



Manorbier Youth Hostel

Wildlife Report



This report was prepared by Biodiversity Solutions and Pembrokeshire Coast National Park Authority as part of the 'Naturally Connected' project. The project was funded by the Welsh Government's Sustainable Development Fund.

This is a pilot project so we would love to receive your feedback on this information pack. You can send your comments to sarahme@pembrokeshirecoast.org.uk or leave your comments in the visitor book.

Pembrokeshire Coast National Park

Welcome to Pembrokeshire Coast National Park!

Pembrokeshire lies at the south west extreme of Wales and is surrounded on three sides by the sea. Pembrokeshire's marine and terrestrial environments are strongly influenced by the Gulf Stream and the National Park supports species found in both warmer, southern areas as well as those from colder, northern regions.

Pembrokeshire is internationally important for many of its coastal, marine and lowland heath habitat as well as ancient, semi-natural oak woodland in the North of the park. These habitats support some of our most iconic species including choughs, puffins and seals.

The high wildlife value of the Park is reflected by its nature conservation designations which include:

- 13 Special Areas of Conservation (3 Marine SACs overlap about 75% of the Park coastline and account for about 60% of the inshore area).
- 5 Special Protection Areas.
- 1 Marine Nature Reserve (Skomer) – one of three in the UK.
- 7 National Nature Reserves.
- 60 Sites of Special Scientific Interest.

With miles of rugged coastline, sandy beaches, farmland, valleys, hills and woodlands to explore, we hope this short guide will help you experience some of the fabulous wildlife our National Park has to offer.



Manorbier Youth Hostel

Manorbier Youth Hostel occupies a stunning position directly on the Pembrokeshire Coast National Park path with 187 miles of superb coastal scenery right on the doorstep. As well as hostel accommodation there is a cafe, a campsite and three luxury camping pods set within a meadow bounded by hedges and trees. From the hostel, traditional flower-rich hay meadows lead you down to the cliffs and the secluded cove of Skrinkle Haven and panoramic views of the south Pembrokeshire coast, Caldey Island and the Gower Peninsula.

This quirky futuristic building used to belong to the Ministry of Defence who still occupy nearby land at nearby Manorbier camp. In the 1980's the building was bought by the YHA and developed into a Youth Hostel while the surrounding land was bought by



Pembrokeshire Coast National Park Authority and developed as a coastal nature reserve making it a wonderful spot for enjoying the special wildlife of the National Park.

Manorbier Youth Hostel used to be owned by the Ministry of Defence

You can wander through meadows full of flowers, bees and butterflies, explore the rocky shore and experience some of our best coastal wildlife including seals and seabirds such as choughs, guillemots, fulmar and herring gulls from the nearby islands of Caldey and St. Margaret's.

1 Around the Hostel

The mown lawn areas around the hostel have a variety of flowers in the short turf including self-heal, yarrow, clover, rib-wort plantain, daisies and birds-foot trefoil. The south facing bank in front of the hostel is particularly vibrant and buzzing with solitary bees, hoverflies and peacock and meadow brown butterflies.

Around the hostel trees and shrubs offer some much needed shelter in this exposed location. Look out for ash, alder, hawthorn, blackthorn and also sycamore. Sycamore is not a native tree but is often used for shelter in coastal locations due to its ability to tolerate the strong salty winds.

Under these trees you can find the green glossy



The black spots on sycamore leaves are the result of a fungal disease called tar spot.

foliage of the hart's-tongue fern, so called because the tongue shaped leaf around the size of a deer's tongue. These hedgerows and tree lines provide shelter for wildlife as well as a supply of nectar for insects and berries for flocks of birds in the autumn and winter.

Blackthorn is the first shrub to flower in the spring and its blossoms emerge in March before the leaves, a much welcome sign that spring is just around the corner. The hawthorn or whitethorn follows later on in May. It is considered unlucky to bring these flowers into the house and perhaps that was a practical consideration as despite their



beauty these flowers have a slightly unpleasant musky smell. This is in contrast to honeysuckle with its sweet summer honey scented flowers curling its way up strong wooden trunks to reach the light.

