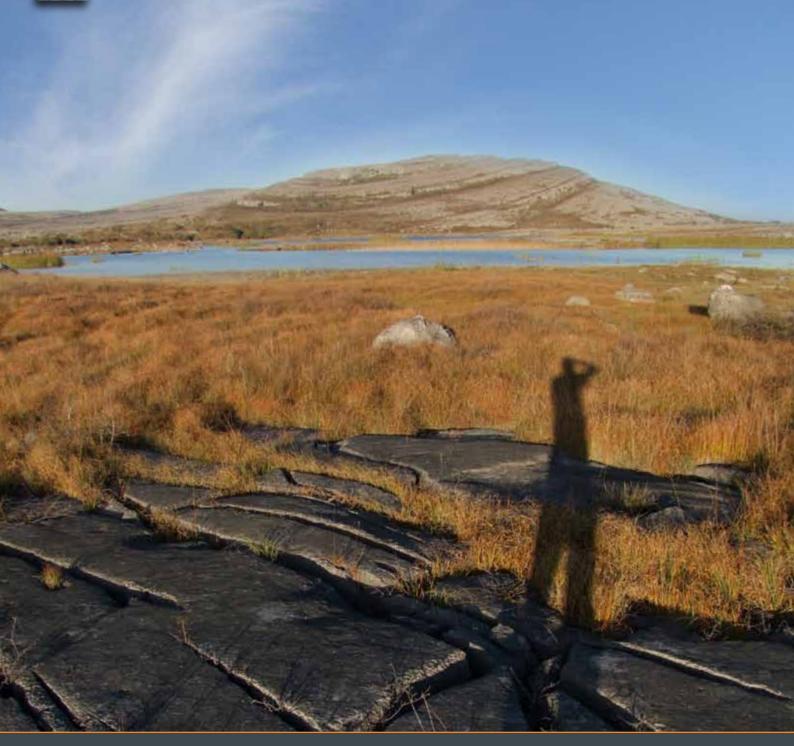
BURRENISIEHT

The Burrenbeo Trust 2011

Issue 3

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The Power of the Burren - Sarah Poyntz

People in Their Place - Michael Viney

Feral Goats in the Burren - Bryony Williams & Ruth Enright

Creating a Buzz in the Burren - Eugenie Regan

book reviews

poetry

Treasure Chest - the forgotten uses of plants - Vivienne Campbell
12th Centuary Pilgrims - The Burren's first tourists? - Peter Harbison
The Harvard-Irish Mission in Clare 1930-1934 - Anne Byrne
Busy Burren Bees - Una Fitzpatrick

Burren map and much more.....

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THE POWER OF THE BURREN

discoverers. If we are thoughtful we look for truth or beauty, preferably both and

almost always we wish for happiness. Sometimes we find them seemingly by chance. It was in the early 1980s that I found truth, beauty and joy. I found them in this place called the Burren. I was brought up in the lush beauty of the Sister Rivers, the Barrow, the Nore and the Suir so when I saw the Burren - it was the area around Ballyvaughan - I could scarcely take in the reality. Here I was faced with a landscape stripped to bare reality, the bare reality of the earth on which we live and have our being, that which shapes every region in the world even the luxuriously lush, the prolifically fertile - stone. I observed the Burren's limestone pavements, walls of stone, hills of rock and I found truth and beauty, the truth of the region's hard reality, the By Sarah Poyntz beauty of the light gliding over the bare hills and ancient ruins Former Guardian Country Diarist and Burren resident

We are all searchers and often turning them to deep blue, violet, silver and gold, a light everchanging just as the flowers change from season to season and wildlife and indeed our farmers have to adapt to wind, rain, storm, floods and ice. We may feel awe in contemplating this truth, this beauty but it is not the awe that diminishes us because it is within our human scale. Artists and writers come to the Burren and find in it the very core of their inspiration. Scientists arrive and find the basis for their research. We live in it and somehow it changes us into poets and researchers although we may never write a line. And all the while our farmers work the land, maintaining the wild flowers of the valleys and fields, a perfect contrast to the bare and encircling hills. The Burren has power, the power to transform us.

Letter to Friends of the Burren

One theme that runs through this issue is the importance of community – not just one community, but the many communities which together comprise the Burren. Sarah Poyntz writes of the power of the Burren to transform those human lives. Pat McCormack links man to the symphony of nature and landscape.

Through mapping the evidence left by previous communities, Christine Grant and co are able to gain an insight into how they farmed and travelled in prehistoric times. This is supported by Michelle Comber's findings in Caherconnell. Michael Lynch provides information on what it would be like to live in a ringfort based on Brehon law. As long ago as the 12th century, Peter Joanne McInerney, Paula Flynn and Laura Read present the Harbison depicts pilgrims as the first tourists to the Burren.

Anne Byrne brings the recent past to life through letters from the Harvard Mission to Clare, whilst Tomas Mac Conmara and Eugene Lambe carry this tradition into the present day by recording the memories of the living. Then there is the current move to reconnect emigrant communities, as Rory O'Shaughnessey reaches out to the Irish diaspora.

