# 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

Supporting documentation for the conservation status assessment for the habitat:

H7120 - Degraded raised bogs still capable of natural regeneration

NORTHERN IRELAND

## **IMPORTANT NOTE - PLEASE READ**

- The information in this document is a country-level contribution to 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.
- The 2019 Article 17 UK Approach document provides details on how this supporting information was used to produce the UK Report.
- The UK Report on the conservation status of this habitat is provided in a separate document.
- The reporting fields and options used are aligned to those set out in the European Commission guidance.
- Explanatory notes (where provided) by the country are included at the end. These provide an audit trail of relevant supporting information.
- Some of the reporting fields have been left blank because either: (i) there was insufficient information to complete the field; (ii) completion of the field was not obligatory; and/or (iii) the field was only relevant at UK-level (sections 10 Future prospects and 11 Conclusions).
- For technical reasons, the country-level future trends for Range, Area covered by habitat and Structure and functions are only available in a separate spreadsheet that contains all the country-level supporting information.
- The country-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.

## **NATIONAL LEVEL**

## 1. General information

1.1 Member State	UK (Northern Ireland information only)
1.2 Habitat code	7120 - Degraded raised bogs still capable of natural regeneration

## 2. Maps

2.1 Year or period	2013-2018
2.3 Distribution map	Yes

2.3 Distribution map Method used Complete survey or a statistically robust estimate

2.4 Additional maps

## **BIOGEOGRAPHICAL LEVEL**

## 3. Biogeographical and marine regions

3.1 Biogeographical or marine region where the habitat occurs

3.2 Sources of information

## Atlantic (ATL)

Cooper, A. & McCann, T. (2001). The Northern Ireland Countryside Survey 2000. Environment and Heritage Service, Belfast

Cooper, A., McCann, T. and Rogers, D. (2009) Northern Ireland Countryside Survey 2007: Broad Habitat Change 1998-2007. Northern Ireland Environment Agency. Northern Ireland Environment Agency Research and Development Series No. 09/06. Belfast. 58 pp.

McCann, T., Rogers, D. and Cooper, A. (2009) Northern Ireland Countryside Survey 2007: Field methods and technical manual. Northern Ireland Environment Agency. Northern Ireland Environment Agency, Research and Development Series No 09/07. Belfast.

Murray, R., McCann, T. and Cooper, A. (1992). A Land Classification and Landscape Ecological Study of Northern Ireland. Department of the Environment NI and Department of Environmental Studies, University of Ulster, Coleraine. Rodwell, J.S. (1991). British Plant Communities. Volume 2, Mires and heaths. Cambridge: Cambridge University Press

NIEA. Internal Condition Assessment Reports (various sites and years). Rodwell, J.S., Dring, J.C., Averis, A.B.V., Proctor, M.C.F., Malloch, A.J.C., Schaminee, J.H.J & Dargie, T.C.D. 1998. Review of Coverage of the National Vegetation Classification. Lancaster: Unit of Vegetation Science report to the Joint Nature Conservation Committee.

Data on aerial Nitrogen deposition taken from Air Pollution Information System website - http://www.apis.ac.uk/

Lindsay, R.A. (1995). Bogs: The ecology, classification and conservation of ombrotrophic mires. Scottish Natural Heritage. Battleby.

Leach S. J. & Corbett, P. McM. (1987). A preliminary survey of raised bogs in Northern Ireland. Glasra, 10, 57-73.

Corbett, P. McM. & Seymour, G. R. (1997). The conservation of peatland in Northern Ireland. In: Conserving Peatlands; Eds.: L. Parkyn, R.E. Stoneman and H.A.P. Ingram. CAB International, Wallingford, pp 348-356.

