

## **Dynamic Dunescapes**

### **What is the Dynamic Dunescapes project?**

Dynamic Dunescapes is a new project to restore sand dunes across England and Wales for the benefit of wildlife, people and communities.

Often seen as a holiday destination or the perfect spot to spend a sunny summer's day, it sometimes comes as a surprise to learn that the coastal dunes of England and Wales are internationally important habitats for wildlife! These dunes are a sanctuary to many unique and rare species, like the fen orchid, natterjack toad and sand lizard. But, conventional dune management over many decades has created stable dunes that have become overgrown with vegetation. We now realise that this is actually putting these special creatures at risk. As our understanding of what's best for the dunes has changed, we're ready to use new conservation methods.

Healthy sand dunes need to be free to move and be dynamic. We know that some of our protected wildlife needs areas of open sand to thrive, so the resources and funding of the Dynamic Dunescapes project allows us to bring life back to the dunes by creating areas of open sand. Other specialised creatures need us to improve the dune slacks, as these often water-filled dips behind the dunes are important habitats for amphibians and birds. We'll also work to remove invasive species from the dunes and dune grasslands, to improve conditions for some of our rarest native plants to flourish.

The Dynamic Dunescapes project is big and ambitious – targeting some of the most important sand dune systems across England and Wales. We will work with schools and local groups, volunteers and visitors of all ages and abilities to help rejuvenate our dunes and allow the threatened wildlife to flourish.

### **Why are sand dunes threatened?**

Sand dunes are listed as the habitat most at risk in Europe, and they actually face threats from many different things.

They are at risk of becoming stabilised so that the dune sand is no-longer able to move freely. Invasive species are also a big problem; when plants or animals who aren't native to a dune environment end up in a sand dune, they can flourish quickly and overwhelm the other species which are adapted to live there.

With this comes species loss and less biodiversity. All the extra plant growth means the sand becomes more enriched with nutrients too, encouraging even more plant growth and stabilisation.

### **What work will take place and why is it needed?**

The work planned at every site is slightly different because each dune system is unique and needs a different care package! Some sand dune sites need removal of

invasive species like sea buckthorn that is taking over the habitat. Others need areas scraped to remove a layer of rich organic material that is covering the sand. A few sites will benefit from more extensive rejuvenation techniques with 'notches' created in the frontal dunes using tractors. All these techniques have the aim of creating more bare sand to allow dune wildlife to flourish.

### [Explore the project sites](#)

#### **What is dune rejuvenation?**

Healthy foredunes have a lot of bare sand and are constantly moving. Dune rejuvenation means looking at dunes which have become stabilised over time and creating areas of bare sand.

In stabilised dunes, shrubs and sometimes even trees have been able to grow. When these plants put down roots, the dunes become less able to move and stop being dynamic. The wildlife we're protecting in this project needs moving, bare sand to survive, so at some of our sites we need to remove these plants.

Rejuvenation work can mean creating notches in the dunes. These involve digging a pathway through or over the foredune, which exposes lots of bare sand.

Another technique is to dig and lower the hollows (slacks) between the dunes. These notches and bare slacks are super important for allowing sand to move through the dunes and for the dunes to shift. With more bare sand exposed, windy conditions create 'sand rain', where sand from one part of the dune is lifted and dropped elsewhere. This benefits early sand dune succession stages and keeps our bare sand-loving wildlife happy!

This work will only take place at a few of our sand dune sites. At these dunes, extensive environmental and geomorphological surveying has been carried out to ensure that it's the right course of action for the wildlife, and that these techniques will have a really positive impact on the dune system for many years to come.

### [More about a dune lifecycle](#)

#### **Where we're working**

From Cornwall to Cumbria, the Dynamic Dunescapes project will restore nine key dune areas in England and Wales. These key areas include 34 individual dune sites and cover up to 7,000 hectares.

Find out more about what's happening at each site: [Explore the project sites.](#)

Download the Project Information Note **For more information.**

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