

Welcome to Saltfleetby-Theddlethorpe Dunes

National Nature Reserve

This coastal National Nature Reserve stretches for some 4.5km. The dunes, which began forming in the 13th century, are constantly changing as they are shaped by the wind and the sea. Some of the dunes are open and maintained by grazing while other areas are covered in sea buckthorn and hawthorn bushes.



Brent geese

The freshwater marshes - with pools and dykes created by Natural England - are one of the reserves highlights. They are home to many interesting plants, such as water plantain, water parsnip, yellow flag and marsh orchids, fourteen species of dragonflies and damselflies, horse leeches, water voles, water shrews and even the rare natterjack toad.

On the saltmarsh and foreshore a variety of specialised plants provide food, shelter and nesting cover for birds like skylark, redshank, oystercatcher, ringed plover and little tern. In the winter months flocks of waders, brent geese, shelduck, teal and wigeon can be seen.



Southern marsh orchid



Natterjack toad



Walks information Map reference OS Explorer 283 - Louth & Mablethorpe

There are seven car parks from which you can access the Natural Nature Reserve. These are linked by a path running at the back of the dunes, the beach or by a path running between the dunes and the saltmarsh.

In addition to these paths there are six way-marked trails for you to follow and explore the Reserve. The easy access trail here at Rimac is detailed on the side panel. The other trails start from Seaview or Churchill lane car park

Churchill Lane

Walks information

- 1. Oliver's Trail**
Distance: 3.1km circuit - 30 minutes
Difficulty: Easy. Gentle slopes.
Features of interest: Freshwater marsh and dunes.
- 2. Coastal Trail**
Distance: 2.6km circuit - 50 minutes
Difficulty: Easy/medium. Gentle slopes, some soft sand.
Features of interest: Freshwater marsh, dunes and beach.

Getting there: Churchill Lane is located off of the A511 south of Mablethorpe B-Hotel. There are bus services running north from Louth and Mablethorpe.
Grid reference: TF 472 903

Sea view

Walks information

- 1. Meadow Loop**
Distance: 1km - 30 minutes
Difficulty: Easy. Gentle slopes.
Features of interest: Meadow, dunes.
- 2. Paradise Trail**
Distance: 2.6km circuit - 3 hours
Difficulty: Easy/medium. Gentle slopes, can be slippery along saltmarsh path.
Features of interest: Meadow, dunes and saltmarsh.
- 3. Shubby Trail**
Distance: 1.6km circuit - 1 hour
Difficulty: Easy/medium. Gentle slopes, can be slippery along saltmarsh path.
Features of interest: Dunes and saltmarsh.

Getting there: The sea view car park is signposted off of the A511, opposite the B122 to Seaview Bn. Customers. There are bus services running north from Louth and Mablethorpe.
Grid reference: TF 464 921

Natural England is here to conserve and enhance the natural environment, for its intrinsic value, the wellbeing and enjoyment of people and the economic prosperity that it brings. There are more than 200 National Nature Reserves and we welcome over 15 million visitors to them each year.

For further information contact: Natural England on 0300 060 6000

This site has been notified as a Site of Special Scientific Interest under section 28 of the Wildlife and Countryside Act 1981.

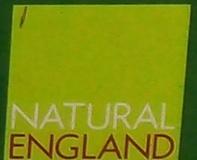
It is an offence, without reasonable excuse, intentionally or recklessly to destroy or damage any of the flora, fauna or geological or physiological features by reason of which the land is of special interest, or intentionally or recklessly to disturb any of those fauna.

A person found guilty of any such offences may be prosecuted and liable to a fine not exceeding £20,000.



Southern hawker dragonfly

INFORMATION DISPLAYED AT THE SALTFLEETBY / THEDDLETHORPE NATURE RESERVE. AN AREA OF MANAGED SALT MARSH AND SAND DUNES ON THE LINCOLNSHIRE COAST SOUTH OF CLEETHORPES. A SITE OF SPECIAL SCIENTIFIC INTEREST (SSSI), THE AREA IS MANAGED TO PROMOTE AND PRESERVE HABITATS AND BIODIVERSITY AND ALLOW THE PUBLIC ACCESS WITHOUT DAMAGING THE ENVIRONMENT.