## 4. Range

- 4.1 Surface area (in km²)
- 4.2 Short-term trend Period

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 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) b) Operator c) Unknown No d) Method 4.11 Change and reason for change No change in surface area of range The change is mainly due to: 4.12 Additional information 5. Area covered by habitat 5.1 Year or period 2013-2018 5.2 Surface area (in km²) a) Minimum b) Maximum c) Best single 44 value 5.3 Type of estimate Best estimate 5.4 Surface area Method used Based mainly on extrapolation from a limited amount of data 5.5 Short-term trend Period 2007-2018 5.6 Short-term trend Direction Increasing (+) 5.7 Short-term trend Magnitude a) Minimum c) Confidence b) Maximum interval 5.8 Short-term trend Method used Based mainly on extrapolation from a limited amount of data 5.9 Long-term trend Period 1994-2018 5.10 Long-term trend Direction Increasing (+) 5.11 Long-term trend Magnitude a) Minimum b) Maximum c) Confidence interval 5.12 Long-term trend Method used Based mainly on extrapolation from a limited amount of data 5.13 Favourable reference area a) Area (km²) b) Operator c) Unknown No d) Method

5.14 Change and reason for change in surface area of range

## No change

The change is mainly due to:

5.15 Additional information

## 6. Structure and functions

6.1 Condition of habitat	a) Area in good condition (km²)	Minimum 0	Maximum 0
	b) Area in not-good condition (km²)	Minimum 1.6966	Maximum 1.6966
	c) Area where condition is not known (km²)	Minimum 42.3034	Maximum 42.3034

6.2 Condition of habitat Method used
6.3 Short-term trend of habitat area in good condition Period
6.4 Short-term trend of habitat area in good condition Direction
6.5 Short-term trend of habitat area in good condition Method used
6.6 Typical species
6.7 Typical species Method used

Based mainly on extrapolation from a limited amount of data

2013-2018

Stable (0)

Based mainly on extrapolation from a limited amount of data

Has the list of typical species changed in comparison to the previous No. reporting period?

## 7. Main pressures and threats

## 7.1 Characterisation of pressures/threats

6.8 Additional information

Pressure	Ranking
Burning for agriculture (A11)	Н
Agricultural activities generating air pollution (A27)	M
Drainage for use as agricultural land (A31)	M
Peat extraction (C05)	Н
Droughts and decreases in precipitation due to climate change (NO2)	M
Modification of hydrological conditions, or physical alteration of water bodies and drainage for forestry (including dams) (B27)	M
Intensive grazing or overgrazing by livestock (A09)	M
Other invasive alien species (other then species of Union concern) (IO2)	М
Drainage, land reclamation and conversion of wetlands, marshes, bogs, etc. to settlement or recreational areas (F26)	М
Threat	Ranking
Burning for agriculture (A11)	Н
Agricultural activities generating air pollution (A27)	Н
Drainage for use as agricultural land (A31)	M
Peat extraction (C05)	Н
Droughts and decreases in precipitation due to climate change (NO2)	Н
Modification of hydrological conditions, or physical alteration of water bodies and drainage for forestry (including dams)	М
(B27)	
(B27) Intensive grazing or overgrazing by livestock (A09)	M
_: '	M

7.2 Sources of information

7.3 Additional information

## 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	Restore the habitat of the species (re	elated to '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 nex	kt two reporting periods, 2019-2030)
8.5 List of main conservation measures		

Prevent conversion of natural and semi-natural habitats, and habitats of species into agricultural land (CA01)

Adapt mowing, grazing and other equivalent agricultural activities (CA05)

Reduce/eliminate air pollution from agricultural activities (CA12)

Manage drainage and irrigation operations and infrastructures in agriculture (CA15)

Manage drainage and irrigation operations and infrastructures (CB14)

Management, control or eradication of other invasive alien species (CIO3)

Implement climate change adaptation measures (CN02)

Adapt/manage exploitation of energy resources (CC02)

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

8.6 Additional information

## 9. Future prospects

9.1 Future prospects of parameters

- a) Range
- b) Area
- c) Structure and functions

9.2 Additional information

## 10. Conclusions

10.1. Range

10.2. Area

10.3. Specific structure and functions

(incl. typical species)

