

County: Lancashire **Site Name:** Lune Estuary
District: Wyre, Lancaster
Status: Site of Special Scientific Interest (SSSI) notified under Section 28 of the Wildlife and Countryside Act, 1981.
Local Planning Authority: Lancaster City Council
Wyre Borough Council
National Grid Reference: SD 395550 **Area:** 6,978.0 (ha) 17,242.6 (ac)

Ordnance Survey Sheet 1:50 000 97, 102 **1:10 000** SD 46 SW, SE
SD 45 SW, SE,
NW, NE
SD 44 NW
SD 35 NW, SE,
SW.
SD 34 NW, NE

Date Notified (Under 1949 Act): 1966 **Date of Last Revision:** 1979
Date Notified (Under 1981 Act): 1990 **Date of Last Revision:** 1990

Other Information:

1. This site is listed in 'A Nature Conservation Review', edited by D. A. Ratcliffe (1977), Cambridge University Press.
2. The site includes the Wyre–Lune Sanctuary, a National Wildfowl Refuge made a statutory bird sanctuary by the Wild Birds (Wyre–Lune Sanctuary) Order, 1963 under the Protection of Birds Act, 1954. By virtue of the interpretation Act, 1978 the Order remains in force.
3. Boundary revised on re-notification by a partial deletion and a minor extension. Cockerham Marsh, formerly part of the Lune Estuary SSSI, has been notified as a separate SSSI.

Reasons for Notification:

The Lune Estuary is situated on the coast of Lancashire extending from Heysham in the north and the Wyre Estuary in the south inland to the outskirts of Lancaster. It forms part of the Morecambe Bay intertidal system and includes extensive sand/silt flats together with saltmarsh in the form of a number of discontinuous saltings fringing the estuary. As part of Morecambe Bay, the site forms a major link

in the chain of estuaries along the west coast of Britain used by birds on migration between the breeding grounds in the far north, and the wintering grounds further south and is of international importance for the passage and wintering waterfowl it supports. A large part of the estuary, between Knott End and Cockersands Point, is covered by the Wyre–Lune Sanctuary which provides a protected roost for wintering pink-footed geese. Some of the saltmarshes are of interest for their breeding bird populations and collectively support a variety of plant communities and a number of uncommon plant species.

The mud-flats are exposed for considerable periods between tides and are rich in invertebrates. They provide extensive feeding grounds for waders and for many of the wildfowl, especially shelduck which depend on the intertidal zone almost entirely for their diet of invertebrates. The sandbanks also provided important low-tide roosting sites for pink-footed geese and other waterfowl. The estuary is fringed by a series of saltmarshes which provide roosting sites for waders at high tide and support large numbers of wildfowl, such as mallard, wigeon, shelduck and pink-footed geese.

As a whole the site regularly supports internationally important numbers of wintering oystercatcher (11,650), grey plover (1,350), turnstone (850), knot (18,500), and pink-footed geese (8,700), and nationally important numbers of curlew (920), redshank (1,370) and dunlin (6,700). The total numbers of wintering waders are also of international importance with numbers regularly exceeding the criterion of 20,000 (with average peak winter counts of 26,500 waders for the years 1983–1987). In spring and autumn the estuary provides an important staging post for sanderling on passage, and has supported up to 3,430 birds with numbers well above the qualifying levels for international importance. Spring numbers of ringed plover are regularly in excess of 670, several times the qualifying level for national importance, and passage numbers of dunlin (up to 6,300+) also exceed this criterion. The breeding bird communities of the saltmarsh are also significant and of particular note is a nationally important common tern colony on Colloway Marsh.

The saltmarshes themselves are mostly grazed by sheep or cattle producing, on the upper levels, a dense fine sward dominated by perennial grasses such as common saltmarsh grass, red fescue and creeping bent, accompanied by other salt-tolerant plants (halophytes) such as sea arrow-grass, thrift, sea milkwort and sea plantain. The marshes are dissected by irregular creeks or channels along the edges of which (where they are protected from grazing) such typical plants as sea aster, sea purslane and annual sea-blite are found. Cordgrass *Spartina anglica* occurs in patches on the seaward edge of most of the saltmarshes and forms dense swards dominating the marshes near Sunderland Point and from Glasson to Cockersands Point. The transition from saline to freshwater conditions is best shown on Middleton Marsh where the typical saltmarsh zonation is apparent. Here the outer edge of the marsh is typified by the pioneer species glasswort *Salicornia europaea* and occasional clumps of cordgrass *Spartina anglica*. The mid-marsh zone is dominated by creeping bent, thrift and sea plantain which grades into a distinct zone of sea rush *Juncus maritimus*. Above this a brackish marsh supports such non-halophytic species as hemlock water-dropwort *Oenanthe crocata*, parsley water-dropwort *Oenanthe lachenalii* and toad rush *Juncus bufonius*. The sands at the northern extremity of this marsh are notable for the occurrence of two nationally scarce plants, the sand leek *Allium scorodoprasum* and the sea radish *Raphanus maritimus*. Plants which are particularly sensitive to grazing, such as the common sea-lavender *Limonium vulgare*, the rarer lax-flowered sea-lavender *Limonium humile* and sea wormwood *Artemisia maritima* have survived on a small area of ungrazed saltmarsh at Conder Green which supports the widest variety of plants of all the saltmarshes within the estuary, and is one of only three locations in Lancashire where these two sea-lavenders occur together, the others being Burrows Marsh SSSI and Barnaby Sands Marsh SSSI.