European Environment Agency
European Topic Centre on Biological Diversity

Osmoderma eremita

Annex	II, IV
Priority	Yes
Species group	Arthropods
Regions	Alpine, Atlantic, Black Sea, Boreal, Continental, Mediterranean, Pannonian, Steppic

The hermit beetle *Osmoderma eremita* belongs in the Scarabaeidae family and is distributed widely across Europe. The larvae of this species develop by consuming wood which has already been attacked by mycelium covering the walls of cavities (rot-holes) in old deciduous trees and also in yew-trees. Species uses many different food plants and has been recorded from a large number of tree species. In contrast with this, it has very special requirements as to the selection of the cavity.

In the Alpine region, the conservation status is assessed as unfavourable-inadequate and decreasing. In the previous reporting round it was unfavourable-bad. This change seems to be due to better data and using different method for the assessment what was reported by countries. Also significantly influence on this change has Bulgaria with very large distribution area for this species. Bulgaria did not report in 2007. In Alpine region were reported these main threats and pressures: modification of cultivation practices (France), abandonment of crop production (Austria), restructuring agricultural land holding (France), removal of hedges and copses or scrub (Slovenia), agriculture activities not referred to above (Austria), artificial planting on open ground (non-native trees) (Romania, Bulgaria), forest and plantation management and use (Romania), forestry clearance (Romania, Bulgaria, Italia, Spain and Slovakia), removal of dead and dying trees (Slovenia, Slovakia, Romania and Spain), forest exploitation without replanting or natural regrowth (Romania), use of biocides, hormones and chemicals (forestry) (Spain and Bulgaria), other urbanisation, industrial and similar activities (Austria), tree surgery, felling for public safety, removal of roadside trees (Austria and Slovenia), problematic native species (Italy), burning down (Bulgaria and Spain) and anthropogenic reduction of habitat connectivity (Spain).

The conservation status for the Atlantic region is assessed as unfavourable-bad which was also the case in 2007 (no change). Following threats and pressures were reported for the Atlantic region: modification of cultivation practices and restructuring agricultural land holding from France. Forest and plantation management and use from France and Germany, forestry clearance and removal of dead and dying trees, use of biocides, hormones and chemicals (forestry), burning down and anthropogenic reduction of habitat connectivity from Spain, forest exploitation without replanting or natural regrowth and roads, paths and railroads from France, tree surgery, felling for public safety, removal of roadside trees from Germany.

The conservation status for the Black Sea region is assessed as unfavourable-inadequate. There was no report in the previous reporting round. Bulgaria reported for the Black Sea region these threats: forestry clearance, removal of dead and dying trees and burning down also as a pressure.

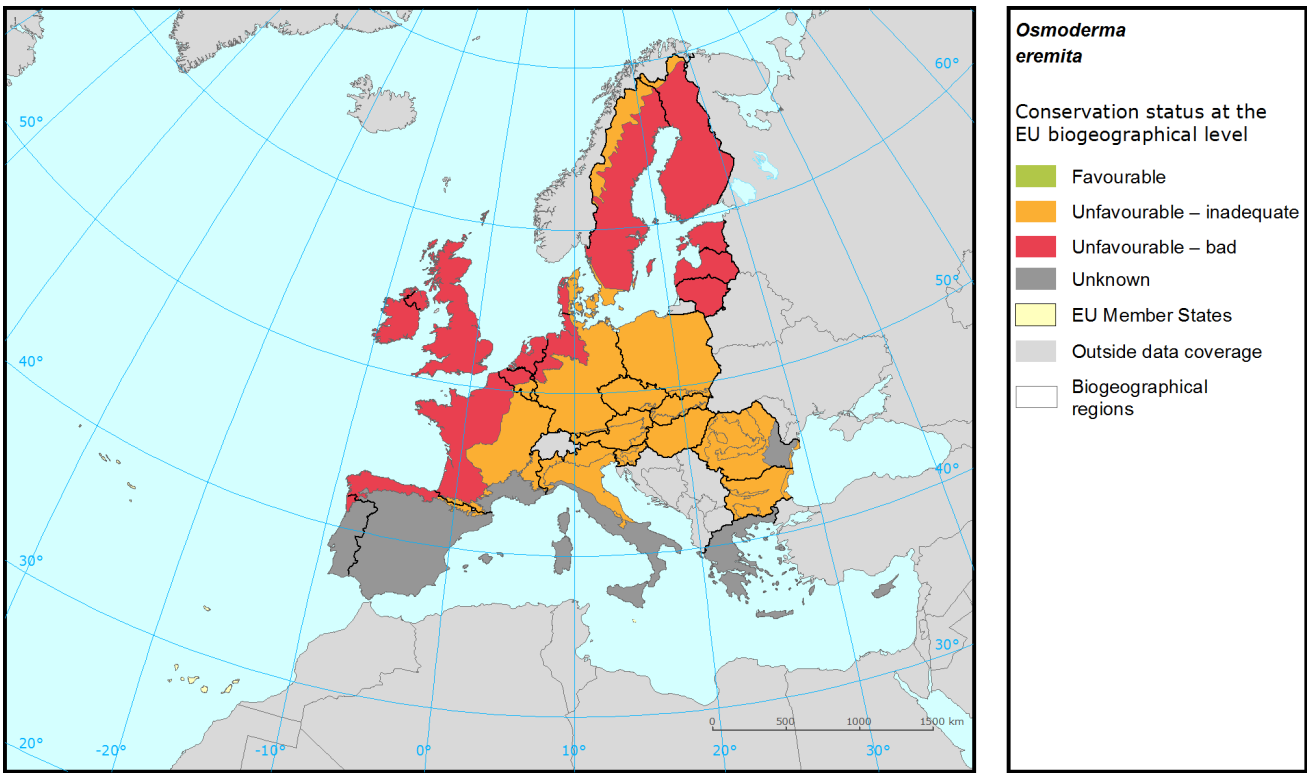
The conservation status for the Boreal region is assessed as unfavourable-bad and

