

► Horsey Island Trail

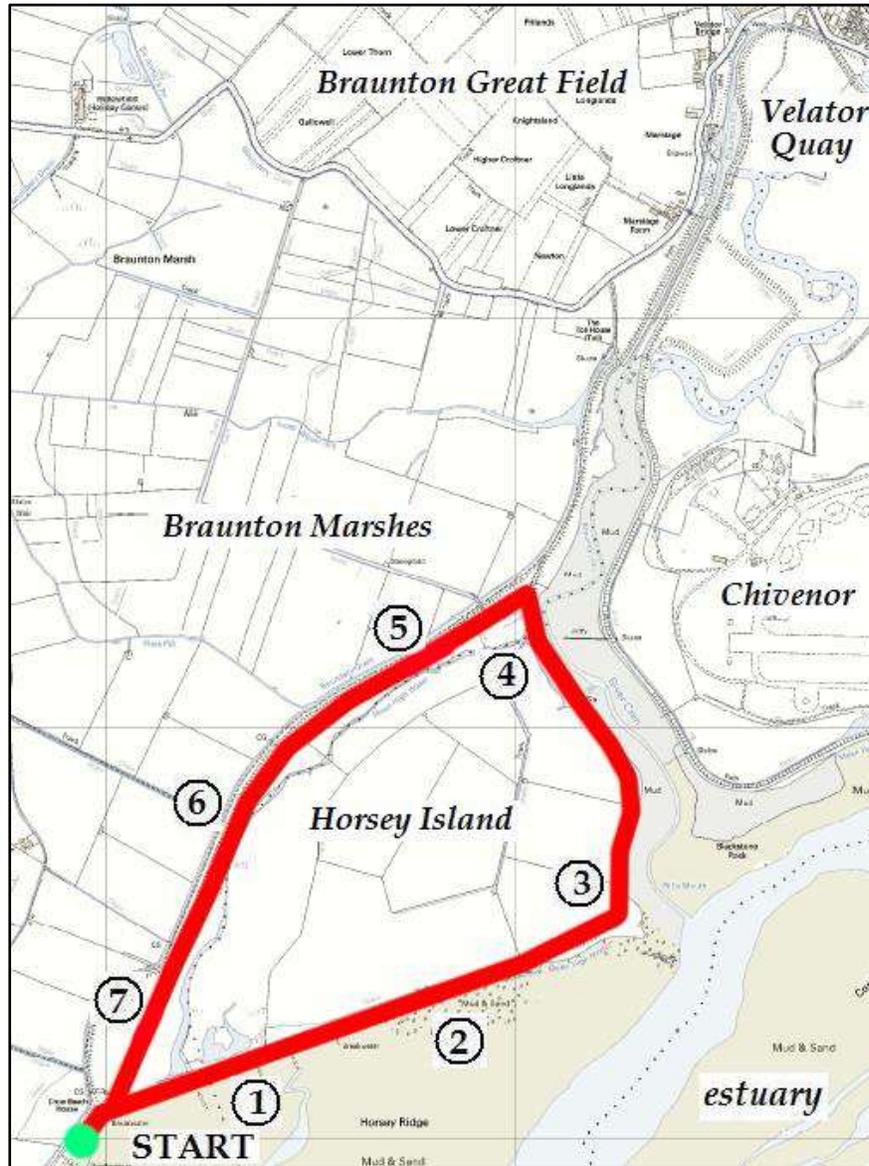


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This circular walk of nearly three miles (just over 4 kilometres) takes us around Horsey Island on Braunton Marshes, following two embankments that were created during the reclamation of Braunton Marshes from the sea between 1815 and 1857. There are excellent views of the Taw Torridge Estuary from here and the walk involves no gradients but may be exposed during inclement weather. Because of the sheep that graze along the majority of the route and the special bird life that abounds on Braunton Marshes, it is particularly important that dogs are kept under close control at all times, preferably on leads.



Route Map



The White House is the starting point for this walk. The best way to reach it from Braunton is to proceed on foot or by car along South Street, turn right at the roundabout outside Tesco and travel along the road that passes through Velator towards Braunton Marshes. Keep your eye out for a small road on your left, sign-posted to Crow Point. This is a toll road across the Marshes, which you will need to follow until you reach the car park at the end. You will see the White House on your left as you enter the car park.

Horsey Island Trail

Make your way to the White House and find a promontory on top of the sandy bank, from which to view the Estuary. We begin by following an embankment that was built in 1857 to reclaim the tidal salt marsh of Horsey Island, but we will return via an earlier embankment, built in 1815.

