

## F6.1a Western basiphilous garrigue

### Summary

This is scrub vegetation dominated by xerophytic sub-shrubs, mats and cushion plants, tufted grasses and herbs on shallow or eroded soils derived from basic and ultramafic rocks through the low intensity agricultural landscapes of the western Mediterranean. On rocky outcrops or crests and in semi-arid regions, it may be permanent climax vegetation but, in most cases, it replaces a range of degraded forests and the vegetation shows enormous floristic diversity across its range. For such a fire-prone habitat, the current infrequency of burning can allow succession to forest and other threats are agricultural intensification, afforestation, urbanization and touristic expansion in some areas. Low intensity agriculture with long fallow periods is needed for conservation.

### Synthesis

A stable or a very slight reduction in quantity and quality since the last 50 year, mostly due to vegetation succession as a result of the land abandonment, result in a Least Concern (LC) assessment. The future prospects for the habitat are also assessed as stable both in the EU28 and EU28+ countries. In spite of the habitat's abundant occurrence and the absence of relevant threats, the wide local variation of the habitat type should be taken into account when designing and implementing management practices. The habitat is very species-rich and contains many narrow endemics amongst which many threatened species.

Overall Category & Criteria			
EU 28		EU 28+	
Red List Category	Red List Criteria	Red List Category	Red List Criteria
Least Concern	-	Least Concern	-

### Sub-habitat types that may require further examination

This is a very heterogeneous habitat with a high local/regional variability in species composition, including many endemics. Therefore many regional subtypes may be distinguished and assessed individually.

### Habitat Type

#### Code and name

F6.1a Western basiphilous garrigue



*Ulex densiflorus*, *Thymus zygis* subsp. *sylvestris* and *Rosmarinus officinalis* community as a substitution stage of *Juniperus turbinata* / *Quercus coccifera* high-scrub, Cape Espichel, Portugal (Photo: Jorge Capelo).



*Ulex erinaceus* community on eroded table limestone, St. Vincent Cape, Portugal (Photo: Jorge Capelo).

## Habitat description

Scrub vegetation dominated by xerophytic chamaephytes, mostly of cushion-shaped, nano-phanerophytes and sometimes tuffed perennial grasses and hemicryptophytes, on shallow or eroded soils derived from rocks with alkaline reaction of the western Mediterranean subregion. Common substrata are limestone (calcium carbonate rich), dolomitic (magnesium carbonate rich) and ultramafic rocks with alkaline reaction. The habitat type F6.1a is, in most cases, seral vegetation stage following degradation of zonal forests distributed from the thermo to meso-Mediterranean, seldom to the low supra-Mediterranean, semi-arid to sub-humid vegetation belts. In rocky outcrops or crests it may have a permanent character and form the climax vegetation. Also in semi-arid regions, such as those in the Murcia-Almerian province, it may stand as permanent vegetation in large areas.

The habitat is frequently dominated by shrubs of the families *Labiatae* and *Fabaceae* of neomediterranean character. It comprises a broad diversity of plant communities, especially in Spain, and includes many local endemic taxa, thus having a high conservation value. This vegetation has historically expanded its area due to soil erosion after the destruction of woodlands for agriculture and cattle grazing. It may also be promoted by wildfires, as most plants are R-strategist seeders and fire-prone. The biogeographic and bioclimatic variability allows the recognition of three subgroups (vegetation orders): *Rosmarinetalia* (dry to subhumid central and west Iberian limestone), *Antyllidetalia terniflorae* (semi-arid limestone and marl Murcia-Almerian province) and *Convolvuletalia boissieri* (dolomite and ultramafic), containing in total thirteen alliances.

