Report under the Article 17 of the Habitats Directive Period 2007-2012

# **European Environment Agency** *European Topic Centre on Biological Diversity*



## Graphoderus bilineatus

Annex II, IV Priority No

**Species group** Arthropods

**Regions** Alpine, Atlantic, Black Sea, Boreal, Continental, Pannonian, Steppic

Water beetle *Graphoderus bilineatus* belongs to group of diving beetles. It is widely spread across Europe. This species is confined mainly to inland, standing water bodies.

It is assessed as unfavourable-bad in the Alpine region which was the case also in 2007. Fishing and harvesting aquatic resources, diffuse pollution to surface waters due to agricultural and forestry activities and also due to other sources not listed, modification of standing water bodies and eutrophication were reported from the Austria as the main pressure or threats.. Another country of the Alpine region, Slovakia reported human induced changes in hydraulic conditions as its major threat and pressure for the species.

The conservation status for the Atlantic region is assessed as unfavourable-bad which was also the case in 2007. In the Atlantic region, France reported as its main threats and pressures cultivation and invasive non-native species. In the Netherlands main threats and pressures were following: crop change, canalisation and water deviation and dykes, embankments, artificial beaches, general.

In the Black region the conservation status of this species is reported by Romania as unfavourable-inadequate. There was no report in the previous reporting round. Removal of sediments (e.g. mud) is reported as a threat of high importance.

The conservation status for the Boreal region is assessed as unfavourable-inadequate, but stable. In the previous reporting round it was favourable, however the change seems to be due to better data especially from Latvia. In Boreal region from Lithuania were reported these main threats and pressures: use of biocides, hormones and chemicals, pollution to surface waters (limnic and terrestrial, marine and brackish) and species composition change (succession) and from Latvia: invasive non-native species and problematic native species as threats.

In the Continental region, the conservation status is assessed as unfavourable-bad, but stable. In the previous reporting round it was favourable, however the change seems to be due to significant differences in the distribution areas from gridded map reported in 2007 and 2013 especially from Sweden. Eight European states from the Continental region reported following threats and pressures: intensive fish farming, intensification (Czech Republic), fishing and harvesting aquatic resources (Slovenia and Austria), leisure fishing (Slovenia), pollution to surface waters (limnic and terrestrial, marine and brackish) (Poland and Germany), diffuse pollution to surface waters due to agricultural and forestry activities (Austria and Czech Republic), diffuse pollution to surface waters due to other sources not listed (Austria), landfill, land reclamation and drying out and infilling of ditches, dykes, ponds, pools, marshes or pits (Italy), canalisation & water deviation (Poland), modification of hydrographic functioning, general (Germany), modification of standing water bodies (Slovenia and Austria),

Report under the Article 17 of the Habitats Directive

surface water abstractions by fish farms (Slovenia), water abstractions from groundwater(Romania), reduction or loss of specific habitat features and biocenotic evolution, succession (Germany) and natural eutrophication (Austria).

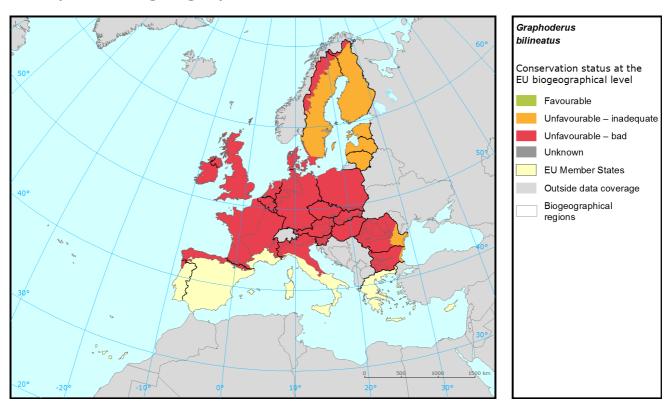
The conservation status for the Pannonian region is assessed as unfavourable-bad which was also the case in 2007 (no change). Only Slovakia from Pannonian region reported human induced changes in hydraulic conditions as main threat and pressure.

Water beetle *Graphoderus bilineatus* belongs to group of diving beetles. It is widely spread across Europe. This species is confined mainly to inland, standing water bodies.

In the Steppic region this species is reported only from Romania. The conservation status is assessed as unfavourable-inadequate. There was no report in the previous reporting round. Water abstractions from groundwater as main threat reported Romania for this region

Report under the Article 17 of the Habitats Directive

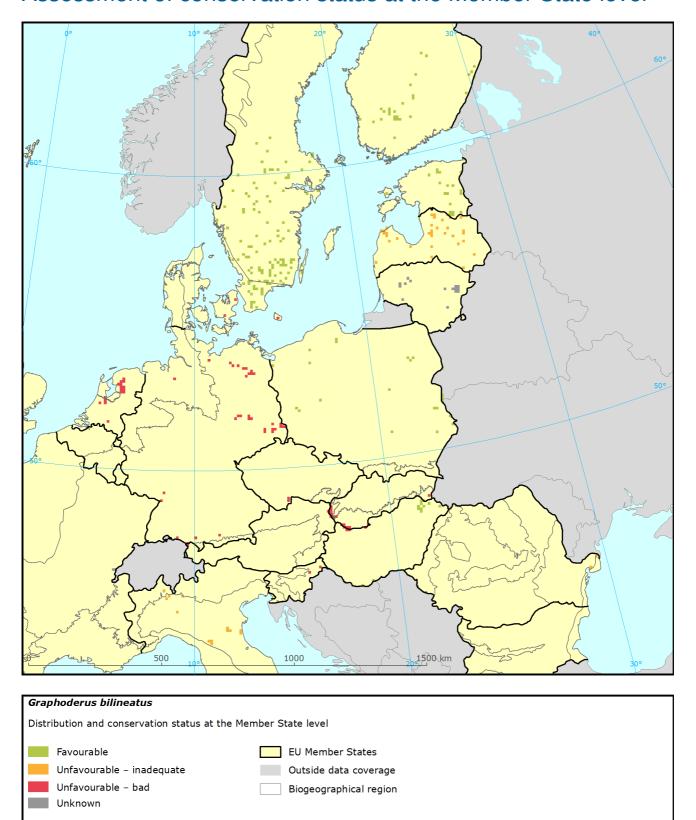
## Assessment of conservation status at the European biogeographical level



