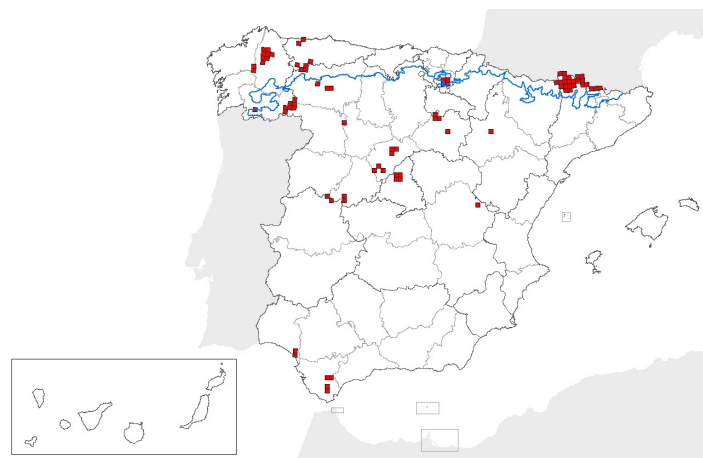


3110 Oligotrophic waters containing very few minerals of sandy plains (Littorell

1. National level

Biogeographical regions and/or marine regions concerned within the Member State: **ALP ATL MED**



map-distribution

2. Biogeographical or marine level

2.1 Biogeographical region or marine region: **ALPINE**

2.2 Published sources and/or websites:

Vigo, J.; Carreras, J. & Ferré, A. (eds.). Manual dels Hàbitats de Catalunya: catàleg dels hàbitats naturals reconeguts en el territori català d'acord amb els criteris establerts pel CORINE biotopes manual de la Unió Europea. Vols I a VII. Departament de Medi Ambient i Habitatge. Generalitat de Catalunya. 2005-2008.

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

2.3.1 Surface area of range in km ² :	8,62
2.3.2 Date of range determination:	1998-2003
2.3.3 Quality of data concerning range:	Good e.g based on extensive surveys
2.3.4 Range trend:	Stable (=)
2.3.5 Range trend magnitude in km ² (optional):	
2.3.6 Range trend period:	1990-2006
2.3.7 Reasons for reported trend:	Other (specify)
and/or specify	Sin especificar

2.4 Area covered by habitat type in the biogeographical region or marine region

2.4.1 Surface area of the habitat type (km ²):	8,03
2.4.2 Date of area estimation:	1998-2003
2.4.3 Method used for area estimation:	Ground based survey (based on field mapping, possibly using stratified random sa
2.4.4 Quality of data on area:	Good e.g based on extensive surveys
2.4.5 Area trend:	Decreasing (-)
2.4.6 Area trend magnitude (km ²):	0
2.4.7 Area trend period:	1990-2006
2.4.8 Reasons for reported trend:	Direct human influence (restoration, deterioration, destruction)

3110 Oligotrophic waters containing very few minerals of sandy plains (Littorell

Indirect anthropo(zoo)genic influence
Natural processes

and/or specify:

2.4.9 Justification of % thresholds for trends (optional):

2.4.10 Main pressures:

210 - Professional fishing
220 - Leisure fishing
400 - Urbanised areas, human habitation
602 - skiing complex
620 - Outdoor sports and leisure activities
701 - water pollution
850 - Modification of hydrographic functioning, general
950 - Biocenotic evolution

2.4.11 Threats

210 - Professional fishing
220 - Leisure fishing
400 - Urbanised areas, human habitation
602 - skiing complex
701 - water pollution
850 - Modification of hydrographic functioning, general
950 - Biocenotic evolution

2.5 Complementary information

2.5.1 Favourable reference range (km2):

Approximately equal to

2.5.2 Favourable reference area (km2):

Approximately equal to

2.5.3 Typical Species:

Callitriche verna, *Cyclops abyssorum*, *Daphnia* spp., *Diaptomus cyaneus*, *Dinobryon bavaricum*, *Eudiaptomus vulgaris*, *Euproctus asper*, *Hypericum elodes*, *Isoetes echinospora*, *Isoetes lacustris*, *Juncus bulbosus*, *Mallomonas* spp., *Mixodiaptomus laciniatus*, *Neidium iridis*, *Nostoc zetterstedtii*, *Phoxinus phoxinus*, *Potamogeton polygonifolius*, *Ranunculus flammula*, *Salmo trutta fario*, *Salvelinus fontinalis*, *Sparganium angustifolium*, *Stigonema* spp., *Subularia aquatica*, *Surirella robusta*, *Synura uvella*, *Tabellaria flocculosa*

2.5.4 Typical species assessment:

Especies aportadas por Cataluña: Seleccionadas a partir del "Manual de los hábita

2.5.5 Other relevant information (optional):

Conclusion

Biogeographical or marine level

Conclusions within Natura 2000 sites (optional)

Conclusions: (2.3) Range:

Favourable (FV)

Conclusions: (2.4) Area:

Inadequate (U1)

Conclusions: (2.5) Structure and function, including typical species:

Inadequate (U1)

Conclusions: Future prospects:

Inadequate (U1)

Conclusions: Overall assessment:

Inadequate (U1)

2.1 Biogeographical region or marine region: **ATLANTIC**

2.2 Published sources and/or websites:

Bellot, F. (1968). La vegetación de Galicia. Anal. Inst. Bot. Cavanilles, 24:3-306.