As basiphilous garrigues have enormous syntaxonomic and floristic diversity in the western Mediterranean, some degree of interpretation is needed. We follow the concept of Mucina et al. (2014) with several modifications. The core concept is that of chamaephyte- and nano- phanerophyte-dominated scrub on eroded or thin soils in substrata with alkaline reaction, either derived from limestone, dolomitic (rich in magnesium carbonate) or sometimes ultramafic rock, in thermo-Mediterranean and meso-Mediterranean belts. The vegetation corresponds to a large part of the class *Rosmarinetea officinalis* (in the sense of Rivas-Martínez et al., 1991, = *Oniondo-Rosmarinetea* in Mucina et al.) and mostly to the widespread dry to sub-humid order *Rosmarinetalia*. Also the semi-arid limestone communities of the Murcia-Almerian province (order *Anthyllidetalia terniflorae*) are included. Gypsum communities (order *Gipsophylletalia*) are excluded (included in F6.7), but magnesium-prone ones are included (order *Convolvuletalia boissieri*). The equivalent habitats in west European calcareous mountains, mostly in supra and oro-Mediterranean thermotypes, sometimes in sub-Mediterranean temperate bioclimate are excluded and systematized in F6.6, F6.7 and F7.4. By the same reasoning all hedgehog heath (order *Erinacetalia anthylis*) is excluded and belongs to F7.4. The following syntaxa, in many cases ascribed to *Rosmarinetea* are thus excluded from F6.1a: *Erysimo-Jurinetalia bocconeii* (F7.4b), *Festuco-Ononidetalia striatae* (F74.a). Also, not following Mucina et al., mountain garrigues of the following alliances are excluded: *Polygalo-Genistion corsicae*, *Helianthemo-Aphyllantion monspeliensis* (F6.6), *Alyssion bertolonii* (F7.4a), *Artemisio albae-Saturejion montanae* (F7.4a), *Lavandulo latifoliae-Genistion (Echinospartion) boissieri* (F6.6), *Siderito incanae-Salvio lavandulifoliae* (F6.6). However *Cisto eriocephali-Ericion multiflorae* is included to stand for an Italo-Thyrrenean irradiation of the east-Mediterranean *Cisto-Micromerietea* class or otherwise considered in *Rosmarinetea* (West Mediterranean). Garrigues in limestone sea-cliffs (order *Helichrysetalia italicici*) are excluded and classifiable in either F7.1-2 (west Mediterranean coastal garrigues) or B3.1-3b (Mediterranean and Black Sea rocky shores).

Indicators of good quality:

Apart from the primary ecological niches of the habitat (crests and rocky outcrops), its presence is dependent on disturbances of low to moderate degree; otherwise, it is expected to be substituted along the succession process by forest communities. Although such processes are slow or even 'locked' by

persistence of disturbance or feeble water capacity, the whole mosaic of garrigues and other habitats (grasslands, forests) in dry sub-humid types with shallow soils should be balanced by active management (burning or traditional agriculture and grazing). At its permanent positions on rock crests no management is required for the conservation of the habitat. Species rich, "saturated" variations of the habitat need the emphasis to be given on conservation, while the species-poor pioneer stages are of lower conservation value but potentially these evolve into more species rich communities.. Another indicator of the habitat's good quality is the presence of the majority of its local characteristic species.

Characteristic species:

Flora, Vascular plants:

