# 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:

## H2140 - Decalcified fixed dunes with *Empetrum nigrum*

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 | **2140 - Decalcified fixed dunes with Empetrum nigrum** |

### 2. Maps

| | |
|---|---|
| 2.1 Year or period | 1987-2008 |
| 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 | Scotland<br>https://www.environment.gov.scot/our-environment/habitats-and-species/habitat-map-of-scotland/<br>The Sand Dune Vegetation Survey of Scotland, Tom Dargie 1994-2000 National Report<br>The Sand Dune Vegetation Survey of Scotland 2012 SNH Natural Spaces dataset<br>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<br>Angus, S. (2008). Outline planning permission for golf course and resort development on land at Menie House, Balmedie, Aberdeen. Principal precognition of Stewart Angus on behalf of Scottish Natural Heritage (DPEA REFERENCE CIN/ABS/001)<br>http://jncc.defra.gov.uk/pdf/Article17Consult_20131010/H2140_SCOTLAND.pdf |

### 4. Range

| | | |
|---|---|---|
| 4.1 Surface area (in km²) | 1931.72 | |
| 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) | 1931.72 |
| | 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 |

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| | |
|---|---|
| | 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>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 | 1987-2008 | | |
| 5.2 Surface area (in km²) | a) Minimum | b) Maximum | c) Best single value 4.7 |
| 5.3 Type of estimate | 95% confidence interval | | |
| 5.4 Surface area Method used | Complete survey or a statistically robust estimate | | |
| 5.5 Short-term trend Period | 2001-2017 | | |
| 5.6 Short-term trend Direction | Stable (0) | | |
| 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) 4.86<br>b) Operator<br>c) Unknown No<br>d) Method The FRA is not more than 10% above the current area. The FRA value has been updated to take account of improved information on the habitat area. 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>The change is mainly due to: Improved knowledge/more accurate data | | |
| 5.15 Additional information | | | |

## 6. Structure and functions

| | | | |
|---|---|---|---|
| 6.1 Condition of habitat | a) Area in good condition (km²) | Minimum 1.2 | Maximum 1.2 |
| | b) Area in not-good condition (km²) | Minimum 3.29 | Maximum 3.29 |
| | c) Area where condition is not known (km²) | Minimum 0.23 | Maximum 0.23 |
| 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 | 2001-2016 | | |

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| | |
|---|---|
| 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 |
|---|---|
| Extensive grazing or undergrazing by livestock (A10) | M |
| Modification of coastline, estuary and coastal conditions for development, use and protection of residential, commercial, industrial and recreational infrastructure and areas (including sea defences or coastal protection works and infrastructures) (F08) | M |
| 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 |
|---|---|
| Extensive grazing or undergrazing by livestock (A10) | M |
| Modification of coastline, estuary and coastal conditions for development, use and protection of residential, commercial, industrial and recreational infrastructure and areas (including sea defences or coastal protection works and infrastructures) (F08) | M |
| 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, but none yet taken |
| 8.2 Main purpose of the measures taken | | |

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8.3 Location of the measures taken

8.4 Response to the measures

8.5 List of main conservation measures

Management of problematic native species (CI05)

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

8.6 Additional information

## 9. Future prospects

9.1 Future prospects of parameters

| | |
|---|---|
| a) Range | Good |
| b) Area | Poor |
| c) Structure and functions | Bad |

9.2 Additional information

Future trend of Range is Overall stable; 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.
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

No change

The change is mainly due to:

b) Overall trend in conservation status

No change

The change is mainly due to:

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.
Conclusion on Area covered by habitat reached because: (i) the short-term trend direction in Area is stable; and (ii) the current Area is not more than 10% below the Favourable Reference Area.
Conclusion on Structure and functions reached because habitat condition data indicates that more than 25% of the habitat is in unfavourable (not good) condition.

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Conclusion on Future prospects reached because: (i) the Future prospects for Range are good; (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 - stable, and Structure and functions - decreasing.

