



Picton Castle

Wildlife Report



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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.



Picton Castle and Gardens

Introduction

Picton Castle has a rich history to explore and its gardens boast one of the best plant collections in Wales, including important collection of conifers, roses, medicinal herbs and Rhododendrons. The exotic trophy plants of the horticultural collections co-exist with a wealth of native wildlife.

The Bluebell Walk and nearby Peep-In-Walk provide magnificent colour from April onwards peaking in May with the flowering of masses of rhododendrons. Summer and Autumn bring woodland walks among the massive oaks and giant redwoods and the Jungle Garden one of the largest in the UK, is still magnificent during October.

While an ever changing pattern of colours and scents throughout the seasons will not fail to fail to enchant the gardener, Picton also has plenty to offer the wildlife enthusiast.

1

The Castle and Courtyard

A number of buildings in and around the courtyard area provide excellent habitats for wildlife, in particular birds and bats.

Under the eaves of the courtyard buildings you will see a busy colony of house martins. Their mud cup nests are created from pellets of mud mixed with saliva and grass. A new nest will take a couple of weeks to build but many birds will repair an old nest which only takes a couple of days.



Housemartins

They will raise two or three broods of chicks each year and you can hear their twittering calls as they swoop overhead answering calls from the young in the nest.

As the chicks grow they will become even more vocal in demanding food from their parents.

The birds have a distinctive white rump and forked tail with black upper parts and pure white underparts. They feed on insects and spend much of their time feeding in the air above wetlands, grasslands and rivers. In particular look out for them swooping over the wildflower meadow at the front of the castle.

Out of 85 species of horseshoe bats only two are found in the UK. Both greater and lesser horseshoe bats can be found utilising the buildings at Picton for breeding and hibernating. Horseshoe bats are the only British species that hang by their feet with their wings wrapped around them.

Several buildings in the courtyard area and to the north of the Walled Garden are well known as greater and lesser horseshoe bat roosts, one of those is in the Mortuary, which can be seen in this photograph. The bats fly in and out of the slats in the tower and the doorway, in the evening the lesser horseshoe bats can be seen flying around inside the Mortuary in readiness for their night of foraging.



The mortuary

There is also a roost of lesser horseshoe bats that emerge from under the door of a building on the south west side of the castle. These lesser horseshoe bats feed under the trees around the lawn at first and then disappear into the bug rich habitats in the castle grounds and along the Daugleddau.

Greater horseshoe bats use some of the structures around the garden for hibernating through the winter. The ice houses in particular provide ideal cool, moist conditions, allowing the bats to become torpid before waking up in the spring and dispersing to their maternity roosts.

2

Castle Wildflower Meadow

A walk through a welsh haymeadow in summer is an experience not to be missed. At the front of the castle you will find a beautiful wildflower meadow created by the gardeners around sixteen years ago. The area is managed in the same way as a traditional haymeadow and as a result the meadow is full



Cuckooflower

of wildflowers and buzzing with life and colour. Because of modern farming methods this is a very rare habitat and as a result every area of meadow should be treasured.

Each year the grass is allowed to grow long through the spring and summer and then cut in August when the flowers have set seed. Wildflowers may not be as showy as garden plants but if you look closely over 50 species plants have been recorded in this meadow.

The cuckoo-flower or lady's-smock can flower as early as April and are named because they were thought to coincide with the arrival of the first cuckoo, a sign that spring has arrived.

Yellow rattle was common in traditional haymeadows. Farmers did not like it because it is a parasite on grasses and reduced their hay crop. Later in the summer when it dries the seeds rattle in their pods the wind, hence the name.



Yellow rattle

Also look out for the purple thistle-like heads of black knapweed, the deep purple flowers of self-heal and the yellow pea-like flowers of bird's-foot trefoil.

The frothy white flowers of meadowsweet are found in the damp hollows of the meadow. The plant is not named for the sweet smell of the flower but for its use in making honey mead. In the mid 19th century salicylic acid was isolated from meadowsweet which lead eventually to the creation of aspirin.

In 2016 a Southern Marsh orchid turned up in the meadow for the very first – a wonderful reward for sixteen years work!



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



Southern Marsh Orchid

On a sunny day the meadow is alive with butterflies, bees and hoverflies. Butterflies such as meadow brown, ringlet, small copper and common blue take advantage of the nectar offered by the flowers in the meadow and 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.