*Anthyllis cytisoides*, *Anthyllis gandogerii*, *Aphyllanthes monspeliensis*, *Argyrolobium zanonii*, *Asperula brachysiphon*, *Astragalus chlorocyanus*, *Astragalus granatensis*, *Atractylis humilis*, *Bupleurum fruticosescens*, *Cephalaria leucantha*, *Cheirolophus intybaceus*, *Cistus albidus*, *Convolvulus lanuginosus*, *Coris monspeliensis*, *Coronilla lotoides*, *Coronilla minima* subsp. *minima*, *Digitalis obscura*, *Dorycnium pentaphyllum*, *Elaoselinum tenuifolium*, *Fumana ericoides*, *Fumana hispidula*, *Fumana procumbens* subsp. *procumbens*, *Fumana thymifolia*, *Globularia alypum*, *Helianthemum syriacum*, *Helianthemum violaceum*, *Hippocrepis squamata*, *Koeleria vallesiana*, *Ononis angustifolia*, *Picris hispanica*, *Rosmarinus officinalis*, *Sideritis incana*, *Staehelina dubia*, *Thesium divaricatum*, *Thymelaea ruizii*, *Thymus vulgaris*, *Valeriana tuberosa*, *Aristolochia pistolochia*, *Astragalus alopecuroides*, *Astragalus glaux*, *Catananche caerulea*, *Centaurea pinae*, *Cephalaria leucantha*, *Cistus clusii*, *Cytinus ruber*, *Dianthus hispanicus*, *Elaeoselinum hispanicum*, *Euphorbia flavidoma*, *Euphorbia hispanica*, *Euphorbia isatidifolia*, *Euphorbia nicaeensis*, *Fritillaria boissieri*, *Fumana montana*, *Fumana laevipes*, *Fumana laevis*, *Globularia vulgaris*, *Halimium atriplicifolium*, *Hedysarum europaeum*, *Helianthemum apenninum* subsp. *apenninum*, *Helianthemum asperum*, *Helianthemum cinereum* subsp. *rotundifolium*, *Helianthemum rotundifolium*, *Helianthemum croceum* subsp. *stoechadifolium*, *Helianthemum hirtum*, *Helianthemum marifolium*, *Hippocrepis bourgaei*, *Iberis nazarita*, *Klasea leucantha*, *Klasea pinnatifida*, *Lavandula latifolia*, *Leuzea conifera*, *Linaria aeruginea*, *Linum suffruticosum*, *Lithodora fruticosa*, *Ononis minutissima*, *Ononis pusilla*, *Onosma hispanica*, *Orobanche latisquama*, *Paronychia retioides*, *Rosmarinus palaui*, *Ruta chaleensis*, *Satureja barceloi*, *Satureja obovata*, *Scorzonera hispanica* subsp. *crispatula*, *Serratula flavescens* subsp. *leucantha*, *Serratula pinnatifida*, *Sideritis fruticulosa*, *Teucrium bicoloreum*, *Teucrium capitatum*, *Teucrium hanseleri*, *Thymelaea elliptica*, *Thymelaea tinctoria*, *Viola arborescens*, *Cistus creticus*, *Genista corsica*, *Centaurea caballeroi*, *Centaurea dufourii*, *Cistus creticus*, *Cytinus pityusensis*, *Dianthus multiceps*, *Dianthus pungens*, *Erica multiflora*, *Genista dorycnifolia*, *Genista lucida*, *Genista trichoacantha*, *Guillonea scabra*, *Helianthemum caput-felis*, *Helianthemum cavanillesianum*, *Helianthemum molle*, *Helianthemum origanifolium*, *Hippocrepis fruticosescens*, *Lavandula dentata*, *Ononis microphylla*, *Polygala rupestris*, *Satureja nervosa*, *Satureja rodriguezii*, *Sideritis albicaulis*, *Sideritis cardoana*, *Sideritis tragoriganum*, *Teucrium integrifolium*, *Teucrium spinescens*, *Teucrium x coeleste*, *Thymelaea sanamunda*, *Thymus aestivus*, *Ulex parviflorus*, *Vincetoxicum apodium*, *Aristolochia bianorii*, *Centaurea antennata*, *Lotus tetraphyllus*, *Phlomis italicica*, *Satureja innota*, *Teucrium album*, *Anthyllis lagascana*, *Anthyllis onobrychioides*, *Arenaria pseudarmeriastrum*, *Centaurea rouyi*, *Dianthus fontqueri*, *Salvia mariolensis*, *Satureja valentina*, *Teucrium homotrichum*, *Thymelaea argentata*, *Thymelaea valentina*, *Thymus piperella*, *Dianthus contestanus*, *Linaria hegelmaieri*, *Thymelaea velutina*, *Genista pillosa* subsp. *jordanii*, *Cistus creticus* subsp. *ericephalus*, *Dorycnium hirsutum*, *Fumana arabica*, *Micromeria nervosa*, *Teucrium flavum*, *Thymelaea tartonraira*, *Cytisus plumosus*, *Helianthemum andalusicum*, *Helianthemum hirtum* subsp. *bethoricum*, *Hyacinthoides vicentina* subsp. *vicentina*, *Iberis microcarpa*, *Klasea neglecta*, *Rosmarinus x mendizabali*, *Satureja micrantha*, *Sideritis lusitanica*, *Sideritis grandiflora*, *Sideritis reverchonii*, *Teucrium eriocephalum*, *Teucrium rixanense*, *Thymbra capitata*, *Thymus longiflorus*, *Thymus lotoccephalus*, *Ulex scaber*, *Asperula hirsute*, *Genista hirsuta* subsp. *algarbiensis*, *Staureja graeca* subsp. *micrantha*, *Serratula baetica* subsp. *lusitanica*, *Sideritis algarviensis* subsp. *lusitanica*, *Teucrium algarbiensis*, *Teucrium*

