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	**1107**
0.2.2 Species name	**Salmo marmoratus**
0.2.3 Alternative species scientific name	Salmo trutta marmoratus
0.2.4 Common name	trota marmorata

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	1994-2012
1.1.4 Additional map	No
1.1.5 Range map	Yes

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 Alessandra Ippoliti, Andrea Sibilia (Associazione Italiana Ittiologi Acque dolci - AIIAD) and Anna Alonzi, Piero Genovesi, Francesca Ronchi (Institute for Environmental Protection and Research - ISPRA). Information, unpublished data and experts' judgments have been provided by Francesco Nonnis Marzano, Massimo Lorenzoni, Giuseppe Maio, Massimo Pascale, Armando Piccinini, Elisabetta Pizzul, Cesare M. Puzzi, Lorenzo Tancioni, Paolo Turin (AIIAD).

Distribution data for the following Nature 2000 sites have been inserted by the Ministry of Environment (source: Italian Nature 2000 database): IT1180005; IT20A0008; IT3320025; IT3320030.

Dataset ETP 1988-2012. Regione Friuli Venezia Giulia;
G.R.A.I.A. Srl, 2000. Carta delle vocazioni ittiche della provincia di Varese. Provincia di Varese, 264 pp;
G.R.A.I.A. Srl, 2003. Conservazione della trota marmorata nel Parco Adda Sud. Parco Adda Sud. Technical Report, unpublished document;
G.R.A.I.A. Srl, 2003. Progetto di conservazione della Trota marmorata nel Parco Adda Nord. Parco Adda Nord. Technical Report, unpublished document;
G.R.A.I.A. Srl, 2004. Progetto Life-Natura di "Conservazione di Salmo marmoratus e Rutilus pigus nel Fiume Ticino" - Life-nat00/it/7268. Life-Nature Programm, Consorzio Parco Lombardo della Valle del Ticino, Pontevecchio di Magenta (MI). Technical Reports, unpublished document;
G.R.A.I.A. Srl, 2006. Progetto di "Conservazione di Acipenser naccarii nel Fiume Ticino e nel medio corso del Po" - Life-nat03/it/000113. Autorità di Bacino del Fiume Po, Parma. Technical Report, unpublished document;
G.R.A.I.A. Srl, 2007. Aggiornamento della Carta delle Vocazioni Ittiche della Provincia di Milano. Amministrazione Provinciale di Milano. Technical Report, unpublished document;
G.R.A.I.A. Srl, 2007. Carta Ittica del Fiume Po. Autorità di Bacino del Fiume Po, Parma. Technical Report, unpublished document;
Lombardi C., 2002. Carta provinciale delle vocazioni ittiche. Provincia di Cremona,

Settore Agricoltura, Caccia e Pesca, 400 pp.;
Marconato E., Maio G., Salviati S., 2000. La fauna ittica della Provincia di Venezia. Provincia di Venezia, Ass. Caccia, Pesca e Polizia Provinciale, 176 pp.;
Perosino G., 2006. Monitoraggio della fauna ittica in Piemonte. Regione Piemonte, unpublished data;
Personal communication Turin P.
Provincia di Bergamo, 2001. Carta Ittica della provincia di Bergamo. Provincia di Bergamo, 150 pp.;
Provincia di Pavia, 2007. Aggiornamento della Carta Ittica della Provincia di Pavia. Amministrazione Provinciale di Pavia. Unpublished data;
Provincia di Treviso, 2012. Carta ittica della Provincia di Treviso, aggiornamento 2008-2010. Rapporto tecnico pubblicato sul web. 181 pp.;
Provincia di Verona, 2008. Carta Ittica della Provincia di Verona. Rapporto tecnico pubblicato sul web. 210 pp.;
Regione Piemonte, 2009. Ittiofauna del Piemonte (anno di monitoraggio 2009) - Testo di illustrazione dei parametri fisiogeografici relativi agli ambienti fluviali ed allo stato delle popolazioni ittiche - tabella riassuntiva dati.xls. Technical Report, published on internet;
Turin P., Locatelli R., 2010 “Carta Ittica – Aggiornamento dello stato delle conoscenze sui popolamenti ittici della Provincia di Padova”. Ed. Provincia di Padova, 332 pp;
Turin P., Zanetti M., Caudullo G., Tioli S., Tuzzato B., Mazzetti G., Patroncini D., Turrin D., Zocca A. 2008 - Presenza e distribuzione delle specie ittiche di interesse comunitario nelle acque interne del Veneto, in relazione alle aree SIC. In M. Bon, L. Bonato, F. Scarton (eds.), 2008. Atti 5° Convegno Faunisti Veneti. Boll. Mus. Civ. St. Nat. Venezia, suppl. al vol. 58, pp. 368.