10.4. Future prospects

10.5 Overall assessment of

**Conservation Status** 

10.6 Overall trend in Conservation

Status

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

## 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

b) Maximum

c) Best single value 1.6966

## 11.2 Type of estimate

11.3 Surface area of the habitat type inside the network Method used

11.4 Short-term trend of habitat area in good condition within the network Direction

11.5 Short-term trend of habitat area in good condition within network Method used

Best estimate

Complete survey or a statistically robust estimate

Increasing (+)

Complete survey or a statistically robust estimate

11.6 Additional information

## 12. Complementary information

12.1 Justification of % thresholds for trends

12.2 Other relevant information

## **Distribution Map**

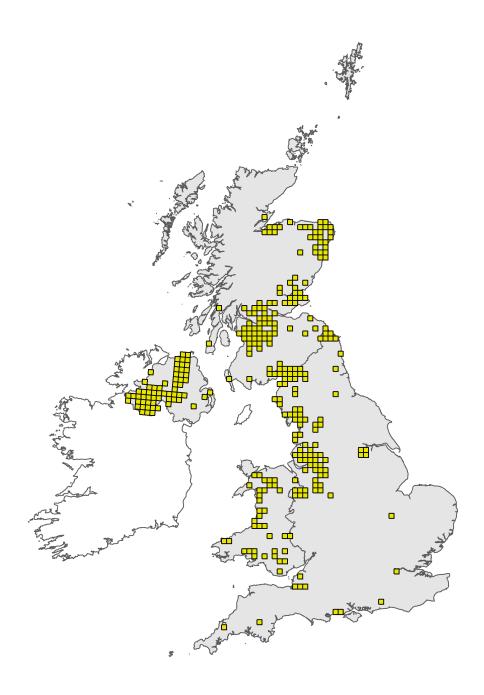


Figure 1: UK distribution map for H7120 - Degraded raised bogs still capable of natural regeneration. Coastline boundary derived from the Oil and Gas Authority's OGA and Lloyd's Register SNS Regional Geological Maps (Open Source). Open Government Licence v3 (OGL). Contains data © 2017 Oil and Gas Authority.

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

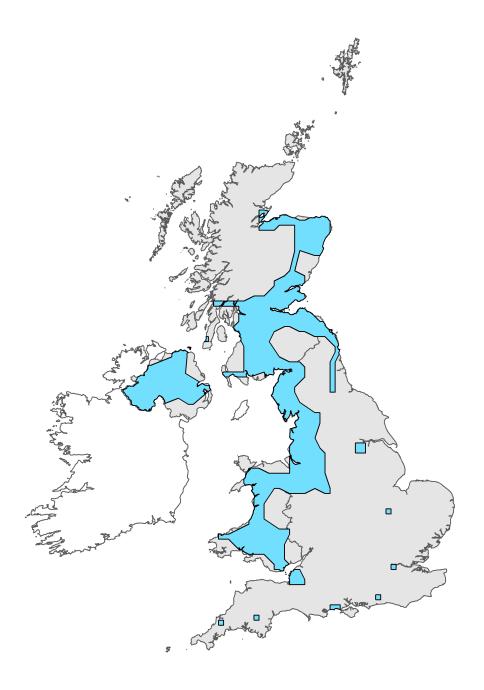


Figure 2: UK range map for H7120 - Degraded raised bogs still capable of natural regeneration. Coastline boundary derived from the Oil and Gas Authority's OGA and Lloyd's Register SNS Regional Geological Maps (Open Source). Open Government Licence v3 (OGL). Contains data © 2017 Oil and Gas Authority.

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.

