

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

**Second Report by the United Kingdom under
Article 17
on the implementation of the Directive
from January 2001 to December 2006**

**Conservation status assessment for :
H2160: Dunes with *Hippophae rhamnoides***

Please note that this is a section of the report. For the complete report visit <http://www.jncc.gov.uk/article17>

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H2160 Dunes with *Hippophae rhamnoides*

Audit trail compiled and edited by JNCC and the UK statutory nature conservation agencies Coastal Lead Coordination Network.

This paper and accompanying appendices contain background and data used to complete the standard EC reporting form (Annex D), following the methodology outlined in the document entitled “Assessment, monitoring and reporting under Article 17 of the Habitats Directive, Explanatory Notes and Guidelines, Final Draft 5, October 2006.” The superscript numbers below cross-reference to the headings in the corresponding Annex D reporting form. This supporting information should be read in conjunction with the UK approach for habitats (see ‘Assessing Conservation Status: UK Approach’).

1. National-biogeographic level information

1.1 General description and correspondence with NVC and other habitat types

Table 1.1.1 provides a summary description of H2160 and its relations with UK classifications.

Dunes with *Hippophae rhamnoides* comprise scrub vegetation on more-or-less stable sand dunes in which sea-buckthorn *H. rhamnoides* is abundant. Sea-buckthorn may either form dense thickets, with sparse nitrophilous associates such as common nettle *Urtica dioica*, or occur as more scattered bushes interspersed with various grasses, typically marram *Ammophila arenaria* and red fescue *Festuca rubra*, and associated herbs of dune grassland. This vegetation corresponds with NVC type SD18 *Hippophae rhamnoides* dune scrub.

This form of dune vegetation is mainly found on Atlantic coasts in the EU. The *New Atlas of the British and Irish Flora* (Preston et al. 2002) maps the native distribution of *Hippophae* as ranging patchily from Northumberland down to Dungeness/Camber in Sussex. However, Dargie (2002) extends the native range up to Dunbar on the east coast of Scotland. Elsewhere sea-buckthorn has been planted, and is generally regarded as a conservation problem as it tends to invade other dune habitats and change the nutrient status of the soil where it grows.

Table 1.1.1 Summary description of habitat H2160 and its relations with UK vegetation/habitat classifications.

Classification	Correspondence with Annex I type	Comments
NVC	This vegetation corresponds with NVC type; SD18 <i>Hippophae rhamnoides</i> dune scrub	Only examples of this NVC community within the natural range of <i>Hippophae rhamnoides</i> in the UK are included in this definition.
CSM reporting categories	Not applicable	Rarely a notified feature of SSSIs – conservation objectives are currently tailored when it is an SAC feature (two sites). Outside its natural range it is regarded as a ‘negative indicator species’.

2. Range^{2.3}

2.1 Current range

Range surface area^{2.3.1}: 290 km²
 Date calculated^{2.3.2}: May 2007
 Quality of data^{2.3.3}: Moderate

The surface area estimate was calculated within alpha hull software, using extent of occurrence as a proxy measure for range (see Map 2.1.1). The value of alpha was set at 25 km; the alpha hull software used to calculate the surface area of the range could only be clipped to a 10km strip width along the coast. The geomorphological and physical factors influencing the distribution of the habitats are likely to occur only within a far smaller distance of the coastline (at most 1km) and hence the area value has been reduced by a factor of 10 to give a more realistic value for the surface area of the range for these habitats.

Maps 2.1.1 and 2.1.2 show the range and distribution of H2160 in the UK. The map shows post-1987 10x10 km squares supporting native stands of *Hippophae rhamnoides*, excluding records in Essex and Suffolk which are mostly on coastal banks rather than dunes. Occurrences resulting from introductions outside its natural range, which are not considered for site selection in the UK, are not shown.

