Report on the main results of the surveillance under article 17 for annex I habitat types (Annex D)

CODE: 3140

NAME: Hard oligo-mesotrophic waters with benthic vegetation of Chara spp.

1. National Level

1.1 Maps

1.1.1 Distribution Map	Yes
1.1.2 Distribution Method	Estimate based on expert opinion with no or minimal sampling (1)
1.1.3 Year or period	2005-2012
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

The present Habitat assessment (fields 0.1-3.1) has been compiled by Pierangela Angelini (ISPRA). Information, unpublished data and experts' judgments have been provided by Edoardo Biondi, Liliana Zivkovic and Giovanni Spampinato(SBI).

Bagella S., Gascon S., Caria M.C., Sala J., Mariani M.A., Boix D., 2010. Identifying key environmental factors related to plant and crustacean assemblages in Mediterranean temporary ponds. Biodivers Conserv 19: 1749-1768. DOI 10.1007/s10531-010-9801-5.

Bazzichelli G. & Abdelahad N., 2009. Flora analitica delle Caroficee. Alghe d'acqua dolce d'Italia. Editrice Sapienza. Angelini P., Augello R., Bianco P.M., Gennaio R., La Ghezza V., Lavarra P., Marrese M., Papallo O., Perrino V. M., Sani R., M. Stelluti. 2012. Carta degli habitat della Regione Puglia per il sistema informativo di Carta della Natura alla scala 1:50.000. ISPRA - Arpa Puglia

Bianco P.M., Laureti L., Papallo O. , Perfetti D. 2012 Carta degli habitat della Regione Umbria per il sistema informativo di Carta della Natura alla scala 1:50.000. ISPRA

Biondi E, Blasi C, Burrascano S, Casavecchia S, Copiz R, Del Vico E, Galdenzi D, Gigante D, Lasen C, Spampinato G, Venanzoni R, Zivkovic L (2009a) Italian interpretation Manual of the habitats (92/43/EEC Directive). Ministero dell'Ambiente e della Tutela del Territorio e del Mare. http://vnr.unipg.it/habitat/

Blasi et al., 2010. La Vegetazione d'Italia con Carta delle Serie di Vegetazione in scala 1:500000. Palombi ed.

Camarda I., Carta L., Brunu A., Brundu G. , Laureti L. , Angelini P., Bagnaia R., 2011. Carta degli habitat della Regione Sardegna per il sistema informativo di Carta della Natura alla scala 1:50.000. Dipartimento di Scienze Botaniche Ecologiche e Geologiche dell'Università degli Studi di Sassari - ISPRA - Regione Sardegna

Casella L., Agrillo E., Bianco P.M., Cardillo A., Carbone M., Cattena C., Laureti L., Lugari A., Spada F., 2008. Carta degli habitat della Regione Lazio per il sistema informativo di Carta della Natura alla scala 1:50.000. ISPRA - Università degli Studi di Roma "La Sapienza" - Regione Lazio

ISPRA, 2011. Dati del sistema informativo di Carta della Natura alla scala 1:50.000.

ISPRA, Corine land cover 2006 IV livello. Dati della Rete del sistema Informativo Nazionale Ambientale - SINAnet

ISPRA, 2005. Dati del sistema informativo di Carta della Natura alla scala 1:50.000.

Papini F., Gianguzzi L., Brullo S., Bianco P. M., Angelini P., 2006. Carta degli habitat della Regione Sicilia per il sistema informativo di Carta della Natura alla

scala 1:50.000. Dipartimento di Scienze Botaniche dell'Università degli Studi di Palermo - Dipartimento di Botanica dell'Università degli Studi di Catania -Regione Sicilia – ISPRA

2.3 Range of the habitat type in the biogeographical region or marine region

2.3.1 Surface area - Range (km²)	31500	
2.3.2 Range method used	Estimate based on expert opinion with no or minimal sampling (1)	
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	
2.3.10 Reason for change	Improved knowledge/more accurate data Use of different method	

2.4 Area covered by Habitat

2.4.1 Surface area (km²)	48,11	
2.4.2 Year or period	2005-2012	
2.4.3 Method used	Estimate based on partial data with some extrapolation and/or modelling (2)	
2.4.4 Short-term trend period	2001-2012	
2.4.5 Short-term trend direction	stable (0)	
2.4.6 Short-term trend magnitude	min	max
2.4.7 Short term trend method used	Estimate based on expert opinion with no or minimal sampling (1)	
2.4.8 Long-term trend period		
2.4.9 Long-term trend direction	N/A	
2.4.10 Long-term trend magnitude	min	max
2.4.11 Long term trend method used	N/A	
2.4.12 Favourable reference area	area (km)	
	operator	approximately equal to (≈)
	unknown	No
	method	
2.4.13 Reason for change	Improved knowledge/more accurate data Use of different method	

