# European Community Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora (92/43/EEC)

## Fourth Report by the United Kingdom under Article 17

on the implementation of the Directive
from January 2013 to December 2018

Conservation status assessment for the habitat:

## H2150 - Atlantic decalcified fixed dunes (*Calluno-Ulicetea*)

UNITED KINGDOM

## IMPORTANT NOTE - PLEASE READ

- The information in this document represents the UK Report on the conservation status of this habitat, submitted to the European Commission as part of the 2019 UK Reporting under Article 17 of the EU Habitats Directive.
- It is based on supporting information provided by the geographically-relevant Statutory Nature Conservation Bodies, which is documented separately.
- The 2019 Article 17 UK Approach document provides details on how this supporting information contributed to the UK Report and the fields that were completed for each parameter.
- The reporting fields and options used are aligned to those set out in the European Commission guidance.
- Maps showing the distribution and range of the habitat are included (where available).
- Explanatory notes (where provided) are included at the end. These provide additional audit trail information to that included within the UK assessments. Further underpinning explanatory notes are available in the related country-level and/or UK offshore-level reports.
- Some of the reporting fields have been left blank because either: (i) there was insufficient information to complete the field; and/or (ii) completion of the field was not obligatory.
- The UK-level reporting information for all habitats and species is also available in spreadsheet format.

Visit the JNCC website, https://jncc.gov.uk/article17, for further information on UK Article 17 reporting.

# Report on the main results of the surveillance under Article 17 for Annex I habitat types (Annex D)

## NATIONAL LEVEL

### 1. General information

| | |
|---|---|
| 1.1 Member State | **UK** |
| 1.2 Habitat code | **2150 - Atlantic decalcified fixed dunes (Calluno-Ulicetea)** |

### 2. Maps

| | |
|---|---|
| 2.1 Year or period | 1987-2018 |
| 2.3 Distribution map | Yes |
| 2.3 Distribution map Method used | Complete survey or a statistically robust estimate |
| 2.4 Additional maps | No |

## BIOGEOGRAPHICAL LEVEL

### 3. Biogeographical and marine regions

| | |
|---|---|
| 3.1 Biogeographical or marine region where the habitat occurs | **Atlantic (ATL)** |
| 3.2 Sources of information | England<br>JNCC (14/11/2017) Spreadsheet of UK SAC information as contained within the Natura 2000 standard data forms submitted to the European Union. http://jncc.defra.gov.uk/page-1461<br>Brownett, JM., Mills, RS,. (2017) The development and application of remote sensing to monitor sand dune habitats. Journal of Coastal Conservation, Volume 21, Number 5, page 643-656. https://link.springer.com/article/10.1007/s11852-017-0504-x<br>JNCC (2013) 3rd UK Habitats Directive Reporting 2013. UK-level reporting information on Favourable Reference Values. http://jncc.defra.gov.uk/page-6387<br>Natural England (2015 unpublished) Site of Special Scientific Interest Series short review and assessment for coastal habitat features.<br>JNCC. 2013. Third report by the United Kingdom under article 17 on the implementation of the directive from January 2007 to December 2012<br>H2150 Atlantic decalcified fixed dunes (Calluno-Ulicetea)<br>Jones L, Garbutt A and Angus S. 2013. Impacts of climate change on coastal habitats, MCCIP Science Review, 4<br>http://www.mccip.org.uk/media/13315/2013arc_backingpapers_18_chab.pdf<br>Natural England. 2015. Coastal management theme plan (IPENSTP019)<br>http://publications.naturalengland.org.uk/publication/6371629661683712?category=5605910663659520<br>Natural England. 2015.Climate change theme plan: Developing a strategic approach to climate change adaptation (IPENSTP014)<br><br>http://publications.naturalengland.org.uk/publication/4954594591375360?category=5605910663659520<br>Natural England. 2015.Public access and disturbance theme plan: A strategic approach to identifying and addressing significant effects on the features of Natura 2000 sites (IPENSTP022)<br>http://publications.naturalengland.org.uk/publication/6621454219083776?category=5605910663659520<br>Natural England. 2015. Atmospheric nitrogen theme plan: Developing a strategic approach for England's Natura 2000 sites (IPENSTP013)<br>http://publications.naturalengland.org.uk/publication/6140185886588928?categ |

