



# Set B - Sand dune super species

## Bird's-foot trefoil *Lotus corniculatus*



Plant

Producer

Common

Habitat - semi-fixed dunes, fixed dunes and dune slacks

Flowers - June to September

Superpower - it is an important foodplant for the caterpillars of the common blue, silver-studded blue and wood white butterfly and its flowers are an excellent source of nectar for bees.



## Dillwyn's dung beetle *Onthophagus nuchicornis*



Animal > invertebrate > insect

Secondary consumer - omnivore

Common

Habitat - semi-fixed dunes

Superpower - disposes of dead matter, where there is a scarcity of dung it can be found in dog faeces.



**Grey bush cricket**  
*Platycleis albopunctata*



**Animal > invertebrate > insect**

**Secondary consumer - omnivore**

**Least concern**

**Habitat - rough vegetation on all dunes**

**Superpower - camouflage and jumping**



**Chough**  
*Pyrrhocorax*



**Animal > vertebrate > bird**

**Secondary consumer - omnivore**  
(invertebrates and berries)

**Rare**

**Habitat - all coastal areas**

**Superpower - acrobatic flight.**  
65% of the UK population live in Wales.



**Small blue butterfly**  
*Cupido minimus*



**Animal** > invertebrate > insect

**Primary consumer** - herbivore

**Rare**

**Habitat** - all dunes and coastal grasslands

**Superpower** - the small blue tends to live in small colonies of up to 30 individuals. Both sexes can be found in communal roosts, facing head down in the grass.