Map 2.1.1 Habitat range map ^{1.1} for H2160	Map 2.1.2 Habitat distribution map ^{1.2} for H2160
	
<p>Range envelope shown in blue/grey shade in above map is a minimum convex polygon constructed using JNCC Alpha Shapes tool (see Technical note I for details of methodology)</p>	<p>Each yellow square represents a 10x10km square of the National Grid and shows the known and/or predicted occurrence of this habitat 10 km-square count: 39</p>

See Section 7.1 for map data sources

2.2 Trend in range since c.1994

Trend in range^{2.3.4}: Stable
Trend magnitude^{2.3.5}: Not applicable
Trend period^{2.3.6}: 1958-2006
Reasons for reported trend^{2.3.7}: Not applicable

There has long been disagreement and confusion about the native range of *Hippophae rhamnoides*, due to widespread planting since at least the early 1800s (Ranwel, 1972). This makes it difficult to assess any trends in the native range. There is, however, reasonable consistency in published accounts of *H.*

rhamnoides distribution since Groves (1958) – e.g. Perring and Walters (1962), Ranwell (1972), Stewart et al. (1994), Dargie (2002) and Preston et al. (2002). These all indicate that its native distribution has remained stable, although there is some disagreement about whether the populations on the south east coast of Scotland (at the northern limit of its native range in the UK) are native or introduced.

Due to its highly competitive behaviour, especially on semi-fixed dunes, control measures have been instigated on a number of sites both within and outside its native range. Although this may have affected its abundance in some areas, it has not affected its native range. The range of H2160 Dunes with *Hippophae rhamnoides* has been stable since 1994.

2.3 Favourable reference range

Favourable reference range^{2.5.1}: 290 km²

Section 3.2.1.3 of ‘Assessing Conservation Status: UK Approach’ sets out how favourable reference range estimates for habitats have been determined in the UK. Based on this approach, the current surface area, 290 km², has been set as the favourable reference area. Reasons for this are discussed below.

Pollen deposits suggest that *H. rhamnoides* was widespread in late glacial and early post-glacial times, including at inland sites (Godwin 1956). Some of the coastal records, including the Sefton coast, are outside its current accepted native range (Atkinson and Houston 1993). It is believed that the current native coastal distribution is a relic, having retreated here in the face of widespread woodland development. Despite this, it is widespread and frequent within its current native range.

Its rapid establishment and spread at sites where it has been planted shows that *H. rhamnoides* has the potential to grow on dunes all around the UK coast. Although preferentially a calcicolous shrub, it will also grow on acidic sands (as at Hemsby in Norfolk – Dargie 2002). For the purposes of this report, though, it is reasonable to equate the potential range with the native range. It is extremely unlikely that *H. rhamnoides* will be eradicated from all the sites that it has been introduced to outside its current native range. Indeed, on a number of sites it is likely to become an accepted part of the dune vegetation, rather than an unwelcome lodger. As a consequence, its range will remain more extensive than its favourable reference range.

There has been no decline in range and the habitat has exceeded its natural range while maintaining itself in its native range. The 1994 and current range are therefore considered to be viable, sufficiently extensive and with adequate representation of the ecological variation.

2.4 Conclusions on range

Conclusion^{2.6.i}: Favourable

The native range of *H. rhamnoides* on dunes has remained stable for at least 100 years whilst, through planting over a longer period, it has become widespread around much of the UK coast.

3. Area^{2.4}

3.1 Current area

Total UK extent^{2.4.1}: 2.35km²

Date of estimation^{2.4.2}: May 2007

Method^{2.4.3}: 3 = ground based survey

Quality of data^{2.4.4}: Moderate

Table 3.1.1 provides information on the area of H2160 in the UK. Dargie (2002), largely using information from the Sand Dune Survey of Great Britain (Radley 1994, Dargie 1993, Dargie 1994, Dargie 2002), estimated there was 644 ha. of this habitat in total in England, Scotland and Wales (not

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including Northern Ireland). This indicates that there is more of this habitat outside its current native range than within it.

Table 3.1.1 Area of H2160 in the UK.

	Area (ha)	Method ^{2.4.3}	Quality of data ^{2.4.4}
England	235	3	Moderate
Scotland	Introduced	-	-
Wales	Introduced	-	-
Northern Ireland	Introduced	-	-
Total UK extent^{2.4.1}	235	3	Moderate

Method used to estimate the habitat surface area: 1 = only or mostly based on expert opinion; 2 = based on remote sensing data; 3 = ground based survey. Only the most relevant class is given if more than one applies.