## **Explanatory Notes**

#### Habitat code: 7120

#### Field label

#### Note

#### 2.2 Distribution map

The priority habitat (Lowland raised bog) includes the two Annex 1 habitats: H7110 Active raised bogs and H7120 Degraded raised bogs (still capable of natural regeneration). However, these habitats are often not separated in standard habitat mapping, and may often be difficult to distinguish in the field. Lowland raised bog covered 25,196 ha (NI Peatland Survey, 1988). It was estimated that 2,270 ha of this (about 9% of all lowland raised bog) was still intact, with most of the remainder being cut, principally by hand. Lowland raised bogs occur all over NI, but are generally very scarce in Counties Down and Armagh, where the majority have been totally destroyed by a combination of turf-cutting and agricultural reclamation (e.g. Brown, 1968). Degraded raised bogs occur where there has been widespread disruption to the structure and function of the peat body, though activities such as cutting and drainage. This can involve changes to the hydrology, vegetation, and physical structure of the bog, leading to desiccation, oxidation and loss of species or changes in the balance of the species composition. In contrast to 7110 Active raised bogs, peat is not currently forming in H7120 Degraded raised bog. The vegetation of degraded bog contains several, but not all, of the species typical of Active raised bogs, but the relative abundance and distribution of individual species differs. The Interpretation Manual of European habitats (European Commission DG Environment 2003) stresses that Degraded raised bogs only includes examples which are 'capable of natural regeneration', i.e. where the hydrology can be repaired and where, with appropriate rehabilitation management, there is a reasonable expectation of re-establishing vegetation with peat-forming capability within 30 years. Provided they are capable of natural regeneration, the following land-cover types are considered to fall within the definition of Degraded raised bogs: Conifer plantations, Improved pasture, Scrub woodland (usually birch Betula spp.), Bare peat, Impoverished vegetation dominated by species including purple moor grass Molinia caerulea, hare's-tail cottongrass Eriophorum vaginatum and heather Calluna vulgaris, and lacking significant cover of bog-mosses Sphagnum species. Often individual bogs contain elements of both H7120 and 7110 - and clearly, the distribution of the two habitats is identical.

## 2.3 Distribution map; Method used

Map based upon NI Peatland Survey (Cruickshank and Tomlinson, 1988) with additional fieldwork by NIEA staff at other sites - SACs, ASSIs and other locations. During the reporting period, NIEA staff have generally visited SACs and ASSIs, with coverage of the habitat in the wider countryside more patchy.

#### Habitat code: 7120 Region code: ATL

#### Field label

#### Note

#### 4.1 Surface area

The complete resource has not been surveyed since 1988, but we have no reason to believe that there has been a loss in range; certainly no loss in range has been recorded in the habitat on SACs or ASSIs since the condition assessment programme was introduced in 2002.

## used

4.5 Short term trend; Method Based upon NI Countryside Survey, in addition to regular condition monitoring of protected lowland raised bog sites. The latter cover just under 10% of the habitat in NI.

