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The Burren

Welcome to the magical kingdom of the Burren, land of the fertile rock. Within this section you will find a full range of information on the various aspect of this, Ireland's flagship heritage landscape, from flora to fauna. geology to archaeology, agriculture to community. No matter what it is about the Burren that interests you, there is something here for everybody.

So what do people think about when they think about the Burren? For many, it has to be the flowers. No surprise there, as the region hosts a spectacular array of over 70% of Ireland's native flora, including 22 of our 27 native orchid species and the much-loved blue gentian, compressed into what is just under 0.5% of our national land mass. This extraordinary flora supports an equally diverse fauna – from feral goats to pine martens, elegant butterflies to snake-like slow worms.

For many people it's the archaeology that is of most interest in the Burren: with over 500 ring forts and over 80 known Neolithic tombs, the Burren is very well endowed in this regard, resembling 'one vast memorial to bygone cultures' according to cartographer Tim Robinson.

For other people the main source of attraction is the landscape itself, the unique panoramas of grey that provide such a stark contrast to Ireland's proverbial 'forty shades of green'. The Burren hills are teeming with such geological oddities as labyrinthine cave systems, disappearing streams and lakes, tiered hillsides and oddly dissected pavements.

The Burren also has a wonderfully rich and vibrant culture, possibly captured best in the fascinating agricultural traditions that have evolved in the area over thousands of years. The physical and anecdotal evidence of this remarkable story of human interaction with a landscape still lingers in the Burren - a cultural resource of enormous significance.

In this section you will find information on these, and other, aspects of the Burren which we hope will enhance your understanding and appreciation of this outstanding landscape.

Burren Landscape: Overview

The Burren upland region is located along Ireland's mid-Western coast, stretching across approximately 36,000 ha of north Clare and south Galway. The term 'upland' is somewhat misleading however, as the region extends from sea level to modest heights of just over 300m: it is however used to distinguish this region from the adjacent 'Burren lowland' region which extends over 20,000ha to the east.

Formed some 340 million years ago at the bottom of a warm, shallow sea, the visibly fossil-rich layers of limestone that characterise the Burren have been modified by millions of years of glacial, tectonic, solutional and human processes. The result is a wonderfully rich, undulating series of swirls, tiers, cliffs, caves, hollows and bare pavements, classical features of what is described as a 'karst' landscape. The heat retention capacity of this massive block of limestone, over 700m thick in places, and the ample shelter afforded by its dynamic geomorphology, contributed to its use as a winter holding area for livestock.

It has been stated that water, not rock, is the key to the Burren. Ironically, water-flows in the Burren are rarely visible, most having assumed a subterranean course over time, as the natural acidity of rain water gradually eroded a path through the soluble limestone.

However, the impact of water on the Burren landscape is ubiquitous, from the extensive karst features to the rich array of micro-solutional forms known as 'karren' - runnels, grooves, and little hollows - that appear in the bare pavement. The relative scarcity of surface water in summer time is also an important factor in the evolution of the agricultural tradition of winter grazing in these areas.

An initial appraisal of the Burren uplands would suggest rather a hostile agricultural landscape. However, on closer perusal, these hills are seen to provide surprisingly ample, albeit intermittent, grazing for livestock, particularly on the level plateaus, and on the steps that divide them. The soils found in these areas are usually described as rendzinas - thin, dark, well-drained, organic soils - though brown earth and (possibly) loessic soils are also found. These thin soils, and the species-rich vegetation layer that binds them, are resistant to poaching in winter time, thereby providing out-wintering animals with a warm, dry bed on which to graze and rest.

Understanding the landscape of the Burren is fundamentally important in order to appreciate the unique agricultural traditions that developed on it, and to achieve a greater understanding of the phenomenally rich natural and cultural heritage that have evolved as a result of these traditions. We hope that the information presented here, and the links provided, will help to enhance your understanding and appreciation of this important element of the Burren's natural heritage. For an insight into the importance of one of the Burren's most interesting geological features, limestone pavement, please download the pdf file below.

Burren Landscape: Origin and Evolution

Origin: The pale grey to greyish-blue limestone layers or tiers that dominate the Burren were laid down at the end of the Lower Carboniferous (Visean) period, some 340 million years ago, in some cases to a thickness of 780 meters. This limestone is composed of the calcium-rich skeletal remains of marine organisms that populated the warm, shallow sea that lay over the region during that distant period. These were eventually compressed by their own weight and that of the sea above, and subsequently elevated to reveal the massive, fossil-rich beds that we see today.

Relatively insoluble shale bands separate these limestone beds, facilitating the formation of today's stepped landscape. These bands originate from ancient periodic fluvial outwashes of mud from adjacent land masses onto the sea bed. Later, in the Upper Carboniferous (Namurian) period, these fluvial outwashes of mud, sand, and clay became the dominant depositional form, and eventually (following compression) developed into thick (up to 330m) layers of shales, siltstones, and sandstones.

These darker, impermeable rocks once cloaked the entire Burren but were largely removed through glaciation, and now survive only intermittently in the west of the region around Lisdoonvarna (clearly visible at the Cliffs of Moher), and more consistently further south.

The Burren is quite stable geologically, as it is underlain by Tournaisian limestone, and further underpinned by Galway granite. Ancient earth movements have however affected the region, contributing to the formation of the distinctive web of joints - essentially vertical lines of weakness - that pervade the entire area, which when further weathered, develop into the characteristic clint-grike systems. These forces also resulted in the asymmetric north-east to south-west folding of the limestone layers in certain peripheral areas, such as the spectacular 'syncline' seen at Mullaghmore hill.

Evolution: The present day landscape of the Burren is a reflection of millennia of fluvial, glacial and solutional processes and, it would now appear, of anthropogenic (human) influence as well. The geological terminology most commonly used to describe the contemporary Burren landscape is 'glaciated karst', a reflection of the two most significant processes that sculpted it from the original, largely homogeneous, form.

Over the course of the last Ice Age, which began roughly one million years ago, much of the upper Namurian shales were stripped off the Burren, thereby exposing the limestone beneath to attack by erosive glacial waters, and subsequent scouring by the unremitting ice, removing any loose material. This tremendous erosive activity, acting along lines of weakness within and between the limestone layers, gradually etched out the distinctive terraces, pavements and other karst features visible in the Burren today.

The most recent glaciation (the 'Midlandian', 35-13,000 years ago) in the Burren proceeded from a north-east to a south-west direction, as attested by the orientation of the axes of glacial striations and drumlins. The main effects of this glaciation were further erosion and 'scouring', as well as the deposition of considerable amounts of calcareous drift, mainly spread along valleys, or alternatively in the form of drumlins, lateral moraines or fluvioglacial outwashes such as seen at Glencolumkille in the north-eastern Burren.

Relatively little sediment is thought to have been deposited in the Burren compared to elsewhere in Ireland, as the underlying karstic substrate and the proximity of the ocean provided escape routes for meltwater. As a result, only a light covering of distinctive rounded boulders (called 'glacial erratics') and sparse pockets of deposited sediment remained over large areas of the Burren, resulting in the very distinctive and unusual rocky landscape we see today.

Burren Landscape: Karst & Karren

The relatively pure calcium carbonate limestone of the Burren is very susceptible to the solutional effect of the high rainfall levels in the region (rain is a mild carbonic acid) - it has been estimated that 0.005mm of limestone is dissolved annually. This effect is accentuated in places through the humic acids produced by heathy vegetation pockets. Solution of the limestone has resulted in the formation abundant karren and karst features in the Burren.

Karst, a term originating from a limestone region in (the former) Yugoslavia, is derived from the Slovenian word kras, meaning a bleak, waterless place. It is used to describe a landscape containing erosional features such as bare pavements, subterranean water systems, dry valleys, dolines and poljes. The Burren is recognised as one of Europe's finest examples of a karst landscape, abounding in all of these features.

Some 100 closed depressions of various sizes occur in the Burren. Those of moderate dimension are called dolines, from the Serbo-Croat for valley or hollow, and a good example is found at Poulavallan near the Glen of Clab. Dolines are more or less circular, formed by solution, directly in some cases, or indirectly through the collapse of cavern roofs. Larger closed depressions known as poljes are more frequent in the Burren, and the best examples are found at Carran, Poulawillan, Caherconnell and Kilcorney.

Often providing a focus for agricultural settlement, these features were originally formed by ancient (Tertiary period) shale-based streams burning through the limestone beneath. The word polje derives from the Slav word for field, or an area that can be cultivated, and they are not unique to karst areas. Carran polje is c. 3.2 km long, 1.6 km wide, and over 60m deep.

Turlough is a term derived from the Irish words tuar and loch meaning 'disappearing lake'. Turloughs are temporary (largely seasonal), shallow, groundwater-fed lakes surrounded by a rocky rim and lined with boulder clay, which are replenished and drained through discrete openings connected with the water table. They are strongly associated with zones of higher permeability in the aquifer in western Irish limestone lowlands. Some good examples in the Burren include sites at Carran, Aleenaun, and Turlough.

Probably the most characteristic karst feature of the Burren is the extensive pavement network, largely a product of glacial erosion and subsequent soil loss. There are two main pavement types, depending on the nature and structure of the limestone: smooth and shattered, with smooth pavements more common in the west Burren, shattered in the east.

These pavements are susceptible to solution, which can eventually expose vertical lines of weakness in the limestone to form characteristic clint-grike systems. The clints or blocks range from a few square centimetres to over 65m², with most ranging between 0.4 and 2.8 m². The grikes, or crevices that dissect them, are usually less than two meters deep and 3.2 to 6.5 centimetres wide, but extend down to six meters in places.

Karren (or 'lapies') is a general term used to describe the total complex of superficial micro-solutional features of limestone pavement, widespread in areas such as the Burren. Karren forms

include sharp-ridged grooves (rillenkarren) and their larger, elongated cousins (rinnenkarren), as well as rounded runnels formed beneath a soil cover (rundkarren). Other forms include the ubiquitous solutional hollows (kamenitzas), deep cleft-like ruts or grikes (kluftkarren), clints (flachkarren), and horseshoe shaped stepped structures (trittkarren) found on the Burren coast.

Karren forms vary depending on the extent and nature (where present) of the former soil cover. For instance, karren features that developed subaerially are fretted and rough, such as rillenkarren, while under an acid soil cover 'cusped' and 'arcuate' forms such as rundkarren predominate. Furthermore, a bare karren surface of sub-soil origin is rounded and smooth, and not as sharp and angular as a similar surface that has never had a soil cover. Most karren features in the Burren are smooth rather than angular, suggesting that an extensive mineral soil cover must have existed in the area at one stage, a finding supported by pollen records from the area.

Burren Landscape: Caves

The caves of the Burren can be divided into two main groups: fossil and active. Fossil caves are those which no longer contain the streams of water which would have shaped them, and are thus no longer actively evolving. Many of the caves of the Burren uplands would be fossil: in recent years some of these caves have been the subject of archaeological excavation and have revealed a fascinating legacy of prehistoric use. Examples of fossil caves would include Kilcorney (the cave of the wild horses) and Glencurran and Poulcurran, both of which are located close to Carran village.

Active caves in the Burren tend to be concentrated along the shale-limestone interface, particularly in the south-west Burren in the vicinity of Slieve Elva and Poulacapple. Here, rainwater streaming down from the acid surface of the shale hills burns swallow holes into the limestone and these streams then work their way underground through the limestone, sculpting and shaping cave systems as they go. Some of these caves run for several miles, and it is thought that the vast majority of them remain unmapped. The dimensions of these caves are wildly variable, some very tall and narrow, others rounded.

Some sections are water filled ('sumps'), others host spectacular stalagmites and stalactites (Poll an Ionain is said to contain the longest (7m) free standing stalactite in the world), while other caves are important visitor sites (Ailwee Caves).

The extensive network of caves that exists in the Burren represents a wonderful resource, one that, because of its often inaccessible nature, has not received the attention it deserves. However, from the casual visitor to the experienced potholer, these wonderful, mysterious cave systems have an enormous amount to offer.

Burren Landscape: Hydrology

It has been claimed, with some justification, that water, not rock, is the essence of the Burren. Drainage in the Burren is largely subterranean, as over many millennia water courses in the region worked their way underground, reappearing periodically after heavy rainfall events. A consistent supply of surface water in the Burren is thus a rare and valuable resource, largely confined to the River Caher in Fanore and other ephemeral flows.

As a result, rural areas in the Burren traditionally had to rely almost exclusively on a combination of rainwater collection tanks and small springs for their water supply. The absence of a consistent

supply of water in the Burren uplands, particularly in the summer season, is also an important factor in the evolution of the 'winterage' tradition whereby animals are put on these grasslands over winter when more water is available.

Most of the central Burren (40% of the overall area) drains south into the Fergus, via the Elmvale springs north of Corofin. The northern Burren, consisting of the catchments of Ballyvaughan and Bell Harbour (12% and 14% of the Burren respectively) drains mainly through submarine outlets into the sea at Galway Bay. The western Burren, consisting of the catchments of Poulsallagh, Deereen, Caher and Fisherstreet (16% of the area) drains largely into the Atlantic Ocean.

One fascinating reflection of the unusual hydrology of the Burren is the profusion of turloughs in the region. Turlough is a term derived from the Irish words tuar and loch meaning 'disappearing lake'. Turloughs are temporary (largely seasonal), shallow, groundwater-fed lakes surrounded by a rocky rim and lined with boulder clay, which are replenished and drained through discrete openings connected with the water table. Europe's largest turlough is found at Carran in the central Burren.

Karst areas such as the Burren are particularly sensitive to pollution because of the thin (or absent) soil cover that provides minimal attenuation of pollutants. Also, there is little attenuation by the rock itself due to the speed of water flow, which can reach over 100m/hr. A study by Drew et al. (1995) concluded that 'short of operating perfect management practices, such an environment does not possess the resilience to survive modern rural activities of the type described in this study'. As a result, particular care has to be taken in the control of pollutants, agricultural and domestic, generated in the Burren.

Burren Landscape: Links

Landscape information

Geological survey of Ireland

www.gsi.ie

GIS heritage data for Ireland

www.heritagedata.ie

Quaternary research association

www.qra.org.uk

Limestone Pavement action group

www.limestone-pavements.org.uk

Institute for European environmental policy

www.ieep.org.uk

Soil science society of Ireland

<http://www.ucd.ie/sssi/>

Agroclimatic atlas of Ireland

http://www.ucd.ie/agmet/Publications/Atlas/Soils_colour.html

Geographical society of Ireland

<http://www.geographical-society-ireland.org/>

The importance of Limestone and Karst in Ireland

<http://www.gsi.ie/workgsi/groundwater/karstbook/04-importance.htm>

Info on Turloughs

<http://www.enfo.ie/leaflets/bs9.htm>

An Taisce - Ireland's independent environmental charity

www.antaisce.org

Ireland's Heritage Council

<http://www.heritagecouncil.ie/>

The Burren Flora

When it comes to ecological wealth and diversity, the Burren has few parallels elsewhere in Ireland. Supporting an enormous diversity of species in its orchid-rich limestone grasslands, heaths and pavements, the Burren contains twelve Annex 1 habitats listed in the EU Habitats Directive.

In terms of flora, the Burren is especially rich: Webb and Scannell (1983) recorded a total of 635 species from the Burren hills (345 square km), a remarkable tally representing over 70% of Ireland's 900 native species in less than 0.5% of its area! A recent research project (Dunford, 2001) found 28 different species per square meter (averaged over 1,100 vegetation samples) in upland grasslands, with up to 45 species per square metre in some samples.

Though the Burren does contain some much sought after rarities, its real ecological distinction relates to the abundant presence of several species which elsewhere are of very limited distribution. In the Burren are found several hundred square kilometers of species-rich unimproved limestone grasslands, a precious resource by any standards.

Some particularly noteworthy features of the flora found in the Burren include the curious mixture of Arctic-Alpine and Mediterranean species, and calcicole (lime-loving) and calcifuge (lime-hating) species, as well as the wealth of orchids - 22 of Ireland's 27 native orchid species are found in the region. The more interesting members of this rich flora are usually found on upland pastures, dominated by bare rock and thin, intermittent, rendzina soils, a highly stressful growing environment. A reflection of this is the very compact morphology or life form that many of these plants assume, and the high proportion of parasitic plants found among them.

An important factor contributing to the rich floral diversity of the Burren uplands is the traditional practice of grazing these uplands mainly in winter. This practice serves to remove potentially dominant grass and weed species, thus allowing the dormant herb flora sufficient light and resources to prosper over their flowering season, with little threat of being trampled by livestock.

Burren Flora: habitats

Though the Burren region represents less than 1% of the National land cover, the richness and diversity of the natural and cultural heritage present belies its compact size. Over 70% of Ireland's native species of flora are found here, including 23 of the 27 native orchid species, as well as a very rich and interesting fauna. Some 30,462ha of the Burren have been designated as Special Areas of Conservation in recognition of the international conservation importance of the region.

Within the Burren are found sixteen Annex I habitats, five of them described as 'Priority Habitats' under the EU Habitats Directive. These are limestone pavements, orchid-rich grasslands, petrifying springs, turloughs and Cladium fens.

The main habitat present in the Burren is limestone pavement, and it is estimated that almost 18,000ha of this habitat (from a national total of c. 30,000ha) are found within the Burren. A variety of pavement forms are visible – smooth, blocky and shattered. Many of the pavements are very well developed with impressive arrays of karst and karren features.

Over one quarter of the estimated 6,000ha of orchid-rich calcareous grasslands remaining in Ireland are found in the Burren. Very species-rich, these pastures contain orchid species such as the pyramidal, frog, fragrant, bee, fly and spotted orchids. These grasslands are of very high quality within the Burren.

An estimated 275ha of turloughs are found within the Burren, equating to c.9% of the national total for this priority habitat. These important, unique habitats are an Irish speciality, and are very closely associated with glaciated karst regions such as the Burren.

The estimated area of petrifying springs with tufa formations in Ireland is a mere 0.5ha, with the springs present in the Burren are likely to represent a significant proportion of the national total. An estimated 200ha of Cladium fen are found in the East Burren Complex SAC, representing 8% of the national total for this habitat.

The scale, diversity, quality and uniqueness of the habitats present in the Burren is unparalleled at a regional, national - and possibly even an EU - context. The fact that these habitats exist in a non-fragmented landscape 'unit' further enhances their ecological significance, as does their largely positive conservation status.

Burren Flora: Orchids

Of Ireland's 28 native orchid species, an extraordinary 24 are known to exist in the Burren. Beginning every year around April with the flowering of the early purple orchid, and ending in September with the intricate flowering spikes of the autumn lady's tresses, these wonderful little flowers provide a rich and fascinating attraction in the summer pastures of the Burren. Below are listed the orchids found in the Burren, their Latin, English and Irish names (from the work of Nelson (2000).