ACCESS IS ALLOWED AND EVEN ENCOURAGED ON THE SALTFLEETBY / THEDDLETHORPE NATURE RESERVE, BUT IT IS CHANNLED INTO CERTAIN AREAS TO PRESERVE THE ECOSYSTEM AND ALLOW BIODIVERSITY TO FLOURISH. PATHWAYS ARE PAVED WITH STONE CHIPPINGS TO PREVENT FOOTPATH EROSION AND THE CAR PARK IS MADE OF PERMEABLE MESH TO STOP WATER RUNOFF.





THE DUNE BELT IS ONLY ALLOWED TO RUN SO FAR THROUGH THE NORMAL SUCCESSION AS LATER STAGES WILL REDUCE BIODIVERSITY. THIS IS MANAGED BY GRAZING BY CATTLE AND PONIES SINCE THE DEMISE OF RABBITS DUE TO MYXOMATOSIS. OVERGRAZING WOULD DAMAGE THE DUNES AND UNDER-GRAZING WOULD ALLOW THE FULL SUCCESSION TO WOODLAND AND LOWER BIODIVERSITY.

VIEWING POINTS HAVE BEEN SET UP FOR VISITORS TO APPRECIATE THE DUNE BELT IN THE FOREGROUND, THE SALT MARSH BEYOND AND THE INCREDIBLE VARIETY OF FLORA AND FAUNA. THE SALT MARSH MEANS THAT THE DUNE BELT IN THIS NORTHERN SECTION NO LONGER HAS THE YELLOW DUNE / EMBRYO DUNE STAGE OF BLOWING SAND.



Saltmarsh - the Green Tide Grows



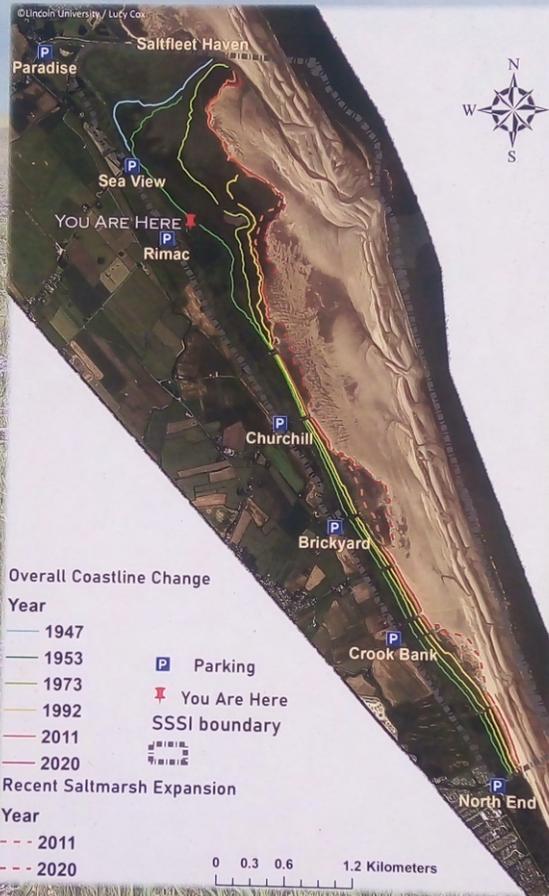
Saltmarsh swathes the seaward edge of the sand dunes like a tide of green plants. It is a unique feature. What you see here is 1% of England's saltmarsh. Much of England's saltmarsh is eroding due to sea level rise. At Saltfleetby the green tide is growing!



Sea lavender is a characteristic, colourful plant of the Rimac saltmarsh

175 years ago there was almost no saltmarsh on the reserve. 1854 marked a change: saltmarsh started developing at Paradise after the straightening of Saltfleet Haven. Salt tolerant plants started to grow on Rimac's 'beach' in 1974. Steadily, sea purslane, sea aster, sea lavender and saltmarsh grass have sprouted and expanded their range southward – this saltmarsh is now 6km long.

Map showing saltmarsh expansion over 73 years down the whole length of the reserve



Aerial photos show how the green tide has spread (see map, left). World War II pill boxes that surveyed the sea from the top of the beach in 1945, now overlook a kilometre of saltmarsh. But the future of the saltmarsh is unsure.

Eroded saltmarsh caused by rising sea levels



The foreshore is narrowing as sea levels rise and our saltmarshes will have to adapt or drown. If the sheltering ridge of dunes you see on the horizon is washed away, the saltmarsh will be sucked back into the sea. With a predicted rise in sea level of half a metre by 2072 this view could look very different in 50 years' time.

This background photo of Rimac shore shows sand dunes on the skyline. Saltmarsh developed in the shelter of this ridge.

