

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

0.1 Member State	GR
0.2.1 Species code	1279
0.2.2 Species name	Elaphe quatuorlineata
0.2.3 Alternative species scientific name	N/A
0.2.4 Common name	Lafiatis

1. National Level

1.1 Maps

1.1.1 Distribution Map	Yes
1.1.1a Sensitive species	No
1.1.2 Method used - map	Estimate based on partial data with some extrapolation and/or modelling (2)
1.1.3 Year or period	2012
1.1.4 Additional map	No
1.1.5 Range map	Yes

2. Biogeographical Or Marine Level

2.1 Biogeographical Region

2.2 Published sources

Mediterranean (MED)

- Angeletti, L. R., Agrimi, C. C., French, D. & Mariani-Contantini, R. (1992). Healing ritual and sacred serpents. *The Lancet*, 340, 223-225. [\[2\]](#)
- Böhme, W. & Ščerbak, N. N. (1993). *Elaphe quatuorlineata* (Lacépède, 1789) - Vierstreifennatter. In: W. Böhme (Ed). *Handbuch der Reptilien und Amphibien Europas* (pp. 373-396). Wiesbaden: Aula-Verlag [\[2\]](#)
- Cattaneo, A. (1998). Gli anfibi e rettili delle isole greche di Skyros, Skopelos e Alonissos (Sporadi settentrionali). *Atti della Società Italiana di Scienze Naturali e del Museo Civico di Storia Naturale di Milano*, 139, 127-149. [\[2\]](#)
- Cattaneo, A. (1999). Variabilità e sottospecie di *Elaphe quatuorlineata* (Lacépède) nelle piccole isole Egee (Serpentes: Colubridae). *Atti della Società Italiana di Scienze Naturali e del Museo Civico di Storia Naturale di Milano*, 140, 119-139. [\[2\]](#)
- Clark, R. (1994). New observations on the *Elaphe* snakes from Amorgos (Cyclades, Greece) and the validity of *Elaphe rechingeri* Werner as an endemic species. *Herpetological Journal*, 4, 91-97. [\[2\]](#)
- Crnobrnja-Isailovic, J., Ajtic, R., Vogrin, M., Corti, C., Pérez Mellado, V., Sá-Sousa, P., Cheylan, M., Pleguezuelos, J. M., Lymberakis, P., Sindaco, R., Romano, A. & Jelić, D. (2009, June). *Elaphe quatuorlineata* In: IUCN 2012 IUCN Red List of Threatened Species version 2012.2. Available via: www.iucnredlist.org. [\[2\]](#)
- Dimitropoulos, A. & Ioannidis, Y. 2002. The reptiles of Greece & Cyprus. *The Goulandris Natural History Museum / KOAN*, p. 275 (in greek). [\[2\]](#)
- Kornilios, P., Thanou, E., Lymberakis, P., Sindaco, R., Liuzzi, C., Giokas, S. Mitochondrial phylogeography, intraspecific diversity and phenotypic convergence in the four-lined snake (Reptilia, Squamata). *Zoologica Scripta*, in press. [\[2\]](#)
- Lenk, P., Joger, U. & Wink, M. (2001). Phylogenetic relationships among European ratsnakes of the genus *Elaphe* Fitzinger based on mitochondrial DNA sequence comparisons. *Amphibia-Reptilia*, 22, 329-339. [\[2\]](#)
- Uetz, P. (2014, February). The Reptile Database. Available via: <http://www.reptile-database.org>. [\[2\]](#)
- Utiger, U., Helfenberger, N., Schätti, B., Schmidt, C., Ruf, M. & Ziswiler, V. (2002). Molecular systematics and phylogeny of Old and New World ratsnakes, *Elaphe* Auct., and related genera (Reptilia, Squamata, Colubridae). *Russian Journal of*

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Herpetology, 9, 105-124.

Valakos, E.D., Pafilis, P., Sotiropoulos, K., Lymberakis, P., Maragou, P., Foufopoulos, J., 2008. The Amphibians and Reptiles of Greece, Edition Chimaira, Frankfurt.