Blackthorn



Ivy flower

Ivy flowers in the autumn, at a time when few other native species flower providing an important source of food for late flying bees, wasps and hoverflies as well as red admiral and peacock butterflies.

You can find European gorse around the carpark area with its profusion of yellow coconut-scented flowers, the essence of a Pembrokeshire summer. This plant was known as 'furze' locally or 'eithin' in Welsh and in the past it was cut and milled as

cheap source of animal feed which was high in protein and essential nutrients.

As the shrubs become aflame with berries in the Autumn birds move in and take advantage of the opportunity to fatten up for the winter.

At this time of year our resident blackbirds and song thrushes are joined by birds which have migrated south to spend the winter here, including blackbirds (between 10 and 15 million blackbirds come to the UK each winter), and fieldfares.



Blackbird, blackberries & hawthorn berries

2

Rocky banks and concrete/tarmac

You wouldn't naturally associate concrete with wildlife but at the hostel there are species which use it to their advantage. The stone banks were created from the demolished buildings and covered in soil, providing excellent habitat for reptiles such as lizards and slow worms which use the area for basking in the sun. Reptiles bask to maintain their body temperatures, the time of day



Common lizard



Wall pennywort

varies depending on the time of year and the weather conditions. Reptiles have favourite basking spots and will often return to the same place. Lizards found basking in the summer are very likely to be pregnant females. Both lizards and slow worms can lose their tails if handled incorrectly so please look but don't touch.

Stonewort has taken advantage of the thin droughted edges around the tarmac and is recognisable as starry white flowers with fleshy pink tinged leaves. In an area of stone wall to the south west of the carpark you can also find the long spikes of greenish bell like flowers of naval-wort or wall-pennywort with its rounded fleshy leaves.

3

Dark skies and nightlife

Light pollution is a major problem in the UK and as a result it can be difficult to find places that are truly dark. Skrinkle has been designated as a 'Dark Sky Discovery Site' by the UK Dark Sky Discovery Partnership as a good place to watch the stars and explore the night sky. Look for planets and stars, take a moonlit walk or get up early to enjoy the sunrise.

Too much light can also be a problem for wildlife such as bats. You will see that the campsite at Manorbier YHA is lit by low level lights which help to illuminate the paths without spilling light up into the sky, an ideal way to protect the dark sky environment.

In the Manorbier camp military facility there is a roost of greater horseshoe bats in one of the bunkers. This species is common in south and west Wales and the UK but is afforded special protection as their numbers have reduced so drastically over the last 50 years. Greater horseshoe bats were recorded on a night time bat



Spectacular dark skies

survey as were noctules, the largest UK bat. Groups of smaller bats (most likely common and soprano pipistrelles) are often seen feeding around the east side of the youth hostel. It is most likely that the bats seen by the hostel staff come from the neighbouring farm.

Animal tracks around the site indicate that both badgers and foxes may be spotted on site as they head out hunting. In particular you can see badger 'snuffle holes', these are small areas where badgers have dug out their prey such as earthworms and insect larvae from the soil.



Fox

4

Meadows

The youth hostel is surrounded by large areas of coastal haymeadow filled with wildflowers. This is now an incredibly rare sight in Wales and also in the UK. Following severe food shortages during the second world war the government provided aid to farmers to intensify their management of the land in order to produce more food. For grassland fields this meant ploughing the old grasslands, fertilising and re-seeding with a limited number of fast growing commercial grass species. Unfortunately this led to the loss of over 95% of our wildflower



Exploring the wildflower meadows at the youth hostel



Sea bindweed

Over 30 species of flowering plants have

grasslands and the Wildlife Trusts estimate that only 15000 hectares of flower-rich meadow survive today which makes this area very special.

