

Mudflats

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1. Status of the habitat / species

Please give your most accurate assessment of the status of your species or habitat for the UK and for each country. Leave the row blank where the species or habitat does not occur in that country.

	Amount:	Units:	Year:	Accuracy:	Reference for data:
UK	277385	<input type="text"/>	2002	Partial or sample survey	Updated UK figure, using new figure for Wales.
E	206900	<input type="text"/>	1996	Partial or sample survey	JNCC, 1996. Coasts & seas of the UK, Coastal Directory Series. Also Buck, A.L., 1997. An inventory of UK estuaries. JNCC.
NI	10985	<input type="text"/>	1996	Partial or sample survey	JNCC, 1996. Coasts & seas of the UK, Coastal Directories Series.

S	45500		1996	Partial or sample survey	JNCC, 1996. Coasts & seas of the UK, Coastal Directories Series.
W	14000		2002	Partial or sample survey	CCW Phase 1 survey (on-going)

Information originally entered by Brian Empson on Thursday, October 17, 2002
 Information last changed by Brian Empson on Tuesday, December 10, 2002

2. Trend in Biological Status

Please give your best estimate of the current trend for your species or habitat for the UK, and each appropriate country, using the following categories. Please give an estimate unless there is absolutely no information on which to assess status.

	Trend:	Accuracy:	Reference for data:
UK	Not know n		
E	Not know n		
NI	Not know n		
S	Not know n		

W	Declining (slow ing) ▼	Informed guess ▼	Based on reclamation of coastal land in Wales

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3. Status of knowledge

To what extent is our scientific knowledge of the habitat / species (e.g research information, autecological knowledge, knowledge for effective re-introduction or habitat restoration/re-creation) sufficient to deliver the plan targets?

Please give an assessment for the UK overall but if there is significant difference in knowledge between different countries this should be noted.

Status of knowledge:	Know ledge insufficient but research currently underw ay. ▼
Notes:	National Biodiversity Netw ork South-w est England Pilot Project underw ay.

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4. Progress on targets

Each of the revised targets from the 2001 Targets Review is listed below.

For each one please give a qualitative assessment of progress for the UK and each country. You can also enter quantitative information on progress by entering data in each of the target boxes and entering the current amount in the amount box. For more information see Help.

T1: Maintain at least the present extent and regional distribution of the UK's mudflats. This target will require compensating predicted losses to development by the restoration of mudflats. Whilst this may not be possible in the same location, it should be within the same littoral sediment cell.

Target start date:

1999

Target end date:

ongoing

Target units:



	Progress	Target	Current	Accuracy	Monitoring
UK	Some progress (behind schedule) ▼				
E	Some progress (behind schedule) ▼		28	Full survey ▼	Yes ▼
NI	Some progress (behind schedule) ▼				
S	Some progress (behind schedule) ▼				

W	Some progress (behind schedule) ▼			Informed guess ▼	Under consideration ▼
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T2: Create and restore enough intertidal area over the next 50 years to offset predicted losses to rising sea level in the same period. Predicted losses in the next 15 years should be offset in the next 10 years.

Target start date:	1999
Target end date:	2050
Target units:	▼

	Progress	Target	Current	Accuracy	Monitoring
UK	Unknown ▼			▼	▼
E	Unknown ▼			▼	▼
NI	Unknown ▼			▼	▼
S	Unknown ▼			▼	▼
W	Unknown ▼			▼	▼

T3: Restore estuarine water quality to ensure that existing mudflats fulfil their important ecological and conservation role.

Target start date:

1999

Target end date:

ongoing

Target units:

	Progress	Target	Current	Accuracy	Monitoring
UK	<input type="text" value="Some progress (on schedule)"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="Under active development"/>
E	<input type="text" value="Some progress (on schedule)"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="Under active development"/>
NI	<input type="text" value="Some progress (on schedule)"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="Under active development"/>
S	<input type="text" value="Some progress (on schedule)"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="Under active development"/>
W	<input type="text" value="Some progress (on schedule)"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="Under active development"/>

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5. Current factors affecting the habitat

When your plan was published the factors (threats) that were thought to be causing loss or decline were listed (in section 2). Re-assessing the current situation may help prioritise actions for your species or habitat. In addition, this enables identification of the main threats to biodiversity across all plans. It is useful to assess whether the importance of different factors is changing and whether there are new issues emerging.