Michael Viney salutes the bridging of the gap between specialists and practitioners brought about by BurrenLIFE and its successor Burren Farming for Conservation; Brendan Dunford describes this new chapter which is unfolding in farming.

Plants and animals also live in communities. Sharon Parr discusses how to maintain a balance between hazel woods and the orchid rich grasslands. Vivienne Campbell is researching forgotten uses of Burren plants. Eugenie Regan states that flowers get way too much attention in the Burren - then goes on to tell us why. Reinforcing this message, Una Fitzpatrick depicts bees as our least appreciated workforce. The lapwing announces John Murphy's passion for birds, whilst Sinead Biggane goes batting. How far do goats walk? Bryony Williams & Ruth Enright have the answer.

Burren as both playground and classroom. On a visit to the Doolin stalactite, Brian Mooney heard a little girl exclaim in astonishment, prompting him to set down his thoughts.

And the Burrenbeo Trust has made it to the Lonely Planet guide as 'dedicated to promoting the natural beauty of the Burren and increasing awareness'. One always begins too late, but it is never too late to begin. If you have not joined us yet then please do - we appreciate your support.

Brigid Barry and Stephen Ward

Editors

This issue of Burren Insight is dedicated to the memory of Brigid Hynes, Croughville, Carron.

People in Their Place

By Michael Viney

My first immersion in the wilder landscape of the Burren came twenty years ago when David Cabot and I were making a documentary film about its gifted cartographer, Tim Robinson. "Folding Landscapes", shown on RTE and BBC, was a celebration of solitary genius — not that Tim, tramping doggedly over the grikes in mist or pouring rain and cycling from one chilly, out-of-season, B&B to another, to compose his "graphic expression of a sense of place" can always have found himself in celebratory mood.

As we re-enacted his meticulous mapping of contours and lost monuments in the mossy, Lilliputian jungle of the hazel scrub, or on the bleak and clattering heights of the hills, or tracked the squeak of his old bicycle along deserted boreens, it was, indeed, the strangeness and intensity of his lonely enterprise we were wanting to convey.

Tourists may now arrive by the busload, but so much of the Burren has been defined by individual, questing strangers – botanists, ecologists, geologists archaeologists, poets, painters, writers – all pursuing their own special versions, visions, explorations, understandings of the place. Many have been natives of the neighbouring island, some reluctant to acknowledge that "this wondrous Eden", or however it struck them, was actually not part of Britain.

Tim Robinson, while very English, learned Irish in his years on Inis Mór, and his marvellous books and maps of Aran and Connemara have rediscovered, even for Ireland, the crowded meanings of these landscapes. His wanderings on bike and foot have not been purposely solitary, but enriched by the potential of every wayside chat. In a 1987 essay on his Burren explorations, he told of meeting a farmer on the slopes below Mám Chatha who identified a set of grassy mounds as the grown-over remnants of fulachta fiadh, the cooking-places of ancient huntsmen – this at a time when archaeologists consulted by Robinson were (wrongly, as it turned out) sceptical of their presence in the Burren.



It was in that essay*, too, that he wrote so despairingly of the prospects of conserving the Burren, citing helicopter spraying of hillsides with fertiliser, with grants from the EEC. "The financial, legal and moral persuasions necessary to preserve the Burren from such 'improvement'," he wrote, "have not yet been discovered. [But] if we cannot save such a place fom spoliation, there is nowhere safe on the surface of the earth."

So many years on, the right "persuasions" seem, indeed, to have been discovered, and the Burren's long polarisation between the special roles of natural science, aesthetics, and art, and the practical livelihoods of the region's people, is being brought to an end. In the BurrenLIFE project and subsequent programme of Burren Farming for Conservation lies a shared ownership of how such a rare landscape should be valued – the people of the place have been brought home.

Reading a major report on the project in British Wildlife, the leading UK ecological journal,** I was struck first of all by this welcome recognition of the project's wider importance, and then

by its practical detail. Here is high ecological purpose fitted to the problems of day-to-day farming. The solutions - jointly and often ingeniously arrived at - restore traditional outwintering of cattle across the limestone scarps without the concentrations of animals for feed and water that have come to threaten special and fragile habitats. Many measures are essentially so simple as cutting new paths through encroaching scrub, restoring the guiding pattern of old stone walls, and providing nose-operated pumps for water.

Co-operation on an initial score of farms has made it possible to monitor the benefits of changes in grazing and feeding regimes in return for closely-costed actions. While the BurrenLIFE project was funded by the European Commission, a new Government investment has spread its measures to a further 100 or so farmers to the end of 2012.

But the Burren is much more than a collection of priority habitats, or prime photo-opportunities for tourists. Its broader reach of settlements and culture demands a strategic approach to managing the region as a whole – a vision urged for decades in one report

after another. Responsibility for the region's development is now fragmented into many different agencies with different objectives, lacking any structure for local participation.