*Iusitanicum*, *Thymus lotocephalus*, *Biscutella vicentina*, *Sideritis algarviensis* subsp. *algarviensis*, *Teucrium vicentinum*, *Ulex erinaceus*, *Bartsia aspera*, *Iberis procumbens* subsp. *microcarpa*, *Serratula extremadurensis*, *Sideritis hirsuta* subsp. *hirtula*, *Thymus zygis* subsp. *sylvestris*, *Ulex densus*, *Armeria platyphylla*, *Galium balearicum*, *Hypericum ericoides*, *Sideritis sericea*, *Vincetoxicum balearicum*, *Anthyllis balearica*, *Astragalus balearicus*, *Euphorbia balearica*, *Genista valdesbermejoi*, *Helichrysum microphyllum*, *Hypericum balearicum*, *Linaria pruinosa*, *Ononis crispa*, *Sonchus willkommii*, *Teucrium subspinosum*, *Anthyllis terniflora*, *Anthyllis xmedia*, *Astragalus hispanicus*, *Centaurea intybacea*, *Cistus carthaginensis*, *Convolvulus sericeus*, *Coris rivasiana*, *Elaeoselinum tenuifolium*, *Helianthemum cinereum*, *Helianthemum hispidulum*, *Helianthemum scopulorum*, *Hippocrepis scabra*, *Klasea mucronata*, *Linum jimenezii*, *Onobrychis stenorhiza*, *Paronychia suffruticosa*, *Satureja canescens*, *Sideritis murgetana*, *Teucrium gracillimum*, *Teucrium muricum*, *Thymus hyemalis*, *Centaurea spachii*, *Fumana fontanesii*, *Helianthemum almeriense*, *Helianthemum guerrae*, *Helianthemum marminorense*, *Matthiola rigualii*, *Sideritis chamaedryfolia*, *Sideritis ibanyezi*, *Sideritis pusilla*, *Teucrium carthaginense*, *Thymus ciliatus*, *Thymus murcicus*, *Sideritis leucantha*, *Teucrium carolipaui*, *Thymus x diazii*, *Vella lucentina*, *Dianthus charidemi*, *Sideritis osteoxyla*, *Sideritis granatensis*, *Teucrium cavanillesianum*, *Teucrium charidemi*, *Teucrium almeriense*, *Teucrium hieronymi*, *Teucrium xguemesii*, *Teucrium xportusmagni*, *Anabasis articulata*, *Diplotaxis intricata*, *Euzomodendron bourgeanum*, *Herniaria almeriana*, *Limonium album*, *Limonium carthaginense*, *Limonium estevei*, *Limonium tabernense*, *Moricandia foetida*, *Salsola papillosa*, *Sideritis alhamillensis*, *Teucrium lanigerum*, *Helianthemum hieronymi*, *Sideritis bourgaeana*, *Sideritis leucantha* subsp. *incana*, *Sideritis pauciflora*, *Sideritis serrata*, *Teucrium franchetianum*, *Teucrium martinii*, *Thymus antoninae*, *Thymus funkii*, *Thymus xparadoxus*, *Anthyllis polyccephala*, *Anthyllis ramburii*, *Anthyllis tejedensis*, *Centaurea granatensis*, *Convolvulus boissieri*, *Digitalis laciniata*, *Erodium astragaloides*, *Festuca plicata*, *Fumana baetica*, *Fumana paradoxa*, *Helianthemum suffruticosum*, *Helianthemum neopiliferum*, *Helianthemum pannosum*, *Helianthemum raynaudii*, *Hippocrepis eriocarpa*, *Onobrychis argentea*, *Ononis cephalotes*, *Pterocephalus spathulatus*, *Thymus granatensis*, *Andryala agardhii*, *Anthyllis rupestris*, *Arenaria caesia*, *Arenaria racemosa*, *Arenaria tomentosa*, *Armeria trevenqueana*, *Armeria longiaristata*, *Centaurea genesii-lopezii*, *Chamaespartium undulatum*, *Erodium boissieri*, *Erysimum cazorlense*, *Festuca segimonensis*, *Globularia spinosa*, *Hedysarum costaetalantis*, *Helianthemum frigidulum*, *Jasione sequarensis*, *Leucanthemopsis spathulifolia*, *Lithodora nitida*, *Rothmaleria granatensis*, *Santolina elegans*, *Scabiosa pulsatilloides*, *Scorzonera albicans*, *Silene tejedensis*, *Alyssum atlanticum*, *Anthyllis plumosa*, *Arenaria delaguardiae*, *Cistus parviflorus*, *Digitalis integrifolia*, *Erysimum rondae*, *Helianthemum estevei*, *Helianthemum viscidulum*, *Lavandula lanata*, *Sideritis arborescens*, *Sideritis occidentalis*, *Teucrium reverchonii*, *Teucrium serratum*, *Thymelaea angustifolia*, *Thymus baeticus*, *Thymus sabulicola*, *Alyssum malacitanum*, *Armeria carratraccensis*, *Centaurea carratraccensis*, *Genista lanuginosa*, *Halimium serpentinicola*, *Klasea baetica*, *Scorzonera baetica*, *Staehelina baetica*, *Ulex baeticus*.

