The state of coastal dunes of the Atlantic biogeographical region 2020

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Note: This summary is derived from the Article 17 data published by the European Environment Agency in 2020. The information was correct at the time of writing in October 2020 but subsequent edits may have changed some information and web links may have changed.

State of nature in the EU 2020

The European Environment Agency published the report *State of nature in the EU* on 19th October 2020¹. The report is an analysis of the data provided by Member States reporting under the nature directives 2013-2018. For Habitats Directive habitats and species the detailed information by member state and biogeographical region is published in a series of dashboards² and the Article 17 web-tool³. These can be used to check the current status and trends of habitats and species by Member State, by biogeographic region, by habitat type or species and to compare this information with reports from 2001-2006 and 2007-2012. Links in the Article 17 web-tool give access to Member State reports reported by biogeographical region⁴.

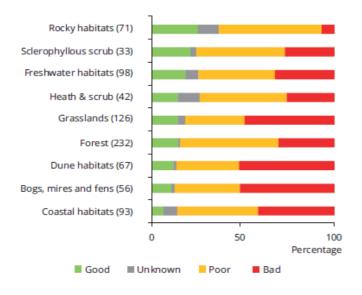
Across all habitat groups, dunes (21 coastal and inland habitat types), along with bogs, mires and fens, have the highest percentage (>50%) of bad assessments and a low number of good assessments. These 'dune habitats' include the 10 habitats making up the Habitats Directive subgroup Sea dunes of the Atlantic, North Sea and Baltic coast, 7 habitats in Sea dunes of the Mediterranean coast and 4 habitats in Inland dunes, old and decalcified.

¹ https://www.eea.europa.eu/publications/state-of-nature-in-the-eu-2020

² https://www.eea.europa.eu/themes/biodiversity/state-of-nature-in-the-eu/article-17-national-summary-dashboards

³ https://nature-art17.eionet.europa.eu/article17/

⁴ The reports are national reports and do not give information by country or region. For example reports from England, Scotland, Wales and Northern Ireland are not on the EEA dashboards but can be found at https://jncc.gov.uk/our-work/article-17-habitats-directive-report-2019-habitats/



Note: The number of assessments per group is indicated in parentheses. The total number of assessments is 818.

Source: Article 17 Member States' reports and EU assessments.

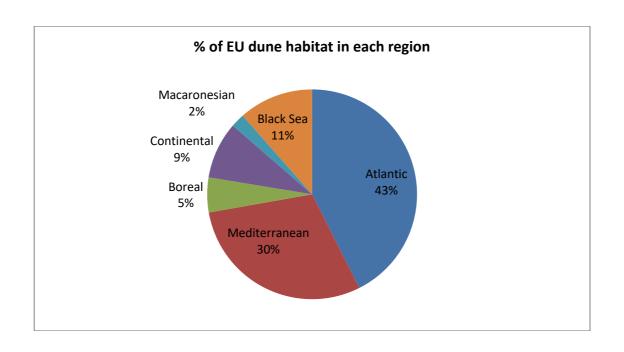
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According to Member States assessments the total area of all Annex I dune habitats (coastal and inland) is 9,200 km², the smallest area of any habitat group. Compare this, for example, to the reported 406,000 km² of coastal habitats. As a consequence any proposed restoration targets for coastal dunes are relatively small in the big picture. Working together, however, e.g. through the Natura 2000 Biogeographical Process, will help to ensure that habitat restoration and habitat creation opportunities are promoted.

Coastal dunes in the Atlantic biogeographical region

This note is derived from the information from the Article 17 reports for the Member States in the Atlantic Biogeographical Region (i.e. Denmark, Germany, The Netherlands, Belgium, France, Spain, Portugal, UK and Ireland). Only The Netherlands, Belgium, UK and Ireland lie wholly within the Atlantic region. The EEA State of nature report 2020 includes data for the UK which was still a member of the EU in the reporting period. The UK, however, will no longer take part in future Article 17 reporting, although information on habitat and species status will continue to be monitored. This, therefore, will be the last EEA report which presents information from the nine countries in the Atlantic biogeographical region.

