

Report on the main results of the surveillance under Article 11 for Annex II, IV and V species (Annex B)

NATIONAL LEVEL

1. General information

1.1 Member State	GR
1.2 Species code	1056
1.3 Species scientific name	<i>Parnassius mnemosyne</i>
1.4 Alternative species scientific name	
1.5 Common name (in national language)	

2. Maps

2.1 Sensitive species	Yes
2.2 Year or period	2015
2.3 Distribution map	Yes
2.4 Distribution map Method used	Based mainly on expert opinion with very limited data
2.5 Additional maps	Yes

3. Information related to Annex V Species (Art. 14)

3.1 Is the species taken in the wild/exploited?	No	
3.2 Which of the measures in Art. 14 have been taken?	a) regulations regarding access to property	No
	b) temporary or local prohibition of the taking of specimens in the wild and exploitation	No
	c) regulation of the periods and/or methods of taking specimens	No
	d) application of hunting and fishing rules which take account of the conservation of such populations	No
	e) establishment of a system of licences for taking specimens or of quotas	No
	f) regulation of the purchase, sale, offering for sale, keeping for sale or transport for sale of specimens	No
	g) breeding in captivity of animal species as well as artificial propagation of plant species	No
	h) other measures	No

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3.3 Hunting bag or quantity taken in the wild for Mammals and Acipenseridae (Fish)

a) Unit

b) Statistics/ quantity taken	Provide statistics/quantity per hunting season or per year (where season is not used) over the reporting period					
	Season/ year 1	Season/ year 2	Season/ year 3	Season/ year 4	Season/ year 5	Season/ year 6
Min. (raw, ie. not rounded)						
Max. (raw, ie. not rounded)						
Unknown	No	No	No	No	No	No

3.4. Hunting bag or quantity taken in the wild Method used

3.5. Additional information

BIOGEOGRAPHICAL LEVEL

4. Biogeographical and marine regions

4.1 Biogeographical or marine region where the species occurs

Mediterranean (MED)

4.2 Sources of information

Köstler W. 2013. Außergewöhnliche Raupenzeichnung bei einer Population von *Parnassius mnemosyne* (Linnaeus, 1758) in Griechenland (Lesitse-Gebirge, Anatolische Rhodopen) (Lepidoptera, Papilionidae, Parnassiinae). Nachrichten des Entomologischen Vereins Apo. Pamperis LN. 2009. The Butterflies of Greece. Athens: Pamperis Editions.

Zografou K, Kati V, Grill A, Wilson JR, Tzirkalli E, Pamperis L, Halley JM. 2014. Signals of Climate Change in Butterfly Communities in a Mediterranean Protected Area. PLOS ONE 9(1): 1-9.

Zografou K, Sfenthourakis S, Pullin A, Kati V . 2008. On the surrogate value of red-listed butterflies for butterflies and grasshoppers: a case study in Grammos site of Natura 2000, Greece. Journal of Insect Conservation 13(5): 505-514.

5. Range

5.1 Surface area

34761

5.2 Short-term trend Period

2007-2018

5.3 Short-term trend Direction

Stable (0)

5.4 Short-term trend Magnitude

a) Minimum

b) Maximum

5.5 Short-term trend Method used

Based mainly on extrapolation from a limited amount of data

5.6 Long-term trend Period

5.7 Long-term trend Direction

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5.8 Long-term trend Magnitude	a) Minimum	b) Maximum
5.9 Long-term trend Method used		
5.10 Favourable reference range	a) Area (km ²)	
	b) Operator	Approximately equal to (≈)
	c) Unknown	
	d) Method	No extinction is officially reported for the species at 10km grid scale. Therefore the FVR is considered to be similar with the current range.
5.11 Change and reason for change in surface area of range	Improved knowledge/more accurate data Use of different method	
	The change is mainly due to: Improved knowledge/more accurate data	

5.12 Additional information

6. Population

6.1 Year or period	2015	
6.2 Population size (in reporting unit)	a) Unit	number of map 1x1 km grid cells (grids1x1)
	b) Minimum	
	c) Maximum	
	d) Best single value	12427
6.3 Type of estimate	Best estimate	
6.4 Additional population size (using population unit other than reporting unit)	a) Unit	number of adults (adults)
	b) Minimum	5000
	c) Maximum	10000
	d) Best single value	
6.5 Type of estimate	Best estimate	
6.6 Population size Method used	Based mainly on expert opinion with very limited data	
6.7 Short-term trend Period	2007-2018	
6.8 Short-term trend Direction	Stable (0)	
6.9 Short-term trend Magnitude	a) Minimum	
	b) Maximum	
	c) Confidence interval	
6.10 Short-term trend Method used	Based mainly on expert opinion with very limited data	
6.11 Long-term trend Period		
6.12 Long-term trend Direction		
6.13 Long-term trend Magnitude	a) Minimum	
	b) Maximum	
	c) Confidence interval	
6.14 Long-term trend Method used		