Quality of habitat surface area data: 'Good' e.g. based on extensive surveys; 'Moderate' e.g. based on partial data with some extrapolation; 'Poor' e.g. based on very incomplete data or on expert judgement.

3.2 Trend in area since c.1994

Trend in area^{2.4.5}: **Increasing**

Trend magnitude^{2.4.6}: **Unknown**

Trend period^{2.4.7}: **1950-2006**

Reasons for reported trend^{2.4.8}: **5 – Natural processes**

The impression given in the literature is that until the 1950s, although it had been widely planted, *H. rhamnoides* was held in check, probably by intensive rabbit grazing. With the collapse of the rabbit population through myxomatosis during the mid-1950s, *H. rhamnoides* has subsequently greatly expanded on many sites, both within and outside the native range. An example of the pattern of this increase is described in Baker and Wislocka (1991). At Merthyr Mawr SSSI in south Wales, its cover increased from 0.2% in 1954 to 3.1% in 1971 to 14% by 1989. Where control measures are not in place, it continues to spread.

Over the last 25 years, substantial effort has been expended in containing and reducing the area of *H. rhamnoides* on dunes, both within and outside its native range. On a few sites (e.g. Whiteford Burrows in south Wales) it has been eradicated. On a few sites (e.g. Saltfleetby Theddlethorpe Dunes SSSI and Gibraltar Point SSSI both on the Lincolnshire coast), some areas of *H. rhamnoides* scrub are developing, through succession, into other forms of scrub and even into woodland. Where this occurs, *H. rhamnoides* dies out.

However, in spite of control and succession, there is still a considerably larger area of 'Dunes with *H. rhamnoides*' than there was in the early 1950s, with no reduction in area since 1994.

3.3 Favourable reference area

Favourable reference area^{2.5.2}: **2.35 km²**

Section 3.2.1.3 of 'Assessing Conservation Status: UK Approach' sets out how favourable reference range estimates for habitats have been determined in the UK. Based on this approach, the current surface area, 2.35 km², has been set as the favourable reference area. Reasons for this are discussed below.

Although preferentially a calcicolous shrub of sand dunes, it will also grow on acidic sands (as at Hemsby in Norfolk – Dargie 2002). It requires free draining soils, and grows most vigorously in only semi-fixed dunes. Where dunes become fully fixed, it loses some vigour. Through suckering and seed it can rapidly take advantage of suitable dune conditions, over time shading out dune grassland and significantly increasing the soil nutrient status by nitrogen fixation.

As a consequence, its expansion is at the expense of other Annex 1 coastal habitats, in particular H2120 shifting dunes, H2130 Fixed dunes with herbaceous vegetation, and to a lesser extent H2170 Dunes with *Salix repens*. In order to balance these conflicting interests, on the Lincolnshire coast a provisional

objective has been set for *H. rhamnoides* cover to be about 30% of the overall dry dune area (i.e. of the unconstrained potential area). On these sites, this will necessitate some clearance of *H. rhamnoides* scrub. However, on other sites within its native range, it is likely to have been contained well below such a figure and there may be scope for some expansion. Although this may prove controversial, it is currently only present in small and isolated patches on most sites within its native range outside of Lincolnshire.

It is extremely unlikely that *H. rhamnoides* will be eradicated from all the sites that it has been introduced to outside its current native range. Indeed, on a number of sites it is likely to become an accepted part of the dune vegetation, rather than an unwelcome lodger. As a consequence, its area will remain more extensive than its favourable reference area (assessed within its native range).

3.4 Conclusions on area covered by habitat

Conclusion^{2.6.ii}: Favourable

In spite of control measures and, in some places, succession to mixed scrub and woodland, there is still a considerably larger area of 'Dunes with *H. rhamnoides*' within its native range than there was in the early 1950s, with no reduction in area since 1994. The current area is therefore more extensive than the favourable reference area. In addition a larger area exists outside its native range, much of which will remain into the future.

