### BURREN NATIONAL PARK



Spring brings new growth and new life and signs of this are beginning to appear all over the Burren National Park as welcome pops of colour emerge from the forest floor in the hazel wood. Hazel catkins and hazel flowers began to appear in February and March sees the Primrose *Primula vulgarus*, Wood Anemone *Anemone nemorosa* and Lesser Celandine *Ficaria verna* among many others all making an appearance. A close study of the ground whilst strolling along the orange trail might reward the eagle eyed with a glimpse of an Early Purple Orchid *Orchis mascula* rosette or even the leaves of the stunning Spring Gentian *Gentiana verna* waiting for the flowers to bud and bloom in the coming weeks. The very wet March weather this year means the turloughs around the park are quite high and at times the trails have been flooded in spots.

The fauna of the park are becoming more active too as temperatures rise, bees are rousing from hibernation and it is only a matter of weeks before some butterflies and bats make their first flights after their winter slumbers. We will also bid farewell to our wintering waterfowl but happily anticipate the arrival of Spring and Summer migrants from Africa.

SPRING 2023 NEWSLETTER

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# Fluttering and Buzzing BURREN NATIONAL Into Spring



The Burren National Park is a wonderful place to see butterflies with 24 of Irelands 32 regular and migrant butterfly species found in the park depending upon the time of year. The species rich grassland and 'fertile rock' of the park make it a hotspot for biodiversity with a vast array of flowering plants found on the limestone pavement, in the meadows, by the turloughs and amongst the hazel woods.



One of the earliest and most joyous signs of Spring in the Burren National Park are the first glimpses of the Brimstone Butterfly *Gonepteryx rhamni ssp. gravesi*. They have been in hibernation since September or October and have spent this cooler period hung up amongst the Holly and Ivy or hidden under bramble leaves. The Brimstone can usually be spotted during April feeding on Spring flowers such as Dandelions, Primroses and Bluebells. The male brimstone is a lemon yellow colour while the female is of a more green hue, both have striking angled wings with pronounced venation which makes them resemble a leaf when perched.

They are also recognisable by the orange 'rust spots' on the forewings and hindwings. They require Buckthorn *Rhamnus cathartica* (also known as Purging Buckthorn), a plant that prefers the calcareous soils found in the Burren as well as West Galway and West Mayo, for their larval foodplants, they will also lay their eggs on Alder Buckthorn *Frangula alnus*. Brimstones can be found in areas of open scrub, woodland edges and clearings rich in flower species making the park an ideal habitat. Mating occurs in late March reaching a peak in May after which the female lays bottle shaped eggs directly onto the underside of the preferred foodplant. The tiny green caterpillars hatch after ten days to devour the Buckthorn and Alder Buckthorn leaves.

The larval stage lasts about 30 days before the fully grown and fattened caterpillar finds a place to pupate in low undergrowth, this stage lasts a further two weeks before the fresh adult butterfly emerges during the months of June and July. These new butterflies can be seen for the remainder of the summer and early autumn feeding on the rich flowering meadows of the Burren National Park on the nectar of plants such as Devil's-Bit Scabious *Succisa pratensis* or Clover *Trifolium pratense*, they do seem to favour purple flowers! They will continue to feed until hibernation during September and will mate in the following Spring thus beginning the cycle again. It has been suggested that the word 'butterfly' comes from the light yellow colour of this insect.



### Fluttering and Buzzing into Spring





Red Tailed Bumblebee Bombus lapidarius



Shrill Carder Bee Bombus sylvarum

As the temperatures rise Bumblebees have been waking up from their winter hibernation and can be seen buzzing about the early spring flowering plants. All the bumblebees spotted in the early months are queens emerging in search of nectar and nest sites. Once the queen has chosen a safe spot, which may be a thick tuft of grass or a hole in the ground she will continue to collect pollen and store it in the nest before laying her first brood of eggs. She sits on the eggs for several days keeping them warm before the larvae hatch. The queen feeds the larvae nectar and pollen and after about two weeks they spin a cocoon to live in while they develop into fully grown bees. These become the worker bees who will take care of the nest and forage for nectar and pollen. The queen remains in the nest from this point laying more eggs before dying and being replaced by a new queen. The new eggs will hatch into queens and male bumblebees. The male bumblebees leave the nest in the late Summer or Autumn and do not return again, instead they feed, mate and die off leaving the youngest newly mated queens to prepare for hibernation, a phase of diapause that allows her to slow down all her systems before finally laying her eggs in the Spring.

