



HOLKHAM



Holkham

National Nature Reserve



Welcome to Holkham

Holkham is the most extensive, diverse and dramatic nature reserve on a coastline famous for nature reserves. Windswept tidelines, a maze of creeks and saltings, miles of dunes and sandspits, shady pinewoods, green pastures and marshes: the mix of habitats and the blend of wildlife make Holkham National Nature Reserve a unique place, somewhere to catch your breath in a busy world.



Pink-footed geese coming in to roost

Holkham National Nature Reserve is owned by the Earl of Leicester's Holkham Estate and the Crown Estates. The Reserve is managed by Natural England and Holkham Estate.



A changing coastline

From Burnham Overy to Wells the low-lying marshes north of the coast road used to be tidal saltmarshes, separating offshore shingle and dune ridges from the main coastline. The tidal creeks were large enough to allow ships to load cargo from a staithe at Holkham village. From 1639 onwards a series of embankments were constructed by local landowners. By 1859 when the Wells embankment was completed about 800 hectares of saltmarsh had been converted to agricultural use.

In the middle of the nineteenth century, pine trees were planted on the dunes, creating a shelter-belt to protect the reclaimed farmland from wind-blown sand. Today the ribbon of mature woodland still separates seascape from farmscape. These farmland fields and dykes, ridges and trackways have become part of the natural mosaic.

Even today, there are changes affecting the way the Nature Reserve is managed. Milder winters have led to longer grass growth on the grazing marshes. This has made it challenging to achieve the short sward favoured by breeding waders in the spring.



Natterjack Toad



Southern hawker dragonfly

Exploring Holkham can be a healthy experience!

Holkham National Nature Reserve covers about 4,000 hectares from Burnham Norton to Blakeney. You can explore most of the area on foot by following the Norfolk Coast Path National Trail from the main settlements – just look out for the wooden signs with the acorn on!

The area between Wells and Holkham Bay is crossed by paths allowing access to all the best wildlife habitats. To the east of Wells the path skirts a large area of saltmarsh and mudflats; tidal creeks are dangerous on a rising tide and this area should be avoided unless you have expert local knowledge.

Getting outdoors is good for your health. It can help prevent heart disease, obesity, diabetes and can improve mental health conditions such as mild depression and stress. Brisk exercise in the outdoors is good for everyone and helps create a general feeling of well-being. Aim to exercise outdoors for 30 minutes a day, three times a week.



Shelduck

Foreshore

Seawatching and beachcombing are a speciality of the Norfolk coast; a walk along the wide open shore could be interrupted by spotting a seal or slipping on a jellyfish.

The foreshore is an extreme place, exposed to the elements. Very few plants can gain a foothold, and even shellfish find it hard to find any food in the sand. But mud is a different matter. The mouth of the Wells Channel and parts of the eastern shore are muddy and beneath the grey surface are hidden hordes of lugworms and cockles - perfect food for wading birds with long beaks such as curlews and oystercatchers. Shorter beaks come in useful too; thousands of knot and a seasonal mix of redshank, grey plover and dunlin dabble about over the

surface of the mud for small invertebrates like worms and mussel larvae. Elsewhere, the tideline attracts groups of ringed plovers and sanderlings; birds that find food by running to and fro between the breaking waves.

Growing on the lower-level muddy shores are carpets of algae and eel-grass. These plants are the staple diet of one of Holkham's key birds, the brent goose. Several thousand of these geese, which breed in Siberia, overwinter here, grazing in the shallows and roosting on the wide open mudflats among the shelduck and the waders. It may seem odd to seek safety in a place where you can be seen from three miles away but, conversely, nothing can creep up on you. The same reasoning applies to seals. You can see both common and grey seals hauled out in the distance and looking like driftwood tree-stumps beside the Blakeney Channel, but you can really only get close to them by taking a boat trip from Morston or Blakeney.



Oystercatcher and chick




Saltmarsh

In sheltered bays, sediment brought in with each tide builds up into a skim of mud and silt. Over the years the layers of sediment evolve into saltmarsh.

In summer the lower mudflats dry out and are frosted by salt crystals; glasswort and annual seablite are the only plants to cope with the sudden shift from chilly ooze to salty desert. By contrast, the middle and upper levels of Holkham's saltmarshes are covered with plants. Sea aster looks rather like a Michaelmas daisy while sea lavender forms extensive carpets and creates a misty-blue haze over the marshes in mid-summer. A closely related plant, the matted sea lavender, is a north Norfolk speciality and forms cushions rather than carpets. The plant which gives the upper marshes their distinctive character is the shrubby seablite. This is a dark green chunky shrub with a mass of tiny cylindrical leaves. Although it is common on the Norfolk coast it is rarely found anywhere to the north or west of here.

