

B1.5b Atlantic coastal *Calluna* and *Ulex* heath

Summary

This heath, characteristic of stable, dry decalcified sands on coastal dunes along the milder, moister Atlantic coastline, is typically dominated by *Calluna vulgaris*, *Erica cinerea*, and/or *Ulex* spp. and other low spiny legumes, along with a strong contingent of grasses and sedges, often also mosses and lichens. Persistent wind-exposure or light grazing prevent succession to scrub and woodland and the habitat is thus threatened by abandonment of traditional pastoralism, also by tourist pressure and afforestation.

Synthesis

Although there has been a decline in quantity and quality over the last 50 years, the negative trends are not severe, and both criteria A1 (trend in quantity) and C/D1 (trend in quality) lead to a Least Concern status for this habitat.

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

Regarding to latitudinal variations and ecological variations (nature of the substrate), sub-types are certainly existing, but their description would require further investigations and data.

Habitat Type

Code and name

B1.5b Atlantic coastal *Calluna* and *Ulex* heath



Coastal heath on decalcified dune, with *Erica cinerea*, *Festuca vasconsensis*, *Cistus salvifolius* and abundant lichens (*Cladonia* spp.) in the Nature reserve of Courant d'Huchet, Landes, France (Photo: Frédéric Bioret).



Small patches of *Calluna vulgaris* dominated dunes in a mosaic with decalcified dune grassland with lichens, in the dune area near Pavilosta, Latvia. Like in other Baltic countries the habitat occurs very marginal here, because most dune heath is dominated by *Empetrum nigrum* (Photo: John Janssen).

Habitat description

Decalcified fixed dunes colonized by relatively low heaths and spiny legumes in the European Atlantic coasts under humid climatic conditions, often with dominance of *Calluna vulgaris* and/or *Erica* spp. Soils are coarsely sandy and well drained and under the predominant hydric regime (high rainfall or ground water) leaching of soluble basic nutrients, particularly calcium, is very active.

Sedges and grasses are common all over the habitat's range. In the southern sector (southern Portugal) an endemic gorse preferently grows in this habitat (*Ulex australis* subsp. *welwitschianus*), while another one is also frequent in North-western Iberia (*Ulex europaeus* subsp. *latebracteatus*). Several coastal scrub species occur in the habitat, like *Genista triacanthos* and *Halimium halimifolium*. In the northern parts of the Atlantic coast and the Baltics the habitat is replaced by dune heaths dominated by *Empetrum nigrum* (B1.5a).

This low sized heathland is forming a dense scrub and plays an important role in the dune fixation. Soils are acidic, coarse sandy and have a low water retention capacity.

Indicators of good quality:

An optimal state of this habitat type is a dense scrub formed by heaths, gorses and some herbaceous plants (*Carex* and grasses) of low size (40 to 80 cm), with no or few open patches and without exotic species, trees or tall shrubs. Indicators of good quality are:

- relatively low, closed structure
- dominance by heaths and gorses
- absence of non-native, invasive species
- absence or low abundance of trees and tall shrubs

Characteristic species:

Flora

Vascular plants: *Agrostis stolonifera* var. *pseudopungens*, *Calluna vulgaris*, *Carex arenaria*, *Carex trinervis*, *Erica ciliaris*, *Erica cinerea*, *Erica scoparia*, *Erica umbellata*, *Festuca vasconensis*, *Genista triacanthos*, *Halimium halimifolium*, *Pseudoarrhenatherum longifolium*, *Ulex australis* subsp. *welwitschianus*, *Ulex europaeus* subsp. *latebracteatus*.

Fauna

Birds: *Alectoris rufa*, *Caprimulgus europaeus*, *Caprimulgus ruficollis*, *Galerida theklae*, *Lanius senator*, *Lullula arborea*, *Merops apiaster*, *Saxicola torquata*, *Sylvia conspicillata*, *Sylvia melanocephala*, *Sylvia undata*.

Reptiles and amphibians: *Chalcides striatus*, *Chamaeleo chamaeleon*, *Hemorrhois hippocrepis*, *Macroprotodon brevis*, *Malpolon monspessulanus*, *Pleurodeles waltl*, *Podarcis bocagei*, *Podarcis carbonelli*, *Psammodromus algerus*, *Rhinechis scalaris*, *Testudo graeca*.

Classification

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

EUNIS:

B1.5 Coastal dune heaths

EuroVegChecklist (Alliances) :

Daboecion cantabricae (*Ulicetum latebracteato-minoris* p.p.)

