

Views About Management



A statement of English Nature's views about the management of The Wash Site of Special Scientific Interest (SSSI).

This statement represents English Nature's views about the management of the SSSI for nature conservation. This statement sets out, in principle, our views on how the site's special conservation interest can be conserved and enhanced. English Nature has a duty to notify the owners and occupiers of the SSSI of its views about the management of the land.

Not all of the management principles will be equally appropriate to all parts of the SSSI. Also, there may be other management activities, additional to our current views, which can be beneficial to the conservation and enhancement of the features of interest.

The management views set out below do not constitute consent for any operation. English Nature's written consent is still required before carrying out any operation likely to damage the features of special interest (see your SSSI notification papers for a list of these operations). English Nature welcomes consultation with owners, occupiers and users of the SSSI to ensure that the management of this site conserves and enhances the features of interest, and to ensure that all necessary prior consents are obtained.

Management Principles

All habitats

The habitats within this site are highly sensitive to inorganic fertilisers and pesticides, and their use within and adjacent to the site should either be avoided or carefully controlled. Recreational activities and access may also need to be managed to avoid harmful impacts.

Coastal saltmarsh

Saltmarshes form the upper vegetated portions of intertidal mudflats in sheltered coastal locations, such as estuaries, lagoons and beach plains. There is typically a zonation of vegetation, from plants adapted to regular immersion by the tides (halophytes), through to more widespread plant species in the areas less frequently covered by the sea. The halophyte plant species are confined to this type of habitat, and areas of structurally diverse vegetation provide good invertebrate habitat. Saltmarshes are also important nursery sites for several fish species, and important refuge, feeding and breeding grounds for coastal birds. However, coastal birds are vulnerable to anthropogenic disturbance such as recreation. Consequently, human activities which cause disturbance need to be effectively managed using a range of measures such as the provision of bird refuges, restricting footpaths to the sea banks, adoption of good practice guides by different user groups and education.

Saltmarshes that have been traditionally grazed by livestock can support a variety of different habitats. These can be botanically rich and can be used by both wintering and breeding birds. Ideally, livestock grazing should create a mosaic of tussocks and short turf as this is attractive to both over-wintering and breeding birds. However, the precise timing and intensity of grazing will vary according to local conditions and nature conservation requirements, for example the amount of tidal inundation, the type or availability of stock, and/or the need to avoid trampling of ground nesting birds. If grazing were to cease there may be a loss of botanical diversity and loss of bird interest, hence grazing management should be maintained on traditionally grazed areas. Although care should be taken to avoid overgrazing, as this may reduce the diversity of animal and plant species that the saltmarsh is able to support, as well as potentially impact upon the sediments supporting the saltmarsh.

Not all saltmarsh habitats require active management to retain their conservation interest. Where there has not been a history of livestock grazing, the saltmarsh vegetation will reflect this and grazing intolerant species are likely to be present. Consequently, if these habitats support species that are part of an interest feature of the site, livestock grazing should not be introduced.

There are a number of factors that are contributing to saltmarsh change that management may need to take into consideration. These include coastal erosion as a result of coastal flood-defence works, rising sea-levels, variations in sediment deposition, and land claim for development.

Littoral sediments (mud and sand flats)

Intertidal mud and sand flats include a range of generally muddy or sandy low-gradient shores that are exposed to air during low tide and submerged during the higher tides. High energy shores, such as those on open coasts, are generally sandy in nature whilst more sheltered, low energy flats are muddier. They support a wide variety of marine invertebrates that represent an important food source for many fish and bird species.

Good water quality and sediment quality should be maintained, and the sediment budget within the estuarine or coastal system should not be restricted by anthropogenic influences.

The birds that use mud and sandflats for feeding and roosting are vulnerable to disturbance from human activities, for example, bait digging, shellfish gathering, dog walking and wildfowling. These activities can lead to reduced time spent feeding, or individuals being restricted to areas with a poor food supply. Disturbance should therefore be minimised or avoided, especially at times when bird populations may be stressed, such as during severe winter weather.

The distribution, extent and species composition of marine invertebrate communities should be maintained. Damage and or loss of these communities may occur through smothering or selective extraction of species for example by disposal of dredge spoil, bait digging, shellfish gathering and commercial fishing. Management needs to

ensure that littoral invertebrate communities are maintained and not unsustainably exploited.

The location and extent of mud or sandflats is dependent on the extent to which the estuary or coast where they occur is constrained from responding to sea level rise and changing sediment regimes. Management needs to create space to enable landward roll-back to take place in response to sea-level rise, and should also allow the system to be dynamic and retain the flexibility to respond to associated changes such as the movement of physical features within the system, e.g. migrating subtidal sandbanks.

Biogenic Reefs

Biogenic reefs are large solid structures that are created by accumulations of marine animal species, usually bivalves or tube-forming worms. The structure of the reef may be composed entirely of the reef-building organism and its tubes or shells, or it may also include sediments, stones and shells bound together by these organisms. Many important seaweed and animal communities depend upon these habitats.

Biogenic reefs are fragile and therefore physical disturbance (e.g. trampling, bottom trawling, shellfish farming, bait digging, dredging and gravel extraction) should be avoided. The sediment budget must not be altered by anthropogenic influences, including shoreline development. For example, increased sediment released by dredging may lead to a decline in the condition of mussel reefs. Conversely, aggregate extraction may remove the sediment supply that is necessary to build or maintain biogenic reefs. It is also important to maintain good water and sediment quality.