## 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 2.41 |
| 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 | Stable (0) |
| 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

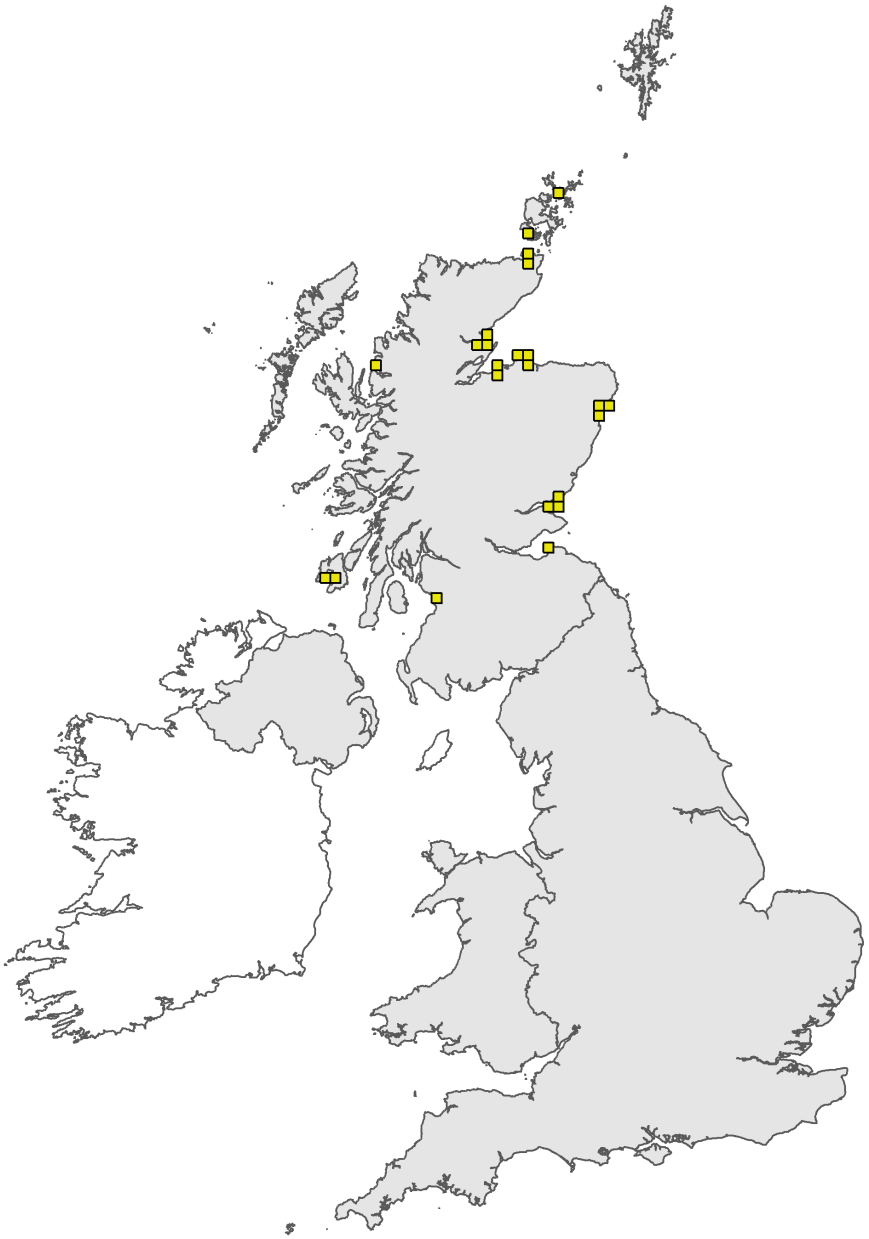

Figure 1: UK distribution map for H2140 - Decalcified fixed dunes with *Empetrum nigrum*. Coastline boundary derived from the Oil and Gas Authority's OGA and Lloyd's Register SNS Regional Geological Maps (Open Source). Open Government Licence v3 (OGL). Contains data © 2017 Oil and Gas Authority.

