

# 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	2373
0.2.2 Species name	Mauremys caspica
0.2.3 Alternative species scientific name	Mauremys caspica
0.2.4 Common name	Potamohelona

## 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)

Bringsoe, H., 1985. A check-list of Peloponnesian amphibians and reptiles, including new records from Greece. *Annales Musei Goulandris*, 7:271-318. [\[2\]](#)

Broggi, M.F., 2011. The semi-aquatic herpetofauna of Serifos (Cyclades, Greece) including conservation aspects. *Herpetozoa*, 24(1/2): 13-22. [\[2\]](#)

Broggi, M.F., 2012. The Balkan Terrapin *Mauremys rivulata* (Valenciennes, 1833), in the Aegean islands. Threats, conservation aspects and the situation on the island of Kea (Cyclades) as a case study (Testudines: Geoemydidae). *Herpetozoa*, 24(3/4): 149-163. [\[2\]](#)

Buttle, D., 1989. Notes on reptiles and amphibians of northeastern Greece and the island of Samothraki. *British Herpetological Society Bulletin*, 29: 49-51. [\[2\]](#)

Buttle, D., 1993. Notes on the herpetofauna of some of the Cyclades islands, Greece. *British Herpetological Society Bulletin*, 46: 5-14. [\[2\]](#)

Cyren, O., 1941. Beitrage zur Herpetologie der Balkanhalbinsel. *Mitteilungen des Königlichen Naturwissenschaftlichen Institut Sofia*, 14: 36-152. [\[2\]](#)

ritz, U. & Wischuf, T., 1997. Zur Systematik westasiatisch-sudosteuropaischer Bachschildkroten (Gattung *Mauremys*) (Reptilia: Testudines: Bataguridae). *Zoologische Abhandlungen aus dem staatlichen Museum für Tierkunde in Dresden*, 49(13): 223-260. [\[2\]](#)

Mantziou, G., 2000. Ecology, Distribution and Differentiation of *Mauremys caspica* (Testudines: Bataguridae) in Crete. M.Sc. Thesis, University of Crete. [\[2\]](#)

Mantziou G., Poulakakis N., Lymberakis P., Valakos E., Mylonas M., 2004. The inter- and intraspecific status of Aegean *Mauremys rivulata* (Chelonia, Bataguridae) as inferred by mitochondrial DNA sequences. *Herpetological Journal*, 14: 35-45. [\[2\]](#)

Mellado, V.P., Valakos, E.D., Gil, M.J., Guerrero, F., Lulch, J., Navarro, P., Maragou, P., 1999. Herpetological notes from mainland and insular Greece. *British Herpetological Society Bulletin*, 67: 33-38. [\[2\]](#)

Stepanek, O., 1944. Zur herpetologie Griechenlands. *Vestnik Ceskoslovenske Spolecnosti Zoologicke*, 9: 123-147. [\[2\]](#)

van Dijk, P.P., Lymberakis, P., Ahmed Mohammed Mousa Disi, Ajtic, R., Tok, V., Ugurtas, I., Sevinç, M. & Haxhiu, I., 2004. *Mauremys rivulata*. The IUCN Red List of Threatened Species. Version 2014.2. <[www.iucnredlist.org](http://www.iucnredlist.org)>. Downloaded on 3

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

October 2014.

Werner, F., 1930. Contribution to the knowledge of the Reptiles and Amphibians of Greece, especially the Aegean islands. Occasional papers of the Museum of Zoology, 211: 1-47.

Wischuf, T. & Busack, S.D., 2001. *Mauremys rivulata* (Valenciennes in Bori de Saint-Vincent et al., 1833) - Ostmediterrane Bachschildkroete. In: Fritz, U. (ed.): Handbuch der Reptilien und Amphibien Europas. Schildkroeten (Testudines), I: 89-110.

## 2.3 Range

2.3.1 Surface area - Range (km <sup>2</sup> )	43238,45
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 <sup>2</sup> ) operator approximately equal to (≈) unkown 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 1101 max 1495
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	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	

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

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 N/A unknown Yes method
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 <sup>2</sup> )	1495
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	Moderate
2.5.4 b) Quality of habitat - method	A species that is more commonly present in small bodies of water, rivers and channels. Deterioration of the habitat quality in parts of its range mainly in some islands and in the lower parts of some rivers in the mainland. 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	decrease (-)
2.5.7 Long-term trend period	
2.5.8 Long term trend direction	N/A
2.5.9 Area of suitable habitat (km <sup>2</sup> )	2619
2.5.10 Reason for change	Genuine Improved knowledge/more accurate data Use of different method

## 2.6 Main Pressures

Pressure	ranking	pollution qualifier(s)
agricultural intensification (A02.01)	medium importance (M)	N/A
use of biocides, hormones and chemicals (A07)	medium importance (M)	N/A
Discharges (E03)	medium importance (M)	N/A
Taking and removal of animals (terrestrial) (F03.02)	low importance (L)	N/A
Pollution to surface waters (limnic & terrestrial, marine & brackish) (H01)	high importance (H)	N/A
burning down (J01.01)	low importance (L)	N/A
human induced changes in hydraulic conditions (J02)	high importance (H)	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)
agricultural intensification (A02.01)	medium importance (M)	N/A
use of biocides, hormones and chemicals (A07)	medium importance (M)	N/A
Discharges (E03)	medium importance (M)	N/A
Taking and removal of animals (terrestrial) (F03.02)	low importance (L)	N/A
missing or wrongly directed conservation measures (G05.07)	high importance (H)	N/A
Pollution to surface waters (limnic & terrestrial, marine & brackish) (H01)	high importance (H)	N/A

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

burning down (J01.01)	low importance (L)	N/A
human induced changes in hydraulic conditions (J02)	high importance (H)	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 Inadequate (U1)  
qualifiers N/A

2.9.4. Future prospects assessment Unknown (XX)  
qualifiers N/A

2.9.5 Overall assessment of Conservation Status Inadequate (U1)

2.9.5 Overall trend in Conservation Status declining (-)

## 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 771 max 1046

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
Measures needed, but not implemented (1.2)	Contractual Recurrent	medium importance (M)	Both	
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	Long term