Restoring and celebrating our coastal dunes: An update from Dynamic Dunescapes

Important havens for rare wildlife and spaces for both coastal protection and community recreation, sand dunes are far more than just an area to walk through on the way to the beach. However, coastal sand dunes are one of the most threatened habitat types for biodiversity loss in Europe, and, closer to home, the UK has lost more than a third of its sand dune habitat since 1900. In recent decades, many of our dune systems have become increasingly fixed and the naturally dynamic and mobile successional stages of a dune are being lost. This puts increased pressure on the dune-specialist species that rely on them; lizards, beetles and wasps that burrow in bare sand, for example, or toads and orchids that live in shallow ephemeral dune pools.

<u>Dynamic Dunescapes</u>, a partnership project led by Natural England, is working to restore 7,000 hectares of dune in England and Wales. Project partners are Plantlife, Natural Resources Wales, National Trust, and The Wildlife Trusts, and funders are National Lottery Heritage Fund and EU LIFE Programme. We're two years into our three-year delivery phase and, despite a slow start during pandemic, we've been able to undertake plenty of large-scale nature restoration actions.

Pioneering techniques and trialling new technologies

This year, our Natural England team at Ainsdale NNR and National Trust team at Formby <u>created</u> <u>several 'notches'</u> – V-shaped gaps in the fixed frontal dunes excavated using heavy machinery. Notches allow natural dune processes to take place again; wind-blown sand can move through the extended dune system, creating mobile and dynamic dune habitats that benefit wildlife for years to come. Notches have also been created and at Oxwich in South Wales with Natural Resources Wales.



<u>Images of the dune notches being created with heavy machinery, and also of the finished notches illustrating the lack of bare sand or dynamic dune habitat within the dune system at present.</u>

The project has also led a UK trial of NoFence technology. In Dorset with National Trust, and in Lincolnshire and Cumbria with Natural England, groups of grazing cattle have been wearing GPS collars. They respond to virtual fences marking grazing boundaries that are drawn by site managers using a mobile app. The cows receive an audio tone or a pulse when they approach the boundary and turn away from it. This technology has enabled us better sight of our animals' whereabouts and behaviour, and to target their grazing where our sites need it most without the cost or inconvenience of physical fencing. Read our GPS Virtual Fencing Trial (2020) report or watch our short film.



Sally Wallington, Dynamic Dunescapes Project Officer at National Trust, with one of the herd of Red Devon cattle using GPS collars at

Studland Bay

Resource creation

Working with UKCEH, Dynamic Dunescapes has published a comprehensive <u>Sand Dune Manager's Handbook</u>. This freely available document discusses the wide range of dune management options available to address the issues faced by coastal sand dune systems. Accompanying this, <u>case studies</u> are being compiled reflecting on the interventions that have been undertaken as part of Dynamic Dunescapes. Designed to assist land managers exploring similar strategies, the case studies detail the issues tackled, what was done and how, and where the action was (or wasn't) successful. For example, learn about <u>working with MOD at Braunton Burrows</u> in Devon, to remove UXO from a former military training space and scraping overgrown turf to create new habitat.

Public engagement

Community engagement around the value of dunes and the work being done to support them is a key aim. Our engagement team across the partnership run a range of events for schools, community groups and members of the public, including guided walks, mindfulness sessions and dune-inspired art workshops that resulted in an exhibition in Cornwall. Local volunteer groups have played a huge role in dune monitoring and practical works, and will continue to act as dune landscape custodians with the local partners once the project is finished. The project's engagement arm also includes supporting student research and communications projects, and providing placement opportunities that offer field skills and practical experience. You can read about their experiences in our <a href="Estudent Student Stud

World Sand Dune Day

June 25th is <u>World Sand Dune Day</u>, an awareness day designed to shine a spotlight on our sandy spaces around the globe. Across the partnership and beyond, events such as dune yoga and tai chi, guided walks and citizen science bio-blitzes took place. Digitally, we also also holding a range of talks covering topics including <u>birds in the dunes</u>, <u>natterjack toads</u>, and <u>dune wildflowers</u>, which you can watch on YouTube.