Such concerns are more than regional. In December 2010, the Heritage Council called yet again for a Landscape Act. Its new manifesto, Proposals for Ireland's Landscapes, *** argues for pulling together all the facets of landscape management – economic, social, environmental – in a joined-up oversight of landuse. A decade after Ireland signed up, nominally, to the European Landscape Convention, the Heritage Council echoes its emphasis on community involvement and "ownership" of place – getting agreement on what actions people want and then enabling them to carry them through under the framework and charters of the national Act. The Council's document cites the BurrenLIFE project and the successor Burren Farming for Conservation programme as offering key principles for "a new approach to managing our countryside", recognising the central role of the farmer but also bringing farmers together with ecologists, agronomists and economists.

Even as this major advisory document was published, the Heritage Council's budget from the Department of the Environment was slashed by almost 50%, undermining its hopes for a new Landscape Observatory to support and help implement the workings of a Landscape Act. But while national funding for almost anything new is vanishing by the day, there is nothing to stop a new government from improving structures and opening them up to local participation. And with the launching of the Burrenbeo Trust in 2008, a new voice has been added to those seeking a better deal for the Burren.

Among BurrenLIFE's finest achievements has been the sense of meaningful identity it has helped to foster in the region's communities – a sense reinforced by a whole network of new activities, contacts and events. This social energy needs to cohere, endure and grow, asserting its voice and contribution even in these nationally chaotic times. The rocks remain - and so must the new spirit of their people.

*In The Book of the Irish Countryside, Blackstaff, 1987.

** British Wildlife, October 2009.

*** Proposals for Ireland's Landscapes 2010, Heritage Council.

Michael Viney is perhaps best known for his weekly nature column *Another Life*, in The Irish Times. Among his books are *A Year's Turning* and *Ireland:*A Smithsonian Natural History, and, most recently, *Ireland's Ocean: A Natural History*, co-authored with his wife Ethna. He is a patron of the Burrenbeo Trust.

BURRENINSIGHT 2011

A New Chapter in Burren Farming

By Brendan Dunford

the importance of winter grazing to the region's rich biodiversity encroaching scrub, weeds, etc), with each qualifying field given a and landscape, has really come to the fore in recent years. Now, following the pioneering work of the BurrenLIFE Project, a management means higher scores and more money – guidelines whole new chapter in Burren farming is unfolding - really terrific on how management can be improved are included in the farm news for those who care about the heritage of the Burren and its plan, but ultimately the farmer decides, giving added flexibility and communities.

agri-environmental initiative which has been designed to conserve on the farm. In its first year BFCP has invested €139,811 in scrub and support the heritage, environment and communities of the removal (c.55ha of scrub), €65,412 in stone wall repair (17,831m Burren. Building on the findings of the BurrenLIFE Project (2005- of internal walls), €48,398 in water provision (131 troughs, 15 2010), it is jointly funded by the Departments of Agriculture and storage tanks, 6 water harvesters etc), €24,273 in gate installation Environment but is managed locally by a 3-person team based in (158 gates with posts), €10,250 in feed equipment (41 feed bins, Carron, in the central Burren.

A total of 117 Burren farmers (selected on the basis of defined cost of works depending on the task in question, so value for environmental criteria) are taking part in Year 1 of the BFCP. A money is guaranteed. plan for each farm has been prepared by a trained advisor - though significantly, each farmer has also been able to nominate his/her BFCP covers over 30,000 acres of high-quality Burren habitat – over ideas as to how to improve the environmental condition of their one third of all the designated (SAC) land in the region. The aim farm. The BFCP farm plan is revolutionary in terms of its layout, for the coming years is to increase the number of farmers involved size and user-friendliness – most plans are only 3 pages long, and (347 applied for the initial 120 places!) and the levels of payment are composed of the bare essentials: an aerial photo of the farm, a which will result in a really major landscape-level improvement in list of the planned works and a map showing the SAC areas, listed Burren heritage for the benefit of all.

monuments, internal field boundaries and works to be carried out on the farm.

The average payment in year 1 of the BFCP is €5,645. Almost half of this (45%) comes from an innovative 'bonus payment' for the production of species rich grassland. This is based on a careful assessment of the environmental condition of the farm The fascinating story of farming and the Burren, and in particular (looking at grazing levels, damage to water sources, levels of score from 0-10 on which an area based payment is made. Better

The Burren Farming for Conservation Programme (BFCP) is a new Most of the remaining payments are for 'Site enhancement works' 78 troughs) and €14,533 on habitat restoration work (protecting springs, clearing rubbish). Farmers contribute 25% - 75% of the

Dr Brendan Dunford is the Project Manager of the Burren Farming for Conservation Programme. He came to the Burren to carry out his doctorate on farming methods and conservation in the region. He is the author of Farming in the Burren and a founder of the Burrenbeo Trust. For more information on the above programme go to www.burrenlife.com





conversation arose as to what was the most beautiful sound. One of the warriors said his favorite sound was the song of the skylark, another said it was the song of the blackbird, another warrior said his favourite sound was the bellow of the stag in the autumn. Each warrior gave his opinion, Fionn was now the last to speak. A silence fell over the campfire as they awaited his response. The great leader thought for a while and then he said I think the most beautiful sound is the music of what happens.

