

Explore
the
shifting
sands
of
Welsh
dunes

Wild about Welsh
...sand dunes

The shifting sands...

Have you ever explored the sandy dunes behind a beach? You may have even raced down the slopes or played hide-and-seek behind tussocks of grass.

When the wind blows sand to the top of the beach, over time a dune is formed. Plants grow on the dune helping to secure the sand while a new dune is formed in front. This leads to a 'system' of dunes of different sizes and ages, each with their own variety of plants, fungi, insects and other wildlife.

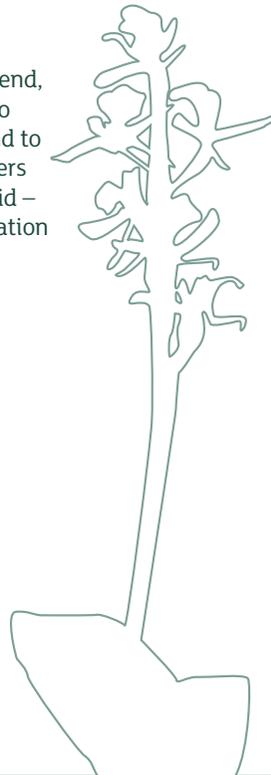
When a dune is eroded by strong winds or waves, this can cause a 'blow out' which creates a hollow or 'slack'. This is a sheltered, often damp place that provides a different kind of habitat than the dunes themselves.

This variety of habitats is good news for plants. The Carmarthen Bay dunes alone are home to around 250 species – that's nearly one-fifth of all flowers found in Wales.

Keeping our dunes dynamic...

Unfortunately, coastal development, invasion by non-native plants and planted conifer trees all threaten sand dunes in Wales. To protect these special habitats, we need to keep the dunes moving so they can provide places for our native plants and fungi to flourish. At Newborough Warren National Nature Reserve, Natural Resources Wales are using Welsh mountain ponies to help maintain the varied habitats found in the dunes.

At Kenfig near Bridgend, Plantlife is helping to restore the dunes and to encourage wild flowers such as the fen orchid – half of the UK population can be found there.



We can all play a part in celebrating and protecting sand dunes in Wales.

Here are some ways you can get involved...

Support our work Become a member and help us protect flowers and fungi across Wales – www.plantlife.org.uk

Share your finds Record the species you spot via your Local Environmental Records Centre – www.lrcwales.org.uk

Attend an event Visit the Plantlife website for a list of events in your area – www.plantlife.org.uk

Celebrate the dunes Share your photos with us via Facebook (PlantlifeCymru) or Twitter (@plantlifecymru)

How to explore...

Help children learn more about sand dunes by playing spot-the-difference

Use these pictures to help you find different shaped leaves...

- ▶ On the top of a sand dune right next to the beach
- ▶ In a hollow (slack) in between sand dunes away from the beach



How many leaf shapes did you spot in each place?

Did you find more leaf shapes in one place than the other? Why do you think this might be?

If you were a plant, would you prefer to live at the top of a dune or in a slack? Why?

How do you think plants might help sand dunes keep their shape?

Where to find them...

Many sand dunes are protected and designated as National Nature Reserves (NNRs) and Sites of Special Scientific Interest (SSSI). Here are some to visit...

- 1 **Newborough Warren NNR** – Natural Resources Wales (NRW)
- 2 **Morfa Dyffryn NNR & SSSI** – NRW & Snowdonia National Park
- 3 **Ynys Las NNR** – NRW
- 4 **Stackpole NNR** – National Trust & NRW
- 5 **Whiteford NNR** – National Trust & NRW
- 6 **Kenfig NNR** – Bridgend County Borough Council & NRW
- 7 **Merthyr Mawr Warren NNR** – Merthyr Mawr Estate & NRW



For links to these sites please visit: www.plantlife.org.uk/uk/our-work/publications/welshsanddunes

What to look for...

The best time to see dune plants is between May and August.

Each sand dune system is different, but you'll see some of these common species.

What have you spotted?

Share your photos via Twitter – @plantlifecymru or Facebook – PlantlifeCymru

We are Plantlife Cymru

Wild flowers, plants and fungi are the life support for all Wales' wildlife and their colour and character light up our valleys, mountains and coastline. But without our help, this priceless natural heritage is in danger of being lost.

From the open landscapes of our nature reserves to the corridors of the Senedd, we raise their profile, celebrate their beauty and protect their future.

HRH The Prince of Wales is our Patron



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Sea holly ▶

Now quite rare, people would use parts of this plant for food and decoration



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Sea bindweed ▼

Its stems are often half-buried in the sand, helping to stabilise new dunes



Marsh helleborine ▲

This orchid likes damp places and can be found in dune slacks

©Helen Bradbury/Plantlife



Wild pansy ▲

This plant and its close cousin, the dune pansy (in the photo), can both be found in dunes



Lady's bedstraw ▼

Can you guess why this plant was given its name? Take a sniff of the flowers...

©Andrew Gagg/Plantlife



Kidney vetch ▲

The rare Small Blue butterfly lays its eggs on this plant

©Bob Gibbons/Plantlife



Autumn gentian ▲

This late-flowering plant likes to bloom in late summer and early autumn

©Bob Gibbons/Plantlife

Haresfoot clover ▲

Its name refers to the furry feel of the flower heads



©Sue Harris/Plantlife

Rest-harrow ▲

It was once said that the tough stems were able to stop (arrest) a harrow (used to break up soil)

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Dune waxcap ▲

Look out for this fungi growing among moss and lichens