Naturally the meadow attracts lots of species to pollinate the flowers. Bumblebees are the most conspicuous, look out for white-tailed, buff-tailed and red-tailed bumblebees.

This herb-rich area is a gold mine of excellent feeding for birds in the daytime and bats at dusk

Walled Garden

The first place to look for wildlife is the walls themselves. The sunny sheltered stones and mortar provide an interesting habitat for a range of plants. Look out for pellitory-of-the-wall, a herb once used to cure stomach upsets in horses and ivy-leaved toadflax which was introduced from the Mediterranean on marble slabs in the 1600s and has made itself at home in the UK.



Hart's-tongue Fern



Pellitory-of-the-Wall

Look out for ferns such as the Rusty -back fern, Polypody fern and Maidenhair Spleenwort, so named because of its resemblance to maidens plaits. The glossy Harts Tongue fern is also found in damper corners.

On the outside of the garden walls where the old glass houses used to be masonry bees and solitary wasps can be seen exploring the walls looking for nest sites and a pair of wrens have taken up residence in one of the wall cavities.

The medicinal plant section of the garden labels common wayside plants and kitchen garden faithfuls with their uses. The steamy fernery is also a treat and gives you a wonderful feel for the kinds of conditions ferns like to grow in.



Wren

The pond sits in the middle of the walled garden area and frogs emerging from their winter hibernation sites can often be seen as early as January if it is warm enough (generally over 5 degrees). They will move to the pond to breed and frogspawn is a common sight here.



Common Blue Damselfly

On warm summer days look out for dragonflies quartering the pond looking for prey. You won't miss the large golden-ringed or emperor dragonflies who won't hesitate to investigate you if you are standing on their beat. Smaller dragonflies to look for include the red common darter and borad bodied chaser. Damselflies are generally more delicate and hold their wings closed when at rest.

The Lichen Tree

You will find the lichen tree inside the walled garden – over 80 species of lichen have been recorded on this tree.

Lichens are part fungus and part algae. The fungus provides the structure or the “home” and the algae provides food from the sun by photosynthesis. Lichens grow in three different forms, “crustose” or crust like, “foliose” or leaf like and “fruticose” which are bushy or beard like.

Lichens absorb nutrients from the air and, as they have no control over what they absorb, they are very sensitive to pollutants such as sulphur dioxide and nitrogen - their abundance here is an indicator of good air quality. Many of the birds that nest among the trees and bushes also use lichens to line their nests.

Picton also has a number of rare lichens including the Tree Lungwort, so named because it resembles the lobes of a lung.



The Lichen tree

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Woodland Gardens

The woodland gardens at Picton are host to a range of exotic and garden species including an important collection of conifers or evergreen trees. Trees such as patagonian cypress, giant redwood or sequoia and western red cedar can be seen, some of these species were planted as part of a conservation programme to conserve trees threatened by logging and clearance in their native habitats. Rhododendrons are another speciality of Picton along with a range of exotic woodland shrubs.

Much of the woodland area is classed as Ancient Semi-natural Woodland which means this land has probably been wooded since the 1600's and possibly even longer. Native

trees such as oak, ash, beech and lower shrubs such as hazel, spindleberry, holly and elder sit side by side with the exotic species.

Carpets of bluebells make for spectacular heady scented displays in the spring and you can also look out for the starry white flowers of wood anemone and the delicate clover-like leaves of Wood Sorrel. Later in the summer you will find brambles, ivy and tall pink foxgloves, herb robert and rosebay willowherb.



Foxglove

Fallen tree trunks and branches are kept on site, with splays of root plates left as architectural features and large fallen trunks carved into seats. This deadwood is very important for the woodland ecosystem for cycling nutrients and also as a habitat for plants, fungi and insects. If you look closely you will see the holes and mining tracks left by insects such as beetle larvae.



King Alfred's Cake

King Alfred's cake is an interesting fungi seen at Picton, mostly found on Ash or Elder. These hard black balls are said to resemble burnt buns and the story goes that King Alfred was sheltering in a peasant ladies hut to escape capture by his enemies and was told to look after the cakes, but he left them to burn! Despite the name they are not edible.