Our human story in the Burren and the music of what happens is rich and wonderful, from the first hunter-gatherers to the dolmen builders, the first farmers, the fort dwellers, our ecclesiastical heritage, the castles, the chieftains, the landlords, the herdsman, our music and games, all the strands of our culture and story. The interconnectiveness between our human heritage and the physical landscape should always be beckoning our attention and curiosity. Our connection to the earth and landscape is sacred and should never be dismissed or trivialized.

The great gift is to be fully alive and be aware of your own ancestral song. So this year do not miss a beat, take the time to watch the sun rising and the way it sails towards the horizon and sinks into the ocean. The first sign of spring in the Burren is when the sun changes its imperial distance and a new light arrives as if a switch is turned on from deep in the heart of the hills. The blue grass and the gentian, the early purple orchid all are announcing the spring. As each new wave of flowers come out to greet you it is important to wholly absorb the beauty and wonder of what is happenning.

The world of nature and landscape is always inviting us to be part of its wonderful symphony.

interpret the land. Farmers have inherited an ancient and unique system that links them directly to prehistoric Burren farmers. Through the generations

FERAL GOATS IN THE BURREN

By Bryony Williams & Ruth Enright

History of goats in the Burren

Goats were introduced approximately four thousand years ago in Ireland, and feral herds are thought to have formed ever since. 'Feral' can be defined as wild-living animals of a domestic species. Historically goats played an important role in farming systems in the Burren with their produce (primarily milk, cheese and meat) used to feed farming families, provide a source of income, and treat conditions such as asthma and eczema. Goats were traditionally run with herds of cattle and flocks of sheep in the Burren to protect livestock from falling over cliffs and ledges, to eat herbs associated with diseases in cattle, to help keep track of cattle (as white goats could be seen more easily than cattle at a distance), and to lead sheep to higher, safer ground when it snowed. Another custom was to rear kids in a cró (which is Irish for a holding pen or hut) made from stone, and these structures can still be seen in the Burren.

A controversial issue

Goats were considered a valuable asset by Burren farmers for centuries, whereas now some consider the feral herds to be a nuisance - damaging stone walls, grazing forage intended for livestock, and defecating and urinating on areas that cattle then avoid. On the other hand, feral goats contribute to conserving the ecology and landscape of the Burren, goat sightings can enhance the experience of residents and visitors, and there is the possibility of a genetically-distinct Old Irish Goat breed in these feral herds (which would be of conservation importance).

The goats have no natural predators and, as they are feral, they are not protected or managed as wildlife or livestock are. While it is widely accepted that some management is needed, secret round-ups, sporadic culls of large numbers of animals, and shooters solely with sporting interests who trespass on private land, have all caused controversy in local communities. There are arguments for and against the Burren's feral goats; some people would like to see them eradicated, some would like to see them left alone, and others believe that feral goats should stay but that their populations need some level of control. Ideally, any management should be done in a sensitive and systematic way, with support from all stakeholders.

Research on feral goats in the Burren

Goats are social animals with complex herd dynamics and therefore feasible, long-term management needs to be based on knowledge



of their behaviour. A few studies have been carried out on feral goats in the Burren, investigating population size and/or goat behaviour. Population size estimates for feral goats in the Burren have ranged from one thousand to ten thousand animals over the last ten years. This variation is attributed partly to fluctuations in numbers and partly to a lack of consistent, region-wide monitoring.

Goat populations and behaviour are typically studied using direct field observations. A very different technique is to use GPS tracking, where a goat can be fitted with a collar that records the animal's location using satellite technology. Both methods have advantages and the different sets of data can complement each other considerably. Bryony Williams has previous experience of GPS tracking hill sheep in the west of Ireland and carrying out analysis on location data retrieved. Ruth Enright observed feral goats in the Burren between March 2009 and January 2011 as part of her PhD research with University College Cork investigating herd behaviour. We were keen to track feral goats at the same time as Ruth made regular field observations and were fortunate to be awarded funding from the Heritage Council Research Grant Scheme last year to enable us to do so.

Four feral goats were caught, fitted with a GPS tracking collar then released to re-join their herd. GPS location data were retrieved from the collars using a radio tracking receiver, radio tracking antenna and remote download device. GPS location data enable us to estimate home range sizes, distances travelled and habitat preferences of feral goats for example. This is the first time GPS tracking has been used to investigate goat behaviour in Ireland and knowledge of this kind will help inform a much-needed management plan for feral goats in the Burren. We fitted a GPS

collar onto an adult female goat from an established feral herd in the Slieve Carran, Bouleevin, Carrownamaddra and Mullagh More areas. The collars were scheduled to record a location every two hours and, with this schedule, batteries should last just over a year. We will know more when we retrieve the full set of data from all four goats later this year but, in the meantime, there are some initial findings below that may interest you. These are based on location records retrieved from two of the goats tracked between June and November of last year.