As well as the extensive coastal meadows, the Youth Hostel has its own small piece of meadow in front of the



Self-heal

been recorded here (a list of all species recorded here is included at the back of this report). Look out for the purple thistle like heads of black knapweed, the white flowered yarrow with its feather like leaves and cheerful yellow centred oxeye daisies. The yellow pea like meadow vetchling is perfectly adapted to long grass meadows, weaving up through the grass stems to reach the sun. The delicate pink flowers of sea bindweed can be seen threading their way through the meadow.

Many of our native plants have long been valued for their medicinal properties. One example is a small purple plant called self-heal has such a range of traditional uses it could be described as a 'cure-all'. In the UK it was mainly used to promote the healing of wounds, sore throats and mouth ulcers. It was also used to treat internal bleeding and heart complaints.



Wild carrot

Wild Carrot is easy to identify because the centre of the frothy white flower has a dark red spot that mimics an insect. The purpose of the red spot is to advertise the flower as a good place to encouraging other insects to land and pollinate the plant.

Further down on the coastal haymeadow, look out for orchids, especially common spotted orchid and southern marsh orchid. Sometimes these

orchids hybridise and the resulting plants can be very large as a result of hybrid vigour, sometimes up to knee height.

Another unusual plant on the coastal meadows is yellow rattle. This little yellow flowered plant was common in traditional haymeadows. Farmers did not like it because it is a parasite on grasses and reduced their hay crop. which is a parasite on grasses. Later in the summer its seeds rattle in their pods in the wind, hence the name.



Yellow rattle



Early purple orchid

Butterflies and Bees

On warm sunny days butterflies such as Meadow Brown, Ringlet, Small Copper and Common Blue take advantage of the nectar offered by the flowers in the meadow. Many of these butterfly species use the plants in the meadow for laying their eggs. Meadow Browns and Ringlets use common grasses such as cock's-foot and the common blue butterfly uses bird's-foot trefoil and white clover. A rare butterfly, the small blue has been recorded on this site because its food plant, Kidney vetch, grows on the coastal slopes. Small tortoiseshells, peacocks and red admirals can also be found in the meadows.



Common blue (top left), meadow brown (top right), Small Copper (bottom left), speckled wood (bottom right).

In most years you will see painted lady butterflies which migrate to our shores from North Africa. In certain years large numbers of butterflies arrive and 2009 was the last spectacular migration year. Unfortunately the butterflies do not survive our winter.

Naturally the meadows also attract lots of species to pollinate the flowers. Bumblebees are the conspicuous look out for white-tailed, buff-tailed and red-tailed bumblebee. Hoverflies do not sting, but at first glance they resemble a wasp with their black and yellow bands. This is deliberate mimicry on the part of the hoverfly aimed at tricking predators into thinking they sting. How to tell them



Red-tailed bumblebee

apart? It can be difficult but wasps have a very obvious 'waist' and hoverflies do not come to sweet things, so if it is after your ice-cream it is probably a wasp.

Chough can be seen here feeding in the short turf on the coastal slope. These glossy black birds are members of the crow family, their bright scarlet legs and curved red beaks make them easy to distinguish from other members of the family. Their beaks are perfectly designed to probe for bugs. They particularly enjoy foraging for ants in the numerous yellow meadow ant colonies within the grassland and dung beetles are a favoured food for fattening up young in the spring. Young chough initially have dark beaks and red legs, the red increases with age, you will see the difference in June when many choughs will be in family groups. One third of the Welsh chough population is found in Pembrokeshire.



Chough



Stonechat

Stonechats, linnets, meadow pipits, chiffchaffs and whitethroats breed here too, watch out for them on the tops of the gorse branches and in coastal scrub. Kestrel and peregrine falcons hunt here and during the summer ravens, herring gulls and lesser black-backed gulls can be seen flying overhead possibly travelling from colonies on Caldey and St. Margaret's Island.