As you might expect the woodlands hold a plethora of birds. Listen out for blackbirds, wrens, song thrushes and coal tits.

If you chance to walk around on a quiet day when there are few people about you will almost certainly be accompanied by the very tame 'gardeners robin' who will flit about your feet in the hope that you might take a fork to the soil and turn up his lunch!

Nuthatches and tree creepers are regularly seen at Picton in the tree canopy, on the tree trunks and if you are lucky on the bird feeders.

Treecreepers can be tricky to see because their mottled brown colour makes them very well camouflaged against the tree bark. They look rather mouse-like as they scurry up the tree trunk in a spiral fashion, seeking out insects in crevices in the bark.



Treecreeper

Nuthatches are quite colourful so they are much easier to spot moving around the branches and tree trunks with the aid of their powerful toes. They nest in tree holes and often modify the opening to the correct size using mud.

6

Eels

The large pond near the Peep-in walk was built in 1800 as a water supply for Picton. The pond is home to European eels. The European eel is a critically endangered species with a fascinating lifecycle. Even today parts of its lifecycle are still very poorly understood.

The migration of eels from the freshwater and estuarine waters of Europe to the Sargasso Sea (near Bermuda) is one of the most impressive feats of animal migration observed in nature. It is not known how long it takes eels to get to their distant spawning grounds or how many of the eels leaving Europe reach the Sargasso Sea to spawn.

After spawning, it is assumed that the eggs drift eastwards towards Europe with the Gulf Stream. During this time, the eggs hatch and when the larvae reach European continental shelf they metamorphose into the cylindrical shape that we associate with eels. These fish are virtually transparent and are called '**glass eels**'.

On entering freshwater the eels darken in colour as pigmentation takes place and they become known as **elvers**. During this time, they migrate upstream and occupy a wide variety of freshwater and estuarine habitats, feeding on invertebrates and fish. Eels are also known to move overland across wet terrain to get to some waterbodies. During their freshwater-resident phase they are known as **yellow** eels and they can remain in these habitats for more than 20 years. When eels are ready to reproduce, their colouration changes and they start to turn **silver** in preparation for their migration to the Sargasso Sea.



1. The Castle and Courtyard

3. Walled Garden

5. Woodland Gardens

2. Wildflower Meadow

4. Lichen tree

6. Eel Pond

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Further Afield

1

Picton point and the Daugleddau

Turn left out of the Picton castle carpark and follow the road down to the carpark by the river. Facing the river, head right along the permissive path towards Picton point. You will walk on the shingle for part of the way so please be aware this part of the walk is tidal.



Foreshore

Picton Point marks the place where the Eastern and Western Cleddau rivers meet to form the Daugleddau (two Cleddaus). The Cleddau Estuary is an example of a Ria, a valley flooded when sea levels rose at the end of the last ice age.

It is often called the 'secret waterway' tucked away in the heart of the National Park surrounded by rolling farmland and ancient woodland. The estuary is fringed with saltmarsh and dotted with numerous small pills making it a great place for watching birds.

Grey herons nest and roost high up in trees near here and can be seen hunting for prey at the edge of the river, standing and waiting to strike with their knife-like beaks. Other birds often dive bomb or chase herons, their outline is predator-like and they kill and eat young birds as well as fish, eels and frogs.

Cormorants can be found up the river hunting for fish in all seasons. These large black birds with long snake like necks breed near the mouth of the estuary and hunt in shallow water. These birds dive to catch their fish using their feet to speed through the water. You may see them standing with wings outspread between dives, this is because their feathers are designed to reduce buoyancy during underwater dives and as a result they are less waterproof than other birds.



Cormorant

At low tide you can walk to the west and around the point to Millin Pill, a fine spot for waders. This pill has a high number of sightings of the rare wader, the spotted redshank and you can also see dunlin, redshank, green sandpiper, grey plover and greenshank here. Curlews come to feed from August onwards, spot the females with the long down curved beak and the shorter bill of the male.



Redshank



Curlew

During the winter the plants on the river bank are a tangle of greys and greens. Sea purslane binds the mud together in areas of strong flow at the mid-tide level. Higher up the bank grasses, sea pink, sea lavender and scurvy grass survive the inundations of salty water as our large tides mixes with the downstream flow of the river water.