The Slieve Carran goat travelled a total of 282 kilometres (or 175 miles) - that's equivalent to travelling from Doolin to Dublin! She roamed over 1,146 hectares of land, which is equivalent to 1,061 full-sized football pitches. The Bouleevin goat roamed over 897 hectares of land, travelled 243 kilometres in total, and travelled a remarkable two and a half kilometres in just two hours (compared with a maximum of two kilometres in two hours by the Slieve Carran goat). Fifteen habitats are found in the Burren and the tagged goats only visited seven of these. They chose to mostly occupy winterage-type land with limestone pavement and species-rich grassland. Although considerable areas of improved grassland were accessible to the goats, in both cases they rarely chose to visit it (less than one percent of their locations were recorded on improved grassland). The boundaries of the areas occupied by the goats cannot be explained by physical barriers, such as high fences or stone walls, but appear to be closely associated with higher altitudes. We're looking forward to retrieving the rest of the data and seeing how the goats' behaviour differs within and between the four individuals over the course of a year.

Further information

If you would like to find out more about GPS tracking feral goats in the Burren, our report to the Heritage Council is available on the Burrenbeo Trust's website (www.burrenbeo.com) or you can contact us by emailing goattrackers@gmail.com

Permission to access land was obtained from the relevant landowners and the National Parks & Wildlife Service. No animals were harmed by carrying out this research. Special thanks to the Heritage Council, landowners and everyone who assisted with this study.

Dr Bryony Williams currently works on a conservation project in the Burren. She previously worked with the BurrenLIFE Project, REPS participants and the Countryside Council for Wales. Her doctorate research was on the resource selection of hill sheep in Co. Mayo, in collaboration with the National University of Ireland Galway and Teagasc.

Ruth Enright is currently working towards a PhD on the behavioural ecology of feral goats in the Burren and on the Beara Peninsula in Co. Cork with the School of Biological, Earth and Environmental Sciences in University College Cork. She has studied animal behaviour in Ireland, the UK, Madeira and Tanzania.



Kid crós on the Burren

burrenbeotrust conservation volunteers

Building THE SKILLS OF THE VOLUNTEERS

By Karin Funke

Instead of being built, perfectly functional drystone walls were The workshop started with a lesson in why certain stacking actually dismantled. But there was method to the madness: guide Rory O'Shaughnessy, on how to build and repair drystone prolongs the walls' lifespan considerably! walls.

neighbour of his, a gifted stone wall builder, who would turn every stone up to 6 times before finding the perfect spot in the wall for it. tools and safety gear needed for this kind of work, and then, not

techniques are more successful than others when building Burrenbeo with the help of a heritage grant by Galway County drystone walls which are basically walls without mortar or any other Council had organised a drystone wall workshop with local binding agents. We also learned that the gaps between the rocks landowner John Connolly, as well as stone mason and heritage are actually good for putting up less resistance to the wind which

Rory and John started to take down several parts of a wall, and John has vast experience in building this kind of wall because, as groups of two and three of the Burrenbeo Conservation Volunteers a boy, he had to walk from the farm over to where we had our went to work at each gap, trying to fill them up again. Then John workshop, make a gap in the wall, get the horses out for a day's showed us how to build a double stone wall from scratch. We work, and in the evening, after bringing the horses back, rebuild learned that a double stone wall is not two single walls stuck the gap in the wall. That is until he got smart and stuck a dead together, but a wider stone wall with two "faces", i.e. where, with whitethorn in the gap. He was also fortunate enough to work with a the exception of the 'through' stones, you can't see the same stone sticking out on either side of the wall. John talked us through the

unlike a swarm of bees, we started to build up the wall.

From the youngest members of the group who were not much taller than the sledge hammers, to the oldest, we gathered suitable stones for the foundation (fidín in Irish), the middle bit and the top part which looked again like a single dry stone wall.

The ultimate test for the durability and stability of the wall was delivered by one member of the team when he walked on top of our newly erected wall. There was not even a wobble in the stones under his feet!

We had a great day with lots of banter and laughter, and we actually learned much about wall building without realising it. So we will be able to use our newly acquired skills when coming across derelict walls on our Burrenbeo Volunteers' days out.

This stonewall workshop was part-funded by a heritage grant from Galway County Council.

Karin Funke works at the Burren Smokehouse. She has been a Burrenbeo Conservation Volunteer since February 2010 and participated in various Burrenbeo Conservation Volunteer outings.

burrenbeotrust conservation volunteers

The Burrenbeo Conservation Volunteers

The Burrenbeo Trust established the Burrenbeo Conservation Volunteer programme as a means of coming together as a community and tackling key conservation issues that exist in the region. To date, tasks have included scrub removal in areas of species-rich grassland, mapping areas of ancient settlements, clearing areas to aid the breeding of rare butterfly species, beach clean ups and stone wall workshops.