The Atlantic biogeographical region holds the largest area of coastal dune habitat in EU-28 (43%) but also has the lowest percentage of habitat in good condition (28%).



The main set of Habitats Directive Annex I coastal dune habitats of the Atlantic biogeographical region are in the sub-group of the Interpretation Manual of EU Habitats 'Sea Dunes of the Atlantic, North Sea and Baltic coast', i.e:

- 2110 Embryonic shifting dunes
- 2120 Shifting dunes along the shoreline with *Ammophila arenaria* (white dunes)
- 2130* Fixed coastal dunes with herbaceous vegetation (grey dunes)
- 2140* Decalcified fixed dunes with *Empetrum nigrum*
- 2150* Atlantic decalcified fixed dunes (Calluno-Ulicetea)
- 2160 Dunes with Hippophae rhamnoides
- 2170 Dunes with Salix repens ssp. argentea (Salicion arenariae)
- 2180 Wooded dunes of the Atlantic, Continental and Boreal Region
- 2190 Humid dune slacks
- 21A0 Machairs (* in Ireland)

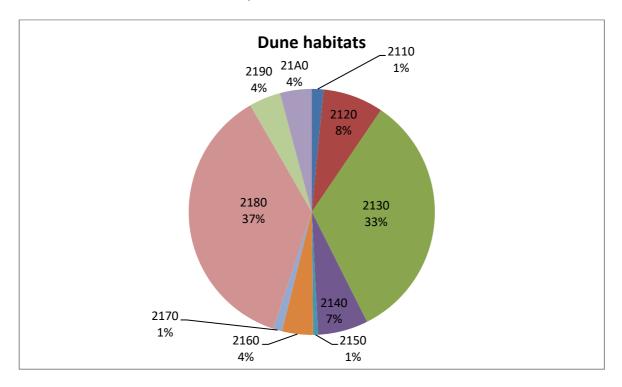
The overall distribution and condition of these habitats in Atlantic biogeographical region (i.e. the total for nine Member States) is:

Habitat	Habitat	Area (ha)	Overall
	code		assessment
Embryonic shifting dunes	2110	5,456	U1 poor
Shifting dunes along the shoreline with			U1 poor
Ammophila arenaria (white dunes)	2120	28,232	
Fixed coastal dunes with herbaceous vegetation			U2 bad
(grey dunes)	2130*	117,321	
Decalcified fixed dunes with Empetrum nigrum	2140*	23,377	U1 poor
Atlantic decalcified fixed dunes (Calluno-			U2 bad
Ulicetea)	2150*	2,271	
Dunes with Hippophae rhamnoides	2160	14,439	FV good
Dunes with Salix repens ssp. argentea (Salicion	2170	4,136	U1 poor

^{*} Signifies that the habitat is a priority habitat

arenariae)			
Wooded dunes of the Atlantic, Continental and			U1 poor
Boreal Region	2180	129,807	
Humid dune slacks	2190	14,751	U2 bad
Machairs (* in Ireland)	21A0	14,768	U1 poor
Total for Atlantic region		354,558 ha	

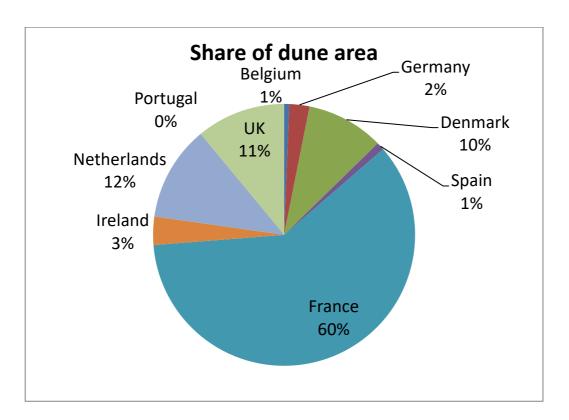
FV= Favourable; U1 = Unfavourable-inadequate; U2 = unfavourable-bad



The area of coastal dune habitat is dominated by two habitats, fixed coastal dunes (2130*) and wooded dunes (2180) although with 93% of reported Annex I dune woodland from France. The habitat types 2110 and 2120 (mobile dunes), 2130 (fixed dunes) and 2190 (dune slacks) occur in all nine Member States in the Atlantic region.