## Classification

This habitat may be equivalent to, or broader than, or narrower than the habitats or ecosystems in the following typologies.

EUNIS:

F6.1 Western garrigues

EuroVegChecklist:

*Cisto cretici-Genistion corsicae*

*Rosmarinion officinalis* (=Rosmarino-Ericion multiflorae)

*Cisto eriocephali-Ericion multiflorae*

*Eryngio trifidi-Ulicion erinacei* (=Saturejo-Thymbrion capitatae)

*Ulici densi-Thymion sylvestris*  
*Hypericion balearici*  
*Hypericion ericoidis*  
*Thymo moroderi-Siderition leucantha*e  
*Anthyllido terniflorae-Salsolion papilosae*  
*Siderition bourgaeanae*  
*Andryalion agardhi*  
*Lavandulion lanatae*  
*Stahelino-Ulicion baetici*

#### Annex 1:

- (small parts overlap with 5330 and 5140)

Emerald:

F5.5B Cabo da Sao Vicente brushes

MAES-2:

Heathland and scrub

IUCN:

3.8 Mediterranean-type Shrubby Vegetation

**Does the habitat type present an outstanding example of typical characteristics of one or more biogeographic regions?**

Yes

#### Regions

Mediterranean

#### Justification

The habitat type is exclusively occurring on basic soils in the Western part of the Mediterranean region (SW Europe) subjected to Mediterranean macro-bioclimatic conditions.