Until the early 1800s, Braunton Marshes were brackish salt marshes, where villagers grazed their animals on poor vegetation, under the rather dangerous tidal conditions. In 1808, Braunton Marshes were visited by a man called Charles Vancouver, who was preparing to publish a report for the Board of Agriculture. He estimated that, in their current state, the marshes were worth as little as £10 but that, if they were reclaimed from the sea, they could fetch up to £3 per acre. The suggestion was, perhaps unsurprisingly, well received by local landowners and by 1811 a scheme was in place to enclose the marshes, drain them of saltwater and provide what became a rich and fertile grazing land.

The County Engineer James Green was employed and three Marsh Commissioners were appointed to oversee the project. Details of the construction work are scant but there is no doubt that the engineering work involved was expertly carried out. The level of water in the network of drainage ditches (some sixteen miles altogether) was designed to be gravity-fed and to this day is accurately controlled by a system of sluice gates. By 1815 the first phase of reclamation had been

completed and the responsibilities of the Marsh Commissioners were transferred to the Marsh Inspectors, who would oversee the maintenance and management.

We will begin by facing the estuary and turning left, to walk along the raised sandy bank in an inland direction, past the White House and beyond.



The White House, next to the Taw Torridge Estuary

© Neville Stanikk



Some of the original salt creeks, like these, are still visible on the rest of the Marshes

© Neville Stanikk

STOP 1

We are now walking along the later bank, which was completed in 1857. Until the 1850s, the main

quay that served Braunton was situated at the neighbouring village of Wrafton, but it was reached by a shallow winding channel that was unsuitable for large vessels. It was desirable therefore to straighten the approaching channel and this was made possible during the 1850s as part of an ambitious project undertaken by the Williams family, who had recently purchased the Heanton estate. The plans included straightening Braunton Pill, reclaiming further tidal lands at Velator and Wrafton, enclosing an area known as Horsey Island (to our left now) and, in doing so, relocating the quay to Velator. This second phase of reclamation works was completed by 1857, at a cost of £18,000 (the equivalent of more than £1 million today). The new quay was thought to have been opened in 1870.

On your left is an area of phragmites reed bed. This area has a rich diversity of wildlife because of the interesting mosaic of different habitats which include reeds, scrub, open water, rushes, grazed dry grassland and marsh.

Salt-marsh plants like sea milkwort and sea arrow grass still thrive here, although they have had no supply of sea water since 1910. Large clumps of sharp sea rush, quite an uncommon plant nationally, can be seen growing here. The collection of ponds on the left of the path are thought to appear in Henry Williamson's book, *Tarka the Otter*.

Several types of butterflies can be seen along the path during the Summer months, these include the common blue, marbled white, small heath, large skipper, wall brown and red admiral. In June the common blue is often quite abundant - the food plant of the caterpillar is the birds foot trefoil which grows among the short grass here

along with doves foot cranesbill and birdseye speedwell. The slow-flying marbled white butterfly is a species associated with calcareous areas, and therefore is not at all common in the rest of North Devon.

Continue now for another 500 metres (550 yards) or so.



Bessie Clark and the barge Hilda at Velator

© Braunton Museum



Modern day Velator Quay

© Dave Edgcombe



Ponds near the White House

© Dave Edgcombe

STOP 2

Horsey is still referred to as an island; although since the second phase of reclamation it has become part of Braunton Marshes. The surveyor for this sea wall, which we are following, was Nicholas Whitley. He proposed that the seaward slope of a natural pebble ridge should be adopted as the form best-suited to resist the action of the waves. This gentle 1:5 slope allows a more natural succession by plants and animals to occur than a steeper slope would, and resists wave erosion more effectively.

The sea bank was built from material dug from a delph and then faced with clay up to 3' thick into which pitch-paving was driven. Much of the stone for the facing came from Braunton Down quarry, with some boulders from the estuary. On the sandy bank here there are plants such as sea couch and marram grass that bind the sand dunes together. Alongside which, sand sedge grows in straight lines through the sand. In mid-summer colourful shows of the yellow ladies bedstraw and birds foot trefoil contrast with the blue vipers bugloss and deep mauve tree mallow. Various types of poppies have established themselves here too, and in July and

August the tall sea couch grass is alive with grasshoppers.

The mudflats exposed at low tide, a little further along, are a feeding ground for many wading birds such as dunlin, oystercatcher, curlew, redshank and ringed plover. Autumn and Winter months are best to watch large numbers of waders. The mudflats might appear barren and devoid of life, but they are in fact teeming with a multitude of small creatures beneath the surface, which are a vital source of food for these birds.