4. Specific structures and functions (including typical species)

4.1 Main pressures^{2.4.10}

Most of the pressures adversely affecting sand dunes and their Annex 1 habitats within the native range of *H. rhamnoides* are not relevant to this H2160 habitat. The main pressures are:

- Clearance (**102 Mowing /cutting**)

This is due to conflicts with other dune communities (in particular H2120 Shifting dunes, H2130 Fixed dunes with herbaceous vegetation, and to a lesser extent H2170 Dunes with *Salix repens*). Even within its native range *H. rhamnoides* tends to be perceived as a problem species of low conservation value.

- Lack of dune mobility (**990 Other natural processes**)

H. rhamnoides requires relatively open conditions for establishment and vigorous growth. If dunes become over-stabilised, over time established *H. rhamnoides* will degenerate and few or no new plants will grow. This trend will be exacerbated if new areas of dune do not develop, due to lack of sediment.

- Succession to woodland (**950 Biocenotic evolution**)

SD18 *H. rhamnoides* scrub is not a stable community. Over time it develops into mixed species scrub and then woodland. *H. rhamnoides* rapidly disappears from these later communities.

- Air pollution (**702 Air pollution**)

Based on an assessment of relevant literature, this habitat is potentially sensitive to air pollution, but it has not been possible to undertake an assessment of potential impact based on critical loads because of the poor equivalence between this habitat and those for which critical loads are set (see Technical note III).

4.2 Current condition

4.2.1 Common Standards Monitoring condition assessments

Condition assessments based on Common Standards Monitoring (see <http://www.jncc.gov.uk/page-2199>) provide a means to assess the structure and functioning of H2160 in the UK. The following attributes were examined for all CSM assessments relevant to the habitat:

- Habitat extent,

- Vegetation structure: range of zones of vegetation,
- Vegetation structure,
- Vegetation composition,
- Other negative indicators (negative indicator species and signs of disturbance).

SAC condition assessments

Table 4.2.1 and Map 4.2.1 summarise the Common Standards Monitoring condition assessments for UK SACs supporting habitat H2160. These data were collated in January 2007. The maps give an impression of the overall spread of where Unfavourable and Favourable sites exist (summary statistics for the map are given in Section 7.2). The combined assessments show that of the SACs assessed:

- 100% of the area and 100% of the number of assessments was Favourable;
- at least 79% of the total UK habitat area was in Favourable condition.

SSSI/ASSI condition assessments

SSSI/ASSIs Common Standards Monitoring condition assessments are not relevant as most or all the resource is on SACs.

Table 4.2.1 Common Standards Monitoring condition assessment results for UK SACs supporting H2160. See notes below table for details. Information on the coverage of these results is given in Section 7.2.

Condition	Condition sub-categories	Area (ha)	Number of site features
Unfavourable	Declining		
	No change		
	Unclassified		
	Recovering		
	Total		0
	% of all assessments	0%	0%
	% of total UK resource	0%	unknown
Favourable	Maintained		
	Recovered		
	Unclassified	185	1
	Total	185	1
	% of all assessments	100%	100%
	% of total UK resource	79%	unknown

Notes

Data on features that have been partly-destroyed have been excluded from this table because they are not relevant to the consideration of present condition.

The data included are from CSM assessments carried out between April 1998 and December 2006. NB: these include additional and some up-date data from those used in the six year report produced by JNCC. (Williams, J.M., ed. 2006. *Common Standards Monitoring for Designated Sites: First Six Year Report*. Peterborough, JNCC).

Only assessments made for qualifying interest features on SAC have been included in this analysis.

Area figures for CSM assessments have been calculated using the data presented on the standard Natura 2000 data forms submitted to the EU.