Further Afield

1 Rocky shores at Skrinkle beach and Manorbier

The rocky shores of Pembrokeshire are teeming with life. The shore is a tough place to live and species at the top of the shore have to cope with extremes of temperature and exposure whereas those on the lower shore need to be capable of withstanding long periods submerged in salty water.

Life on the rocky shore arranges itself in zones from high to low water according to how well the organism is adapted to living in those conditions. If you look at the cliffs you can see distinct colour banding where species only survive in the conditions specific to that height on the shore.

Look out for classic rocky shore creatures such as periwinkles, barnacles, limpets and mussels as well as several types of sea anemone. breadcrumb sponges and star ascidians. Brown seaweeds such as bladder wrack and serrated wrack dominate the middle shore, but look more closely to see more delicate bright green sea lettuce and delicate pink frosted coralline algae.



Skrinkle shore

Exploring rock pools is fun thing and the wave cut platform at Manorbier beach is spectacularly good place to go rock pooling. Remember don't pull anything off the rocks and if you turn over a rock, put it back in the same place gently. Return the animals back where you found them, crabs back under the seaweed, prawns back in their pools.

<http://www.pembrokeshirecoast.org.uk/files/files/Wildlife/RockPooling.pdf>

<http://www.pembrokeshireoutdoors.org.uk/wp-content/uploads/2011/01/MCOFactSheets.pdf>

2

Along the coast path

Manorbier YHA sits right on the coastal path and you can either head East along the path towards Lydstep and Giltar Point or West towards Manorbier village and beyond. Skrinkle Haven marks the boundary between the Carboniferous limestone and the old red sandstone.

Choughs are found all along this stretch of coast and look out for Raven nests which can be spotted on the cliffs as large piles of twigs. Nesting kittiwakes can be seen dotted across the cliffs, look out for their somewhat stiff winged flight as they circle below you.

The coastal flowers in the maritime (influenced by the sea) grassland put on a spectacular display in spring. Baby pink heads of sea-thrift, abundant spring squill and white nodding heads of sea campion. In Wales, due to our western Atlantic climate bluebells can often be found



growing on the coast under **Carpets of pink sea-thrift** bracken.

On limestone you will also find abundant wild thyme (you may notice this as you sit down on a headland for a picnic and crush the leaves releasing the scent!), greater knapweed, salad burnet, mouse-ear hawkweed with its lemon yellow flowers and kidney vetch which is the foodplant for the rare small blue butterfly.

As you head towards Manorbier you may also hear the skylarks singing as they rise high in the sky on the upper reaches of the coastal slopes and on adjacent farmland. The National Park Authority works with the landowner at Hill farm to manage the coastal slopes with pony grazing and traditional winter burning. This helps to stop the gorse taking over to maintain a nice balance between scrub and grassland.

3

Freshwater East Local Nature Reserve

Managed by the National Park Authority with help from the community this Local Nature Reserve (LNR) is ideal for experiencing reed bed and sand dune habitats. You can explore the reed bed area in comfort from the boardwalk and wonderful marsh hide which was thatched using reeds from the site. In spring and early summer you can hear the calling of

reed warblers, sedge warblers and the scarce cetti's warbler, look out for flowers such as the beautiful yellow marsh marigold in the wet woodland, water mint and tall spikes of purple loosestrife along the board walk.

The sand dunes, although small are home to over 200 species of flowering plants. The display of pyramidal orchids is spectacular with over a 1000 stems recorded in 2015 and the scarce orchid autumn ladies tresses is also be found here. The floral display is wonderful during the summer months and flowers include

lady's bedstraw, bird's-foot trefoil, burnet rose and viper's bugloss to name but a few. Also look out for scarce sea holly along the seaward face of the dunes.



Pyramidal orchids

4

Bosherston Lakes and Stackpole Dunes

This site is owned by the National Trust and managed as a National Nature Reserve in partnership with Natural Resources Wales. This reserve has a lot to explore including, coastal cliffs, sand dunes, freshwater lakes and woodland.

