



## Maculinea arion

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<b>Annex</b>	IV
<b>Priority</b>	No
<b>Species group</b>	Arthropods
<b>Regions</b>	Alpine, Atlantic, Black Sea, Boreal, Continental, Mediterranean, Pannonian

The Large Blue (*Maculinea arion*) occurs locally on dry, open grasslands on limestone and sandy areas. It is one of the larger, more conspicuous blues. The females lay their eggs on different species of thyme (*Thymus* spp.), and on warmer sites also on Marjoram (*Origanum vulgare*). The caterpillars feed on the buds and flowers of the foodplant. After a few weeks they leave their foodplant and allow themselves to be taken by workers into the nests of any species of *Myrmica* ant, although over most of Europe survival is high only with *Myrmica sabuleti*, which must adopt at least 67% of larvae for a population to persist; in north-east Europe there is some evidence of a host switch to *M. lobicornis*. The caterpillars feed on the ant grubs, hibernating and pupating there as well. Species occurs from Europe to Siberia, Mongolia, China and Japan.

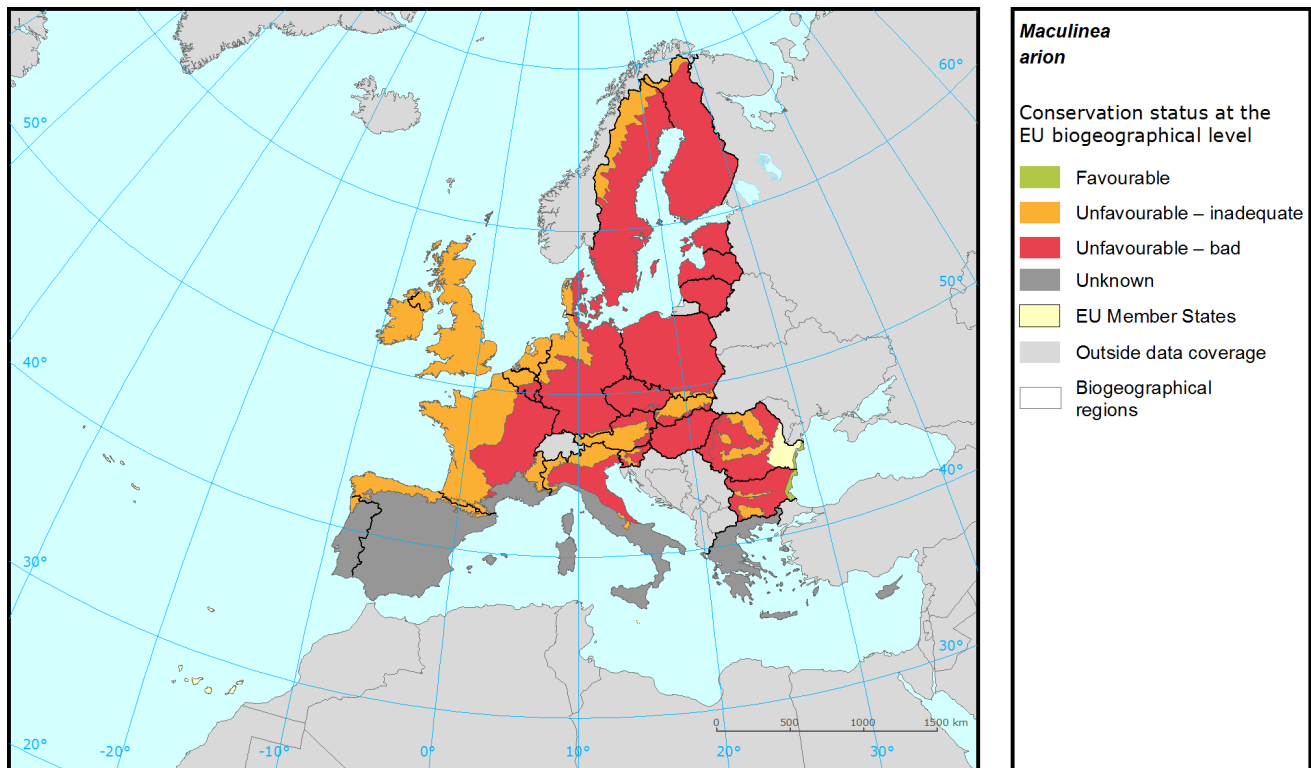
The conservation status is favourable in Black Sea bioregion (previous unknown), unfavourable-inadequate in Alpine (improving from unfavourable-bad) and Atlantic (previous unknown), unfavourable-bad in Boreal, Continental and Pannonian bioregions (all same as previous), unknown in Mediterranean bioregion (same as previous).