2.5 Main Pressures

Pressure	ranking	pollution qualifier(s)
Pollution to surface waters (limnic & terrestrial, marine & brackish) (H01)	medium importance (M)	N/A
use of biocides, hormones and chemicals (A07)	medium importance (M)	N/A
Fertilisation (A08)	high importance (H)	N/A
modifying structures of inland water courses (J02.05.02)	medium importance (M)	N/A
canalisation (J02.03.02)	medium importance (M)	N/A

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

2.6 Main Threats

Threat	ranking	pollution qualifier(s)
Pollution to surface waters (limnic & terrestrial, marine & brackish) (H01)	medium importance (M)	N/A
use of biocides, hormones and chemicals (A07)	medium importance (M)	N/A
Fertilisation (A08)	high importance (H)	N/A
modifying structures of inland water courses (J02.05.02)	medium importance (M)	N/A
canalisation (J02.03.02)	medium importance (M)	N/A

2.6.1 Method used – threats	expert opinion (1)

2.7 Complementary Information

2.7.1 Species
Chara tomentosa
Chara globularis
Chara intermedia
Chara hispida
Chara aspera
Chara canescens
Chara galioides
Chara vulgaris
Chara pelosiana
Nitella hyalina
Nitella tenuissima
Nitellopsis obtusa
Nitella capillaris
Tolypella hispanica
Tolypella glomerata
Tolypella nidifica
Lamprothamnium papulosum
Lychnothamnus barbatus

2.7.2 Species method used	List from field "combinazione fisionomica di riferimento" of habitat's form in: Manuale Italiano di Interpretazione degli Habitat (Biondi et al., 2009; http://vnr.unipg.it/habitat/)
2.7.3 Justification of % - thresholds for trends	
2.7.4 Structure and functions - methods used	Estimate based on expert opinion with no or minimal sampling (1)
2.7.5 Other relevant information	

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

2.8.1 Range	assessment Favourable (FV) qualifiers N/A

2.8.2 Area	assessment Favourable (FV) qualifiers N/A
2.8.3 Specific structures and functions (incl Species)	assessment Favourable (FV) qualifiers N/A
2.8.4 Future prospects	assessment Favourable (FV) qualifiers N/A
2.8.5 Overall assessment of Conservation Status	Favourable (FV)
2.8.5 Overall trend in Conservation Status	N/A

3. Natura 2000 coverage conservation measures - Annex I habitat types on biogeographical level

3.1 Area covered by habitat

3.1.1 Surface area (km²)	min	48,08353	max	48,08353
3.1.2 Method used	Complete survey/Complete survey or a statistically robust estimate (3)			
3.1.3. Trend of surface area	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)	Administrative Recurrent	high importance (H)	Inside	Maintain Enhance
Restoring/improving the hydrological regime (4.2)	Recurrent One-off	high importance (H)	Inside	Maintain
Legal protection of habitats and species (6.3)	Administrative	high importance (H)	Inside	Maintain Long term

2.1 Biogeographical Region	**Continental (CON)**
2.2 Published	The present Habitat assessment (fields 0.1-3.1) has been compiled by Pierangela Angelini (ISPRA). Information, published and unpublished data management and experts' judgments have been provided by Edoardo Biondi and Liliana Zivkovic(SBI). Bazzichelli G. & Abdelahad N., 2009. Flora analitica delle Caroficee. Alghe d'acqua dolce d'Italia. Editrice Sapienza. Biondi E., Casavecchia S. & Radetic Z., 2002. La vegetazione dei ""guazzi"" e il paesaggio vegetale della pianura alluvionale del tratto terminale del Fiume Musone (Italia centrale). Fitosociologia 39(1): 45-70. Bianco P.M., Laureti L., Papallo O. , Perfetti D. 2012 Carta degli habitat della Regione Umbria per il sistema informativo di Carta della Natura alla scala 1:50.000. ISPRA Biondi E, Blasi C, Burrascano S, Casavecchia S, Copiz R, Del Vico E, Galdenzi D, Gigante D, Lasen C, Spampinato G, Venanzoni R, Zivkovic L (2009a) Italian interpretation Manual of the habitats (92/43/EEC Directive). Ministero dell'Ambiente e della Tutela del Territorio e del Mare. http://vnr.unipg.it/habitat/ Blasi et al., 2010. La Vegetazione d'Italia con Carta delle Serie di Vegetazione in scala 1:500000. Palombi ed. Brentan D., Burbello A., Avanzi E., Gasparini S., Laureti L., Bianco P.M., 2008. Carta degli habitat della regione Veneto per il sistema informativo di Carta della Natura alla scala 1:50.000. ISPRA - Arpa Veneto. http://www.isprambiente.gov.it/site/it-IT/Servizi_per_l%27Ambiente/Sistema_Carta_della_Natura