The lakes are shallow man-made calcareous lakes were created as a designed landscape by moving Stackpole village damming a limestone river valley. The lakes are fed by a series of clean calcium-rich springs. Although they are best known for the display of beautiful white waterlilies they are also home to many other interesting aquatic plants

including the spiny-looking bristly stonewort which grows in submerged

dense beds in the clear lime-rich water of the central and western arms of the lakes. In spring, the woods surrounding the lakes are covered in pungent wild garlic with its starry white flowers alongside the spikes of early purple orchids.

Otters are regularly seen here and at dusk you are likely to see bats foraging over the woodland and lake. Some of these bats may be greater horseshoe bats as around 10% of the UK population breed at a roost site nearby. In summer the lake is alive with dragonflies



Eight-arch bridge

and damselflies and the best place to experience these is standing on one of the bridges on a sunny day in summer.



Barafundle Bay

A walk along the coastal paths on the Stackpole Estate will take you through sand dunes and maritime grassland, over limestone cliffs, and on to the lovely sandy beaches of Broadhaven and Barafundle Bay. Along the way you will encounter many beautiful wildflowers and special coastal plants as well as scrambled-egg lichen which is a threatened species in the UK. Look out for razorbills, guillemots and choughs. The choughs regularly feed on the coastal slopes adjacent to Broadhaven beach so you may be able to spot them flying overhead as you sunbathe.

3

Stack Rocks/Elegug Rocks and Range East

The welsh name 'Elegug' is the word for guillemot and if you visit at the right time of year you will see why. This is a fantastic to experience the sights, sounds and smells of a busy seabird colony. Thousands of birds nest here including guillemots, razorbills and kittiwakes, the best time to visit is during the breeding season from May-July.

After watching the stacks you can take a walk around the trail at range east which has a wide variety of wildlife species on the coast path including hoary rock rose and goldilocks aster.

The range is a unique place for one of our scarcest butterflies. On sunny days in June where you might be lucky to witness

the spectacle of hundreds of marsh fritillary butterflies. Over 1000 larval webs of this species were counted during this year's survey on the ranges. This whole section of coast is managed pollinator corridor so look out for bees too, especially the rare shrill carder bee.

Castlemartin also has the densest breeding population of Choughs in Pembrokeshire so if you missed them elsewhere along the coast – hopefully you will catch up with them here!



Guillemot



Marsh fritillary

14 pairs bred successfully along the ranges in 2016. Look out for the elusive Dartford warbler on Range East near St Govan's Head in the gorse.

Stack rocks and the range east trail are on land managed by the MOD as a military range so access restrictions apply. Check their website before you head out, but generally access is available on weekends and throughout August.

4

Caldey and St. Margret's island

From the Youth Hostel you can see the islands of St Margaret's (the closest island) and Caldey Island. Sandtop beach on Caldey can be seen glowing sandy gold on a good day. Caldey is the second biggest island in Pembrokeshire and is accessed by boat from Tenby harbour.

Cistercian Monks own and run the main island with the help of the Caldey islanders, who run the ferry boat, post office, shops and cafe. The island is no longer farmed so it has been opened up for visitors to walk parts of the North and West coasts. Priory beach is backed by dunes and a dune slack - this is one of the best places in Pembrokeshire to find sea holly.

Caldey is the most wooded island in Pembrokeshire with 10 ha of coniferous plantation woodland planted by the monks and is half limestone, half red sandstone. The western limestone cliff end has spectacular displays of maritime flowers in the spring and recently new paths have been opened up through the woodlands with

wonderful displays of bluebells.



Caldey beach

Large colonies of herring and lesser black-backed gulls breed here. It is a special place for the threatened herring gull and although it still hosts large numbers they have declined by 50% in the last 35 years. Atlantic grey seals also use secluded beaches around Caldey for hauling out and also occasionally for pupping, a boat trip is the best way to see them.



