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NATIONAL LEVEL

1. General information

1.1 Member State	**GR**
1.2 Species code	**1852**
1.3 Species scientific name	**Fritillaria obliqua**
1.4 Alternative species scientific name	
1.5 Common name (in national language)	

2. Maps

2.1 Sensitive species	No
2.2 Year or period	2015
2.3 Distribution map	Yes
2.4 Distribution map Method used	Complete survey or a statistically robust estimate
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

Καμάρη Γ., Ανδριόπουλος Π., Αριανούτσου Μ. 2009. Fritillaria obliqua subsp. obliqua. Στο: Φοίτος Δ., Κωνσταντινίδης Θ., Καμάρη Γ. (Επιμ. Εκδ.). Βιβλίο Ερυθρών Δεδομένων των Σπάνιων και Απειλουμενων Φυτών της Ελλάδας. Τόμος Δεύτερος, σελ. 42-45

Zaharof-Pourpoutidi, E. 1987: Biometric and karyological study of the genus Fritillaria L. from Greece [In Greek]. – Thessaloniki: Ph.D. Thesis, Aristotle University of Thessaloniki, 238 pp.

Strid A. 1988-2014. Flora Hellenica Database. Copenhagen

5. Range

5.1 Surface area: 832

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

5.8 Long-term trend Magnitude: a) Minimum b) Maximum

5.9 Long-term trend Method used

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5.10 Favourable reference range	a) Area (km²)	
	b) Operator	Approximately equal to (≈)
	c) Unknown	
	d) Method	Favourable reference range was based on the sum of the historic and current distribution of the species. Four localities of F. obliqua subsp. obliqua in Attiki (Ymittos, Lykavittos, Merenta, Dekeleia) which are either doubtful or recorded in the 19th century and not confirmed since were excluded. Also, localities of F. obliqua subsp. tuntasia on the islands of Kea, Folegandros and the islet of Piperi where the presence of the species requires confirmation (due to confusion with Fritillaria graeca) were excluded.
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 individuals (i)
	b) Minimum	12160
	c) Maximum	19000
	d) Best single value	
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	7645
	c) Maximum	18000
	d) Best single value	
6.5 Type of estimate	Best estimate	
6.6 Population size Method used	Based mainly on extrapolation from a limited amount of data	
6.7 Short-term trend Period	2007-2018	
6.8 Short-term trend Direction	Unknown (x)	
6.9 Short-term trend Magnitude	a) Minimum	
	b) Maximum	
	c) Confidence interval	
6.10 Short-term trend Method used	Insufficient or no data available	
6.11 Long-term trend Period		
6.12 Long-term trend Direction		

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6.13 Long-term trend Magnitude	a) Minimum b) Maximum c) Confidence interval	
6.14 Long-term trend Method used		
6.15 Favourable reference population (using the unit in 6.2 or 6.4)	a) Population size b) Operator c) Unknown d) Method	 More than (>) The favourable reference population was set as the estimated minimum value of the current population and corresponds to mature, nonconsumed individuals.
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	Population size in 6.4 corresponds to mature, nonconsumed individuals. Population size in 6.2 includes non-flowering rosettes and consumed individuals.	

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)?	No
	b) Is there a sufficiently large area of unoccupied habitat of suitable quality (for long-term survival)?	Unknown
7.2 Sufficiency of area and quality of occupied habitat Method used	Based mainly on extrapolation from a limited amount of data	
7.3 Short-term trend Period	2007-2018	
7.4 Short-term trend Direction	Decreasing (-)	
7.5 Short-term trend Method used	Complete survey or a statistically robust estimate	
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 1.7 km2 and its quality is moderate. The area of suitable habitat is 560 km2. The habitat of F. obliqua is mediterranean medium height and tall shrub (for example,Juniperus phoenicea or Quercus coccifera shrub) with small openings on usually rocky sites. The subspecies cannot survive in forest (for example pine forest) and it may be stressed in very low and very open shrub. The quality of the habitat assessed as vegetation structure composition (typical species) and as threats to the habitat (fire, overgrazing) is good at 45 % of the species' distribution, moderate in 30% and bad in 25%. The habitat of F. obliqua subsp. Tuntasia is mediterranean low shrub (phrygana) and mediterranean medium height, open shrub. The quality of the habitat assessed as vegetation structure and composition (typical species) and as threats to the habitat (fire, overgrazing) is good at most of the subspecies.	