2.3 Range

2.3.1 Surface area - Range (km²)	30000	
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	decrease (-)	
2.3.5 Short-term trend magnitude	min	max
2.3.6 Long-term trend period	1989-2012	
2.3.7 Long-term trend direction	decrease (-)	
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 opinion
2.3.10 Reason for change	Improved knowledge/more accurate dataUse 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	111	max	111
2.4.3 Additional information	Definition of locality			
	Conversion method	not available		
	Problems	it's not possible to convert grids into individuals		

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

2.4.4 Year or period	2000-2012		
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	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	1989-2012		
2.4.11 Long term trend direction	decrease (-)		
2.4.12 Long-term trend magnitude	min	max	confidence interval
2.4.13 Long-term trend method	Estimate based on partial data with some extrapolation and/or modelling (2)		
2.4.14 Favourable reference population	number		
	operator	much more than (>>)	
	unknown	No	
	method	Expert opinion	
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 (km²)	
2.5.2 Year or period	
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	Expert opinion
2.5.5 Short term trend period	2001-2012
2.5.6 Short term trend direction	decrease (-)
2.5.7 Long-term trend period	1989-2012
2.5.8 Long term trend direction	decrease (-)
2.5.9 Area of suitable habitat (km²)	
2.5.10 Reason for change	Improved knowledge/more accurate data Use of different method

2.6 Main Pressures

Pressure	ranking	pollution qualifier(s)
genetic pollution (animals) (I03.01)	high importance (H)	N/A
Water abstractions from surface waters (J02.06)	high importance (H)	N/A
Fishing and harvesting aquatic resources (F02)	medium importance (M)	N/A
invasive non-native species (I01)	high importance (H)	N/A
anthropogenic reduction of habitat connectivity (J03.02)	medium importance (M)	N/A
reduction or loss of specific habitat features (J03.01)	high importance (H)	N/A
surface water abstractions by hydro-energy (J02.06.06)	high importance (H)	N/A
antagonism arising from introduction of species (K03.05)	medium importance (M)	N/A
Pollution to surface waters (limnic & terrestrial, marine & brackish) (H01)	medium importance (M)	N/A
predation (K03.04)	medium importance (M)	N/A

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

2.7 Main Threats

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

Threat	ranking	pollution qualifier(s)
genetic pollution (animals) (I03.01)	high importance (H)	N/A
Water abstractions from surface waters (J02.06)	high importance (H)	N/A
Fishing and harvesting aquatic resources (F02)	medium importance (M)	N/A
invasive non-native species (I01)	high importance (H)	N/A
anthropogenic reduction of habitat connectivity (J03.02)	medium importance (M)	N/A
reduction or loss of specific habitat features (J03.01)	high importance (H)	N/A
surface water abstractions by hydro-energy (J02.06.06)	high importance (H)	N/A
antagonism arising from introduction of species (K03.05)	medium importance (M)	N/A
Pollution to surface waters (limnic & terrestrial, marine & brackish) (H01)	medium importance (M)	N/A
predation (K03.04)	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: Bad (U2)
- qualifiers: N/A

2.9.2. Population
- assessment: Bad (U2)
- qualifiers: N/A

2.9.3. Habitat
- assessment: Inadequate (U1)
- qualifiers: N/A

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

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

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)	Legal Administrative Recurrent	low importance (L)	Both	Unknown
Managing water abstraction (4.3)	Legal Administrative Recurrent One-off	low importance (L)	Both	Enhance Unknown
Legal protection of habitats and species (6.3)	Administrative Recurrent	low importance (L)	Both	Maintain
Other species management measures (7.0)	Administrative	high importance (H)	Both	Long term
Regulation/ Management of hunting and taking (7.1)	Administrative Recurrent	low importance (L)	Both	Maintain
Regulating/Management exploitation of natural resources on land (9.1)	Legal Administrative Recurrent	low importance (L)	Both	Unknown

2. Biogeographical Or Marine Level

2.1 Biogeographical Region
2.2 Published sources

Alpine (ALP)

The present species assessment (fields 0.1-2.9) has been compiled by Alessandra Ippoliti, Andrea Sibilia (Associazione Italiana Ittiologi Acque dolci - AIIAD) and Anna Alonzi, Piero Genovesi, Francesca Ronchi (Institute for Environmental Protection and Research - ISPRA). Information, unpublished data and experts' judgments have been provided by Francesco Nonnis Marzano, Massimo Lorenzoni, Giuseppe Maio, Massimo Pascale, Armando Piccinini, Elisabetta Pizzul, Cesare M. Puzzi, Lorenzo Tancioni, Paolo Turin (AIIAD).