Current Condition of H2160 based on Common Standard Monitoring condition assessments (See Sections 4.2 and 7.2 for further information)		
Map 4.2.1 SAC assessments	Map 4.2.2 Assessments strongly indicative of the condition on SSSI/ASSIs	Map 4.2.3 Assessments weakly indicative of the condition on SSSI/ASSIs
<p>Current status of HSD features CURRENT_ST ■ unfavourable ■ favourable ■ not assessed not on SAC</p>	Not applicable	Not applicable
<p>Key</p> <p><u>Red = Unfavourable</u>, i.e. the square contains at least one SAC where this habitat feature is present and has been judged Unfavourable</p> <p><u>Green = Favourable</u>, i.e. the square contains at least one SAC where this habitat feature is present and has been assessed as Favourable but there are no Unfavourable SAC features</p> <p><u>Blue = SAC not assessed</u>, i.e. the square contains at least one SAC supporting this habitat feature but no assessment has been reported</p> <p><u>Transparent = SAC feature not present</u>, i.e. the square does not contain any SAC features of this habitat type</p>	<p>Key*</p> <p><u>Green</u> – 80 – 100% of assessed features on 10km square are Favourable</p> <p><u>Yellow</u> - 50 – 80% of assessed features on 10km square are Favourable</p> <p><u>Orange</u> - 20 – 50% of assessed features on 10km square are Favourable</p> <p><u>Red</u> - 0 – 20% of assessed features on 10km square are Favourable</p> <p>*This is the same key as was used for JNCC CSM Report 2006</p>	

4.3 Typical species

Typical species^{2.5.3}:

Hippophae rhamnoides

Typical species assessment^{2.5.4}:

Change in 10 km square occupancy across UK over last 25 years

Table 4.3.1 Characteristic species

Typical species considered ^{2.5.3} :	Trend	Method(s) used to assess typical species ^{2.5.4} :
<i>Hippophae rhamnoides</i>	Sig. increase, but <25% in 25 yrs	Trend based on analysis of BSBI Atlas 10-km square records (1930-69 and 1987-99)*

* See: <http://www.jncc.gov.uk/page-3254>

In the UK the H2160 habitat is defined by the presence of large amounts of *H. rhamnoides*. The equivalent NVC community, SD18, has relatively few other constituent species. Where *H. rhamnoides* is still colonising mobile and semi-fixed dune grassland (SD18a), some of the pre-existing grassland species are still present – in particular marram and red fescue. Where a closed canopy has formed, a sparse nitrophilous ground flora develops – with nettle, false oat-grass and woody nightshade frequent.

4.4 Conclusions on specific structures and functions (including typical species)

Conclusion^{2.6.iii}:

Favourable

The EC Guidance states that where “structures and functions are in good condition and no significant pressures exist”, the conclusion should be Favourable. In the UK, this was generally taken to mean that less than 5% the habitat area was in Unfavourable condition.

CSM site condition assessments show that a large part of this habitat is classed as in Favourable condition. However, there is currently a predominance of early and mid successional stages of Dunes with *Hippophae rhamnoides*, with limited representation of mature stands. In addition, on most sites within its natural range (except to some extent in Lincolnshire), its presence and structure are more by default than positive management. Management on all these sites concentrates on achieving Favourable condition for the open grassland communities.

5. Future prospects

5.1 Main factors affecting the habitat

5.1.1 Conservation measures

- Protection within designated sites

Around 79% of the resource of H2160 lies within SACs with management measures specifically aimed at maintaining and enhancing the features for which they are designated, and to address some of the pressures listed within section 4.1 and the future threats listed in section 5.1.2.

- UK BAP

The habitat is covered by the *Coastal sand dunes* action plan under the UK Biodiversity Action Plan (see <http://www.ukbap.org.uk>), as well as under country and local biodiversity action plans and strategies, with targets to maintain, improve, restore and expand the resource.

Although still controversial, attitudes within the nature conservation community towards scrub are in the process of changing – acknowledging it as a habitat in its own right, and not simply as a problem for other more open habitats. The lead on this has been taken on inland terrestrial habitats (Mortimer *et al.*, 2000). Reassessment of the place of scrub and woodland on dunes is less advanced but it is likely that, in

the future, scrub and woodland will be more actively retained on dunes, both within and outside the native range of *H. rhamnoides*.

The east coast dune systems on which *H. rhamnoides* occurs within its native range are generally relatively narrow and do not have a history of large scale mobility or new accretion. There is therefore not a large amount of optimum substrate for the development of new areas of *H. rhamnoides* scrub. A consequence of this is that the large pulse of *H. rhamnoides* scrub that has developed in the last 50 years will mature without an equivalent area of young *H. rhamnoides* developing. This is being addressed at the core sites in Lincolnshire by the introduction of a 'coppice' rotation of about 25 years' length to mimic the early stages of development. However, it is too early to assess how well the *H. rhamnoides* will respond to this. There is a risk that it will lose vigour and be replaced by a more mixed species scrub.