**Least puffball**  
*Bovista pusilla*



**Fungi**

**Decomposer**

**Common**

**Habitat** - semi-fixed and fixed dunes

**Superpower** - burst spraying its brown dust-like spores.



## Creeping willow

*Salix repens*



**Plant**

**Producer**

**Common**

**Flowers** - April to May

**Habitat** - fixed dunes and dune slacks

**Superpower** - it can change its growth form from upright to horizontal when engulfed by sand.



## Dune tiger beetle

*Cicindela maritima*



**Animal** > invertebrate > insect

**Secondary consumer** - carnivore

**Rare**

**Habitat** - mobile dunes

**Superpower** - can rapidly fly and run in search of prey. Its larvae are also predatory.



**Vernal mining bee**  
*Colletes cunicularius*



**Animal** > invertebrate > insect

**Primary consumer** - herbivore

**Rare**

**Habitat** - mobile dunes

**Superpower** - coats inside of burrows with waterproof membrane.



**Dune robber fly**  
*Philonicus albiceps*



**Animal** > invertebrate > insect

**Secondary consumer** - carnivore

**Rare**

**Habitat** - mobile dunes

**Superpower** - injects poison to paralyze prey.



**Vineyard or striped snail**  
*Cernuella virgata*



**Animal** > invertebrate > mollusc

**Primary consumer** - herbivore

**Common**

**Habitat** - fixed dunes and grassland

**Superpower** - the snail makes and uses love darts to try and attract a mate.



**Early marsh orchid**  
*Dactylorhiza incarnata*



**Plant**

**Producer**

**Occasional or locally frequent**

**Flowers** - May to mid-July

**Habitat** - dune slacks

**Superpower** - super food source for pollinators, with up to 50 flowers on one stem.



**Early gentian**  
*Gentianella anglica*



**Plant**

**Producer**

**Rare**

**Flowers - March to July**

**Habitat - mature dunes and coastal grassland**

**Superpower - it is endemic to the UK so is found nowhere else in the world!**



**Willow poisonpie**  
*Hebeloma vaccinum*



**Fungi**

**Decomposer**

**Rare**

**Habitat - dune slacks**

**Superpower - it links with the roots of the Creeping willow to help it grow.**



**Great crested newt**  
*Triturus cristatus*



**Animal** > vertebrate > amphibian

**Secondary consumer** - carnivore

**Declining** - European protected species

**Habitat** - dune slacks

**Superpower** - has been known to have lived on earth for at least 40 million years.



**Natterjack toad**  
*Epidalea calamita*



**Animal** > vertebrate > amphibian

**Secondary consumer** - carnivore

**Rare** - European protected species

**Habitat** - dune slacks

**Superpower** - pioneer species, the first to colonise a new habitat.





**Slow worm**  
*Anguis fragilis*



**Animal** > vertebrate > reptile

**Secondary consumer** - carnivore

**Common**

**Habitat** - fixed dunes

**Superpower** - can shed their tails to escape from predators.



**Sand lizard**  
*Lacerta agilis*



**Animal** > vertebrate > reptile

**Secondary consumer** - carnivore

**Rare** - European protected species

**Habitat** - semi-fixed and fixed dunes

**Superpower** - uses rabbit burrows for shelter and hibernation and digs own burrows off them. The burrows can be as deep as 1 meter but very small in diameter.



## Dune inkcap

*Coprinopsis ammophilae*



**Fungi**

**Decomposer**

**Becoming rare**

**Habitat** - mobile and semi-fixed dune

**Superpower** - salt tolerant inkcap species, grows amongst roots of Marram grass.



## Winter stalkball

*Tulostoma brumale*



**Fungi**

**Decomposer**

**Rare**

**Habitat** - fixed dunes

**Superpower** - the lollipop-like fungus can be easily overlooked among snail shells and other sand dune debris, as it is so well camouflaged.



**Ringed plover**  
*Charadrius hiaticula*



**Animal** > vertebrate > bird

**Secondary consumer** - carnivore

**Declining**

**Habitat** - mobile dunes and sandy/shingle beaches

**Superpower** - they run at speed and then stand still to draw insects to the surface.



**Kestrel**  
*Falco tinnunculus*



**Animal** > vertebrate > bird

**Tertiary consumer** - carnivore

**Declining**

**Habitat** - all sand dune areas

**Superpower** - can see UV urine 'wee' trails.



**Little tern**  
*Sternula albifrons*



**Animal** > vertebrate > bird

**Secondary consumer** - carnivore

**Rare**

**Habitat** - sandy/shingle beaches often below the high-water mark

**Superpower** - migrate to West Africa in winter; a round trip is almost 19,000 miles.



**Marram grass**  
*Ammophila arenaria*



**Plant**

**Producer**

**Common**

**Flowers** - July to August

**Habitat** - mobile, semi-fixed and fixed dunes

**Superpower** - is a xerophyte, so can withstand dry conditions. It has extra long underground stems which enable the plant to survive sand burial. Leaf blade is rolled to reduce water loss.



## Petalwort

*Petalophyllum ralfsii*



**Plant**

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**Producer**

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**Rare**

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**Habitat** - dune slacks

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**Superpower** - during the summer it is not visible as it survives underground until the wet weather returns from autumn onwards.



## Prickly saltwort

*Salsola kali*



**Plant**

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**Producer**

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**Flowers** - July to September

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**Habitat** - strandline & mobile dunes

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**Superpower** - succulent halophyte plant (salt tolerant). When burnt it produces sodium carbonate, which was used to make glass and soap.



**Pyramidal orchid**  
*Anacamptis pyramidalis*



**Plant**

**Producer**

**Occasional or locally frequent**

**Habitat** - semi-fixed to fixed dunes

**Superpower** - it provides nectar and pollen for pollinators.



**Sea holly**  
*Eryngium maritimum*



**Plant**

**Producer**

**Frequent or locally abundant**

**Flowers** - July to September

**Habitat** - strandline, mobile and semi-fixed dunes

**Superpower** - it was once used to treat flatulent disorders and the roots can be eaten boiled or roasted. It was used to make a jelly or sweets called "kissing comfits".