2.3 Range

2.3.1 Surface area - Range (km ²)	39676,98
2.3.2 Method - Range surface area	Estimate based on partial data with some extrapolation and/or modelling (2)
2.3.3 Short-term trend period	2001-2012
2.3.4 Short-term trend direction	stable (0)
2.3.5 Short-term trend magnitude	min max
2.3.6 Long-term trend period	
2.3.7 Long-term trend direction	N/A
2.3.8 Long-term trend magnitude	min max
2.3.9 Favourable reference range	area (km ²) operator approximately equal to (≈) unknown No method A wide ranging species. None of the known populations became extinct since 1994. FRV is the total of the range which excludes the unfavorable altitude areas.
2.3.10 Reason for change	Improved knowledge/more accurate data Use of different method

2.4 Population

2.4.1 Population size (individuals or agreed exception)	Unit N/A min max
2.4.2 Population size (other than individuals)	Unit number of map 1x1 km grid cells (grids1x1) min 6394 max 9013
2.4.3 Additional information	Definition of locality Conversion method Problems There are no adequate references or measurements regarding the population size or population densities. Based on the available data an estimation of the population using as unit the number of individuals doesn't seem feasible at this stage.
2.4.4 Year or period	2012
2.4.5 Method – population size	Estimate based on partial data with some extrapolation and/or modelling (2)
2.4.6 Short-term trend period	2001-2012
2.4.7 Short term trend direction	stable (0)
2.4.8 Short-term trend magnitude	min max confidence interval
2.4.9 Short-term trend method	Estimate based on expert opinion with no or minimal sampling (1)
2.4.10 Long-term trend period	
2.4.11 Long term trend direction	N/A
2.4.12 Long-term trend magnitude	min max confidence interval
2.4.13 Long-term trend method	N/A
2.4.14 Favourable reference population	number operator approximately equal to (≈) unknown No method There are no indications or reports of population decline or

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abnormal population structure. FRV has been set at the current population level.

2.4.15 Reason for change Improved knowledge/more accurate data Use of different method

2.5 Habitat for the Species

2.5.1 Surface area - Habitat (km ²)	9013
2.5.2 Year or period	2012
2.5.3 Method used - habitat	Estimate based on partial data with some extrapolation and/or modelling (2)
2.5.4 a) Quality of habitat	Good
2.5.4 b) Quality of habitat - method	A widely distributed generalist species. Random surveys have been conducted in the distribution areas.
2.5.5 Short term trend period	2001-2012
2.5.6 Short term trend direction	stable (0)
2.5.7 Long-term trend period	
2.5.8 Long term trend direction	N/A
2.5.9 Area of suitable habitat (km ²)	22754
2.5.10 Reason for change	Improved knowledge/more accurate data Use of different method

2.6 Main Pressures

Pressure	ranking	pollution qualifier(s)
Cultivation (A01)	low importance (L)	N/A
use of biocides, hormones and chemicals (A07)	low importance (L)	N/A
collection of animals (insects, reptiles, amphibians.....) (F03.02.01)	low importance (L)	N/A
burning down (J01.01)	low importance (L)	N/A
parasitism (fauna) (K03.02)	low importance (L)	N/A
roads, motorways (D01.02)	low importance (L)	N/A

2.6.1 Method used – pressures mainly based on expert judgement and other data (2)

2.7 Main Threats

Threat	ranking	pollution qualifier(s)
Cultivation (A01)	low importance (L)	N/A
use of biocides, hormones and chemicals (A07)	low importance (L)	N/A
collection of animals (insects, reptiles, amphibians.....) (F03.02.01)	low importance (L)	N/A
burning down (J01.01)	low importance (L)	N/A
parasitism (fauna) (K03.02)	low importance (L)	N/A
roads, motorways (D01.02)	low importance (L)	N/A

2.7.1 Method used – threats expert opinion (1)

2.8 Complementary Information

2.8.1 Justification of % thresholds for trends

2.8.2 Other relevant Information The range estimations do not include unfavorable altitude areas.

The data used for the distribution and range of the species are based on extensive fieldwork and reliable published sources that does not confirm the

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presence of the species in GR1110002 and GR1110003. Possible discrepancies with the SDF will be corrected in the next submission of revised SDF forms.

2.8.3 Trans-boundary assessment

2.9 Conclusions (assessment of conservation status at end of reporting period)

2.9.1 Range	assessment Favourable (FV) qualifiers N/A
2.9.2. Population	assessment Favourable (FV) qualifiers N/A
2.9.3. Habitat	assessment Favourable (FV) qualifiers N/A
2.9.4. Future prospects	assessment Favourable (FV) qualifiers N/A
2.9.5 Overall assessment of Conservation Status	Favourable (FV)
2.9.5 Overall trend in Conservation Status	N/A

3. Natura 2000 coverage and conservation measures - Annex II species

3.1 Population

3.1.1 Population Size	Unit	number of map 1x1 km grid cells (grids1x1)		
	min	1245	max	1804
3.1.2 Method used	Estimate based on partial data with some extrapolation and/or modelling (2)			
3.1.3 Trend of population size within	N/A			

3.2 Conversation Measures

3.2.1 Measure	3.2.2 Type	3.2.3 Ranking	3.2.4 Location	3.2.5 Broad Evaluation
Establish protected areas/sites (6.1)	Legal One-off	low importance (L)	Inside	Unknown
Legal protection of habitats and species (6.3)	Legal	high importance (H)	Both	No effect