Bolbelasmus unicornis

Annex	II, IV
Priority	No
Species group	Arthropods
Regions	Alpine, Black Sea, Continental, Mediterranean, Pannonian, Steppic

The beetle *Bolbelasmus unicornis* is known from all overall Europe, from England and France to Ukraine and Turkey, in the south to Italy and Greece. The centre of its area of distribution is in Pannonian plain. The species lives on subterranean fungi of Tuber genus and in decaying wood. It lives only on meadows that were not cultivated, often on loesses, karsts area and pannonian oak forests.

It is assessed as unfavourable-bad for the Alpine region. It was the same in the previous reporting round. Slovenia reports the cultivation, intensive mowing or intensification as the main pressures for this species.

The conservation status for the Black Sea region is assessed as unfavourable-inadequate. There was no report in the previous reporting round. From the Black Sea region Bulgaria reported main pressures or threats as an artificial planting on open ground (non-native trees), removal of dead and dying trees, use of biocides, hormones and chemicals (forestry), other urbanisation, industrial and similar activities, burning down.

In the Continental region, the conservation status is assessed as unfavourable-inadequate, but declining. In the previous reporting round it was unknown; however the change seems to be due to Bulgaria with biggist distribution area which did not prepare the report in 2007. Five Member States of the Continental region report varieties of high importance threats and pressures related to the cultivation, modification of cultivation practices, agricultural intensification, intensive grazing, artificial planting on open ground (non-native trees), forest and plantation management & use, removal of dead and dying trees, forest exploitation without replanting or natural regrowth, use of biocides, hormones and chemicals (forestry), other urbanisation, industrial and similar activities, burning down, species composition change (succession).

In the region Mediterranean the conservation status is assessed as unknown, which was also the case in 2007, but there was no report from Greece in 2013. No pressure and threat are reported.

In the Panonian region, the conservation status is assessed as unfavourable-bad, but stable. In the previous reporting round it was unknown. This change is due to better data especially from Hungary. Czech Republic reported the grassland removal for arable land as main pressure and the biocenotic evolution, succession as threat of high importance.
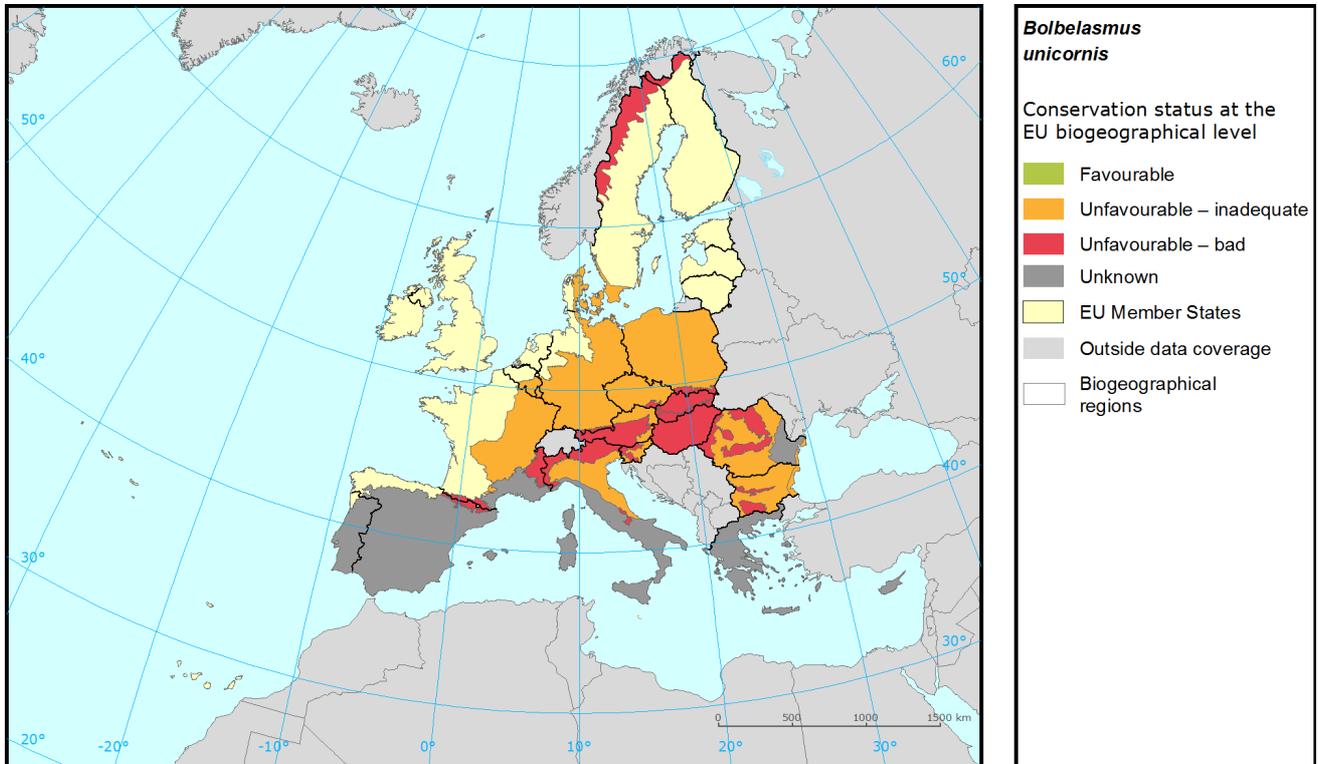
This species in the Steppic region is reported only from Romania. The conservation status is assessed as unknown. There was no report in the previous reporting round. From the Steppic region Romania reported main pressures or threats as the modification of cultivation practices and forest and plantation management & use and forest exploitation without replanting or

