G2.2 Mainland laurophyllous woodland

Summary

This habitat comprises micro-forest vegetation with a low canopy dominated by lauriphyllous evergreen shrubs or small trees growing in warm and humid oceanic to hyper-oceanic environments along the Atlantic coasts of northern Iberia, central and southern Italy, Sardinia and Sicily. Nowadays, only small remnants survive where sheltered situations like ravines provide local protection against summer heat and dessication. The species-poor vegetation is usually dominated by shrubs with lianes and herbs characteristic of the humid Mediterranean zone. Isolation offers some protection but the habitat can be threatened by inappropriate forest management and substitution by forest plantations, non-native species, alterations to hydrology and climate change. As far as possible, these need to be controlled.

Synthesis

The habitat has been assessed as Least Concern. The surface of the area is estimated to have increased by 22% during the last 50 years according to data from Portugal, Spain and Italy. If new data could justify trend in quality (currently missing), this could substantially change the assessments results. Historic trends and future projections are not available, neither in quantity nor quality.

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

No subhabitats need to be distinguished within this type for further analysis.

Habitat Type

Code and name

G2.2 Mainland laurophyllous woodland

Small *Laurus* woodland along a limestone cliff in Portugal (Photo: Sandra Mesquita).

Laurus nobilis forest in El Acebal de Valgañón, Sierra de la Demanda, La Rioja (Photo: Javier Loidi).

Habitat description

This habitat comprises micro-forest vegetation with a low canopy dominated by lauriphyllous evergreen

shrubs or small trees growing in warm-temperate oceanic to hyper-oceanic environments along the Atlantic coasts of northern Iberian Peninsula, central and southern Italy, Sardinia and Sicily. Nowadays, they present small remnants in the most humid and oceanic areas of the Atlantic areas of the continent or isolated enclaves surviving where sheltered situations like ravines provide local protection against summer heat and dessication. Typically species-poor, the habitat is usually dominated by shrubs of the humid Mediterranean zone, such as *Arbutus unedo* and *Laurus nobilis* which have a broad Mediterranean and southern Atlantic distribution and has an associated liane and field flora with general affiliations to the evergreen oak forests of the Quercetea ilicis.

Indicators of good quality:

- When the stands are in optimal conditions they show the appearance of a closed deep shady bush or small forest.
- Canopy is continuous and evergreen
- Soil is covered by a thick layer of decomposing litter.
- Ferns are common in the understory, sometimes as epiphytes, and bryophytes cover the stones and the trunks.
- No signs of disturbance (logging, grazing, etc.) should be visible
- Dead wood can be considered as a good indicator of maturity

Characteristic species:

Arbutus unedo, Laurus nobilis, Ilex aquifolium, Phyllirea latifolia, Prunus lusitanica, Rhamnus alaternus, Rosa sempervirens, Rubia peregrina, Smilax aspera, Tamus communis, Viburnum tinus.

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

EUNIS:

G2.2 Eurasian continental sclerophyllous woodland

EuroVegChecklist (alliances):

Arbuto unedonis-Laurion nobilis Rivas-Martínez, Fernández-González et Loidi 1999

Clematido cirrhosae-Quercenion ilicis Bacch., Bagella, Biondi, Farris, Filigheddu & Mossa 2004

Fraxino orni-Quercion ilicis Biondi, Casavecchia & Gigante 2003

Annex 1:

5230 *Arborescent matorral with Laurus nobilis

Emerald:

F5.18 Laurus nobilis matorral

G2 Broadleaved evergreen woodland

MAES-2:

Woodland and forest

IUCN:

1.6. Subtropical/Tropical Moist Lowland Or 1.4 Temperate Forest

EFT:

9.5 Other sclerophyllous forest

Does the habitat type present an outstanding example of typical characteristics of one or more biogeographic regions?
No

<u>Justification</u>
The habitat occurs in the warmer part of the Atlantic region and very local in the Mediterranean region.

