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

CODE: 7210

NAME: Calcareous fens with Cladium mariscus and species of the Caricion davallianae

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). Published and unpublished data, information and experts' judgments have been provided by Edoardo Biondi, Liliana Zivkovic and Giovanni Spampinato(SBI).

"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 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/ Biondi E., Casavecchia S., Guerra V., 2006 – Analysis of vegetation diversity in relation to the geomorphological characteristics in the Salento coasts (Apulia, Italy). Fitosociologia 43 (1): 25-38 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 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 Taffetani F., 2011. Il Bosco Fantine. Un'area umida retrodunale di elevato valore naturalistico e ambientale nel Comune di Campomarino (CB). I Quaderni della Selva. Vol. IV. Crisafulli A, Cannavò S., Maiorca G., Musarella C.M., Signorino G., Spampinato G., 2010 - Aggiornamenti floristici per la Calabria. Inform. Bot. Ital 42(2): 431-442."

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

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

2.3.1 Surface area - Range (km²)	9000	
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	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	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)	4,7	
2.4.2 Year or period	2005-2012	
2.4.3 Method used	Estimate based on expert opinion with no or minimal sampling (1)	
2.4.4 Short-term trend period	2001-2012	
2.4.5 Short-term trend direction	decrease (-)	
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)	medium importance (M)	N/A
roads, motorways (D01.02)	medium importance (M)	N/A
other outdoor sports and leisure activities (G01.08)	medium importance (M)	N/A
discontinuous urbanisation (E01.02)	medium importance (M)	N/A
use of biocides, hormones and chemicals (A07)	low importance (L)	N/A
infilling of ditches, dykes, ponds, pools, marshes or pits (J02.01.03)	medium importance (M)	N/A
management of aquatic and bank vegetation for drainage purposes (J02.10)	medium importance (M)	N/A

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

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

2.6 Main Threats

Threat	ranking	pollution qualifier(s)
Pollution to surface waters (limnic & terrestrial, marine & brackish) (H01)	medium importance (M)	N/A
roads, motorways (D01.02)	medium importance (M)	N/A
other outdoor sports and leisure activities (G01.08)	medium importance (M)	N/A
discontinuous urbanisation (E01.02)	medium importance (M)	N/A
use of biocides, hormones and chemicals (A07)	low importance (L)	N/A
infilling of ditches, dykes, ponds, pools, marshes or pits (J02.01.03)	medium importance (M)	N/A
management of aquatic and bank vegetation for drainage purposes (J02.10)	medium importance (M)	N/A

2.6.1 Method used – threats	expert opinion (1)

2.7 Complementary Information

2.7.1 Species
Cladium mariscus
Kostelezkia pentacarpos
Thelypteris palustris
Sonchus maritimus
Juncus maritimus

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 Bad (U2) qualifiers N/A
2.8.4 Future prospects	assessment Bad (U2) qualifiers N/A
2.8.5 Overall assessment of Conservation Status	Bad (U2)
2.8.5 Overall trend in Conservation Status	declining (-)

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

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	4,619	max	4,619
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
Other wetland-related measures (4.0)	One-off	high importance (H)	Inside	Maintain Long term
Restoring/improving water quality (4.1)	Administrative Recurrent	high importance (H)	Inside	Maintain Enhance Long term
Restoring/improving the hydrological regime (4.2)	Contractual Recurrent	medium importance (M)	Inside	Maintain Enhance
Establish protected areas/sites (6.1)	Administrative	medium importance (M)	Inside	Maintain Long term
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). Published and unpublished data, information and experts' judgments have been provided by Edoardo Biondi and Liliana Zivkovic(SBI). "Conti E., Manzi A., Pirone G., 1998. Note floristiche per l'Abruzzo. Inform. Bot. Ital., 30 (1-3): 15-22. 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. ISPRABiondi 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_NaturaCasella 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 LazioISPRA, 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 - SINAnetDriolo 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_NaturaPesaresi 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)	15700	
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	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	
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)	8,17	
2.4.2 Year or period	2005-2012	
2.4.3 Method used	Estimate based on expert opinion with no or minimal sampling (1)	
2.4.4 Short-term trend period	2001-2012	
2.4.5 Short-term trend direction	decrease (-)	
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)
roads, motorways (D01.02)	high importance (H)	N/A
Urbanised areas, human habitation (E01)	high importance (H)	N/A
Pollution to surface waters (limnic & terrestrial, marine & brackish) (H01)	medium importance (M)	N/A
canalisation (J02.03.02)	high importance (H)	N/A
Water abstractions from groundwater (J02.07)	high importance (H)	N/A
Fertilisation (A08)	medium importance (M)	N/A
use of biocides, hormones and chemicals (A07)	medium importance (M)	N/A

management of aquatic and bank vegetation for drainage purposes (J02.10)	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)
roads, motorways (D01.02)	high importance (H)	N/A
Urbanised areas, human habitation (E01)	high importance (H)	N/A
Pollution to surface waters (limnic & terrestrial, marine & brackish) (H01)	medium importance (M)	N/A
canalisation (J02.03.02)	high importance (H)	N/A
Water abstractions from groundwater (J02.07)	high importance (H)	N/A
Fertilisation (A08)	medium importance (M)	N/A
use of biocides, hormones and chemicals (A07)	medium importance (M)	N/A
management of aquatic and bank vegetation for drainage purposes (J02.10)	high importance (H)	N/A