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European Commission 2016. Second Atlantic biogeographic seminar. http://ec.europa.eu/environment/nature/natura2000/platform/events/263_second_atlantic_natura_2000_seminar_en.htm Includes the 'Dune Road Map' from

the LIFE Platform meeting 2016 by Houston J. http://ec.europa.eu/environment/nature/natura2000/platform/events/258_ecology_morphology_management_of_coastal_and_inland_dunes_en.htm
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Mossman HL, Grant A & Davy AJ. (2013) Implications of climate change for coastal and inter-tidal habitats in the UK. Terrestrial biodiversity climate change impacts report card technical paper. Biodiversity Report Card paper 10
The UK National Ecosystem Assessment Technical Report 2011 Chapter 11: Jones, L. et al. Coastal Margins. The UK National Ecosystem Assessment UNEP-WCMC, Cambridge. http://uknea.unep-wcmc.org/LinkClick.aspx?fileticket=dNI5e5W5I5Q%3D&tabid=82
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The Sand Dune Vegetation Survey of Scotland, Tom Dargie 1994-2000 National Report
The Sand Dune Vegetation Survey of Scotland 2012 SNH Natural Spaces dataset
Janine M Morris, Site Condition Monitoring of Coastal Habitats. (National Contract, Year 2009-2010) and Site Condition Monitoring of Coastal Habitats (National Contract, Year 2010-2011). Contract No: 25639
SNH Site Condition Monitoring results Cycle 3 (from 1 April 2012): see Scotland's environment website. [From the website Detailed tab, select Coastal features by clicking the Feature filter on the left of the screen, then Feature Category= Coast. Data can be exported to spreadsheet by right clicking the table at the bottom of the screen, then Export, then Export Table. Cycle 3 assessments can be seen by filtering the spreadsheet on the 'LatestAssessedSCMcycle' column].
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## 4. Range

| | | |
|---|---|---|
| 4.1 Surface area (in km²) | 11176.44 | |
| 4.2 Short-term trend Period | 2007-2018 | |
| 4.3 Short-term trend Direction | Stable (0) | |
| 4.4 Short-term trend Magnitude | a) Minimum | b) Maximum |
| 4.5 Short-term trend Method used | Based mainly on extrapolation from a limited amount of data | |
| 4.6 Long-term trend Period | | |
| 4.7 Long-term trend Direction | | |
| 4.8 Long-term trend Magnitude | a) Minimum | b) Maximum |
| 4.9 Long-term trend Method used | | |
| 4.10 Favourable reference range | a) Area (km²) | 11176.44 |
| | b) Operator | |
| | c) Unknown | No |
| | d) Method | The FRR is approximately equal to the current range area. The FRR value has been updated to take account of improved information on the habitat range. The approach |

taken to set the FRR is explained in the 2007 and 2013 UK Article 17 habitat reports (see http://jncc.defra.gov.uk/page-4064 and http://jncc.defra.gov.uk/page-6563).

| | |
|---|---|
| 4.11 Change and reason for change in surface area of range | Improved knowledge/more accurate data<br>No information on nature of change<br>The change is mainly due to: Improved knowledge/more accurate data |
| 4.12 Additional information | |

