

## 87. Blackwater Estuary (Mid-Essex Coast, phase 4)<sup>1</sup>

<b>Geographical Coordinates:</b>	51°44'N 0°49'E	<b>Area:</b>	3,657ha
<b>Location:</b>	About 15km south of the City of Colchester and 20km east of Chelmsford, in the county of Essex, on the coast of southeast England.		
<b>Date of Ramsar Designation:</b>	12 May 1995		
<b>Other International Designations:</b>	European Union Special Protection Area		
<b>National Designations:</b>	Site of special scientific interest		

**Principal Features:** The Mid-Essex Coast comprises an extensive complex of estuaries and intertidal sand and silt flats including several islands, shingle and shell beaches and extensive areas of saltmarsh. The Mid-Essex Coast includes a total of 3,237ha of saltmarsh, which represents 7% of the British total. The Blackwater Estuary is one of three areas within the whole complex which are of international importance through supporting full and representative sequences of saltmarsh plant communities. Twenty-two nationally scarce plant species are present: *Bupleurum tenuissimum*, *Carex divisa*, *Ceratophyllum submersum*, *Chenopodium botryodes*, *Euphorbia paralias*, *Limonium humile*, *Inula crithmoides*, *Myosurus minimus*, *Hordeum marinum*, *Puccinellia fasciculata*, *P. rupestris*, *Ranunculus baudotii*, *Ruppia cirrhosa*, *Salicornia perennis*, *S. pusilla*, *Spartina maritima*, *Suaeda vera*, *Trifolium ornithopodioides*, *T. squamosum*, *Zostera angustifolia*, *Z. marina* and *Z. noltii*. The invertebrate fauna is well represented and includes at least 16 Red Data Book species. Among these are the endangered water beetle *Paracymus aeneus* and the vulnerable damselfly *Lestes dryas*, and vulnerable flies *Aedes flavescens*, *Erioptera bivittata*, and *Hybomirra expollicata*. Notable also are nationally important numbers of breeding waterbirds: *Aythya ferina*, *Sterna albifrons* and *Charadrius hiaticula*; and nationally important wintering numbers of *Phalacrocorax carbo*, *Tadorna tadorna*, *Anas strepera*, *Anas crecca*, *Bucephala clangula*, *Charadrius hiaticula*, *Numenius arquata* and *Tringa totanus*. (Criteria 1a,2a,2b).

<sup>1</sup>The Blackwater Estuary Ramsar site includes Old Hall Marshes which was designated independently as a Ramsar site in March 1992 (627ha).

**Conservation Issues:** Land uses at the site include habitat/nature conservation, bait and shellfish collecting, recreational and sport hunting, recreational, sport and commercial fishing, permanent pastoral agriculture, harbour use, salt production, tourism, recreation and research, sewage treatment, industrial water supply, industry and transport. A water control regime has been introduced at Old Hall Marshes by the Royal Society for the Protection of Birds (RSPB), enabling water levels to be managed within winter maximum and summer minimum levels. This has resulted in a substantial increase in waterfowl numbers using the site, in particular the number and productivity of breeding waterfowl. The RSPB are implementing a management plan for Old Hall Marshes. A draft Estuary Management Plan for the Blackwater Estuary has been produced in partnership with English Nature. A study is in preparation for a shoreline management plan. Coastal erosion in south and east England has resulted in the loss of

extensive areas of coastal habitat. Sea defence work has in some instances exacerbated this problem through preventing the natural formation and migration of intertidal habitats like saltmarsh. English Nature and the National Rivers Authority are exploring alternative 'soft engineered' approaches which promote creation of saltmarsh by allowing sea defences to be penetrated. In a collaborative managed retreat experiment on Northey Island in the Blackwater Estuary the sea wall was lowered to allow about 100 tides a year to inundate the lower parts of the site. Botanical surveys before and after the sea wall was lowered showed that earlier meadow vegetation had been largely killed off by the sea water. In its place there had been rapid colonisation of the area by saltmarsh plants, and within two years a recognisable pioneer saltmarsh community had become established across the whole survey area. Future monitoring will establish the stability of these communities.