IUCN Red List Status Europe: Endangered, EU: Endangered, worldwide Lower Risk/near threatened. The species is listed on the Habitats Directive Annex 4. In many parts of Europe this species is restricted to nature reserves. Here the main threat is inappropriate management, as this species is very susceptible to small changes in grazing pressure or other changes in management. Where the species is more widespread, loss of habitat by agricultural intensification and abandonment, as well as afforestation, are the main threats.

# Species: *Maculinea arion*

Report under the Article 17 of the Habitats Directive

## Assessment of conservation status at the European biogeographical level



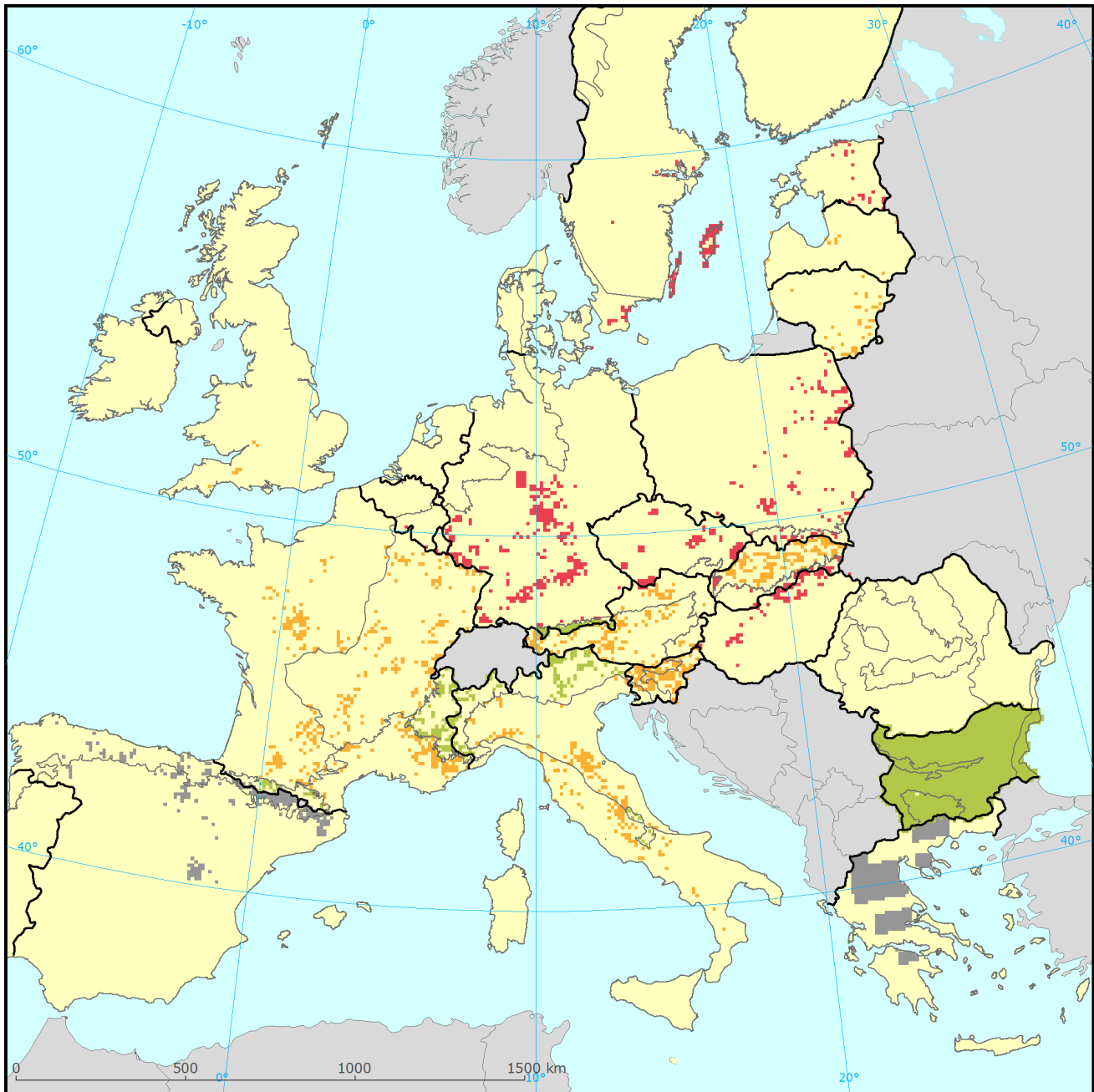
Region	Conservation status (CS) of parameters				Current CS	Trend in CS	% in region	Previous CS	Reason for change
	Range	Population	Habitat	Future prospects					
ALP	FV	U1	U1	U1	U1	-	22	U2	Not genuine
ATL	U1	U1	U1	XX	U1	=	5	XX	Not genuine
BLS	FV	FV	FV	FV	FV	=	3	XX	Not genuine
BOR	U2	U2	U1	U2	U2	-	4	U2	
CON	U1	U2	U1	U1	U2	-	48	U2	
MED	XX	XX	XX	XX	XX	-	16	XX	
PAN	U1	U2	U2	U2	U2	-	3	U2	

