



## Ainsdale Sand Dunes National Nature Reserve

Self guided trail 



### Walk Description

This walk starts at Pinfold Path, near Ainsdale NNR site office which is off the Coastal Road, a short way down Sustrans route 81. You can get to the start of the route using the path from Ainsdale Railway Station.

The route is marked by the silhouette of a toad on waymarker posts and follows sections of the green and yellow waymarked paths, and comes along the grazing enclosure, back through the dunes and back to the start via a small stretch of the white waymarked path (Woodland Path). Educational or disabled groups can, by arrangement, park and make use of the toilets at Ainsdale NNR site office.

This is a 3.4 km moderately difficult walk which should take around 1 1/2 hours. The walk will take you on a journey through sand dunes and the pinewood plantation of the old Weld-Blundell family estate.

To start this walk, take Pinfold Path, following the toad and green waymarkers, from the notice board on the cycle path near the road entrance to the reserve; this will take you through a short stretch of woodland track.



Red squirrels

## Safety for visitors

- Be safe, plan ahead and let someone know your plan, come prepared for the weather and wind
- conditions and be aware of the tide.
- Respect any signs.
- Beware of uneven or slippery ground and rabbit warrens.
- Take all your litter home.
- During dry weather conditions there is a high risk of fire. Visitors are advised not to smoke near shed pine needles or long grass and not to discard cigarettes or empty bottles.
- If you are a group wishing to undertake this walk it is essential that you book ahead via Ainsdale Sand Dunes National Nature Reserve site office. Although a risk assessment has been done for this walk, as a walk leader we recommend you complete a pre-visit risk assessment to ensure that you have considered all risks/factors specific to your group.



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Further information and the local tide timetable can be found at [www.seftoncoast.org.uk](http://www.seftoncoast.org.uk)

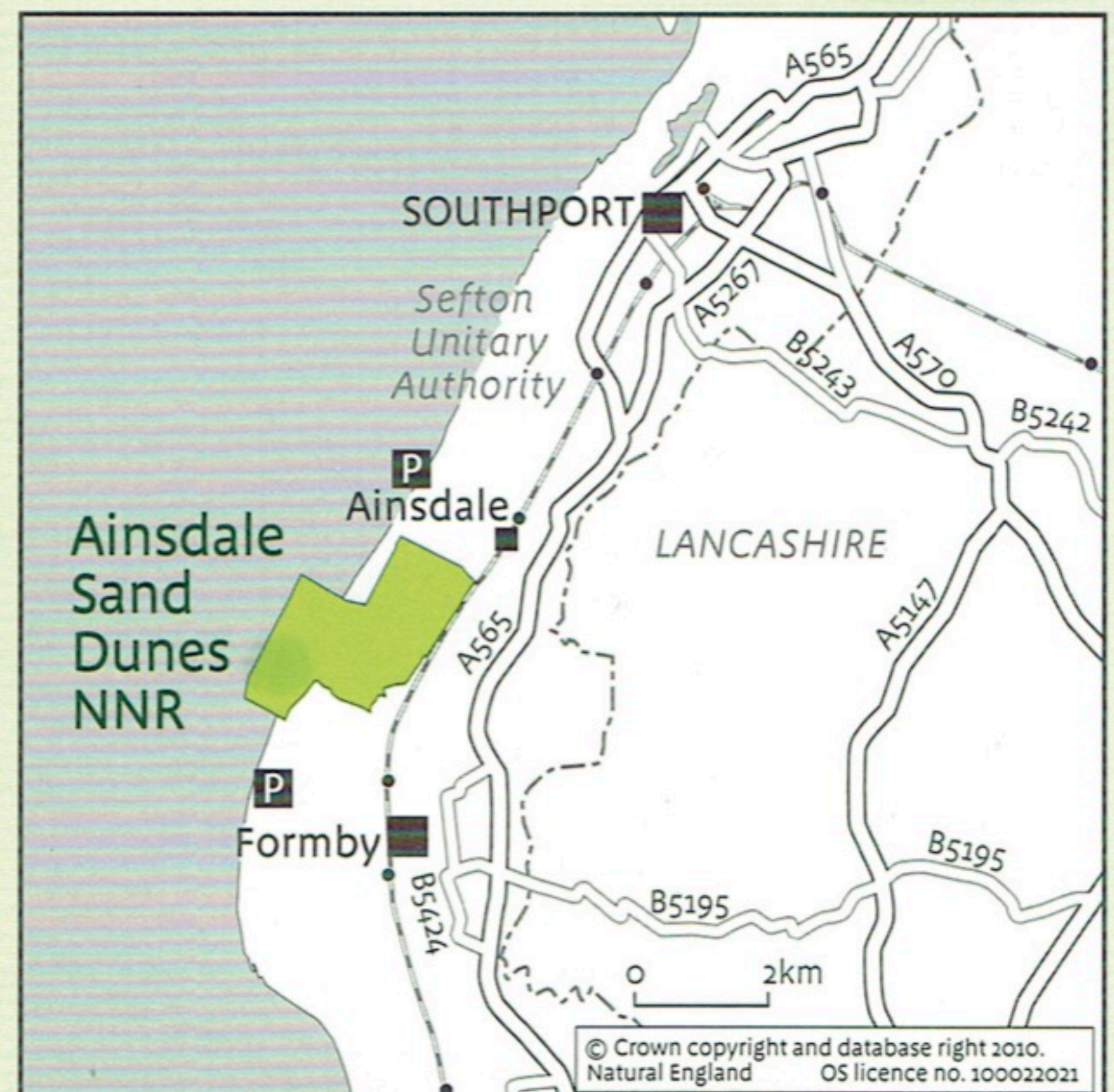
## Find out more...