## 5. Area covered by habitat

| | | | |
|---|---|---|---|
| 5.1 Year or period | 1987-2018 | | |
| 5.2 Surface area (in km²) | a) Minimum | b) Maximum | c) Best single value 15.9164 |
| 5.3 Type of estimate | Best estimate | | |
| 5.4 Surface area Method used | Complete survey or a statistically robust estimate | | |
| 5.5 Short-term trend Period | 2005-2018 | | |
| 5.6 Short-term trend Direction | Decreasing (-) | | |
| 5.7 Short-term trend Magnitude | a) Minimum | b) Maximum | c) Confidence interval |
| 5.8 Short-term trend Method used | Based mainly on extrapolation from a limited amount of data | | |
| 5.9 Long-term trend Period | | | |
| 5.10 Long-term trend Direction | | | |
| 5.11 Long-term trend Magnitude | a) Minimum | b) Maximum | c) Confidence interval |
| 5.12 Long-term trend Method used | | | |
| 5.13 Favourable reference area | a) Area (km²) | | |
| | b) Operator | More than (>) | |
| | c) Unknown | No | |
| | d) Method | The FRA has been changed to not more than 10% above the current area as the habitat area has declined. An FRA operator has been used as it is not clear what the exact area of the FRA is. The approach taken to set the FRA is explained in the 2007 and 2013 UK Article 17 habitat reports (see http://jncc.defra.gov.uk/page-4064 and http://jncc.defra.gov.uk/page-6563). | |
| 5.14 Change and reason for change in surface area of range | Improved knowledge/more accurate data<br>No information on nature of change<br>The change is mainly due to: Improved knowledge/more accurate data | | |
| 5.15 Additional information | The short term trend direction is considered to be decreasing by 1%/yr or less, based on the rate of decline identified in Scotland. | | |

## 6. Structure and functions

| | | | |
|---|---|---|---|
| 6.1 Condition of habitat | a) Area in good condition (km²) | Minimum 3.468 | Maximum 3.818 |
| | b) Area in not-good condition (km²) | Minimum 7.462 | Maximum 8.182 |

| | | | | |
|---|---|---|---|---|
| | c) Area where condition is not known (km²) | Minimum 4.246 | Maximum 4.676 | |
| 6.2 Condition of habitat Method used | Based mainly on extrapolation from a limited amount of data | | | |
| 6.3 Short-term trend of habitat area in good condition Period | 2001-2018 | | | |
| 6.4 Short-term trend of habitat area in good condition Direction | Decreasing (-) | | | |
| 6.5 Short-term trend of habitat area in good condition Method used | Based mainly on extrapolation from a limited amount of data | | | |
| 6.6 Typical species | Has the list of typical species changed in comparison to the previous reporting period? | No | | |
| 6.7 Typical species Method used | | | | |
| 6.8 Additional information | | | | |

## 7. Main pressures and threats

7.1 Characterisation of pressures/threats

| Pressure | Ranking |
|---|---|
| Intensive grazing or overgrazing by livestock (A09) | M |
| Extensive grazing or undergrazing by livestock (A10) | H |
| Problematic native species (I04) | H |
| Mixed source air pollution, air-borne pollutants (J03) | H |
| Natural succession resulting in species composition change (other than by direct changes of agricultural or forestry practices) (L02) | M |

| Threat | Ranking |
|---|---|
| Intensive grazing or overgrazing by livestock (A09) | M |
| Extensive grazing or undergrazing by livestock (A10) | H |
| Problematic native species (I04) | H |
| Mixed source air pollution, air-borne pollutants (J03) | H |
| Natural succession resulting in species composition change (other than by direct changes of agricultural or forestry practices) (L02) | M |

| | |
|---|---|
| 7.2 Sources of information | |
| 7.3 Additional information | J03: Mixed source air pollution, air-borne pollutants is ranked as a High ranked pressure and threat, due to the nutrient N critical load for the habitat being exceeded across >25% of the habitat area |

## 8. Conservation measures

| | | |
|---|---|---|
| 8.1 Status of measures | a) Are measures needed? | Yes |
| | b) Indicate the status of measures | Measures identified and taken |
| 8.2 Main purpose of the measures taken | Maintain the current range, population and/or habitat for the species | |
| 8.3 Location of the measures taken | Both inside and outside Natura 2000 | |

| | |
|---|---|
| 8.4 Response to the measures | Medium-term results (within the next two reporting periods, 2019-2030) |
| 8.5 List of main conservation measures | |

Manage changes in hydrological and coastal systems and regimes for construction and development (CF10)

