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

0.1 Member State	**IT**
0.2.1 Species code	**1217**
0.2.2 Species name	**Testudo hermanni**
0.2.3 Alternative species scientific name	N/A
0.2.4 Common name	Testuggine di Hermann

1. National Level
1.1 Maps

1.1.1 Distribution Map	Yes
1.1.1a Sensitive species	No
1.1.2 Method used - map	Complete survey/Complete survey or a statistically robust estimate (3)
1.1.3 Year or period	2000-2012
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)** The present species assessment (fields 0.1-2.9) has been compiled by Anna Rita Di Cerbo, Francesco Ficetola, Roberto Sindaco (Societas Herpetologica Italica). Information, unpublished data and experts' judgments have been provided by Anna Rita Di Cerbo, Francesco Ficetola, Roberto Sindaco. Distribution data for the following Nature 2000 sites have been inserted by the Ministry of Environment (source: Italian Nature 2000 database): ITA060010, ITA020021, ITA060012, IT9150011 e IT9150032 Capula M., Corti C., Mancino G., Carpaneto G.M., Mazzotti S., Zuffi M.A.L., 2011. Testudo hermanni Gmelin 1789. In: Fauna d'Italia, vol. XLV, Reptilia. A cura di Corti C., Capula M., Luiselli L., Razzetti E., Sindaco R., p. 188-199. Edizioni Calderini de Il Sole 24 ORE, Bologna. De Pous P., Speybroeck J., Bogaerts S., Pasmans F., Beukema W. 2012. A contribution to the atlas of the terrestrial herpetofauna of Sardinia. Herpetology Notes, volume 5: 391-405. Mazzotti S., 2006. Testudo hermanni Gmelin 1789. In: Atlante degli Anfibi e dei Rettili d'Italia / Atlas of Italians Amphibians and Reptiles, Sindaco R., Doria G., Razzetti E. & Bernini F. (Eds). P. 390-395. Societas Herpetologica Italica. Edizioni Polistampa, Firenze. Salvi D., Bombi P., 2010. Reptiles of Sardinia: updating the knowledge on their distribution. Acta Herpetologica 5(2): 161-177 Rondinini, C., Battistoni, A., Peronace, V., Teofili, C. (compilatori). 2013. Lista Rossa IUCN dei Vertebrati Italiani. Comitato Italiano IUCN e Ministero dell'Ambiente, del Territorio e del Mare, Roma. Regione Autonoma della Sardegna - Assessorato Difesa Ambiente - 2008-2009.

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"Realizzazione del sistema di monitoraggio dello stato di conservazione degli habitat e delle specie di interesse comunitario della Regione Autonoma della Sardegna".

Regione Autonoma della Sardegna - Assessorato Difesa Ambiente , 2012 - "Servizio di monitoraggio dello stato di conservazione degli habitat e delle specie di importanza comunitaria presenti nei siti della Rete Natura 2000 in Sardegna – Linea 4. Redazione del Rapporto sullo stato di conservazione degli habitat e delle specie ".

2.3 Range

2.3.1 Surface area - Range (km²)	68400
2.3.2 Method - Range surface area	Complete survey/Complete survey or a statistically robust estimate (3)
2.3.3 Short-term trend period	2001-2012
2.3.4 Short-term trend direction	decrease (-)
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 (km²)
	operator more than (>)
	unkown No
	method Expert judgement
2.3.10 Reason for change	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 10x10 km grid cells (grids10x10)
	min 329 max 329
2.4.3 Additional information	Definition of locality
	Conversion method
	Problems
2.4.4 Year or period	2000-2012
2.4.5 Method – population size	Complete survey/Complete survey or a statistically robust estimate (3)
2.4.6 Short-term trend period	
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	Absent data (0)
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 N/A
	unknown Yes
	method
2.4.15 Reason for change	Improved knowledge/more accurate data

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

2.5 Habitat for the Species

2.5.1 Surface area - Habitat (km²)	
2.5.2 Year or period	2000-2012
2.5.3 Method used - habitat	Absent data (0)
2.5.4 a) Quality of habitat	Moderate
2.5.4 b) Quality of habitat - method	Decrease of habitats because of intense anthropogenetic activity in the plain, including intensification of agriculture, intentional burning, urbanisation. Roads can affect population owing to vehicle collision.
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 (km²)	
2.5.10 Reason for change	Improved knowledge/more accurate data