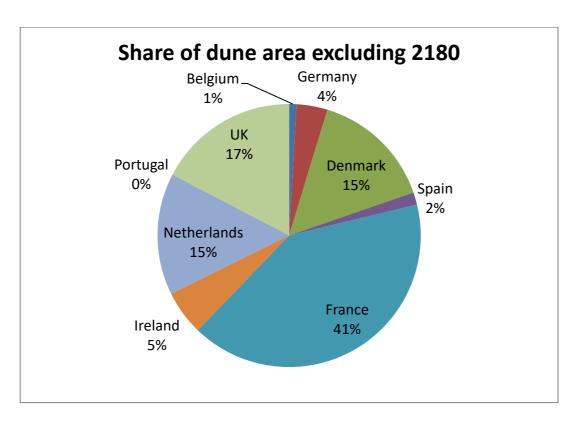
A significant change in the 2006, 2012 and 2018 Article 17 reports is the reported area of 2180 dune woodland for France. In 2006 the area was reported as 7,500 ha (U1), in 2012 this had increased to 20,000 ha (U1=) and by 2018 the habitat area was reported as between 85,100 and 121,000 ha (U1=). According to EEA information there are 46 Natura 2000 sites in France with this habitat with a combined total area of c. 28,400 ha. Although both the area allocated to this habitat type has increased and the area covered by Natura 2000 has increased from c. 17,400 ha in 2012 it is the case that most of this habitat area lies outside the Natura 2000 network.

The very large area of dune woodland in France is reflected in the overall share of the dune resource by Member State.



The implication of this chart is that the success of habitat management in France is crucial to any chances for the dunes of the Atlantic biogeographical region to reach favourable conservation status. There is much to learn from French experience and over the coming years it will be a priority to further develop contacts and to share experience, including the translation and dissemination of French practice.

If the area of dune woodland 2180 is removed a very different chart of the share of dune habitats is shown which gives a more accurate representation of the share of Natura 2000 open dune habitat.

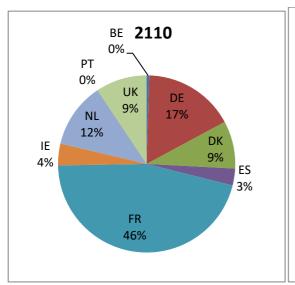


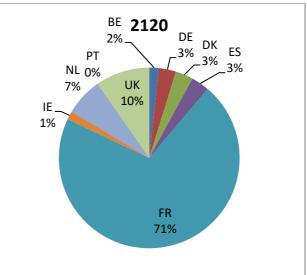
Atlantic coastal dunes- Habitat by habitat assessment

The descriptive text for each habitat is based on the habitat overviews in the EEA reports. There are three issues to note; (1) Member States were given the option to report an estimated maximum and minimum area of habitat and where this was done the EEA has used an average, (2) the reporting for Portugal was not quantified in several cases and (3), if a habitat is present but no estimate of area is provided, or if it is very small, this is indicated by '0' in the tables.

Mobile dune habitats 2110 and 2120

Member State	Area 2110	Area 2120
Belgium	27	482
Germany	908	864
Denmark	475	896
Spain	167	920
France	2,500	20,000
Ireland	217	433
The Netherlands	650	1,900
Portugal	0	0
United Kingdom	512	2,737
Total	5,456 ha	28,232 ha





Embryonic shifting dunes (2110) are the sparsely vegetated part of the dune system closest to the sea. It is normally found as part of a dynamic assemblage of several dune habitats. In the European red list for habitats Atlantic and Baltic shifting coastal dunes are listed as Near Threatened (NT)⁵. It is assessed as unfavourable-inadequate in the Atlantic region (U1) although in it is favourable (FV) in Germany, Denmark and the Netherlands. It has deteriorated in Portugal from U1x in 2012 to U2- in 2018 and remains U2- in the UK. Main threats reported across Europe are tourism, coastline modifications, sand extraction and sea level changes caused by climate change.