Management of problematic native species (CI05)

Management of habitats (others than agriculture and forest) to slow, stop or reverse natural processes (CL01)

Implement climate change adaptation measures (CN02)

8.6 Additional information

## 9. Future prospects

| | | |
|---|---|---|
| 9.1 Future prospects of parameters | a) Range | Poor |
| | b) Area | Poor |
| | c) Structure and functions | Bad |
| 9.2 Additional information | Future trend of Range is Negative - decreasing <=1% (one percent or less) per year on average; Future trend of Area is Negative - decreasing <=1% (one percent or less) per year on average; and Future trend of Structure and functions is Very negative - important deterioration.<br>The Future prospects for Structure and functions takes into account that at least 25% of the habitat area is expected to be in unfavourable (not good) condition in c.2030 due to nutrient N critical load exceedance, unless measures are taken to reduce N deposition impacts. | |

## 10. Conclusions

| | |
|---|---|
| 10.1. Range | Favourable (FV) |
| 10.2. Area | Unfavourable - Inadequate (U1) |
| 10.3. Specific structure and functions (incl. typical species) | Unfavourable - Bad (U2) |
| 10.4. Future prospects | Unfavourable - Bad (U2) |
| 10.5 Overall assessment of Conservation Status | Unfavourable - Bad (U2) |
| 10.6 Overall trend in Conservation Status | Deteriorating (-) |
| 10.7 Change and reasons for change in conservation status and conservation status trend | a) Overall assessment of conservation status<br>No change<br>The change is mainly due to:<br>b) Overall trend in conservation status<br>Use of different method<br>The change is mainly due to: Use of different method |
| 10.8 Additional information | Conclusion on Range reached because: (i) the short-term trend direction in Range surface area is stable; and (ii) the current Range surface area is approximately equal to the Favourable Reference Range.<br>Conclusion on Area covered by habitat reached because: (i) the short-term trend direction in Area is decreasing by 1% per year or less; and (ii) the current Area is not more than 10% below the Favourable Reference Area. |

# Report on the main results of the surveillance under Article 17 for Annex I habitat types (Annex D)

Conclusion on Structure and functions reached because habitat condition data indicates that more than 25% of the habitat is in unfavourable (not good) condition.
Conclusion on Future prospects reached because: (i) the Future prospects for Range are poor; (ii) the Future prospects for Area covered by habitat are poor; and (iii) the Future prospects for Structure and functions are bad.
Overall assessment of Conservation Status is Unfavourable-bad because one or more of the conclusions is Unfavourable-bad.
Overall trend in Conservation Status is based on the combination of the short-term trends for Range - stable, Area covered by habitat - decreasing, and Structure and functions - decreasing.
The Overall trend in Conservation Status has changed between 2013 and 2019 because of the removal of the Future prospects trend from the 2019 method used to assess Overall trend.

## 11. Natura 2000 (pSCIs, SCIs, SACs) coverage for Annex I habitat types

| | |
|---|---|
| 11.1 Surface area of the habitat type inside the pSCIs, SCIs and SACs network (in km² in biogeographical/ marine region) | a) Minimum<br>b) Maximum<br>c) Best single value 6.9937 |
| 11.2 Type of estimate | Best estimate |
| 11.3 Surface area of the habitat type inside the network Method used | Complete survey or a statistically robust estimate |
| 11.4 Short-term trend of habitat area in good condition within the network Direction | Decreasing (-) |
| 11.5 Short-term trend of habitat area in good condition within network Method used | Based mainly on extrapolation from a limited amount of data |
| 11.6 Additional information | |

## 12. Complementary information

| | |
|---|---|
| 12.1 Justification of % thresholds for trends | |
| 12.2 Other relevant information | |

