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	**1167**
0.2.2 Species name	**Triturus carnifex**
0.2.3 Alternative species scientific name	N/A
0.2.4 Common name	Tritone crestato italiano

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

Mediterranean (MED)

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). Information, unpublished data and experts' judgments have been provided by Anna Rita Di Cerbo, Francesco Ficetola, Roberto Sindaco.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): IT9110005; IT5220019; IT5220020

Andreone F., Marconi M., 2006. Triturus carnifex (Laurenti, 1768). 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. 220-225. 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.

Vanni S., Andreone F., Tripepi S., 2007. Triturus carnifex (Laurenti, 1768). In: Fauna d'Italia, vol. XLII, Amphibia. A cura di Lanza B., Andreone F., Bologna M.A., Corti C., Razzetti E., p. 265-272. Calderini, Bologna.

2.3 Range

2.3.1 Surface area - Range (km²)	78500	
2.3.2 Method - Range surface area	Complete survey/Complete survey or a statistically robust estimate (3)	
2.3.3 Short-term trend period	2000-2012	
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 (km²)	

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

	operator	approximately equal to (≈)
	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	439	max	439
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			
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 and reduction of connectivity due to human activity (e.g. introduction of fish and other predators, alteration of hydrographic functioning of ditches, pollution) and natural process (e.g. silting and drying out of ponds).
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)
infilling of ditches, dykes, ponds, pools, marshes or pits (J02.01.03)	high importance (H)	N/A
reduction or loss of specific habitat features (J03.01)	medium importance (M)	N/A
Pollution to surface waters (limnic & terrestrial, marine & brackish) (H01)	high importance (H)	N/A
problematic native species (I02)	medium importance (M)	N/A
roads, motorways (D01.02)	medium importance (M)	N/A
Modification of hydrographic functioning, general (J02.05)	high importance (H)	N/A
Silting up (K01.02)	medium importance (M)	N/A
Interspecific faunal relations (K03)	medium importance (M)	N/A
Landfill, land reclamation and drying out, general (J02.01)	high importance (H)	N/A
anthropogenic reduction of habitat connectivity (J03.02)	medium importance (M)	N/A
Urbanised areas, human habitation (E01)	medium importance (M)	N/A
antagonism arising from introduction of species (K03.05)	medium importance (M)	N/A
removal of dead and dying trees (B02.04)	low importance (L)	N/A
Fertilisation (A08)	low importance (L)	N/A
invasive non-native species (I01)	medium importance (M)	N/A
agricultural intensification (A02.01)	medium importance (M)	N/A
Drying out (K01.03)	medium importance (M)	N/A
Changes in abiotic conditions (M01)	medium importance (M)	N/A
lack of flooding (J02.04.02)	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)
infilling of ditches, dykes, ponds, pools, marshes or pits (J02.01.03)	high importance (H)	N/A
reduction or loss of specific habitat features (J03.01)	medium importance (M)	N/A
Pollution to surface waters (limnic & terrestrial, marine & brackish) (H01)	high importance (H)	N/A
problematic native species (I02)	medium importance (M)	N/A
roads, motorways (D01.02)	medium importance (M)	N/A
Modification of hydrographic functioning, general (J02.05)	high importance (H)	N/A
Silting up (K01.02)	medium importance (M)	N/A
Interspecific faunal relations (K03)	medium importance (M)	N/A
Landfill, land reclamation and drying out, general (J02.01)	high importance (H)	N/A
anthropogenic reduction of habitat connectivity (J03.02)	medium importance (M)	N/A
Urbanised areas, human habitation (E01)	medium importance (M)	N/A
antagonism arising from introduction of species (K03.05)	medium importance (M)	N/A
removal of dead and dying trees (B02.04)	low importance (L)	N/A
Fertilisation (A08)	low importance (L)	N/A