2.6 Main Pressures

Pressure	ranking	pollution qualifier(s)
burning down (J01.01)	high importance (H)	N/A
forestry clearance (B02.02)	low importance (L)	N/A
collection of animals (insects, reptiles, amphibians.....) (F03.02.01)	high importance (H)	N/A
anthropogenic reduction of habitat connectivity (J03.02)	medium importance (M)	N/A
removal of hedges and copses or scrub (A10.01)	low importance (L)	N/A
genetic pollution (animals) (I03.01)	high importance (H)	N/A
modification of cultivation practices (A02)	medium importance (M)	N/A
continuous urbanisation (E01.01)	medium importance (M)	N/A
use of biocides, hormones and chemicals (A07)	low importance (L)	N/A
forest exploitation without replanting or natural regrowth (B03)	low importance (L)	N/A
Roads, paths and railroads (D01)	medium importance (M)	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)
burning down (J01.01)	high importance (H)	N/A
forestry clearance (B02.02)	low importance (L)	N/A
collection of animals (insects, reptiles, amphibians.....) (F03.02.01)	high importance (H)	N/A
anthropogenic reduction of habitat connectivity (J03.02)	medium importance (M)	N/A
removal of hedges and copses or scrub (A10.01)	low importance (L)	N/A
genetic pollution (animals) (I03.01)	high importance (H)	N/A
modification of cultivation practices (A02)	medium importance (M)	N/A
continuous urbanisation (E01.01)	medium importance (M)	N/A
use of biocides, hormones and chemicals (A07)	low importance (L)	N/A

forest exploitation without replanting or natural regrowth (B03)	low importance (L)	N/A
Roads, paths and railroads (D01)	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	
2.8.3 Trans-boundary assessment	

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

2.9.1 Range	assessment	Inadequate (U1)
	qualifiers	declining (-)
2.9.2. Population	assessment	Unknown (XX)
	qualifiers	N/A
2.9.3. Habitat	assessment	Inadequate (U1)
	qualifiers	declining (-)
2.9.4. Future prospects	assessment	Inadequate (U1)
	qualifiers	declining (-)
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	N/A	
	min		max
3.1.2 Method used	Absent data (0)		
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
Other agriculture-related measures (2.0)	One-off	medium importance (M)	Outside	Maintain Long term
Other spatial measures (6.0)	Administrative	medium importance (M)	Both	Maintain Enhance Long term
Legal protection of habitats and species (6.3)	Legal	medium importance (M)	Both	Maintain

2. Biogeographical Or Marine Level

2.1 Biogeographical Region	**Continental (CON)**
2.2 Published sources	The present species assessment (fields 0.1-2.9) has been compiled by Anna Rita Di Cerbo, Francesco Ficetola, Roberto Sindaco (Societas Herpetologica Italica).

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Information, unpublished data and experts' judgments have been provided by Anna Rita Di Cerbo, Francesco Ficetola, Roberto Sindaco.

Capula M., Corti C., Mancino G., Carpaneto G.M., Mazzotti S., Zuffi M.A.L., 2011. Testudo hermanni Gmelin 1789. In: Fauna d'Italia, vol. XLV, Reptilia. A cura di Corti C., Capula M., Luiselli L., Razzetti E., Sindaco R., p. 188-199. Edizioni Calderini de Il Sole 24 ORE, Bologna.

Mazzotti S., 2006. Testudo hermanni Gmelin 1789. In: Atlante degli Anfibi e dei Rettili d'Italia / Atlas of Italians Amphibians and Reptiles, Sindaco R., Doria G., Razzetti E. & Bernini F. (Eds). P. 390-395. Societas Herpetologica Italica. Edizioni Polistampa, Firenze.

Rondinini, C., Battistoni, A., Peronace, V., Teofili, C. (compilatori). 2013. Lista Rossa IUCN dei Vertebrati Italiani. Comitato Italiano IUCN e Ministero dell'Ambiente, del Territorio e del Mare, Roma.