There are a number of different species of bumblebee in the Burren National Park. At the moment you are most likely to spot the Buff Tailed Bumblebee Bombus terrestris, the White Tailed Bombus lucorum bumblebee and the Red Tailed Bumblebee Bombus lapidarius. The Burren is the most important location in Ireland and Britain for the endangered Shrill Carder Bee Bombus sylvarum. This is a small olive-green grey coloured bumblebee with an orange-red tail and a distinctive black band on the thorax. It nests underground and can be seen from late April or May. It requires a large variety of flowers on which to forage and especially likes Knapweed Centaurea nigra and Red Clover Trifolium pratense both of which are plentiful in the Burren National Park. It has a distinctive higher pitched buzz from which it takes its name.

If you would like to help our bumblebees and pollinators you can do so by growing wild flowers, it is important to plant native mixes which are suited to the proboscises (tongues) of our native pollinators. Less mowing of lawns or even a patch left uncut is also a great boon to bees, butterflies, hoverflies, wasps and many more.



### Floral Meadows and Forest Floors





The cheerful Lesser Celandine *Ficaria verna* is one of the earliest flowers of the year and can be seen as early as January. It has eight to twelve brown backed yellow petals and dark green heart-shaped leaves at it's base. In overcast weather it closes its petals. Along with Wood Anemone and various types of buttercup it belongs to the family Ranunculaceae. These early spring flowers are vital early sources of nectar to pollinators such as queen bees emerging from hibernation. Also known as Pilewort as this plant was used to treat hemorrhoids; the young leaves are also high in Vitamin C which gives rise to its other name, Scurvywort, as it was used to treat the disease.

Growing on the floor of hazel woods in the Burren National Park, the delicate white flowers of Wood Anemone Anemone nemorosa appear before leaves grow on trees and shrubs and are a sure sign of Spring. It flowers from March to May forming a fresh green carpet with its deeply lobed basal leaves. Wood Anemone is considered an indicator species for ancient woodland as it can take a long time to fully establish itself. In counties Clare and Galway it was said that the leaves of Wood Anemone could when placed on the head cure a headache, the plant itself is poisonous to humans however!





The Dandelion *Taraxacum agg.* whilst not one of the more exotic plants in the park is certainly one of the most important as a source of nectar and pollen for early spring pollinators. There are over seventy different species of dandelion recorded in Ireland and it can be difficult to distinguish one from another. The lovely yellow shaggy heads of these various plants can be seen popping up everywhere from March right through to October. In Irish it is Caisearbhán and also Bearnán Bríde, 'the indented one of Brigid' probably due its being one of the first flowers to appear close to the saints feast day or Imbolc on Februray 1st.

### Floral Meadows and Forest Floors



The pretty yellow Primrose *Primula vulgaris* can be seen on woodland floors and in the meadows around the park usually during March but can bloom earlier. This five petaled flower belonging to the Primulacceae family sits in a basal rosette of oval shaped crinkled leaves. It was once customary in Ireland for children to gather primroses on May Day eve and make posies which could be hung over doors or placed on window sills to ward of the fairies or evil spirits. In traditional medicine primrose has been used as a cure for burns, jaundice, toothache and insomnia.





Wood Sorrel Oxalis acetosella like Wood Anemone is an indicator species for old woodland and can also be found in patches of hazel woodland throughout the Buren National Park. The delicate white purple veined five petaled bell shaped flower can be seen from April to June. It has distinctive vibrant green trifoliate leaves, each leaf having a heart shaped appearance which are flat during the day but fold into a tent shape at night. Old medicinal uses for Wood Sorrel include its use as a blood tonic and as a cure for diarrhoea.

One of the Burren's most iconic flowers is the Spring Gentian *Gentiana verna*. This five petalled flower is the most startling blue, which has to be seen in the field to be truly appreciated. It has a short stem and a beautiful star shaped flower growing from a long calyx tube. It is has made a home of the calcareous seminatural grassland of the Burren and the Aran Islands though examples have also been found at suitable locations in counties Galway and Mayo. It is otherwise a rare plant in Ireland and is more commonly associated with artic-alpine tundra.



