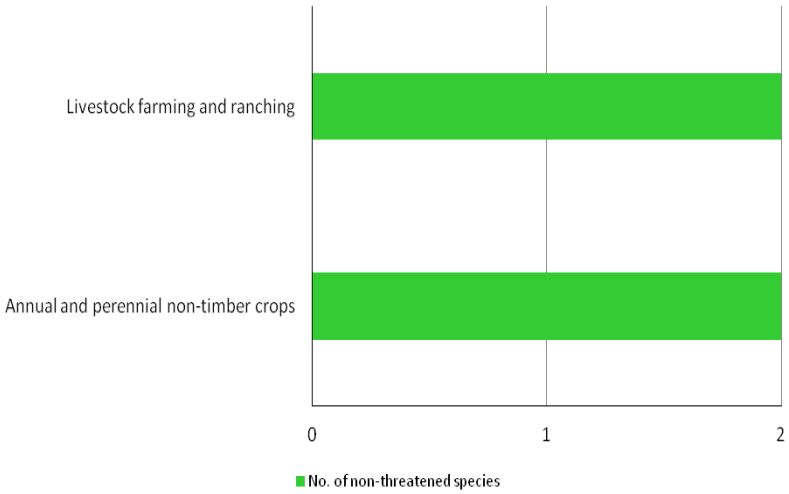
Butterflies

Malta hosts 4% of all butterfly species in Europe. The conservation status of butterflies in Malta based on the European Red List data is relatively good since none of them are considered threatened and all 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



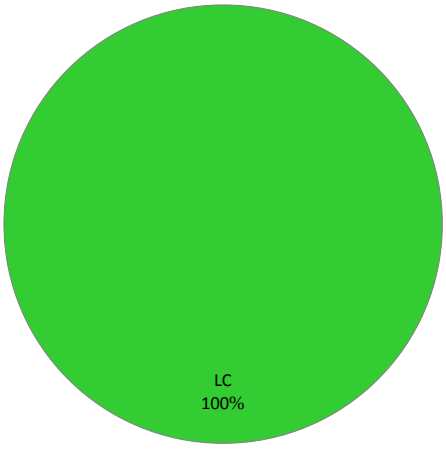
Threats at European level



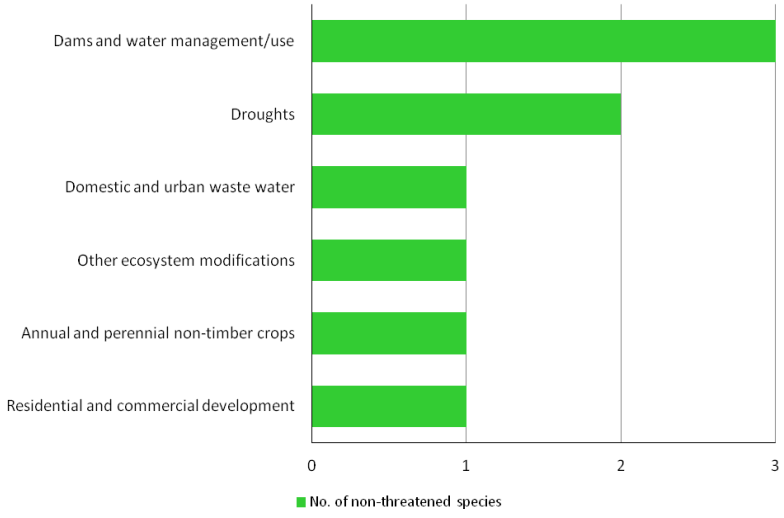
Dragonflies

Ten percent of all the dragonflies in Europe are present in Malta. The conservation status of dragonflies in Malta based on the European Red List data is relatively good since none of them are considered threatened and all are classified as Least Concern. 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