2.6.1 Method used – threats	expert opinion (1)

2.7 Complementary Information

2.7.1 Species
Cladium mariscus
Kostelezkia pentacarpos
Thelypteris palustris
Sonchus maritimus
Juncus maritimus

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 Bad (U2) qualifiers N/A

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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	Bad (U2)
2.8.5 Overall trend in Conservation Status	declining (-)

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	8,1225	max	8,1225
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
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

2.2 Published

Alpine (ALP)

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

"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 Morra di Cella U., Cremonese E., Pari E., Siniscalco C., Amadei M., Angelini P., Cardillo A., 2008. Carta degli habitat della Regione Valle d'Aosta per il

sistema informativo di Carta della Natura alla scala 1:50.000. ISPRA - ARPA Valle d'Aosta - Dipartimento Biologia Vegetale Università degli studi di Torino. http://www.isprambiente.gov.it/site/it-IT/Servizi_per_l%27Ambiente/Sistema_Carta_della_Natura 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. WILHALM T., NIKLFELD H. & GUTERMANN W., 2006 - Katalog der Gefäßpflanzen Südtirols.Veröffentlichungen des Naturmuseums Südtirol Nr. 3. Folio Verlag, Wien/Bozen, 218 pp

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

2.3.1 Surface area - Range (km²)	6700	
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	much 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)	0,59	
2.4.2 Year or period	2005-2012	
2.4.3 Method used	Estimate based on expert opinion with no or minimal sampling (1)	
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	much 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)
roads, motorways (D01.02)	high importance (H)	N/A
paths, tracks, cycling tracks (D01.01)	medium importance (M)	N/A
Pollution to surface waters (limnic & terrestrial, marine & brackish) (H01)	high importance (H)	N/A
dispersed habitation (E01.03)	high importance (H)	N/A
Outdoor sports and leisure activities, recreational activities (G01)	medium importance (M)	N/A
Modification of hydrographic functioning, general (J02.05)	high importance (H)	N/A
agricultural intensification (A02.01)	medium importance (M)	N/A
Fertilisation (A08)	medium importance (M)	N/A
Biocenotic evolution, succession (K02)	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)
roads, motorways (D01.02)	high importance (H)	N/A
paths, tracks, cycling tracks (D01.01)	medium importance (M)	N/A
Pollution to surface waters (limnic & terrestrial, marine & brackish) (H01)	high importance (H)	N/A
dispersed habitation (E01.03)	high importance (H)	N/A
Outdoor sports and leisure activities, recreational activities (G01)	medium importance (M)	N/A
Modification of hydrographic functioning, general (J02.05)	high importance (H)	N/A
agricultural intensification (A02.01)	medium importance (M)	N/A
Fertilisation (A08)	medium importance (M)	N/A
Biocenotic evolution, succession (K02)	high importance (H)	N/A

2.6.1 Method used – threats: expert opinion (1)

2.7 Complementary Information

2.7.1 Species

Cladium mariscus
Thelypteris palustris
Menyanthes trifoliata
Valeriana dioica
Potentilla erecta
Molinia caerulea

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/)

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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	Bad (U2)
	qualifiers	N/A
2.8.2 Area	assessment	Bad (U2)
	qualifiers	N/A
2.8.3 Specific structures and functions (incl Species)	assessment	Bad (U2)
	qualifiers	N/A
2.8.4 Future prospects	assessment	Bad (U2)
	qualifiers	N/A
2.8.5 Overall assessment of Conservation Status	Bad (U2)	
2.8.5 Overall trend in Conservation Status	declining (-)	

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	0,5828	max	0,5828
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
Maintaining grasslands and other open habitats (2.1)	Recurrent	medium importance (M)	Inside	Maintain
Restoring/improving water quality (4.1)	Legal	high importance (H)	Both	Long term
Restoring/improving the hydrological regime (4.2)	Legal One-off	high importance (H)	Inside	Maintain Enhance
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
Regulating/Management exploitation of natural resources on land (9.1)	Legal	high importance (H)	Inside	Maintain