decreasing.. In the previous reporting round it was unfavourable-inadequate, however the change seems to be due to significant differences in the distribution areas from gridded map reported in 2007 and 2013.From the Boreal region four countries reported following threats and pressures: abandonment and lack of mowing and tree surgery, felling for public safety, removal of roadside trees (Lithuania), removal of dead and dying trees (Latvia and Estonia), forestry activities not referred to above (Sweden) and anthropogenic reduction of habitat connectivity both from Sweden and Lithuania.

The conservation status for the Continental region is assessed as unfavourable-inadequate and decreasing. In the previous reporting round it was unfavourable-bad, however all countries reported no change or non-genuine change. This change seems to be due to better data for range and using different methods for the assessments. In the Continental region were reported following threats and pressures: modification of cultivation practices and restructuring agricultural land holding (France), abandonment of crop production and agriculture activities not referred to above (Austria), forest and plantation management and use (Denmark, Romania, France and Germany), forestry clearance (Italy, Romania, Bulgaria), removal of dead and dying trees (Poland, Slovenia, Germany, Romania, Bulgaria and Czech Republic), forest exploitation without replanting or natural regrowth (France and Romania), forestry activities not referred to above (Sweden and Austria), roads, paths and railroads (Poland, France, Germany), urbanised areas, human habitation (Poland), other urbanisation, industrial and similar activities (Austria), intensive maintenance of public parks /cleaning of beaches (Italy, Slovenia), roads, paths and railroads (Poland, France, Germany), urbanised areas, human habitation (Poland), intensive maintenance of public parks /cleaning of beaches (Slovenia, Italy), tree surgery, felling for public safety, removal of roadside trees (Poland, Slovenia, Czech Republic, Austria, Germany), problematic native species (Italy), burning down (Bulgaria), reduction or loss of specific habitat features (Germany) and anthropogenic reduction of habitat connectivity (Sweden and Germany).

The conservation status for the Mediterranean region is assessed as unknown, which was also the case in 2007 (no change). In the Mediterranean region exist following threats and pressures: modification of cultivation practices, restructuring agricultural land holding, forestry activities not referred to above, roads, paths and railroads and discharges in France, forest exploitation without replanting or natural regrowth, intensive maintenance of public parks /cleaning of beaches and problematic native species in Italy, removal of dead and dying trees, use of biocides, hormones and chemicals (forest