Shifting dunes along the shoreline with Ammophila arenaria (white dunes) (2120) is the sparsely vegetated part of the dune system closest to the sea and is often a narrow ribbon parallel to the coast. It is normally found as part of a dynamic assemblage of several dune habitats. In the European red list for habitats it is assessed, along with 2110, as part of Atlantic and Baltic shifting dune habitat (Near Threatened). The habitat is assessed as unfavourable-inadequate (U1) in the Atlantic region although there has been a genuine change since 2012 in the Netherlands where it is now favourable (FV). Conversely there has been a deterioration in Germany over the same period with a genuine change from favourable (FV) to unfavourable-inadequate and declining (U1-). The habitat has improved in Denmark (from U2x to U1x), has deteriorated in Portugal (from U1x to U2-) and Belgium (from U2= to U2-) and remains unfavourable-bad and declining (U2-) in the UK.

The data shows the significance of France for these mobile habitat types in the Atlantic region where the habitats are unfavourable-inadequate (U1x for 2110 and U1= for 2120). Although both habitat types occur in Atlantic Portugal no information on area is available.

The improvement of the white dune habitat (2120) in the Netherlands is highlighted as a case study in the EEA State of nature report and also in two complementary reports published for the LIFE programme^{6,7}.

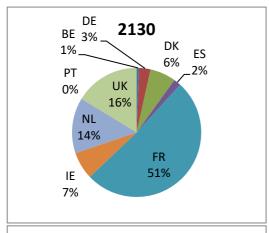
Fixed dune habitat types

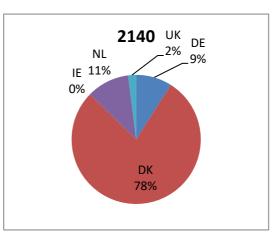
⁵ IUCN categories are Critically Endangered (CR), Endangered (EN), Vulnerable (VU), Near Threatened (NT) and Least Concern (LC). CR and EN do not apply to any Atlantic dune habitats.

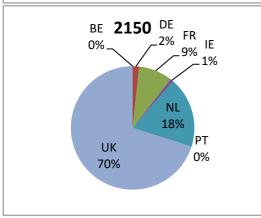
⁶ Study Bringing nature back through LIFE study (europa.eu)

⁷ Brochure Bringing nature back through LIFE (europa.eu)

Member State	Area 2130*	Area 2140*	Area 2150*
Belgium	744		0
Germany	3,334	2,107	39
Denmark	7,600	18,300	
Spain	2,117		
France	60,000		200
Ireland	8,084	0	20
The Netherlands	16,300	2,500	420
Portugal	0		0
United Kingdom	19,142	470	1,592
Total	117,321 ha	23,377 ha	2,271 ha







Fixed coastal dunes with herbaceous vegetation (grey dunes) (2130*) form the stable, more grassy part of a dune system behind the mobile dunes (2110 and 2120) and are normally found as part of a dynamic assemblage of several dune habitats. The Atlantic habitat in the European red list for habitats is part of Atlantic and Baltic coastal dune grassland (grey dune) assessed as Vulnerable (VU). The habitat is assessed as unfavourable-bad (U2) in the Atlantic, Boreal and Continental regions. Threats and pressures include activities associated with tourism such as overuse and urbanisation, together with problems with invasive non-native species and abandonment of grazing. The status is unfavourable-bad and deteriorating (U2-) in Ireland, the UK and Denmark, unfavourable-bad but improving (U2+) in Belgium, unfavourable-inadequate and deteriorating (U1-) in Germany and Portugal, unfavourable-inadequate but stable (U1=) in Spain and unfavourable-inadequate but unknown (U1x) in the Netherlands and France.