**Meadow pipit**  
*Anthus pratensis*



**Animal** > vertebrate > bird

**Secondary consumer** - carnivore

**Common**

**Habitat** - mobile, semi-fixed and fixed dunes

**Superpower** - favourite foster parent to cuckoo chicks.



**Redshank**  
*Tringa totanus*



**Animal** > vertebrate > bird

**Secondary consumer** - carnivore

**Declining**

**Habitat** - saltmarsh and dune grassland

**Superpower** - males perform an elaborate aerial display as part of their courtship ritual.



**Peregrine falcon**  
*Falco peregrinus*



**Animal** > vertebrate > bird

**Tertiary consumer** - carnivore

**Rare**

**Habitat** - all dune areas

**Superpower** - fastest bird in the world, reaching 390km per hour in a dive.



**Fox**  
*Vulpes vulpes*



**Animal** > vertebrate > mammal

**Tertiary consumer** - carnivore

**Common**

**Habitat** - all sand dune areas

**Superpower** - foxes eat just about anything, including berries, insects, small mammals and birds. This year-round food source means they don't need to hibernate.





## Rabbit

*Oryctolagus cuniculus*



**Animal** > vertebrate > mammal

**Primary consumer** - herbivore

**Common**

**Habitat** - fixed dunes

**Superpower** - nature's lawnmowers, helping small plants to grow and churning up sand.



## Parasol

*Macrolepiota procera*



**Fungi**

**Decomposer**

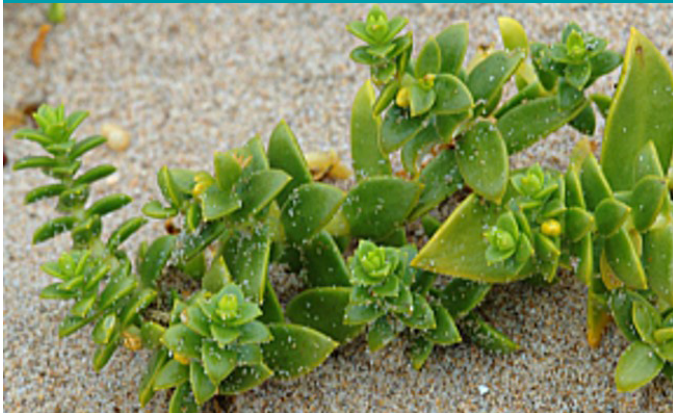
**Common**

**Habitat** - fixed dunes

**Superpower** - in Wales fairies supposedly use the parasols as umbrellas. They often grow in circles or 'fairy rings'.



**Sea sandwort**  
*Honckenya peploides*



**Plant**

**Producer**

**Locally common**

**Flowers - May to August**

**Habitat - strandline, embryo dunes and mobile dunes**

**Superpower -** the shoots and leaves are rich in vitamin A and vitamin C and can be used as a green, leafy vegetable either raw or cooked.



**Shore dock**  
*Rumex rupestris*



**Plant**

**Producer**

**Endangered - European protected species**

**Flowers - June to August**

**Habitat - coastal**

**Superpower -** fruit floats in and is dispersed by seawater and this enables it to colonize new locations.



**Horse**  
*Equus caballus*



**Animal** > vertebrate > mammal

**Primary consumer** - herbivore

**Common**

**Habitat** - all grassland habitats including mobile and fixed dunes

**Superpower** - will eat courser material allowing more light to reach the ground which helps our rarer, less competitive species, to persist.



**Fen orchid**  
*Liparis loeselii*



**Plant**

**Producer**

**Endangered** - European protects species

**Flowers** - June to July

**Habitat** - dune slack

**Superpower** - it needs to be next to a mycorrhizal fungi to be able to germinate.



## Sand couch grass

*Elymus farctus*



**Plant**

**Producer**

**Common**

**Flowers - June to August**

**Habitat - embryo dune, mobile dune and semi-fixed dune**

**Superpower - pioneer species, it is one of the first plants to colonise fresh sand.**



## Sea stock

*Matthiola sinuata*



**Plant**

**Producer**

**Very rare**

**Flowers - June to August**

**Habitat - embryo and mobile dunes**

**Superpower - after flowering the dry flower head, containing seeds, can float off to a new site.**