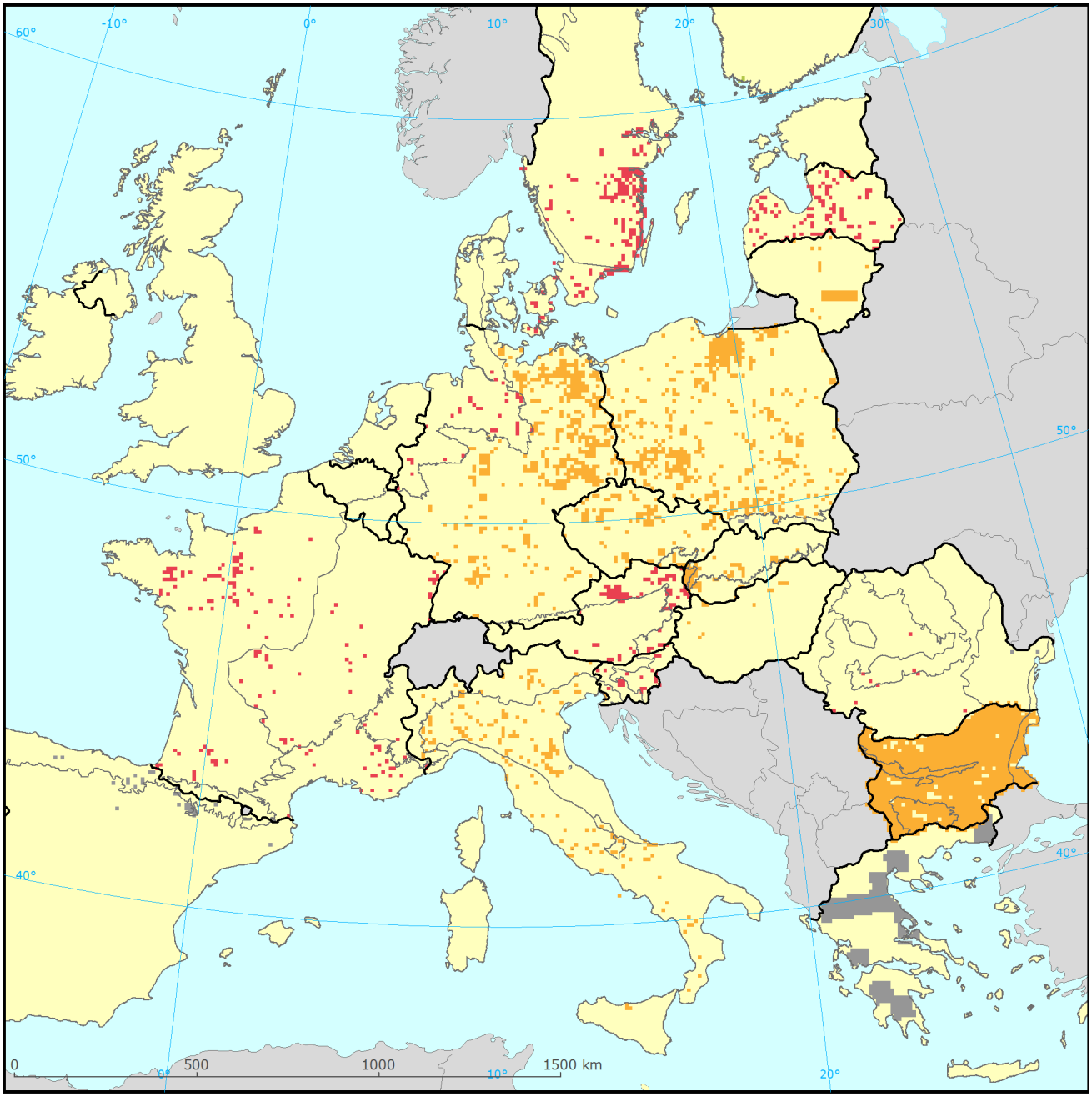
Assessment of conservation status at the European biogeographical level



Region	Conservation status (CS) of parameters				Current CS	Trend in CS	% in region	Previous CS	Reason for change
	Range	Population	Habitat	Future prospects					
ALP	FV	U1	U1	U1	U1	-	8	U2	Not genuine
ATL	U2	U2	U2	XX	U2	-	4	U2	
BLS	FV	FV	FV	U1	U1	-	2	XX	Not genuine
BOR	U1	U2	U2	U2	U2	-	9	U1	Not genuine
CON	U1	U1	U1	U1	U1	-	64	U2	Not genuine
MED	XX	XX	XX	XX	XX	x	12	XX	
PAN	U1	U1	U1	U1	U1	-	1	XX	Not genuine
STE	XX	XX	XX	XX	XX	x	0.06	XX	

See the endnote for more information[i]