Over the stones at the foot of the bank grow plants that are tolerant of salt spray such as rock samphire, sea purslane, sea beet, sea lavender and sea wormwood. These salt loving plants are known as halophytes.

Continue until the path begins to bear left, following the curve of the land.



Marram grass

© John and Mary Breeds



Ladies bedstraw

© John and Mary Breeds



Sea lavender

© John and Mary Breeds



Birds foot trefoil

© John and Mary Breeds



Vipers bugloss

© John and Mary Breeds

STOP 3

Look closely at the seaweeds covering the rocks here. Different species of seaweed grow in distinct bands or zones depending upon how long they are left uncovered by the tide. The channelled wrack grows along here at the high water mark. It retains water to some extent in channels along the underside of the fronds formed by the in-rolling of the margins. Bladder wrack, the most common seaweed of all, grows immediately below. It has pairs of air bladders along its fronds which help the plant float upright when covered by the sea, helping it capture the sunlight that filters thorough the seawater. Here also is the green seaweed and just above the high tide mark lichens have colonised the rock. The sea slater, resembling a large woodlouse, lives among the rocks in this inter-tidal zone.

Look for herons fishing in the channels between the sandbanks at low tide; they are commonly seen all over the marsh, fishing for eels in the dykes. They probably come from the nearest heronry at Arlington Court, some 9 miles away. In the vicinity of where we are, there used to stand a small stone house called Weir House. It

was originally Horsey fishing hut, built during extensive bank repair work after a breach during 1910, but was used for a time as a little shop to sell tobacco and other items to the workers. It has sadly disappeared altogether now.

Wheatears and skylarks can often be seen near here in Summer. The skylark nests on the ground among tussocks of grass, but the wheatear often chooses a disused rabbit burrow to nest. Around here, you may see patches of spiky green grass that has colonised the estuarine mud. This is cord grass, a salt marsh grass that is able to accrete a considerable quantity of mud around its roots. It has therefore been introduced in many estuaries to reclaim land.

The lush fields of Horsey provide excellent sheep grazing. The hummocky terrain of the old salt marsh is still visible in the fields along with the creeks and channels between. Here on the land on your right are some interesting patches of salt marsh containing sea lavender, sea spurrey, scurvy grass, glasswort and large patches of thrift with brackish pools between them. These halophytes, tolerant of salty conditions and alternating periods of inundation and desiccation, are often perennials with succulent leaves and stems (an adaptation associated with survival in a limply saline environment). Glasswort, a cactus like succulent, is the first plant to colonise the mud. The name glasswort derives from the medieval period when it was burnt in large quantities to yield soda used in the glass and soap making industries. It is also an extremely edible plant when lightly cooked with butter - a poor man's asparagus.

Proceed further along the path, rounding the bend, until you arrive opposite a jetty, which extends from the bank opposite, to your right.



Bladder wrack

© Ben Candlin



Fisherman's huts

© Katie James



Jetty

© Katie James

STOP 4

You are now following the River Caen. Enormous sandbars have formed where the

River Caen joins with the River Taw. Look out over the estuary for shelducks flying over, usually in pairs. The shelduck is a distinctive bird with an unusual lifestyle. Its handsome plumage of white body with chestnut breast band, blackish-green head with red bill, and black and white wings is easily recognisable. They nest in disused rabbit burrows, often a considerable distance from the water, and as soon as they can walk the young are marched down to the estuary by their parents. In late Summer shelduck depart to their moulting grounds. Their diet consists largely of tiny snails and the burrowing shrimp that live in the estuarine mud and sand and which feed on microscopic plants, the diatomic and the algae.

The jetty on your right, which extends from the opposite bank, was built as an extension to the runway at Chivenor – to enable the runway lights to extend the required distance. Chivenor began life in 1934, when the North Devon Airport was built. At the start of the Second World War, Chivenor became an RAF station. Throughout the war, RAF Coastal Command was based here, flying Wellingtons, Blenheims and Beaufighters on maritime patrols and anti-submarine missions against German U-boats in the Battle of the Atlantic. After World War II, the station was largely used for training, particularly weapons training. In 1947, the base began training fighter pilots and Spitfires, Vampires, Meteors, Sabres and Hunters were used and during the 1960s, one of the RAF's Tactical Weapons Units (TWU) used Hawker Hunter aircraft for training here. Surprisingly, there was no train station for Chivenor, only a small single siding along this section of the line. Personnel had to use the nearby Wrafton Station.

