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

Third Report by the United Kingdom under Article 17

on the implementation of the Directive from January 2007 to December 2012
Conservation status assessment for

Habitat:

H2190 - Humid dune slacks

# Reporting format on the 'main results of the surveillance under Article 11' for Annex I Habitats Types

| 0.2 Habitat code | H2190 |
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| 1.1 Maps | |
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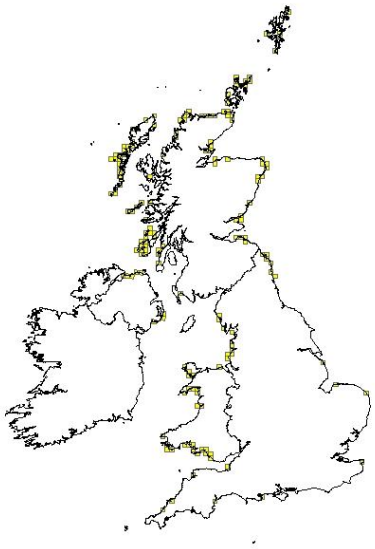
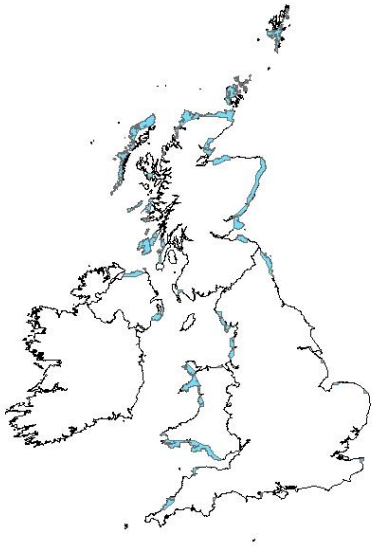
| **1.1.1 Distribution map** | True  |
| | for further details see the 2013 Article 17 UK Approach document |
| **1.1.2 Method used - map** | **Complete survey/Complete survey or a statistically robust estimate** |
| | for further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information |
| **1.1.3 Year or period** | **1987-2012** |
| | for further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information |
| **1.1.4 Additional distribution map** Optional | **False** |
| | |
| **1.1.5 Range map** | True |



for further details see the 2013 Article 17 UK Approach document

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| **2.1 Biogeographical region or marine regions** | **ATL** |
| | |
| **2.2 Published sources** | Information sources as supplied by Natural Resources Wales<br><br>Ashall, J. Duckworth, J . Holder, C . Smart, S . Joint Nature Conservation Committee (JNCC) 1992. Sand dune survey of Great Britain. Site report no. 112 Ynyslas, Ceredigion, Wales 1991 (DRAFT VERSION). - Peterborough: Joint Nature Conservation Committee (JNCC). - (JNCC Report; 80)<br>Ashall, J. Duckworth, J . Holder, C . Smart, S . Joint Nature Conservation Committee (JNCC) 1992. Sand dune survey of Great Britain. Site report no. 111 Towyn Warren, Ceredigion, Wales 1991 (DRAFT VERSION). - Peterborough: Joint Nature Conservation Committee (JNCC). - (JNCC Report; 79)<br>Ashall, J. Duckworth, J . Holder, C . Joint Nature Conservation Committee (JNCC) 1992. Sand dune survey of Great Britain. Site report no. 120 Tai Morfa, Dwyfor Wales 1991 (DRAFT VERSION). - Peterborough: Joint Nature Conservation Committee (JNCC). - (JNCC Report; 86)<br>Ashall, J. Duckworth, J . Holder, C . Smart, S . Joint Nature Conservation Committee (JNCC) 1992. Sand dune survey of Great Britain. Site report no. 115 Morfa Dyffryn Meirionydd (DRAFT VERSION). - Peterborough: Joint Nature Conservation Committee (JNCC). - (JNCC Report; 90)<br>Ashall, J. Duckworth, J. Holder, C. Smart, S. Joint Nature Conservation Committee (JNCC) 1994. Sand dune survey of Great Britain. Site report no. 100 Pendine Burrows, Carmarthen, Wales 1991. - Peterborough: Joint |