Latin Name	English Name	Irish Name	Rarity
Anacamptis pyramidalis	Pyramidal orchid	Magairlin na stuaice	Common
Cephalanthera longifolia	Narrow-leaved helleborine	Cuaichin caol	Rare
Coeloglossum viride	Frog orchid	Magairlin an loscain	Frequent
Dactylorhiza cruenta	Leopard orchid	Magairlin craorag	Local
Dactylorhiza fuchsii ss fuchsia	Spotted-orchid	Nuacht bhallach	Abundant
Dactylorhiza fuchsii ss okellyi	O'Kelly's spotted-orchid	Nuacht bhallach Ui Cheallaigh	Frequent
Dactylorhiza maculate	Heath-spotted orchid	Na circini	Abundant
Dactylorhiza incarnate	Early marsh orchid	Magairlin mor	Frequent
Dactylorhiza majalis	Broad-leaved, western marsh orchid	Margailin ghaelach	Rare
Epipactis atrorubens	Dark-red helleborine	Cuaichin dhearg	Frequent

Latin Name	English Name	Irish Name	Rarity
<i>Epipactis helleborine</i>	Broad-leaved helleborine	Ealabairin	Frequent
<i>Epipactis palustris</i>	Marsh helleborine	Cuaichin corraigh	Local
<i>Gymnadenia conopsea</i>	Fragrant orchid	Lus taghla	Frequent
<i>Listera ovata</i>	Common twayblade	Dedhuilleog	Abundant
<i>Listera cordata</i>	Lesser twayblade	Dedhuilleog bheag	Very rare
<i>Ophrys apifera</i>	Bee orchid	Magairlin na mbeach	Local
<i>Ophrys insectifera</i>	Fly orchid	Magairlin na gcuileanna	Local
<i>Orchis mascula</i>	Early purple orchid	Magairlin meidhreach	Abundant
<i>Orchis morio</i>	Green-winged orchid	Magairlin feitheach	Very rare
<i>Neotinea maculata</i>	Irish orchid, dense flowered orchid	Magairlin glas	Local
<i>Neottia nidus-avis</i>	Bird's-nest orchid	Magairlin neide ein	Rare
<i>Platanthera bifolia</i>	Lesser butterfly orchid	Magairlin beag an fheileacain	Rare
<i>Platanthera chlorantha</i>	Greater butterfly-orchid	Magairlin mor an fheileacain	Rare
<i>Spiranthes spiralis</i>	Autumn lady's-tresses, ladies' tresses	Cuilin Muire	Rare

Burren Flora: Specialities

Some of the most distinctive and characteristic plant species in the Burren uplands would include the mountain avens (*Dryas octopetala*), bloody cranesbill (*Geranium sanguineum*) and, of course, the spring gentian (*Gentiana verna*). Aside from the stunning beauty and unparalleled profusion in the Burren, these species are of significant scientific interest.

The spring gentian for instance is mainly found in alpine regions – seeing it at sea level in the Burren is as surprising as it is pleasant. The mountain avens is actually an ‘Arctic-Alpine’ plant, normally at home in icy environs: it is thought to have survived in the Burren having been brought here by glaciers in the last Ice Age.

The presence of plants such as the gentian and mountain avens in the Burren is rendered all the more fascinating by the fact that they are found growing beside plants of Mediterranean origin such as the dense flowered orchid (*Neotinea maculata*) and the maidenhair fern (*Adiantum capillus-veneris*), the latter usually safely tucked away in dark, damp grikes. This is truly a unique combination by any standards, one that continues to perplex and charm even the most experienced botanists.

Many other fascinating ‘specialities’ exist in the Burren, including the Irish eyebright (*Euphrasia salisburgensis*), thyme broomrape (*Orobancha alba*) and shrubby cinquefoil (*Potentilla fruticosa*), all of which have their main British Isles populations in the Burren. The thyme broomrape is in fact a parasitic plant, drawing most of its energy from wild thyme. Other plants in the Burren are

insectivorous – butterworts (*Pinguicula* spp.) for instance – adopting a different strategy to survive in this nutrient poor environment.

Less spectacular specialities of the Burren would include blue moor grass (*Sesleria albicans*). Known in Irish as féar boirne or Burren grass, this plant is of major significance for farming, as its beautiful metallic-blue flowering head appears in early spring, providing an important source of nutrients for outwintering cattle.

These are but a few of the special plants of the Burren: though often small in size, these flowers more than compensate for their tiny forms with their sublime beauty and fascinating stories.

Burren Flora: Links

Plant talk - plant conservation worldwide

www.plant-talk.org

Irish seed savers

www.irishseedsavers.ie

Galway naturalists field club

<http://homepage.eircom.net/~gnfc/>

Burren Fauna

The fauna of the Burren is a frequently overlooked aspect of the area's natural heritage, most of the attention having been focused on the area's rich flora instead. Feral goats (*Capra hircus*), foxes (*Vulpes vulpes*), and hares (*Lepus timidus*) are the most common mammals encountered in the uplands, with rabbits (*Oryctolagus cuniculus*) once common but now much less so. The number of feral goats currently present is estimated to number over one thousand individuals in spite of an extensive recent cull.

One of the most renowned members of the Burren's faunal community is the pine marten (*Martes martes*). The Burren is commonly considered to be the Irish stronghold of this once-threatened species due to the ample and extensive habitat provided by hazel scrub, a situation not welcomed by many farmers who consider the 'marten cat' a leading predator of young lambs. Woodmice (*Apodemus sylvaticus*) are very common in hazel woodland and play an important role in harvesting hazel nuts. Red squirrels (*Sciurus vulgaris*) and pygmy shrews (*Sorex minutus*) are also common in hazel woodland.

Other mammals found in the Burren include the badger (*Meles meles*), stoat (*Mustela erminea*), bank vole (*Clethrionomys glareolus*), mink (*Mustela vison*), and the rat (*Rattus norvegicus*). The common frog (*Rana temporaria*), smooth newt (*Triturus vulgaris*), and common lizard (*Lacerta vivipara*) are also found in the Burren. Over seventy species of land snails have been recorded in the area, thanks in no small part to the abundance of shell-building calcium carbonate.

All of Ireland's seven native bat species are found in the Burren, with a very significant population of the lesser horseshoe bat (*Rhinolophus hipposiderus*) in the region. Almost all (except two) of Ireland's 30 butterfly species are found, with two more or less limited to this area - the pearl bordered fritillary (*Boloria euphrosyne*) and the brown hairstreak (*Therla betulae*).

One moth species, the Burren green (*Calamia trideus*) has its only station in the British Isles here. The yellow ant (*Lasius flavus*) is also widespread in the Burren. Other interesting members of the Burren fauna include the slow worm (*Anguis fragilis*), in reality a legless lizard, a specimen of which was described by McCarthy (1977), while Cabot (1967) records a sighting of the green lizard (*Lacerta viridis*), linked to a 1958 release of fifteen such lizards in the area.

Seven bird species listed in Annex 1 of the Birds Directive are found in the Burren. A full list of the bird, butterfly and Odonata species found in the Burren National Park is furnished in RPS Cairns (1994), while a recent survey of the birdlife of the Burren and Aran Islands has been compiled by Dr. Liam Lysaght and published by Birdwatch Ireland.

Burren Fauna: Birds

Burren Birds

The Burren, though not renowned for its bird life, would be one of the best places in Ireland to hear the cuckoo, testament to the deceptive wealth of the region's bird life which includes seven species listed in Annex 1 of the European Birds Directive. In total, over 100 species of breeding birds were identified in a recent survey of the Burren and Aran islands, amounting to over 70% of the national total. These include skylarks, best known for their wonderful song, peregrine falcons, those birds of prey par excellence, wonderful soaring ravens with their throaty calls, and Brent Geese who travel across the Atlantic every year to visit our shores.

In pockets of scrub, the chaffinch, song thrush, wren, robin, dunnock, yellowhammer and blackbird are commonly found nesting. Meadow pipits and wheatears are characteristic breeders on limestone pavement-grassland-scrub mosaics, while turloughs attract considerable winter populations of widgeon, teal and shoveler ducks, as well as whooper swans, golden plovers, and lapwings. Among the spectacular birds of prey, the sparrowhawk, kestrel, peregrine falcon, hen harrier and merlin are found in the Burren.

The unique habitats of the Burren – unfertilized, species-rich grasslands, scattered pockets of scrub and woodland, sheer cliff faces, extensive winter wetlands and ocean frontage - provide the ideal balance of habitats for the feeding and nesting activities of many species. Though species such as the corncrake and grey partridge no longer survive in the Burren, it remains a location of great attraction for Irish and international birders or 'twitchers'.

For more information on the birds of the Burren, see 'An Atlas of Breeding Birds of the Burren and the Aran Islands' by Dr. Liam Lysaght, available from Birdwatch Ireland.

Burren Fauna: Butterflies

A rich and diverse array of butterfly species are found in the Burren, testament to the purity of this environment and the wide range of food plants available. All but two of Ireland's 30-odd butterfly species are found in the Burren, while a superb range of moths – including the rare Burren green and the wonderful burnet (*Zygandera* spp.) moths – are also found here. Below is a list of the butterflies present, their common name, Latin name and status of these species in the region.

English Name	Latin Name	Status
Wood White	<i>Leptidea sinapis</i>	Widespread
Brimstone	<i>Gonepteryx rhamni</i>	Widespread
Large White	<i>Pieris brassicae</i>	Widespread
Small White	<i>Artogeia rapae</i>	Widespread
Green Veined white	<i>Artogeia napi</i>	Widespread
Orange Tip	<i>Anthocharis cardamines</i>	Widespread
Green Hairstreak	<i>Callophrys rubi</i>	Scarce
Brown Hairstreak	<i>Thecla betulae</i>	Scarce
Small Copper	<i>Lycaene phlaeas</i>	Scarce
Small Blue	<i>Cupido minimus</i>	Scarce
Common Blue	<i>Polyommatus icarus</i>	Widespread
Holly Blue	<i>Celastrina argiolus</i>	Scarce
Pearl-bordered Fritillary	<i>Clossiana euphrosyne</i>	Scarce
Dark Green Fritillary	<i>Argynnis ahlaia</i>	Widespread
Silver-washed Fritillary	<i>Argynnis paphia</i>	Scarce
Marsh Fritillary	<i>Euphryas aurinia</i>	Scarce
Speckled Wood	<i>Pararge aegeria</i>	Widespread
Wall Brown	<i>Lasiommata megera</i>	Widespread
Grayling	<i>Hipparchia semele</i>	Widespread
Gatekeeper	<i>Pyronia tithonus</i>	Very Scarce
Meadow Brown	<i>Maniola jurtina</i>	Widespread
Ringlet	<i>Aphantopus hyperantus</i>	Widespread
Small Heath	<i>Coenonympha pamphilus</i>	Widespread
Dingy Skipper	<i>Erynnis tages</i>	Widespread
Small Tortoiseshell	<i>Aglais urticae</i>	Widespread
Peacock	<i>Inachis io</i>	Widespread
Red Admiral	<i>Vanessa alalanta</i>	Migrant
Painted lady	<i>Vanessa cardui</i>	Migrant

Burren Fauna: Mammals

Feral goats (*Capra hircus*), foxes (*Vulpes vulpes*), and hares (*Lepus timidus*) are the most common mammals encountered in the uplands, with rabbits (*Oryctolagus cuniculus*) once common but now much less so.

Red squirrels (*Sciurus vulgaris*) and pygmy shrews (*Sorex minutus*) are also common in hazel woodland. Other mammals found in the Burren include the badger (*Meles meles*), stoat (*Mustela erminea*), bank vole (*Clethrionomys glareolus*), mink (*Mustela vison*), and the rat (*Rattus norvegicus*).

Possibly the most renowned member of the Burren's faunal community is the pine marten (*Martes martes*). The Burren is commonly considered to be the Irish stronghold of this once-threatened species due to the ample and extensive habitat provided by hazel scrub, a situation not welcomed by many farmers who consider the 'marten cat' a leading predator of young lambs.

Woodmice (*Apodemus sylvaticus*) are very common in hazel woodland and play an important role in harvesting hazel nuts. Gallagher and Fairley (1979) conducted a population study of the fieldmouse in the Burren, finding that their population density in hazel woodland exceeded that of all previous Irish estimates due to the exceptional abundance of food and cover, and the high calorific value of hazelnuts.

All of Ireland's seven native bat species are found in the Burren, with a very significant population of the lesser horseshoe bat (*Rhinolophus hipposiderus*) in the region.

Burren Fauna: Specialties

Though the Burren would not be known for its fauna, the region certainly has more than its fair share of unusual and interesting faunal species. Examples would include the slow worm (*Anguis fragilis*), a snake like legless lizard. As well as the common lizard, another species, the green lizard (*Lacerta viridis*) has been spotted here, linked to a 1958 release of fifteen such lizards in the area.

Two butterfly species are more or less limited to this area - the pearl bordered fritillary (*Boloria euphrosyne*) and the brown hairstreak (*Therla betulae*). One moth species, the Burren green (*Calamia trideus*) has its only station in the British Isles here. Over seventy species of land snails have been recorded in the area, thanks in no small part to the abundance of shell-building calcium carbonate. The yellow ant (*Lasius flavus*) is also widespread in the Burren. This thermophilous species favours shallow soils on limestone to build its nests, and has been used to identify 'old-field' grassland communities.

Among the region's significant bird population are several pairs of nesting peregrine falcons (*Falco peregrinus*), as well as large numbers of overwintering wildfowl found in turlough areas. Another very interesting member of the Burren's faunal community is the pine marten (*Martes martes*). The Burren is commonly considered to be the Irish stronghold of this once-threatened species due to the ample and extensive habitat provided by hazel scrub, a situation not welcomed by many farmers who consider the 'marten cat' a leading predator of young lambs.

One particularly striking, almost symbolic, aspect of the Burren's fauna are the numerous herds of feral goats (*Capra hircus*) that roam freely across the uplands, estimated to number over one thousand individuals. Recent studies suggest that these herds are unique in Europe, in terms of both their extent and their population ecology.

Burren Fauna: Links

The Irish wildlife trust

www.iwt.ie

All about Irish butterflies

www.irishbutterflies.com

Birdwatch Ireland

www.birdwatchireland.ie

The Burren feral goat campaign

www.clareanimalwelfare.org/burren_goat.html

The National Parks and Wildlife service

www.npws.ie

Burren Archaeology

As richly fascinating as the Burren so patently is in terms of its landscape and ecology, the wealth and diversity of its archaeological landscape is no less remarkable, and well worthy of the international reputation that it enjoys. Burren uplands, and allow us to trace the evolution of agricultural society from its 'hunter-gatherer' origins over six millennia ago to the present day.

The Burren has been aptly described as one 'vast memorial to bygone cultures'. For instance, some 75 wedge tombs of Neolithic origin have been found in the region, from an estimated national total of just over 500. Hundreds of ancient cooking sites or fulachta fiadh and ancient cist graves are found throughout the hills. Some 500 ring forts are found in the Burren, including the magnificent triumvallate (three walled) Cahercummaun and the chevaux-de-frise (an ancient defensive structure composed of upright stones) ringed Ballykingvarga.

Tower houses and Early Christian church sites are also very common, many in an excellent state of preservation. The magnificent portal tomb at Poul nabrone in the rocky heart of the Burren is one of the most easily recognised monuments in Ireland, but is only one very small piece of an extraordinary wealth of heritage to be found in the Burren.

That these assorted layers of built heritage have remained relatively profuse and intact in the Burren uplands is attributable to three main factors. Firstly, the easy availability of building stone in the area which meant that existing built structures did not have to be exploited to provide new building material. Secondly, the relative durability of stone structures, compared with those made of earth and/or wood. Thirdly, the rugged rocky nature and thin soils of the uplands which makes them inherently unsuitable for tillage or reclamation for grassland, largely saving them from a fate that befell many such structures elsewhere.

For all these reasons, and the historical attraction of the Burren for farming communities, the Burren uplands must surely represent one of the best-preserved and broadly representative agricultural landscapes in Europe. For the Burren visitor this rich built heritage provides a wonderful attraction, particularly in the off-peak season when the legions of avid botanists and other visitors have departed.

Burren Archaeology: Mesolithic

According to most palynological studies from the Burren, the Mesolithic landscape would have been one dominated by pine woodland with an understory of hazel (*Corylus avelanna*). Other species which would have been present include yew (*Taxus bacatta*), oak (*Quercus* spp.), elm (*Ulmus* spp.), ash (*Fraxinus excelsior*) and alder (*Alnus* spp.). Some more open sites with a herbaceous vegetation would also have existed.

Little is known about the presence or extent of early Mesolithic settlements in the Burren, as scant evidence from this era has survived. This is hardly surprising considering that such a hunter-gatherer economy as practised by Mesolithic settlers would probably have supported only a couple of small hunting communities, possibly no more than one or two dozen people, in an area the size of the Burren.

Settlement locations along natural boundaries such as water bodies (the distribution of which may well have been very different from that seen today) would have been preferred, and it is likely that their environmental impact would constitute little more than a minor local factor in the changes that occur in the pollen diagrams of this time.

One example of such an impact might be the appearance of bracken (*Pteridium aquilinum*) and the expansion of hazel, both associated with regeneration after clearance by fire, in a pollen diagram from Loch Dá Éan in the south-east Burren (Feighan, 1985). In general however, according to authors such as D'Arcy (1995), 'Palaeobotanical studies have revealed little which might be interpreted as widespread grazing modification until the final stages of the Stone Age'.

Thus, while the question of Mesolithic interference with the environment remains an unconfirmed possibility, it was later, in the Neolithic period, with the development of agriculture, that human impact became really significant.

Burren Archaeology: Neolithic

The first farmers are thought to have arrived in the Burren in the early Neolithic period, some 6,000 years ago. Farming activity appears to have been of a small scale, transient nature characterised by sporadic clearances, followed by abandonment and subsequent regeneration of the woody vegetation. The legacy of these early settlers is best seen in early burial sites such as the famous Poul nabrone portal dolmen, built some 5,800 years ago, within which evidence of early agricultural activity has been recovered.

Ó Nualláin (1983), in a study examining the siting and distribution of Megalithic tombs in Ireland, found that portal and court tomb locations demonstrate a bias toward areas of lower altitude in close proximity to the coast or to water sources. The southern bias to the location of the Burren's court and portal tombs, and the settlements associated with them, though located in upland areas, may possibly be related to the proximity of the River Fergus further south. Wedge tombs, in contrast, are more widely distributed at altitudes up to 900 feet, suggesting 'greater adaptability to local conditions and, with 32% of the total located on thinner soils between 600 and 900 feet, exploitation of uplands for stock raising' (Ó Nualláin, 1983).

There are only two known portal tombs in the Burren: one on the southern periphery at Ballycashin, and the other in the very centre of the Burren at Poul nabrone. Results from an excavation of the

Poul nabrone portal tomb (Lynch and Ó Donnabháin, 1994), which dates from c. 5,800 BP, reveal that this tomb contained the remains of up to 22 people, interred over six centuries. High levels of stress and physical attrition due to diet and work were noted, as was evidence of injury by a chert arrowhead in one case. Early demise was common, with analysis of the adult remains indicating life spans of under thirty years. Dental analyses revealed high levels of wear and tear consistent with a diet that included ground cereal. Other evidence recovered from this site indicated that these people were farmers of cattle, sheep and goat, and that cereal was also grown.

There are four known court tombs in the Burren, all located along its southern limits, from Doolin to Ballyganner to Leamanagh and on to Roughan hill. Evidence from Irish court tombs indicates that these structures were not primarily used as funerary monuments, but that they seem to have been a focus of ritual activity over a number of generations. A recently excavated court tomb at Roughan Hill has been dated to 5,500 BP: human and animal (probably cow) bones, as well as a Neolithic chert arrowhead were found at the site (Jones and Gilmer, 1999).