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6.15 Favourable reference population (using the unit in 6.2 or 6.4)

- a) Population size
- b) Operator Approximately equal to (\approx)
- c) Unknown
- d) Method Comparing current population size with historic estimated population size from Greek butterfly atlas Pamperis (2009), filtered through expert opinion.

6.16 Change and reason for change in population size

- Improved knowledge/more accurate data
- Use of different method
- The change is mainly due to: Improved knowledge/more accurate data

6.17 Additional information

Sampling localities were visited only once in 2014 and 2015. In absence of time series data, we considered (a) expert opinion of known population localities since 2007, (b) population localities from the Greek butterfly atlas and other bibliographic or unpublished records, (c) the proportion % of species presence in the localities visited in 2014 and 2015 (filtering only for adequate localities in terms of phenology), in order to provide an estimation of minimum and maximum population size (population classes).
The population size in 6.2.d has been calculated in GIS using spatial information from the distribution data (10x10 km or smaller grids if additional data were available). Following the conversion of the available data in 1x1 km grid unit, marine or terrestrial grid cells have been deleted and thus excluded from the calculation, depending on the biogeographical region where the species occurs (MED or MMED, respectively).

7. Habitat for the species

7.1 Sufficiency of area and quality of occupied habitat

- a) Are area and quality of occupied habitat sufficient (for long-term survival)? **Unknown**
- b) Is there a sufficiently large area of unoccupied habitat of suitable quality (for long-term survival)?

7.2 Sufficiency of area and quality of occupied habitat Method used

Insufficient or no data available

7.3 Short-term trend Period

2007-2018

7.4 Short-term trend Direction

Unknown (x)

7.5 Short-term trend Method used

Insufficient or no data available

7.6 Long-term trend Period

7.7 Long-term trend Direction

7.8 Long-term trend Method used

7.9 Additional information

The surface area of the habitat is estimated at 7771.36 km², the area of suitable habitat is 19667.85 km² and its quality is unknown.

8. Main pressures and threats

8.1 Characterisation of pressures/threats

Pressure	Ranking
Intensive grazing or overgrazing by livestock (A09)	M

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Threat	Ranking
Intensive grazing or overgrazing by livestock (A09)	M

8.2 Sources of information PRESSURES: Mainly based on expert judgement and other data.
THREATS: Based on expert opinion.

8.3 Additional information

9. Conservation measures

9.1 Status of measures a) Are measures needed? No
b) Indicate the status of measures

9.2 Main purpose of the measures taken

9.3 Location of the measures taken

9.4 Response to the measures

9.5 List of main conservation measures

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9.6 Additional information

10. Future prospects

10.1 Future prospects of parameters a) Range Good
b) Population Good
c) Habitat of the species Unknown

10.2 Additional information

11. Conclusions

11.1. Range Favourable (FV)

11.2. Population Favourable (FV)

11.3. Habitat for the species Unknown (XX)

11.4. Future prospects Favourable (FV)

11.5 Overall assessment of Conservation Status Favourable (FV)

11.6 Overall trend in Conservation Status Stable (=)

11.7 Change and reasons for change in conservation status and conservation status trend
a) Overall assessment of conservation status
No change
The change is mainly due to:

b) Overall trend in conservation status
Use of different method

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The change is mainly due to: Use of different method

11.8 Additional information

12. Natura 2000 (pSCIs, SCIs and SACs) coverage for Annex II species

12.1 Population size inside the pSCIs, SCIs and SACs network (on the biogeographical/marine level including all sites where the species is present)

- a) Unit
- b) Minimum
- c) Maximum
- d) Best single value

12.2 Type of estimate

12.3 Population size inside the network Method used

12.4 Short-term trend of population size within the network Direction

12.5 Short-term trend of population size within the network Method used

12.6 Additional information

13. Complementary information

13.1 Justification of % thresholds for trends

13.2 Trans-boundary assessment

13.3 Other relevant Information