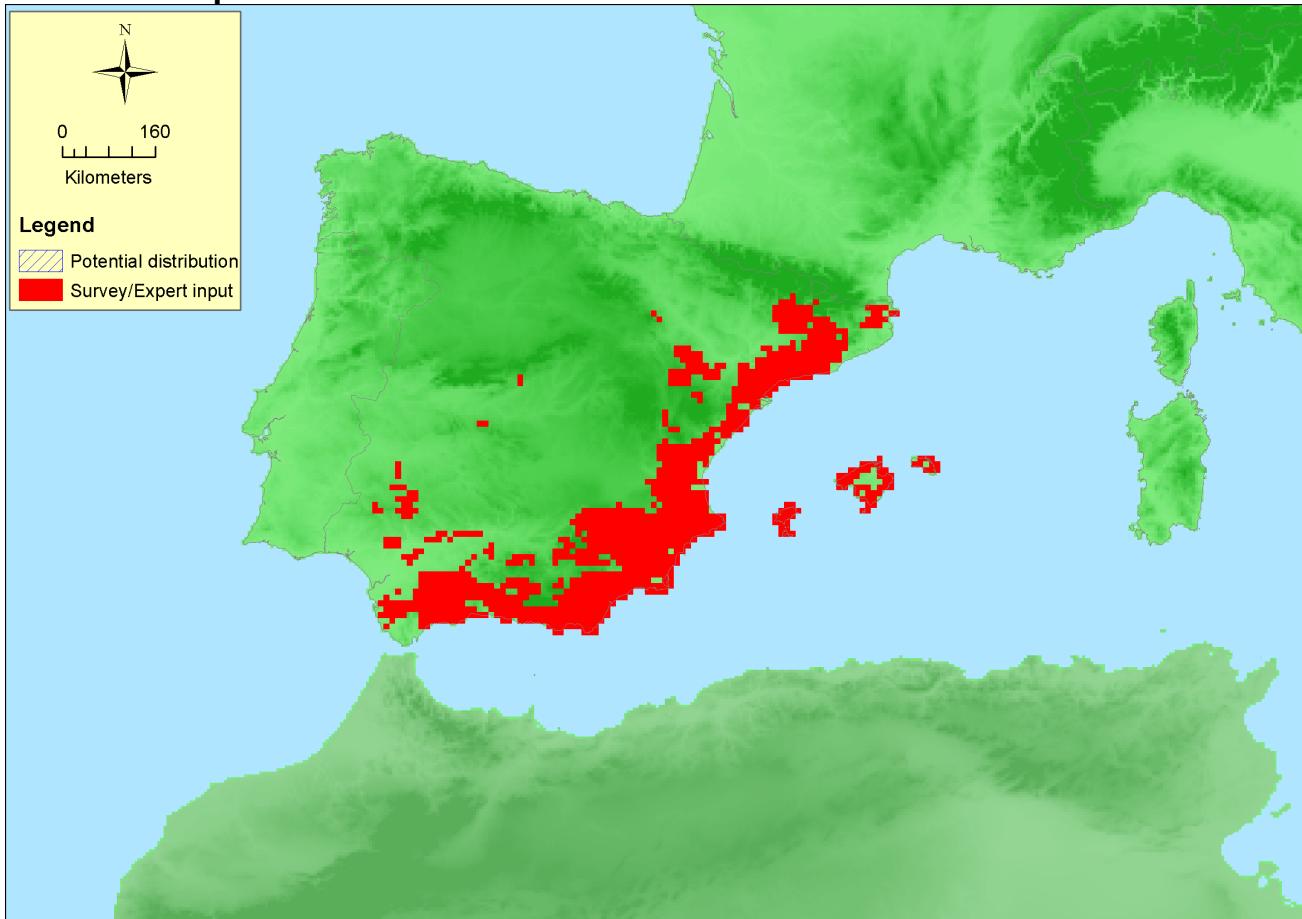
## **Geographic occurrence and trends**

EU 28	Present or Presence Uncertain	Current area of habitat	Recent trend in quantity (last 50 yrs)	Recent trend in quality (last 50 yrs)
France	Corsica: Present France mainland: Present	unknown Km <sup>2</sup>	Unknown	Unknown
Italy	Italy mainland: Present Sardinia: Present Sicily: Present	2811 Km <sup>2</sup>	Stable	Decreasing
Portugal	Portugal mainland: Present	59 Km <sup>2</sup>	Increasing	Unknown
Spain	Balearic Islands: Present Spain mainland: Present	6105 Km <sup>2</sup>	Decreasing	Decreasing

## Extent of Occurrence, Area of Occupancy and habitat area

	Extent of Occurrence (EOO)	Area of Occupancy (AOO)	Current estimated Total Area	Comment
EU 28	402000 Km <sup>2</sup>	1056	8883 Km <sup>2</sup>	
EU 28+	402000 Km <sup>2</sup>	1056	8883 Km <sup>2</sup>	

## Distribution map



Map is complete for Spain, but Portuguese, French and Italian occurrences are missing. Data source: NAT.