Comorant

A boat ride is a good way to see the vertical shaft cliffs and caves of St Margaret's island, its teeming cliffs of guillemots and razorbills, kittiwakes and fulmars. Breeding on the island is one of the largest great black-backed gull colonies in Wales. It is also a stronghold for the cormorant, watch for these dark birds standing by each nest at the top of the cliffs. 160 pairs bred this year, the best year was double that.

Appendix 1 – hostel meadow species list

Common Names	Latin name
Sweet Vernal-grass	<i>Anthoxanthum odoratum</i>
False Oat-Grass	<i>Arrhenatherum elatius</i>
Cock's-foot	<i>Dactylis glomerata</i>
Red Fescue	<i>Festuca rubra</i>
Rough Meadow-grass	<i>Poa trivialis</i>
False Oat-Grass	<i>Arrhenatherum elatius</i>
Yarrow	<i>Achillea millefolium</i>
Common Knapweed	<i>Centaurea nigra</i>
Creeping Thistle	<i>Cirsium arvense</i>
Smooth Hawk's-beard	<i>Crepis capillaris</i>
Carrot	<i>Daucus carota</i>
Hogweed	<i>Heracleum sphondylium</i>
Meadow Vetchling	<i>Lathyrus pratensis</i>
Oxeye Daisy	<i>Leucanthemum vulgare</i>
Common Bird's-foot-trefoil	<i>Lotus corniculatus</i>
Silverweed	<i>Potentilla anserina</i>
Creeping Cinquefoil	<i>Potentilla reptans?</i>
Primrose	<i>Primula vulgaris</i>
Red Clover	<i>Trifolium pratense</i>
Common Nettle	<i>Urtica dioica</i>
Germander Speedwell	<i>Veronica chamaedrys</i>
Rough Chervil	<i>Chaerophyllum temulum</i>
Creeping thistle	<i>Cirsium arvense</i>
Hemp Agrimony	<i>Eupatorium cannabinum</i>
Selfheal	<i>Prunella vulgaris</i>
White clover	<i>Trifolium repens</i>
Fennel	<i>Foeniculum vulgare</i>
Field bindweed	<i>Convolvulus arvensis</i>
Ash	<i>Fraxinus excelsior</i>
Sycamore	<i>Acer psuedoplatanus</i>
Elder	<i>Sambucus nigra</i>
Hawthorn	<i>Crataegus monogyna</i>
Alder	<i>Alnus glutinosa</i>
Harts Tongue Fern	<i>Asplenium scolopendrium</i>
Male fern	<i>Dryopteris filix mas</i>

Common name

Common Toad
 Common Lizard
 Slow-worm

Latin name

Bufo bufo
 Zootoca vivipara
 Anguis fragilis

Soprano pipistrelle bat
 Common Pipistrelle bat
 Greater Horseshoe bat

Pipistrellus pygmaeus
 Pipistrellus pipistrellus
 Rhinolophus ferrumequinum

Garden Tiger
 Cinnabar
 Meadow Brown
 Small Copper
 Small Tortoiseshell
 Large White
 Hedge Brown
 Red Admiral
 Painted Lady
 Common Blue

Arctia caja
 Tyria jacobaeae
 Maniola jurtina
 Lycaena phlaeas
 Aglais urticae
 Pieris brassicae
 Pyronia tithonus
 Vanessa atalanta
 Vanessa cardui
 Polyommatus icarus

Herring gull
 Lesser black-backed gull
 Raven
 Chough

Larus argentatus
 Larus fuscus
 Corvus corax
 Pyrrhocorax pyrrhocorax
 Saxicola rubicola

Stonechat
 House sparrow

Passer domesticus

Linnet

Linaria cannabina

Hedge accentor or dunnoek

Prunella modularis

Swallow

Hirundo rustica

Meadow Pipit

Anthus pratensis

Gold finch

Carduelis carduelis

Long tailed tit

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Blackbird

Turdus merula