Farming developed significantly during the late Neolithic and early Bronze Age, when a phase of more concerted, structured, and settled agricultural activity seems to have developed. The presence of over seventy-five wedge tombs, of Ireland's 400, and numerous farm settlements from this period in the Burren indicate the scale and extent of this prospering agricultural-based economy. Feighan (1985) construes the use of land and labour in such a 'non-productive manner' as evidence of an organised society in control of its resources.

Wedge tombs occur in a variety of sizes, locations and aggregations in the Burren, and though none have been excavated as of yet, it is thought that they generally date from the third millennium BC, i.e. the late Neolithic. In some places the density of these tombs is so concentrated as to suggest the presence of a 'Megalithic tomb cemetery'. One such example is at Parknabinna, near Roughan Hill, in the south-east Burren. Here, twelve wedge tombs are concentrated within a small area, the associated settlement optimally situated to benefit from a combination of good winter pasture to the north, and the proximity of the River Fergus further south.

Burren Archaeology: Bronze Age

Evidence available from archaeological and palynological (the study of pollen records) sources suggest that farming activity and society grew strongly in the Burren over the course of the Bronze Age.

From pollen studies we see that there was a major decline in woodland cover, including the dominant species pine and hazel, and others such as yew, oak, ash, elm, birch and alder. In contrast grassland species such as ribwort plantain were more common, indicating a quite intensive period of farming activity, one that may eventually have contributed (along with a deterioration in climate) to extensive soil loss in the region, laying bare the limestone skeleton that we see in the Burren today.

This relatively prosperous Bronze Age agricultural society left a significant cultural legacy, including hundreds of cist graves and fulachta fiadha, numerous barrows (earthen and stone), ritual monuments, and several artifacts, including a bronze dagger from Gortaclare near Carran and the famous Glenisheen gold collar.

Though cist graves are less visible on the landscape than the 'dolmens' that preceeded them, several hundred of the cairns which house these graves have been identified in the Burren, while it is likely that hundreds more have never been recorded. One of the most famous must be the multiple cist cairn at Poulawack in the south-central Burren. Excavated by a Harvard University team led by Hencken in the 1930s, it was found to contain the remains of sixteen people, found in ten separate graves, some of which are thought to have had a Bronze Age origin.

The term *fulachta fiadh* means 'cooking places of the wild' or 'cooking places of the deer'. Several hundred of these horseshoe-shaped mounds are found in the Burren uplands, dating from roughly 5,000 years ago. Varying somewhat in size, shape, and distribution (in clusters of one to eight), they are composed of discarded charcoal and heat-fractured limestone that was once used to boil water for cooking or bathing in a lined central trough.

The main requirements for cooking using this method would have been an ample supply of stone, fuel and water, the relatively limited supply of the latter dictating the location of the sites in the Burren to a large extent. Experiments have proven that this system was very efficient, helped to tenderise the meat, and to flavour it using 'sugans' or ropes composed of local herbs. Best of all was the fact that once the meat was cooked the pit of warm water made an ideal bathing area for the users of the site.

Burren Archaeology: Iron Age

There was a pronounced decline in agricultural activity over the Iron Age period, which, while falling well short of actual abandonment, did result in a significant recovery of secondary woodland, particularly hazel scrub, according to pollen sources. The cause of the 'Iron Age lull' in agricultural activity, by no means confined to the Burren, has been attributed to diverse factors such as a downturn in climate, cultural upheaval, and the exhaustion, and in some cases outright loss, of the soil resource.

From a cultural perspective, this was also a time of some upheaval, as the Iron Age is often associated with the arrival of the 'Celts', described by Robinson (1986) as a 'cattle-raising society with a warrior ascendancy'.

The 'monumental heritage' of the Iron Age in the Burren would not appear to amount to much. Evidence prehistoric activity (late Bronze or Iron Age) activity was found at Cahercommaun, including stone axes, flint scrapers and saddle querns. Experts also attribute an Iron Age origin to Caherballykingvarga near Kilfenora, due mainly to its 'chevaux de frise', a defensive structure associated with this period.

Another site associated with the Iron Age in the Burren is the massive enclosure on top of Turlough hill, thought to be an early Iron Age hill fort, though Rynne claims to be uncertain of this.

One monument type often associated with the Iron Age is the 'ring barrow', though a small number of these structures may date from as early as the Neolithic, while many others are of Bronze Age origin. Ring barrows are usually 12-30m in diameter, defined by a ditch with an internal mound (within or underneath which burials are often contained), and/or an external bank.

Some 27 of Clare's 45 barrows are found in the Burren (Grogan and Condit, 2000). Barrows are not exclusively earthen structures: Coffey (1996) describes three 'stone barrows' in the Carran area of the central Burren.

Some of the few Iron Age artefacts found in the Burren, include pendants, bridle bits and spearheads (Rynne, 1982, Waddell, 1991).

Burren Archaeology: Links

Archaeology Information

a guide to Ireland's archaeological sites

www.iol.ie/~sec/sites.htm

National museum of Ireland

www.museum.ie

email directory for Irish archaeology

www.xs4all.nl/~tbreen/directry.html

The journal for Irish archaeology

www.nuigalway.ie/jia/

Megalithic Ireland

www.irishmegaliths.org.uk/

The Megalith map

www.megalith.ukf.net/

The Archaeology of megalithic Europe

www.stonepages.com

The Heritage Council's archaeology site

www.heritagecouncil.ie/archaeology/index.html

Burren History

In spite of the 'Iron Age lull' in the Burren, the development of agriculture through prehistoric times in the region continued unabated into the historic period, with new innovations in agriculture and society facilitating an expansion and intensification of farming activity, with consequent implications for the area's natural and cultural heritage.

This intensification was to reach its peak in the mid-1800s before it tragically collapsed with the onset of famine, subsequent to which the rural farming population of the region has been in steady decline.

The arrival of the Cistercian monks at Corcomroe, and their predecessors at Oughtmama, would also have heralded the introduction of new agricultural technologies, particularly in relation to animal

and crop husbandry. This would have coincided with the first real movement into the deeper soils of the more heavily wooded valley and low-lying drift areas of the Burren, far more suited to tillage than the rocky uplands which were the focus of prehistoric farming activity. We see this most clearly in the siting of the Burren's many churches on the more fertile ground of the Burren.

As with the archaeology of the region, in attempting to elucidate the evolution of society in the Burren over the last two millennia, we are blessed with a very rich and relatively intact built heritage, including over 500 ring forts (mostly stone 'cahers'), ecclesiastical sites (thought to be the densest concentration in Ireland), Tower Houses, thousands of miles of stone walls, and a fascinating array of farming structures. Among the main attractions from this period would be the three churches at Oughtmama, the Abbey at Corcomroe, the spectacular Cahercummaun ring fort and the famous Lemanagh Castle.

This record in stone is supplemented by a strong written record, dating back as far as the Annals of the Four Masters which recorded information from as far back as the early Christian Period, and including the superb record of Hely Dutton and his Agricultural Census of County Clare in 1808. These written records tell a fascinating story, from the Mediaeval Period when the Burren contained vast sheep walks owned by the landed classes, to the unspeakable tragedy of the Famine when the land and its people were laid bare. Another deeply interesting chapter in the evolution of this remarkable landscape.

Burren History: Early Christian Period

At the beginning of the Early Christian Period (c. 500 AD) agriculture began to recover strongly from the lull it had experienced over the previous millennium of the Iron Age. Written records from this period reveal that tributes composed of beef cattle, cows, sheep, pigs and cloaks were paid to the kings of Ireland from the tribes of the Burren.

Agriculture at this time would have been boosted by the introduction of new technologies, particularly those relating to crop husbandry and milk processing. New crop species, tools and cultivation techniques were probably introduced to the Burren by monastic settlements such as those at Oughtmama and Corcomroe.

Significant advances in dairying were also taking place. Heretofore cows would have been used primarily for breeding and as a meat source, with many cattle butchered prior to the winter to provide food when the milk supply had dried up. However, with the advent of milk processing in the form of cheese and butter, cows could provide year round sustenance, a fact reflected in the perception of cows as 'the new form of capital that produced interest in the form of milk, cheese and butter' (McCormick, 1995).

To protect these highly coveted animals from marauding wolves and raiding parties, ring forts or cahers were built - over 500 in the Burren alone. These Early Christian farmsteads again noticeably favour the Burren uplands in terms of location, though a number of earthen forts or 'raths' are also found in adjacent lowland areas.

At Cahercummaun ring fort – one of Ireland's great stone forts - dated to c.800AD by a team from Harvard University in 1934 (Hencken, 1938), extensive evidence confirming the prevalence of a

mixed farm economy was recovered. Bones of cattle, sheep, goats and red deer were identified, along with grinding (quern) stones for grain.

The large amount of spindle whorls that were also recovered suggests that the fort may even have served as a major wool-processing centre for the region (see Cotter, 1999). This evidence again attests to the historical importance of dairying and sheep husbandry in a land often misguidedly associated exclusively with the winter grazing of store cattle.

It is interesting to note that many early monastic sites in the Burren, such as Oughtmama (c.1000AD) and Corcomroe (c. 1200AD), were strategically located between upland and lowland areas, reflecting the dual requirements of the mixed farm economy – grazing and tillage – of this time. It was only during this Early Christian period that lowland areas in the Burren began to be seriously exploited, most likely to meet the needs of tillage production that the uplands could not provide.

From this period onward, the centre of activity appears to have gradually shifted to these fertile lowlands. It is noteworthy that ecclesiastical sites, of which the Burren is said to contain the densest concentration in the country, are predominantly located on areas with the richest soils, in contrast with the upland bias of previous constructions, (Mytum, 1982, Ní Ghabhláin, 1995).

Burren History: Medieval Period

The agricultural significance of the Burren in Medieval times is clearly reflected in the fact that over twenty tower houses are found in the region (and fifty others in the adjoining baronies of Corcomroe and Inchiquin), several of which feature walled ‘bawns’ (from ba dhúin’ or cattle enclosure), built to protect livestock.

Many of these tower houses are located on the border of the Burren barony, leading historians to believe that they were built by the ruling O’Loughlin clan to defend the coveted winterage lands of the Burren. The famous Leamanah castle represents a fine example, dating from 1490AD, situated on the shale-limestone interface at the southern edge of the Burren. Dunguaire castle, located where the limestone of the Burren dips into Galway bay, is another good example.

That the richness of the Burren in terms of its agricultural produce was of historic renown is attested to by the frequent raids to which the region was subjected in medieval times. Tales of daring raids to the Burren feature frequently in the pages of the ‘Annals of the Four Masters’: as early as 1055 AD we read of a ‘predatory excursion’ which produced many ‘spoils’. In 1314 AD marauding parties ‘gathered herds, flocks and all valuable gear of the Corcamachs’ from among ‘Burren’s uncouth ways, narrow gaps, crooked passes, rugged boulders and high sharp crests’ (O’Donovan, 1851).

In a reference from 1317AD we read of ‘Burren’s hilly grey expanse of jagged points and slippery steeps, nevertheless overflowing with milk and yielding luscious grass’ (O’Grady, 1929). In 1600 AD, a raid by O’Donnell stripped the Burren of its ‘cattle, flocks and booty’, and later with ‘enormous amount of cattle and plunder, they left the cleft stone passes of white Boireann behind’ (Ó Cléirigh, cited in Ó Dálaigh, 1998).

Burren History: PreFamine

The plantations of the 17th century resulted in much the lands of the Burren being redistributed. The Book of Survey and Distribution (Simmington, 1641) recorded 35 different land types in the

barony of the Burren, broken down into 121 sub-types based on their profitability. Fourteen different types of pasture, of 69 different profit levels, were distinguished, such as Dwarfwood pasture (? profit, ½ profit etc), Rockie pasture (¼ profit, ? profit etc.), and Rockie shrubby pasture (? profit etc.).

This diversity, which is a hallmark of the Burren and a key factor in the cultural and ecological wealth of the region, must be recognised and accommodated in management schemes today if these schemes are to prove successful in delivering upon their stated objectives.

Following the plantations, sheep farming would appear to have attained prominence in the uplands, with vast flocks being kept by the main landowners, often on a year-round basis. The fascinating Statistical Survey of Clare (Dutton, 1808) records in the Burren that ‘immense numbers [of sheep] are annually reared, and usually sold at the fair of Ballinasloe in October ... a small part feeds store bullocks’.

Dutton also notes that ‘the limestone crags of Burrin ... are, with some exceptions, devoted to the rearing of young cattle and sheep, and some so very rocky that four acres could not feed a sheep’. At this time for the smaller, local farmer however, mainly based in the coastal and valley areas of the Burren, a mixed economy based around the cow, pig, goat and the potato, on a dwindling land base, was prevalent.

Considering the contemporary perspective of the Burren as an ecological, cultural and geological haven, it is interesting to note that, historically, it was the agricultural quality of the Burren that took precedence, and seemed to generate most interest among observers.

Ludlow (1651) refers to the ‘sweet and nourishing’ grass patches in the uplands; Dineley (1681) notes that the Burren ‘raises earlier beef and mutton ... than any land in this kingdom, and much sweeter by reason of the sweet herbs intermixed and distributed elsewhere’; Lord Willies (1761) describes the sweet grass and shelter afforded to sheep by the uplands, so good that ‘it fattens them prodigiously’ producing ‘near double the tallow of a sheep the same size fed upon rich pasture’.

Roy (1788) claims that the hills provide ‘the finest pasturage’ for sheep; Coulter (1852) states that ‘the fat sheep and cattle of the Burren’ were ‘proverbial amongst Irish agriculturalists’ [all cited Ó Dálaigh, 1998]. Even the geologist F.J. Foot (1863) expounded the virtues of the Burren soil ‘than which none is more productive’, providing pasture that is ‘so rich and fattening’.

Burren History: Post Famine

managed and how the landscape developed. Prior to the Famine, many upland areas continued to be used as extensive sheep walks, in stark contrast to cultivatable land which was mercilessly exploited by a desperate populace, increasingly dependent on the potato, cow and pig.

The enormous pressure on the land prior to the Famine, when 400 people per square mile lived in areas such as Fanore and the Ballyvaughan and Turlough valleys, resulted by all accounts in a desolate, barren landscape.

Following the famine, the pressure on this environment diminished notably through an enlargement in holdings, a decline in sheep numbers and a reduction in population. The dominance of cattle was

reasserted in the post-Famine period, though sheep remained an important feature of upland grasslands.

The tragic and explosive denouement to the over-exploitation of the environment was thus succeeded by a resumption of a more sustainable system of agricultural management. Again, references from this period continue to stress the high quality of the agricultural produce from what is described as a harsh and desolate landscape.

It is interesting to reflect on the comments of Coulter (1852) who recorded that a 'fuel famine' existed at this time in the Burren, such was the rarity of scrub, or woodland, with ferns, brambles and the stringy stems of mountain avens collected for fuel. Such a situation is almost unimaginable in the Burren today, and reminds us of how rapidly landscapes can evolve, over just a few generations in this case.

This remarkable change in the landscape is a reflection of the fact that, following the ravages of the famine, human pressure on the Burren uplands has been diminishing from what would have been an unsustainable level of intensity. This relative lull in upland activity is reflected today, as it was historically, in the gradual reversion of many upland grassland and pavement areas to scrub, primarily hazel.

Burren History: Links

History Web Links

The national library

www.nli.ie

Ireland's national records database

www.nationalarchives.ie

The national museum

www.museum.ie

The Hunt Museum - exhibiting one of Ireland's greatest private collections of art and antiquities

<http://www.huntmuseum.com/>

Ireland's illustrated history magazine

www.historyireland.com

Archival and genealogy service

www.eneclann.ie

The Royal Irish Academy for sciences and humanities

www.ria.ie

www.irishmegaliths.org.uk/

The Megalith map

www.megalith.ukf.net/

The Archaeology of megalithic europe

www.stonepages.com

The Heritage council's archaeology site

www.heritagecouncil.ie/archaeology/index.html

Burren Agriculture

The surprise expressed by many visitors to the Burren to the fact that these rugged hills are home to a long and illustrious agricultural tradition is both amusing and ironic. Many are misled perhaps by the ostensibly barren, rocky, appearance of the hills, and by the absence of livestock on them over the summer season when most people choose to visit.

Little do these visitors realise it, but the fascinating cultural and natural heritage that attracts them to the Burren is essentially a legacy of this agricultural tradition. Furthermore, the future security of this wonderful legacy very much depends on upon a continuation of these traditions.

It is also somewhat ironic to note that it was this agricultural wealth, and not the flora or archaeology, that fascinated the first visitors to the Burren, over three hundred years ago. For instance, Dineley (1681) noted that the Burren 'raises earlier beef and mutton ... than any land in this kingdom, and much sweeter by reason of the sweet herbs intermixed and distributed everywhere'.

From an agricultural perspective, the Burren uplands are primarily associated with the practice of 'winterage'. This is an unusual adaptation of the 'transhumance' tradition (the seasonal moving of livestock by farmers) found in upland areas elsewhere in Europe, wherein animals are moved to the hill pastures in summertime.

In the Burren uplands, this system was reversed to optimally exploit the unusual attributes afforded by the region's limestone geology. Up until quite recently, hardy native breeds of beef cattle were used to graze upland grasslands between the months of October and April, requiring scarcely any dietary supplement prior to their removal to finishing grass elsewhere.

The ecological significance of this tradition is immense: wintering animals removed all the litter and grasses that would otherwise inhibit herb growth and limit plant species diversity, without damaging these plants during their flowering season. The cultural legacy of this ancient practice is apparent in the numerous tombs, ring forts and tower houses found in the upland pastures.

Enormous changes have been wrought on the agricultural sector of the Burren, as elsewhere, in recent years, particularly since Ireland's accession to the EEC and the increasing exposure to the international marketplace and to advances in the field of agricultural science.

Some of the more significant changes would come under the heading of 'intensification' - involving extensive reclamation, increased use of chemical fertilisers and slurry, the construction of slatted housing units, the massive increase in silage production, and increases in the amount of stock held. Such intensification has occurred widely in the richer valleys that intersect the Burren's limestone hills.

Other changes would be categorised under 'specialisation': traditionally the Burren would have supported small, labour-intensive mixed farming systems. Today this has evolved into a highly mechanised and specialised system involving the more lucrative production of continental weanlings (young calves) from suckler (non-dairy) cows for the export market.

A worrying implication of these changes in the Burren has been the increasing 'marginalisation' of upland grasslands, often manifesting itself in the form of hazel-scrub encroachment. Agriculture has become increasingly concentrated in lowland areas that are more amenable to modern farming systems, while less adaptable and accessible upland areas are becoming increasingly neglected, as their feeding capacity is displaced by that of imported fodder, their sheltering capacity increasingly devalued by the construction of slatted houses.

Naturally, such enormous disruption over such a short time, in what was formerly a quite balanced and harmonious relationship between agriculture and the natural environment in the Burren, will inevitably have enormous implications for the future ecological and cultural development of the area.

