

Chapter 7

Wildlife & Biodiversity in Clarecastle & Ballyea Jean Ryan

Introduction

The villages of Clarecastle & Ballyea and its surroundings are rich in biodiversity, even the Quay close to the centre of Clarecastle village, supports an abundance of wildlife and wildflowers that you would expect to find in the Burren.

Clarecastle & Ballyea contain a variety of landscapes, from limestone pavement & woodland visible in Ballybeg woods, exposed limestone at the Quay, limestone shoreline and woodland at Killone lake and the Estuary from the River Fergus which stretches from Clarecastle Quay all the way down to Islandavanna, where the River Fergus joins the River Shannon and the water flows out to the Atlantic Ocean. It is due to these different environments that there is such an abundance of Biodiversity.

The areas that shall be focused on within this chapter are as follows:

1. The Quay
2. Ballybeg woods
3. Killone
4. Islandmacgrath & Islandavanna

1. The Quay

Although small, the quay areas (the original Quay and the New Quay), comprise of estuary, river bank, hedgerow, marsh and limestone habitats. Wildlife can be readily seen in the quieter spots of this very accessible area. The Quay itself is mostly parkland and while it does support some wildlife, the majority of flora and fauna can be seen in the wilder, less well kept path towards the New Quay, flanked on either side by a hedgerow or by the river bank. The reed beds beside the former coal yard and Quay wall area is another great location for watching wildlife, as is looking across at the small island from the Quay side itself.



Fig.1: The Quay.

Fig. 2: The New Quay.

Dusk is ideal for observation of foxes, which can be seen skulking around the old wall of the former coal yard, nearest the river. Pipistrelle bats can also be seen flying repeatedly up and down the avenue of trees bordering the Quay and Roche. An evening high tide is an excellent time for viewing otters, which can deceptively look like logs floating down river, until one spots the ‘swoosh’ of a tail and the change in direction as the otter swims towards the muddy shoreline.

The wooden post at the end of the ‘New Quay’ is an ideal spot to watch Kingfishers. These colourful but shy birds can be seen watching for small fish at the surface of the water.

Spring mornings, provide opportunities to spot stoats. Adult stoats can be seen at this location in late spring, carrying offspring in its mouth, running across the hedgerow path.

The shallows of the river near the Quay wall on an early summer’s morning, is an ideal time to see baby flatfish taking off into deeper water. These baby fish flounder & skate stay within this estuarine nursery until they are big enough to head out to sea. Old salmon fishermen in the area referred to juvenile flounder as ‘fluke’. Young salmon are called peal (pronounced as ‘pale’). It has been known that fishermen used to also sell grey mullet as sea bass at the local markets.

Cormorants can be seen diving and surfacing with eels or flatfish in their beaks, which they sometimes have difficulty in swallowing. These birds can be seen gulping down water and throwing their heads back in an attempt to swallow these wriggling fish.

The morning is a good time to see frogs in spring. These creatures are getting ready to lay their frog spawn and can sometimes be seen sitting on the track between the Quay and New Quay, bathing themselves in the sunshine. Hares & rabbits can also be spotted through the hedge or railing at Roche, nibbling on the wild grasses beside the hedgerow alongside the New Quay. The hedgerow supports blackbirds, robins, wrens and thrushes and these birds can be seen almost anytime. Blackbirds can be seen smashing snail shells against small stones in this location. In the winter pheasants take shelter near the hedgerow or beside the river bank.

The Quay also supports flocks of Sand Martins that appear to nest in the Quay wall and under the new Quay. These little birds migrate to Ireland from Africa and begin arriving from late March onwards depending on the winds. These birds look similar to a swallow but are smaller, sandy brown, with a blunter tail and tend to fly in groups up and down the river. These birds herald in the summer as they often arrive before the Swallow.

Table 1 below lists some of the other birds which can be seen at this location:

No:	Bird Name:
1	Mallard
2	Teal
3	Shelduck
4	Goosander
5	Heron
6	Little Egret
7	Mute Swan
8	Kestrel
9	Black Headed Gulls
10	Lapwing
11	Curlew
12	Dunlin
13	Snipe
14	Oyster Catcher
15	Wimbrel

16	Swallow
17	Grey Crow
18	Jackdaw
19	Pochard
20	Greenshank

Table 1.- Birds at the Quay.

The New Quay area supports an abundance of wildflowers in late spring early summer and many limestone loving plants can also be seen. The soil here is of a poor gravelly consistency with limestone rock exposed intermittently. Near the white painted bollard, a variety of orchids including the Bee Orchid can be seen. Other plants in the area are as follows: Oxeye Daisy, Yellow Rattle, Early Purple Orchid, Marsh Orchid, Cats Ear, Teasel, Meadow Sweet, Great Willow Herb, varieties of Vetch, Eye Bright, Birds-Foot Trefoil, Devils, Quaking Grass, lady's Bedstraw, Fleabane and Tree Mallow. There are also a variety of grasses, including Quaking grass, Yorkshire Fog and Timothy Grass.