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| | Nature Conservation Committee (JNCC). - (JNCC Report; 78)<br>Ashall, J. Duckworth, J . Holder, C . Smart, S . Joint Nature Conservation Committee (JNCC) 1994. Sand dune survey of Great Britain. Site report no. 105 Stackpole Warren, Barafundle Bay and Broad Haven South Pembrokeshire, Wales 1991. - Peterborough: Joint Nature Conservation Committee (JNCC). - (JNCC Report; 69)<br>Ashall, J . Duckworth, J . Holder, C . Joint Nature Conservation Committee (JNCC) 1994. Sand dune survey of Great Britain. Site report no. 113 Dunes between Tywyn & Aberdovey, Meirionydd, Wales 1991. - Peterborough: Joint Nature Conservation Committee (JNCC). - (JNCC Report; 81)<br>Ashall, J. Duckworth, J . Holder, C . Joint Nature Conservation Committee (JNCC) 1995. Sand dune survey of Great Britain. Site report no. 125 Tywyn Gwyn, Anglesey, Ynys Mon, Wales 1991. - Peterborough: Joint Nature Conservation Committee (JNCC). - (JNCC Report; 94)<br>Ashall, J. Duckworth, J . Holder, C . Smart, S . Joint Nature Conservation Committee (JNCC) 1995. Sand dune survey of Great Britain. Site report no. 104 Freshwater Bay East, South Pembrokeshire, Wales 1991. - Peterborough: Joint Nature Conservation Committee (JNCC). - (JNCC Report; 66)<br>Ashall, J. Duckworth, J . Holder, C . Mcconnell, A . Smart, S . Joint Nature Conservation Committee (JNCC) 1995. Sand dune survey of Great Britain. Site report no. 108 Whitesands Bay, Preseli, Wales 1991. - Peterborough: Joint NatureConservation Committee (JNCC). - (JNCC Report; 71)<br>Ashall, J. Duckworth, J . Holder, C . Mcconnell, A . Smart, S . Joint Nature Conservation Committee (JNCC) 1995. Sand dune survey of Great Britain. Site report no. 110 Poppit Sands, Preseli, Wales 1991. - Peterborough: Joint Nature Conservation Committee (JNCC). - (JNCC Report; 73)<br>Ashall, J. Duckworth, J . Holder, C . Smart, S . Joint Nature Conservation Committee (JNCC) 1995. Sand dune survey of Great Britain. Site report no. 131 Gronant to Talacre, Delyn, Wales 1991. - Peterborough: Joint Nature Conservation Committee (JNCC). - (JNCC Report; 46)<br>Ashall, J. Holder, C . Joint Nature Conservation Committee (JNCC). Smart, S. 1992. Sand dune survey of Great Britain. Site report no. 114 Fairbourne, Meirionydd, Wales 1991 (draft). - Peterborough: Joint Nature Conservation Committee (JNCC). - (JNCC Report; 82)<br>Ashall, J. Holder, C . Smart, S . Joint Nature Conservation Committee (JNCC) 1994. Sand dune survey of Great Britain. Site report no. 106 Broomhill & Kilpaison Burrows, South Pembrokeshire, Wales 1991. - Peterborough: Joint Nature Conservation Committee (JNCC). - (JNCC Report; 70)<br>Ashall, J. Holder, C . Smart, S . Duckworth, J . Joint Nature Conservation Committee (JNCC) 1994. Sand dune survey of Great Britain. Site report no. 115 Morfa Harlech, Meirionydd, Wales 1991. - Peterborough: Joint Nature Conservation Committee (JNCC). - (JNCC Report; 91)<br>Ashall, J. Holder, C . Smart, S . Joint Nature Conservation Committee (JNCC) 1994. Sand dune survey of Great Britain. Site report no. 117 Morfa Bychan, Meirionydd, Wales 1991. - Peterborough: Joint Nature Conservation Committee (JNCC). - (JNCC Report; 83)<br>Ashall, J. Holder, C . Duckworth, J . Joint Nature Conservation Committee (JNCC) 1994. Sand dune survey of Great Britain. Site report no. 119 Traeth Crugan, Dwyfor, Wales 1991. - Peterborough: Joint Nature Conservation Committee (JNCC). - (JNCC Report; 85)<br>Ashall, J. Holder, C . Duckworth, J . Joint Nature Conservation Committee (JNCC) 1995. Sand dune survey of Great Britain. Site report no. 103 Manobier & Swanlake Bay, South Pembrokeshire, Wales 1991. - Peterborough: Joint Nature Conservation Committee (JNCC). - (JNCC Report; 65) |