While some of these implications are already evident, research to identify future changes, and to inform appropriate remedial measures, is essential. The Rural Environmental Protection Scheme (REPS) introduced in 1995 offers considerable hope for the future protection of this agricultural landscape, and of the livelihoods of its custodians, the farming community.

Burren Agriculture: Farming Traditions

Though the Burren is internationally renowned for the 'uniqueness' and 'diversity' of its natural and cultural heritage, farming in the Burren could equally lay claim to these attributes. Farming activity in the Burren has been moulded by the very individual limitations and strengths of the unique landscape, as is reflected in the evolution of practices such as winterage, herding and goat husbandry, and physical features such as rainwater troughs, shelter walls, goat crós and cahers, herdsman's houses, and isolated cattle-loading pens.

Traditionally in the Burren, for most farmers, agriculture was a multidisciplinary activity characterised by high labour inputs. The assorted strands that characterised the mixed farm operation - dairying, beef, sheep, pigs, fowl and tillage - were usually complementary and frequently interdependent.

One striking aspect of the traditional management of the Burren is the intimate level at which even the expansive uplands were managed, with scarcely any area untouched by the hand of man, as a closer inspection of the subtle rearrangements of rocks, the rippling forms of lazy beds or the coppicing of woodland will reveal.

The relatively benign impact which agriculture traditionally had upon the surrounding environment is a reflection of the limited technology formerly available, and the cost of its deployment, as opposed to any ideological imperative. Potential threats such as those posed by scrub incursion or pests were kept closely in check, ensuring the maintenance of a state of 'contained dynamism' between agriculture and environment.

Traditionally, agricultural markets were more local and less discerning than they are today, particularly in terms of livestock quality, breed, and age. Agricultural policy scarcely impacted upon the local farm economy, in stark contrast to its current pre-eminence. Hence farmers were more inclined, and able, to manage their land and stock in accordance with its natural potential and their own judgement and experience, rather than as a response to forces external to the region.

Many traditional management practices have become unsustainable in a modern context, being too labour-intensive and producing commodities of a nature and scale that fail to exploit sufficiently the contemporary political and market environment.

This is further exacerbated by the fact that, while formerly agriculture was survival-orientated, in today's thriving Irish economy the imperative has become to prosper. As the line between the urban and rural dweller has become blurred, agriculture has become more concerned with balance sheets than animal husbandry.

Farming has become increasingly individualistic in recent years: the sense of community, of 'common good', even of 'place', embodied and engendered by traditions like meitheals and cooring, has been superseded by an increasingly individualistic and mechanised approach, often involving the use of outside contractors. Even the claim by Arensberg and Kimball (1968) that farmers work 'within the influence of a long established tradition of ancestral experience' which binds them strongly to the land, is rapidly losing relevance within the Burren farming community today.

There remains much to learn about the various aspects of traditional management in the Burren. Securing information on this rich and revealing heritage at a farm and community level is an urgent and essential requirement, as a cultural asset of enormous inherent wealth and practical significance is being ignored and steadily eroded. To quote the eloquent words of Burren-born poet John O'Donoghue (Clare Champion 11-2-00):

'There is a world in the land, a farming world of the most sophisticated complexity and the most astute and rich memory that in the next ten years will have vanished completely '

Burren Agriculture: Farming Legacy

Ever since man first settled in the Burren, he has impacted upon the vegetation of the region in many ways, direct and indirect, particularly through his role as farmer. The story of farming in the region - how it helped to create, how it adapted to, evolved with, and deeply influenced this unique environment - has largely escaped the attention of the many students and visitors to the area, with some exceptions.

However, the evolution of the Burren's unique farming traditions, developed over generations to optimise exploitation of a very challenging agricultural environment, is one of the most fascinating aspects of the region. The story of this relationship between man and the flora of the Burren is one that is seldom told, but one well worthy of the telling.

An excellent and unique example of the multidimensional and often symbiotic relationship between agriculture and the natural environment of the Burren is found in the long-standing practice of 'winterage'. This practice owes its origins to the fact that much of the limestone uplands are relatively inhospitable to grazing animals in summertime due to the lack of water and lush

vegetation, but in contrast provide a relatively warm, dry, source of calcium-rich fodder, water, and shelter for animals in winter months.

As a result of these and other factors, many of these grasslands are grazed only during winter, facilitating the removal of potentially dominant grasses and decaying vegetation with little damage to the dormant herb species, which subsequently thrive in the low-nutrient, low-disturbance environment.

Thus agriculture, in the form of winter grazing, is in fact a key contributory factor to the high floral diversity of the various grassland communities of the Burren uplands: according to O'Donovan (2001) cattle grazing 'undoubtedly engendered these communities and is deemed essential for their survival'. From a farmer's perspective, winterages provide a low cost, healthy alternative method of winter housing and feeding, representing a resource of enormous importance, particularly in the era before silage harvesting became common.

In the advent of diminished levels of winter grazing, or in the replacement of the winter grazing regime by a more common summer-based system, the species richness and character of the Burren flora are severely affected, according to recent research (Dunford, 2002). Unfortunately this is precisely what is happening on many Burren grasslands today, as the winterage system is losing relevance for a rapidly changing farming sector. Though the impact of these changes may be gradual, they are nonetheless of great concern to the future security of the Burren's rich natural and cultural heritage.

The Burren clearly is a semi-natural environment, and the plagioclimatic grasslands it supports are largely anthropogenic. However, details of the many facets of the relationship between agriculture and these species-rich grasslands have not yet been fully elucidated, at least not to a degree sufficient to inform sustainable management and use of the area. burrenbeo hopes to address this information deficit, and to recount this fascinating story.

Though the rich legacy of farming in the Burren context is unique, most other parts of Ireland have also been profoundly shaped by agriculture, and this is reflected in the natural and cultural heritage of these areas. To read more about the archaeological legacy of farming in Ireland, download the pdf below (courtesy of www.heritagecouncil.ie) :

Burren Agriculture: Times of Change

Between four and five hundred farmers are currently operating in the Burren Uplands, with the average farm size owned in the region estimated to be 240 acres or 97.2 ha (Dunford, 2001). This represents a significant (8.6%) increase over the previous decade, accounted for by a proportional drop in the number of farmers in the region.

Though this farm size appears large, in reality barely half of the average farm is classed as being 'suitable for agriculture', while almost half of this again is only fit for rough grazing. However, these marginal and extensively managed agricultural areas are among the most significant from a nature - and culture - conservation perspective.

Suckler cow based beef systems are the dominant farm enterprise in the region, a change driven primarily by EU agricultural policy, in particular the 'Suckler Cow Premium'. The extent of dairy and sheep farming in the region is, as a result of this and other factors, increasingly limited.

The traditional system of grazing older beef cattle, along with some sheep and goats, on the uplands is no longer widely practiced, as farmers concentrate on the production of high quality weanling (under one year) cattle as are in demand for the export market.

Breeds have also changed: formerly Shorthorns and Herefords were dominant, while today continental breeds are becoming increasingly popular, especially Charolais, Limousine, and Simmental, again due to their marketability. The nutritional and husbandry requirements of these animals is much higher than that of the native breeds, and so supplementary feedstuffs and housing must often be employed for their care.

Stocking rates in the Burren are increasing, but remain relatively low, currently estimated at 0.655 LU/ha, a reflection of the limited agricultural potential of much of the land. The increased stocking levels of recent years have been supported by the more intensive management of the productive lowland areas. The most popular marketplace among Burren farmers for trading livestock is Kilfenora mart in the south Burren, and also Ennis and Gort marts. Many marts have recently introduced night-time sales to cater for the large number of part-time farmers in the area.

Another significant aspect of modern farming practices in the Burren is the high level of mechanisation and external input involved. These efficiency-driven changes have led to the more intensive use of accessible 'lowland' areas of the farm, with fertiliser use and silage harvesting facilitating greater production levels on these areas.

As a consequence of this, many upland areas have fallen into relative disuse, with silage and/or 'slatted' animal housing being used for wintering animals instead. This contributed to a steady loss in plant species diversity, and indeed cultural heritage, on some holdings.

Another notable change highlighted by recent research (Dunford, 2002) is that on over half of all Burren farms, another source of earned income was being generated, a figure that tallies well with national averages, representing a trend that looks set to continue in future. Many farmers are increasingly disenchanted with the relatively long hours, poor holidays and limited income available, and are electing to leave the land, at least on a part-time basis. With them goes a vast store of management knowledge and experience, a multigenerational link with the land, and a loss in the cultural and natural diversity of these farms.

Burren Agriculture: Farming Futures

The full implications of evolving European Policy and international markets for the future of Burren agriculture are enormous, but as of yet, largely conjectural. For instance, the Fischler CAP reforms could spell environmental disaster for the Burren as stocking levels are drastically reduced, as some experts predict may happen.

Nonetheless, some important trends in the development of Irish agriculture are already apparent. There is a steady decline in agricultural employment, and an emergent two-strand farming society, with commercial full-time 'farmers' in the south and east, and a majority of part-timers in the west

and north. There is an increasing reliance on direct payments and off-farm employment as income sources. In terms of farm management there is an increasing emphasis on environmental sustainability, food safety and quality.

It is increasingly likely, particularly in places such as the Burren, that there will be a steady withdrawal of farming activity. Such 'marginal', relatively inaccessible landscapes are typically the first to be abandoned as farmers are forced to improve efficiency and productivity. The increasingly likely scenario facing conservationists is one where trying to persuade farmers to farm in an environmentally friendly manner will become secondary to the need to ensure that there are enough farmers available to farm the Burren in the first place!

Farming alone will not maintain rural populations, and the most critical issue in relation to rural development is the extent to which employment growth in other sectors of the rural economy offsets the attrition in the farm labour force. As the boundary between urban and rural societies blurs and farmers adopt new skills and aptitudes, it seems that sectors such as tourism will play an ever more important role, as will concepts such as 'farming for conservation'.

According to a recent survey of farmers in the Burren, the major changes envisaged for the area will include a continued amalgamation of existing farms to form larger farm units, increasing levels of off-farm activity, and increasing environmental responsibilities.

Such changes will have a huge impact on how the landscape of the Burren evolves. We must be prepared to react to these changes and provide a sustainable blueprint for the management of the Burren.

Relative to other European countries we are relatively fortunate in that we retain a body of management expertise and ability in the Burren, in the form of the farming community. We must protect this management resource and help support farmers to ensure a sustainable future for them and thus their precious heritage. For the Burren is a land of the people, past, present and, we sincerely hope, future.

The BurrenLIFE project - Farming for Conservation in the Burren

The overall objective of the Project is to develop a new model for sustainable agriculture in the Burren in order to conserve the habitats designated under the European Habitats Directive. To achieve this an ambitious programme, with a range of Project Actions, has been developed, including:

Implementing best-known management practices on 2,000ha of the Burren, including new feeding systems, redeployment of existing livestock and targeted scrub removal.

Increasing understanding of the relationship between land management practices and the natural heritage of the Burren.

Developing new support mechanisms for the sustainable management of the Burren habitats.

Enhancing awareness and skills relating to the heritage of the Burren and its management through a range of practical initiatives aimed at empowering local communities.

Disseminating information relating to the agricultural management of areas of high nature and cultural conservation value through literature and the media.

Burren Agriculture: Links

Agriculture Information

Burren Life: Farming for Conservation in the Burren

www.burrenlife.com

Department of Agriculture and Food

www.agriculture.gov.ie

Teagasc - Irelands Agriculture and Food development authority

www.teagasc.ie

The Irish cattle and sheep farmers association

www.icsaireland.com

The farmers journal

www.farmersjournal.ie

Irish examiner farming supplement

www.examiner.ie/pport/web/supplements/farming/index.asp

European forum and nature conservation and pastoralism

www.efncp.org

Irish farm and rural movement

www.irishfarmandruralmovement.com

The Irish Food board

www.bordbia.ie/

Food safety authority of Ireland

www.fsai.ie

UCD department of Agriculture and Food Science

www.ucd.ie/agri/

Irish cattle breeding federation

www.icbf.com/

Macra na Feirme

www.macra.ie

European commission agriculture site

europa.eu.int/comm/agriculture/index_en.htm

Irish organic farmers and growers association

www.iofga.org

worldwide agriculture site

www.agrilaunch.com

Burren Community

When referring to the Burren, the term 'community' has many interpretations. Within the Burren itself there are several distinct parishes, townlands and villages, each of which would have a sense of community not necessarily linked to the 'Burren'. Indeed many local people feel that the term 'Burren' is one that is mostly used by visitors to describe the region. At another level, the Burren 'community' could refer to those people scattered all over the world who have a special place in their heart for this landscape.

But to start with, where is the Burren, and how large is it? Well, the Burren region is located along Ireland's mid-western coast, lying across two counties, Clare and Galway, though it is more commonly associated with the former. It is estimated that the Burren uplands region (rising to a height of 300m) extends over 360 square kms, while the Burren lowlands to the east cover a further c.200 sq. kms.

The Burren upland region is bounded by Galway Bay to the north and the Atlantic Ocean to the west. The southern limit is usually defined by the expanse of wet, Namurian shales running from Doolin in the south west, looping around Lidsoonvarna and onward to Corofin via Kilfenora. The eastern limit is more difficult to define as the terraced hills give way to the vast expanses of low-lying pavement known as the 'Gort lowlands' which stretch as far east as Gort, and as far north as Ardrahan or beyond, in Co. Galway.

The Burren is a predominantly rural landscape. In contrast to prehistoric upland settlement patterns, all of the Burren's main towns and villages lie along the northern (Ballyvaughan, Kinvara) or western (Fanore, Doolin) seashore, or, more commonly, along the shale interface to the south of the region (Lidsoonvarna, Kilfenora, Kilnaboy, and Corofin). The only exceptions are Carran, Boston and Tubber, small farming communities located in the central Burren. From the most recently available population data, the population of the Burren uplands (90,756 acres or 367 sq. km) in June 1996 was 2,603 persons, a 7.3% increase from the figure of five years previously (2,426).

This section contains a brief overview of local Burren communities from the perspective of society, religion, culture and economy - a celebration of the people of the fertile rock.

Burren Community: Society

Traditionally the Burren would have been viewed as a predominantly rural society, somewhat removed from urban influence, far out on the western seaboard. Most of the shopping, socialising, business and marketing would have been done at a local level, or extending as far as the towns of Ennis and Gort. There would have been relatively little interaction with the 'outside world' and most of those living in the Burren would have been from the area and working there. This society was well captured in the famous sociological study 'Family and Community in Ireland' by Arensberg and Kimball, the research for which partially took place in the Burren.

In recent years, particularly since the arrival of the Celtic Tiger, a lot has changed and the Burren has become much more of a cosmopolitan society. Large numbers of holiday homes have been built along coastal regions, in small clusters or single sites. More and more homes are being bought or built by commuters to the larger metropolises of Galway, Shannon and Limerick which improvements in transport and roads have made more accessible. Large numbers of visitors pass through the region every year and a significant seasonal industry has built up around this. Indeed in summer, the region could be described as buzzing – there's even a traffic jam or two to be seen.

In winter time however, towns like Ballyvaughan, Kilfenora and Fanore are very quiet, their peripheral location fine during the visitor season, but leaving little industry around in winter. Similarly, rural areas of the Burren are quieter today than they have been for many a year, the sense of community and companionship once found in farming a thing of the past, as the industry becomes more mechanised and more farmers work off the land, only to hurry home every evening to do their farm jobs.

Some of these changes are revealed in the Census figures, which show a population of 2,649 in Ballyvaughan RD (which encompass c. 75% of the Burren upland region) in 1996, a 27.45% reduction from the 1911 figure of 3,651. The population of the rural DEDs almost halved from 2,423 in 1911 to 1,241 in 1996. It should be noted that the extent of population replacement, whereby indigenous farm families are being succeeded by others external to the area, is not reflected in these figures.

The dependency ratio in Ballyvaughan RD stood at 71.01 in 1991, far higher than the national figure of 53.96. Analysis of the relevant age cohorts indicates that much of this difference is due to higher percentage of population in the 65+ age cohort in Ballyvaughan RD, possibly reflecting to some extent the popularity of the region for retirement, as well as the flight of young people from the region.

Burren Community: Religion

To walk in the Burren is an opportunity to refresh the mind, body and spirit. It is an opportunity to rekindle our relationship with nature, with the land, with our heritage. Given time, the Burren has the power to draw one back to the raw magic of nature, a magic that we sometimes fool ourselves into believing that we can live without.

Many people are drawn to the Burren and held there without ever quite understanding why. This indescribable magnetism found international expression during the Mullaghmore saga when the notion of this remote hill representing 'the soul of Ireland' gained considerable empathy, in somewhat the same way that Ayers Rock in Australia is so sacred to the Aboriginal people. The mysticism of the Burren has also found expression in the books of local poet John O'Donohue, in particular the best selling *Anam Cara* or 'soul mate'.

The Burren itself is a source of healing for many people. For some, comfort is to be found in the weekly community celebration of mass in the Burren's churches. Though Catholicism is the dominant religion in the region, Church of Ireland services are also available in Kilfenora.

But for people who prefer a less formal expression of faith, a solitary visit to one of the many scattered holy wells or ruinous oratories suffices. Places such as Corcomroe Abbey, dedicated to 'Our Lady of the Fertile Rock', where the limestone of the Burren soars symmetrically to the heavens, embody the deep sense of soul that the Burren holds for many people. But the bewitching enthrallment of the Burren is to be experienced not only at this spectacular site, but in the most unlikely of places.

We find it in the deep green interior of the scattered woodland pockets, high on the windswept limestone plateaux, amidst the fragrant multicoloured summer meadows and pastures, and in innumerable other places and ways. The God of small things, to borrow a phrase, is everywhere to be found in the Burren, an indefinable yet inescapable presence.

Burren Community: Culture

The cultural landscape of the Burren is not a fossilized entity composed of ancient tombs and stone forts. In actual fact the region must count as one of the most vibrant and diverse cultural landscapes in Ireland, home to a wide range of artists, craftspeople and entertainers who together account for such a rich and varied cultural output as does justice to this wonderful place. Whether it's a traditional music 'seisiun', high quality art galleries or a strong literary tradition, the Burren has a lot to offer for the interested culture seeker.

Many visual artists have been inspired by the sweeping grey landscapes of the Burren, and by the rich flora and ancient monuments found scattered throughout. Some well known contemporary 'Burren artists' would include Rita Wobbe, Deirdre O'Mahoney, Noirin Mooney, Manus Walsh and Jim McKee and many others, both visiting and local, finding inspiration in the Burren. Some more illustrious names are also associated closely with the region's artistic heritage. Robert Gregory, the son of Lady Augusta Gregory, who died in 1918 in the First World War, painted some beautiful landscapes near his home in the northern Burren. Internationally renowned artists such as the great Australian painter Sir Sidney Nolan formed a close connection with the Burren through his frequent visits here.

The Burren also has a fascinating literary heritage, much of it focused on the New Quay – Finnevarra area, once home to the Bardic school of the O'Dalaighs, commemorated today by a monument. A little further north, on the Flaggy Shore is Mount Vernon, summer home of Lady Augusta Gregory and popular spot for literary greats like Yeats and Synge. The same shore has inspired poet Seamus Heaney who captured so beautifully the special ambience of the area in his poem 'Postscript'. Today

poets like Frank Golden and writers such as Re O’Laigheas continue to uphold this proud literary tradition.