H. rhamnoides will continue to occur on a number of large dune systems on the west coast of England (and Wales), where there is probably more scope to retain a full range of ages and structures of H2160 Dunes with *H. rhamnoides*.

5.1.2 Main future threats^{2.4.11}

The most obvious major future threats to H2160 are listed below, several of which are referred to in Section 4.1. Note that the balance of threats is likely to shift away from conservation management clearance and towards succession to woodland.

- Clearance (**102 Mowing /cutting**)
- Lack of dune mobility (**990 Other natural processes**)
- Succession to woodland (**950 Biocenotic evolution**)

- Air pollution (**702 air pollution**)

Based on an assessment of relevant literature, this habitat is potentially sensitive to air pollution, but it has not been possible to undertake an assessment of its potential future impact based on critical loads because of the poor equivalence between this habitat and those for which critical loads are set (see Technical note III).

- Climate change

Based on the literature review (Technical note IV) climate change is considered a major threat to the future condition of this habitat especially in the long term. However, there is a high degree of uncertainty in defining future climate threats on habitats and species due to uncertainty in: future greenhouse gas emissions; the consequential changes in climatic features (for instance temperature, precipitation CO₂ concentrations); the responses of habitats and species to these changes (for instance location, phenology, community structure) and the role of other socio-economic drivers of environmental change. The scale of change in habitats and species as a result of climate change will vary across ecosystems. Small changes in the climate are more likely to have a substantial impact on habitats and species which exist within a narrow range of environmental conditions. The future impacts of climate change on UK biodiversity will be exacerbated when coupled with other drivers of environmental change.

5.2 Future condition (as regards range, area covered and specific structures and functions)

5.2.1 Common Standards Monitoring condition assessments

The Common Standards Monitoring condition assessments reported in Sections 4.2.1-2 provide a basis to predict the potential future condition of H2160 in the UK. This involved treating all assessments currently identified as either Favourable or Unfavourable recovering as future-favourable: remaining categories were treated as future-unfavourable – see Table 5.2.1.1. There are a number of caveats to this approach, which are set out beneath this table.

SAC condition assessments

Table 5.2.1 and Map 5.2.1 summarise the predicted potential future condition of H2160 on UK SACs. This is based on the approach described above. The maps give an impression of the overall spread of where future-unfavourable and future-favourable sites are predicted to occur (summary statistics for the map are given in Section 7.2.). The combined assessments show that of the SACs assessed:

- 100% of the area and 100% of the number of assessments fall within the future-favourable category;
- at least 79% of the total UK habitat area falls within the future-favourable category.

Table 5.2.1 Predicted future condition of UK SACs supporting H2160 based on current Common Standards Monitoring condition assessments. See notes below table for details. Information on the coverage of these results is given in Section 7.2.

Future condition	Present condition	Area (ha)	Number of site features
Future-unfavourable	Unfavourable declining		
	Unfavourable no change		
	Unfavourable unclassified		
	Total		
	% of assessments	00%	00%
	% of total UK extent	0%	Unknown
Future-favourable	Favourable maintained		
	Favourable recovered		
	Unfavourable recovering		
	Favourable unclassified	185	1
	Total	185	1
	% of assessments	100%	100%
	% of total extent	79%	Unknown

Note that the scenario presented above is based on the same information as used to construct the Table in section 4.1. It is based on the following premises:

- the Unfavourable-recovering condition assessments will at some point in the future become Favourable.
- all Unfavourable-unclassified sites will remain Unfavourable, which is probably overly pessimistic;
- sympathetic management will be sustained on sites already classified as Favourable and these will not be seriously damaged by any unforeseen events.