Vegetated shingle

Shingle is defined as sediment with particle sizes from 2-200mm. Shingle beaches form where sediment is first deposited on the shore by wave action. These deposits can then build up into more stable spits, bars or forelands. The types of vegetation that occur on shingle depend on the stability and structure of the shingle itself, but all must be able to cope with the unique physical and hydrological conditions typical of this habitat. This results in some communities being unique to shingle; including unusual moss- and lichen-rich communities that are of great conservation value. Shingle structures also provide important habitats for invertebrates and breeding birds.

A key management requirement is to avoid or minimise surface disturbance by anthropogenic factors, especially in the more open communities. Many of the vegetation types and species associated with shingle are fragile and vulnerable to damage from trampling. This breaks up the fine humus that develops in the upper layers of the shingle that is vital for the plants to survive. Where recreational pressures are significant enough to result in the loss of vegetation cover, or prevent its recovery, it may be necessary to take steps to manage access. Disturbance of areas important for breeding birds should be minimised during the breeding season.

Where there is more closed vegetation cover, light grazing, by rabbits for example, may be all that is needed to prevent scrub encroachment on areas of grassland and heath. However, if there is a tradition of sheep grazing; it may be beneficial to continue this practice at a low intensity. In some cases grazing is not necessary, because of the low rates of plant growth on shingle structures, and can even be

damaging, due to the fragility of shingle habitats. Consequently, the introduction of grazing where it has not been traditionally practised is not always beneficial.

Coastal lagoons

Coastal lagoons are saline water bodies separated from the sea by a barrier (e.g. sand, shingle or rock sill). A small number are separated by tidal narrows which restrict the flow of water into and out of the lagoon. This separation from the sea makes them unique among coastal habitats and means that saline lagoons are either tideless, or where inlets occur, the tide has only a restricted effect on the lagoon. They retain part of their water-body at low tide, and this water may be either saline or brackish. They often support unusual assemblages of marine, estuarine and aquatic plants and animals, including lagoonal specialist species.

Any management needs to be carefully tailored to the needs of each individual lagoon and should be based on an understanding of the natural features of importance and the external factors affecting the lagoon. Indeed, where a lagoon is in a good and stable condition, active management is unlikely to be necessary. Maintaining salinity and water depths can be a key management priority, particularly where some lagoons become increasingly separated from the sea as a result of natural coastal processes - the balance between freshwater (e.g. from rainfall, streams or artificial outputs) and saline (i.e. sea water) inputs may change as a result. It may be necessary to actively manage freshwater and seawater input to favour certain species or communities. Whilst freshwater input is not essential to the conservation of lagoons, some connectivity with seawater is.

The water depth is also critical to many of the lagoonal specialist species with a depth between 0.5 and 1m being desirable. Some deeper water refuges are also beneficial. Siltation from surrounding land run-off may need to be addressed.

Water quality, and any direct and/or diffuse inputs from the surrounding land, can have a profound effect upon the productivity of lagoons and well-being of specialist species. Saline lagoons can show extreme reactions to a build up of some types of nutrients and therefore it may be necessary to actively manage inputs, especially where in close proximity to farmland and urbanised environments.

In some cases, it may be desirable to allow vegetation to encroach into the lagoon to increase the diversity of habitats present, particularly for some breeding and migratory bird species. However vegetation should not be allowed to encroach to such an extent that it significantly reduces the areas of open water and shallow water, thus reducing the variety of habitats available to specialist species within the lagoon itself.

Islands in saline lagoons can be important for breeding birds and some management of the vegetation on these islands may be necessary to provide the best conditions for breeding birds. Two typical methods of vegetation control include flooding and hand clearance.

Inshore sublittoral sediment / Subtidal sandbanks

The seabed of inshore areas may be composed of a layer of sediment, usually sands and muds, known as inshore sublittoral sediments or subtidal sandbanks. These areas

occur seaward of the low tide level and may be flat plains, or worked into forms such as sandbanks by the action of the tide. They support a range of seaweed, marine invertebrate and fish species, which in turn provide an important food source for birds.

The distribution, extent and species composition of marine invertebrate communities should be maintained. Damage and or loss of these communities may occur through smothering or selective extraction of species for example by disposal of dredge spoil and commercial fishing. Management needs to ensure that sublittoral invertebrate communities are maintained and not unsustainably exploited.

Management should aim to maintain good water and sediment quality. The sediment budget must not be restricted by anthropogenic influences such as dredging, aggregate extraction, the construction of groynes and other coastal defence structures. The habitats are sensitive to physical disturbance, including abrasion and selective extraction.

These habitats must be considered in conjunction with adjoining coastal habitats and not in isolation from the wider issues of coastal management. The location and extent of subtidal flats and sandbanks is dependent on the extent to which the estuary or coast where they occur is constrained from responding to sea level rise and changing sediment regimes. Management needs to create space to enable landward roll-back to take place in response to sea-level rise, and should also allow the system to be dynamic and retain the flexibility to respond to associated changes, such as the movement of physical features such as subtidal sandbanks.

Common Seal

This species of seal spends a large proportion of time within sheltered coastal waters, thus appropriate water quality must be maintained. They require 'haul out' areas for pupping in June and July, and also for resting throughout the year, particularly during the moulting season from July to September. In the east of England these areas are provided by estuarine sandbanks that are exposed at low tide. As such, estuary management should ensure that these areas are maintained, and that the seal's access to them is not restricted.

Anthropogenic disturbance is a major threat to viability of common seal populations. Consequently, to avoid harmful impacts upon common seals, activities which cause disturbance may need to be effectively managed using a range of measures such as the provision of common seal refuges, adoption of good practice guides by different user groups and education.