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)
Croatia	Uncertain	Unknown Km^2	-	-
France	Corsica: Uncertain France mainland: Uncertain	Unknown Km^2	Unknown	Unknown
Italy	Italy mainland: Present Sardinia: Uncertain Sicily: Uncertain	5 Km^2	-	-
Portugal	Portugal mainland: Present	130 Km^2	Increasing	Unknown
Spain	Spain mainland: Present	45 Km^2	Stable	Stable

EU 28 +	Present or Presence Uncertain	Current area of habitat	Recent trend in quantity (last 50 yrs)	Recent trend in quality (last 50 yrs)
Serbia	Uncertain	unknown Km^2	-	-
Switzerland	Present	unknown Km^2	Unknown	Unknown

Extent of Occurrence, Area of Occupancy and habitat area

	Extent of Occurrence (EOO)	Area of Occupancy (AOO)	Current estimated Total Area	Comment
EU 28	1623700 Km^2	704	180 Km^2	AOO and EOO incl. potential distribution
EU 28+	1623700 Km^2	704	180 Km^2	AOO and EOO incl. potential distribution

Distribution map
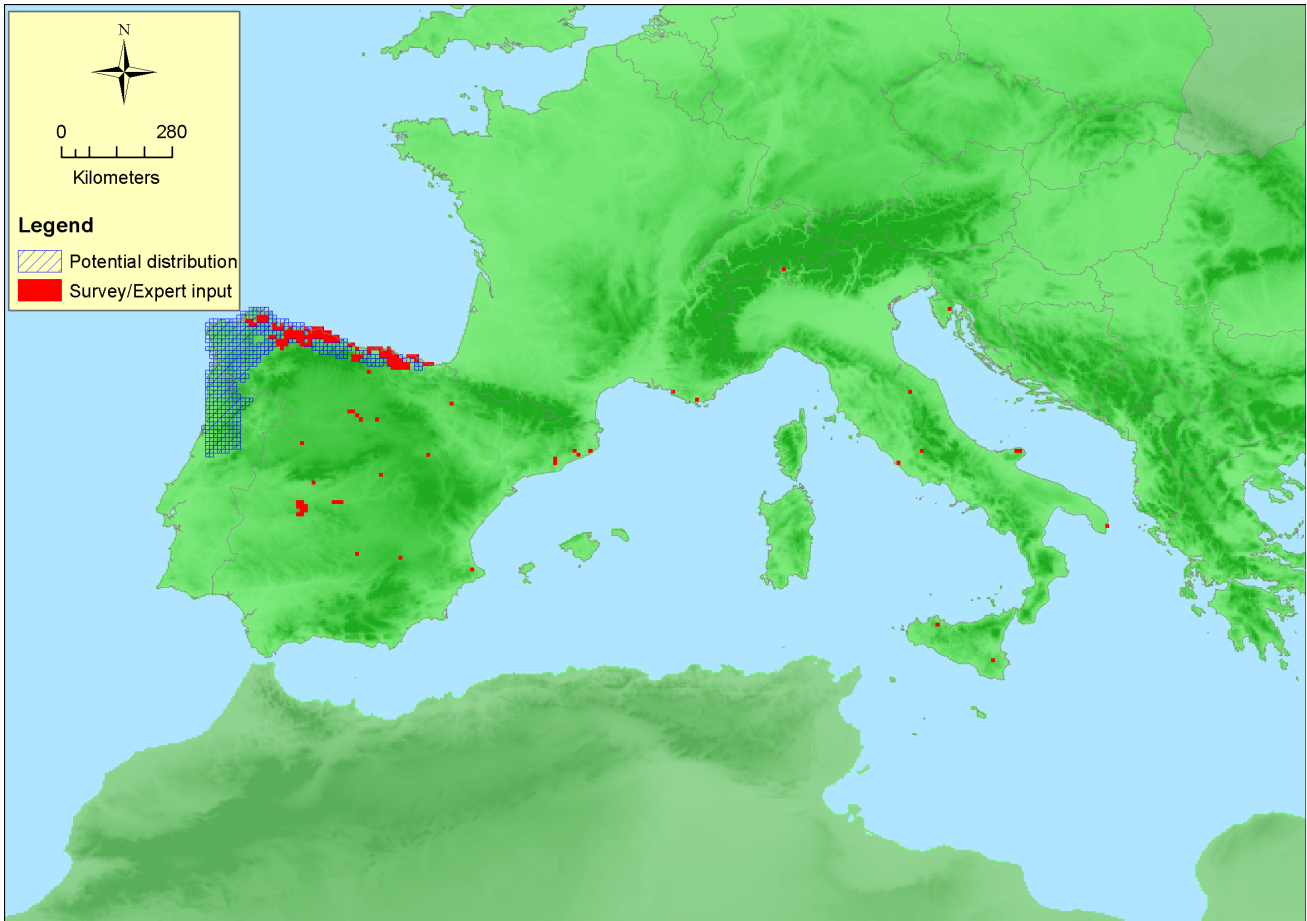
The map has data gaps in Spain and Portugal and therefore potential distribution is partly provided. There is some doubt whether the occurrences in the centre of the Iberian peninsula are correct. Data sources: NAT, EVA.