Assessment of conservation status at the Member State level



Osmoderma eremita

Distribution and conservation status at the Member State level

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

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: *Osmoderma eremita*

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					
AT	ALP	U2	U2	U2	U2	U2	-	4.8	U2	Better data
BG	ALP	FV	FV	FV	U1	U1	-	64.1		
ES	ALP	FV	XX	XX	XX	XX		1.9	XX	
FR	ALP	U2	U2	U2	U2	U2	-	1.5	XX	Genuine
IT	ALP	FV	XX	U1	U1	U1	-	12.2	U2	Better data
PL	ALP	XX	XX	XX	XX	XX		1.9	U1	Changed method
RO	ALP	U2	U1	U2	U2	U2		1.1		
SI	ALP	FV	XX	U2	U2	U2	x	2.2	U2	
SK	ALP	U1	U1	U1	U1	U1	-	10.4	XX	Better data
DE	ATL	U1	U2	U2	U1	U2	+	25.4	U2	Better data
ES	ATL	FV	XX	XX	XX	XX		7.7	XX	
FR	ATL	U2	XX	U2	XX	U2	-	66.9	U1	Genuine
BG	BLS	FV	FV	FV	U1	U1	-	100.0		
EE	BOR	U1	U1	U1	U1	U1	=	0.3	U1+	Better data
FI	BOR	FV	FV	FV	FV	FV		1.0	FV	Better data
LT	BOR	U1	XX	U1	U1	U1	x	13.6	U1	
LV	BOR	U1	U2	U2	U2	U2	x	33.9	FV	Better data
SE	BOR	FV	U2	U2	U2	U2	-	51.2	U2	Better data
AT	CON	U2	U2	U2	U2	U2	-	2.8	U2	Better data
BG	CON	FV	FV	FV	U1	U1	-	40.8		
CZ	CON	U1	U1	U1	U1	U1	=	4.4	U2	Better data
DE	CON	U1	U1	U1	U1	U1	=	20.3	U2	Better data
DK	CON	U2	U2	U2	U2	U2	=	0.6	U2	Better data
FR	CON	U2	U2	U2	XX	U2	-	1.7	U2	
IT	CON	FV	U1	U1	U1	U1	-	4.4	U2	Better data
PL	CON	FV	U1	U1	U1	U1	-	23.0	U1-	
RO	CON	U2	U1	U2	U2	U2		0.3		
SE	CON	FV	U2	U2	U2	U2	-	1.0	U2	Better data
SI	CON	FV	XX	U2	U2	U2	x	0.6	U2	
ES	MED	FV	XX	XX	XX	XX		2.9	XX	
FR	MED	U2	U2	U2	XX	U2	-	5.8	U1	Genuine
GR	MED	XX	XX	XX	XX	XX		78.6	XX	
IT	MED	FV	U1	U1	U1	U1	-	12.7	U2	Better data
CZ	PAN	U1	U1	U1	U1	U1	=	18.0	U2	Better data

MS	Region	Conservation status of parameters				Current CS	Trend in CS	% in region	Previous CS	Reason for change
		Range	Population	Habitat	Future prospects					
HU	PAN	U1	XX	U1	U1	U1	x	24.0	U1-	
SK	PAN	U1	U1	U1	U1	U1	-	58.0	XX	Better data
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
B02	Forest and plantation management & use	29
G05	Other human intrusions and disturbances	14
J01	Fire and fire suppression	8
J03	Other changes to ecosystems	8
A10	Restructuring agricultural parcels	6
A02	Modification of cultivation practices	5
D01	Roads, railroads and paths	5
B04	Use of 'pesticides' (forestry)	4
B07	Other forestry activities	4
I02	Problematic native species	4

Ten most frequently reported 'highly important' threats

Code	Activity	Frequency
B02	Forest and plantation management & use	29
G05	Other human intrusions and disturbances	14
J01	Fire and fire suppression	8
J03	Other changes to ecosystems	8
A10	Restructuring agricultural parcels	6
B03	Forest exploitation	6
D01	Roads, railroads and paths	6
A02	Modification of cultivation practices	5
B04	Use of 'pesticides' (forestry)	5
B07	Other forestry activities	3

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	ATL	BLS	BOR	CON	MED	PAN	STE
AT	4				17			
BG	70		80		40			
CZ					35		80	
DE		x			76			
DK					100			
EE				75				
ES	17	20				5		
FI				100				
FR	x	x			x	x		
HU							84	
IT	x				x	x		
LT				71				
LV				41				
PL	x				5			
RO	58				41			100
SE				33	76			
SI	100				100			
SK	35						27	

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
6.3	Legal protection of habitats and species	29
3.2	Adapt forest management	19
6.1	Establish protected areas/sites	16
3.1	Restoring/improving forest habitats	10
7.0	Other species management measures	7
7.4	Specific single species or species group management measures	7
6.4	Manage landscape features	4
9.1	Regulating/Management exploitation of natural resources on land	4
2.0	Other agriculture-related measures	1
2.1	Maintaining grasslands and other open habitats	1

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=Osmoderma+eremita

[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.