Handmade knitwear, Pottery, Celtic woodcraft, handcrafted leather, Raku ceramics, wooden furniture and hand made musical instruments - the variety of crafts available in the Burren is considerable, the character unique, the quality second to none. A visit to members of the strong Burren community of craftspeople will not disappoint, nor will a visit to the weekly Craft Show held at Ballyvaughan on weekends during the summer.

Often drawing on local materials, colours or traditions, these craftworkers form an important and valued element of the contemporary Burren community but also represent an important link with the past. Some of the methods employed by these people are based on generations of tradition unique to the area, when locally available materials and labour-intensive processing techniques had to be employed, generating products with a strong, identifiable local character.

Burren Community: Economy

The economy of the Burren has seen a steady shift in recent years from one based primarily on agriculture and associated industries, to one in which the services sector plays an increasingly large role. For instance in Ballyvaughan RD (covering most of the Burren uplands) the numbers of people employed in the services sector increased by 105% over the period 1971-1991, from 58 to 119 jobs. In contrast the number involved in Agriculture fell from 525 to 251 over the same period.

Currently in Ballyvaughan RD some 25% of jobs are directly related to Agriculture, Forestry, and Fishing (AFF). This is particularly relevant in the more rural, inland areas: over twice the average number of people are dependent on agriculture in the District Electoral Divisions (DEDs) of Carran, Castletown, Noughval and Oughtmama.

After agriculture, the next most important sector is services (20%), often associated with tourism, and particularly important in areas near to the towns of Lisdoonvarna and Ballyvaughan.

Lisdoonvarna (DED) has 32% of its jobs in the services sector, while the DEDs adjacent to the tourist hub of Ballyvaughan all have an above average percentage of jobs in this sector. In contrast, rural upland DEDs such as Oughtmama (0%), Noughval (4%) and Carran (7%) all have very low numbers of jobs in the services sector, confirming the limited role that tourism plays in the economy of the more remote, agricultural areas of the Burren.

After Agriculture and Services the main sectors would be Professional (13%), Sales (10%), Building (6%), Manufacturing (5%), Clerical (5%), Administration (4%) and Transport (4%).

Many farmers now have part-time or full-time off-farm work, some locally but most in the towns of Ennis and Shannon and Galway. Increased mechanisation, consolidation of holdings, and the lure of a buoyant non-agricultural ‘Celtic Tiger’ economy are some of the reasons for this fall in numbers. According to economists in ‘peri-urban’ areas of the Burren (proximate to Ennis, Shannon and Galway) there exists a ‘pull’ of alternative employment, while in disadvantaged areas there exists a push due to limited farming resources and incomes.

These trends in agricultural employment are very significant in the context of the future evolution of the Burren landscape. This was recognised in a recent report (Consultative Committee on the Heritage of the Burren, 2001): ‘Given that the conservation of the Burren is dependent on the

maintenance of relatively extensive farming, we may be reaching a critical situation – where the numbers available to carry on the necessary extensive management practices may be simply not available’.

Burren Community: Links

Community Information

The Burren outdoor education centre

www.oec.ie/burren/

Clare county library

www.clarelibrary.ie

Clare Heritage and Genealogical Research Centre

www.clareroots.com/

The Clare champion newspaper

www.clarechampion.ie

The Clare people newspaper

www.clarepeople.com/

The clare county enterprise board

www.clare-ceb.ie

Clare FM radio station

www.clarefm.ie

Burren Action Group

www.iol.ie/~burrenag/

Clare County Council

www.clare.ie/

The Leader national rural development programme in Clare

www.rrd.ie/

Ireland's national training and employment authority

www.fas.ie

The Burren centre

www.theburrencentre.ie

Galway Public library

www.galwaylibrary.ie

Mid western health board

www.mwhb.ie

Burren Climate

The climate of the Burren is best described as marine-temperate, dominated by the influence of the Atlantic Ocean, and in particular the North Atlantic drift. The climate is characterised by mild winters, cool summers, strong winds, and year-round rainfall. Average figures for the temperature, sunshine, rainfall and wind conditions are given below, based on a 30-year (1961-1990) average recorded from Shannon Airport, the nearest Met station to the Burren.

Temperature

Mean Daily Temperature (Celsius): 10.1

(Hottest - June 15.7, Coldest - January 5.4)

Mean Daily Maximum (Celsius): 13.5

(Hottest - July 19.4, Coldest - January 8.2)

Mean Daily Minimum (Celsius): 6.8

(Hottest - July 12, Coldest - January 2.6)

Absolute Maximum (Celsius): 31.6 (June)

Absolute Minimum (Celsius): -11.2 (January)

Sunshine

Mean Daily Sunshine (hours): 3.48

(Max - May 5.77, Min - December 1.42)

Maximum Daily Sunshine (hours): 15.8 (June)

Mean Number of Days with no Sun: 62

Rainfall

Mean Annual Rainfall (mm): 926.8

(Wettest- December 99.6, Driest - April 55.5)

Mean number of days with >0.2mm rain: 214

Mean number of days with >1mm rain: 160

Mean number of days with >5mm rain: 66

General Conditions

Mean Annual Wind Speed (knots): 9.8

(Windiest - Feb. 11.1, Calmest August 8.6)

Mean Number of days with snow/sleet: 10.9
(Most snow – January 3.4 days)

Mean Number of days with hail: 21.7 (
Most hail – March 4.3 days)

Mean Number of days with thunder: 6.3
(Worst thunder - January 0.9 days avg).

Mean Number of days with fog: 31.8
(Foggiest month – January 4.1)

For climate information contact

Met Éireann.

The Irish Meteorological Service

Glasnevin Hill

Dublin 9

Tel: +353 1 8064200

Fax: +353 1 8064247

www.met.ie/

Burren Climate: Spring

Spring is usually a quiet time in the Burren for visitors, the arrival of the Spring Gentian in April heralding also the arrival of the first real numbers of visitors of the year. The weather is often surprisingly pleasant in late Spring, the showers and winds of early Spring replaced by more blue skies and slightly higher temperatures.

Weather conditions do, of course, vary from year to year, month to month, day to day, so it is very difficult to predict what to expect when visiting here. The figures below do, however, offer some idea of what to expect when visiting, though its best to come prepared and be aware of the fact that there is so much to do in the Burren, regardless of what the elements should deliver.

Temperature

Mean Daily Temperature (Celsius): February 5.6, March 7, April 8.8

Mean Daily Maximum (Celsius): Feb. 8.5, March 10.5, April 12.7

Mean Daily Minimum (Celsius): February 2.7, March 3.6, April 4.8

Sunshine

Mean Daily Sunshine (hours): Feb. 2.34, March 3.34, April 4.93

Maximum Daily Sunshine (hours): Feb. 9.5, March 11.6, April 13.6

Mean Number of Days with No Sun: February 7, March 5, April 3

Rainfall

Mean Monthly Rainfall (mm): February 72.1, March 71.8, April 55.5

Mean no. of days with >5mm rain: February 5, March 5, April 4

General Conditions

Mean Monthly Wind Speed (knots): Feb 11.1, March 11, April 9.5
Mean No. of days with snow/sleet: Feb. 3.2, March 1.8, April 0.6
Mean Number of days with hail: February 3.1, March 4.3, April 2.5
Mean Number of days with thunder: Feb. 0.5, March 0.4, April 0.3
Mean Number of days with fog: February 2, March 1.8, April 2.2

Figures based on a 30-year (1961-1990) average from Shannon Airport

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Burren Climate: Summer

Summer is the most popular time to visit the Burren, largely due to the interest in the flora which is in full bloom at this time. Longer days (often bright until almost 11pm) are a great benefit, though the weather is often a disappointment. This probably has more to do with the fact that people's expectations are higher in summer than the conditions themselves which, as the records show, are quite good.

Weather conditions do, of course, vary from year to year, month to month, day to day, so it is very difficult to predict what to expect when visiting here. The figures below do, however, offer some idea of what to expect when visiting, though it's best to come prepared and be aware of the fact that there is so much to do in the Burren, regardless of what the elements should deliver.

Temperature

Mean Daily Temperature (Celsius): May 11.7, June 14, July 15.7

Mean Daily Maximum (Celsius): May 15.3, June 17.9, July 19.4

Mean Daily Minimum (Celsius): May 7.3, June 10.1, July 12

Sunshine

Mean Daily Sunshine (hours): May 5.77, June 5.13, July 4.59

Maximum Daily Sunshine (hours): May 15.3, June 15.8, July 15.7

Mean Number of Days with No Sun: May 2, June 2, July 2

Rainfall

Mean Monthly Rainfall (mm): May 60.1, June 62.4, July 57.1

Mean number of days with >5mm rain: May 4, June 4, July 4

General Conditions

Mean Monthly Wind Speed (knots): May 9.5, June 8.9, July 8.7

Mean Number of days with snow/sleet: May 0.1, June 0, July 0

Mean Number of days with hail: May 1.7, June 0.2, July 0.1

Mean Number of days with thunder: May 0.4, June 0.8, July 0.8

Mean Number of days with fog: May 1.7, June 1.8, July 1.8

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Burren Climate: Autumn

Autumn. For many people, the months of late summer and autumn are the best times to visit the Burren. The days are still long, the light superb, the crowds less, and the weather surprisingly pleasant. Later in the autumn the temperatures do fall off a bit, but locally these months are considered to be among the best of the year to visit.

Weather conditions do, of course, vary from year to year, month to month, day to day, so it is very difficult to predict what to expect when visiting here. The figures below do, however, offer some idea of what to expect when visiting, though its best to come prepared and be aware of the fact that there is so much to do in the Burren, regardless of what the elements should deliver.

Temperature

Mean Daily Temp.(Celsius): August 15.5, Sept.13.6, October 11.1

Mean Daily Max. (Celsius): August 19.2, Sept. 17.2, October 14.2

Mean Daily Minimum (Celsius): August 11.7, Sept. 10.1, October 8

Sunshine

Mean Daily Sun (hours):August 4.44, Sept. 3.69, October 2.65

Maximum Daily Sun (hours): August 14.8, Sept. 11.6, October 9.9

Mean Number of Days with No Sun: August 2, Sept. 3, October 6

Rainfall

Mean Monthly Rain (mm): August 82.3, Sept. 81.8, October 92.4

Mean no. of days with >5mm rain: August 5, Sept 6, October 6

General Conditions

Mean Monthly Wind Speed (knots): August 8.6, Sept. 9.6, Oct. 10

Mean No. of days with snow/sleet: August 0, Sept. 0, October 0.1

Mean No. of days with hail: August 0.2, Sept. 0.3, October 1.1

Mean No. of days with thunder: August 0.5, Sept. 0.4, October 0.4

Mean No. of days with fog: August 3.1, September 3, October 3.3

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www.met.ie/

Burren Climate: Winter

Winter in the Burren is something not too many visitors experience, most preferring to wait for the longer evenings and the arrival of the flowers in spring and summer. It's not as bad as people think, though the weather at this time tends to be highly unpredictable. The wind and rain is never too far away, though the odd sunny day is so unexpected that it is a source of great enjoyment and relief at this time of year.

Weather conditions do, of course, vary from year to year, month to month, day to day, so it is very difficult to predict what to expect when visiting here. The figures below do, however, offer some idea of what to expect when visiting, though its best to come prepared and be aware of the fact that there is so much to do in the Burren, regardless of what the elements should deliver.

Temperature

Mean Daily Temp. (Celsius): November 7.5, Dec. 6.3, January 5.4

Mean Daily Max. (Celsius): November 10.4, Dec. 8.9, January 8.2

Mean Daily Min. (Celsius): November 4.5, Dec. 3.6, January 2.6

Sunshine

Mean Daily Sun (hours): November 1.93, Dec. 1.42, January 1.58

Maximum Daily Sun (hours): November 8.8, Dec 7.1, January 7.8

Mean No. of Days with no Sun: November 8, Dec 11, January 10

Rainfall

Mean Monthly Rain (mm): November 94.7, Dec. 99.6, January 97.2

Mean no. of days with >5mm rain: November 7, Dec 7, January 7

General Conditions

Mean Monthly Wind Speed (knots): Nov. 9.6, Dec. 10.5, Jan.10.9

Mean Number of days with snow/sleet: Nov. 0.3, Dec. 1.5, Jan.3.4

Mean Number of days with hail: Nov. 1.8, Dec. 2.7, January 3.7

Mean Number of days with thunder: Nov.0.4, Dec. 0.4, January 0.9

Mean Number of days with fog: November 3.4, Dec. 3.6, Jan. 4.1

Figures based on a 30-year (1961-1990) average from Shannon Airport

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Visitor Information

Planning a **visit** to the Burren anytime soon, or just wishing you were? Well, why not let burrenbeo be your virtual guide? burrenbeo can bring you in contact with the Burren and its people in a way that many actual visitors never succeed in doing. We will provide the necessary information to ensure that you are well informed prior to your arrival here, helping you to make the most of your visit. We will also put you in touch with a range of quality local accommodation and service providers, greatly simplifying the planning of your trip. We will help direct you to the best food, drink, music, shopping and entertainment.

You, as a visitor, have an important role in contributing to the future of this special landscape and its people. At a very basic level, by adhering to the principles outlined in the Burren code, you will be in a position to make informed and responsible decisions while visiting this beautiful place. If you would like further information on the Burren please download and print one of our multilingual factsheets below, or visit our online shop to order a copy of our award winning CD-ROM.

Beyond this however, we would hope that your visit here will contribute to the local economy, helping local communities to survive and continue their important role in maintaining the heritage of the Burren. By exercising your discretion in using local providers and purchasing local produce, your visit can have a significant positive impact. In particular we urge you to use the service providers listed on the Burrenbeo website as these providers actively support the educational and conservation work of Burrenbeo

Following your visit to the Burren we will keep you in contact with the region, and answer any of the questions or needs you may have in relation to the Burren. We would also welcome your comments on both this website and your impressions of the Burren.

Happy Trails!

Visitor Info: Kinvara

Kinvara - Cinn Mhara - The head of the sea is a popular fishing village which has a long tradition of trading by the sea with the people of Connemara. This legacy is celebrated in the village every August when the

Cruinniú na mBád (Gathering of the Boats) festival takes place. Kinvara also hosts the Cuckoo Festival every April. Famous for its music sessions which can spontaneously occur in any one of the 10 pubs in the village. Home to Dunguaire Castle and the Burrenbeo Centre. Come visit us at Burrenbeo on Main Street, info@burrenbeo.com or visit www.kinvara.com for more information about kinvara.

Visitor Info: Ballyvaughan

Ballyvaughan - Baile ua Bheacháin is nestled on the southern shore of Galway Bay against a backdrop of the majestic Burren hill, Ballyvaughan is one of the most beautiful and popular villages in the Burren. It draws large numbers of visitors every summer to enjoy its range of pubs, hotels, shops, restaurants and craft workshops. Once a sleepy port on the southern shores of Galway Bay, Ballyvaughan's recent revival owes much to its excellent location which is very convenient for exploring the fascinating surrounding Burren countryside. Stunning views of the Burren hills and Galway Bay. Home to the famous Ailwee Caves and the Burren College of Art.

For further information visit www.ballyvaughanireland.com

Visitor Info: Boston

Boston- Móinín an gCloigeann - the little bog of the skulls is a tiny village near the eastern edge of the Burren. To the south lies Lough Bunny, a calcareous lake of 480 acres and one of the deepest in the Burren. It contains a wide variety of wildfowl and plants. Turloughmore is situated about 2 miles from Boston Church, and was famous for its racecourse and fair day in the 18th century. The ruins of Cluain Dubháin, or Boston, Castle and Skaghard Castle can be found near Lough Bunny. Today, the ruins of the castles are a reminder of the past sieges endured by its previous occupants.

Visitor Info: Carran

Carran - An Carn A heap of stones (to identify a chiefs grave). Cusacks birthplace, in the heart of the Carran village lies in the centre of the Burren overlooking one of the region's biggest Turloughs. The small village features the bare necessities of country life - a church, school and pub (Cassidy's Croi na Boirne), but is also home to many interesting enterprises. The Cusack's Centre, birthplace to Michael Cusack, founder of the GAA, is now a fully restored state of the art contemporary visitor centre. Carran is also home to the wonderful Burren Perfumery enterprise, a business that has developed a strong and successful international brand. Clare's Rock Hostel is a fine and well run hostel that hosts many of the Burren's national and international visitors. Caherconnell Stone Fort and school is another local enterprise a few miles west of Carran. Carran village is also home to the Farming for Conservation programme BurrenLife.

To find out more, visit

www.claresrock.com

www.burrenperfumery.com

www.michaelcusack.ie

www.caherconnell.com

www.burrenforts.ie

Visitor Info: Corofin

Corrofin lies on the south eastern edge of the Burren, a few short miles south of the Burren National Park. Corrofin is best known as an angler's paradise due to its proximity to Lough Inchiquin and other lakes, and it offers excellent coarse and game fishing. Corofin is a village steeped in folklore, music, song and dance. Home to the Clare Heritage Centre which offers an insight into Irish life in the 1800's, and the Geneological centre which caters for visitors wishing to trace their Irish roots. For more information visit www.corofin.org

Visitor Info: Crusheen

Crusheen – Croisín – The little cross, a village on the Galway / Ennis road, north of Inchicronan Lough. On an island in the lough are the ruins of an Augustinian Abbey founded by the O'Briens. Inchicronan means 'St Crónán's Island'. The area around Crusheen has a number of monuments (wedge grave, ruined castles, churches). There are also several small local lakes suitable for the coarse angler. The village has a particularly pleasant thatched pub, Fogartys, with two open fires.

Visit www.crusheen.com or www.crusheenns.com for further information.

Visitor Info: Doolin

Doolin - Dubh Linn - The dark pool lies on the south-western extremity of the Burren and is internationally renowned as a centre of Irish live music, played in its many hugely popular pubs. It has a wide range of accommodation and good quality restaurants. Popular all year round, most of the activity in the village focuses on the original areas of "Fisherstreet" and "Roadford". Doolin is an excellent base for exploring the Cliffs of Moher, Doolin Cave (Poll an Ionain) as well as the Burren and its Atlantic coastline. Doolin is also popular as the departure point for the Aran Islands ferry and the Cliffs of Moher Cruises. For more information visit www.doolin-tourism.com

Visitor Info: Ennistymon

Ennistymon lies in the southern extremity of the Burren, and has a long history as a market town for the surrounding Burren community. It is a lively and bustling town, with the majority of the businesses still family-owned and run. Many of the shops retain their traditional shopfronts and doors. The narrow street near the bridge over the Cullenagh River is the oldest part of the town. A little below the bridge, the river rushes over an extensive ridge of rocks resulting in the beautiful cascades. For more information

visit <http://www.irelandmidwest.com/clare/towns/Ennistymon.html>

Visitor Info: Fanore

Fanore - Fán Ór - The Golden Slope lies along the western edge of the Burren, affording spectacular views of the Atlantic Ocean and Aran Islands. The village is thought to be one of the longest in Ireland, though most of the daytime activity centers around its spectacular beach and sand dune system. Situated on the R477 to the south of Black Head Fanore is a popular recreational spot with good public access and parking. O'Donoghue's pub and Vasco café & restaurant provides sustenance to the weary traveller. The Caher River runs through Fanore, dividing the beach and is the only Burren river to run along the surface from its source to the sea.