Report on the main results of the surveillance under article 17 for annex I habitat types (Annex D)

Casella L., Agrillo E., Bianco P.M., Cardillo A., Carbone M., Cattena C., Laureti L., Lugari A., Spada F., 2008. Carta degli habitat della Regione Lazio per il sistema informativo di Carta della Natura alla scala 1:50.000. ISPRA - Università degli Studi di Roma "La Sapienza" - Regione Lazio
ISPRA, 2011. Dati del sistema informativo di Carta della Natura alla scala 1:50.000.
ISPRA, Corine land cover 2006 IV livello. Dati della Rete del sistema Informativo Nazionale Ambientale - SINAnet
Oriolo G., Dragan M., Fernetti M., Francescato C., Tomasella M., Giorgi R. 2007. Carta degli habitat della regione Friuli Venezia Giulia per il sistema informativo di Carta della Natura alla scala 1:50.000. ISPRA-Regione Friuli Venezia Giulia.
http://www.isprambiente.gov.it/site/it-IT/Servizi_per_l%27Ambiente/Sistema_Carta_della_Natura
Pesaresi S, Biondi E, Casavecchia S, Catorci A, Foglia M., 2007. Il Geodatabase del Sistema Informativo Vegetazionale delle Marche. Fitosociol 44 (2) suppl. 1: 95-101 http://www.ortobotanico.univpm.it/cartography.
PIANO DI GESTIONE del SIC-zps IT4070002 "BARDELLO". Rapporto tecnico non pubblicato.

2.3 Range of the habitat type in the biogeographical region or marine region

2.3.1 Surface area - Range (km²)	31500	
2.3.2 Range method used	Estimate based on expert opinion with no or minimal sampling (1)	
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	more than (>)
	unkown	No
	method	
2.3.10 Reason for change	Improved knowledge/more accurate data Use of different method	

2.4 Area covered by Habitat

2.4.1 Surface area (km²)	5,03	
2.4.2 Year or period	2005-2012	
2.4.3 Method used	Estimate based on partial data with some extrapolation and/or modelling (2)	
2.4.4 Short-term trend period	2001-2012	
2.4.5 Short-term trend direction	stable (0)	
2.4.6 Short-term trend magnitude	min	max
2.4.7 Short term trend method used	Estimate based on expert opinion with no or minimal sampling (1)	
2.4.8 Long-term trend period		
2.4.9 Long-term trend direction	N/A	
2.4.10 Long-term trend magnitude	min	max
2.4.11 Long term trend method used	N/A	
2.4.12 Favourable reference area	area (km)	
	operator	more than (>)
	unknown	No
	method	
2.4.13 Reason for change	Improved knowledge/more accurate data Use of different method	

Report on the main results of the surveillance under article 17 for annex I habitat types (Annex D)

2.5 Main Pressures

Pressure	ranking	pollution qualifier(s)
Pollution to surface waters (limnic & terrestrial, marine & brackish) (H01)	medium importance (M)	N/A
use of biocides, hormones and chemicals (A07)	medium importance (M)	N/A
Leisure fishing (F02.03)	medium importance (M)	N/A
Water abstractions from groundwater (J02.07)	high importance (H)	N/A
Fertilisation (A08)	medium importance (M)	N/A
canalisation (J02.03.02)	high importance (H)	N/A

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

2.6 Main Threats

Threat	ranking	pollution qualifier(s)
Pollution to surface waters (limnic & terrestrial, marine & brackish) (H01)	medium importance (M)	N/A
use of biocides, hormones and chemicals (A07)	medium importance (M)	N/A
Leisure fishing (F02.03)	medium importance (M)	N/A
Water abstractions from groundwater (J02.07)	high importance (H)	N/A
Fertilisation (A08)	medium importance (M)	N/A
canalisation (J02.03.02)	high importance (H)	N/A