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| **2.3 Range** | | |
|---|---|---|
| **2.3.1 Surface area Range** | **15290.9** | |
| | **for further details see the 2013 Article 17 UK Approach document** | |
| **2.3.2 Method used Range** | **Complete survey/Complete survey or a statistically robust estimate** | |
| | for further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information | |
| **2.3.3 Short-term trend Period** | **2001-2012** | |
| | for further details see the 2013 Article 17 UK Approach document | |
| **2.3.4 Short-term trend Trend direction** | **stable** | |
| | for further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information | |
| **2.3.5 Short-term trend Magnitude** Optional | **a) Minimum** | |
| | | |

| | | |
|---|---|---|
| | **b) Maximum** | |
| | | |
| **2.3.6 Long-term trend Period**<br>Optional | **1994-2012** | |
| | based on a combination of the trend info given under 2.3.3 and the trend info given in the 2007 Article 17 habitat report (see http://jncc.defra.gov.uk/page-4064) - for further details see the 2013 Article 17 UK Approach document | |
| **2.3.7 Long-term trend Trend direction**<br>Optional | **stable** | |
| | based on a combination of the trend info given under 2.3.4 and the trend info given in the 2007 Article 17 habitat report (see http://jncc.defra.gov.uk/page-4064) - for further details see the 2013 Article 17 UK Approach document | |
| **2.3.8 Long-term trend Magnitude**<br>Optional | **a) Minimum** | |
| | | |
| | **b) Maximum** | |
| | | |
| **2.3.9 Favourable reference range** | **a) Value in km².** | **15290.9** |
| | this is an updated value based on the latest version of the UK range mapping tool and the latest 10km square distribution data for the habitat - this data provides a more accurate baseline than used in 2007 to set the Favourable Reference Range value - for further details see the 2013 Article 17 UK Approach document | |
| | **b) Operator** | |
| | | |
| | **c) FRR is unknown (indicated by "True")** | **False** |
| | | |
| | **d) Method used to set FRR** | **the approach taken to set the Favourable Reference Range is explained in the 2007 Article 17 habitat report (see http://jncc.defra.gov.uk/page-4064) - further details are given in the 2013 Article 17 UK Approach document - note that the** |

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| | | **Favourable Reference Range area for this coastal habitat has been restricted to a 10km buffer from the high water boundary, which generates a value considerably in excess of the 2007 value where, in effect, a 1km coastal buffer was applied** |
| | | |
| **2.3.10 Reason for change**<br>Is the difference between the reported value in 2.3.1 and the previous reporting round mainly due to: | a**) Genuine change?** | **False** |
| | for further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information | |
| | **b) Improved knowledge/more accurate data?** | **False** |
| | for further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information | |
| | **c) Use of different method (e.g. "Range tool")** | **True** |
| | the range has been restricted to 10km of the high water boundary in accordance with the EU Guidance on range mapping - this generates a range area considerably in excess of that in the 2007 report, where, in effect, a 1km coastal buffer was applied - for further details see the 2013 Article 17 UK Approach document | |

| **2.4 Area covered by habitat** | | |
|---|---|---|
| **2.4.1 Surface area** | **Value in km²** | **17.96** |
| | for further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information | |
| **2.4.2 Year or period** | **1990-2012** | |
| | for further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information | |
| **2.4.3 Method used Area covered by habitat** | **Complete survey/Complete survey or a statistically robust estimate** | |
| | for further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information | |
| **2.4.4 Short-term trend Period** | **2001-2012** | |
| | for further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information | |