Ericion cinereae Böcher 1940

Ericion umbellatae Br.-Bl. in Br.-Bl. et al. 1952 (*Erico umbellatae-Ulicetum welwitschiani*)

Ulicion minoris Malcuit 1929

Annex 1:

2150* Atlantic decalcified fixed dunes (Calluno-Ulicetea)

MAES-2:

Heathland and shrub

Emerald:

B1.5 Coastal dune heaths

MAES-2:

Heathland and shrub

IUCN:

3.4 Temperate shrubland

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

Yes

Regions

Atlantic

Justification

This habitat is almost restricted to the Atlantic coast. In the Baltic region it occurs fragmented, often in close relation to habitat B1.5a.

Geographic occurrence and trends

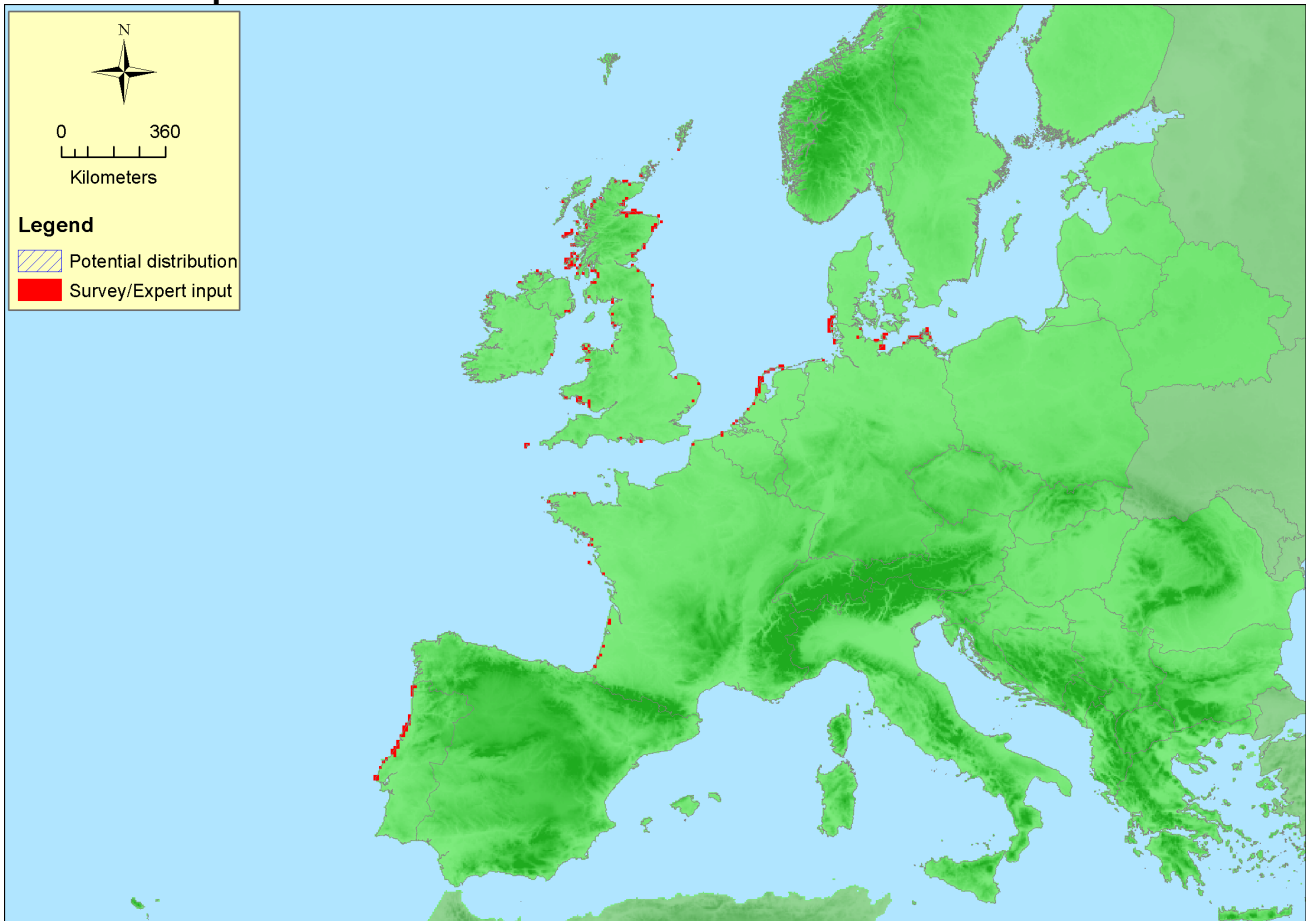
EU 28	Present or Presence Uncertain	Current area of habitat	Recent trend in quantity (last 50 yrs)	Recent trend in quality (last 50 yrs)
<i>Belgium</i>	Present	Km ²	Unknown	Unknown
<i>France</i>	France mainland: Present	10 Km ²	Decreasing	Decreasing
<i>Germany</i>	Present	4 Km ²	Decreasing	Stable
<i>Ireland</i>	Present	0.5 Km ²	Stable	Unknown
<i>Netherlands</i>	Present	4.2 Km ²	Stable	Stable
<i>Portugal</i>	Portugal mainland: Present	7 Km ²	Stable	Decreasing
<i>Spain</i>	Spain mainland: Present	30 Km ²	Decreasing	Decreasing
<i>UK</i>	United Kingdom: Present	9 Km ²	Stable	Decreasing