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

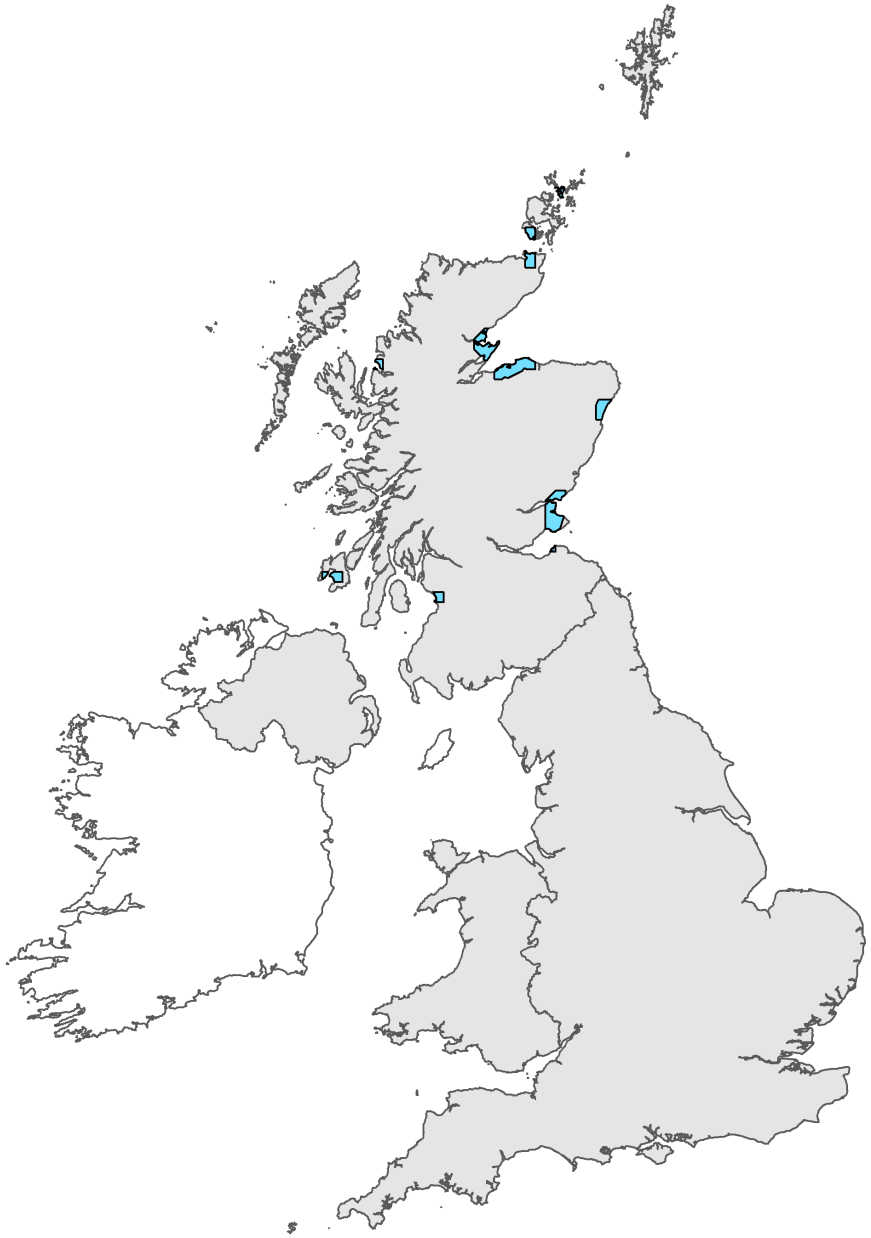

Figure 2: UK range map for H2140 - Decalcified fixed dunes with *Empetrum nigrum*. Coastline boundary derived from the Oil and Gas Authority's OGA and Lloyd's Register SNS Regional Geological Maps (Open Source). Open Government Licence v3 (OGL). Contains data © 2017 Oil and Gas Authority.

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.