5.2 Surface area	It is very difficult to accurately measure the extent of active and degraded raised bog. The habitats are often not separated in standard habitat mapping, and indeed the two may often be difficult to distinguish in the field. The 2007 Report estimated around 4400 ha of H7120 for NI. This was based upon an estimate from the NI Peatland Survey (Cruickshank and Tomlinson, 1988), which is the only full inventory of the NI peatland resource. Note that, although the NI Peatland Survey recorded over 20,000 ha of lowland raised bog as cutover, a significant proportion of this is likely to be active because of NI's wet climate. The NI Countryside Survey estimated the area of degraded raised bog at around 10,000 ha, with the S.E. of the estimate being 37.5 km2. This figure was calculated using four NICS habitat types - dry bog, Molinia grassland, Wet heath and Wet mixed heath. The survey used species composition for field mapping and did not use peat depth, which is a particular issue for the wet heath categories. However, in the lowlands, this is less likely to be an issue compared to upland land classes. So although there may be some overlap with the area estimate for H4010 wet heath, much of this is likely to be H7120 Degraded raised bog. However, it is unlikely that all of this is capable of natural regeneration, so in assessing the extent of the habitat, we have opted to retain the figure of 4400 from the 2013 Report, until more accurate information is available.
5.4 Surface area; Method used	There is no comprehensive estimate of the extent of degraded raised bog capable of natural regeneration in NI, as it is very difficult to accurately measure the extent of active and degraded raised bog - and for the latter, to decide what is capable of natural regeneration. H7110 and H7120 are often not separated in standard habitat mapping, and indeed the two may often be difficult to distinguish in the field. Hence method used is described as Based mainly on extrapolation from a limited amount of data
5.6 Short term trend; Direction	NI Countryside Survey estimated an increase in extent of degraded bog (recorded as dry bog habitat in NICS land-classes) between 1998 and 2007. The increase was 30.1 km2 (42.1%) with a S.E. of 30.4 km2. Although this change was not statistically significant (p=0.05, 95%), it suggests a substantial increase in dry bog as wet bog decreased in extent during the same period. There is no evidence to suggest that this trend has changed over the reporting period.
5.8 Short term trend; Method used	The trend is based upon NI Countryside Survey data for the period 1998 to 2007. It has been assumed that the trend has continued into the current reporting period. NI Countryside Survey data is based on field mapping within 288 25ha sample squares. The figures are based upon the trend in the habitat dry bog, Molinia grassland and Wet Heath which are the nearest equivalents in the NI Countryside Survey to degraded raised bog (note however, that some is likely to be no longer capable of natural regeneration).
5.10 Long term trend; Direction	NI Countryside Survey 2000 indicates an increase in extent of the land-classes associated with degraded bog habitat. The increase between 1998 and 2007 was estimated to be 30.1 km2 (42%) with a standard error of 30.4 km2. This change was not statistically significant, but certainly suggests a substantial increase in extent, much of it at the expense of wet bog land-class (i.e. likely to be active bog).
5.12 Long term trend; Method used	NI Countryside Survey 2000 indicates a decline in wet bog habitat in the lowlands between 1991 and 1998 of 8%. Given the decline between 1998 and 2007, it is clear

that there has been a long-term decline in the extent of active bog, and a

Based mainly on extrapolation from a limited amount of data.

corresponding increase in the extent of degraded bog. However, there is no data since 2007 (apart from condition assessment of SACs and ASSIs); hence data described as

#### 6.1 Condition of habitat

Recent condition assessment data for SACs shows that none of the habitat is in favourable condition, with around one third recovering and the remainder unfavourable (i.e. 52 ha unfavourable recovering; 117 ha unfavourable). However, this represents a tiny proportion of the overall resource, and the trend in the wider countryside is likely to be worse than this. The decline in the extent of wet bog and the corresponding increase in dry bog identified in the NI Countryside Survey suggests that the overall resource is continuing to dry out - probably as a result of long-term hydrological changes.

## 6.2 Condition of habitat; Method used

Condition has been partly assessed from data taken from the most recent Common Standards Monitoring of lowland raised bog SACs and ASSIs. However, a very large part of the resource of H7120 lies outside the designated site network. General trends identified in the NI Countryside Survey 1998-2007 (Cooper, et al., 2009) suggest that a high proportion of the overall resource is likely to be in unfavourable condition - which in the case of this particular habitat - is indicated by the increase in extent at the expense of more desirable wet bog (likely to be active bog). Although the latter survey is now somewhat out of date, it is believed that the broad trends identified are still valid.