See:

www.vasco.ie/

Visitor Info: Gort

Gort - An Gort - The Field - lies in Co. Galway on the eastern extremity of the Burren. It has been designated as a heritage town as it has some of the finest examples of traditional shop-fronts in Ireland. A busy town, Gort is well served with Banks, Supermarkets and Services. It is a popular destination for visitors also as it lies close to the famous Coole Park (Nature Reserve and Heritage Centre) formerly the home of Lady Gregory and cradle of the Irish literary revival, and Thoor Ballylee (formerly the home of the poet W B Yeats). The round tower of Kilmacduagh lies a few miles west.

for further information visit www.gortononline.com

Visitor Info: Kilfenora

Kilfenora - Cill an Abhraoidh - Eyebrow shaped hillside lies on the southern edge of the Burren and is an important focal point for the farmers of the Burren as it is the home of Kilfenora mart. Historically, Kilfenora was best known for its rich ecclesiastical heritage: today this extraordinary

legacy may be seen in the high crosses and cathedral - recently renovated with a glass roof to protect its valuable artefacts. One curious fact is that the Bishop of Kilfenora is none other than the Pope! Kilfenora is also home to the famous Kilfenora Ceili band and the community-run Burren Centre. Visit www.theburrencentre.ie for further information.

Visitor Info: Kilnaboy

Killinaboy – Cill Iníne Baoith - The church of the daughter of Baoith lies between Corrofin and Kilfenora. As you travel from the south you are greeted by the 11th century medieval Church and the remains of a round tower. Across the way is the former Post office which is currently the home of "X-PO", which has been re-opened as a Community and cultural centre for the Parish of Killinaboy. Mullaghmore lies a few miles to the east of Killinaboy village while at Roughan hill can be found a replica of the world famous Tau Cross. Castles in this parish include Lemenagh which was the home of the infamous Máire Rua as well as Inchiquin castle. The Parish of Killinaboy has over 300 items of antiquity alone and is a favourite place for both the Botanist and Burren Rambler alike

Visitor Info: Kilshanny

Kilshanny - Cill Seanaigh - The Church of Senan - "The Lovely Green Vales of Kilshanny" lie on the southern fringe of the Burren. They are home to historical sites such as The Abbey of St. Mary and St. Augustine, The Carn Connachtach (a Bronze age burial site), Smithstown Castle and holy wells dedicated to St. Augustine, St. Senan, St. Cravan and Iníne Baoith. The small village features a Church, a school, a pub and a community hall. It is also home to the popular Kilshanny cheese.

Visitor Info: Lahinch

Lahinch - An Leacht from Leacht Uí Chonchubair, or O'Connor's Cairn is a traditional family seaside town, with a large inviting golden sandy beach, world famous links golf course and spectacular water sports, particularly surfing. Good accommodation and varied entertainment are some of the attractions that make it an ideal holiday location. It is also an excellent base for fishing, walking, cycling and pony trekking.

Visit www.lahinchfailte.com for further information.

Visitor Info: Lisdoonvarna

Lisdoonvarna - Lios Dún Bhearna - The lios at the fort by the gap is a village in the southern edge of the Burren and was a popular health resort in the early nineteenth century thanks largely to its famous spa wells. The Spa's therapeutic mineral waters contain magnesia, iodine and iron. It is famous also for its September festival - The Matchmaking Festival one of Europe's largest 'singles' festival and one of Ireland's oldest.

Lisdoonvarna is an excellent base for exploring the Burren and sampling the famous music and craic of North Clare. Home to the Burren smokehouse and the famous 'Rodaside Tavern' pub. The first Merriman Summer School was founded in 1968. The Summer School features lectures, seminars, dance classes and music. Lisdoonvarna of course, is also famous via the words of Christy Moore's wonderful ballad 'Lisdoonvarna'. www.youtube.com/watch?v=vRYW55rFC24

www.burrensmokehouse.ie
www.burrenpaintingcentre.com
www.sheedys.com/restaurant.html
www.roadsidetavern.ie/roadside/asp/page.asp?p=1
www.matchmakerireland.com

Visitor Info: Tubber

Tubber - Tobar - Well - with its varied landscape, history and tranquility has much to offer the visitor who is looking 'to get away from it all.' An ideal place for discovering the famous flowers of the Burren and a birdwatchers' and anglers' paradise.

Visit www.tubberns.com for further information .

Burren Visitors Itinerary

Sometimes it seems that there is so much to see in the Burren that it's hard to know where to start exploring it all. Whether your interest is in geology, ecology, archaeology or just in sightseeing, there is enough to stimulate and satisfy, even on a short visit to the region.

However, to help you on your way we've put together a few possible itineraries, based on the time you have available to you – a half day, fully day, weekend or whole week. These itineraries are based on the assumption that you have your own transport – otherwise you really would need to extend your trip for a few days (an option we heartily encourage).

The itineraries include some of the 'must-see' attractions of the Burren – such as the famous Poul nabrone dolmen - as well as a number of less well-known options. They include sites of significant natural and cultural heritage value, as well as some of the most scenic stops of the region.

The sites listed are on public land, unless otherwise stated. Permission should be sought to use sites on private land. Care must be taken to ensure that no damage is done when visiting any of these sites – no picking flowers, damaging pavement, disturbing livestock etc. Also, great care should be exercised when parking at these sites, as many of them do not have any dedicated parking areas.

All sites listed do not have any entry charges, unless otherwise stated. Unfortunately, very few of the sites would have disabled access, due to the rugged nature of the terrain. Finally, enjoy your visit, let us know how you fared.

Half Day Itinerary

Half-Day (four hours):

This trip begins in Kilfenora, at the southern edge of the Burren.

1. Kilfenora (30 min): Visit Kilfenora Cathedral to see the carvings, also the graveyard and field to the west to see the high crosses.
2. Kilfenora to Poul nabrone via Leamanagh Castle (30 min): pleasant drive east along the southern edge of the Burren (note the wetter shale country to the south) until arriving at the medieval castle of Leamanagh, which was home to the infamous Maire Rua. Then carry on north through the Burren

uplands, looking out for the scenically situated but now ruinous stone church of Carran on the right hand side

3. Poul nabrone Portal Tomb (30 min): Take some time to admire this famous dolmen, dated to 5,800 years ago, though try to avoid the busloads of tourists. Nice pavements, with well developed clints and grykes, as well as a diverse Burren flora on view here.

4. Poul nabrone to Ballyvaughan via Caher Mor (30 min): beautiful drive with spectacular views of Ballyvaughan valley. Stop at the foot of the hill to visit the roadside fort of Caher Mor with its restored doorway and viewing platform.

5. Ballyvaughan to Corcomroe Abbey (60 min): Take a stroll in the pretty seaside village of Ballyvaughan. Then head east to Corcomroe, looking out to see Muckinish castle on the left. Just after the village of Bell Harbour is found Corcomroe Abbey – dedicated to ‘Our Lady of the Fertile Rock’ by the Cistercian monks – is a superb place to admire some elaborate carvings and beautiful masonry.

6. Corcomroe Abbey to Kinvara via the Abbey Hill road (60 mins): Take a walk along the old green road at Abbey hill for super views of Galway bay, great up-close views of the Burren pavements and colourful flora. Finish off in beautiful Kinvara to admire the hookers (traditional turf boats) and visit Dunguaire Castle before departing the Burren.

Full Day Itinerary

One Day (roughly eight hours):

This trip begins in Kilfenora, at the southern edge of the Burren.

1. Kilfenora (90 min): Visit the Burren Centre at Kilfenora for an excellent introduction to the Burren, including a film about the region (Cover Charge applies). This community-run centre is the perfect way to get a good orientation to the region and its diverse heritage. After this, visit Kilfenora Cathedral to see the elegant carvings, also the graveyard and field to the west to see the high crosses.

2. Kilfenora to Poul nabrone via Leamanagh Castle (30 min): pleasant drive east along the southern edge of the Burren (note the wetter shale country to the south) until arriving at the medieval castle of Leamanagh, which was home to the infamous Maire Rua. Then carry on north through the Burren uplands, looking out for the scenically situated but now ruinous stone church of Carran on the right hand side

3. Poul nabrone Portal Tomb (30 min): Take some time to admire this famous dolmen, dated to 5,800 years ago, though try to avoid the busloads of tourists. Nice pavements, with well developed clints and grykes, as well as a diverse Burren flora on view here.

4. Poul nabrone to Ballyvaughan via Caher Mor (45 min): beautiful drive with spectacular views of Ballyvaughan valley. Stop at the foot of the hill to visit the roadside fort of Caher Mor with its restored doorway and viewing platform. A little further north along the road is found a huge earthen fort – An Rath- also well worth a visit.

5. Ballyvaughan for (60 min): Take a stroll in the pretty seaside village of Ballyvaughan, an excellent lunch stop after a morning's exploration.
6. Ballyvaughan to Corcomroe (45 min): pleasant drive, looking out to see Muckinish castle on the left. Just after the village of Bell Harbour is found Corcomroe Abbey – dedicated to 'Our Lady of the Fertile Rock' by the Cistercian monks – a superb place to admire some elaborate carvings and beautiful masonry.
7. Corcomroe Abbey to Carran and the Burren perumery (60 mins): Driving back south through the Burren uplands to the inland village of Carran – a small rural village with pub, church and school. Excellent views of a turlough to the east. Drop in to the nearby Burren perumery for a superb short film on the Burren and stock up on gifts or a snack.
8. Cahercummaun Hill Fort (60 mins). A short drive south of Carran followed by a half-hour walk to see this magnificent three-walled cliff side fort, built 1200 years ago. This is a really good place to admire the rich and diverse flora and fauna of the Burren as well.
9. Cahercummaun to Kilfenora (60 mins): return to Kilfenora via Kilnaboy if there is time, with brief stops to see wedge tombs at Parknabinna and the old church at Kilnaboy with its distinctive Cross of Lorraine (on the gable) and a Sile na Gig over its doorway.
10. Time permitting, why not catch the sunset from the spectacular viewing platform of the Cliffs of Moher, a 30 min drive away.

One Week Itinerary

One Week Visit

Day 1: Central Burren: As per one-day Itinerary. If not arriving until lunch or afterwards, then this itinerary can also be partially accommodated on Day 7.

Day 2: Eastern Burren:

1. Kilfenora to Burren National Park (30 min): via Leamanagh Castle & Kilnaboy church
2. Burren National Park (4 hours): One of the most precious gems in what is such a special landscape, well worth a half-days visit
3. Burren National Park to Kilmacduagh via Lough Bunney (60min): beautiful views west to the Burren hills and a place to see rare plants such as dropwort, and butterflies galore.
4. Kilmacduagh (60 min): an extraordinary monastic complex established by St. Colman.
5. Kilmacduagh to Abbey Hill (60 min): Take a walk along the beautiful Abbey hill green road - super views of Galway bay, great up-close views of the Burren pavements & flora.
6. Abbey hill to Kilfenora (30 min): Return to base (optional)

Day 3: West Coast Burren

1. Kilfenora to Poulsallagh via Lisdonvarna (90 min): stop off in the matchmaking town of Lisdoon and look at the famous spas and drop in to the Burren smokehouse. Continue on to the coast via Ballinalacken Castle, spectacularly perched on a limestone outcrop.
2. Poulsallagh (2 hours): one of the best places in the Burren to botanise – a spectacular collection of

plants, some quite rare – in a magnificent coastal karst habitat.

3. Craggagh (60min): stop off for lunch at O'Donoghues or for picnic supplies at the **shop**

4. Fanore beach (60 min): superb little beach with impressive dune complex backdrop

5. Black head (120 min): Magnificent views as you ascend the hillside, culminating in the impressive fort of Dun Irghus which has a very commanding location.

6. Back to Ballyvaughan/Kilfenora (60 min): Time permitting you could visit the Pinnacle well or Gleninagh castle & fulacht fiadh all of which are marked along the road.

Day 4 –5: Departing from Doolin Pier, take a trip to the Aran Islands, geographical extensions of the Burren with a similar flora and archaeological heritage. Wonderful trip, also one of the best places in Ireland to hear Irish spoken today. Try to catch the nearby Cliffs of Moher either on your way out from Doolin or en-route back.

Day 6: Relaxation day.

Morning: Try a visit to Ailwee Cave, a pleasant underground diversion for a few hours, with an excellent farm shop, gift shop and much more. Combine this with a visit to some of Ballyvaughan's other attractions such as Newtown Castle and Bishopsquarter beach.

Afternoon: Visit the Flaggy Shore in New Quay, a delightful coastal walk with an impressive geological and ecological heritage. At its extremity is a Martello tower built c.1800AD, while at the other end is Linnane's Lobster Bar, a great place to relax.

Day 7: Getting ready to leave

Taking your leave of the Burren after a week's visit, the final day of the visit would be a good time to do some final shopping, or to get around to some of the sites you may have missed on the previous days. If you are looking for one final fieldtrip before taking your leave, try one of the nature reserves – Slieve Carran or Coole Park both excellent options.

Burren Itinerary: Weekend – Day 1

Day One (roughly eight hours):

This trip begins in Kilfenora, at the southern edge of the Burren.

This is the same Itinerary as has been recommended for a one day visit to the region.

1. Kilfenora (90 min): Visit the Burren Centre at Kilfenora for an excellent introduction to the Burren, including a film about the region (Cover Charge applies). This community-run centre is the perfect way to get a good orientation to the region and its diverse heritage. After this, visit Kilfenora Cathedral to see the elegant carvings, also the graveyard and field to the west to see the high crosses.

2. Kilfenora to Poul nabrone via Leamanagh Castle (30 min): pleasant drive east along the southern edge of the Burren (note the wetter shale country to the south) until arriving at the medieval castle of Leamanagh, which was home to the infamous Maire Rua. Then carry on north through the Burren uplands, looking out for the scenically situated but now ruinous stone church of Carran on the right hand side

3. Poul nabrone Portal Tomb (30 min): Take some time to admire this famous dolmen, dated to 5,800 years ago, though try to avoid the busloads of tourists. Nice pavements, with well developed clints and grykes, as well as a diverse Burren flora on view here.

4. Poul nabrone to Ballyvaughan via Caher Mor (45 min): beautiful drive with spectacular views of Ballyvaughan valley. Stop at the foot of the hill to visit the roadside fort of Caher Mor with its restored doorway and viewing platform. A little further north along the road is found a huge earthen fort – An Rath- also well worth a visit.
5. Ballyvaughan for (60 min): Take a stroll in the pretty seaside village of Ballyvaughan, an excellent lunch stop after a morning's exploration.
6. Ballyvaughan to Corcomroe (45 min): pleasant drive, looking out to see Muckinish castle on the left. Just after the village of Bell Harbour is found Corcomroe Abbey – dedicated to 'Our Lady of the Fertile Rock' by the Cistercian monks – a superb place to admire some elaborate carvings and beautiful masonry.
7. Corcomroe Abbey to Carran and the Burren perumery (60 mins): Driving back south through the Burren uplands to the inland village of Carran – a small rural village with pub, church and school. Excellent views of a turlough to the east. Drop in to the nearby Burren perumery for a superb short film on the Burren and stock up on gifts or a snack.
8. Cahercummaun Hill Fort (60 mins). A short drive south of Carran followed by a half-hour walk to see this magnificent three-walled cliff side fort, built 1200 years ago. This is a really good place to admire the rich and diverse flora and fauna of the Burren as well.
9. Cahercummaun to Kilfenora (60 mins): return to Kilfenora via Kilnaboy if there is time, with brief stops to see wedge tombs at Parknabinna and the old church at Kilnaboy with its distinctive Cross of Lorraine (on the gable) and a Sile na Gig over its doorway.
10. Time permitting, why not catch the sunset from the spectacular viewing platform of the Cliffs of Moher, a 30 min drive away.

Category:

Burren Visitor Itineraries

Burren Itinerary: Weekend – Day 2

Weekend - Day 2: Eastern Burren and the Coast Road (bring a packed lunch)

1. Kilfenora to Burren National Park (30 min): Driving east past Leamanagh Castle and Kilnaboy (visit the church if you missed it on Day One), before turning north passing through the village of Kilnaboy, onward then until the four-way crossroad at Gortlecka.
2. Burren National Park (3 hours): One of the most precious gems in what is such a special landscape, the magnificent views of Mullaghmore mountain and Lough Gealain are matched by the stunning flora and geological features found at this site. For a leisurely visit, stroll across the pavements that skirt the turlough and watch out for rare plants. For a more active visit, scale the mountain, a thrilling hike across sky-bound limestone plateaus with unrivalled panoramas of the east Burren lowlands from the top.

3. Burren National Park to Kilmacduagh via Lough Bunny (30min): driving through the quiet, winding roads of the largely unexplored east Burren, take a break at Lough Bunny – beautiful views west of the Burren and a place to see rare plants such as dropwort.

4. Kilmacduagh (30 min): an extraordinary monastic complex established by St. Colman. A wonderful round tower, slightly leaning, is the focus of the site which also includes several churches with some very beautiful carvings. Gort is 10 minutes to the east.

5. Kilmacduagh to Ballyvaughan via Abbey Hill (60 min): Break up this longish drive back west with a visit to the beautiful Abbey hill green road - super views of Galway bay, great up-close views of the Burren pavements and colourful flora.

6. Ballyvaughan to Fanore beach (60 min): Take a break at Ballyvaughan before heading west along the scenic coast road. Time permitting you could visit the Pinnacle well, Gleninagh castle & fulacht fiadh and Black head, all of which are marked along the road.

7. Fanore: (30min): Wonderful little Atlantic beach backed by impressive dunes, guaranteed to refresh and inspire the weary traveler. Failing this, O'Donoghue's pub is only a mile further south and well worth a visit for a drink.

8. Fanore to Cliffs of Moher to Kilfenora (90 mins): Try to make it to the Cliffs for the sunset, though a longish drive it is really spectacular. Back to base then at Kilfenora, unless you fancy some food, drink and song at Doolin.

Burren Visitor Transport

The Burren region is easily reached by sea and air. Shannon International Airport and Galway Regional Airport are close to the Burren. Shannon airport, an ideal stop for transatlantic visits, and now one of Ryanair's European hubs, is about a one hour drive from the Burren. Galway airport has good connections to Dublin, the UK and also has a few flights to the continent. It is only about thirty minutes from the Airport to Kinvara in the northern Burren. The Burren is approximately a three hour drive from Cork or Dublin Airports. Dublin and Dun Laoghaire sea ports are c.3.5 hours away while Rosslare would be a 4 hour trip.

The Burren region has good rail connections with Train Stations at Ennis and Galway less than a 40 minute trip. Within the Burren there is an extensive network of roads linking the region's towns, whether you are traveling by rental car, bicycle, bus or even on foot. Small Coach Tours are fast becoming the way for groups to get around the region. We recommend the friendly services of Brian Farrell from the well-established Burren Coaches group. See <http://www.burrencoaches.ie> for more information.

Within this section you will find some information on getting to the Burren and getting around. For more detailed information, use the links provided or contact info@burrenbeo.com. See also our Interactive map to help you plan your journey.