Decalcified fixed dunes with Empetrum nigrum (2140) dunes with crowberry (Empetrum nigrum) are only found in northern Europe where they occur along the coasts of the Atlantic and Baltic. They often form the most inland part of the dune complex on leached, acidic soils. They are similar to 2150 Atlantic decalcified fixed dunes (Calluno-Ulicetea) occupying a similar place in dune systems but occurring further north, with several species characteristic of northern Europe. There is some doubt if the habitat 2140 occurs in Ireland. In some areas (e.g. Denmark and UK-Scotland) 2140 and 2150 can sometimes be found together. In the European red list of habitats it is part of Atlantic and Baltic coastal Empetrum heath assessed as Vulnerable (VU). The habitat is assessed as unfavourable-inadequate (U1) in the Atlantic and Continental regions and unfavourable-bad (U2) in the Boreal region. Pressures include inappropriate grazing regimes, atmospheric pollution (often noted as Nitrogen), succession and related processes and invasive non-native species.

By far the largest area of this habitat in the Atlantic region (18,300 ha) is from Denmark where the status is unfavourable-inadequate and deteriorating (U1-) although 'future prospects' for the habitat have been assessed as favourable. A further 7,500 ha of this habitat type in Denmark occurs in the Continental region where it is also unfavourable-inadequate and declining (U1-). In Germany, the Netherlands and Ireland the status is favourable (FV=) and it is only in the UK (with 470 ha) where the status is unfavourable-bad and declining (U2-).

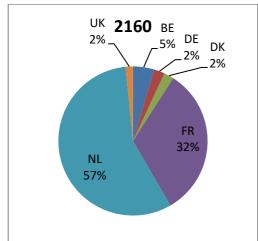
Atlantic decalcified fixed dunes (Calluno-Ulicetea) (2150) dune heaths with heathers (Calluna vulgaris, Erica spp) and gorse (Ulex spp) often with sand sedge (Carex arenaria) are found along Atlantic coasts from south west Spain north to Germany and the British Isles. Although 6,420 ha of the habitat is reported from Mediterranean Spain it is not reported for Atlantic Spain. These heaths often form the most inland part of the dune complex on stable dunes where the soil has been leached leading to acidic soils. The habitat is similar to 2140 Decalcified fixed dunes with Empetrum nigrum but has a more widespread distribution and occurs further south and west on soils which tend to be warmer and drier. The two habitats can be found together on some sites (e.g. in UK-Scotland) and in some areas it can be difficult to separate the two habitats. In the European red list for habitats it is included in Atlantic coastal Calluna and Ulex heath assessed as Least Concern (LC). Important pressures include air borne pollution (Nitrogen), grazing, invasive species (both native and non-native), leisure activities and ecological succession.

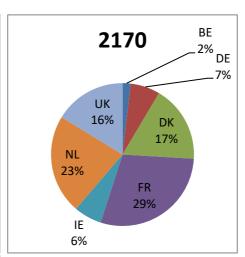
However, its status on coastal dunes is not favourable. Some improvement is noted for France with improved status based on knowledge from unfavourable-bad but unknown (U2x) to unfavourable-inadequate unknown (U1x). It is unfavourable-inadequate but stable (U1=) in Ireland and the Netherlands but unfavourable-bad but stable in Belgium and unfavourable-bad declining (U2-) in Germany, Portugal and the UK. Within the UK the majority of the habitat is in north-east Scotland.

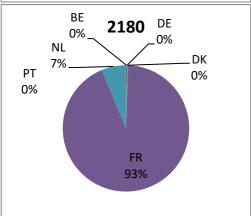
Dunes with Hippophae rhamnoides, dunes with Salix repens and Wooded dunes

Member State	Area 2160	Area 2170	Area 2180
Belgium	665	77	249
Germany	338	276	252
Denmark	309	720	206
Spain			

France	4,700	1,200	121,000
Ireland		261	
The Netherlands	8,200	930	8,100
Portugal			0
United Kingdom	227	672	
Total	14,439 ha	4,136 ha	129,807 ha







Dunes with Hippophae rhamnoides (2160) are stable dunes with scrub dominated by sea buckthorn (*Hippophaë rhamnoides*) with nitrophilous herbs and dune grasses. Sea buckthorn is native to parts of Europe but in some areas sea buckthorn is an invasive alien species and considered a threat to other dune habitat types. The habitat is found around the coasts of the North Sea and the southern Baltic, plus a few sites in northern France, the northern Adriatic (Italy) and the Danube Delta (Black Sea). In the European red list of habitats it is part of Atlantic and Baltic coastal dune scrub and is assessed as of Least Concern (LC). Threats from invasive non-native species and human induced changes in hydraulic conditions are reported by more than one country as highly important. It is assessed as favourable (FV) in the Atlantic biogeographical region although unfavourable-bad in Denmark (U2x) and the UK (U2-). In both France and the Netherlands it is favourable (FV+).