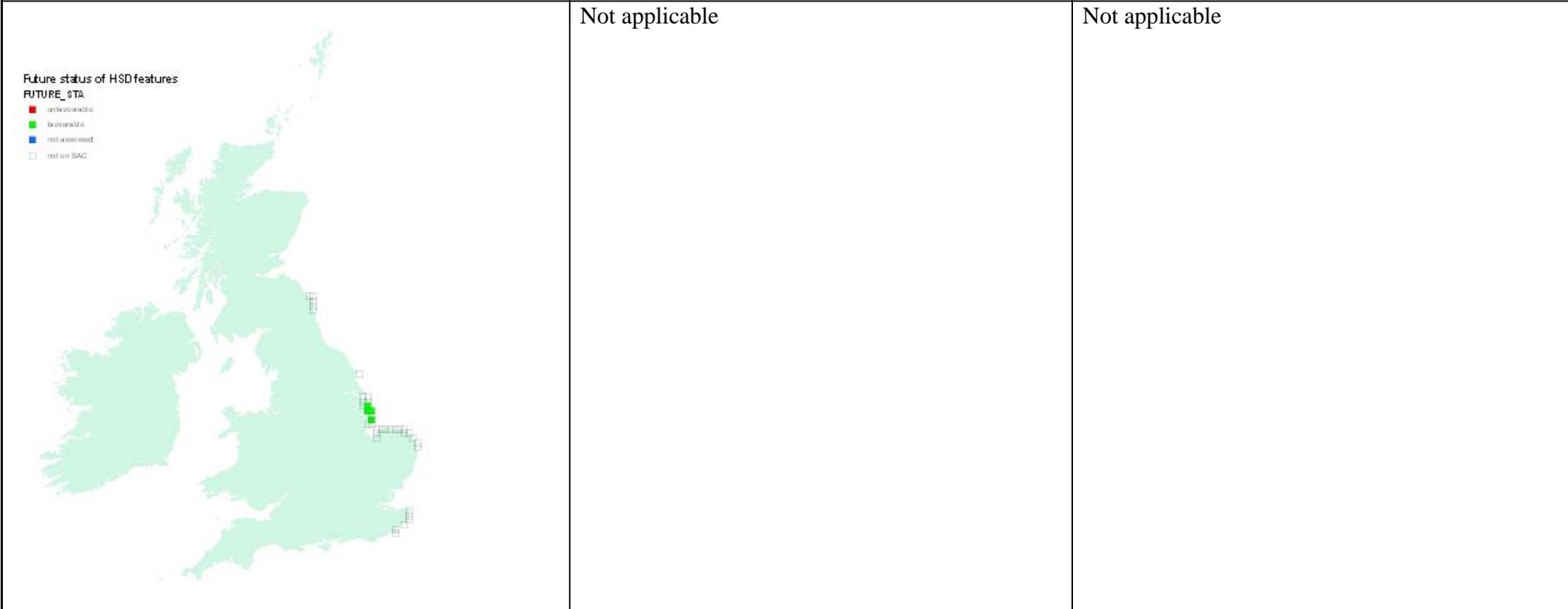
IMPORTANT NOTE: we do not have information on the timescale of the predicted recovery, which may be influenced by many past, natural and human related factors. A sustained, sympathetic management regime is more likely to result in 'Favourable' condition being attained.

SSSI/ASSI condition assessments

SSSI/ASSIs Common Standards Monitoring condition assessments are not relevant as most or all the resource is on SACs.

Predicted Future Condition of H2160 based on Common Standard Monitoring condition assessments (See Sections 5.2 and 7.2 for further information on these maps)

Map 5.2.1 SAC assessments	Map 5.2.2 Assessments strongly indicative of the condition on SSSI/ASSIs	Map 5.2.3 Assessments weakly indicative of the condition on SSSI/ASSIs
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<p>Key <u>Red</u> = <u>future-unfavourable</u>, i.e. the square contains one or more SACs where this habitat feature is present and has been predicted to be future-unfavourable <u>Green</u> = <u>future-favourable</u>, i.e. the square contains at least one SAC where this habitat feature is present and has been predicted to be future-favourable <u>Blue</u> = <u>SAC not assessed</u>, i.e. the square contains at least one SAC supporting this habitat feature but no assessment has been reported <u>Transparent</u> = <u>SAC feature not present</u>, i.e. the square does not contain any SAC features of this habitat type</p>	<p>Key* <u>Green</u> – 80 – 100% of assessed features on 10km square are Favourable <u>Yellow</u> - 50 – 80% of assessed features on 10km square are Favourable <u>Orange</u> - 20 – 50% of assessed features on 10km square are Favourable <u>Red</u> - 0 – 20% of assessed features on 10km square are Favourable *This is the same key as was used for JNCC CSM Report 2006</p>
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5.3 Conclusions on future prospects (as regards range, area covered and specific structures and functions)