So far over 90 individuals have registered with the Burrenbeo Conservation Volunteers. If you want to be part of it, actively working as a community and making a real difference to the Burren, please contact volunteer coordinator Kate on burrencv@gmail. com or call 091 638096 to register.

If you would like to donate funds or equipment towards the work of the **Burrenbeo Conservation Volunteers** please do not hesitate to contact us.





lean up on Fanore beach and dunes. Photo by Denis Bates



DEVITT'S



Striking a Balance:

Orchid-rich Grasslands and Atlantic Hazel Woodland in the Burren.

By Sharon Parr

Woodlands & Scrub in the Burren

The woodlands of the Burren have a chequered history. Initially a well-wooded landscape, human pressure saw the Burren stripped of its tree cover over the millennia. We can deduce from the 17th century 'Book of Survey and Distribution' that only 2.5% of the high Burren was covered in "shrubbery" at that time. Subsequently, it appears that the cover decreased further - a visitor to the Burren in 1852 noted that there was a "fuel famine" in the area and refers to hazel as "a scanty growth here and there amongst the stone walls which divide field from field". However, the fortunes of hazel woodland changed following the population decrease that resulted from the potato famine in the mid-nineteenth century. Since then, hazel has been expanding and in 2003 it was calculated that about 14% of the high Burren is covered by hazel-dominated scrub woodland. Furthermore, it is likely that at least a further 10% is seriously 'scrub-affected' i.e. there is significant cover of low encroaching hazel. This expansion has serious implications for biodiversity, archaeology and farming in the Burren uplands.

Hazel & Biodiversity

The spread of hazel in the Burren poses one of the classic conundrums of conservation as it places two important habitats in opposition. Here we have a rare and under-appreciated habitat, Atlantic hazel woodland, beginning to overrun some of the internationally recognised orchid-rich grasslands of the Burren. We know that these orchid-rich grasslands are important for their flora and that the abundance of flowers is important for many insects that are in decline elsewhere including some of our native bumble bees and butterflies. We also know that much of the biodiversity of these grasslands relies on them remaining open and will be much reduced or lost altogether if they become covered by scrub. Much less is known about the biodiversity of hazel woodlands in the Burren, but we do know that they are an important habitat for rare lichen communities that are only found where the air is clean and the climate 'moist', as well as fungi including the unusual hazelgloves fungus (Hypocreopsis rhododendri) which is very much a species of Atlantic hazel woods.

Both of these habitats are valuable in their own right so how can we say that one is more important than the other, particularly in the absence of a comprehensive knowledge of their biodiversity?

Hazel & Archaeology

Whilst it is easy to find positives in terms of Atlantic hazel woodland as a habitat, it is nigh impossible to find anything positive about its impact on the Burren's rich archaeological heritage. Unrecorded monuments are vulnerable to damage or destruction during over zealous scrub clearance; known and as yet unknown monuments are being lost to view, their stratigraphy and structure open to damage by the growing bushes and trees.

Hazel & Farming

Grazing cattle on the Burren winterages is difficult at the best of times and for some farmers the spread of hazel scrub is making it harder. The biggest impact is on herding; it is hard to find cattle in amongst the bushes and it is harder still when you have to try to get through thickets of young hazel. As the hazel closes in, the available grazing area decreases thus reducing the carrying capacity of the winterages so farmers must either find alternative winter accommodation, usually housing, reduce their stock numbers or bring on silage to compensate. Whichever way they respond, grazing pressure is reduced and this has implications for the further spread of hazel.

Impact of Winter Grazing on the Spread of Hazel

During the BurrenLIFE Project the impact of winter grazing on the survival and growth of hazel seedlings on grasslands and heaths was monitored. Survival rates over 3-4 years were relatively high (68-83%) and, whilst there was a decrease in the number of seedlings on a few farms, the overall trend was for an influx of seedlings that outweighed the number lost. Although winter grazing was not stopping the spread of hazel, it was found to be suppressing the growth of the seedlings as the average height increased only marginally over 3-4 years. The situation is akin to a time-bomb; if grazing is relaxed or removed the seedlings are poised to begin more rapid growth and the seemingly inexorable spread of hazel will continue.

The Future?

The answer for both biodiversity and farming lies in finding some sort of balance. We certainly need to retain the established hazel woodlands that have developed but we also need to protect the flower-rich grasslands of the Burren. As traditional grazing practices appear unable to stop the spread of hazel, and certainly cannot push back scrub that has already spread on to the grasslands, human intervention will be necessary. However, the economics and practicalities of scrub removal in the difficult terrain mean that more areas will develop into Atlantic hazel woodland over time.

Dr Sharon Parr was the monitoring ecologist with BurrenLIFE and is the scientific coordinator with its successor, the Burren Farming for Conservation Programme.



