

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	5364
0.2.2 Species name	Triturus macedonicus
0.2.3 Alternative species scientific name	Triturus carnifex macedonicus, Triturus cristatus carnifex
0.2.4 Common name	Makedonikos tritonas

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)

K. Σωτηρόπουλος, Κ. Ελευθεράκος, Δ. Τσαπάρης, Χ. Γεωργιάδης, Ρ. Πολυμένη, Α. Λεγάκις (2006): Μελέτη μεταπληθυσμών των αμφίβιων *Triturus carnifex macedonicus* και *Triturus vulgaris graecus* στο Κεντρικό Ζαγόρι: Χωρική κατανομή του μεγέθους των υποπληθυσμών. 3ο Συνέδριο Ένωσης Ελλήνων Οικολόγων, Ιωάννινα. [↗](#)

K. Σωτηρόπουλος (2004): Γενετική και μορφολογική ποικιλότητα των ειδών του γένους *Triturus* (Αμφίβια, Ουρόδηλα) στον ελλαδικό χώρο: ιστορικές και οικολογικές ερμηνείες. Διδακτορική Διατριβή. Τμήμα Βιολογίας, Πανεπιστήμιο Αθηνών. [↗](#)

Valakos, E., Pafilis, P., Sotiropoulos, K., Lymberakis, P., Maragou, P., Foufopoulos, J. (2008): The Amphibians and Reptiles of Greece. Editions Chimaira, [↗](#)

Sotiropoulos, K., Eleftherakos, K., Tsaparis, D., Kasapidis, P., Giokas, S., Legakis, A. and Kotoulas, G. (2013). Fine scale spatial genetic structure of two syntopic newts across a network of ponds: implications for conservation. *Conservation Genetics* 14, 385-400. [↗](#)

Wielstra B, Crnobrnja-Isailovic J, Skidmore AK, Sotiropoulos K, Toxopeus AG, Tzankov N, Vukov T, Arntzen JW (2013) Tracing glacial refugia of *Triturus* newts based on mitochondrial DNA phylogeography and species distribution modeling. *Frontiers in Zoology* 10, 13. doi:10.1186/1742-9994-10-13.

2.3 Range

2.3.1 Surface area - Range (km ²)	17505,63	
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

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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 5x5 km grid cells (grids5x5)		
	min	89	max	89
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 preliminary 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 expert opinion with no or minimal sampling (1)		
2.4.6 Short-term trend period		2001-2012		
2.4.7 Short term trend direction		unknown (x)		
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 were no previous estimations of population. 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)		2820
2.5.2 Year or period		2012
2.5.3 Method used - habitat		Estimate based on expert opinion with no or minimal sampling (1)
2.5.4 a) Quality of habitat		Good
2.5.4 b) Quality of habitat - method		Seasonal 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)		6848
2.5.10 Reason for change		Improved knowledge/more accurate data Use of different method

2.6 Main Pressures

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Pressure	ranking	pollution qualifier(s)
roads, motorways (D01.02)	low importance (L)	N/A
human induced changes in hydraulic conditions (J02)	medium importance (M)	N/A
modification of standing water bodies (J02.05.03)	medium importance (M)	N/A
Water abstractions from surface waters (J02.06)	medium importance (M)	N/A
anthropogenic reduction of habitat connectivity (J03.02)	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)
roads, motorways (D01.02)	low importance (L)	N/A
human induced changes in hydraulic conditions (J02)	medium importance (M)	N/A
modification of standing water bodies (J02.05.03)	medium importance (M)	N/A
Water abstractions from surface waters (J02.06)	medium importance (M)	N/A
anthropogenic reduction of habitat connectivity (J03.02)	low importance (L)	N/A
Drying out (K01.03)	medium importance (M)	N/A
droughts and less precipitations (M01.02)	medium importance (M)	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.

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 Unknown (XX)
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 5x5 km grid cells (grids5x5)
min 32 max 53

3.1.2 Method used Estimate based on expert opinion with no or minimal sampling (1)

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3.1.3 Trend of population size within N/A

3.2 Conservation 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	medium importance (M)	Inside	Unknown