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8. Main pressures and threats

8.1 Characterisation of pressures/threats

Pressure	Ranking
Harvesting or collecting of other wild plants and animals (excluding hunting and leisure fishing) (G09)	M
Conversion from other land uses to housing, settlement or recreational areas (excluding drainage and modification of coastline, estuary and coastal conditions) (F01)	H
Interspecific relations (competition, predation, parasitism, pathogens) (L06)	H
Wind, wave and tidal power, including infrastructure (D01)	H
Extensive grazing or undergrazing by livestock (A10)	M
Burning for agriculture (A11)	M
Burning for forestry (B13)	M

Threat	Ranking
Harvesting or collecting of other wild plants and animals (excluding hunting and leisure fishing) (G09)	M
Conversion from other land uses to housing, settlement or recreational areas (excluding drainage and modification of coastline, estuary and coastal conditions) (F01)	H
Construction or modification (e.g. of housing and settlements) in existing urban or recreational areas (F02)	H
Interspecific relations (competition, predation, parasitism, pathogens) (L06)	H
Extensive grazing or undergrazing by livestock (A10)	M
Burning for agriculture (A11)	M
Burning for forestry (B13)	M

8.2 Sources of information

PRESSURES: Based exclusively or to a larger extent on real data from sites/occurrences or other data sources.
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

9.6 Additional information

10. Future prospects

10.1 Future prospects of parameters	a) Range	Good
	b) Population	Poor
	c) Habitat of the species	Poor
10.2 Additional information		

11. Conclusions

11.1. Range	Favourable (FV)
11.2. Population	Unfavourable - Inadequate (U1)
11.3. Habitat for the species	Unfavourable - Inadequate (U1)
11.4. Future prospects	Unfavourable - Bad (U2)
11.5 Overall assessment of Conservation Status	Unfavourable - Bad (U2)
11.6 Overall trend in Conservation Status	Unknown (x)
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 No change The change is mainly due to:
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	

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12.6 Additional information

13. Complementary information

13.1 Justification of % thresholds for trends

13.2 Trans-boundary assessment

13.3 Other relevant Information

The species Fritillaria obliqua includes two subspecies, F. obliqua subsp. obliqua (Attiki & Evvoia Island) and F. obliqua subsp. tuntasia (Kyklades Islands), with distinct distribution, different habitat and different conservation status.
a) For F. obliqua subsp. obliqua (6356) the overall assessment of Conservation Status was assessed as Bad (U2) with overall trend Unknown(x).
b) For F. obliqua subsp. tuntasia (6357) the overall assessment of conservation status was assessed as Inadequate (U1) with the overall trend Unknown (x).
Note on 6.2. in both subspecies, the plants may remain in the immature stage for several years. Population size was size was estimated in the period 2007-2015 in 39 out of 53 2x2 km cells of the species' distribution. The sum of these counts is reported as minimum population size. It must be noted that counts for 4 cells on Kythnos island and 2 cells on Serifos island (Kamari et al. 2009) most probably underestimate the population size. For F. obliqua subsp. obliqua, a rough estimation of the population size in the 11 cells with no counts was made based on expert opinion and older population counts. For F. obliqua subsp. tuntasia a rough and not reliable maximum population number was estimated by assigning the maximum of 1200 individuals to 3 localities with no counts and a maximum of 1000 individuals on Gyaros island (where the survey was not complete). The sum of the above rough estimations and of the minimum population value is reported as maximum population.
Note on 7.3. In the short term period, the quality of the habitat has decreased due to the establishment of wind turbines and antennas (S. Evvoia) and due to fire (Attiki). The species has suffered habitat loss in the last 50 years due to urbanisation (Athens) and due to the expansion of housing estates (area of Marathonas-Schoinias). Since the 19th century the species has lost even more localities in the area of Athens (Ymittos, Lykavittos, probably Parnitha).
Note on 8.1: For F. obliqua subsp. obliqua, consumption of the plant peduncles by the insect Lilioceris lilii and of the whole flowering stem by goats results in a loss of at least 35% of the reproductive units (ranging from 20 to 54%). For F. obliqua subsp. tuntasia, consumption of the plant peduncles by the insect Lilioceris lilii and of the whole flowering stem by goats results in a loss of at least 10% of the reproductive units (ranging from 3 to 45%). In both cases, most plants are consumed by the insect. It must be noted that the above losses were estimated during field work in the middle of the flowering period of the plant and more flowers may have been consumed after the field work.
Note on 11.2. The species is a long-lived perennial and each mature plant produces flowers every year (on nearly so), so the impact of the reduced sexual reproduction on population size is not easy to estimate. In F. obliqua subsp. obliqua population size equals favourable reference population but reproduction is most probably deviating from normal. In F. obliqua subsp. tuntasis it seems that, the loss of reproductive units is not as high for the time being.

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