In the breeding season the mid and upper marshes ring to the loud, fretful call of the redshank, which nests in tussocks and feeds in the creeks and muddy saltpans. In the winter these marshes are grazed by brent geese, often accompanied by shelduck and a variety of waders. Against evening sunshine flocks of grazing wildfowl and the wide horizon of the saltmarshes combine to create a lasting impression: one of the wildlife sights of Europe.



Sand dunes

Dunes

The sand dune systems at Holkham are formed on old shingle ridges. The interplay of wind and water on this landscape can produce complex and often rapid changes. In some places the coast is eroding whilst elsewhere shingle banks are building above the tideline and gathering windblown sand. The tall dune islands on the foreshore in Holkham Bay have appeared from nowhere in the last 60 years. And sometimes after severe storms whole sculpted ridges have vanished overnight.

In this harsh environment pioneer dune plants have to be tough. Among the first colonists are sand couch grass and sea sandwort, then marram grass which is renowned for its ability to bind the loose sand and start the dune-building process.

The young dune and shingle systems create important nesting areas for shore birds. Oystercatchers and ringed plovers lay pebble-patterned eggs among tideline flotsam and marram roots.

Little terns, often seen hovering and diving for fish just offshore, are a special summer visitor to Holkham: the Reserve accounts for 7% of the British population. Unfortunately sandy beaches with patches of shingle are in short supply; the birds have to compete with holiday-making humans. To give them a fair chance to raise their young the most vulnerable colonies at Holkham are cordoned off with notices explaining to people how they can help the terns by giving them plenty of space.

Mature dunes soon grow a mat of vegetation. Cropped by rabbits and subject to surface temperatures of over 30 degrees, flowers like bee orchid and carline thistle thrive in the extreme conditions. So do solitary wasps and bees, and butterflies such as the grayling, small heath and common blue. And in the spring evenings natterjack toads emerge from their burrows and join a noisy chorus at the spawning pools.



© Michael Rooney

Pair of common blue butterflies

Sand dunes are fragile and the plant communities are easily destroyed by trampling, leading to disastrous wind erosion. Boardwalks and steps help visitors to cross the beach without damaging the hard-pressed vegetation.



Marsh helleborine

Pinewoods and scrub

The silence of the pinewoods comes as a surprise after a walk along the shore. The cushion of needles absorbs every footfall and the high canopy keeps away the wind. Three kinds of pines grow in the woods, Corsican (grey trunk, small cones), Scots (orange upper trunk) and maritime (large cones in tree-top clusters). The dense shade and thick carpet of needles make life difficult for most other plants, although the pretty little creeping lady's-tresses orchid and yellow birds nest, do well here. Where the canopy lets in more light there are patches of bramble, privet, honeysuckle, and evergreen holm oaks: all planted by the 2nd Earl of Leicester in the mid-nineteenth century.

On its landward side the ribbon of pines is edged by mixed deciduous scrub which provides nest sites and feeding areas for breeding warblers such as lesser whitethroat, blackcap and willow warbler. In autumn look for Siberian waifs like yellow-browed and Pallas' warblers – tiny vagrants well adrift from their usual migration routes.

The main Pinewoods/Holkham Gap track runs through the scrub and is always a good place to see both birds and butterflies. In spring the early flowers attract species such as brimstone and peacock; these are followed by the orange tip, then the meadow brown, ringlet, common blue and large skipper.



Little egret



Corsican pine

Freshwater grazing marsh

The broad band of level farmland between the pine/dune ridge and the coast road was reclaimed in the eighteenth and nineteenth centuries. Until the 1940s this was pasture for grazing sheep and cattle, but in the Second World War some areas were ploughed for arable crops and the water table of the whole marsh was gradually lowered, making the land less attractive to wildlife. However, in recent years Natural England has worked with the Holkham Estate and its tenants to introduce a system of dams and water control points to raise water levels and bring back the wildlife

The population of many breeding birds like lapwing and snipe has increased dramatically. Avocet, shoveler and marsh harrier have colonised the marshes. Wintering wildfowl have made an astonishing come-back and recent peak counts of 50,000 pink-footed geese, 7,000 brent geese and 13,000 wigeon underline the international importance of Holkham.