natural regrowth.

Assessment of conservation status at the European biogeographical level

Bolbelasmus unicornis

Conservation status at the EU biogeographical level

- Favourable
- Unfavourable – inadequate
- Unfavourable – bad
- Unknown
- EU Member States
- Outside data coverage
- Biogeographical regions

Region	Conservation status (CS) of parameters				Current CS	Trend in CS	% in region	Previous CS	Reason for change
	Range	Population	Habitat	Future prospects					
ALP	XX	XX	U2	XX	U2	=	3	U2	
BLS	FV	U1	U1	U1	U1	-	6	XX	Not genuine
CON	U1	U1	U1	U1	U1	-	11	XX	Not genuine
MED	XX	XX	XX	XX	XX		54	XX	
PAN	XX	XX	U2	XX	U2	x	26	XX	Not genuine
STE	XX	XX	XX	XX	XX	x	0.66	XX	

See the endnote for more information[i]

Assessment of conservation status at the Member State level

Bolbelasmus unicornis

Distribution and conservation status at the Member State level

🟩 Favourable		▭ EU Member States	
🟧 Unfavourable – inadequate		⬜ Outside data coverage	
🟥 Unfavourable – bad		▭ Biogeographical region	
⬛ Unknown			

The map shows both Conservation Status and distribution using a 10 km x 10 km grid.
Conservation status is assessed at biogeographical level. Therefore the representation in
each grid cell is only illustrative.

Species: *Bolbelasmus unicornis*

Report under the Article 17 of the Habitats Directive

MS	Region	Conservation status of parameters				Current CS	Trend in CS	% in region	Previous CS	Reason for change
		Range	Population	Habitat	Future prospects					
SI	ALP	XX	XX	XX	XX	XX		25.0	XX	
SK	ALP	XX	XX	U2	XX	U2	=	75.0	U2	
BG	BLS	FV	U1	U1	U1	U1	-	100.0		
AT	CON	U2	U2	U2	U2	U2	-	13.3		
BG	CON	FV	U1	U1	U1	U1	-	66.7		
FR	CON	XX	XX	XX	XX	XX			XX	
IT	CON	U2	XX	U1	U1	U2	-			
RO	CON	XX	XX	XX	XX	XX		20.0		
CY	MED									
GR	MED	XX	XX	XX	XX	XX		100.0	XX	
CZ	PAN	U2	U2	U2	U2	U2	-	2.6	U2	
HU	PAN	U1	U1	U1	FV	U1	x	69.2	XX	Better data
SK	PAN	XX	XX	U2	XX	U2	=	28.2	U2	
RO	STE	XX	XX	XX	XX	XX		100.0		

Knowing that not all changes in conservation status between the reporting periods were genuine, Member States were asked to give the reasons for changes in conservation status. Bulgaria and Romania only joined the EU in 2007 and Greece did not report for 2007-12 so no reason is given for change for these countries. Greek data shown above is from 2001-06.