2.6.1 Method used – threats: expert opinion (1)

2.7 Complementary Information

2.7.1 Species

Chara hispida

Chara fragilis

2.7.2 Species method used: List from field "combinazione fisionomica di riferimento" of habitat's form in: Manuale Italiano di Interpretazione degli Habitat (Biondi et al., 2009; http://vnr.unipg.it/habitat/)

2.7.3 Justification of % - thresholds for trends

2.7.4 Structure and functions - methods used: Estimate based on expert opinion with no or minimal sampling (1)

2.7.5 Other relevant information

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

2.8.1 Range
assessment Inadequate (U1)
qualifiers N/A

2.8.2 Area
assessment Inadequate (U1)
qualifiers N/A

2.8.3 Specific structures and functions (incl Species)	assessment Inadequate (U1) qualifiers N/A
2.8.4 Future prospects	assessment Inadequate (U1) qualifiers N/A
2.8.5 Overall assessment of Conservation Status	Inadequate (U1)
2.8.5 Overall trend in Conservation Status	stable (=)

3. Natura 2000 coverage conservation measures - Annex I habitat types on biogeographical level

3.1 Area covered by habitat

3.1.1 Surface area (km²)	min	4,91442	max	4,91442
3.1.2 Method used	Complete survey/Complete survey or a statistically robust estimate (3)			
3.1.3. Trend of surface area	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)	Legal	high importance (H)	Both	Long term
Managing water abstraction (4.3)	Legal Recurrent	high importance (H)	Both	Maintain Long term
Establish protected areas/sites (6.1)	Legal	high importance (H)	Inside	Long term
Legal protection of habitats and species (6.3)	Legal	high importance (H)	Both	Long term
Manage landscape features (6.4)	Legal	high importance (H)	Both	Long term

2.1 Biogeographical Region

Alpine (ALP)

2.2 Published

The present Habitat assessment (fields 0.1-3.1) has been compiled by Pierangela Angelini (ISPRA). Information, unpublished data and experts' judgments have been provided by Edoardo Biondi, Liliana Zivkovic and Cesare Lasen(SBI).

Bazzichelli G. & Abdelahad N., 2009. Flora analitica delle Caroficee. Alghe d'acqua dolce d'Italia. Editrice Sapienza. Brentan D., Burbello A., Avanzi E., Gasparini S., Laureti L., Bianco P.M., 2008. Carta degli habitat della regione Veneto per il sistema informativo di Carta della Natura alla scala 1:50.000. ISPRA - Arpa Veneto. http://www.isprambiente.gov.it/site/it-IT/Servizi_per_l%27Ambiente/Sistema_Carta_della_Natura

Biondi E, Blasi C, Burrascano S, Casavecchia S, Copiz R, Del Vico E, Galdenzi D, Gigante D, Lasen C, Spampinato G, Venanzoni R, Zivkovic L (2009a) Italian interpretation Manual of the habitats (92/43/EEC Directive). Ministero dell'Ambiente e della Tutela del Territorio e del Mare. http://vnr.unipg.it/habitat/

Blasi et al., 2010. La Vegetazione d'Italia con Carta delle Serie di Vegetazione in scala 1:500000. Palombi ed.

Casella L., Agrillo E., Bianco P.M., Cardillo A., Carbone M., Cattena C., Laureti L., Lugari A., Spada F., 2008. Carta degli habitat della Regione Lazio per il sistema informativo di Carta della Natura alla scala 1:50.000. ISPRA - Università degli Studi di Roma "La Sapienza" - Regione Lazio

ISPRA, 2011. Dati del sistema informativo di Carta della Natura alla scala

1:50.000.
ISPRA, Corine land cover 2006 IV livello. Dati della Rete del sistema Informativo Nazionale Ambientale - SINAnet
Oriolo G., Dragan M., Fernetti M., Francescato C., Tomasella M., Giorgi R. 2007. Carta degli habitat della regione Friuli Venezia Giulia per il sistema informativo di Carta della Natura alla scala 1:50.000. ISPRA-Regione Friuli Venezia Giulia. http://www.isprambiente.gov.it/site/it-IT/Servizi_per_l%27Ambiente/Sistema_Carta_della_Natura

2.3 Range of the habitat type in the biogeographical region or marine region

2.3.1 Surface area - Range (km²)	20500	
2.3.2 Range method used	Estimate based on expert opinion with no or minimal sampling (1)	
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	
2.3.10 Reason for change	Improved knowledge/more accurate data Use of different method	

