



Buxbaumia viridis

Annex	II
Priority	No
Species group	Non-vascular plants
Regions	Alpine, Atlantic, Boreal, Continental, Mediterranean, Pannonian

Green Shield-moss *Buxbaumia viridis*, grows on well-decayed conifer logs and stumps in sheltered and shaded places (rarely on humus-rich soils). Shoots are minute, only capsules visible in the field. Local populations normally survive on a substratum patch for only a few years.

In Europe it has been found in several countries and is considered as Boreal-montane. However rare in most and most often on each national red list (except Sweden where it is considered as only slightly declining, however, from a quite large population size). The population in Europe in total has an estimated decline rate roughly 10 % in 10 years based on the present decline of decaying wood in the boreal-montane zone, especially Finland, Russia and Sweden, which include the region where the species is most abundant. That meets the criterion for Vulnerable (VU) C2a status at a European level.

It is assessed as "Unfavourable Bad" in Pannoinan region, "Unfavourable Inadequate" in Alpine and Continental region, "Unkown" in Atlantic region and "Favourable" in Boreal and Mediterranean region. Trend stable or unknown for all regions. Most member states reported "Unfavourable" or "Unkown" status. The species was reported "Favourable" only from Bulgaria (ALP), Estonia (BOR), France (MED), Poland (ALP, CON) and Sweden (BOR).

The threats are mainly removal of dead wood, particularly large, rotten logs, and fragmentation of habitat, usually including commercial forestry operations.

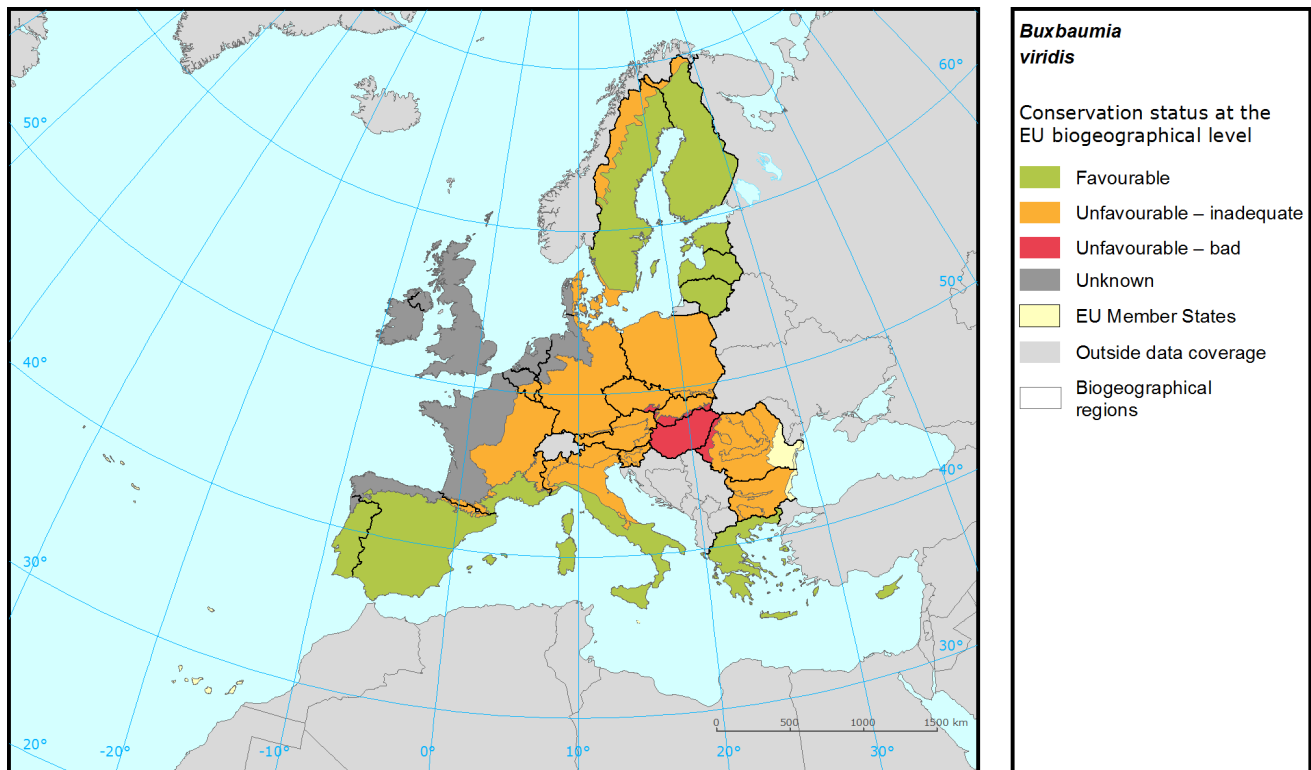
Changes in overall conservation status between 2001-06 and 2007-12 report are mostly caused by different methodical approach and better data rather than real change in conservation status in Alpine, Atlantic, Continental and Mediterranean region. No changes in overall conservation status between 2001-06 and 2007-12 reports in Boreal and Pannonian region.

Better data is needed from Germany, Greece, Italy, Lithuania, Slovenia, Spain and United Kingdom.