## How much of the current distribution of the habitat type lies within the EU 28?

The habitat is distributed in both European and North African areas in the Western Mediterranean Subregion in soils derived of rocks with high pH (limestone, dolomite, mafic rocks). In Europe, the habitat stretches from Portugal to the Threenean coast of Italy. Along the North African coast, its range is from the Tingitanian peninsula (Tanger, Morocco) in the west, includes the subcoastal areas of Algeria and Tunisia and reaches, in the east, the Cyrenaica peninsula in Lybia (Al Akhdar). We estimate that approximately 50% of the habitat is within the EU28 and the remaining 50% is on North Africa.

## Trends in quantity

The total calculation yields a slight decrease value in quantity: -3,2%, which in practical terms corresponds to a stable condition within the 50 years' time.. Nevertheless, the recorded situation is heterogeneous among the SW European countries: Portugal reports an increase of 83%, Italy and Spain refer a slight decrease ('stable' and -5% decrease respectively) in the habitat's area. This is probably to the fact that Portugal retained the agricultural subsidies for cultivations on marginal lands until long after the other two countries.. After setting aside the EU CAP policy, the garrigues expanded much.. Slight regression in Spain and Italy is assumed to be due to successional processes towards pre-forest and/or forest communities. Stability is expected to represent the future prospects of the habitat's area.

- Average current trend in quantity (extent)

EU 28: Stable

EU 28+: Stable

- Does the habitat type have a small natural range following regression?

No

*Justification*

The EOO>> 50.000 Km<sup>2</sup> and the AOO>> 50 (10 x 10 km grid cells size) implies that habitat range does not qualify as 'small'.

- Does the habitat have a small natural range by reason of its intrinsically restricted area?

No

*Justification*

The habitat is distributed throughout the whole of SW Europe and is relatively abundant within the range.

## Trends in quality

Spain and Italy (with the remaining countries reporting 'unknown') report a slight decrease in habitat quality (-5 and 10% respectively) with a slight severity, so assessors estimate that future trends are of stabilization. Global proportion of habitat with decreased quality in EU is calculated in 4,76% with 'slight' severity in trends for quality (50 years). Thus, in practical terms, also for future prospects are of stable condition, as assessors take it.

- Average current trend in quality

EU 28: Stable

EU 28+: Stable

## Pressures and threats

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in the past, the basiphilous garrigues have been associated with low-intensity agriculture. Therefore, possible intensification of the agricultural system- mostly by shortening or eliminating the fallow period - could be locally negative to garrigues. Also, afforestation in abandoned fields affects the occurrence of this type of garrigues. Urbanization and touristic expansion have affected some areas of former basiphilous garrigue. As most plants in the habitat are fire-prone (pyrophytes), the lack of fire might facilitate the vegetation succession towards pre-forest and forest communities.

## List of pressures and threats

### Agriculture

Agricultural intensification

### Sylviculture, forestry

Artificial planting on open ground (non-native trees)

### Urbanisation, residential and commercial development

Discontinuous urbanisation

### Natural System modifications

Lack of fires

### Natural biotic and abiotic processes (without catastrophes)

Species composition change (succession)

## Conservation and management

For best conservation management measures and results, the maintenance of a balanced proportion of low-intensity agriculture with long fallow periods (by implementing agro-environmental policies) is suggested.

When designing management measures in the context of local and regional policies, the local and regional variants of the habitat type (F6.1b) with the possible peculiarities in species and endemic/rare/threatened species composition should be taken in account.. The most effective way of implementing different conservation measures depending on the conservation value of the different sub-types of the same habitat type is to use their species composition for different legal conservation status and actions.

Micro-reserves or other designation regimes sites network could safeguard, , even in agricultural territories, the preservation of all the constituent flora species and mature status of the habitat. The short fallow periods imply that habitats are always kept in early succession stages characterized by a low number of species (pioneer species). In conservation oriented agricultural land, i.e. managed to include also conservation objectives, the maintenance of a proportion of land with longer fallow period (thus allowing succession and species saturation of the habitat) is suggested.