## 7.1 Characterisation of pressures/ threats

Although monitoring efforts are directed primarily at active bog on SACs and ASSIs, condition assessment suggests that a reasonable proportion of the habitat within protected sites is in recovering condition. Similar pressures and threats impact H7120 as H7110. On designated sites, the main pressures are burning and the impacts of past turf-cutting and drainage (leading to long-term hydrological change, with associated surface drying, loss of Sphagnum cover and scrub encroachment, etc.). Outside the protected sites network, drainage and peat cutting are significant pressures on the habitat, as indicated by the NI Countryside Survey. More localised pressures include livestock grazing, impacts from adjacent forestry plantations, invasive species, such as Rhododendron, and conversion to agricultural or development land. As far as threats are concerned, climate change will inevitably have some effects on the habitat, through changing patterns of rainfall. It is difficult to predict what the long-term effects of this will be, although if, as current projections suggest, there are prolonged periods of drought, this may well have an adverse impact on the health of Sphagnum bog-mosses. The habitat is sensitive to aerial Nitrogen deposition, with a critical load range listed in the APIS website as 5-10 kg N /ha/yr. Most of the habitat in NI receives above this - in some cases considerably higher than this. For example, Blaeberry Island Bog ASSI in the east of NI has a predicted annual rate of over 20 kg/N/ha/year (average figure), compared to Moneygal Bog in the extreme west, which has a figure of 13.7 kg/N/ha/year (average figure). Apart from nutrient enrichment and the associated impacts on species composition, some key bog species are particularly sensitive to the effects of ammonia (i.e. Cladonia portentosa and Sphagnum spp), and one NI SAC (Moninea Bog) has also experienced damaging effects from ammonia.

#### 7.2 Sources of information

Threats and pressures assessed from the most recent Common Standards Monitoring of the habitat at protected sites (SACs and ASSIs), in addition to data from the NI Countryside Survey and expert judgement to assess pressures in the wider countryside - particularly from the APIS website. Threats based upon current pressures and expert judgement on future trends.

#### 8.1 Status of measures

Recent monitoring on SACs and ASSIs has shown that there are still extensive areas of both active and degraded raised bog habitat in unfavourable condition. Specific site conservation measures (e.g. drain blocking on Black Bog and Ballynahone Bog SACs to restore hydrology) have been put in place at several SACs and ASSIs, primarily to improve the condition of the active raised bog. Further measures will be put in place under the Interreg Va programme, and the Environmental Farming Scheme (EFS). These measures should also have a beneficial effect on associated areas of degraded bog habitat. In addition at a regional level, the Department is developing a road map to reduce atmospheric Nitrogen from agricultural sources.

## 8.2 Main purpose of the measures taken

The habitat is extensive across NI. Measures are aimed at reducing damaging impacts from current pressures and future threats, with the ultimate aim of restoring degraded bog to active bog. Hence this is reported as Restore the structure and functions, including the status of typical species (related to 'Specific structure and functions').

## 8.3 Location of the measures taken

Management measures are aimed primarily at improving the condition of active raised bog and have been taken at a number of sites - i.e. Ballynahone Bog SAC in Co. Londonderry, Black Bog SAC in Co Tyrone, Garry Bog SAC in Co. Antrim, etc. In addition, Interreg Va project will be developing conservation management plans and implementing management measures at several SACs, and Rural Development Plan (RDP) funds are being used to develop similar Conservation Management Plans at other raised bog SACs. Several areas of raised bog across NI - both within designated sites and outside - have been entered into the Environment Farming Scheme (EFS), which aims to implement sympathetic management.

## 9.1 Future prospects of parameters

As for Active Raised Bogs - i.e. Future Prospects for Range reported as Overall Stable. Area reported as Negative - slow decline in area over time identified by NI Countryside Survey likely to have continued during the period of the report. Recent monitoring on SACs and ASSIs has shown that there are extensive areas of the habitat in unfavourable condition. Although specific site conservation measures have been put in place at several SACs and ASSIs to improve condition, and further measures will be put in place under the Interreg Va programme and the Environmental Farming Scheme (EFS), a large proportion of the habitat is outside the protected sites network. Furthermore, much of the habitat is receiving levels of atmospheric deposition of Nitrogen that are above the critical thresholds. Although the Department is developing a road map to reduce atmospheric Nitrogen from agricultural sources, until this initiative is implemented and its impacts evaluated, advice from JNCC is that the assessment of future prospects for Structure and Function should be assessed as Negative.