The threat section from the original plan is duplicated below, and a first attempt at categorising the threats has been made. Please confirm that you agree with the categorisation of the original threats identified in the plan (by deleting any wrongly categorised threats and adding the correct category). Please also add to the list any significant threats that have emerged recently, being mindful of environmental issues that have increased in profile or been recognised since plan publication (e.g. climate change). Once you are happy that the list contains all the threats identified in the published plan together with any new ones, please rank them in order of severity (1= highest threat). If the situation has changed and one of the published threats is no longer significant, please leave this in the list but give this rank = 0.

Current factors affecting the habitat from the original publication:

- 2.1 It has been estimated that sea level rise will result in a loss of 8000 to 10,000 ha of intertidal flats in England between 1993 and 2013. Much of this loss is expected in southern and south-east England although research suggests that the major firths in Scotland will also be affected. The rise results from sinking of the land following the end of the last ice age, plus the effects of global warming. Low water moves landward, but sea defences prevent a compensating landward migration of high water mark with the result that intertidal flats are squeezed out.
- 2.2 Land claim, for urban and transport infrastructure and for industry, has removed about 25% of Great Britain estuarine intertidal flats and up to 80% in some estuaries. Loss of mudflats reduces estuary productivity and may influence other estuary habitats such as saltmarsh. Although land claim has slowed considerably in recent years, it has not stopped.
- 2.3 Barrage schemes for water storage, amenity, tidal power and flood defence continue to pose a threat to the integrity and ecological value of mudflats in estuaries and enclosed bays.
- 2.4 Diffuse and point source discharges from agriculture, industry and urban areas, including polluted storm-water run-off, can create abiotic areas or produce algal mats which may affect invertebrate communities. They can also remove embedded fauna and destabilising sediments thus making them liable to erode.
- 2.5 Oil and gas extraction and related activities, and dredging for navigation, have an important effect on sediment biota and on sediment supply and transport. Many coastal areas, including estuaries, are now either licensed or available for exploration and development.
- 2.6 Fishing and bait digging can have an adverse impact on community structure and substratum. For example, suction dredging for shellfish or juvenile flatfish bycatch from the shrimp fisheries may have a significant effect on important predator populations.

2.7 Human disturbance affects bird populations' roosting and feeding areas.

2.8 The introduction of new or non-native species, for example the spread of cord-grass *Spartina anglica* which has vegetated some upper-shore mudflat areas with important ecological consequences in some areas.

2.9 Within estuaries, mudflats deposited in the past may erode due to changed estuarine dynamics and remobilised sediment may be redeposited elsewhere in the same littoral sediment cell. Higher sea level and increased storm frequency, resulting from climate change, may further affect the sedimentation patterns of mudflats and estuaries.

Keyworded factors:

To add factors click the add button, to delete factors check the delete box and then click the delete button.

Delete:	Rank:	Keyword:
<input type="checkbox"/>	9	Accidental mortality Fisheries bycatch - netting
<input type="checkbox"/>	8	Habitat loss / degradation - fisheries Bait digging
<input type="checkbox"/>	2	Habitat loss / degradation - infrastructure development Coastal defence works
<input type="checkbox"/>	4	Habitat loss / degradation - infrastructure development Dredging (coastal)
<input type="checkbox"/>	3	Habitat loss / degradation - infrastructure development Port infrastructure
<input type="checkbox"/>	1	Habitat loss / degradation Erosion (coastal)
<input type="checkbox"/>	0	Human disturbance Interference / displacement

- 7 Invasive/non-native species (directly affecting species) | Competition
- 5 Pollution - land | Agricultural (other agro-chemicals)
- 6 Pollution - marine | Industrial / commercial

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6. Constraints (optional)

Select the three most significant constraints to achieving the targets of the plan, and indicate the order of priority (1-3 with 1 being the most significant constraint). Only include constraints that are acting as a real blockage to delivering the plan targets or leading to a substantial delay in their delivery. For each constraint, please indicate whether you feel that it is within the ability of the lead partner or steering group to resolve the constraint.