# Distribution Map

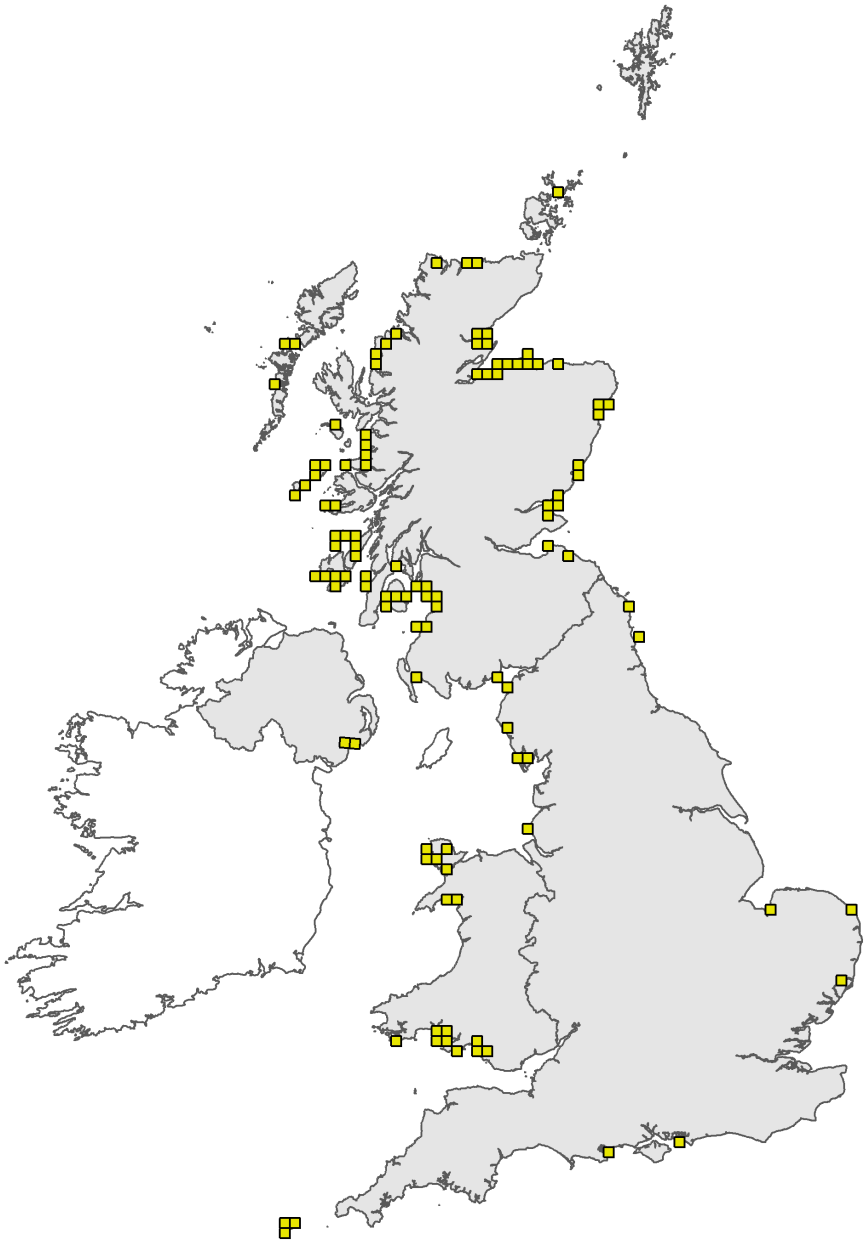

Figure 1: UK distribution map for H2150 - Atlantic decalcified fixed dunes (*Calluno-Ulicetea*). Coastline boundary derived from the Oil and Gas Authority's OGA and Lloyd's Register SNS Regional Geological Maps (Open Source). Open Government Licence v3 (OGL). Contains data © 2017 Oil and Gas Authority.

The 10km grid square distribution map is based on available habitat records which are considered to be representative of the distribution within the current reporting period. For further details see the 2019 Article17 UK Approach document.