Distribution data for the following Nature 2000 sites have been inserted by the Ministry of Environment (source: Italian Nature 2000 database): IT1204032; IT1205030; IT3320018; IT1205070

Badino G., Lodi E., Forneris G., Carta Ittica - Bacino della Dora Baltea, II fase. Regione autonoma Valle d'Aosta, 1997
Borroni I., 2005. Indagini Di Approfondimento Della Carta Ittica Della Provincia Di Imperia - Bacini del Tanarello E Dell'arroscia, Luglio/Agosto 2005. Technical Report, Published On Internet;
Dataset ETP 1988-2012. Regione Friuli Venezia Giulia;
G.R.A.I.A. Srl, 2000. Analisi delle popolazioni di temolo nei fiumi del Nord Italia. Associazione Thymallus, 200 pp.
G.R.A.I.A. Srl, 2000. Biodiversità nell'Alto Bacino del Fiume Oglio, 180 pp. Parco Oglio Nord. Technical Report, unpublished document;
G.R.A.I.A. Srl, 2005. Carta Ittica della Provincia di Brescia - Provincia di Brescia, settore Caccia e Pesca. Provincia di Brescia, 468 pp.;
Maiolini B., Betti L., Dorigoni E., Franceschini A., Grigolli E., 1994. Le Acque del Parco Adamello - Brenta. Aspetti biologici del laghi e dei torrenti del Parco. Parco Adamello - Brenta. Documenti, 88 pp.;
Personal communication Turin P.;
Piccola guida ittiofauna dei biotopi della provincia di Trento, Carta ittica provincia di Trento, Monitoraggi ad hoc riserve naturali provinciali;
Progetto Interreg IIIA "individuazione, salvaguardia e riabilitazione delle

popolazioni di trote autoctone in Valle d'Aosta e in Alta Savoia." Relazione finale 2006;
Provincia di Bergamo, 2001. Carta Ittica della provincia di Bergamo. Provincia di Bergamo, 150 pp.;
Provincia di Bolzano, carte di distribuzione della fauna ittica presenti sul sito (http://www.provincia.bz.it/foreste/pesca/carta-distributiva.asp);
Provincia di Lecco, 2008. Carta delle vocazioni ittiche. Piano ittico Provinciale. Provincia di Lecco, 308 pp.;
Provincia di Sondrio, 1998. Ittiofauna e gestione della pesca in provincia di Sondrio. Edoardo Fusi editore, 101 pp.;
Provincia di Verona, 2008. Carta Ittica della Provincia di Verona. Rapporto tecnico pubblicato sul web. 210 pp.;
Regione Lombardia, 2012. Programma Regionale della Pesca e dell'Acquacoltura di Regione Lombardia (P.R.P.A.) per il triennio 2012-2014. Rapporto tecnico, 266 pp.;
Regione Piemonte, 2009. Ittiofauna del Piemonte (anno di monitoraggio 2009) - Testo di illustrazione dei parametri fisiogeografici relativi agli ambienti fluviali ed allo stato delle popolazioni ittiche - tabella riassuntiva dati.xls. Technical Report, published on internet.;
Turin P., Zanetti M., Caudullo G., Tioli S., Tuzzato B., Mazzetti G., Patroncini D., Turrin D., Zocca A. 2008 - Presenza e distribuzione delle specie ittiche di interesse comunitario nelle acque interne del Veneto, in relazione alle aree SIC. In M. Bon, L. Bonato, F. Scarton (eds.), 2008. Atti 5° Convegno Faunisti Veneti. Boll. Mus. Civ. St. Nat. Venezia, suppl. al vol. 58, pp. 368.;
Zanetti M., Turin P., Grava Vanin B., Bilò M.F., Rossi V., Guerra D., Loro R., 2000. Carta ittica della Provincia di Belluno. Prov. Belluno, Ass. Pesca e Tutela delle Acque, 287 pp.