The Marsh area supports yellow Iris, Lady's Smock, Teasel, Purple Loosestrife and a variety of rushes. On winter's evenings, snipe shelter in the marsh area amongst the rushes. These shy birds, may cower down (preferring to hide), before silently taking flight using a peculiar zig zag motion and uttering a 'Scaap' call to alert others that an intruder is in their area!

The hedgerow supports plants such as Primrose, Scarlett Pimpernel, Lords and Ladies, Willow Herb and Harts-Tongue Fern. Trees & bushes include Hawthorn, Willow & Brambles.

Fig. 3: Bee Orchid.



Fig. 4: Common Spotted orchid.



Fig. 6: Teasel

Fig. 5: Common Knapweed



Fig. 7: Yellow Rattle.



Fig. 8: Tree Mallow.



Fig.9:Wild



Carrott.



Fig. 10: Common Frog.



Fig. 11: Flounder.



Fig. 12: Hare.



Fig. 13: Kingfisher

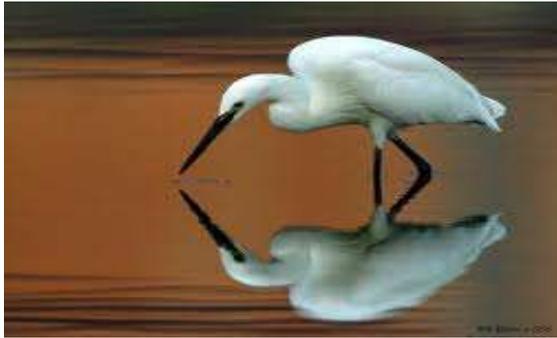


Fig. 14: Little Egret.



Fig. 15: Otter.

2. Ballybeg woods

From April to May, an abundance of spring flowers can be seen at Ballybeg woods. Flowers such as Wood violet, Wood Anemone, Bluebell, Lesser Celandines, Primroses, wild Strawberries, Dandelions and Daisies. Other plants such as Lords and Ladies a selection of Ferns, such as Harts Tongue, Polypody Fern.



Fig. 16: Bluebells

Birds seen at the wood include the following: magpie, blackbird, thrush, robin, blue tit, great tit, long tailed tit, starling, jay, kestrel, tree creeper, collared dove, stock dove and jackdaw

Spring is a perfect time to see young beech leaves and crab apple blossom displays. Other trees include conifers, sycamore, oak, ash, holly, willow, wild cherry, black thorn and haw thorn

During the autumn, the leaves change colour due to diminishing chlorophyll and eventually fall from the trees in the first storms, providing a multi-coloured display on the paths. Autumn fruits such as acorns, blackberries, beech nuts, hawthorn berries, crab apples, sycamore keys and spindle wood berries, hazel nuts can also be seen. Different types of lichens and fungi can also be found during this time of year.

The plants and trees can be seen growing alongside paths and in the cracks and crevices of the limestone pavements and boulders within the wood.

The wood is home to a number of mammals which can be seen in the early morning or at dusk. Animals include badger, hedgehog, fox, red squirrel and a herd of wild goat. The area is very close to an area of special conservation, which aids the protection of a lesser horseshoe bat colony. Some trees at Ballybeg woods have bat boxes mounted on them to provide suitable roosting locations for bats.



Fig. 17: Wood Violet



Fig. 18: Hart's-tongue Fern



Fig. 19: Fox



Fig. 20: Badger



Fig. 21: Beech Leaves

Fig. 22: Cherry Blossoms

Lesser horseshoe bats are so called due to the shape of their face, where they have a saddle shaped profile just under their nose. Horseshoe bats forage nocturnally and eat insects and moths. The Horseshoe bat navigates by echo location, the bats make a very high pitched ultrasonic noise (which can be detected by a bat detector), however it is due to this high pitched frequency call that these bats must feed while flying back & forth to a row of trees or hedgerows, as they are unable to detect distant objects.



Fig. 23: Horseshoe Bat

Horseshoe bats hibernate in the winter in locations such as caves, where their body temperature reduces from thirty five degrees Celsius to that of their surroundings, for example Edenvale cave (near to Ballybeg) may be ten degrees Celsius on average during the winter, so the bats will huddle together in big groups hanging upside down, with their wings folded around them by their tiny claws to maintain a temperature of 10 degrees Celsius.

The horseshoe bat has an unusual way of producing young, in that the Male and Female will mate in the autumn or winter however the female bat doesn't become pregnant until spring, this ensures that there is plenty of food around during pregnancy & birth of her pup.