# Range Map

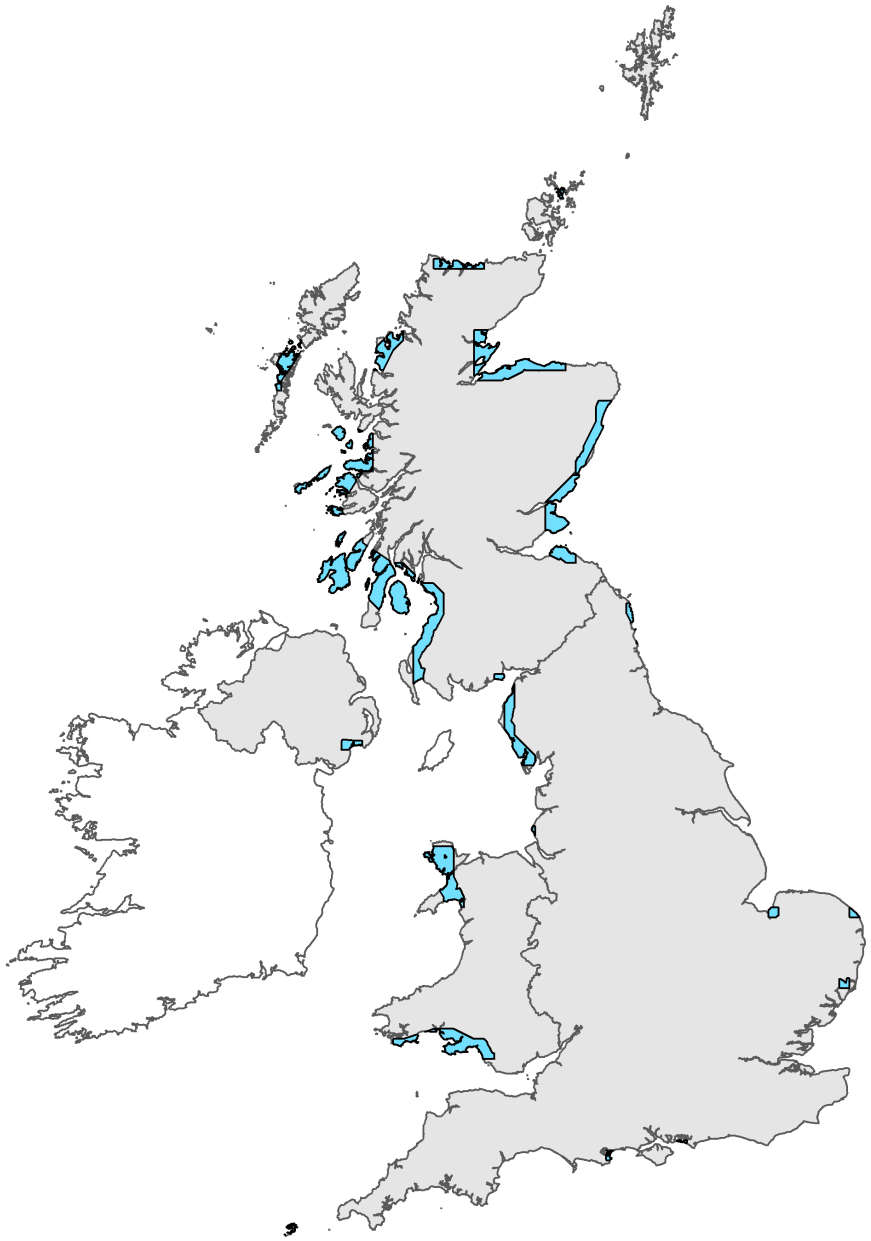

Figure 2: UK range map for H2150 - Atlantic decalcified fixed dunes (*Calluno-Ulicetea*). Coastline boundary derived from the Oil and Gas Authority's OGA and Lloyd's Register SNS Regional Geological Maps (Open Source). Open Government Licence v3 (OGL). Contains data © 2017 Oil and Gas Authority.

The range map has been produced by applying a bespoke range mapping tool for Article 17 reporting (produced by JNCC) to the 10km grid square distribution map presented in Figure 1. The alpha value for this habitat was 25km. For further details see the 2019 Article 17 UK Approach document.