In 1974, the RAF station was left on "care and maintenance", though No. 624 Volunteer Gliding Squadron continued to fly from here. The TWU returned, flying BAE Hawks in 1979 and 1981. In 1994, the TWU left Chivenor and merged with No. 4 Flying Training School at RAF Valley. The RAF handed the airfield over to the Royal Marines and these days it is known as RMB Chivenor. The RAF still has the "A" flight of 22 Squadron here, which operates two search and rescue Sea King helicopters – you might see them in action during your walk. No. 624 Volunteer Gliding Squadron also remains, operating Vigilant T1 motor gliders.

Continue along the sea wall now, crossing stiles as necessary. You will soon reach the toll road and a junction in the path. Turn left, back towards the White House and continue to walk until you find some stonework on the edge of the dyke to your right and an outfall of water coming under the embankment, from right to left. This is the Great Sluice, which is actually located under the embankment.



Search and rescue

© John and Mary Breeds



© Katie James

The path curves towards Braunton

STOP 5

Here you can climb down from the bank on either side and view the Great Sluice. Sluices are used all over the marshes to accurately control the water levels in the dykes. The Great Sluice is the only point of exit for this water into the estuary. The doors on its outer side are pushed open by the force of the water flowing out but are pushed shut by the high tide – which ingeniously prevents salt water from entering the system. The doors and planks of wood used at the opposite end to raise or lower the water level are made of elm, which outlasts most of types of wood but has been very hard to come by since the advent of Dutch Elm Disease.

The benefits of land drainage were recognised throughout the country but by the end of the First World War a decline in agriculture and increase in material and labour costs had combined to make such schemes uneconomical. In an effort to support agricultural productivity, the Government sought to better organise the drainage administrations throughout the UK and this gave rise to the Braunton Marshes Internal Drainage Board. Its earliest members were the three Marsh Inspectors and four other marsh landowners, although several marsh owners

were suspicious of the change and feared that they might lose their existing rights and privileges.

The ditches that drain the marshes were useful for providing water for the livestock that grazed there and also acted as stock barriers, but someone had to maintain them. The Inspector's House is situated at the beginning of a toll road, which extends away from Velator towards Crow Point and the estuary. This house was traditionally given to an employee of the Inspectors who received free accommodation in return for carrying out various duties. These might include destroying rats and moles who threatened to undermine the banks, checking and controlling water levels, cutting weed, clearing drains and rounding up escaped stock. The same person was often paid by the farmers to tend their livestock and they would also have been responsible for collecting the tolls from anyone who was not a marsh owner but wanted access. The tolls were, and still are, used to maintain the road and surrounding area.

Flocks of starlings can often be seen in the hawthorn trees along the bramble covered stone bank on your left. Notice how the leading shoots of these hawthorn trees have been wind pruned. This bank is an ideal spot for viewing the typical Marsh landscape with its derelict lincays, buttercup covered pastures, swallows flying low for insects, and swans and mallards sieve food as they swim along the drainage channels.

Continue walking along the embankment, heading back towards the White House.



The Great Sluice from above

© Dave Edgcombe



The front of the Great Sluice

© Katie James



Cattle grazing on the Marshes

© Neville Stanikk

the ravages of the sea. At first livestock was banned from the embankment in case they caused it to subside. Pigs were particularly mentioned in the strict regulations, because as being rooting animals they were thought to be particularly troublesome and anyone who allowed his pigs to wander on or near the bank was fined 10/- per animal. Later, when the grass took root on the bank, sheep were recognised as the most effective means of keeping it short and are still used for this purpose today.

In 1808, Braunton Marshes were visited by a man called Charles Vancouver, who was preparing to publish a report for the Board of Agriculture. At that time, it was a dangerous tidal ground with rather poor quality grazing. He estimated that, in their current state, the marshes were worth as little as £10 but that, if they were reclaimed from the sea, they could fetch up to £3 per acre. The suggestion was, perhaps unsurprisingly, well received by local landowners and by 1811 a scheme was in place to enclose the marshes, drain them of saltwater and provide what became a rich and fertile grazing land.

The County Engineer James Green was employed and three Marsh Commissioners were appointed to oversee the project. Details of the construction work are scant but there is no doubt that the engineering work involved was expertly carried out. The level of water in the network of drainage ditches (some sixteen miles altogether) was designed to be gravity-fed and to this day is accurately controlled by a system of sluice gates. By 1815 the first phase of reclamation had been completed and the responsibilities of the Marsh Commissioners were transferred to the Marsh Inspectors, who would oversee the maintenance and management.

STOP 6

You are now walking along the Great Sea Bank. Originally one hundred feet thick, it was designed to protect the first-enclosed area from

By 1847, the second phase of reclamation (including the enclosure of Horsey Island and the relocation of the quay, about which we have already heard) was complete.