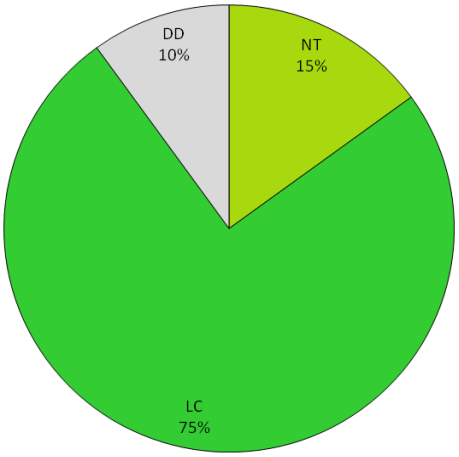
Threats at European level



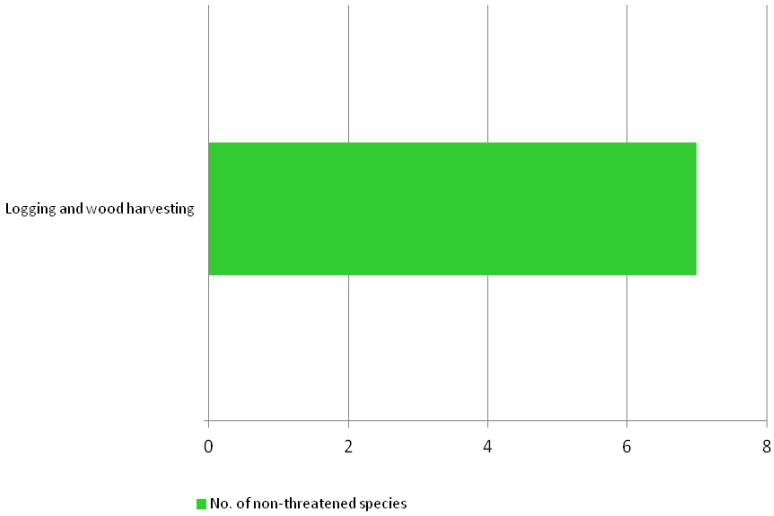
Saproxylic beetles

Five percent of the beetle species assessed by the European Red List are present in Malta. The conservation status of saproxylic beetles in Malta based on the European Red List data is relatively good since none of them are considered threatened, 15% are classified as Near Threatened and 75% as Least Concern. 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



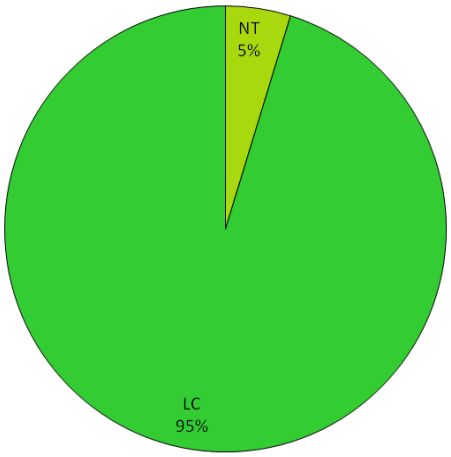
Threats at European level



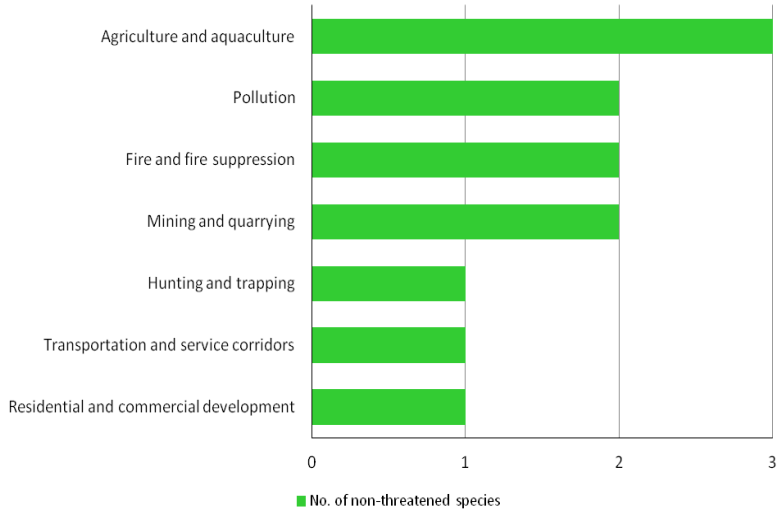
Terrestrial molluscs

The conservation status of terrestrial molluscs in Malta based on the European Red List data is relatively good since none of them are considered threatened, 5% are classified as Near Threatened and 95% as Least Concern. The major threat to this group at the European level is continuous destruction of suitable habitat due to agricultural expansion and intensification, pollution, mining and quarrying and increase in fire frequency.