Dunes with Salix repens ssp. argentea (Salicion arenariea) (2170) are wet areas within dune complexes with characteristic vegetation dominated by creeping willow (*Salix repens* ssp *argentea*), often found in association with habitat type 2190 Humid dune slacks, sometimes it can spread from damp areas onto neighbouring drier areas. This habitat is found along the coast of the Atlantic from

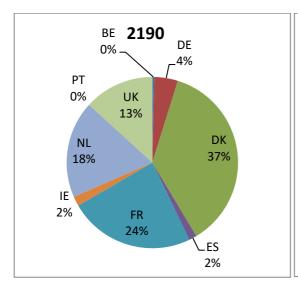
Portugal northwards and along the southern coasts of the Baltic; although not reported by Spain or Portugal it is possible that the habitat is present and has possibly been included with habitat type 2190. In the European red list for habitats it is part of Atlantic and Baltic coastal dune scrub and assessed as of Least Concern (LC). Threats and pressures include invasive non-native species, inappropriate agricultural activities (grazing, mowing), changes in hydrology, succession and activities associated with tourism and urbanisation. The habitat is reported as favourable (FV=) in Germany and the Netherlands, unfavourable – inadequate in Denmark (U1x), France (U1=) and Ireland (U1=) but unfavourable-bad in Belgium (a deterioration from U1= to U2=) and in the UK where it remains unfavourable-bad and deteriorating (U2-).

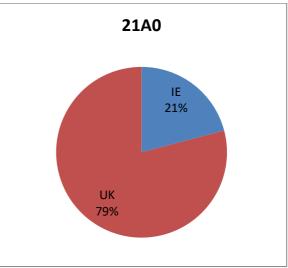
Wooded dunes of the Atlantic, Continental and Boreal region (2180) dunes with natural woodland (both broadleaved and conifer) occur along the coasts of the Atlantic and Baltic in the Atlantic, Boreal and Continental biogeographical regions with a few localities along the Black Sea in Bulgaria. Wooded dunes in southern Europe are habitat type 2270 Wooded dunes with *Pinus pinea* and/or *Pinus pinaster*. In the European red list for habitats the habitat is included in Atlantic and Baltic broad-leaved coastal dune woodland assessed as of Least Concern (LC). Pressures and threats include inappropriate forestry management, suppression of fire, tourism and invasive species.

The main concentrations of the habitat are in France and the Netherlands where it is assessed as unfavourable-inadequate but stable (U1=). It is favourable (FV+) in Germany but unfavourable –bad in Belgium (U2=), Denmark (U2x) and Portugal (U2-).

Dune slacks and machair

Member State	Area 2190	Area 21A0
Belgium	56	
Germany	654	
Denmark	5,400	
Spain	217	
France	3,500	
Ireland	271	3,088
The Netherlands	2,700	
Portugal	0	
United Kingdom	1,953	11,680
Total	14,751 ha	14,768 ha





Humid dune slacks (2190) are wetlands occurring as a part of a dune complex including both open water, fens and wet grasslands which can be species rich with specialised species of plant and animal and are sensitive to changes in water regime. It is the habitat of some Annex II species such as the fen orchid (*Liparis loeselii*). This habitat is found along coastlines throughout the European Union although relatively rare in the Boreal and Mediterranean biogeographical regions. The habitat includes much variation and there may be differences in interpretation between countries, especially in the Mediterranean. In the European red list for habitats it is part of Atlantic and Baltic moist and wet dune slack habitat assessed as Vulnerable (VU). The pressures and threats are mostly due to human impact, including drainage, inappropriate management, invasive species and tourism.