## **List of conservation and management needs**

### **Measures related to agriculture and open habitats**

Other agriculture-related measures

### **Measures related to spatial planning**

Establish protected areas/sites

Establishing wilderness areas/allowing succession

Legal protection of habitats and species

### **Measures related to special resource use**

Regulating/Management exploitation of natural resources on land

## **Conservation status**

### **When severely damaged, does the habitat retain the capacity to recover its typical character and functionality?**

The habitat is a meta-stable successional stage following agricultural abandonment, long fallow period or a time period between wildfires. If succession is allowed, it is expected that after a period of 10 to 20 years, a species 'saturated' stage (beyond the pioneer stages) could be achieved and kept stable for a long while. Afterwards, in soils less shallow, the vegetation succession is expected to progress to pre-forest/forest stages.

### **Effort required**

20 years
Naturally

## **Red List Assessment**

### **Criterion A: Reduction in quantity**

Criterion A	A1	A2a	A2b	A3
EU 28	-3.2 %	stable %	stable %	unknown %
EU 28+	-3.2 %	stable %	stable %	unknown %

During the past 50-years period there are substantial differences among the SW European countries, although the average reduction is small (-3,2%). All future prospects are taken to be stable. Historical variation is unknown.

#### Criterion B: Restricted geographic distribution

Criterion B	B1			B2			B3		
	EOO	a	b	c	AOO	a	b	c	
EU 28	>50000 Km <sup>2</sup>	No	-		>50	No	-		
EU 28+	>50000 Km <sup>2</sup>	No	-		>50	No	-		

The 'default' values for EOO and AOO are taken to be true (in fact much greater than the threshold values). No relevant (<5%) decrease has been calculated; thus it could be encompassed within the uncertainty of estimations and considered as 'stable'. 'Stable' condition is expected for all future time-frames.

#### Criterion C and D: Reduction in abiotic and/or biotic quality

Criteria C/D	C/D1		C/D2		C/D3	
	Extent affected	Relative severity	Extent affected	Relative severity	Extent affected	Relative severity
EU 28	4.8 %	0.3 %	unknown %	unknown %	unknown %	unknown %
EU 28+	4.8 %	0.3 %	unknown %	unknown %	unknown %	unknown %

Criterion C	C1		C2		C3	
	Extent affected	Relative severity	Extent affected	Relative severity	Extent affected	Relative severity
EU 28	unknown %	unknown %	unknown %	unknown %	unknown %	unknown %
EU 28+	unknown %	unknown %	unknown %	unknown %	unknown %	unknown %

Criterion D	D1		D2		D3	
	Extent affected	Relative severity	Extent affected	Relative severity	Extent affected	Relative severity
EU 28	unknown %	unknown %	unknown %	unknown %	unknown %	unknown %
EU 28+	unknown %	unknown %	unknown %	unknown %	unknown %	unknown %

Globally, as a result of successional progression due to agricultural abandonment a slight (0,3) quality reduction in average 4,76% of the habitat area is estimated, based on territorial information.

#### Criterion E: Quantitative analysis to evaluate risk of habitat collapse

Criterion E	Probability of collapse
EU 28	unknown
EU 28+	unknown

There is no quantitative analysis available that estimates the probability of collapse of this habitat type.

## Overall assessment "Balance sheet" for EU 28 and EU 28+

	A1	A2a	A2b	A3	B1	B2	B3	C/D1	C/D2	C/D3	C1	C2	C3	D1	D2	D3	E
EU28	LC	LC	LC	DD	LC	LC	LC	LC	DD	DD	DD	DD	DD	DD	DD	DD	DD
EU28+	LC	LC	LC	DD	LC	LC	LC	LC	DD	DD	DD	DD	DD	DD	DD	DD	DD

Overall Category & Criteria							
EU 28				EU 28+			
Red List Category	Red List Criteria	Red List Category	Red List Criteria	Red List Category	Red List Criteria	Red List Category	Red List Criteria
Least Concern	-	Least Concern	-	Least Concern	-	Least Concern	-

## Confidence in the assessment

Medium (evenly split between quantitative data/literature and uncertain data sources and assured expert knowledge)

## Assessors

J. Capelo

## Contributors

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