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|---|---|---|
| **2.4.5 Short-term trend Trend direction** | **decrease 1% or less/year** | |
| | for further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information | |
| **2.4.6 Short-term trend Magnitude** Optional | **a) Minimum** | |
| | | |
| | **b) Maximum** | |
| | | |
| | **c) Confidence interval** | |
| | | |
| **2.4.7 Short-term trend Method used** | **Estimate based on partial data with some extrapolation and/or modelling** | |
| | for further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information | |
| **2.4.8 Long-term trend Period** Optional | **1994-2012** | |
| | based on a combination of the trend period given under 2.4.4 and the trend info in the 2007 Article 17 habitat report (see http://jncc.defra.gov.uk/page-4064) - for further details see the 2013 Article 17 UK Approach document | |
| **2.4.9 Long-term trend - Trend direction** Optional | **decrease 1% or less/year** | |
| | based on a combination of the trend direction given under 2.4.5 and the trend info in the 2007 Article 17 habitat report (see http://jncc.defra.gov.uk/page-4064) - for further details see the 2013 Article 17 UK Approach document | |
| **2.4.10 Long-term trend Magnitude** Optional | **a) Minimum** | |
| | | |
| | **b) Maximum** | |
| | | |
| | **c) Confidence interval** | |
| | | |
| **2.4.11 Long-term trend Method used** Optional | **Estimate based on expert opinion with no or minimal sampling** | |
| | based on a combination of the trend method under 2.4.3 and the 'quality of area data' in the 2007 Article 17 habitat report (see http://jncc.defra.gov.uk/page-4064) - for further details see the 2013 Article 17 UK Approach document | |

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| **2.4.12 Favourable reference area** | **a) Value in km²** | **19.756** |
| | this is an updated value based on the latest, most accurate, extent data for the habitat (see 2.4.1) - this data provides a more accurate baseline than used in 2007 to set the Favourable Reference Area value - for further details see the 2013 Article 17 UK Approach document | |
| | **b) Operator** | |
| | | |
| | **c) FRA is unknown (indicated by true")** | **False** |
| | | |
| | **d) Method used to set FRA value** | **the approach taken to set the Favourable Reference Area is explained in the 2007 Article 17 habitat report (see http://jncc.defra.gov.uk/page-4064)** |
| | | |
| **2.4.13 Reason for change** Is the difference between the reported value in 2.4.1 and the previous reporting round mainly due to: | **a) Genuine change?** | **True** |
| | for further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information | |
| | **b) Improved knowledge/more accurate data?** | **False** |
| | for further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information | |
| | **c) Use of different method (e.g. "Range tool")** | **False** |
| | for further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information | |

**2.5 Main pressures**

| a) Pressure | b) Ranking<br>H = high importance<br>M = medium importance<br>L = low importance | c) Pollution qualifier |
|---|---|---|
| A04: grazing | H | |
| B01: forest planting on open ground | H | |
| J02: human induced changes in hydraulic conditions | H | |
| K01: abiotic (slow) natural processes | H | |
| K02: Biocenotic evolution, succession | H | N |
| G01: Outdoor sports and leisure activities, recreational activities | M | |
| G02: Sport and leisure structures | M | |
| H02: Pollution to groundwater | M | |

| | | |
|---|---|---|
| (point sources and diffuse sources) | | |
| H04: Air pollution, air-borne pollutants | M | AN |
| I01: invasive non-native species | M | |
| I02: problematic native species | M | |
| M01: Changes in abiotic conditions | M | |
| M02: Changes in biotic conditions | M | |
| A08: Fertilisation | L | |
| C01: Mining and quarrying | L | |
| E03: Discharges | L | |
| E04: Structures, buildings in the landscape | L | |
| G04: Military use and civil unrest | L | |
| J03: Other ecosystem modifications | L | |
| L08: inundation (natural processes) | L | |
| | | |

| | |
|---|---|
| for further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information | |
| **2.5.1 Method used – pressures** | **based exclusively or to a larger extent on real data from sites/occurrences or other data sources** |
| | for further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information |

| **2.6. Main threats** | | |
|---|---|---|
| **a) Threats** | **b) Ranking**<br>H = high importance<br>M = medium importance<br>L = low importance | **c) Pollution qualifier** |
| A04: grazing | H | |
| I02: problematic native species | H | |
| K02: Biocenotic evolution, succession | H | N |
| B01: forest planting on open ground | M | |
| G02: Sport and leisure structures | M | |
| H02: Pollution to groundwater (point sources and diffuse sources) | M | |