## Departures and Arrivals





Our feathered winter visitors are getting ready to leave the country and within the Burren National Park Whooper Swans Cygnus cygnus, which can sometimes be seen on or near turloughs, will depart in the coming weeks. Having arrived here in Autumn they come here to feed on grasslands and open farmland close to inland bodies of water. They will leave Ireland during March and April returning to Iceland to breed. We have two other species of swan in Ireland, our resident Mute Swan Cygnus olor and the migratory Bewick Swan Cygnus Colmbianus which has seen its numbers fall drastically in Ireland as warmer climates mean it no longer has to fly as far west from its breeding grounds in Siberia to feed. The three types of swans

can be distinguished from one another by their beaks. The Whooper and Bewick swan have yellow and black beaks, but on the beak of the Whooper the yellow extends down the beak to the nostril, while in the Bewick swan there is less yellow and the black colour covers the nostril, whilst the Mute Swan has a orange beak with a black mass or knob at the top. Other over wintering water fowl which will soon be taking their leave of the park include Tufted Duck Aythya fuligula, Golden Plover Pluvialis apricaria and the Lapwing Vanellus vanellus. It is no surprise that these beautiful birds feature in the folklore and mythologies of many countries and we are all familiar with the story of the Children of Lir in Ireland. In Finnish folklore the long necks of the Whooper Swan were said to allow them to see into the realm of the dead or Underworld known as Tuonela allowing them to serve as messengers between the realms of the living and the dead.

The park and the wider Burren is an excellent place to hear the Cuckoo Cuculus canorus calling and you are far more likely to hear it than see it. This bird arrives in Ireland from Africa during the month of April and stays with us until August each year. It is the male of the species that makes the distinctive 'cuck-oo' sound while the females have more of a burbling call. Interestingly they do not sing in Africa despite spending nine months of the year there. As is well known the cuckoo is a 'brood parasite' that is it lays its eggs in the nests of other birds. The female cuckoo will lay a single egg in between twelve and twenty four nests throughout its stay and as it does not have to rear its own young will makes the journey back to central and southern Africa from June. The newly hatched cuckoo chick pushes out any other fledgling or eggs and is reared alone in the host nest. In the Burren this is usually that of a Meadow Pipit Anthus pratensis but in other locations it will also use Dunnock Prunella modularis and Reed Warbler Acrocephalus scirpaceus nests. When the fledglings are old enough they too will make the journey back to Africa. Other birds which will arrive in the coming weeks and months are the Wheatear Oenanthe oenanthe and the Willow Warbler Apus apus.



## Coming out of Hibernation



Brown Long Eared Bat *Plecotus autitus* 



Lesser Horseshoe Bat Rhinolophus hipposideros

There are nine confirmed resident species of bat in Ireland, seven of which can be found in the Burren. During October/November bats will have retreated to their hibernation roosts (hibernaculum) and will begin to emerge in the late Spring and early Summer. Bats are the only mammal capable of true flight, and the bone structure in their wings somewhat resembles a modified human hand with the skin stretching between the elongated digits. This means that the bat is very agile in the air and can change direction quickly to follow its prey. Bats in Ireland are insectivores who can consume upwards of a thousand insects per night, their prey may include moths, mosquitoes, lacewings, craneflies, mayflies and midges and even some ground prey such as earwigs and spiders depending on the species of bat. Common Pipistrelle Pipistrellus pipistrellus and Soprano Pipistrelle Pipistrellus pygmaeus bats, both of which are found in the park, can eat a staggering three thousand prey items a night. Bats will roost in rock crevices, trees, old buildings and even attics during the summer months. A number of bats roosting together is called a colony with the females giving birth to one pup around June in what is known as a maternity roost. These roosts are usually in quiet spots with a good supply of insects nearby. Bats are not blind but because they hunt at night they use echolocation to locate their prey. They also use linear features such as hedgerows and tree lines to echolocate their routeway through the countryside, feeding on insects as they go.

The Burren National Park is home to the Lesser Horseshoe bat *Rhinolophus hipposideros* which has a more limited distribution compared to the other bat species in Ireland and can only be found in Clare, Galway, Mayo, Limerick, Kerry and Cork. This bat differs from the other species too by being the only resident species with a nose leaf or fold of skin that enhances its ability to echolocate. Another distinctive feature of this species is that it is unable to perch and crawl into its roost site and must fly in, the open entrances of caves or disused stone building with open doors or windows are favoured roosting places. The Lesser Horseshoe bat is also our only bat that actually- hangs upside by its feet and closes its wings around itself when resting. It is also the most photosensitive of the bat species in Ireland so will not be seen in urban settings but prefers dark countryside locations. The other species of bat found in the Burren is the Brown Long-Eared bat *Plecotus auritus*, the Whiskered bat *Myotis mystacinus*, Daubenton's bat *Myotis daubentonii* and Brandt's bat *Myotis brandtii*.





#### **UPDATED OPENING HOURS:**

The Burren Information Point in Corofin will be open during April from **Wednesday** to **Sunday** from **9:30am** to **5:00pm** 

Please note the Information Point in Corofin will be closed on the **26th**, **27th** and **28th** of **April** for staff training purposes.

#### **Burren National Park:**

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