THE BURREN & CLIFFS OF MOHER GEOPARK PROJECT:

Application to the European Geoparks Network

By Ronán Hennessy



& Learning Centres Geostes - Walking Trail National Par Burrenbeo Trust Lisdoonvarna Spa Wells The Burren Centre Cliffs of Moher

Clare County Council has applied to the European Geoparks Network (EGN) seeking the UNESCO-endorsed award of European and Global Geopark status for north Clare. Compiled by Burren Connect with the support of the Geological Survey of Ireland and Shannon Development, and several partner organisations in County Clare, the application was submitted in late 2010.

An event to mark the submission held in the Burren Centre in Kilfenora in December 2010, was addressed by Clare County Mayor Christy Curtin. It was attended by representatives of Clare County Council, Shannon Development, Burren Connect, NPWS, Burrenbeo Trust, Cliffs of Moher Centre, Clare Biodiversity Group, Burren Ecotourism Network and Lisdoonvarna Fáilte.

The application follows a previous application made in 2006, after which a dedicated Burren and Cliffs of Moher Geopark project was established under Burren Connect. Since 2007, the Geopark project has been actively engaged in developing an education and outreach programme, and information resources for visitors and the local community.

The application will be evaluated by the EGN and the International Union of Geological Sciences (IUGS). Two members of the EGN will visit the Burren to conduct an evaluation at some time during summer 2011. During this visit, EGN evaluators will visit geosites (sites of geological interest), visitor centres, and public walking routes, assessing interpretation panels and maps. They will meet local tourism groups, education providers, conservation bodies, community groups, landowners and other stakeholders. The evaluators will assess the region's eco-tourism services and geoeducational facilities, and assess the local community's attitude to the development of a sustainable tourism economy in the region. A final decision is expected in September 2011.

A successful applicant is made a member of the European Geoparks Network. This is not a legislative designation. EGN

> membership is valid for four years, after which it is reevaluated by the EGN. A member may also voluntarily withdraw from the EGN at any time. The EGN currently has 42 members (Geoparks) in 20 countries across Europe, two of which are in Ireland (Marble Arch Caves Global Geopark; and Copper Coast Geopark). Members of the EGN are also members of the wider UNESCO Global Geoparks Network with over 80 members worldwide. The Burren and Cliffs of Moher Aspirant Geopark application to the European Geoparks Network is available at www. burrenconnect.ie/geopark. For further information see www.europeangeoparks.org.

Dr. Ronán Hennessy is the Geopark Geologist for the Burren Region. For more information email rhennessy@burren.ie

Young Burren Experts

Over 75 young Burren experts graduated from the Ecobeo Heritage Programme in 2010. A further 75 Burren school children are currently engaged in this unique course aimed at opening up the Burren's vast and varied heritage to the future custodians of this magnificent landscape.

"It is wonderful to see the Burren through the eyes of these young people, to see how much they have learned over the last twenty weeks; reeling off the complicated names of plants and animals, identifying geological and archaeological features and proudly telling local folklore and history tales to their classmates. These individuals truly are young Burren experts. By educating these local school children, the Trust has sown a seed in creating a sense of pride, ownership and responsibility in the local natural and cultural heritage which will hopefully continue to develop into their adulthood and will spread amongst the local people and visitors of the Burren that they come into contact with. The Ecobeo education programme has created a foundation in Burren heritage knowledge that we hope will be spread to all schools throughout the Burren" Brigid Barry, Ecobeo Coordinator

Since the launch of the Ecobeo heritage education programme seven years ago, the Burrenbeo Trust has trained and graduated over 700 primary school children from across the Burren. National schools in Ballindereen, Carron, Northampton and Ruan participated in Ecobeo 2010, whilst this year Ballyvaughan, Fanore, Oranmore and Doorus are currently undertaking this exciting course. The main aim of the programme is to increase awareness



children who live in this special place. The course offers each child a hands-on, fun learning experience and each child graduates with a huge bank of knowledge about the Burren region.

The Ecobeo course is carried out on a shoe-string budget and through voluntary input on behalf of the course tutors. Burrenbeo Trust is presently seeking funding to extend the course to other Burren schools in 2012.

The Burrenbeo Trust would like to thank Ecobeo tutors: Brendan Dunford, Ronan Hennessy, Eugene Lambe, Zena Hoctor, Sarah O'Malley, Kate Duncan, and Gordon D'Arcy for their time and infectious enthusiasm in delivering their expertise. The Trust would also like to thank the Cliffs of Moher, the Aillwee Caves and the Burren Centre for donating prizes to each school. For further comments or information on the Ecobeo education programme or the Burrenbeo Trust, please contact Brigid Barry on 087 9689486/091 638096



Why not invest in the future of the Burren and sponsor a school to take part in the Ecobeo programme?

> The Burrenbeo Trust is part of the Charity Donation Tax Scheme thus all donations over €250 receive tax back.

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HERITAGE TRAINING FOR ADULTS

Paula Flynn describes her time on a Burren Ecobeo Adult weekend heritage course hosted by the Burrenbeo Trust.