CMADS. (2007). Plan director de conservación da Rede Natura 2000 de Galicia. Vol: I-II-III-IV. Lugo.

Géhu, J.M. (1975). Synécologie de *Lilaeopsis attenuata* (Hooker et Arnott.) Fernald dans l'extreme Nord-Ouest de l'Espagne. Anales Inst. Bot. Cavanilles 32(2): 993-1004.

3110 Oligotrophic waters containing very few minerals of sandy plains (Littorell

Izco Sevillano, J., Díaz Varela, R., Martínez Sánchez, S., Rodríguez Guitián, M.A., Ramil Rego, P. & Pardo Gamundi, I. (2001). Análisis y valoración de la Sierra de O Xistral: un modelo de aplicación de la Directiva Hábitat en Galicia. 162 pp. Consellería de Medio Ambiente. Xunta de Galicia. Santiago de Compostela.

Molina, J. A. & Casado, R. (1998). Datos sobre la vegetación anfibia vivaz de la Península Ibérica. Doc. Phytosoc. XVIII: 151-156.

Pulgar, I. (1999). La vegetación de la Baixa Limia y Sierras del entorno. Tesis Doctoral (inédita). Facultade de Farmacia. Universidade de Santiago de Compostela.

Ramil et al. 2005. La expresión territorial de la diversidad. Paisajes y hábitats. Recursos Rurais (2005). Serie cursos 2:109-128.

Romero, M.I., Ramil, P. & Rubinos, M. (2004a). Conservation status of *Eryngium viviparum* Gay. Acta Bot. Gallica 151 (1): 55-64.

Romero, M.I., Rubinos, M. & Ramil, P. (2004b). *Luronium natans*, a rare species in the Iberian Peninsula. Belg. Journ. Bot. 137(1):

Rodríguez-Oubiña, J., Romero, M.I. & Ortiz, S. (1997). Communities of the class Littorelletea uniflorae in the northwest iberian Peninsula. Acta Bot. Gall. 144 (1): 155-169.

Ministerio de Medio Ambiente. (2003). Atlas y manual de los hábitat de España. Dirección General de Conservación de la Naturaleza, Ministerio de Medio Ambiente.

Bartolomé, C., J. Álvarez, J. Vaquero, M. Costa, M.A. Casermeiro, J. Giraldo & J. Zamora (2005). Los tipos de hábitat de interés comunitario de España. Guía básica. Dirección General para la Biodiversidad, Ministerio de Medio Ambiente.

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

2.3.1 Surface area of range in km ² :	2284,2
2.3.2 Date of range determination:	2003-2007
2.3.3 Quality of data concerning range:	Moderate e.g. based on partial data with some extrapolation
2.3.4 Range trend:	Unknown (X)
2.3.5 Range trend magnitude in km ² (optional):	
2.3.6 Range trend period:	
2.3.7 Reasons for reported trend:	Not applicable
and/or specify	

2.4 Area covered by habitat type in the biogeographical region or marine region

2.4.1 Surface area of the habitat type (km ²):	
2.4.2 Date of area estimation:	
2.4.3 Method used for area estimation:	
2.4.4 Quality of data on area:	
2.4.5 Area trend:	
2.4.6 Area trend magnitude (km ²):	0
2.4.7 Area trend period:	
2.4.8 Reasons for reported trend:	Not applicable
and/or specify:	
2.4.9 Justification of % thresholds for trends (optional):	
2.4.10 Main pressures:	170 - Animal breeding 701 - water pollution 803 - infilling of ditches, dykes, ponds, pools, marshes or pits 850 - Modification of hydrographic functioning, general
2.4.11 Threats	170 - Animal breeding 701 - water pollution

3110 Oligotrophic waters containing very few minerals of sandy plains (Littorell

803 - infilling of ditches, dykes, ponds, pools, marshes or pits

850 - Modification of hydrographic functioning, general

2.5 Complementary information

2.5.1 Favourable reference range (km²):

0

2.5.2 Favourable reference area (km²):

0

2.5.3 Typical Species:

Antinoria agrostidea, *Apium inundatum*, *Baldellia ranunculoides*, *Deschampsia setacea*, *Eleocharis bonariensis*, *Eleocharis multicaulis*, *Eryngium viviparum*, *Hydrocotyle vulgaris*, *Hypericum elodes*, *Isoetes velata* subsp. *Velata*, *Isoetes velata* subsp. *asturicensis*, *Juncus bulbosus*, *Lilaeopsis caroliniana*, *Littorella uniflora*, *Luronium natans*, *Pilularia globulifera*, *Potamogeton oblongus*, *Ranunculus ololeucos*, *Scirpus fluitans*, *Veronica scutellata*

2.5.4 Typical species assessment:

Sin Evaluar

2.5.5 Other relevant information (optional):

Especies típicas aportadas únicamente por Galicia.