We are moving parallel with the deep boundary drain on your right, which runs next to the toll road. This is an excellent freshwater habitat. It is very slow flowing and so supports floating plants such as pond weeds and duckweed. The most spectacular of the aquatic plants are the 'emergent' species that grow through the shallow water or at the water's edge – sedges of many kinds, rushes, meadow sweet, purple loosestrife, marsh horsetail, great hair willow herb and perhaps the most abundant and spectacular of all, the yellow flag iris. Many of these species used to be common, but are now becoming rarer due to land drainage and more intensive watercourse management. The yellow flag or sweet iris, was once an important source of dyes. Dyers obtained yellow colour from its flowers and a black dye from its roots. Its roots were also used to scent linen.

The variety of plants found in a ditch usually depends on how recently and how often it is cleared. The cycle of ditch clearing encourages the diversity of flora. If the ditches are not cleared at all then they overgrow and revert to boggy grassland. It is important that ditch management should continue as much for the wildlife interest as for the drainage and supply of drinking water for cattle. The ditches are also home to a variety of aquatic animals, dragonflies, water beetles, sticklebacks etc. Keep a look out in the summer for dragonflies and their smaller relatives the damselflies. They require open water with plants on which they can lay their eggs and their larvae live for up to three years in

the watercourse, feeding on other aquatic invertebrates.

Looking ahead and to the right – we can see the sand dunes of Braunton Burrows on the horizon, behind which is the sea. The Burrows form the centre of the country's first newly designated Biosphere Reserve – a world class designation that puts it alongside Ayer's Rock, the Danube Delta and Yellowstone National Park.



Continue walking now, along the Great Sea Bank.



Typical Marshes view

© Neville Stanikk



Braunton Burrows

© Neville Stanikk

STOP 7

The linhays are an interesting feature of the Marshes. They were constructed as shelters for numerous cattle and almost all of them appear to have been built by the time of the 1842 tithe map. No two are the same, although most are of square or rectangular shape. Some have become dilapidated but around 30 still stand today. The one which attracts the most attention is the round linhay, a grade II listed building on the edge of the inner marsh road, which has been thatched and provides endless photographic opportunities. The plump cattle on the marshes now benefit from wonderfully lush grazing that their forebears could only have dreamed of.

The slate stiles that you have been tackling are another interesting feature of Braunton Marshes, as they were constructed at a time when there was no slate in North Devon. It is thought to have been brought over from Wales, which was regularly visited by trading vessels from Braunton. They often brought back coal from Welsh mines, but cargoes were also known to include (throughout the years): clay, pitch, road metal, crushed granite, gravel, cement, scrap iron, railway sleepers, pit props, timber, salt, phosphate, malt, oats, manure and potatoes.

They also transported produce from the Great Field to markets all over the country. There were of course a great many fishing boats and indeed many Braunton families made their living from the sea – some going as far as Newfoundland to fish.

The slate stiles and the old walls around them are often covered with patches of orange lichen. These are slow growing non-flowering plants, which are able to survive this very dry, exposed habitat. The stiles with stone walls reaching down to the road were built to divide the embankment into sections, in order to control movement of livestock. It is difficult to imagine the marsh landscape prior to the construction of this massive embankment, built using thousands of tons of stone that was brought in by horse, cart and barge.

Continue back along the path to the White House, thus completing the circle.



The round linhay

© Neville Stamikk



Typical slate stile

© Katie James



Boundary walls

© Katie James



Linnhays on the Marshes

© Dave Edgcombe



Claude Chugg loading Braunton vessel the Ann

© Braunton Museum

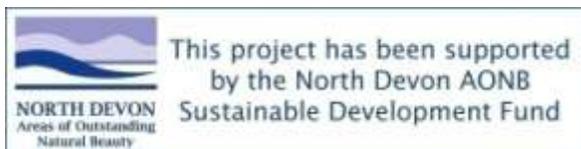
We hope you have enjoyed this walk and that it has inspired you to find out more about this part of the North Devon Coast Areas Outstanding Natural Beauty. For more information please visit www.explorebraunton.org or go to Braunton Countryside Centre or Braunton Museum.

More detailed information about Braunton Marshes is available in the Braunton Marsh Management Study, 2007, by Clare Manning BSc (Hons) for the Taw Torridge Estuary Forum. Copies are available at www.explorebraunton.org.

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The marshes change at different times of year



© Katie James

The Countryside Code

- Be safe, plan ahead and follow any signs
- Leave gates and property as you find them
- Protect plants and animals and take your litter home
- Keep dogs under close control
- Consider other people