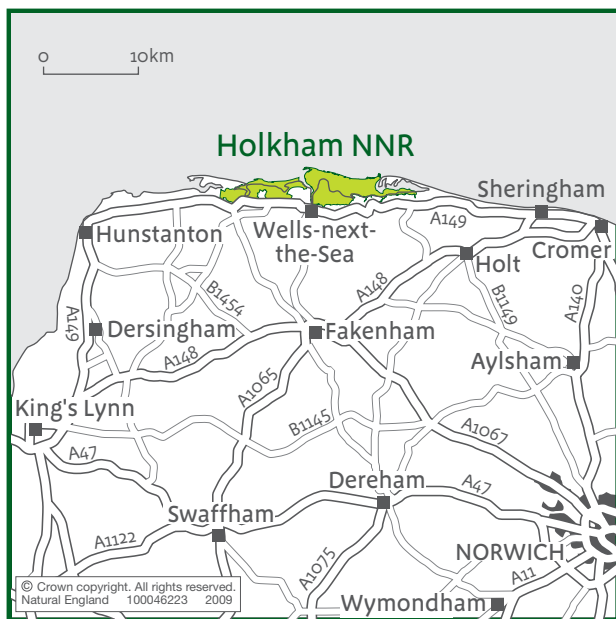
To look out from the hides on a winter evening, over the golden marshes towards Holkham Park, and watch as the geese flight in or a harrier drifts past against the breeze, is a memorable experience.

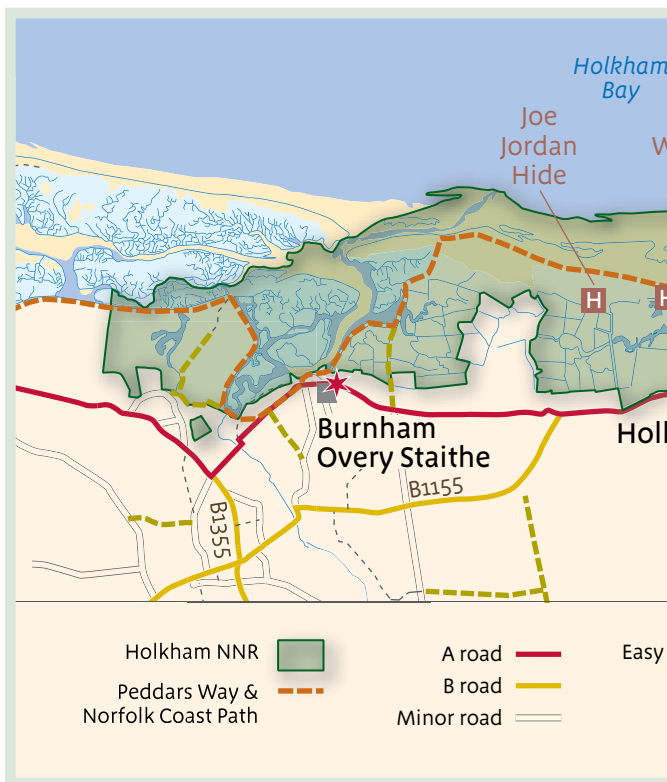
How to get here

Holkham is well serviced by frequent buses from King's Lynn, Hunstanton, Fakenham and Sheringham. There are train stations at Sheringham and King's Lynn.

Why not cycle to Holkham? National Cycle Route 1 passes close by Lady Ann's Drive.

There are two main car parks at Lady Ann's Drive and Wells Beach Road. A charge for parking is payable at all times of the year at both of these sites.





Enjoy your visit to Holkham. The whole Reserve is open to the public on agreed access routes. Please do not walk on the farmland or grazing marshes. To help to keep it special, please remember the Coastal Code:

Look out for signs and leaflets showing how to prevent damage to plants and animals.

Keep dogs on a lead or under close control.

Reduce erosion by keeping to paths and established routes.

Avoid disturbing birds and other animals. Birds that live on the beach are particularly at risk.



- access trail
- RUPP - - - -
- Bridleway - - - -
- Footpath - - - -

- Sand
- Saltmarsh
- Mud

- Parking P
- Toilets ♿
- Coasthopper bus stops ★

Leave wild flowers for others to enjoy.

Play and sit on the beach not the dunes.

Reduce the risk of fires by not lighting fires, stoves or barbecues.

Use your bicycle but stick to authorised routes.

Please take your litter home.

Warning: Unexploded bombs and live ammunition are occasionally found throughout the Reserve. Do not touch any suspicious items. Report all findings to the coastguard.



Holkham grazing marsh

Front cover photograph:

Marram grass colonising dunes © Peter Wakely

The logo for Natural England, featuring the words "NATURAL" and "ENGLAND" stacked vertically in a bold, sans-serif font. "NATURAL" is in white and "ENGLAND" is in a dark red color, both set against a yellow square background.

**NATURAL
ENGLAND**

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.

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