| | | |
|---|---|---|
| H04: Air pollution, air-borne pollutants | M | AN |
| I01: invasive non-native species | M | |
| J02: human induced changes in hydraulic conditions | M | |
| K01: abiotic (slow) natural processes | M | |
| M01: Changes in abiotic conditions | M | |
| M02: Changes in biotic conditions | M | |
| A08: Fertilisation | L | |
| C01: Mining and quarrying | L | |
| E03: Discharges | L | |
| G01: Outdoor sports and leisure activities, recreational activities | L | |
| J03: Other ecosystem modifications | L | |
| L08: inundation (natural processes) | L | |
| | | |

| | |
|---|---|
| for further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information | |
| **2.6.1 Method used –threats** | **expert opinion** |
| | for further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information |

| **2.7 Complementary information** | |
|---|---|
| **2.7.1 Typical species** (as used in the assessment of Structure and function) | |
| | a list of the specific species used to assess the condition of the habitat during the reporting period is not available |
| **2.7.2 Typical species – method used** | **the status of various plant species has been considered when the condition of individual sites supporting the habitat have been assessed - these assessments have utilised Common Standards** |

| | |
|---|---|
| | **Monitoring Guidance, information on which is available via http://jncc.defra.gov.uk/page-2199 (refer to guidance on individual habitats for details) - a list of the specific species used during the reporting period is, however, not available** |
| | |
| **2.7.3 Justification of % thresholds for trends** | |
| | |
| **2.7.4 Structure and functions - Methods used** | **Estimate based on partial data with some extrapolation and/or modelling** |
| | for further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information |
| **2.7.5 Other relevant information** | **for further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information** |
| | |

| **2.8 Conclusions** ***(assessment of conservation status at end of reporting period)*** | | |
|---|---|---|
| **2.8.1 Range** | **a) Conclusion** | **Favourable** |
| | Conclusion reached because:<br>(i) 2.3.4 Range short-term trend direction is stable;<br>(ii) 2.3.1 Range surface area is not less than 2.3.9 Favourable Reference Range;<br>- for further details see the 2013 Article 17 UK Approach document | |
| | **b) Qualifier** | |
| | | |
| **2.8.2 Area** | **a) Conclusion** | **Inadequate** |
| | Conclusion reached because:<br>(i) 2.4.5 Short-term trend direction is decrease 1% or less/year;<br>(ii) 2.4.1. Surface area is less than 2.4.12 Favourable Reference Area by not more than 10%;<br>- for further details see the 2013 Article 17 UK Approach document | |
| | **b) Qualifier** | **declining** |
| | Qualifier reached because 2.4.5 Short-term trend direction is decrease 1% or less/year - for further details see the 2013 Article 17 UK Approach | |

| | | |
|---|---|---|
| | document | |
| **2.8.3 Specific structures and functions (incl. typical species)** | **a) Conclusion** | **Bad** |
| | Conclusion reached because available site condition data indicate that more than 25% of the habitat is in unfavourable condition (based on SAC data at least 34% of the UK habitat area unfavourable) - for further details see the 2013 Article 17 UK Approach document | |
| | **b) Qualifier** | **declining** |
| | Qualifier reached because available site condition data, modified to take account of the current level of nutrient Nitrogen critical load exceedance (= 16% in 2005), indicate that more of the habitat in unfavourable condition is declining than recovering (based on SAC data 164ha declining and 103ha recovering; based on SSSI/ASSI data 5 features/monitoring units declining and 4 recovering) - for further details see the 2013 Article 17 UK Approach document | |
| **2.8.4 Future prospects** | **a) Conclusion** | **Bad** |
| | Conclusion reached because:<br>(i) 2.3.4 Range short-term trend direction is stable and 2.3.1 Range surface area is expected to be not less than 2.3.9 Favourable Reference Range in c.2025;<br>(ii) 2.4.5 Short-term trend direction is decrease 1% or less/year and 2.4.1. Surface area might be less than 2.4.12 Favourable Reference Area by not more than 10% in c.2025;<br>(iii) available site condition data indicate that more than 25% of the habitat might be in unfavourable condition in c.2025 (based on SAC data = 47% of area unfavourable; and based on SSSI/ASSI data = 38% of features/monitoring units unfavourable) - in addition, the level of threat from nutrient Nitrogen critical load exceedance is assessed as 'Medium', which is likely to have a negative impact on the condition of the habitat;<br>- for further details see the 2013 Article 17 UK Approach document | |
| | **b) Qualifier** | **stable** |
| | Qualifier reached because:<br>(i) 2.3.4 Range short-term trend direction is stable;<br>(ii) 2.4.5 Short-term trend direction is decrease 1% or less/year;<br>(iii) available site condition data, modified to take account of the predicted level of nutrient Nitrogen critical load exceedance (= 12% in 2020), indicate that less of the habitat might be in unfavourable conditon in c.2025 (based on SAC data from 58% to 48% of area unfavourable; based on SSSI/ASSI data from 62% to 41% of features/monitoring units unfavourable);<br>- for further details see the 2013 Article 17 UK Approach document | |
| **2.8.5 Overall assessment of** | **Bad** | |