Burren Transport: Air

Shannon Airport

Fly direct by air to Shannon Airport which gets you into the heart of the Shannon Region. There are scheduled flights daily, on a year round basis to and from major cities in Britain, Europe and North America. Below, we detail the main carriers to/from Shannon. For specific information on services to/from Shannon Airport visit the Shannon Airport website.

Main Carriers

Aerlingus

Aer Lingus offers internal and international flights to most major destinations in Europe and many other world destinations. Contact Aerlingus for further details.

E-mail info@aerlingus.com

URL www.aerlingus.com

Ryanair

One of the world's most successful lowfare airlines. Departures to and from Ireland to mainland Europe. Numerous flights available from Shannon and Dublin. Lots of new Air Routes from Shannon including Bracelona, Milan, Paris and Brussels. Flights to and from Britain, Germany, Italy, Spain, Sweden.

E-mail info@ryanair.com

URL www.ryanair.com

Galway Airport

Galway Airport acts as an access point for flights from Britain and Europe via Dublin. Facilities at the airport include Aer Lingus and Aer Arann airline desks. The Airport has it's own ground handling facilities, airline ticket sales and reservations, car hire, taxis, bar and snack service, car parking and duty free services.

Location Carnmore County Galway

Directions Located 8km from City Centre and approx. 12 km from Kinvara and the Burren. Phone 091 755569

Main Carrier

Aer Arann route between Dublin and Galway, approximate flight time of 45 minutes. Also flies into the following Regional Irish Airports from Dublin: Cork, Kerry, Sligo, Knock and Donegal. Reservation No: Within Ireland- 08 18 210 210 UK (freephone)- 0800 587 2324 Outside Ireland- +353 1 8141058

E-mail info@aerarann.com

URL www.aerarann.com

Connemara Regional Airport

Mainly acts as flight carrier to the Aran Islands .

Main Carrier

Aer Arann have daily flights to the three Aran Islands, with a flight time of less than 10 minutes.

Pleasure flights are also available. There is a free car park and a bus service from Galway and Salthill Tourist Office to meet each flight.

Address : Connemara Regional Airport, Inverin, County Galway, Phone 091 593034

E-mail aerarann@iol.ie

URL www.aerarannislands.ie

Helicopter Services

Helicopter Services Ireland

The contact number for Helicopter Services Limited is

Dublin 01 4966088

Address 32b Grosvenor Road

Dublin 6

Burren Transport: Sea

National and International Ferries

The majority of sea services to Ireland are through Dublin, Dun Laoghaire, Rosslare and Cork Ports.

The Shannon Region is within 3-4 hours drive from these ports. For full listing on sea access to Ireland visit the following sites:

Irish Ferries <http://www.irishferries.com>

Stena Line <http://www.stenaline.com>

AFerries <http://www.aferry.co.uk/ferry-to-ireland.htm>

Sea Cat <http://www.seacontainers.com>

Locally based Ferries

Killimer to Tarbert Ferries is a car ferry 'bridge' between Kerry and Clare. The main tourist routes of the West of Ireland's Shannon Region are linked via the Killimer-Tarbert car ferry. This 20 minute journey across the Shannon Estuary will save 137km (85 mls) from ferry terminal to ferry terminal providing a staging point for the many attractions of Clare including the Burren. Killimer is in County Clare and Tarbert in Co. Kerry.

No reservations are necessary. Ferries operate year-round. The Ferry service leaves Killimer every hour on the hour (0700hrs to 2100hrs) and Tarbert every hour on the half-hour (0730hrs to 2130hrs).

Aran Islands by Ferry

The Aran Islands lie just five miles off the coast of Co. Clare and are not only geographically close to the Burren but are also intrinsically linked through landscape, natural and social history. There are three islands in the group, Inismore, Inismean and Inisheer all serviced by ferry from Doolin in Co. Clare.

The ferry from Doolin in Co. Clare to the Aran Islands is circa 30 minutes duration. There are several ferry sailings daily, with additional sailings in peak season. See ferry listings in our links sections.

Shannon Ferries www.shannonferries.com

Doolin Ferries www.doolinferries.com

Burren Transport Roads

Roads

An extensive road network exists in the Burren region. The spectacular ascent of the aptly named 'Corkscrew hill' and the glorious views of the coastal road around Black head are among the highlights. All driving is on the **Left Hand Side** and a general speed limit of 80km (c. 50 miles)/hour applies on most of the region's roads.

Care should be taken when driving here as many roads are quite narrow and winding, and with large coaches, cyclists, walkers and the occasional farm animal also sharing these roads, its best to be cautious and keep your eyes fixed firmly on the road.

There are a number of main approach roads to the Burren. The N18 road running south from Galway to Limerick via Gort and Ennis flanks the Burren to the east, and most traffic to the region will divert off of this main road onto the smaller routes that service the Burren.

Most traffic from a line north of Galway-Dublin would divert from the N18 at Kilcolgan, heading west along the N67 through Kinvara, Bell Harbour and Ennistymon. This would be the main route dissecting the Burren, running from the NE to the SW.

Traffic from the south would come through Limerick and onto Ennis via the N18 before turning off onto the N85 for Ennistymon. A few miles west of Ennis there is a turn off (R476) north to Corofin and Kilfenora which lie along the Burren's southern edge.

Gort would be another possible gateway to the Burren, particularly for traffic from Loughrea, Portumna and other midland locations.

Approximate travel times to the edge of the Burren are as follows:

Dublin: 3.5 hours

Cork: 3 hours

Limerick: 1 hour

Galway: 30min

Ennis: 30min

For more detailed information on travelling by road in Ireland, please see www.aaireland.ie

For information on renting coaches or getting private bus tour around the Burren contact **Burren Coaches** New Quay 065 707-8009 or go to www.burrencoaches.com. They are accredited with the Burren Ecotourism Network.

Burren Transport: Rail

Rail Services

Iarnod Éireann, the Irish Rail Network, operates a regular train service from Dublin to Ennis, via Limerick, from where bus connections to the Burren are available. An alternative route from Dublin to the Burren would be on the Galway line, alighting at Athenry or Galway city, both towns a 30 minute drive from Kinvara (bus connections available from Galway). For details and timetables Visit www.irishrail.ie

Railtours Ireland

Day tour by rail from Dublin to the Shannon Region featuring the highlights of Clare and Limerick. Visit www.railtours.ie

‘Railtours Ireland, in association with Iarnród Éireann, offer visitors the chance to enjoy a great deal of Ireland's natural beauty. From the mountains and lakes of Killarney and Connemara, to the rugged coastline of Galway Bay, and the Burren of County Clare. You can reserve seats on InterCity rail services, most with full dining facilities great day out’

Burren Transport: Links

Transport information

www.map-ireland.com

www.buseireann.ie

www.irishrail.ie

www.aer-rianta.com

www.ryanair.com

www.aerlingus.com

www.aerarann.ie

Local Transport Providers

Farrell Bus & Coach Service New Quay 065 707-8009

Burren Attractions

The Burren region has a number of high-quality day visitor centers graced with fantastic natural backdrops that embrace the natural environment of the region. The visitor centres, which range in size and location, are all well maintained, efficiently run and competitively priced.

With a natural environment that draws tourists from all over the world, the area is saturated with both natural attractions and targeted facilities for every type of visitor. Ailwee cave for instance is one of Ireland's top ten visitor attractions (as are the Cliffs of Moher), combining a fascinating trip into Ireland's largest show cave. The community run Burren Centre in Kilfenora provides a superlative interactive experience, with state of the art technology and visitor facilities.

For those of you looking for a more nature based experience, perhaps you would rather take a peaceful walk through the Burren National Park or stroll along the Flaggy Shore or the green road that skirts Abbey hill.

Check the links provided to see which attractions would suit your needs best. Contact details are provided for you to find out more, or just drop in to any of the many attractions when you get here.

Burren Attractions: Visitor Centres

Visiting the Burren? With a natural environment that draws tourists from all over the world the Burren is not short of visitor attractions. From Kinvara to Corofin, Lisdoonvarana and back to Ballyvaughan, the area is saturated with both natural attractions and targeted facilities for every type of visitor.

Burren Attractions: Monuments

The Burren has been aptly described as one 'vast memorial to bygone cultures'. For instance, some 80 wedge tombs of Neolithic origin have been found in the region, from an estimated national total of just over 500. Hundreds of ancient cooking sites or fulachta fiadh and ancient cist graves are found throughout the hills.

Some 500 ring forts are found in the Burren, including the magnificent triumvallate (three walled) Cahercummaun and the chevaux-de-frise (an ancient defensive structure composed of upright stones) ringed Ballykingvarga. Tower houses and Early Christian church sites are also very common, many in an excellent state of preservation.

The magnificent portal tomb at Poul nabrone in the rocky heart of the Burren is one of the most easily recognised monuments in Ireland, but is only one very small piece of an extraordinary wealth of heritage to be found in the Burren.

Here you will find a listing of the main sites of archaeological and historical significance of the Burren.

For general archaeological information try the following links:

[the heritage council](#)

[irish archaeological sites](#)

Monuments: Cahermor

Caher Mor ('big stone fort') is a fine example of this most characteristic of Burren monuments. Over 500 stone forts are found in the Burren, many of them old farmsteads, but Caher Mor is one of the most interesting and easily accessible. Recent restoration work has been conducted at the site, including the provision of interpretative panels, a wooden walkway and viewing platform, as well as the restoration of the original entrance. Located right by the R480 road between Leamanagh Castle and Ballyvaughan, Caher Mor is a short distance south of An Rath, an equally fine example of an earthen fort (known in Irish as rath) which is quite a rarity in the Burren, due to the paucity of available earthen material in the rocky landscape. An Rath is in good repair and has a very well developed canopy of trees, mainly mature beech, with a deep trench all around which occasionally fills with water. There are no parking or interpretative facilities at the site, but an option would be to

park at the nearby Caher Mor and walk down to see An Rath. Great care is required however as this is quite a busy road, particularly during summertime.

Contact:

Heritage Services Director

Address:

R480 rd, between Leamanagh Castle and Ballyvaughan

Tel:

(01) 647 2300

Web:

<http://www.opw.ie>

Monuments: Caherconnell

The fort is in its original state. Its position, overlooking virtually all-surrounding areas suggests a defensive settlement. This may not have been defensive in a military sense, but rather for personal security from raiders or wild animals which were among the most common foes at the time.

Ringforts such as Caherconnell are thought to have been inhabited from 400-1200A.D. However a description of the site at Caherconnell, in the early 20th century by local historian the late Dr. McNamara of Corofin Co. Clare suggests that the entrance to the fort may have been re-built in the 15th or 16th century. This suggests that this fort may have been inhabited up to the late medieval period.

Contact:

info@caherconnell.com

Tel:

065 6089999

Email:

<http://www.burrenbeo.com/info%40caherconnell.com>

Web:

<http://caherconnell.com>

Category:

Burren Monuments

Monuments: Cahercommaun

One of the true wonders of the Burren, this dramatically situated 'great fort' is a little off the beaten track, but well worth the effort. Reminiscent of the famous Caher Dun Igrhus on Inis Mor, Cahercommaun is a trivallate (three walled) fort precariously perched on the edge of a cliff overlooking a wooded valley. The entire site was excavated by a team from Harvard University in 1934, and a wealth of information is available as to the origins (built c.800AD) and use of this structure. Over 4,000 kg of animal bones were recovered from the site, of which an overwhelming 97% were cattle, indicating the importance of this site as a centre of farming activity, which is thought to have supported the 40 or so occupants of the fort. Located on the 'back road' between Kilnaboy and Carran, roadside parking is available for a few cars. Interpretative panels are located by the parking area, which leads to the site itself via a 1km stretch of undulating surfaced pathway, a lovely walk which traverses a number of species-rich habitats, from woodland to grassland to limestone pavement. Recent works at the fort itself have included the construction of a pathway and viewing platform.

Contact:

Heritage Services Director

Address:

Between Kilnaboy and Carran

Tel:

(01) 647 2300

Web:

<http://www.opw.ie/index.htm>

Monuments: Corcomroe

Corcomroe Abbey is one of the best-known monastic sites in Ireland. Built at the end of the 12th century by the Cistercians, or 'white monks', and occupied up until the 17th century, it became known as the Abbey of the fertile rock, a title that acknowledged the agricultural wealth of the surrounding Burren hills. The structure is under state care and is in an excellent state of preservation, with several fascinating and elaborate wall carvings, stone heads and tombstones still visible. Located close to the village of Bell Harbour in the north Burren, and linked to it by a secondary road, good parking facilities and an interpretative panel are available at the site.

Impressive views of the surrounding hills are also visible from this highly recommended site. The graveyard surrounding the Abbey is still in use and so care must be taken not to disturb the site.

Contact:

Heritage Services Director

Address:

BellHarbour
Co Clare

Tel:

(01) 647 2300

Web:

<http://www.opw.ie/>

Monuments: Dungaire Castle

Dunguaire Castle Banquet An evening of superb music, song and storytelling awaits you at Dunguaire Banquet on the majestic shores of Galway Bay, one of Ireland's most picturesque locations.

Dunguaire Castle is a small 17th century castle on a rocky promontory, situated just outside the picturesque village of Kinvara. The castle is an inspirational place, commanding the shores of Galway Bay and is famed in story and song. Enjoy an enchanting evening at Dunguaire Castle. In a truly intimate setting. Let the castle's superb artists will inspire you with extracts chosen from the works of great literary writers such as Synge, Yeats, Shaw and O'Casey, selected to lighten the heart and performed by artists perfectly moulding themselves into their parts. Mirroring the tradition of medieval 'King Guaire', you are welcomed to savour a delicious four course dinner with select wines - food guaranteed to please the palate and entertainment to lift the soul. Banquet Programme
Dunguaire Castle Banquet takes place twice each evening from Mid April - Mid October at 5.30pm & 8.45pm. Reservations are necessary. From May to September from 9.30am - 5pm Dunguaire Castle is open daily for visitors to explore, reservations are not necessary to visit during the day.

Contact:

Reservations

Address:

Dunguaire Castle
Kinvara
Co. Galway

Tel:

+353 (0)61 711200

Fax:

+353 (0)61 472523

Email:

info@shannonheritage.com

Web:

<http://www.shannonheritage.com>

Monuments: Gleninagh Castle

The main feature of this interesting coastal site is the imposing 16th century Towerhouse, once home to the O'Loughlin clan. The Tower is in excellent condition, and spectacularly located a short distance from the southern shores of Galway bay, in the shadow of the Burren hills. Nearby are found other interesting heritage features including a holy well, fulacht fiadha, earthen fort and the ruins of a medieval church. The site lies just north of the R477 road between Ballyvaughan and Fanore, and is accessed via a narrow roadway running from the main road. Parking and access are thus very restricted, and no other visitor facilities are available at the site.

Contact:

Heritage Services Director

Address:

N of the R477 road between Ballyvaughan and Fanore

Tel:

(01) 647 2300

Web:

<http://www.opw.ie/>

Monuments: Kilfenora Cathedral

Located right in the heart of Kilfenora, just behind the Burren Centre, Kilfenora Cathedral was built in 1189 on the site of St. Fachtna's monastery which was burned in 1055. Part of the building is still roofed and used for worship, while the remaining sections contain some extraordinary carved stone window frames and 13-14th century effigies. Three wonderful crosses are found nearby and to the west: a 'Doorty' cross and two richly decorated High Crosses. There is plenty of parking and other facilities in the vicinity, and the site has been recently restored. Well worth a visit.

Contact:

Heritage Services Director

Address:

Kilfenora
Co.Clare

Tel:

(01) 647 2300

Web:

<http://www.opw.ie/>

Category:

Burren Monuments

Monuments: Kilmacduagh

A spectacular complex featuring an impressively intact Round Tower and several churches, Kilmacduagh is one of the most interesting and best-kept secrets in the Burren. Located just off the main road between Corofin and Gort (which lies just a few miles off) in the eastern Burren, the site has very good parking and interpretative facilities. There is a lot to see at the site, including elaborate stone carvings, impressive masonry (particularly in the soaringly symmetric round tower) and fine views of the eastern Burren lowlands. Ideal stop off as part of an alternative east Burren itinerary which would include Coole Park and Lough Bunny.

Contact:

Heritage Services Director

Address:

Just off the main road between Corofin and Gort

Tel:

(01) 647 2300

Web:

<http://www.opw.ie>

Monuments: Kilnaboy Church

This roadside church is located just west of Corofin on the R476 road to Kilfenora which loosely defines the southern boundary of the Burren. The 16th century structure has a number of notable features including a double-barred cross (referred to by some as a 'cross of lorraine') built into the gable end, a sheelagh-na-gig (pagan fertility symbol) over the southern door, and the ruins of an old round tower within the graveyard (which is still in use). A conveniently located lay-by is suitable for parking, though no other visitor facilities exist.

Contact:

Heritage Services Director

Address:

west of Corofin on the R476 road to Kilfenora

Tel:

(01) 647 2300

Web:

<http://www.opw.ie>

Monuments: Lemanah Castle

Once home to the famous Maire Rua and, according to legend, location of her famed husband-killing exploits, this distinctive structure is composed of a Tower House built in 1490, with an extensive 17th century dwelling house attached. In the immediate vicinity of the castle are found an old bawn or enclosure, old fishponds and a deer park. The building is inaccessible at the moment as ongoing restoration works are being carried out. The grounds of the castle lie on private property, but excellent views of the castle may be had from the roadside. It is situated at the intersection of the R476 Corofin-Kilnaboy road and the R480 road to Ballyvaughan, at the southern boundary of the Burren. There is limited parking space available on the roadside but care must be taken at this busy junction. No other facilities are available on site.

Contact:

Heritage Services Director

Address:

At the intersection of the R476 Corofin-Kilnaboy road and the R480 road to Ballyvaughan
Corofin

Tel:

(01) 647 2300

Web:

<http://www.opw.ie>

Burren Nature Attractions

The importance of the Burren's natural heritage - from karst features to rare orchids to beautiful butterflies - is recognised internationally.

Below you will find a listing of some of the best locations in the Burren to appreciate some of the Burren's rich natural heritage.

The people of the Burren welcome visitors to Ireland's most extraordinary landscape. However much of the limestone pavement is in private ownership and is being actively farmed, much of it in the traditional way that helps to maintain the natural eco-system of this amazing limestone landscape.

So be careful if you are crossing private land and try to seek permission where possible before you enter obvious farmland.

Please do not disturb wildlife, pick flowers, damage pavements when visiting here - tread lightly on this fragile landscape.

Bishops Quarter

A very popular spot for summer sun worshippers or year round beachcombers, this lovely place lies on the southern shores of Galway bay a short distance east of Ballyvaughan Village. Good parking facilities are available here, while in summer lifeguards also patrol the shallow waters of the bay. An impressive, but badly damaged dune system, lies behind the pleasant beach. It's a good place to look for plants such as the autumn gentian and pyramidal orchid. Fine views of the Burren may be had all around, and this is also a nice spot to watch the sun go down.

Address:

Bishops Quarter
Near Ballyvaughan
Co.Clare

Tel:

LoCall 1890 202021

Fax:

+353-1-8883272

Email:

natureconservation@environ.ie

Web:

<http://www.clare.ie>

Burren National Park Located in the south-east Burren, and extending up to 1,150 hectares, the Burren National Park contains a spectacular diversity of high quality Burren habitats. These include terraced limestone hills (some with unique folding patterns), turloughs, woodlands and spectacular limestone pavements. The Park features a full range of Burren flora, including many rare species such as the shrubby cinquefoil and turlough violet. An array of archaeological features, from field walls to wedge tombs, are also visible, so be sure to allow at least one half-day to explore this utterly fascinating environment. No admission fee, but please take great care not to damage this precious place when visiting.