There are no favourable reports for this habitat. Habitat condition is either stable or declining in all countries except Belgium where an unfavourable-bad but improving trend (U2+) has been maintained since 2012. In Germany, Denmark, Portugal and the UK the status is unfavourable-bad and deteriorating (U2-), in France and Ireland it is unfavourable-inadequate and deteriorating (U1-) and in Spain and the Netherlands it is unfavourable-inadequate but stable (U1=). Overall there has been a deterioration at biogeographical level from unfavourable-inadequate (U1=) to unfavourable-bad and deteriorating (U2-), a return to the 2006 status (with backcasting).

Machairs (21A0) are cultural landscapes developed in western Ireland and Scotland on windblown sand resulting from centuries of low intensity agriculture including grazing and cultivation. As such, they are dependent on the continuation of traditional agricultural practices. The habitat has priority status in Ireland, but not in the United Kingdom, and occurs only in Atlantic biogeographical region. In the European red list for habitats Machair is Least Concern (LC). Both countries report activities associated with agriculture as important threats and pressures.

For the UK the habitat conservation status has improved sharply from unfavourable-bad (U2) in 2006, to unfavourable-inadequate but improving (U1+) in 2012 to favourable (FV=) in 2018 largely due to the success of the machair LIFE project. In Ireland the situation has also improved from the assessment of unfavourable-bad (U2=) in 2012 to unfavourable-inadequate (U1=) in 2018. In Ireland the area of habitat is not considered to be favourable.

The Scottish machair LIFE project is highlighted as a success story in the 'bringing nature back through LIFE' reports.

There are three other dune habitats reported for the Atlantic region

2230 Malcomietalia dune grasslands are reported for both Atlantic Portugal and Spain but with small areas (e.g. 10 ha for Spain).

2250 Coastal dunes with Juniperus spp. is reported from Demark (with 1 ha) and the UK (with 25 ha). In the UK the status of the habitat has improved from unfavourable-bad (U2=) in 2012 to favourable (FV+) in 2018 through actions to control invasive species.

2260 Cisto-Lavenduletalia dune sclerophyllous scrubs are reported from Spain (42 ha) and France (between 500 and 5,000 ha). In France the conservation status has been reassessed from unfavourable-bad (U2=) in 2012 to unfavourable-inadequate (U1x) in 2018 as a result of better knowledge.

Response to the State of nature report

Overall the picture is not good for coastal dunes in the Atlantic region, despite many excellent projects at the local or regional level and some reported successes at national level. Shifting dunes (2120) for example are in a poor or bad conservation status in eight of the nine Member States. Endemic plant species that rely on these habitats, like Shore Dock (*Rumex rupestris*) are also reported as having a poor conservation status.

With more than half of the assessments for dunes habitats reporting an overall bad status the situation remains the worst for any habitat group, or perhaps equally bad alongside mires, bogs and fens. The reported trend for dune habitats (coastal and inland) is of particular concern with 38% of assessments showing a decreasing trend in conservation status.

The EEA analysis looks at how the conservation status and trends have changed in the period 2013-2018. The data can show whether habitat status is favourable and stable (FV), unfavourable (U1 and U2) but stable (=) or whether there are improving (+) or deteriorating (-) trends.

There are mixed results. There is clearly a significant problem with habitat condition in the UK where all habitats, with the exception of machair (21A0), are unfavourable-bad and deteriorating (U2-)⁸. Similarly in Atlantic Portugal, albeit with a much smaller dune are, all habitats are assessed as deteriorating. Only in the Netherlands are there no records of current habitat deterioration and in Belgium only the shifting dunes habitat (2120) is assessed as deteriorating.

In terms of habitats the fixed dunes (2130*) and humid dune slacks (2190) are of significant concern. Fixed dune habitat is reported as deteriorating in the UK, Germany, Denmark, Ireland and Portugal and dune slack habitat is deteriorating in the UK, Germany, Denmark, France, Ireland and Portugal.

The coverage of habitat types in the Natura 2000 network (Special Areas of Conservation) is variable. For three of the largest reported areas of habitat the portion protected in the Natura 2000 network is low (in the broad category 0-35%).