Conclusion	Biogeographical or marine level	Conclusions within Natura 2000 sites (optional)
Conclusions: (2.3) Range:	Unknown (XX)	
Conclusions: (2.4) Area:	Unknown (XX)	
Conclusions: (2.5) Structure and function, including typical species:	Unknown (XX)	
Conclusions: Future prospects:	Unknown (XX)	
Conclusions: Overall assessment:	Unknown (XX)	

2.1 Biogeographical region or marine region: **MEDITERRANEAN**

2.2 Published sources and/or websites:

Bellot, F. (1968). La vegetación de Galicia. Anal. Inst. Bot. Cavanilles, 24:3-306.

CMADS. (2007). Plan director de conservación da Rede Natura 2000 de Galicia. Vol: I-II-III-IV. Lugo.

Géhu, J.M. (1975). Synécologie de *Lilaeopsis attenuata* (Hooker et Arnott.) Fernald dans l'extreme Nord-Ouest de l'Espagne. Anales Inst. Bot. Cavanilles 32(2): 993-1004.

Izco Sevillano, J., Díaz Varela, R., Martínez Sánchez, S., Rodríguez Guitián, M.A., Ramil Rego, P. & Pardo Gamundi, I. (2001). Análisis y valoración de la Sierra de O Xistral: un modelo de aplicación de la Directiva Hábitat en Galicia. 162 pp. Consellería de Medio Ambiente. Xunta de Galicia. Santiago de Compostela.

Molina, J. A. & Casado, R. (1998). Datos sobre la vegetación anfibia vivaz de la Península Ibérica. Doc. Phytosoc. XVIII: 151-156.

Pulgar, I. (1999). La vegetación de la Baixa Limia y Sierras del entorno. Tesis Doctoral (inédita). Facultade de Farmacia. Universidade de Santiago de Compostela.

Ramil et al. 2005. La expresión territorial de la diversidad. Paisajes y hábitats. Recursos Rurais (2005). Serie cursos 2:109-128.

Romero, M.I., Ramil, P. & Rubinos, M. (2004a). Conservation status of *Eryngium viviparum* Gay. Acta Bot. Gallica 151 (1): 55-64.

Romero, M.I., Rubinos, M. & Ramil, P. (2004b). *Luronium natans*, a rare species in the Iberian Peninsula. Belg. Journ. Bot. 137(1):

Rodríguez-Oubiña, J., Romero, M.I. & Ortiz, S. (1997). Communities of the class Littorelletea uniflorae in the northwest iberian Peninsula. Acta Bot. Gall. 144 (1): 155-169.

Bartolomé, C., J. Álvarez, J. Vaquero, M. Costa, M.A. Casermeiro, J. Giraldo & J. Zamora (2005). Los tipos de hábitat de interés comunitario de España. Guía básica. Dirección General para la Biodiversidad, Ministerio de Medio Ambiente.

http://www.mma.es/porta/sectores/biodiversidad/rednatura2000/documentos_rednatura/acceso_fichas.htm

Ministerio de Medio Ambiente. (1993). Inventario Nacional de Hábitat. Dirección General para la Biodiversidad, Ministerio de Medio Ambiente.

3110 Oligotrophic waters containing very few minerals of sandy plains (Littorell

Ministerio de Medio Ambiente. (2003). Atlas y manual de los hábitat de España. Dirección General de Conservación de la Naturaleza, Ministerio de Medio Ambiente.

Cuevas, J.A. (2003). Inventario y descripción de los hábitats incluidos en la Directiva 92/43/CEE presentes en la Comunidad de Madrid. Serie Documentos, nº 40. Edt. Centro de Investigaciones Ambientales de la Comunidad de Madrid Fernando González Bernáldez. Soto del Real. Madrid. 59pp.

Rivas-Martínez, S. T.E. Díaz, F. Fernández-González, J. Izco, J. Loidi, M. Lousa & A. Penas (2002). Vascular plant communities of Spain and Portugal. Addenda to the syntaxonomical checklist of 2001. *Itinera Geobotanica* 15(2): 433-922.