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

90%, if we consider small occurrences in Switzerland and Balkan countries.

Trends in quantity

The overall increase of quantity is of 30%, for 3 countries (Spain, France and Italy) over the last 50 years. This tendency has been extrapolated to all EU28 (and most probably also for EU28+). The total surface has passed from of 139 km2 to 180 in this 50 year period. The biggest increase (+32%) has occurred in Portugal, that hosts 72% of the surface of the habitat. For this reason, even if in Italy the trend is to decrease of 10% in the last 50 years, the overall surface of the habitat remains increasing for EU 28. The current and future trend is supposed to be stable. Historical trends (from 1750) remain unknown.

- Average current trend in quantity (extent)
  EU 28: Increasing
  EU 28+: Increasing
- Does the habitat type have a small natural range following regression?
  No
  Justification
  The EOO is large.
- Does the habitat have a small natural range by reason of its intrinsically restricted area?
  No
  Justification
  The habitat may often occur in small stands, but not due to restricted underlying factors.

Trends in quality

Information on the trends in quality is very limited. Italy estimate that 10% of their surface respectively have suffered slight (around 30% severity) degradation over recent 50 year period. Considering that the surface occupied by Italy represents only 3% of area, this criteria is considered Data Deficient

- Average current trend in quality
  EU 28: Stable
  EU 28+: Stable

Pressures and threats

Most of localities of the habitat occur in remote areas, and for this reason the pressures are limited. The territorial experts have identified the main threat to the habitat to be forest management and substitution by forest plantations. To certain extend it has been highlighted the invasion by alien species, and changes in abiotic conditions, either induced by human (changes in hydraulic conditions) or indirectly (climate change).

List of pressures and threats

Sylviculture, forestry

Forest and Plantation management & use
Forest replanting (non native trees)

Natural System modifications

Human induced changes in hydraulic conditions

Climate change

Changes in abiotic conditions

Conservation and management

Currently as locations of this habitat are usually remote, the threats are low. Proposed conservation measures are related to identified pressures: Forestry, change in the hydraulic conditions

List of conservation and management needs

Measures related to forests and wooded habitats

Other forestry-related measures
Adapt forest management

Measures related to spatial planning

Legal protection of habitats and species

Conservation status

Annex 1:

5230: MED U1 (not a very good relationship as the Annex 1-habitat is a scrub-type)

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

Unlike other laurophilus woodland that show very limited recovery capacity (for example the canary island ones), this habitat has shown very elastic behaviour, increasing naturally almost by 1/3 in last 50 years, according to territorial experts.

Effort required

20 years	50+ years	200+ years
Through intervention	Naturally	Naturally

Red List Assessment

Criterion A: Reduction in quantity

Criterion A	A1	A2a	A2b	A3
EU 28	+30 %	Unknown %	Unknown %	Unknown %
EU 28+	+30 %	Unknown %	Unknown %	Unknown %

According to territorial experts from Spain, Portugal and Italy there has been 30% increase on habitat surface in the last 50 years (see territorial datasheet). This is mainly due to Portugal, which has reported an increase of 26% since 1974 (estimated by linear regression to be of 32% in last 50 year period). The trend in EU 28+ is unknown but since the occurrences outside EU28 are very small, they are not likely to affect the trend.

Criterion B: Restricted geographic distribution

Criterion B	B1				B2				B3
	EOO	a	b	c	AOO	a	b	c	
EU 28	>50000 Km^2	No	No	No	>50	No	No	No	No
EU 28+	>50000 Km^2	No	No	No	>50	No	No	No	No

EOO and AOO, calculated from the distribution map, are much larger than the thresholds under this criterion.

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	Unkown %	Unknown %	Unknown %	Unknown %	Unknown %	Unknown% %
EU 28+	Unknown %	Unknown %	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%

The only country reporting data on degradation over the last 50 years is Italy. Considering that the surface occupied by Italy represents only 3% of area, this criteria is assessed as Data Deficient.

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	DD	DD	DD	LC	LC	LC	DD	DD	DD	DD	DD	DD	DD	DD	DD	DD
EU28+	LC	DD	DD	DD	LC	LC	LC	DD	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
Least Concern	-	Least Concern	-

Confidence in the assessment
Low (mainly based on uncertain or indirect information, inferred and suspected data values, and/or limited expert knowledge)

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