invasive non-native species (I01)	medium importance (M)	N/A
agricultural intensification (A02.01)	medium importance (M)	N/A
Drying out (K01.03)	medium importance (M)	N/A
Changes in abiotic conditions (M01)	medium importance (M)	N/A
lack of flooding (J02.04.02)	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	
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	Inadequate (U1)
	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
Restoring/improving water quality (4.1)	One-off	medium importance (M)	Outside	Maintain
Restoring/improving the hydrological regime (4.2)	Recurrent One-off	medium importance (M)	Inside	Maintain Enhance
Establish protected areas/sites (6.1)	Legal Administrative	high importance (H)	Inside	Maintain Enhance Long term Not evaluated

Legal protection of habitats and species (6.3)	Administrative	medium importance (M)	Inside	Maintain Enhance Long term
Specific single species or species group management measures (7.4)	One-off	high importance (H)	Inside	Enhance

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

Andreone F., Marconi M., 2006. Triturus carnifex (Laurenti, 1768). 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. 220-225. 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.

Vanni S., Andreone F., Tripepi S., 2007. Triturus carnifex (Laurenti, 1768). In: Fauna d'Italia, vol. XLII, Amphibia. A cura di Lanza B., Andreone F., Bologna M.A., Corti C., Razzetti E., p. 265-272. Calderini, Bologna.

2.3 Range

2.3.1 Surface area - Range (km²)	98200	
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	669	max	669
2.4.3 Additional information	Definition of locality			
	Conversion method			

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

	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	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		

2.5 Habitat for the Species

2.5.1 Surface area - Habitat (km²)	
2.5.2 Year or period	2001-2012
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	Alteration and loss of habitats due to human activities like introduction of fish, intensive agriculture and pollution, modifications of slowing irrigation canals.
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)
infilling of ditches, dykes, ponds, pools, marshes or pits (J02.01.03)	high importance (H)	N/A
reduction or loss of specific habitat features (J03.01)	medium importance (M)	N/A
Pollution to surface waters (limnic & terrestrial, marine & brackish) (H01)	high importance (H)	N/A
problematic native species (I02)	medium importance (M)	N/A
roads, motorways (D01.02)	medium importance (M)	N/A
Modification of hydrographic functioning, general (J02.05)	high importance (H)	N/A
Silting up (K01.02)	medium importance (M)	N/A
Interspecific faunal relations (K03)	medium importance (M)	N/A
Landfill, land reclamation and drying out, general (J02.01)	high importance (H)	N/A
anthropogenic reduction of habitat connectivity (J03.02)	medium importance (M)	N/A
Urbanised areas, human habitation (E01)	medium importance (M)	N/A

antagonism arising from introduction of species (K03.05)	medium importance (M)	N/A
removal of dead and dying trees (B02.04)	low importance (L)	N/A
Fertilisation (A08)	low importance (L)	N/A
invasive non-native species (I01)	medium importance (M)	N/A
agricultural intensification (A02.01)	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)
infilling of ditches, dykes, ponds, pools, marshes or pits (J02.01.03)	high importance (H)	N/A
reduction or loss of specific habitat features (J03.01)	medium importance (M)	N/A
Pollution to surface waters (limnic & terrestrial, marine & brackish) (H01)	high importance (H)	N/A
problematic native species (I02)	medium importance (M)	N/A
roads, motorways (D01.02)	medium importance (M)	N/A
Modification of hydrographic functioning, general (J02.05)	high importance (H)	N/A
Silting up (K01.02)	medium importance (M)	N/A
Interspecific faunal relations (K03)	medium importance (M)	N/A
Landfill, land reclamation and drying out, general (J02.01)	high importance (H)	N/A
anthropogenic reduction of habitat connectivity (J03.02)	medium importance (M)	N/A
Urbanised areas, human habitation (E01)	medium importance (M)	N/A
antagonism arising from introduction of species (K03.05)	medium importance (M)	N/A
removal of dead and dying trees (B02.04)	low importance (L)	N/A
Fertilisation (A08)	low importance (L)	N/A
invasive non-native species (I01)	medium importance (M)	N/A
agricultural intensification (A02.01)	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 (-)