Address:

Burren National Park
Burren
County Clare

Tel:

LoCall 1890 202021

Fax:

+353-1-8883272

Email:

natureconservation@environ.ie

Web:

<http://www.npws.ie>

Coole Park & Garryland

Coole-Garryland Park is the former home of Lady Augusta Gregory and a regular destination for literary greats such as Yeats, Synge and Russell, this Nature Reserve is a wonderful site for a relaxing afternoon stroll or picnic. The main habitats present are turloughs (home to the famous swans of Coole) and woodlands, the latter accessible by an extensive labyrinth of pathways. The trees present are a mixture of conifers and broadleaves, with some spectacular specimen trees among them. A visitor centre, tea room and toilets, as well as ample car parking, are available free of charge. Nearby is a walled garden containing the famous 'autograph tree' - a massive copper beech with the carved initials of the many illustrious visitors to the area.

Address:

Coole Park
Coole
Co. Galway

Tel:

LoCall 1890 202021

Fax:

+353-1-8883272

Email:

natureconservation@environ.ie

Web:

<http://www.npws.ie>

Corkscrew Hill

This aptly named feature refers to a section of undulating roadway which snakes up a hillside between Ballyvaughan and Lisdoonvarna. Wonderful views of Ballyvaughan valley and Galway bay

open up as one ascends the hillside. A viewing area is located on the north side of the road close to the summit, the perfect spot to sit back and take in the panoramic views. It represents a welcome break for the many dazed motorists following their dizzying ascent upward. No wonder it's such a popular spot for car rallies!

Address:

CorkScrew Hill
Burren
Co.Clare

Tel:

LoCall 1890 202021

Fax:

+353-1-8883272

Email:

natureconservation@environ.ie

Web:

<http://www.npws.ie/>

Dromore Woods

Dromore Woods is a wonderful nature reserve with 1,000 acres of woodland. The remains of the 15th century Ruan Church is right next to Dromore Lake. Tours and booklets are available and admission is free. Dromore Woods is about 13km north of Ennis. The nearby village of Corofin, surrounded by lakes, is a good area for trout fishing.

Address:

Dromore Woods
Ruan
Co.Clare

Tel:

LoCall 1890 202021

Fax:

+353-1-8883272

Email:

natureconservation@environ.ie

Web:

<http://www.npws.ie>

Fanore Beach

Beautiful golden sands, undulating dunes, panoramic Burren views and the crashing waters of the Atlantic are among the features that make Fanore beach so unique and popular. A favourite for surfers and sun worshippers alike, it's also a great place to explore the natural history of the Burren, particularly marine heritage, while rare plants like the parasitic 'dodder' are also found here. During the summer season lifeguards are on duty here and toilet facilities are also available. There are a good parking facilities at the site. Currently protection work is taking place on the dunes, so care should be taken to ensure no further damage occurs to these valuable ecosystems.

Address:

Fanore
Co.Clare

Tel:

LoCall 1890 202021

Fax:

+353-1-8883272

Email:

natureconservation@environ.ie

Web:

<http://www.npws.ie>

Lough Bunny

One of the extensive network of internationally important oligotrophic (low nutrient levels) lakes of the eastern Burren, Lough Bunny has many features to recommend it. It is easily accessible, just off the main Tubber to New Quay road, less than a half hour from Ennis. This shallow lake, with its floor of limestone mud on pavement, is also well known for some of the rare plants that occur on its shores, including dropwort and shrubby cinquefoil, as well as an array of other Burren specialities. Basic parking facilities are available on the roadside, while an interpretative panel is also found, thanks to the laudable efforts of the local community.

Address:

Boston
Burren
Co Clare

Tel:

LoCall 1890 202021

Email:

natureconservation@environ.ie

Web:

<http://www.npws.ie/>

Slieve Carron

Hotel Details A few miles south of Kinvara, Slieve Carran (or Keelhilla) is a favourite place for many local families when visiting the Burren. Extending over several hundred hectares, it contains an impressive range of Burren flora and fauna, as well as cultural features such as an old oratory and a fulacht fiadh. Parking space for a few cars is available on the roadside but no other facilities are available at present. Also known as Eagles Rock, a distinctive feature of the site is the large cliff face, where it is said eagles once nested. Some of the oldest and best woodland in the Burren is found at the base of these cliffs, while the other main habitats present throughout the site are limestone pavement and orchid-rich grassland.

Contact:

National Parks and Wildlife service Park Ranger

Address:

A few miles south of
Kinvara
Co.Clare

Tel:

LoCall 1890 202021

Fax:

+353-1-8883272

Email:

natureconservation@environ.ie

Web:

<http://www.npws.ie>

Boghill Centre

The Boghill Centre is a residential venue between Lisdoonvarna and Kilfenora set in 50 acres of land, which offers both accommodation and a venue for a variety of events from meetings, training activities, workshops or conferences. The Centre can accommodate 40 guests on a residential or day visitor basis and offers delicious food from its vegetarian kitchen. Our Octagon hall is stunning, can accommodate up to 100 people and provides a peaceful alternative setting for a whole range of events.

Location: from Ennis, take the N85 out of Ennis signed Lisdoonvarna, Ennistymon and Corofin and follow the signs to Corofin on the R476 - to your right just outside Ennis. Keep on this road all the way through Corofin to Kilfenora. When you reach Kilfenora take the first turn to the right to Lisdoonvarna (still on R476). After approx 3 miles you will see a sign for the Boghill Centre on your left. Take this turn and then the next right turn – after you see two horse heads on the left and just after the house on the right. The Centre is about half a mile on your left. If you are coming from Galway: Head for Kinvara, Ballyvaughan and Lisdoonvarna. From Lisdoonvarna take the road to Kilfenora. After about 1/2 mile Boghill is signposted on the right.

Facilities: Single and 4 Twin en-suite rooms plus 2 family rooms and 2 dormitories to accommodate 28 people. A large meeting room/ hall suitable for a range of activities/events. Full vegetarian catering service available. Set in 50 acres of grounds with stone circle.

Quality: Budget

Contact:

Sonja O'Brien (Manager)

Address:

The Boghill Centre
Kilfenora
Co.Clare

Tel:

+353(0)657074644

Email:

boghill@eircom.net

Web:

<http://www.boghill.com>

Flaggy Shore

Another local favourite, the singular beauty of the Flaggy shore attracts a steady stream of walkers throughout the year. A paved secondary road runs along most of the shore, ideal for walkers of all age and ability. The shore itself is composed of limestone flags and rounded boulders, extending out into the waters of Galway bay. Look out for Burren specialities like the spring gentian and pyramidal orchid in grassy outcrops along the shoreline. The rounded outline of Burrin hill rises from the inland side of the roadway, which loops around the beautiful Lough Muree further west. For parking (and more) try Linnanes Lobster bar, or else the beach at the start of the shore (perfect for bathing). The Martello tower at Finnevarra point marks a good end point, returning the same way or else by the slightly longer inland loops (c. 3 miles).

Contact:

National Parks & Wildlife Service Park Ranger

Address:

Flaggy Shore
New Quay
Co.Clare

Tel:

LoCall 1890 202021

Email:

natureconservation@environ.ie

Web:

<http://www.npws.ie>

Burren Visitor Activities

The Burren region is a wonderful destination for those looking for an activity-filled holiday or even an active weekend breakaway. This spectacular natural environment is perfect for a range of activities - good hikes, bicycle rides, rock climbing, potholing, horse riding and a range of water activities like scuba diving, sea kayaking and lots of nature based activities many provided by Burrenbeo.

<http://www.burrenbeo.com/>

With such a beautiful coastline running alongside the western Burren it is no surprise that canoeing, surfing, sailing, swimming, diving and cruising are all popular pursuits in the area. Fishing is excellent along the coast and inland waters.

Other nature based activities draw people from all over the world wishing to experience and contemplate the sheer beauty and tranquility of the Burren while enjoying the wonderful activities on offer.

In this section we hope to provide you with a full listing of Activities to engage you on your visit here.

Hike & Bike

Walking holidays are one of the best ways to experience the Burren. Walkers come back to the Burren over and over again attracted by a network of quiet country roads and lanes with limestone hills and ancient hazel woods that offer a glimpse of past worlds.

For serious walkers, there are many well-organised walking tours with routes & walking trails traversing the Burren's most unique landscape (links below). Whether heading off alone or with a group of friends on one of the network of green roads in the region, or taking part in a guided tour with one of the many walking specialists (listings below) in the area, you are sure to enjoy your time. Sturdy boots, a good map, some basic supplies and plenty of enthusiasm are all you really need.

A number of wonderful waymarked looped walks have been launched in 2009 around the Burren. Details of these trails can be found on www.shannonregiontrails.ie,

Water-based Activities

Most people don't immediately associate water with the Burren region, but the reality is that the Burren has a magnificent coastline which offers ample opportunity for those interested in pursuing waterbased activities like scuba diving, surfing, canoeing and kayaking

North Clare is also a popular international destination for fishermen. From the famous brown trout game fishing lakes in the southern Burren – including Lough Inchiquin, Dromore Lake and Lickeen Lake - to the extensive rocky Atlantic coastline which is perfect for shore angling, there is a wide choice available. The area around the southern Burren town of Corofin is one of the best in the country for coarse angling, particularly for pike and perch.

Nature-based Activities

Botanising

Many people visit the Burren to experience first hand, some of the Burren's extraordinary ecological wealth. The Burren is a species-rich haven with some particularly fascinating flora found in the limestone hills and meadows including a curious mixture of Arctic-Alpine and Mediterranean flowers.

Many amateur botanists come to pay homage to the curious mix of plants found in the Burren and seek out the twenty two of Ireland's twenty-seven native orchid species that are to be found. The Burren offers budding artists a colourful display to inspire with an eco-system that is a joy to watch unfold. The sight of curious feral goats, red foxes and hares and even occasionally the more elusive members of the Burren's faunal community, the pine marten, attract nature lovers year after year to this natural wonderland

Birdwatching

Though not as celebrated as much as the renowned flora, there is a significant wealth and diversity of fauna to be found throughout the Burren region. From the avifaunal perspective for instance, over 100 different bird species are thought to breed in the Burren.

Among the most common species would be the skylark and stonechat, though peregrine falcons, cuckoos and grey herons also occur in relative abundance. Many winter visiting birds swell the local avifaunal populations, with the seasonally enlarged turloughs a favourite destination for many of them.

The essential guide for the Burren twitcher has to be 'An Atlas of the Breeding Birds of the Burren and the Aran Islands' by Liam Lysaght, published by Birdwatch Ireland. This important publication gives a detailed background to the landscape and land use history of the Burren and Aran Islands, as well as describing the main habitats present. It also gives detailed species accounts and distribution maps for all breeding birds, based on extensive fieldwork.

Art and Photography

Many visual artists have been inspired by the sweeping grey landscapes of the Burren, and by the rich flora and ancient monuments found scattered throughout. But you don't have to be an internationally renowned artist to delve into the Burren for inspiration; there is something here for everybody. Even those who enjoy just looking at art are catered for, with a number of Galleries throughout the Burren and in nearby villages and towns.

Possibly one of the most photogenic landscapes in the world, the Burren is the perfect place for all levels of photographers to develop their craft, particularly those with an interest in nature photography. Photography represents one of the best and most appropriate mediums through which this special place can be explored, allowing for an intimate perspective of this rich heritage without damaging it. This is especially the case with new developments in digital photography.

The Burren is a very generous landscape for the photographer and artist, with a massive range of material to photograph, draw and paint from sweeping landscapes to crumbling monuments, from intricate flowers to colourful butterflies. It is also a landscape that changes with the seasons, as new flowers emerge to colour the landscape and the water levels of the turloughs fluctuate in line with rainfall levels. The Burren is particularly sensitive to changing light conditions, assuming a lilac hue in summer's evenings, in contrast to the glaringly bright noon conditions.

Burren Visitor: Conservation

Though the Burren region represents less than 1% of the National land cover, the richness and diversity of the natural and cultural heritage present belies its compact size. Over 70% of Ireland's native species of flora are found here, including 23 of the 27 native orchid species, as well as a very rich and interesting fauna.

In terms of its geology, the Burren is generally considered to be one of the finest examples of a glaciated karst landscape in Europe, replete with a range of uniquely distinctive features. The cultural wealth of these ostensibly barren hills and pavements is equally stunning, aptly described as 'one vast memorial to bygone cultures' by cartographer Tim Robinson.

But what measures are in place to ensure that this rich and diverse heritage is protected for future generations to enjoy? Who implements these measures and what resources have been made

available for the conservation of the Burren?

Much of the Burren would have been recognised as being of major conservation interest for many years, with designations such as ASI (Area of Scientific Interest) and more recently NHA (Natural Heritage Area) and SAC (Special Area of Conservation) having been bestowed upon it. In recent years these SACs have been surveyed by staff from the National Parks and Wildlife Service (NPWS), who are responsible for the protection of these sites, and a Conservation Management Plan has been formulated for each SAC.

There are five such SACs in the Burren, covering most of the Burren Upland region as well as significant stretches of the Burren lowlands and the northern shores of the region. These SACs were selected from the best sites in the existing NHA network.

Under the SAC designation, certain activities have been restricted, and lists of 'Notifiable Actions' have been prepared for each of the habitats present. The primary management objective for each of the Burren SACs is 'to maintain and where possible enhance the ecological value of the priority habitats present', habitats such as orchid-rich grasslands, limestone pavements, Cladium fens, turloughs and petrifying springs.

These SACs are looked after by NPWS staff, including two rangers on the ground – one in the east Burren and one in the west – and management based at offices in Corofin, just to the south of the region. Landowners with SAC land receive top-up payments as part of their Rural Environmental Protection Scheme (REPS) in compensation for limits placed on their farming operations and for income foregone. Those farmers not in REPS do not, however, currently receive any payments for this SAC designation.

The built heritage of the Burren has historically received a more significant level of protection. The Sites and Monuments Record (SMR) provides a numbered list of archaeological sites and monuments together with a set of control maps indicating their location and extent.

This record must be consulted in the course of any developments (e.g. monuments must be marked on all REPS plan maps to ensure the landowner does not damage them inadvertently). The Office of Public Works – Monuments Section is responsible for ensuring the protection of listed sites, including those more significant sites which have been classed as National Monuments.

Protected Areas

The main environmental designation that currently applies in the Burren is that of the Special Area of Conservation (SAC). Three main terrestrial SACs encompass some 30,462ha of the Burren. Running from the west to east, these SACs are:

Black Head-Poulsallagh Complex Special Area of Conservation (IE0000020), which extends along the north-western coast of the Burren, covering some 5,572 ha.

Moneen Mountain Special Area of Conservation (IE0000054), encompassing much of the central Burren 'Uplands', covering some 6,070ha.

East Burren Complex Special Area of Conservation (IE0001926), a massive 18,820ha site, which contains much of the Burren lowland region, and features extensive limestone pavements and oligotrophic limestone wetlands.

These SACs form part of the European-wide Natura 2000 Network. Ireland lies within the Atlantic region of this network (one of 2,419 such sites), and the ecological wealth, site distribution and management challenges for this region is described in the downloadable pdf file at the bottom of this page.

Eco-tourism

Of the several hundred thousand people who visit the Burren every year, a high proportion are attracted primarily by the region's pristine natural environment and rich heritage. Many of these visitors engage in outdoor activities such as hill walking, caving, rock climbing, cycling etc.

The popular and recently extended 'Burren Way' is a favourite route of many visitors, though many hillwalkers use lands outside of this route, often attracted by the vast archaeological heritage found in the area. The network of green roads and famine roads found in the Burren are also a great resource for the outdoor recreationalist. Other significant activities in the Burren include horseriding, fishing, shooting and a range of watersports.

The small villages of the Burren - particularly Ballyvaughan, Kilfenora, Carran and Doolin are heavily dependent on tourism, as are many rural households, particularly those who are involved in the provision of accommodation. Tourism is in turn reliant on these rural communities, as it is through their farming traditions that the quality of the natural and cultural landscape of the Burren - from orchid-rich grasslands to ancient field walls – is maintained.

Today, many of the farm families of the Burren are leaving the land, and this is a cause of some concern for the management of the region's heritage. But can tourism, in particular nature-based tourism, help to maintain these communities and their heritage?

One of the objectives of Burrenbeo is to help promote the Burren as a haven for Ecotourism - 'ecologically and socially responsible nature-based tourism that fosters environmental appreciation and understanding' while contributing to the local economy.

The provision of physical and intellectual access to the landscape is the key to the development of a sustainable Eco-tourism industry in the Burren, as the well-informed and sympathetic visitor will be in a far stronger position to pursue activities that will support the communities of the Burren as well as respecting this fragile landscape.

After many years of promoting the Burren as an Eco-tourism destination, Burrenbeo is delighted that the Burren finally has an umbrella organisation in place to support the promotion of Eco-Tourism. **Burren Eco-Tourism** is a network of businesses who promote "Responsible travel to natural areas that conserve the environment and improve the well-being of local people" while providing really great holiday experiences for visitors.

This network of businesses show their commitment to ecotourism principles by:

Using environmentally sustainable practices

Bringing people into nature

Promoting our natural and cultural heritage

Contributing to conservation

Maximising benefits for local communities

Ensuring visitor satisfaction

Marketing responsibly

Increasing cultural respect and awareness

What can you do?

You, as a visitor, have an important role in contributing to the future of the special landscape of the Burren, and the communities that live there. At a very basic level, by reading and adhering to the principles outlined in the Burren code, you will be in a position to make informed and responsible decisions while visiting this beautiful place.

If you would like further information on responsible behaviour in the Burren, please ask about our information brochures and other downloadable material. This way, even before you visit, you will be in a position to appreciate this unique place and ensure that your visit here does not damage the fragile heritage of the region.

Beyond this however, we would hope that your visit here would contribute positively to the local economy, helping local communities to survive and continue their important role in maintaining the heritage of the Burren.

By exercising your discretion in using local providers and purchasing local produce, your visit can have a significant positive impact. Burrenbeo hopes to help in this regard by providing information about local service providers and products of local origin.

By visiting off-season and extending your stay, your experience of the Burren will be enriched, as will the beneficial impact of your visit. One of the biggest problems with the region's tourism industry is its seasonality, with most visitors arriving during the summer months. This means there is very little full time employment available for local people who are more likely to opt for year-round work in nearby towns and cities.

Likewise, passing through the Burren on a coach tour for an afternoon does no justice to this special place and leaves little income to the communities of the region who host your visit. Why not get to know the place on a more intimate level – take a walk, rent a bike, go for a horse ride – you won't be disappointed as the more you put in to the Burren, the more you will get out of it.

If you would like to support the Burren as a visitor:

be as informed and respectful as possible;

try to source local products and local providers

stay a few days longer and explore on foot, bicycle or horseback

Finally we urge you to please support the non-profit work of Burrenbeo by becoming a member of the Burren Trust.

Thanks