

National Trust

Mansands managed retreat and wetlands project

By Mike Ingram, Area Warden, Dart and Start Bay Property
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Photo: National Trust

Overview

In 2005 the National Trust published “Shifting Shores – Living with a changing coastline” which highlighted the threats to its coastal ownership from erosion by the sea with climate change being a key driver. The document highlighted the need to work with natural processes where possible and allow the coast to realign itself when sea defences have to be removed.

The Mansands managed retreat project is the culmination of several years of discussion to integrate a wetland conservation project with a managed retreat initiative, in line with current National Trust policy and wider thinking on coastal processes.

Mansands Beach is located approximately 1.5km south of Brixham on the South Devon coast and is part of Woodhuish Farm, which National Trust bought in 1982. It is situated at the base of two steep sided coombes and is fed by two small streams, which run through each of the valleys, across pasture land and then over a shingle bar and out to sea.

In 1985 the National Trust installed steel mesh gabions, two deep, along the whole of the beach. This was to provide a defence against sea incursions onto the farmland behind and to create a firm footing for the coast path which traverses the beach.

By 2001, however, it was obvious that these gabions were deteriorating due to sea action and vandalism. They were now presenting a health and safety issue and were regarded as an eyesore, leading the National Trust to reassess a future vision for the area. In addition there was a change in tenancy for the farmland behind the gabions and there were new opportunities to look at land management here.

Adaptation actions

Following consultation with local people, the Environment Agency, the local authority and the Parish Council, it was agreed to remove the sea defences and not replace them. This was done in January 2004 and has transformed the appearance of the beach in a very positive way.

The area behind the beach had historically been wetland and, it is thought, extended some distance up the valley. During the 1970s, the fields behind the beach were drained and when the Trust first acquired the site the whole valley was largely improved grassland with a few damp areas near the beach. This was intensively grazed with cattle and sheep and was subject to improvement with artificial fertilizer.

When the gabions were removed in 2004, a concrete drain which culveted the streams under the beach and out to sea was also removed, resulting in the flooding of the fields behind. Initially, this produced a 2ha lake, or ley, which attracted considerable attention from birds and local birdwatchers, providing an attractive addition to the landscape and habitats of the area. This lasted until March 2007 when the shingle bar was breached after heavy storms and high tides, emptying the entire ley.

The area has now been accepted part of a wider Higher Level Stewardship Scheme which helps with funding.



Benefits of adapting

The benefits have been a safer and more aesthetically pleasing landscape with more varied habitats. These include shingle bar, reed bed, open freshwater and wet unimproved grassland. This has considerably increased the biodiversity of the area, now making a key wetland site locally. Public reaction is generally now positive.

Species now found at the site are numerous but include:

Birds - Mallard, Tufted Duck, Shoveler, Snipe, Water Rail, Coot, Moorhen

Dragonflies – Black-tailed Skimmer, Broad-bodied Chaser, Common Darter, Azure Damselfly.

Plants - Yellow horned Poppy, Sea Beet (on shingle bar).

Challenges

The beach is well used by visitors, particularly in the summer, and the South West Coast Path runs across it, although geographic distance from car parks and roads means that it is not overcrowded.

The main challenge has been to persuade local people that, with the sea defences not being replaced, the beach and its environs are to be part of a dynamic, evolving system and that, with climate change, it was going to be difficult to predict what the landscape will look like in the future. Meetings, walks and information boards were organised to inform visitors of the National Trust's vision and most people were in agreement with the proposals. However, amongst other concerns, it was feared that the National Trust would ruin the beach and that available sand would disappear. At the time of writing these fears appear to have been allayed, with the beach looking aesthetically better and with no noticeable change in the amount of sand.

A more unforeseen challenge was the reaction of some local birdwatchers and other locals when the large freshwater ley disappeared in 2007 after the breach of the shingle bar. The ley attracted good numbers of wildfowl, waders and gulls and when it drained several birdwatchers were insistent that the National Trust should re-instate it. This was despite the fact that we had predicted that a breach could occur at anytime, and that this was part of working with natural coastal processes. This created bad feeling locally and negative press, with individuals suggesting that other conservation bodies should manage the site and not the National Trust!

National Trust policy has always been minimal intervention and the reinstatement and maintenance of the large ley would have involved major works and associated cost, which could not be guaranteed to last. Natural accretion of shingle has reformed the breach and a smaller ley, but with more varied habitats, has developed behind the beach. Most of the species lost after the breach have returned plus several additional ones.

The consultation with statutory bodies (Environment Agency, Natural England), conservation organisations (RSPB, Devon Bird and Preservation Society, Devon Wildlife Trust), the local authority and the Parish Council were all positive and supportive.

Another important challenge was maintaining the South West Coast Path so that people could get across the beach where the overflow from the ley flows out to sea. Heavy rain and high tides can sometimes make the crossing difficult and walkers have complained at such times. The National Trust has worked closely with the Devon County Council Coast Path Team and has committed to providing stepping stones across the overflow stream in the form of large boulders, which can be replaced if tides or storms move them. In extreme circumstances, such as another major breach, a temporary inland route has been identified.

At the southern end of the beach there are some historical/archaeological features and a small turning area for vehicles, which local people strongly felt that we should try to protect. In the long term they may well disappear but we have installed rock armour to give these features some immediate protection.

Lessons Learnt

Engaging local people early on is essential. Communicating clearly the idea of familiar landscapes being changed and that this change can be dramatic (e.g. breaches in the shingle bar) is important.

Stating more clearly that this project does not intend major intervention, but that it is designed to help facilitate natural processes may also have helped relations with the local birdwatchers.

Future Plans

The wetland area behind the beach will be extended further up the valley, making it even more significant for wildlife locally.

The Coast Path crossing will be maintained and monitored.

Monitoring has started, and will continue, to show the changes of flora and fauna as well as to the beach profile, as a result of coastal processes.

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