You can read more about the reserve in our general National Nature Reserve leaflet.

The NNR also hosts a programme of events and volunteering opportunities throughout the year, so why not give it a go?

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Ainsdale sand dunes

## Point 1

The pine trees here are some of the oldest on the reserve and were planted in the 1920-30s. Red squirrels have colonised the pine woodlands along the Sefton Coast. Even if you do not spot squirrels you may well come across pine cones which have been dismantled by them to get at the seeds.

As you come to the edge of the trees the toad and yellow markers of West End Walk guide you towards a narrow route which will take you to the top of the tallest sand dune. If you want to see the view at point 2, take a climb to the top!

## Point 2

From the top of the dune you can see the current extent of the dunes. The further from the sea you look, the older and more stable the dunes are. On a clear day you will be able to see the off-shore gas rig to the west, the Pontins holiday camp and Blackpool Tower to the north, the plantation forest to the south and east, and Ainsdale Village to the east.

Once you have taken in the view, carefully make your way back down the sand dune and rejoin the toad and the green waymarked path. Follow the path until you reach an exposed sand dune profile to the right of the path.

## Sand dune formation

Sand dunes begin to form when an obstruction above high tide line (such as a piece of driftwood) traps windblown sand, forming a small mound. Eventually this will be colonised by specialist plants. These plants then trap more sand and the mound will begin to grow. Marram grass (the long spiky grass found all over the dunes) is excellent at this, becoming buried in the trapped sands but growing up through them. The roots of this grass will reach right down through a dune stabilising the sands and stopping the dunes from being blown away.

Because of the way they are formed, sand dunes develop with their long edge facing the sea. On this coast this means they will stretch north-south. Older dunes that are further away from the sea and no longer get new deposits of sand. The dunes here are shaped and carved by the westerly onshore wind over time – meaning the long edge of the dune lies at a right angle to the shore.

The sand dunes at Ainsdale have a special microclimate that supports unusual species such as the northern dune tiger beetle and sand lizards. Many rare plants can also be found here such as dune helleborine, field gentian and petalwort.



Seaside centaury

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Front cover photograph:  
One of many dune slacks at Ainsdale Sand Dunes NNR  
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## Point 3

The dune here allows you to see the marram grass roots and rhizomes; the points where new roots and shoots are produced.

This sand dune is relatively stable (apart from this exposed profile) allowing moss and other plants to establish, fixing the surface layer. The marram grass which thrives on mobile (shifting) sand dunes is being replaced by these plants.

The brown layer a few inches deep beneath the plants is where organic layer is building up forming soil. This thin layer has probably taken about 200 years to form!

Continuing along the path you will shortly reach an open area of flat land with different plants growing on it. This is called a dune slack.

## Point 4

Dune slacks are the low, wet areas between sand dunes. They form where the sand dune system becomes eroded and the wind blows sand away from this weak point over time, creating a bowl. The slacks at Ainsdale were all formed around the middle of the 19th century, when the dune system was mostly bare sand with far fewer plants than it has today.

Different plants live in these wetter areas, including creeping willow which dominates the slacks and has a hairy underside to its leaves reducing water loss.

Taking care to avoid the wetter areas if necessary, follow the route along the far edge of the dune slack, which is marked with the toad symbol for this walk.



## Point 5

Continue until you reach the fenced area. The fence has important jobs to do throughout the year, keeping grazing livestock in this area in winter and protecting this part of the site for ground nesting birds and the breeding natterjack toads in the spring and summer. You are welcome to walk in these areas, but dogs are not permitted within the fenced area.