⁸ The poor status of habitats in the UK is being addressed through the work of two LIFE projects, DuneLIFE LIFE17 NAT/UK/000570 and Sands of LIFE LIFE17 NAT/UK/00023

Member State	Habitat	Total area	Area in Natura	% in Natura
			2000	2000
France	2130	55,000	10,900	19.8%
France	2180	103,050	22,500	21.8%
UK	21A0	11,680	1,683	14.4%

In the broad category 35-75% the habitats with less than 50% in the Natura 2000 network are:

Member State	Habitat	Total area	Area in Natura	% in Natura
			2000	2000
UK	2130	19,142	8,838	46.2%
France	2170	900	393	43.7%
UK	2120	2,737	984	35.9%
UK	2110	512	209	40.8%
UK	2150	1,592	699	43.9%
France	2120	15,000	7,000	46.7%

Compare these figures to the information from the Netherlands where over 90% of all habitats are within the Natura 2000 network. In Denmark, a country with a large dune area, about 60% of all habitats are included in the Natura 2000 network.

Where a high proportion of any habitat type is included in the Natura 2000 network it should be easier to achieve favourable conservation status. For example in the category of 75-100% of habitat in Natura 2000 there are 12 reports of favourable conservation status from four Member States (with coverage in Natura 2000 from 88% to 100%) whereas in the category of 35-75% there are only two reports of favourable conservation status from two Member States.

What should be the response to the State of nature 2020 report?

It is time to take stock of where we are with our work towards achieving favourable conservation status for habitats at a national and biogeographical level. Dune habitats have already been identified in the Natura 2000 Biogeographical Process as key habitats for the Atlantic region and have been highlighted in the series of biogeographical seminars (2012, 2016 and 2019).

The outputs of major LIFE projects in The Netherlands, Belgium and Denmark, and the report of a LIFE platform meeting on coastal and inland dunes in 2016, have led to the preparation of a Dune Roadmap for knowledge exchange in the Atlantic region. The Roadmap can be seen as a positive response to the situation presented in the Article 17 reports, showing where there is a need for knowledge and networking, where tried and tested techniques can be scaled up, and where support from national authorities and the European Commission is requested.

The Roadmap is an output of the biogeographical process and, with the publication of the State of nature report 2020, should be updated to set out priorities for the reporting period 2019-2024.

EU priorities for nature in the period 2019-2024 are cascaded down from the European Green Deal⁹, launched at the end of 2019, which includes the new Biodiversity Strategy for 2030¹⁰ launched on 20th May 2020. The Biodiversity Strategy strengthens the EU commitment to Natura 2000, to increasing the cover of terrestrial protected areas to 30% of the EU territory, to develop a Trans-European Nature Network and to set out with Member States legally binding EU nature restoration targets as part of a EU Nature Restoration Plan.

The Strategy is the most ambitious yet from the EU. However, the broad view with a focus on carbon-rich ecosystems, connectivity and enlargement of protected areas might overlook the relatively small (by area), naturally fragmented and low-nutrient dependant dune systems. There is still as much of a need as ever to highlight the special value of dune landscapes and habitats. We have to make the case by setting out what has to be done and what could be achieved by showing that there is a common appreciation of the value of these habitats and a willingness to continue to share good practice.

Some ideas to take forward:

- Help ensure that dune habitats are included in national strategies and habitat restoration plans by offering expert input, i.e. we need national experts with influence to champion dunes in Prioritised Action Frameworks and to support a biogeographical approach
- Identify actions which could be carried out in cooperation with others, e.g. sharing scientific studies, management experience and monitoring and disseminate this knowledge through national networks
- Improve the effectiveness of communication including reaching out to all dune managers with some common messages (using projects, national networks, newsletters etc)
- Update the dune Roadmap and make it available on the Commission web-pages as part of Natura 2000 biogeographic process
- Support the European Dune Network through actions such as the EUCC-D¹¹ website
- Offer more help with translation to improve the links with French colleagues
- Share planning for workshops and conferences to ensure that they address issues of common concern and have EU added value

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⁹ https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal en

¹⁰ https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal/actions-being-taken-eu/eu-biodiversity-strategy-2030 en

¹¹ https://www.eucc-d.de/beach-and-dune-network.html