Species: *Buxbaumia viridis*

Report under the Article 17 of the Habitats Directive

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	x	28	U2	Not genuine
ATL	FV	XX	XX	XX	XX		1	U1	Not genuine
BOR	FV	FV	FV	FV	FV	=	48	FV	
CON	U1	U1	U1	U1	U1	x	19	XX	Not genuine
MED	FV	FV	FV	XX	FV	=	4	XX	Not genuine
PAN	U1	U2	U2	U2	U2	=	0.14	U2	

See the endnote for more informationⁱ

Species: *Buxbaumia viridis*

Report under the Article 17 of the Habitats Directive

Assessment of conservation status at the Member State level



Buxbaumia viridis

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: *Buxbaumia viridis*

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	U1	U2	U2	-	17.7	U2	Better data
BG	ALP	FV	FV	FV	FV	FV		35.2		
DE	ALP	XX	XX	XX	XX	XX		3.4	XX	
ES	ALP	FV	FV	U1	FV	U1	+	3.9	U2	
FR	ALP	FV	FV	FV	U1	U1	=	18.5	FV	Better data
IT	ALP	FV	U1	U1	U1	U1	-	3.2	FV	Better data
PL	ALP	FV	FV	FV	FV	FV		4.2	U2	Better data
RO	ALP	FV	U1	U1	U1	U1		5.4		
SE	ALP	FV	U2	FV	U1	U2	=		U2	
SI	ALP	FV	XX	FV	XX	XX		1.2	XX	
SK	ALP	FV	U1	U1	FV	U1	=	7.1	XX	Better data
DK	ATL	U2	U2	U2	U2	U2	x		U2	
UK	ATL	FV	XX	XX	XX	XX		100.0	U1+	Changed method
EE	BOR	FV	FV	FV	FV	FV		1.1	U2	Better data
FI	BOR	FV	U2	U1	U1	U2	=	1.7	U1	Better data
LT	BOR	FV	XX	U1	XX	U1	x	2.8	U1	Genuine
LV	BOR	XX	U1	U1	U1	U1	=	0.4	U1	
SE	BOR	FV	FV	FV	FV	FV		93.9	FV	
AT	CON	U2	U2	U2	U2	U2	-		U2	Better data
BG	CON	FV	FV	FV	U1	U1	=	17.8		
CZ	CON	U1	U1	U1	U1	U1	=	18.5	XX	Better data
DE	CON	XX	XX	XX	XX	XX		21.1	XX	
DK	CON	U2	U2	U2	U2	U2	x	0.4	U2	
FR	CON	FV	U1	U1	U1	U1	=	38.9	FV	Better data
IT	CON	FV	XX	U1	U1	U1	-	1.1		
PL	CON	FV	FV	FV	FV	FV		1.9	U2	Better data
SE	CON	U1	U2	U1	U1	U2	=		U2	Better data
SI	CON	FV	XX	FV	XX	XX		0.4	XX	
ES	MED	FV	XX	U2	U1	U2	+	10.7	XX	Changed method
FR	MED	FV	FV	FV	XX	FV		76.8	FV	
GR	MED	XX	XX	XX	XX	XX		1.8	XX	
IT	MED	FV	XX	U1	U1	U1	-	10.7	U1	No data
HU	PAN	U1	U2	U2	U2	U2	=	100.0	U2	

Species: *Buxbaumia viridis*

Report under the Article 17 of the Habitats Directive

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	61
K02	Vegetation succession/Biocenotic evolution	11
B03	Forest exploitation	7
H04	Air pollution, air-borne pollutants	7
B05	Use of fertilizers (forestry)	4
B07	Other forestry activities	4
K04	Interspecific floral relations	4
M01	Abiotic changes (climate change)	4

Ten most frequently reported 'highly important' threats

Code	Activity	Frequency
B02	Forest and plantation management & use	57
H04	Air pollution, air-borne pollutants	10
J01	Fire and fire suppression	7
K02	Vegetation succession/Biocenotic evolution	7
M01	Abiotic changes (climate change)	7
B03	Forest exploitation	3
B05	Use of fertilizers (forestry)	3
B07	Other forestry activities	3
K04	Interspecific floral relations	3

Species: *Buxbaumia viridis*

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	BOR	CON	MED	PAN
AT	17			x		
BG	100			100		
CZ				36		
DE	64			51		
DK		0		100		
EE			100			
ES	100				25	
FI			50			
FR	56			98	3	
HU						100
IT	x			x	x	
LT			45			
LV			15			
PL	100			77		
RO	100					
SE	100		20	50		
SI	0			0		
SK	100					
UK		81				

See the endnotes for more informationⁱⁱ

Species: *Buxbaumia viridis*

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
6.1	Establish protected areas/sites	30
3.2	Adapt forest management	27
6.3	Legal protection of habitats and species	24
7.0	Other species management measures	6
9.1	Regulating/Management exploitation of natural resources on land	6
3.1	Restoring/improving forest habitats	3
6.4	Manage landscape features	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:

<http://bd.eionet.europa.eu/article17/reports2012/species/summary/?group=Non-vascular+plants&period=3&subject=Buxbaumia+viridis>

Species: *Buxbaumia viridis*

Report under the Article 17 of the Habitats Directive

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.