Prior to having their single pups, the female bats move to a nursery location to roost, these can be in the roofs of derelict buildings or sheds and generally warmer than cave locations. The baby bats suckle from their mother for up to 6 weeks. These bats in these nursery colonies gradually disperse as temperatures drop and there is a less abundant insect supply.

As the lesser horseshoe b

at requires a range of different habitats, such as caves, derelict buildings, sheds and rows of trees or hedgerow so they can navigate while foraging, they are protected by EC Directive on the Conservation of natural habitats and of wild fauna and flora (Habitats Directive), and it is for this reason that Special Areas of Conservation have been set up near to Ballybeg woods and this area is monitored annually. The lesser horseshoe bat is also protected under the Wildlife Act 1976 and Wildlife (Amendment) Act 2000.

Red squirrels are native to Ireland since before the last Ice Age and can also be seen at Ballybeg woods. These shy animals can sometimes be seen running across the woodland paths but generally tend to hide out on the far side of tree tops when you are looking for them! Red squirrels have orange red fur, a bushy tail and ear tufts. At Ballybeg woods they feed on hazelnuts, beech nuts, acorns, fruits, buds and possibly fungi. The squirrels enjoy Ballybeg Woods's mixture of coniferous and deciduous woodland and build their drays in the hollows of these trees or trees that are covered with heavy ivy.



Fig. 24: Red Squirrel

Around January or February, the male squirrels chase the females around the trees in an attempt to win her as a mate. After six weeks the female gives birth to approximately three kittens, these suckle for up to ten weeks and are naked and blind when born. The kittens only start to look like an adult squirrel when they reach three months old. These young squirrels stay close to home until the autumn before dispersing to another location.

The red squirrel has suffered a decline due to the deforestation and introduction of the grey squirrel. The grey squirrels compete with the red squirrel for certain foods and where introduced the grey squirrel will result in the disappearance of the red squirrel from the same area, within 20 years. The grey squirrel has also introduced viruses such as squirrel pox, which results in the red squirrel dying from infected lesions on its face, eyes and hands within a few weeks. The grey squirrel does not suffer the same affects and is a carrier for the virus. The red squirrel is protected under Wildlife Act 1976 and Wildlife (Amendment) acts 2000 & 2010 and the Bern Convention (Appendix III). In recent times, there have been observations made that there might be a rise in Pine martin populations in some parts of the country, where these mammals are feeding on the grey Squirrel populations; this is providing the red squirrel an opportunity to repopulate an area, while also aiding the protected pine martin. Grey squirrels are not as wary to predation by pine martins as our native red squirrel, thus tends to make easy prey.

3. Killone:

The area around Killone Abbey is rich in Biodiversity due to its different habitats: woodland, lake with limestone shore line, farmland and wet lands.



Fig. 25: Daisies at Killone Abbey.



Fig. 26: waterfall at Killone woods.

A fantastic display of spring flowers can be seen in the woods from April onwards, which similar to Ballybeg woods, include bluebells, primroses, celandines, wood violet but unlike Ballybeg woods, wood sorrel can be found here, which may indicate an ancient undisturbed woodland.

A variety of ferns can be found in the woodland including the polypody fern which grow on the branches of oak trees, to enable them access to more light.

The waterfall area on the approach road into Killone Abbey after the gate lodge is an ideal location to see these woodland flowers and ferns in spring. During the autumn the Waterfall area is also a great location to see fungi such as scarlet elf cup and a variety of lichens.



Fig. 27: Wood Sorrell



Fig. 28: Greater Stitchwort



Fig. 29: Lords & ladies



Fig. 30: Primrose



Fig. 31: Lesser Celandines at Killlone Wood

The forest is made up of mainly deciduous trees such as beech, ash, oak, chestnut, spindle wood, holly, black thorn, haw thorn and crab apple trees can also be seen in these woods.

The wood is home to animals such as fox, badger, bats and red squirrel. Indeed much evidence can be seen around the waterfall and on the wooded lake shore where badgers have rooted up the soil for worms and insects, with evidence of badger dung and even badger sets.



Fig. 32: Badger set at Killlone wood

Woodland birds observed in Killone are blackbird, robin, blue tit, great tit, long tailed tits, tree creeper, wren, collared dove and stock dove

The wet land surrounding the lake shore is home to birds such as coot, water-hen, mallard and heron. These birds can be seen more easily at St John's Well. Cormorants can be seen perched on top of the lake buoys with their wings outstretched, to dry while migratory birds such as tufted duck tend to stay within the centre of the lake to avoid predation. Great crested grebes can also be seen on this lake.



Fig. 33: (from left to right) Great Crested Grebe, heron & Cormorant

Yellow Iris and rushes can be seen growing around the Lake shore. The farmland nearest the lake contains thick brambles which provide blackberries for birds and mammals during the autumn months.