_	Conser	vation status	(CS) of p	arameters	Current	Trend in	% in	Previous	Reason for change
Region	Range	Population	Habitat	Future prospects	CS	CS	region	CS	
ALP	U2	U2	U2	U2	U2	Х	0.87	U2	
ATL	U2	FV	U1	U2	U2	x	5	U2	
BLS	FV	U1	U1	U1	U1	х	0.29	XX	Not genuine
BOR	U1	U1	U1	U1	U1	x	57	FV	Not genuine
CON	U2	U2	U1	U2	U2	x	28	FV	Not genuine
PAN	U1	XX	U2	XX	U2	-	8	U2	
STE	U1	U1	U1	U1	U1	х	0.29	XX	Not genuine

See the endnote for more information<sup>i</sup>

#### Assessment of conservation status at the Member State level



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

Report under the Article 17 of the Habitats Directive

		Cons	ervation statu		0	T	0/ !	Duaniana	December	
MS	Region	Range	Population	Habitat	Future prospects	Current	Trend in CS	% in region	Previous CS	Reason for change
AT	ALP	U2	U2	U2	U2	U2	х	33.3	U2	
IT	ALP	U1	XX	U1	XX	U1	x	33.3		
SK	ALP	XX	XX	U2	XX	U2	-	33.3	U2-	
DE	ATL	U2	U2	FV	XX	U2	+	5.9	FV	Changed method
FR	ATL	XX	XX	XX	XX	XX			U2	Genuine
NL	ATL	U2	FV	U1	U2	U2	х	94.1	U2	
RO	BLS	FV	U1	U1	U1	U1		100.0		
EE	BOR	FV	FV	FV	FV	FV		10.3	U1	Better data
FI	BOR	FV	FV	FV	FV	FV		15.9	FV	
LT	BOR	XX	XX	XX	XX	XX		7.7	XX	
LV	BOR	U1	U1	U1	U1	U1	х	17.4	FV	Better data
SE	BOR	FV	FV	FV	FV	FV		48.7	FV	
AT	CON	U2	U2	U2	U2	U2	=	1.0	U2	
CZ	CON	U2	U1	U1	U1	U2	=	2.0	U2	
DE	CON	U2	U2	U1	U2	U2	х	32.7	U2	
DK	CON	U2	U2	XX	U2	U2	x	3.1	U2	
FR	CON	XX	XX	FV	XX	XX		2.0		Better data
IT	CON	U1	XX	U1	U1	U1	х	12.2	U2	
PL	CON	XX	FV	FV	FV	FV		22.4	FV	
RO	CON	FV	U1	U1	U1	U1		1.0		
SE	CON	FV	FV	FV	FV	FV		21.4	FV	
SI	CON	U2	U2	U2	U2	U2	-	2.0	XX	Genuine
HU	PAN	FV	FV	FV	FV	FV		41.4	XX	Better data
SK	PAN	XX	XX	U2	XX	U2	-	58.6	U2-	
RO	STE	U1	U1	U1	U1	U1		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.

Report under the Article 17 of the Habitats Directive

### 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
J02	Changes in water bodies conditions	41
H01	Pollution to surface waters	23
F02	Fishing and harvesting aquatic resources	14
K02	Vegetation succession/Biocenotic evolution	14
A02	Modification of cultivation practices	5
F01	Marine and freshwater aquaculture	5

#### Ten most frequently reported 'highly important' threats

Code	Activity	Frequency
J02	Changes in water bodies conditions	40
H01	Pollution to surface waters	20
K02	Vegetation succession/Biocenotic evolution	13
F02	Fishing and harvesting aquatic resources	10
A02	Modification of cultivation practices	3
A07	Use of 'pesticides' in agriculture	3
101	Invasive alien species	3
102	Problematic native species	3
J03	Other changes to ecosystems	3

Report under the Article 17 of the Habitats Directive

## 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	PAN	STE
AT	100				Х		
CZ					100		
DE		100			95		
DK					43		
EE				100			
FI				32			
FR					Χ		
HU						86	
IT	Х				Χ		
LT				28			
LV				52			
NL		50					
PL					43		
RO			Χ		100		100
SE				10	20		
SI					100		
SK	32					10	

See the endnotes for more information ii

Report under the Article 17 of the Habitats Directive

## 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	26
4.1	Restoring/improving water quality	19
6.1	Establish protected areas/sites	19
4.3	Managing water abstraction	13
7.2	Regulation/ Management of fishery in limnic systems	6
2.1	Maintaining grasslands and other open habitats	3
4.0	Other wetland-related measures	3
6.4	Manage landscape features	3
7.0	Other species management measures	3
7.1	Regulation/ Management of hunting and taking	3

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: <a href="http://bd.eionet.europa.eu/article17/reports2012/species/summary/?group=Arthropods&period=3&subject=Graphoderus+bilineatus">http://bd.eionet.europa.eu/article17/reports2012/species/summary/?group=Arthropods&period=3&subject=Graphoderus+bilineatus</a>

Report under the Article 17 of the Habitats Directive

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.

iiPercentage 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.