### 10.1 Range

Although the information on range contraction for lowland mires infers a substantial historic contraction in the range for raised bogs overall (H7110 and H7120 combined), there is no information on any changes in range for H7110 or H7120 since 1994, nor any previous historical data on extent or changes. Within NI it is clear that there have been large historic losses in extent, but the habitat still occurs - albeit in fragmented state - in the east of the country (Co Down - Blaeberry Island ASSI), suggesting that the range has not contracted. Certainly, there are no indications that the range has declined since 1988. Hence range assessed as favourable.

## 10.2 Area

The favourable reference area for H7110 has been set as the total of the current extent of both raised bog habitats (i.e. H7110 and H7120), as H7120 is restored back to active raised bog. For NI the figures have been approximately estimated as 4,400 ha of active bog and 4,400 ha of degraded raised bog capable of natural regeneration - so the FRA for NI is 8,800 ha. NI Countryside Survey 2000 indicates a decline in wet bog habitat (probably active bog) in the lowlands between 1991 and 1998 of 8%, and a further decline between 1998 and 2007, as dry bog (i.e. largely degraded bog) has increased. The degraded raised bog habitat H7120 therefore appears to be increasing at the expense of the more desirable Active raised bog H7110. Hence the judgement is Bad - declining.

## 10.3 Specific structure and functions

The condition of degraded raised bog on SACs and ASSIs in NI has generally shown an improvement since designation. However, analysis from NI Countryside data suggest that wet bog (i.e. largely active) has declined as dry bog (i.e. largely degraded bog) has increased. The habitat H7120 therefore appears to be increasing at the expense of the more desirable Active raised bog H7110. This is almost certainly the result of damaging activities such as cutting and other hydrological impacts, some of which may well be historical in nature (i.e. long-term drying out). Structure and function therefore recorded as Bad - declining.

10.4 Future prospects	Designated sites are generally improving, although the resource in the wider countryside is declining. Given the uncertain future impacts of air pollution and climate change, future prospects are predicted as Unfavourable Bad.
10.5 Overall assessment of Conservation Status	Range is stable; extent is unfavourable bad due to probable rates of loss. Structure and function is bad. Future prospects are bad, with climate change impacts currently unpredictable and atmospheric Nitrogen deposition still a major threat. Hence an overall unfavourable bad assessment.
11.1 Surface area of the habitat type inside the pSCIs, SCIs and SACs network	There are 15 SACs for active raised bog habitat in NI; two of these (Curran Bog and Peatlands Park SACs) include significant extent of degraded raised bog habitat at Grade C. The estimated extent of degraded raised bog habitat at these sites is 169.66 ha, although there are smaller areas of H7120 also present at most if not all of the other SACs (Grade D - insignificant presence).
11.3 Surface area of the habitat type inside the network; Method used	The habitat across NI was mapped by the NI Peatland Survey. Area estimates for SACs have been refined by field survey, although it is often difficult to separate degraded bog from active bog. CSM of SACs is undertaken on a regular basis and no recent loss in extent has been recorded.
11.4 Short term trend of habitat area in good condition within the network; Direction	Assessment of increasing based upon recent condition assessment data. Although the majority of the habitat in the SAC network reported as unfavourable, a significant amount of the habitat in SACs is in unfavourable recovering status. It should be note however, that the Condition Assessment methodology is generally not sensitive in detecting the impacts of atmospheric Nitrogen deposition.
11.5 Short term trend of habitat area in good condition within the network; Method used	Assessment based upon recent condition assessment data. Around one third of the habitat on SACs was recorded as unfavourable recovering, with proactive management in place on several SACs to improve condition. Hence short-term trend increasing. However, the Condition Assessment methodology is generally not sensitive in detecting the impacts of atmospheric Nitrogen deposition.