2.3 Range

2.3.1 Surface area - Range (km²)	7500
2.3.2 Method - Range surface area	Complete survey/Complete survey or a statistically robust estimate (3)
2.3.3 Short-term trend period	2001-2012
2.3.4 Short-term trend direction	decrease (-)
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 (km²)
	operator much more than (>>)
	unkown No
	method Expert judgement
2.3.10 Reason for change	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 10x10 km grid cells (grids10x10)
	min 39 max 39
2.4.3 Additional information	Definition of locality
	Conversion method
	Problems
2.4.4 Year or period	2000-2012
2.4.5 Method – population size	Complete survey/Complete survey or a statistically robust estimate (3)
2.4.6 Short-term trend period	2001-2012
2.4.7 Short term trend direction	decrease (-)
2.4.8 Short-term trend magnitude	min max confidence interval
2.4.9 Short-term trend method	Estimate based on partial data with some extrapolation and/or modelling (2)
2.4.10 Long-term trend period	
2.4.11 Long term trend direction	N/A

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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	more than (>)		
	unknown	No		
	method	Expert judgement		
2.4.15 Reason for change	Improved knowledge/more accurate data			

2.5 Habitat for the Species

2.5.1 Surface area - Habitat (km²)	
2.5.2 Year or period	2000-2012
2.5.3 Method used - habitat	Absent data (0)
2.5.4 a) Quality of habitat	Moderate
2.5.4 b) Quality of habitat - method	Decrease of habitats because of intense anthropogenetic activity in the plain, including intensification of agriculture, deforestation, urbanisation. Roads can affect population owing to vehicle collision.
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 (km²)	
2.5.10 Reason for change	Improved knowledge/more accurate data

2.6 Main Pressures

Pressure	ranking	pollution qualifier(s)
agricultural intensification (A02.01)	high importance (H)	N/A
use of biocides, hormones and chemicals (A07)	medium importance (M)	N/A
Urbanised areas, human habitation (E01)	high importance (H)	N/A
fire and fire suppression (J01)	high importance (H)	N/A
collection of animals (insects, reptiles, amphibians.....) (F03.02.01)	high importance (H)	N/A
forestry clearance (B02.02)	medium importance (M)	N/A
introduction of disease (microbial pathogens) (K03.03)	low importance (L)	N/A
Roads, paths and railroads (D01)	low importance (L)	N/A
anthropogenic reduction of habitat connectivity (J03.02)	low importance (L)	N/A
removal of hedges and copses or scrub (A10.01)	medium importance (M)	N/A
genetic pollution (animals) (I03.01)	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)	high importance (H)	N/A
use of biocides, hormones and chemicals (A07)	medium importance (M)	N/A
Urbanised areas, human habitation (E01)	high importance (H)	N/A
fire and fire suppression (J01)	high importance (H)	N/A

collection of animals (insects, reptiles, amphibians.....) (F03.02.01)	high importance (H)	N/A
forestry clearance (B02.02)	medium importance (M)	N/A
introduction of disease (microbial pathogens) (K03.03)	low importance (L)	N/A
Roads, paths and railroads (D01)	low importance (L)	N/A
anthropogenic reduction of habitat connectivity (J03.02)	low importance (L)	N/A
removal of hedges and copses or scrub (A10.01)	medium importance (M)	N/A
genetic pollution (animals) (I03.01)	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	
2.8.3 Trans-boundary assessment	

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

2.9.1 Range	assessment	Bad (U2)
	qualifiers	declining (-)
2.9.2. Population	assessment	Inadequate (U1)
	qualifiers	declining (-)
2.9.3. Habitat	assessment	Inadequate (U1)
	qualifiers	declining (-)
2.9.4. Future prospects	assessment	Bad (U2)
	qualifiers	N/A
2.9.5 Overall assessment of Conservation Status	Bad (U2)	
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	N/A
	min	max
3.1.2 Method used	Absent data (0)	
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
Maintaining grasslands and other open habitats (2.1)	Administrative	medium importance (M)	Inside	No effect