Escudero, A., J.M. Olano, R. García, P. Bariego, I. Molina & J.A. Arranz (2007). Guía básica para la interpretación de los hábitats de interés comunitario en la Comunidad de Castilla y León. Junta de Castilla y León. Consejería de Medio Ambiente (en prensa).

Martín, J.; Cirujano, S.; Moreno, M.; Bautista, J.; Stübing, G. La vegetación protegida en Castilla-La Mancha. Descripción, ecología y conservación de los hábitat de protección especial. Dirección General del Medio Natural. Consejería de Agricultura y Medio Ambiente. Junta de Comunidades de Castilla-La Mancha. 2003.

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

- 2.3.1 Surface area of range in km2: 3652,7
- 2.3.2 Date of range determination: 1993-2007
- 2.3.3 Quality of data concerning range:
- 2.3.4 Range trend: Unknown (X)
- 2.3.5 Range trend magnitude in km2 (optional):
- 2.3.6 Range trend period:
- 2.3.7 Reasons for reported trend: Not applicable
and/or specify

2.4 Area covered by habitat type in the biogeographical region or marine region

- 2.4.1 Surface area of the habitat type (km2):
- 2.4.2 Date of area estimation:
- 2.4.3 Method used for area estimation:
- 2.4.4 Quality of data on area:
- 2.4.5 Area trend: Unknown (X)
- 2.4.6 Area trend magnitude (km2): 0
- 2.4.7 Area trend period:
- 2.4.8 Reasons for reported trend: Not applicable
and/or specify:
- 2.4.9 Justification of % thresholds for trends (optional):
- 2.4.10 Main pressures:
- 140 - Grazing
 - 141 - abandonment of pastoral systems
 - 170 - Animal breeding
 - 701 - water pollution
 - 702 - air pollution
 - 720 - Trampling, overuse
 - 840 - Flooding
 - 850 - Modification of hydrographic functioning, general
 - 852 - modifying structures of inland water courses
 - 853 - management of water levels
 - 890 - Other human induced changes in hydraulic conditions

3110 Oligotrophic waters containing very few minerals of sandy plains (Littorell

	952 - eutrophication
	954 - invasion by a species
2.4.11 Threats	140 - Grazing
	141 - abandonment of pastoral systems
	170 - Animal breeding
	701 - water pollution
	702 - air pollution
	720 - Trampling, overuse
	790 - Other pollution or human impacts/activities
	840 - Flooding
	850 - Modification of hydrographic functioning, general
	852 - modifying structures of inland water courses
	853 - management of water levels
	890 - Other human induced changes in hydraulic conditions
	954 - invasion by a species
2.5 Complementary information	
2.5.1 Favourable reference range (km2):	0
2.5.2 Favourable reference area (km2):	0
2.5.3 Typical Species:	<i>Antinoria agrostidea</i> , <i>Apium inundatum</i> , <i>Baldellia ranunculoides</i> , <i>Deschampsia setacea</i> , <i>Eleocharis acicularis</i> , <i>Eleocharis bonariensis</i> , <i>Eleocharis hexandra</i> , <i>Eleocharis macropoda</i> , <i>Eleocharis multicaulis</i> , <i>Eryngium viviparum</i> , <i>Hydrocotyle vulgaris</i> , <i>Hypericum elodes</i> , <i>I. echinosporum</i> , <i>Isoetes velata</i> subsp. <i>Asturicensis</i> , <i>Isoetes velata</i> subsp. <i>Velata</i> , <i>Isoetes velatum</i> , <i>Juncus bulbosus</i> , <i>Juncus emmanuelis</i> , <i>Juncus heterophyllus</i> , <i>Juncus tenageia</i> subsp. <i>Perpusillus</i> , <i>Lilaeopsis caroliniana</i> , <i>Littorella uniflora</i> , <i>Luronium natans</i> , <i>Pilularia globulifera</i> , <i>Potamogeton oblongus</i> , <i>Potamogeton polygonifolius</i> , <i>Ranunculus flammula</i> , <i>Ranunculus ololeucos</i> , <i>Scirpus fluitans</i> , <i>Scirpus setaceus</i> , <i>Sparganium angustifolium</i> , <i>Spegularia capillacea</i> , <i>Subularia aquatica</i> , <i>Veronica scutellata</i>
2.5.4 Typical species assessment:	Castilla-La Mancha: seleccionadas a partir de la publicación “La vegetación prote
2.5.5 Other relevant information (optional):	Comunidad Aragón: Hábitat presente en 0 Lugares. 0 % del hábitat conocido inclu
Conclusion	Biogeographical or marine level Conclusions within Natura 2000 sites (optional)
Conclusions: (2.3) Range:	Unknown (XX)
Conclusions: (2.4) Area:	Unknown (XX)
Conclusions: (2.5) Structure and function, including typical species:	Unknown (XX)
Conclusions: Future prospects:	Unknown (XX)
Conclusions: Overall assessment:	Unknown (XX)