Constraint 1:	
Constraint keyword:	Country:
Research, survey and information Identification techniques - required	<input checked="" type="checkbox"/> UK <input checked="" type="checkbox"/> E <input checked="" type="checkbox"/> NI <input checked="" type="checkbox"/> S <input checked="" type="checkbox"/> W
Solution:	Solution type:
agreed definition and target enabling an accurate rate of change to be established.	Legislation and policies

Able to resolve:



Constraint 2:

Constraint keyword:

Research, survey and information | Monitoring techniques poorly understood

Country:



Solution:

demonstration projects to be promoted to determine the suitability of habitat creation techniques at a larger scale.

Solution type:

Research

Able to resolve:



Constraint 3:

Constraint keyword:

Research, survey and information | Data audit/review - required

Country:



Solution:

Solution type:

Continue progress on water quality parameters through the EA/EN/CCW Water Quality Technical Advisory Group

Management

Able to resolve:



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7. Steering Group

Please list all organisations that are represented on the steering group for your species/habitat (include all organisations that have contributed either directly or by correspondence within the last 3 years). Where a steering group does not exist please leave this form blank.

To add organisations click the add button, to delete organisations check the delete box and then click the delete button.

Delete: Organisation:

- Countryside Agency
- Countryside Council for Wales
- Department for the Environment, Food and Rural Affairs
- English Nature
- Environment Agency

<input type="checkbox"/>	Environment and Heritage Service
<input type="checkbox"/>	Joint Nature Conservation Committee
<input type="checkbox"/>	National Trust
<input type="checkbox"/>	Royal Society for the Protection of Birds
<input type="checkbox"/>	Scottish Natural Heritage
<input type="checkbox"/>	Wildlife Trust

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8. Other Groups/Organisations

Please list any additional groups/organisations that are actively involved in implementing your action plan. (This is to try to assess which groups are involved where there is no steering group and any additional contributors). If you do not have any other organisations involved, click [here](#).

To add organisations click the add button, to delete organisations check the delete box and then click the delete button.

9. Linkages to LBAPs

a) Which of the following most accurately describes your interaction with LBAPs, up to now?

Little or no contact with LBAPs.

b) If you have been in contact with LBAPs how was it initiated?

c) Irrespective of current contact, how important do you consider LBAP co-ordinated action will be in achieving the targets of the plan? Select from category:

Critical

d) If you consider LBAP action to be anything other than unimportant, which of the following forms of engagement do you think would be appropriate? (Note, you may tick more than one category.)

- Indirect contact (e.g. posting information on UKBAP website, sharing work programmes, meeting schedules, articles in Biodiversity News, newsletter)
- Provision of generic information on habitat and/or species (e.g. advice and guidance on habitat/species ecology and management)
- Direct provision of advice (e.g. proactive approach to LBAP, response to consultations from LBAPs, advice on LBAP target setting)
- Reciprocal attendance at meetings
- Development of collaborative projects

Other (please specify):

>

10. Successes (optional)

Have there been key successes in the implementation of your plan that should be drawn to the attention of government, the wider BAP partnership, or the public? Please give a brief description (i.e. 2-3 sentences) of up to three successes and allocate a topic area to each of them:

Success 1:

Description:

Three small scale demonstration sites resulting in the creation of 28 hectares of mudflat. Further potential in the Maw ddach estuary in Wales with the restoration of 300 ha of a mixture of habitats.

Country:

UK E NI S W

Keyword:

Species and habitat management | Habitat creation / restoration - achieved

Success 2:

Description:

Country:

Setting of water quality targets, including new sediment targets in the shortly to be revised EA/EN Guidelines for managing water quality impacts within UK European marine sites, Oct 1999.

UK E NI S W

Keyword:

Policy, legislation and designation | Improved protection through site designation - international (SPA, SAC, RAMSAR)

Success 3:

Description:

GIS Mapping of mudflats covering entire UK resource as part of a joint ENVEA R&D project.

Country:

UK E NI S W

Keyword:

Research, survey and information | Baseline survey - achieved or started

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Thankyou for answering the questions. You have not yet completed all of the questions. You can go back and answer the additional ones or edit the ones you have already answered whenever you want.

Sign-off:

When you have completed all of the questions that you are able to, you must sign off your reporting.

I agree that the steering group (if present) have agreed the information in this report and that the following contact point has also signed it off:

Contact point:	Brian Empson	email:	Brian.empson
Your name:	Brian Empson		
Date:	24th Dec 2002		