Conclusion^{2.6.iv}: **Favourable**

The EC Guidance states that where “habitat prospects are good with no significant impacts from threats expected and long-term viability assured”, the judgement should be Favourable. In the UK, this was generally taken to mean that range and/or area are stable or increasing, and more than 95% of the habitat area is likely to be in Favourable condition in 12-15 years.

CSM site condition assessments show that a large part of this habitat (79% of total UK resource) is expected to remain in Favourable condition. However, there is still some uncertainty over representation in the future of a full range of successional stages of *H. rhamnoides* scrub, due to the slow change in attitudes to scrub in general and the continuing conflicting objectives with other Annex 1 dune habitats. Concentrating on its native range, there is a risk that the current resource will mature and change into mixed scrub and woodland, without new areas of early succession *H. rhamnoides* scrub developing. The UK BAP, working towards enhancing future viability, has targets to bring the dune systems into Favourable or recovering condition by 2010 while maintaining the current extent. Given progress already made and some additional recovery once further conservation measures are put into place, the expectation is that circa 80% of the habitat will be in Favourable condition in the next 10-15 years.

6. Overall conclusions and judgements on conservation status

Conclusion^{2.6}: **Favourable**

All parameters have been assessed as Favourable. Hence, the overall conclusion is also Favourable.

Table 6.1 Summary of overall conclusions and judgements

Parameter	Judgement	Grounds for Judgement	Confidence in judgement*
Range	Favourable	Current range is stable and not less than the favourable reference range.	2
Area covered by habitat type within range	Favourable	Current extent is stable and not less than the favourable reference area.	2
Specific structures and functions <small>(including typical species)</small>	Favourable	Structures and functions considered to be in good condition with no significant pressures.	2
Future prospects <small>(as regards range, area covered and specific structures and functions)</small>	Favourable	Habitat prospects over the next 12-15 years considered to be good with no significant impacts from threats expected and long-term viability assured.	2
Overall assessment of conservation status	Favourable	All individual judgements are Favourable.	2

Key to confidence in judgement: 1 = High; 2 = Medium; 3 = Low

7. Annexed material (including information sources used 2.2)

7.1 References

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Map data sources

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7.2 Further information on Common Standards Monitoring data as presented in Sections 4.2 and 5.2

Table 7.2.1 Summary of the coverage of the data shown in Tables 4.2.1 and 5.2.1

Data	Value
Number of SACs supporting feature (a)	1
Number of SACs with CSM assessments (b)	1
% of SACs assessed (b/a)	100
Extent of feature in the UK – hectares (c)	235
Extent of feature on SACs – hectares (d)	185
Extent of features assessed – hectares (e)	185
% of total UK hectarage on SACs (d/c)	79
% of SAC total hectarage that has been assessed (e/d)	100
% of total UK hectarage that has been assessed (e/c)	79

Notes

Extent of features on SACs (d) includes only those features that have been submitted on the official Natura 2000 data form as qualifying features. This figure is based on the habitat extent figures presented on standard Natura 2000 data forms.

The data included are from CSM assessments carried out between April 1998 and December 2006. NB: these include additional and some up-date data from those used in the six year report produced by JNCC (Williams, J.M., ed. 2006. *Common Standards Monitoring for Designated Sites: First Six Year Report*. Peterborough, JNCC).

Table 7.2.2 Summary of grid square map data shown in Maps 4.2.1-3 and 5.2.1-3

Status	Number of squares	Proportion of all squares
Current – Unfavourable (red)	0	0%
Current – Favourable (green)	4	11%
On SAC but not assessed (blue)	0	0%
Not on SAC (transparent)	34	89%
Total Number of 10km squares (any colour)	38	100%
Future – Unfavourable (red)	0	0%
Future – Favourable (green)	4	11%