The grazing animals create small areas of disturbance and remove coarse grasses and scrub, allowing wildflowers to flourish. At the fence line, go left keeping the fence at your right. And keep going until you come to point 6, which is one of the main natterjack toad breeding pools.

Volunteers help maintain the fence line and work with us to manage the livestock.

## Point 6

In the winter, water gathers in most of the slacks and in wet years, natterjack toads can breed successfully across the site and even in local gardens. Male natterjacks have a very loud mating call and have been given the local name of the Birkdale nightingale. They have short back legs and run rather than hop or crawl; giving rise to the nickname of the running toad.

Natterjack toads are a protected species and a dry winter, like in 2010 seriously affects their breeding success. The adults can survive even long droughts by burrowing into the dunes to keep moist and giving them chance to breed successfully in another year. This particular slack keeps water in it for longer and is a more stable habitat which we protect for the natterjacks.

Continue past the pond following the toad symbols on the fence until you come to a disturbed area of dunes on your right – a blow out.



## Point 7

In the more stable dunes, disturbed areas create suitable places for insects and reptiles to bask in the sun and for specialist dune annual plants to grow. South-facing bare slopes in spring and summer are ideal for vernal mining bees, northern dune tiger beetles and sand lizards, when the sand can reach 35°C.

Both the northern dune tiger beetle and sand lizard can only be found in these northwest coastal sand dunes and in the heathlands of southern England. On the dunes sand lizards are extremely hard to spot, hunting for insects in the marram grass or sunbathing during the day then retreating into burrows at night. They are generally a well-camouflaged brown, but in the breeding season, the males turn a vivid green to attract the females.

Continue along the fence line until the path takes a turn to the right, following the toad symbols. This will rejoin the yellow waymarked path (West End Walk) near point 8.



Sand lizard

© Natural England

## Point 8

Rabbits have lived on the dunes since at least the 17th century, when they were farmed for meat and fur. The constantly nibbled grass is easier for the 'running toads' to move through and fresh sand patches from creating burrows give plants and animals new opportunities in the dunes.

Continuing along the path, you will cross a grazed firebreak in the tree cover, which is part of the way we manage fires on the site. You will then reach a small standing of birch trees to your left.

## Point 9

This birch scrub develops naturally where the Corsican pine plantation provides shelter. Over time this area would become full woodland, so to protect the dunes the scrub is cleared. Volunteers help us do this and their efforts are essential for helping us maintain and improve the site. From here, continue along the path until you re-enter the plantation.

## Point 10

Under the canopy you can see the shapes of the original sand dunes which the trees were planted on. In the years after their planting, the lower branches were removed to increase visibility and reduce the fire risk in this dry site.

The year-round canopy does not allow much light through to the ground, and together with the shed needles mean that only specialist plants can grow. These include broad buckler fern, bracken and sand sedge.



Corsican pine plantation

© www.paulspixels.me.uk

## Corsican pine plantation

The Corsican pine woodland was planted between 1920 and 1934 to provide a barrier from sand which was causing problems for the farms, houses, tracks and railway and so that the farmland was more profitable for asparagus growing, poultry and pig farming in addition to the timber crop which could be sold once the trees matured.

Although this is not a native forest, it now supports a population of red squirrels. As part of the Sefton Coast Forest Plan, to maintain a healthy woodland and keep a steady food source for the red squirrels, some of the older trees are replaced with new saplings to create more age variation.

White poplar and balsam poplar were planted to help stabilise the sand, allowing the pine to establish. These trees produce runners and encroach further into the dunes and are need to be removed periodically by Natural England volunteers.

Following the path on through the woods and out to the flat grassy area to your right, you enter a meadow beside the railway.

## Point 11

This flat, sandy area was planted with asparagus by Charles Weld-Blundell to create a safety gap between the railway and the trees to stop the frequent forest fires caused by sparks from the steam trains. The spiky sea buckthorn around the northern and seaward boundaries of his land was also planted with the aim of preventing trespassers who may light fires.

On the dunes, the sea buckthorn can create dense thickets, shading out dune species and decreasing the number of invertebrates found, so it has mostly been removed from this site. There are, however, still remnants of this historic boundary around the area today, which are constantly being removed by site staff and volunteers.

This area is now managed as meadow, having a late cut like traditionally managed hay meadows which support a large number of plant and invertebrate species.

From here you can go right to explore the rest of the reserve and end up at Freshfield station, or go left to get back to the start of the walk and continuing along the track: you will end up at Ainsdale station.

