

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

CODE: 1410

NAME: Mediterranean salt meadows (*Juncetalia maritimi*)

## 1. National Level

### 1.1 Maps

1.1.1 Distribution Map	Yes
1.1.2 Distribution Method	Estimate based on partial data with some extrapolation and/or modelling (2)
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

### 2.2 Published

#### Mediterranean (MED)

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 Published and unpublished data, information and experts' judgments have been provided by Edoardo Biondi, Liliana Zivkovic and Giovanni Spampinato(SBI).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

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

2.3.1 Surface area - Range (km <sup>2</sup> )	19700	
2.3.2 Range method used	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		
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 (km <sup>2</sup> )	
	operator	approximately equal to (≈)
	unknown	No
	method	
2.3.10 Reason for change	genuine change	No
	improved knowledge	Yes
	different method	Yes

## 2.4 Area covered by Habitat

2.4.1 Surface area (km <sup>2</sup> )	72,32		
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	decrease (-)		
2.4.6 Short-term trend magnitude	min	max	confidence interval
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	confidence interval
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 dataUse 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
Urbanised areas, human habitation (E01)	medium importance (M)	N/A
discontinuous urbanisation (E01.02)	medium importance (M)	N/A
Tramplng, overuse (G05.01)	medium importance (M)	N/A
Soil pollution and solid waste (excluding discharges) (H05)	medium importance (M)	N/A
canalisation (J02.03.02)	medium importance (M)	N/A

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infilling of ditches, dykes, ponds, pools, marshes or pits (J02.01.03)	medium importance (M)	N/A
Water abstractions from groundwater (J02.07)	medium importance (M)	N/A
Other human induced changes in hydraulic conditions (J02.15)	high importance (H)	N/A
Sand and gravel extraction (C01.01)	medium importance (M)	N/A

**2.5.1 Method used – pressures** Estimate based on partial data with some extrapolation and/or modelling( 2)

## 2.6 Main Threats

Threat	ranking	pollution qualifier(s)
Pollution to surface waters (limnic & terrestrial, marine & brackish) (H01)	high importance (H)	N/A
Urbanised areas, human habitation (E01)	medium importance (M)	N/A
discontinuous urbanisation (E01.02)	medium importance (M)	N/A
Trampling, overuse (G05.01)	medium importance (M)	N/A
Soil pollution and solid waste (excluding discharges) (H05)	medium importance (M)	N/A
canalisation (J02.03.02)	medium importance (M)	N/A
infilling of ditches, dykes, ponds, pools, marshes or pits (J02.01.03)	medium importance (M)	N/A
Water abstractions from groundwater (J02.07)	medium importance (M)	N/A
Other human induced changes in hydraulic conditions (J02.15)	high importance (H)	N/A
Sand and gravel extraction (C01.01)	medium importance (M)	N/A

**2.6.1 Method used – threats** Estimate based on expert opinion with no or minimal sampling( 1)

## 2.7 Complementary Information

### 2.7.1 Species

Juncus maritimus
Juncus acutus
Juncus subulatus
Carex extensa
Carex distachya
Aster tripolium
Plantago cornuti
Spartina versicolor
Trifolium pannonicum
Inula crithmoides (Limbarda crithmoides)
Atriplex prostrata
Scirpus maritimus
Limonium narbonense
Puccinellia festuciformis
Hordeum nodosum

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Trifolium maritimum
Trifolium squamosum
Trifolium michelianum
Alopecurus bulbosus
Carex divisa
Ranunculus ophioglossifolius
Linum maritimum
Juncus gerardii
Lotus preslii
Plantago crassifolia
Schoenus nigricans
Blackstonia imperfoliata
Centaureum tenuiflorum
Orchis coriophora ssp. Fragans
Aeluropus litoralis
Limonium densissimum
Elytrigia elongata (= Agropyron elongatum)
Elytrigia juncea

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; <a href="http://vnr.unipg.it/habitat/">http://vnr.unipg.it/habitat/</a> )
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	unknown( x)

# 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 (km <sup>2</sup> )	min	56,42667	max	56,42667
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

#### 2.1 Biogeographical Region

#### 2.2 Published

#### Continental (CON)

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).