Main pressures and threats reported by Member States

Member States were asked to report the 20 most important threats and pressures using an agreed hierarchical list which can be found on the Article 17 Reference Portal. Pressures are activities which are currently having an impact on the species and threats are activities expected to have an impact in the near future. Pressures and threats were ranked in three classes 'high, medium and low importance'; the tables below only show threats and pressures classed as 'high', for some species there were less than ten threats or pressures reported as highly important.

Ten most frequently reported 'highly important' pressures

Code	Activity	Frequency
A02	Modification of cultivation practices	27
B02	Forest and plantation management & use	13
B04	Use of 'pesticides' (forestry)	13
E06	Other urban/industrial developments	13
J01	Fire and fire suppression	13
A01	Agricultural cultivation	7
A03	Mowing or cutting grasslands	7
K02	Vegetation succession/Biocenotic evolution	7

Ten most frequently reported 'highly important' threats

Code	Activity	Frequency
B01	Afforestation	14
B02	Forest and plantation management & use	14
B03	Forest exploitation	14
B04	Use of 'pesticides' (forestry)	14
J01	Fire and fire suppression	14
K02	Vegetation succession/Biocenotic evolution	14
A02	Modification of cultivation practices	7
A04	Grazing by livestock	7

Proportion of population covered by the Natura 2000 network

For species listed in the Annex II of the Directive Member States were asked to report the population size within the Natura 2000 network. The percentage of species population covered by the network was estimated by comparing the population size within the network and the total population size in the biogeographical/marine region.

Percentage of coverage by Natura 2000 sites in biogeographical/marine region

	ALP	BLS	CON	PAN	STE
AT			100		
BG		100	100		
CZ			x		
HU				84	
IT			x		
RO			58		100
SI	x				
SK	32			10	

See the endnotes for more information[ii]

Most frequently reported conservation measures

For species listed in the Annex II of the Directive Member States were asked to report up to 20 conservation measures being implemented for this species using an agreed list which can be found on the Article 17 Reference Portal. Member States were further requested to highlight up to five most important ('highly important') measures; the table below only shows measures classed as 'high', for many species there were less than ten measures reported as highly important.

Ten most frequently reported 'highly important' conservation measures

Code	Measure	Frequency
6.1	Establish protected areas/sites	29
6.3	Legal protection of habitats and species	21
3.1	Restoring/improving forest habitats	14
3.2	Adapt forest management	14
9.1	Regulating/Management exploitation of natural resources on land	14
4.2	Restoring/improving the hydrological regime	7

This information is derived from the Member State national reports submitted to the European Commission under Article 17 of the Habitats Directive in 2013 and covering the period 2007-2012. More detailed information, including the MS reports, is available at:
http://bd.eionet.europa.eu/article17/reports2012/species/summary/?group=Arthropods&period=3&subject=Bolbelasmus+unicornis

[i]**Assessment of conservation status at the European biogeographical level:** Current Conservation Status (Current CS) shows the status for the reporting period 2007-2012, Previous Conservation Status (Previous CS) for the reporting period 2000-2006. Reason for change in conservation status between the reporting periods indicates whether the changes in the status were genuine or not genuine. Previous Conservation Status was not assessed for Steppic, Black Sea and Marine Black Sea regions. For these regions the Previous status is therefore considered as 'unknown'. The percentage of the species population occurring within the biogeographical/marine region (% in region) is calculated based on the area of GIS distribution.

[ii]**Percentage of coverage by Natura 2000 sites in biogeographical/marine region:** In some cases the population size within the Natura 2000 network has been estimated using a different methodology to the estimate of overall population size and this can lead to percentage covers greater than 100%. In such case the value has been given as 100% and highlighted with an asterisk (*). The value 'x' indicates that the Member State has not reported the species population and/or the coverage by Natura 2000. No information is available for Greece. The values are only provided for regions, in which the occurrence of the species has been reported by the Member States.