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

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



Report under the Article 17 of the Habitats Directive

## Assessment of conservation status at the Member State level



### ***Maculinea arion***

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.

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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	U1	U1	U1	U1	=	12.6	U1	Changed method	
BG	ALP	FV	FV	FV	FV		22.7			
DE	ALP	FV	FV	FV	FV		5.5	FV		
ES	ALP	XX	XX	XX	XX		8.4	XX		
FR	ALP	FV	FV	FV	FV		12.7	FV		
IT	ALP	FV	FV	FV	FV		15.1	U2	Better data	
PL	ALP	XX	U2	U2	U2	-	2.4	U2		
SI	ALP	FV	U1	U1	U1	-	5.3	U1		
SK	ALP	FV	U1	U1	U1	-	15.3	U1-		
ES	ATL	XX	XX	XX	XX		24.7	XX		
FR	ATL	U1	FV	U1	XX	=	71.6	U2		
UK	ATL	FV	U1	U1	FV	+	3.6	U1+		
BG	BLS	FV	FV	FV	FV		100.0			
EE	BOR	U2	U2	U2	U2	-	18.4	XX	Better data	
FI	BOR	U2	U2	U2	U2	=	5.7	U2-	Changed method	
LT	BOR	FV	U1	U1	U1	=	24.8	U2	Better data	
LV	BOR	U1	U1	XX	U1	=	7.1	XX	No data	
SE	BOR	U2	U2	U1	U2	-	44.0	U2-		
AT	CON	U1	U1	U1	U1	-	1.7	U2	Changed method	
BE	CON	U2	U2	U1	U1	x	0.1	U2		
BG	CON	FV	FV	FV	FV		54.2			
CZ	CON	U2	U2	U2	U2	-	3.8	U2		
DE	CON	U1	U2	U2	U1	-	14.7	U1	Genuine	
DK	CON	U2	U2	XX	U2	=	0.1	U2	Better data	
FR	CON	FV	XX	U1	XX	x	8.9	U2		
IT	CON	FV	U1	FV	U1	-	5.4	U2	Better data	
LU	CON	U2	U1	U2	U2	x	0.3	U2		
PL	CON	U1	U2	U1	U2	-	6.0	U2		
SE	CON	U2	U2	U1	U2	-	1.2	U2-		
SI	CON	U1	U1	U1	U1	-	3.5	U1		
ES	MED	XX	XX	XX	XX		15.7	XX		
FR	MED	FV	XX	U1	U1	=	16.6	U1		
GR	MED	XX	XX	XX	XX		55.4	XX		
IT	MED	FV	U1	FV	U1	-	12.3	U2	Changed method	

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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	U2	U1	U2	-	64.6	U2-		
SK	PAN	FV	U1	U2	U1	-	35.4	U2-		

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
A04	Grazing by livestock	18
K02	Vegetation succession/Biocenotic evolution	16
A02	Modification of cultivation practices	15
J03	Other changes to ecosystems	11
B01	Afforestation	10
A01	Agricultural cultivation	6
C01	Mining and quarrying	6
A03	Mowing or cutting grasslands	5
E01	Urbanisation and human habitation	5
A08	Fertilisation in agriculture	3

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## Ten most frequently reported 'highly important' threats

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A03	Mowing or cutting grasslands	4
C01	Mining and quarrying	4
A08	Fertilisation in agriculture	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=Arthropods&period=3&subject=Maculinea+arion>

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**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.