Killone Abbey itself provides a suitable habitat for carpets of daisies and rusty back ferns can be seen growing on the walls. The purple flowered Bugle can also be seen in the graveyard. Pellets coughed up from a resident bird of prey can be found at the doorway of the O'Donnell family vault. These pellets contain hair and bones from prey such as mice.



Fig. 34: Pellet & its contents

The water in St John's well itself provides a home to pond skaters and whirligig beetles. Duckweed can also be seen growing in the well. The stone wall around the well provides a substrate for pennyworth, ferns and ivy. Butter cups and daisies can be seen growing around the well favouring its boggy conditions. Ash trees and holly border the walls of the well area and heron can be found roosting in these trees surrounding the wetland area just outside the wall of the well.



Fig. 35: Left & Right - St John's well

4. Islandmcgrath & Islandavanna

The wet lands and farmland of Islandmcgrath provide food and shelter for winter visiting birds such as lapwing, mallard, tufted duck, teal, curlew, shell duck, snipe, little egret and swans. In the winter months, fieldfares, redwing and starlings migrate from mainly Eastern parts of Europe to avail of Ireland's milder climate, although fewer numbers of these birds have been observed at these locations in recent times.

Islandavanna is a fantastic spot for observing wetland birds and waders. These birds feed on the rich mudflats at low tide. Estuarine mud contains microscopic bacteria and algae, which obtain their energy from the sun or from detritus which is fed upon or filtered from the water by an abundance of invertebrates such as snails, worms and clams. This provides a vital food source for migratory birds, where "each cubic metre of estuary mud contains the same calorific value as 14 Mars Bars" (www.marine-conservation.org.uk). Estuary mudflats are as rich in biodiversity as coral reefs or tropical rain forests.



Fig. 36: (left to right) Islandavannah & Islandmcgrath

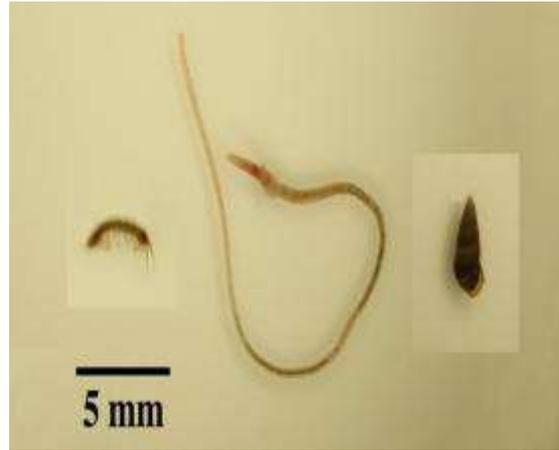


Fig. 37: (left to right) Worms & Shrimp that provide food for estuary birds which feed on the mud.

Birds seen at Islandavanna are as follows: heron, teal, shell-duck, mallard, little egret, oyster catcher, dunlin, lapwing, redshank, and widgeon.



Fig. 38: (left to right) Curlew and Dunlin



Fig. 39: (left to right) Lapwing & Oyster Catcher.



Fig. 40: (left to right) Shellduck & Teal



Fig. 41: (left to right) Common Seal & River Shannon Dolphins.

Mammals which can be seen include Common seal, grey seal, Dolphins & otter.

The rock and walls are covered by bladder wrack sea weeds and Sea Asters can be seen during late summer growing at the water edge. Shellfish and dead estuarine crabs can also be seen washed up on the shoreline. At Islandavanna most this wildlife can be seen at the roadside looking out over the land reclamation wall. Mudflats protect the coastline from erosion, however they have come under threat from chemical pollution such as arm run-off, rising sea levels and land reclaim for development.

From late April onwards the cuckoo can be heard at Islandmcgrath and Islandavanna. The male cuckoo is calling a female to mate, the female cuckoo returns the call and the male bird will fly to locate her. This can lead to a flight chase between ash trees and hedgerow around the surrounding farmland. This courting activity ends when the cuckoos have mated. The female cuckoo lays one egg in smaller song bird's nests (typically meadow pipit), after removing one of the original eggs out of the nest. This activity is repeated in approximately 20 nests. Once hatched, the cuckoo chick throws all the meadow pipit chicks out of the nest. The meadow pipit parents then have to feed these large cuckoo chicks until they fledge and are ready to leave the nest to fly to Africa around August.



Fig. 42: (left to right) Cuckoo & cuckoo fledgling being fed by adult Robin.

The Clarecastle & Ballyea areas have enjoy a wealth of natural beauty to be discovered where the views, sounds and smells change with the weather and seasons. A walk through Ballybeg woods or the Mid Clare Way is a must to escape from hectic modern living and a chance to experience the wild!

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