2.3 Range

2.3.1 Surface area - Range (km²)	49900	
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	decrease (-)	
2.3.5 Short-term trend magnitude	min	max
2.3.6 Long-term trend period	1989-2012	
2.3.7 Long-term trend direction	decrease (-)	
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 opinion
2.3.10 Reason for change	Improved knowledge/more accurate dataUse 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	239	max	239
2.4.3 Additional information	Definition of locality			
	Conversion method	not available		

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

	Problems	it's not possible to convert grids into individuals	
2.4.4 Year or period	1994-2012		
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	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	1989-2012		
2.4.11 Long term trend direction	decrease (-)		
2.4.12 Long-term trend magnitude	min	max	confidence interval
2.4.13 Long-term trend method	Estimate based on partial data with some extrapolation and/or modelling (2)		
2.4.14 Favourable reference population	number		
	operator	much more than (>>)	
	unknown	No	
	method	Expert opinion	
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 (km²)	
2.5.2 Year or period	
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	Expert opinion
2.5.5 Short term trend period	2001-2012
2.5.6 Short term trend direction	decrease (-)
2.5.7 Long-term trend period	1989-2012
2.5.8 Long term trend direction	decrease (-)
2.5.9 Area of suitable habitat (km²)	
2.5.10 Reason for change	Improved knowledge/more accurate data Use of different method

2.6 Main Pressures

Pressure	ranking	pollution qualifier(s)
genetic pollution (animals) (I03.01)	high importance (H)	N/A
Water abstractions from surface waters (J02.06)	high importance (H)	N/A
Fishing and harvesting aquatic resources (F02)	medium importance (M)	N/A
invasive non-native species (I01)	high importance (H)	N/A
anthropogenic reduction of habitat connectivity (J03.02)	medium importance (M)	N/A
reduction or loss of specific habitat features (J03.01)	high importance (H)	N/A
surface water abstractions by hydro-energy (J02.06.06)	high importance (H)	N/A
antagonism arising from introduction of species (K03.05)	medium importance (M)	N/A
Pollution to surface waters (limnic & terrestrial, marine & brackish) (H01)	medium importance (M)	N/A
predation (K03.04)	medium importance (M)	N/A

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

2.7 Main Threats

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

Threat	ranking	pollution qualifier(s)
genetic pollution (animals) (I03.01)	high importance (H)	N/A
Water abstractions from surface waters (J02.06)	high importance (H)	N/A
Fishing and harvesting aquatic resources (F02)	medium importance (M)	N/A
invasive non-native species (I01)	high importance (H)	N/A
anthropogenic reduction of habitat connectivity (J03.02)	medium importance (M)	N/A
reduction or loss of specific habitat features (J03.01)	high importance (H)	N/A
surface water abstractions by hydro-energy (J02.06.06)	high importance (H)	N/A
antagonism arising from introduction of species (K03.05)	medium importance (M)	N/A
Pollution to surface waters (limnic & terrestrial, marine & brackish) (H01)	medium importance (M)	N/A
predation (K03.04)	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: Bad (U2)
- qualifiers: N/A

2.9.2. Population
- assessment: Bad (U2)
- qualifiers: N/A

2.9.3. Habitat
- assessment: Inadequate (U1)
- qualifiers: N/A

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

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

3.2.1 Measure	3.2.2 Type	3.2.3 Ranking	3.2.4 Location	3.2.5 Broad Evaluation
Other wetland-related measures (4.0)	One-off	medium importance (M)	Both	Long term
Restoring/improving water quality (4.1)	Legal Administrative Recurrent	high importance (H)	Both	Maintain Unknown
Restoring/improving the hydrological regime (4.2)	Legal Recurrent One-off	medium importance (M)	Both	Maintain Enhance Long term Not evaluated
Managing water abstraction (4.3)	Legal Administrative Recurrent One-off	high importance (H)	Both	Enhance Unknown Not evaluated
Legal protection of habitats and species (6.3)	Legal Administrative Recurrent	high importance (H)	Both	Maintain Not evaluated
Other species management measures (7.0)	Administrative	medium importance (M)	Both	Long term
Regulation/ Management of hunting and taking (7.1)	Administrative Recurrent	low importance (L)	Both	Maintain
Regulation/ Management of fishery in limnic systems (7.2)	Legal Administrative Recurrent	high importance (H)	Both	Maintain Not evaluated
Specific single species or species group management measures (7.4)	Recurrent	high importance (H)	Both	Enhance
Other measures (8.0)	Administrative	medium importance (M)	Both	Enhance Long term
Regulating/Management exploitation of natural resources on land (9.1)	Legal Administrative Recurrent	low importance (L)	Both	Unknown