Conti F., Bracchetti L., Gubellini L., 2007. Flora vascolare della Riserva Naturale Regionale Sentina (Marche). Delpinoa 49: 89-110.

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-](http://www.isprambiente.gov.it/site/it-IT/Servizi_per_l%27Ambiente/Sistema_Carta_della_Natura)

[IT/Servizi\\_per\\_l%27Ambiente/Sistema\\_Carta\\_della\\_Natura](http://www.isprambiente.gov.it/site/it-IT/Servizi_per_l%27Ambiente/Sistema_Carta_della_Natura)

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., Ferneti 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-](http://www.isprambiente.gov.it/site/it-IT/Servizi_per_l%27Ambiente/Sistema_Carta_della_Natura)

[IT/Servizi\\_per\\_l%27Ambiente/Sistema\\_Carta\\_della\\_Natura](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>

# 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 (km <sup>2</sup> )	5900	
2.3.2 Range method used	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		
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 (km <sup>2</sup> )	
	operator	more than (>)
	unknown	No
	method	
2.3.10 Reason for change	genuine change	No
	improved knowledge	Yes
	different method	Yes

## 2.4 Area covered by Habitat

2.4.1 Surface area (km²)	54,52		
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	decrease (-)		
2.4.6 Short-term trend magnitude	min	max	confidence interval
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	confidence interval
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 dataUse of different method		

## 2.5 Main Pressures

Pressure	ranking	pollution qualifier(s)
Urbanised areas, human habitation (E01)	medium importance (M)	N/A
eutrophication (natural) (K02.03)	medium importance (M)	N/A
Pollution to surface waters (limnic & terrestrial, marine & brackish) (H01)	high importance (H)	N/A
Landfill, land reclamation and drying out, general (J02.01)	medium importance (M)	N/A
canalisation (J02.03.02)	medium importance (M)	N/A

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

Water abstractions from groundwater (J02.07)	high importance (H)	N/A
estuarine and coastal dredging (J02.02.02)	high importance (H)	N/A

2.5.1 Method used – pressures Estimate based on partial data with some extrapolation and/or modelling( 2)

## 2.6 Main Threats

Threat	ranking	pollution qualifier(s)
Urbanised areas, human habitation (E01)	medium importance (M)	N/A
eutrophication (natural) (K02.03)	medium importance (M)	N/A
Pollution to surface waters (limnic & terrestrial, marine & brackish) (H01)	high importance (H)	N/A
Landfill, land reclamation and drying out, general (J02.01)	medium importance (M)	N/A
canalisation (J02.03.02)	medium importance (M)	N/A
Water abstractions from groundwater (J02.07)	high importance (H)	N/A
estuarine and coastal dredging (J02.02.02)	high importance (H)	N/A

2.6.1 Method used – threats Estimate based on expert opinion with no or minimal sampling( 1)

## 2.7 Complementary Information

### 2.7.1 Species

Juncus maritimus
Juncus acutus
Carex extensa
Carex distachya
Aster tripolium
Plantago cornuti
Samolus valerandi
Spartina versicolor
Inula crithmoides (=Limbarda crithmoides)
Scirpus maritimus
Limonium narbonense
Hordeum marinum
Trifolium squamosum
Alopecurus bulbosus
Carex divisa
Ranunculus ophioglossifolius
Linum maritimum
Juncus gerardii
Schoenus nigricans
Centaurium tenuiflorum
Orchis coriophora ssp. Fragans

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*Puccinellia festuciformis* ssp. *festuciformis*

*Artemisia coerulescens*

*Aeluropus litoralis*

*Plantago crassifolia*

*Agropyron elongatum*

*Agropyron pungens*

*Athrocnemum macrostachyum*

## 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

### 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

unknown( x)

## 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 49,1223 max 49,1223

#### 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