EU 28 +	Present or Presence Uncertain	Current area of habitat	Recent trend in quantity (last 50 yrs)	Recent trend in quality (last 50 yrs)
<i>Guernsey</i>	Present	Km ²	Unknown	Unknown
<i>Jersey</i>	Present	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
<i>EU 28</i>	2080500 Km ²	227	65 Km ²	Based on existing data provided by EU member States
<i>EU 28+</i>	2080500 Km ²	227	65 Km ²	no additional quantitative data

Distribution map



Map complete. Data sources: Art17.

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

More than 90% (estimation). Outside the EU28 it may occur in baltic Russia and Norway.

Trends in quantity

In the two countries where the habitat has the highest area (France and Spain) the general trend is decreasing. The trend is stable in the other countries.

- Average current trend in quantity (extent)
EU 28: Decreasing
EU 28+: Decreasing
- Does the habitat type have a small natural range following regression?
No
Justification
The EOO is larger than 50,000 km².
- Does the habitat have a small natural range by reason of its intrinsically restricted area?
Yes
Justification
This habitat is always present in relatively small areas.

Trends in quality

The main trend is decreasing, linked to shrub encroachment and fragmentation of the habitat.

- Average current trend in quality
EU 28: Decreasing

Pressures and threats

The main threat is abandonment of traditional grazing, leading to shrub encroachment. This habitat is also threatened by fragmentation due to tourism and urbanisation. In some places, the intensification of the front dune erosion can lead to the alteration of the habitat which disappears under sand deposition. Finally nitrogen deposition (eutrophication) and expansion of non-native species form threats in some countries.

List of pressures and threats

Agriculture

Abandonment of pastoral systems, lack of grazing

Human intrusions and disturbances

Trampling, overuse

Pollution

Nitrogen-input

Invasive, other problematic species and genes

Invasive non-native species

Natural biotic and abiotic processes (without catastrophes)

Erosion

Conservation and management

This habitat occurs very localised and is conserved in few protected areas. Traditional management is needed to maintain the habitat for the long term.

List of conservation and management needs

No measures

No measures needed for the conservation of the habitat/species

Measures related to agriculture and open habitats

Maintaining grasslands and other open habitats

Measures related to wetland, freshwater and coastal habitats

Restoring coastal areas

Measures related to spatial planning

Establish protected areas/sites

Conservation status

Annex 1:

2150: ATL U2, CON U1

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

When damaged, the recovering process of this habitat is low and at least about 20 years are needed.

Effort required

20 years
Naturally

Red List Assessment

Criterion A: Reduction in quantity

Criterion A	A1	A2a	A2b	A3
EU 28	-22 %	unknown %	unknown %	unknown %
EU 28+	-22 %	unknown %	unknown %	unknown %

Over the last 50 years, the average European reduction in quantity is -22%. Values for A1 are calculated from territorial sheets from 4 EU countries, including the countries with the largest areas. For A2 and A2b, there is no possibility to evaluate. No data was available for EU28+ countries, but here the habitat is marginally present. The A1 criterion leads to a Least Concern status.

Criterion B: Restricted geographic distribution

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

Despite that EOO, AOO and number of locations do not meet the thresholds for criteria under B, this habitat has a scattered distribution in only 8 EU countries, where it occupies small areas.

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	33 %	34 %	unknown %	unknown %	unknown %	unknown %
EU 28+	33 %	34 %	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 %

Values have been calculated from territorial data of 8 EU countries, including the countries with largest areas. Almost everywhere a decrease in quality is recorded, but the severity and extend are too low to be evaluated as Near Threatened. C/D1 criterion leads to a Least Concern status.

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	LC	DD	DD	DD	DD	DD	DD	DD	DD	DD
EU28+	LC	DD	DD	DD	LC	LC	LC	LC	DD	DD	DD	DD	DD	DD	DD	DD	DD

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

Confidence in the assessment

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

Assessors

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