Status at European level



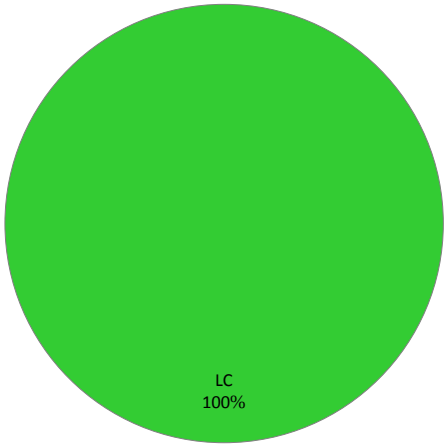
Threats at European level



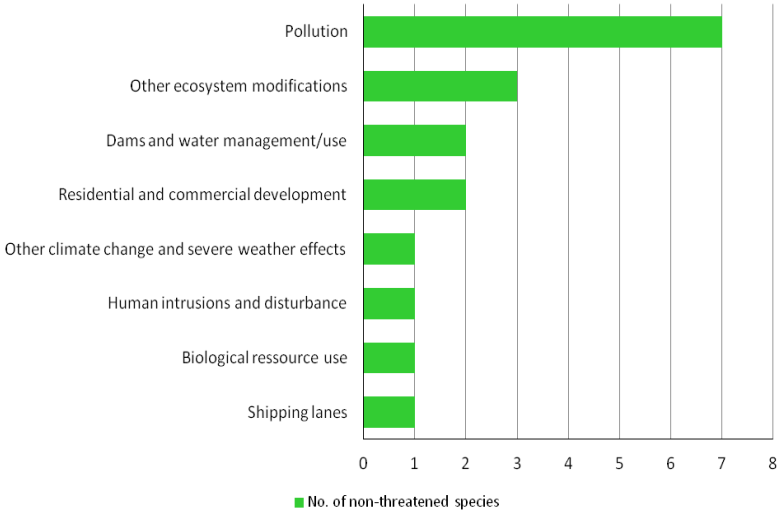
Freshwater molluscs

The conservation status of freshwater molluscs in Malta based on the European Red List data is relatively good since none of them are considered threatened and all of them are classified as Least Concern. Water pollution, especially the one coming from agricultural, industrial and domestic effluents is the main threat to this group at the European level. Habitat degradation caused by inappropriate ecosystem management is also one of the major threats.

Status at European level



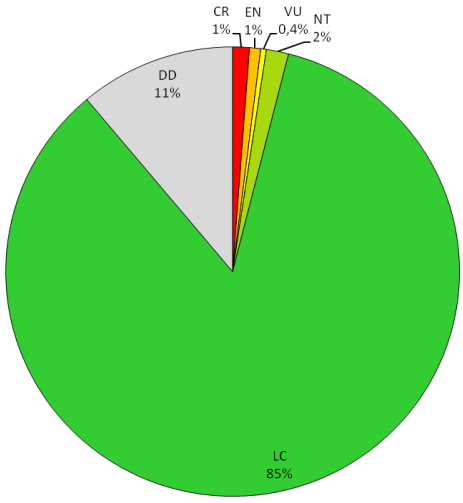
Threats at European level



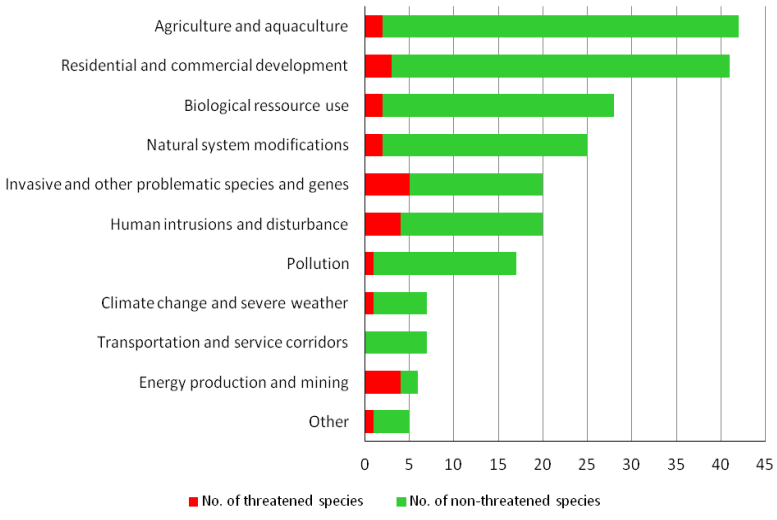
Vascular plants

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 252 species are found in Malta, which represent 14% of the total of species assessed in Europe. Three percent* of the 252 vascular plant species assessed in Malta are considered threatened at the European level. For terrestrial plants, urban and touristic development and agricultural expansion, harvesting and intensification have the worst impacts. For aquatic species, direct habitat loss caused by natural system modifications is the main threat.

Status at European level



Threats at European



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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 Jeffrey Sciberras (*Helichrysum melitense*)

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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.