Sea Aster

Canaston and Minwear Woods

The valley of the Eastern Cleddau has been wooded for many centuries. Canaston, Minwear and Slebech woodlands are all part of the older and once more extensive Narberth Forest. These were very much working woodlands used for supplying pit props as well as fuel for limekilns, iron forges and blast furnace works in Canaston woods and later at Blackpool. Oak bark would also have been harvested to supply the tanneries near Lawrenny.

Later the broadleaved trees were replanted with coniferous trees by the Forestry Commission to provide timber, but many areas of broadleaved woodland along with ancient trees remain.

Spring flowers are superb, varying from nothing under the conifers to swathes of bluebells, wood anemones and wild garlic under the deciduous trees, later tall foxgloves stand to attention alongside the tracks or run riot in the clear felled areas.

This area has many common woodland birds like blue, great and long-tailed tits, dunnock, chaffinch, songthrush, robin and blackbird which are around all year.



Wood Anemone



Long-tailed Tit

willow warblers and chiffchaffs.

It is worth mentioning the blackcap here as this warbler now winters here in Pembrokeshire when 25 years ago blackcaps in the winter were rare. The male of the species has the black cap and the female a brown cap. Their song is melodic and beautiful.

A lot of high pitched trilling from the trees above may be a flock of long tailed tits, the pink and grey fluffy bundles with long black and white tails often travel as a family and can number 15 or more birds. They do everything together, safety in numbers, even roosting together in winter to conserve warmth

The spring brings in migrant birds that have wintered further south and return to nest in these woodlands such as the wood warblers,

If you are here in the winter, the reedbeds on the Eastern Cleddau are used as a roost by hundreds of thousands of starlings producing spectacular murmurations as the birds whirl together in unison. This is best viewed from the viewpoint in Minwear Wood.

In the woods and scrub there are also foxes and badgers, and there is a slim chance of seeing polecats and hedgehogs. Grey squirrels, a non-native species introduced from north America will also be seen, look out for the gnawing bark damage on the trees.



Blackcap

3

Carew Castle

The Castle and its surroundings are important for roosting and feeding for a whole range of bats including pipistrelle, brown long-eared bat, Natterers and Daubenton's bats. Noctule bats, *Myotis* species and pipistrelles regularly feed over the mill pond, on the edge of the scrub and woodland and in Castle Lane. There are also records of Serotine bats in the Castle grounds.

Carew Castle is designated at a National and European level because of its importance for bats, in particular Greater Horseshoe bats. The castle is a transition roost and used mainly in the Spring and late Summer/Autumn when bats are moving between their hibernacula and breeding colonies. Usually you might find up to 30 horseshoe bats at any one time roosting in the castle there is a high turnover and as a result of the radio tracking work it is thought that a high proportion of the estimated 350 Greater Horseshoe bats in Pembrokeshire pass through the castle at some point in the year.



Black Knapweed at Carew Castle

The best way to experience the bats is to take a dusk walk along the lane and around the mill pond, or join one of the National Park's bat walks.

Within the castle itself the limestone walls are home to a range of interesting flowers including rusty back fern, pellitory-of-the wall and wall rue. Barn owls regularly breed and roost in the Castle. Tawny and

little owls have also bred within the Castle in recent years. Peregrine falcons feed and roost within the Castle, especially during autumn and winter.

The lagoon and fringing saltmarsh are used by small numbers of waders for feeding and roosting at high tide: Up to 200 dunlin have been recorded roosting at high tide on the shoreline. Other passage and wintering waders include redshank, greenshank, green and common sandpiper. Wildfowl include mute swans and shelduck which are recorded regularly in winter and early spring.

Large areas of the grounds have been under conversion to haymeadow and as a result a range of flowers can be seen including yellow rattle, black knapweed and eyebright. In the winter this area is grazed by ponies which help to manage the grasslands and also provide dung which in turn attracts the invertebrates which feed the bats!



Barn Owl

4

West Williamston

This Wildlife Trust reserve is situated to the west of the village of West Williamston. Access is from the small car park by a public footpath across fields towards the shore of the Carew river and the south west corner of the river.

The reserve is a promontory on the confluence of the Carew and the Cresswell rivers. The saltmarsh is deeply indented with tidal creeks excavated as loading bays for the



West Williamston

limestone quarries in the 18th century. Many of the creeks are now becoming salt marsh, and the remaining spoil heaps from the quarries have become vegetated.