2.4 Area covered by Habitat

2.4.1 Surface area (km²)	19,09	
2.4.2 Year or period	2005-2012	
2.4.3 Method used	Estimate based on partial data with some extrapolation and/or modelling (2)	
2.4.4 Short-term trend period	2001-2012	
2.4.5 Short-term trend direction	stable (0)	
2.4.6 Short-term trend magnitude	min	max
2.4.7 Short term trend method used	Estimate based on expert opinion with no or minimal sampling (1)	
2.4.8 Long-term trend period		
2.4.9 Long-term trend direction	N/A	
2.4.10 Long-term trend magnitude	min	max
2.4.11 Long term trend method used	N/A	
2.4.12 Favourable reference area	area (km)	
	operator	more than (>)
	unknown	No
	method	
2.4.13 Reason for change	Improved knowledge/more accurate data Use of different method	

2.5 Main Pressures

Pressure	ranking	pollution qualifier(s)
Pollution to surface waters (limnic & terrestrial, marine & brackish) (H01)	high importance (H)	N/A
Other forms of pollution (H07)	high importance (H)	N/A
Water abstractions from groundwater (J02.07)	high importance (H)	N/A

management of aquatic and bank vegetation for drainage purposes (J02.10)	high importance (H)	N/A
collapse of terrain, landslide (L05)	low importance (L)	N/A

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

2.6 Main Threats

Threat	ranking	pollution qualifier(s)
Pollution to surface waters (limnic & terrestrial, marine & brackish) (H01)	high importance (H)	N/A
Other forms of pollution (H07)	high importance (H)	N/A
Water abstractions from groundwater (J02.07)	high importance (H)	N/A
management of aquatic and bank vegetation for drainage purposes (J02.10)	high importance (H)	N/A
collapse of terrain, landslide (L05)	low importance (L)	N/A

2.6.1 Method used – threats: expert opinion (1)

2.7 Complementary Information

2.7.1 Species

Chara tomentosa
Chara globularis
Chara intermedia
Chara hispida
Chara aspera
Nitella hyalina
Nitella tenuissima
Nitellopsis obtusa
Tolypella sp.pl.
Chara canescens
Chara galioides
Chara vulgaris
Tolypella hispanica
Tolypella glomerata
Tolypella nidifica
Lamprothamnium papulosum
Lychnothamnus barbatus
Chara pelosiana
Nitella capillaris

2.7.2 Species method used: List from field "combinazione fisionomica di riferimento" of habitat's form in: Manuale Italiano di Interpretazione degli Habitat (Biondi et al., 2009; http://vnr.unipg.it/habitat/)

Report on the main results of the surveillance under article 17 for annex I habitat types (Annex D)

2.7.3 Justification of % - thresholds for trends	
2.7.4 Structure and functions - methods used	Estimate based on expert opinion with no or minimal sampling (1)
2.7.5 Other relevant information	

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

2.8.1 Range	assessment	Favourable (FV)
	qualifiers	N/A
2.8.2 Area	assessment	Inadequate (U1)
	qualifiers	N/A
2.8.3 Specific structures and functions (incl Species)	assessment	Inadequate (U1)
	qualifiers	N/A
2.8.4 Future prospects	assessment	Inadequate (U1)
	qualifiers	N/A
2.8.5 Overall assessment of Conservation Status	Inadequate (U1)	
2.8.5 Overall trend in Conservation Status	stable (=)	

3. Natura 2000 coverage conservation measures - Annex I habitat types on biogeographical level

3.1 Area covered by habitat

3.1.1 Surface area (km²)	min	13,5119	max	13,5119
3.1.2 Method used	Complete survey/Complete survey or a statistically robust estimate (3)			
3.1.3. Trend of surface area	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)	Legal	high importance (H)	Both	Long term
Managing water abstraction (4.3)	Legal	high importance (H)	Both	Long term
Establish protected areas/sites (6.1)	Legal	high importance (H)	Inside	Long term
Legal protection of habitats and species (6.3)	Legal	high importance (H)	Both	Long term Not evaluated
Manage landscape features (6.4)	Legal	high importance (H)	Both	Long term

Notes

Habitat code: 3140

Field label	Note	User
1.1.2 method used	Il metodo indicato per la realizzazione della mappa è 2 per ALP e 1 per CON e MED	ISPRA_habitat
1.1.1 Distribution Map	Habitat probabilmente sottovalutato a livello quantitativo, trattandosi di pozze o stagni di modeste dimensioni, poco cartografabili soprattutto all'interno del bosco. Per la cartografia di distribuzione ci si è limitati, dunque, ai soli dati ufficialmente disponibili.	ISPRA_habitat