IN THE LAST 100 YEARS OR SO SALT MARSH HAS GROWN ALONG THE SEAWARD SIDE OF THE DUNE BELT SO THE DUNES ARE NO LONGER SUPPLIED WITH SAND AND ARE NOW INACTIVE. THE SALT MARSH ADDS SIGNIFICANTLY TO THE HABITATS AND BIODIVERSITY OF THE RESERVE. CLIMATE CHANGE AND SEA LEVEL RISES MAY, HOWEVER, PUT ALL THESE HABITATS IN DANGER.



THE NATURE RESERVE ENCOURAGES ACCESS ALONG SET ROUTES AND WALKS OF VARYING DIFFICULTY. ACCESS TO MORE SENSITIVE AREAS IS PREVENTED BY FENCING. HERE THE VEGETATION IS PROGRESSING ALONG THE SAND DUNE SUCCESSION WHERE PLANT COVER, PLANT HEIGHT AND BIOMASS INCREASE, EVENTUALLY ENDING IN THE CLIMATIC CLIMAX COMMUNITY OF PLANTS WHEN BIODIVERSITY DECREASES. ACTION WILL BE NEEDED HERE SOON TO RETARD THE SUCCESSION AND RETAIN BIODIVERSITY.



Gaze and be Amazed!

Rimac is named after a ship that was wrecked near here during a gale in December 1874. Strangely, the brig 'Rimac' was named after a river in Peru. It seems it was originally built to ship guano (bird lime fertiliser) back to Britain.

Scan Me!



Saltmarsh habitat: in the shelter of a new shingle ridge, saltmarsh started forming here in 1974. It is now 6 km long and 1 km wide. Saltmarsh develops on mud that is occasionally covered by the tide. Plants need to be highly specialised to survive in this salty environment.

Natterjack toad



Amphibian alert!

Yellow-striped natterjack toads forage for food in open dune wetland.

Wet dune habitat: once a saltmarsh, the present marsh became a freshwater habitat during the 1930s.

Wow! That's rare!
Only 11 people in Britain had seen a crucifix beetle when it was first spotted on the reserve. Marsh moth also breeds at Rimac – one of only two places in Britain.



Crucifix beetle

How Old?

This huge dune started forming in the Anglo-Saxon period. The date of 464-884 AD was obtained using a luminescence technique that measures when the sand grains were last exposed to sunlight (yes, really!) Optically stimulated luminescence measures ionizing radiation in mineral grains and is used to date geological sediments.

Open sand habitat: a low, narrow dune ridge that started to grow in 1854. It extended in an arch to enclose a crescent of beach that is now dune wetland. Dunes are wind-blown sand trapped by specially adapted plants like marram grass.

Marsh orchid



Orchids in abundance!
Three species of marsh orchid flower in the dune wetland, together with marsh helleborine.

Dry dune grassland: common lizards squiggle after prey in the short grazed turf. Many flowers bloom here in early summer.

Marram grass



Tussocky marram grass is a sand dune must-have. Its 2m long roots bind loose sand together and sometimes grow 5m deep.

INFORMATION BOARDS ARE COMMON IN THE NATURE RESERVE AND EDUCATION IS A KEY ASPECT OF THE WORK OF NATURAL ENGLAND. HERE SOME OF THE SPECIES THAT CAN BE SEEN ARE HIGHLIGHTED AND THE HISTORY OF THE DUNE BELT / SALT MARSH AND ITS FORMATION ARE EXPLAINED. CERTAIN ACTIVITIES SUCH AS CAMPING AND CAMP FIRES ARE BANNED TO PREVENT WILDFIRES.





IN PLACES SEA BUCKTHORN HAS BEGUN TO COLONISE THE DUNE BELT. THIS STAGE OF THE SUCCESSION BEGINS TO LIMIT THE VARIETY OF FLORA AND FAUNA FOUND AND IT IS SELECTIVELY CUT BACK IF THE SPREAD BECOMES TOO EXTENSIVE.

HERE WE HAVE A VIEW FROM A DUNE RIDGE OVER AN ACCESS WALKWAY TO A DUNE SLACK IN THE BACKGROUND. ALTHOUGH THESE DUNE SLACK FRESHWATER WETLANDS CAN OCCUR NATURALLY IF WIND CAN EXCAVATE THE SAND DOWN TO THE WATER TABLE, HERE THE SLACKS HAVE BEEN PURPOSEFULLY DUG TO OFFER ANOTHER HABITAT FOR FRESHWATER SPECIES OF PLANTS AND ANIMALS.



