3.4 Coastal Habitats for Curlew

Curlew nest in tussocky vegetation and need plentiful supplies of invertebrates for their chicks (see Section 4.3) so during the breeding season they utilise rough farmland and open moorland and many of the High Focus Habitats of the Biosphere (see Table 1). However, curlew overwinter along the coast making it important to also consider coastal habitats when looking to support the curlew population within the Biosphere.

Coastal saltmarsh, mudflats, coastal and floodplain grazing marsh, are UK priority habitats. Although limited within, and on the edges of, the Biosphere (Map 10), these are important wintering grounds for a range of wildlife including High Focus species curlew and golden plover. Coastal saltmarsh and intertidal mudflats are priority UK BAP habitats and examples include Fleet Bay, Wigtown Bay Local Nature Reserve, Luce Bay, Loch Ryan. Other adjacent habitats, particularly wet coastal grasslands, can also be very important for curlew in the winter, where they will feed on invertebrates. The Troon Golf Links and foreshore for example can support significant numbers of wintering wildfowl and waders, particularly curlew.

3.4.1 Habitat Description

Mudflats and saltmarsh (merse) are found in estuaries, bays and low lying coastal areas. Mudflats, lying between saltmarsh and low water, are a dynamic environment with significant salt and fresh water input which undergo cycles of erosion and sediment deposition.

Salt marshes are areas of low lying vegetation covered by sea water at each tide so the vegetation is therefore highly specialised, with plants adapted to high salinity and cyclical flooding. The vegetation in turn slows water flow, thereby increasing sedimentation. They contain a rich and varied invertebrate fauna and therefore provide excellent feeding grounds for a range of shore birds such as redshank and curlew, both of which breed on merse.

The most important coastal grasslands for feeding curlew are wet rough pastures, with a relatively short sword adjacent to mudflats and saltmarshes. These grasslands are also rich in invertebrates so provide an important additional winter food source.

The condition of mudflats and saltmarshes is only known for the Cree Estuary (SSSI), where mudflats are currently in good condition but the saltmarshes were deemed to be in poor condition in 2012. The condition of coastal wet grassland is unknown.

3.4.2 Conservation Objectives

The main conservation objectives for mudflats, salt marshes and coastal grasslands are to:

- Identify areas important to wildfowl and waders, particularly curlew, and assess the current condition, vegetation assemblage and past management so the most appropriate management regimes can be identified.
- Maintain the condition of, and minimise disturbance to, these areas.

3.4.3 Management

The main aims of management for mudflats and salt marshes are to:

- Minimising diffuse pollution to prevent nutrient enrichment.
- Reduce impacts of vehicles or mechanical fishing.
- Allow landward retreat where possible to retain the natural flooding/sedimentation cycle.
- Set an appropriate grazing regime according to current condition and management: Too high a grazing level reduces diversity, with a loss of sensitive species, but if a site has been grazed this should continue at an appropriate rate to prevent the development of rank vegetation. The preferred grazing pattern of intermittent light grazing between April and October with 2-3 sheep or 0.7-1.0 young cattle per hectare (~0.5LU/ha) should meet most requirements. Moderate grazing of 5-6 sheep or 1-1.5 young cattle (~1LU/ha) between April and October will be suitable on some sites. When setting the grazing pattern always take account of wild herbivores such as grazing geese.

The main aims for management of the adjacent wet coastal grasslands used by curlew in the winter are to:

- Maintain a short to medium sward, while retaining rushes and rank areas where these are important for breeding.
- Avoid draining/clearing drains in order to maintain wet areas.
- On improved grasslands that have been identified as important foraging areas large scale re-seeding and the use of inorganic fertilizers should be avoided as both can have significant detrimental impacts on invertebrates.

3.4.4 Example Projects

- No specific projects have been identified, however, management for waders is usually well supported by agri-environment schemes.

3.4.5 Considerations

- The need to identify the current condition of the habitat and causes of any natural changes taking place then take appropriate action where necessary.
- Invasive species, for example cord grass, can colonise mud flats and disrupt the local ecology (such as at Fleet Bay).
- Wildfowling, fishing, boating and jet skis can adversely affect the condition of mudflats and saltmarshes if not managed carefully.

3.4.6 Opportunities

- Wigtown Bay Management Committee oversee sustainable management of the bay.
- Solway Firth Partnership prepares schemes of management for SNH for Luce Bay and Sands SAC.
- Actively farmed salt marsh may be eligible for funding under agri-environment scheme.

3.4.7 Further Information

Solway Firth Partnership: www.solwayfirthpartnership.co.uk

Joint Defra / Environment Agency Flood and Coastal Erosion Risk Management R&D Programme Saltmarsh management manual. Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/290974/scho0307bmkh-e-e.pdf

Survey of marine features within the Luce Bay and Sands Special Area of Conservation (SAC). SNH Commission Report No. 738. Report available at: http://www.snh.org.uk/pdfs/publications/commissioned_reports/738.pdf