The saltmarsh fringes the muddy shoreline where there is a broad belt of cord grass, glassworts, rock sea-lavender and also marsh-mallow at one of its few locations in Pembrokeshire. The ridges between the creeks and quarries have a rich calcareous flora between patches of

scrub including Blackthorn. Local and uncommon plants include bee orchid, fragile glasswort, hairy rock-cress, hairy violet, and yellow-wort. Ash and sycamore dominate the woodland with oaks, beech and hazel. Lichen and fungi are abundant and include sulphur tuft and orange peel fungus.

The site is home to one of the largest colonies of brown hairstreak butterfly in Pembrokeshire. This butterfly is restricted to the south of the county and its main centre of population is on the clay soils around the Daugleddau. The butterfly lays its eggs on blackthorn. They are one of our latest emerging butterflies often first seen on the wing in July and early August. They spend much of their time in the tree canopy around a favoured 'master tree' often an ash but you may see them nectaring on late flowering species such as Hemp Agrimony.



Little Grebe

Large numbers of waders and wildfowl frequent the site, including Curlew, Little Grebe, Grey Heron, Shelduck, Mute Swan, Cormorant and Oystercatcher.

5

Lawrenny Woods

Do the short circular walk for a wonderful combination of woodland and estuary. The woodland is a fragment of ancient woodland on steep slopes with gnarled and twisted sessile oaks. As you might expect birdlife is abundant here, look out for the redstart in particular which is known to breed here. In spring the bluebell display is fabulous and throughout the year you can see bilberry, heather, woodrush and wild honey suckle. A few wild service trees grow in the shrub layer adjacent to the path, a good indicator this is ancient woodland.



Redstart



Little Egret

You will also see a variety of shorebirds at the sheltered Garron Pill. In particular look out for little egrets, wigeon and teal.

Appendix 1 - Meadow Species list supplied by Matt Sutton and Vicky Swan of Wyndrush Wild Products

<i>Ajuga reptans</i>	Bugle
<i>Anthoxanthum odoratum</i>	Sweet Vernal Grass
<i>Arrhenatherum elatius</i>	False Oat Grass
<i>Cardamine pratensis</i>	Cuckoo Flower
<i>Carex caryophyllea</i>	Spring Sedge
<i>Carex flacca</i>	Glaucous Sedge
<i>Carex leporina</i>	Oval Sedge
<i>Carex panicea</i>	Carnation Sedge
<i>Centaurea nigra</i>	Lesser Knapweed
<i>Cerastium fontanum</i>	Common Mouse-ear
<i>Cynosurus cristatus</i>	Crested Dog's-tail
<i>Dactylis glomerata</i>	Cock's-foot
<i>Danthonia decumbens</i>	Heath Grass
<i>Festuca rubra</i>	Red Fescue
<i>Filipendula ulmaria</i>	Meadowsweet
<i>Holcus lanatus</i>	Yorkshire Fog
<i>Hypochoeris radicata</i>	Cat's-ear
<i>Juncus conglomeratus</i>	Compact Rush
<i>Lathyrus pratensis</i>	Meadow Vetchling
<i>Lotus corniculatus</i>	Bird's-foot Trefoil
<i>Lotus pedunculatus</i>	Greater Bird's-foot Trefoil
<i>Luzula campestris</i>	Field Woodrush
<i>Lysimachia nemorum</i>	Yellow Pimpernel

Narcissus obvallaris

Wild Daffodil

Plantago lanceolate

Ribwort Plantain

Poa pratensis

Smooth Meadow Grass

Potentilla erecta

Tormentil

Potentilla reptans

Creeping Cinquefoil

Prunella vulgaris

Self-heal

Ranunculus acris

Meadow Buttercup

Ranunculus repens

Creeping Buttercup

Rhinanthus minor

Yellow Rattle

Rumex acetosa

Common Sorrel

Taraxacum officinale

Dandelion

Trifolium dubium

Lesser Trefoil

Trifolium pratense

Red Clover

Trifolium repens

White Clover

Veronica chamaedrys

Germander Speedwell

Vicia sativa

Common Vetch

Vicia sepium

Bush Vetch