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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)	Legal	medium importance (M)	Inside	No effect
Restoring/improving the hydrological regime (4.2)	Contractual Recurrent	low importance (L)	Both	Enhance Unknown
Establish protected areas/sites (6.1)	Administrative	medium importance (M)	Inside	Maintain Enhance Long term
Legal protection of habitats and species (6.3)	Administrative	medium importance (M)	Both	Maintain Enhance Long term
Specific management of traffic and energy transport systems (8.2)	Contractual	low importance (L)	Both	Maintain

2. Biogeographical Or Marine Level

2.1 Biogeographical Region

Alpine (ALP)

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

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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.

Vanni S., Andreone F., Tripepi S., 2007. Triturus carnifex (Laurenti, 1768). In: Fauna d'Italia, vol. XLII, Amphibia. A cura di Lanza B., Andreone F., Bologna M.A., Corti C., Razzetti E., p. 265-272. Calderini, Bologna.

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2.3 Range

2.3.1 Surface area - Range (km²)	27700
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	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 (km²) operator approximately equal to (≈) 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 154 max 154
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	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

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	Loss of habitat mainly because of abandonment of pastoral system in the mountain. This causes lack of management of ponds, ditches and then drying out of suitable breeding sites.

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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)
infilling of ditches, dykes, ponds, pools, marshes or pits (J02.01.03)	high importance (H)	N/A
reduction or loss of specific habitat features (J03.01)	medium importance (M)	N/A
Pollution to surface waters (limnic & terrestrial, marine & brackish) (H01)	high importance (H)	N/A
problematic native species (I02)	medium importance (M)	N/A
intensive grazing (A04.01)	low importance (L)	N/A
abandonment of pastoral systems, lack of grazing (A04.03)	high importance (H)	N/A
roads, motorways (D01.02)	medium importance (M)	N/A
Modification of hydrographic functioning, general (J02.05)	high importance (H)	N/A
Silting up (K01.02)	medium importance (M)	N/A
Interspecific faunal relations (K03)	medium importance (M)	N/A
Landfill, land reclamation and drying out, general (J02.01)	high importance (H)	N/A
anthropogenic reduction of habitat connectivity (J03.02)	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)
infilling of ditches, dykes, ponds, pools, marshes or pits (J02.01.03)	high importance (H)	N/A
reduction or loss of specific habitat features (J03.01)	medium importance (M)	N/A
Pollution to surface waters (limnic & terrestrial, marine & brackish) (H01)	high importance (H)	N/A
problematic native species (I02)	medium importance (M)	N/A
intensive grazing (A04.01)	low importance (L)	N/A
abandonment of pastoral systems, lack of grazing (A04.03)	high importance (H)	N/A
roads, motorways (D01.02)	medium importance (M)	N/A
Modification of hydrographic functioning, general (J02.05)	high importance (H)	N/A
Silting up (K01.02)	medium importance (M)	N/A
Interspecific faunal relations (K03)	medium importance (M)	N/A
Landfill, land reclamation and drying out, general (J02.01)	high importance (H)	N/A
anthropogenic reduction of habitat connectivity (J03.02)	medium importance (M)	N/A

2.7.1 Method used – threats: expert opinion (1)

2.8 Complementary Information

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

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	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	Inadequate (U1)
	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	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)	Legal	medium importance (M)	Inside	No effect
Other wetland-related measures (4.0)	Legal	medium importance (M)	Inside	Maintain
Restoring/improving water quality (4.1)	Contractual	high importance (H)	Inside	Maintain
Restoring/improving the hydrological regime (4.2)	Contractual Recurrent	low importance (L)	Both	No effect
Specific management of traffic and energy transport systems (8.2)	Contractual	low importance (L)	Both	Maintain