| | |
|---|---|
| **Conservation Status** | Based on individual conclusions for Range, Area, Structures and functions, and Future Prospects - for further details see the 2013 Article 17 UK Approach document |
| **2.8.6 Overall trend in Conservation Status** | **declining** |
| | Based on trends/qualifiers for Range, Area, Structures and functions, and Future Prospects - for further details see the 2013 Article 17 UK Approach document |

## 3. Natura 2000 coverage & conservation measures - Annex I habitat types

### 3.1 Area covered by habitat

| | | |
|---|---|---|
| **3.1.1 Surface area**<br><br>Estimation of habitat type surface area included in the SAC network. | **a) Minimum** | **12.76** |
| | This is based on information submitted to the European Union as part of a Standard Data Form for each candidate SAC. The source information used for these data are available on an individual site basis within a downloadable spreadsheet http://jncc.defra.gov.uk/page-1461. (Go to the sheet 'Site feature data' and filter on the relevant habitats). Individual site data forms can be accessed here: http://jncc.defra.gov.uk/page-1458. For the vast majority of sites the habitat extent figures are based on the best available information at the time of the original submission of the site as a candidate SAC to the European Union. In many cases these data have been compiled in the early 2000s, i.e. more than ten years prior to this report. | |
| | **b) Maximum** | **12.76** |
| | | |
| **3.1.2 Method used** | **Estimate based on partial data with some extrapolation and/or modelling** | |
| | for further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information | |
| **3.1.3 Trend of surface area within the network**<br>Optional | **decrease** | |
| | for further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information | |

### 3.2 Conservation measures

Conservation measures taken (i.e. already being implemented) within the reporting period and provided information about their importance, location and evaluation.

| 3.2.1 Measure | 3.2.2 Type | | | | | 3.2.3 Ranking<br>H = high importance<br>M = medium importance<br>L = low importance | 3.2.4 Location<br>where the measure is PRIMARILY applied | | | 3.2.5 Broad evaluation of the measure | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | a) Legal/statutory | b) Administrative | c) Contractual | d) Recurrent | e) One-off | | a) Inside | b) Outside | c) Both inside & outside | a) Maintain | b) Enhance | c) Long term | d) No effect | e) Unknown | f) Not evaluated |
| 2.1: Maintaining grasslands and other open habitats | Y | | Y | Y | | H | | | Y | | Y | Y | | | |
| 4.1: Restoring/improving water quality | Y | | Y | Y | | L | | | Y | | Y | Y | | | |
| 4.2: Restoring/improving the hydrological regime | | | Y | | | L | Y | | | | Y | | | | |
| 4.3: Managing water abstraction | Y | | Y | Y | | L | | | Y | | Y | | | | |
| 4.4: Restoring coastal areas | Y | | Y | Y | | H | | | Y | | Y | Y | | | |
| 6.1: Establish protected areas/sites | Y | | | | Y | L | | Y | | | Y | Y | | | |
| 6.3: Legal protection of habitats and species | Y | | | | Y | L | | | Y | | Y | Y | | | |

for further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information