I attended the Burrenbeo Heritage Course over the weekend of 20th - 21st November 2010. Mornings were spent listening to expert viewpoints covering archaeology, geology, history, flora, fauna and conservation whilst the afternoons were spent out in the Burren.

David Drew (Trinity College Dublin) told how the limestone was laid down on the floor of a warm sea some 300 million years ago. In recent millenia, massive ice-sheets flowed over the Burren, leaving plateaux, cliffs and scarps and subsequently acidic rain etched out the grykes. An understanding of these complex processes helps us to enjoy the beautiful landscape we see today.

Christine Grant (National Monument Service) brought us from the Neolithic age (4,000 to 2,000 BC), through the Bronze Age (2,000 to 600 BC) to the Iron Age (500 BC to 400 AD). The Burren is crowded with megalithic tombs. The diet of the times could be determined from human remains excavated at the renowned Poulnabrone portal tomb. At Cappanawalla a 2km enclosure – one of the largest features yet described from the Burren (and discovered by someone who was not even an archaeologist – so keep your eyes open!) may have been used as a gathering point for trading. From these fragments of evidence Christine built a picture of life in the Burren stretching back 6,000 years.

Michael Lynch (Fields Monuments Advisor) spoke about the more recent history of the Burren, the cashels, churches and holy wells of the early Christian people. Souterrains associated with cashels were built on the surface and then covered in; here the people would keep hostages or hide their valuables during raids.

On our visit to Aillwee Hill, Christine pointed out pick-axe markings on the side walls of a wedge tomb. Nobody knows how far back these human markings date, but we all liked to think they were

Neolithic! From pick-axes to toothbrushes - onwards to a holy well believed to cure toothaches. As we walked David pointed out both large and miniature landforms in the landscape. At our final stop, a cave, some of us ventured in for a short walk. Our day was coming to a close as we walked home along the green road, by the light of a full moon.

In Connolly's Pub, Eugene Lambe entertained us with Burren sounds and stories. Among them a piece of music inspired by the sound of a whale heard off the Clare coast. The haunting music released from the uilleann pipes was like the song of the whale itself. Eugene also had footage of seanachai telling their stories and gave us a taste of past times of entertainment in the Burren. Magic!

Next morning, Sharon Parr, (Botanical Society of the British Isles) described the Burren flora, from the Primrose to spectacular orchids, such as the Early Purple Orchid and the romantically named Autumn Lady's Tresses. It is the mix of Alpine (such as Spring Gentian) and Arctic plants (Mountain Avens) growing beside Mediterranean species (Irish Orchid), together with acid-loving plants such as Bell Heather that makes the Burren such an intriguing place for botanists. Sharon closed on a simple note - you don't have to know the name of every plant you come across, just enjoy them!

Stephen Ward (Clare Biodiversity Group) presenting the fauna put things into perspective with one statistic – plants account for only a quarter of the species recorded in Ireland. In numbers terms while 19,122 are known overall, 17,187 of them are creepy crawlies. But remember, these are the numbers for Ireland, so how many are there in the Burren? The answer is not known – looking for a challenge? So, while you may think of the Burren fauna as comprising pine martens, foxes and goats, these may be

the largest but they are certainly not the most numerous.

Brendan Dunford (Burren Farming for Conservation) told how 5,000 years ago the farmers shaped the landscape by cutting away the hazel and pine woodlands. Cattle grazed the hills during the winter allowing the unique flora of the Burren to thrive in the spring and summer. BurrenLIFE encouraged today's farmers to work in the traditional way to conserve the Burren. Brendan recapped the elements of the heritage of the Burren; the geology with its amazing landscape; the diversity of plants hidden between the grykes; the numerous archaeological sites leading down to today's people which all go to make this a very special place.

At Slieve Carran we walked to the oratory surrounded by hazel, goat willow and ferns. On the surrounding hills herds of cattle grazed – a winter picture that most tourists to the Burren don't get to enjoy. As the sun set and cast its golden light on Slieve Carran we turned homewards taking with us a magical impression of this rocky land.

Two great days steeped in the Burren, all thanks to the Burrenbeo Trust. Deeply memorable!

Paula Flynn is a member of the Burrenbeo Trust, and of the Burrenbeo Conservation Volunteers and looks forward to working out in the Burren and using her new knowledge.



Scattered through this issue of Burren Insight are tales heard by Eugene over the years.

Nights of Ragairne or Cuaird were common in the Burren in bygone days and although the advent of electricity, and later TV, tolled the death knell of this widespread pastime, the custom continued, in some houses at least, into the recent past. Stories were told and re-told and, as in the case of a good song, nobody would ever say "but I heard that one before". The magic lay in the telling. And truth was not necessarily a major ingredient! But there always had to be the slight possibility that it could be true.

While physical works of art such as literature, sculptures or paintings will endure and can be preserved for future generations in museums, art galleries and libraries, these more ephemeral art forms, like traditional music and song can only continue to exist by the listening and then by the telling.

By Eugene Lambe

Eugene Lambe

Eugene Lambe carried out a doctorate in plant ecology, sailed a few oceans, and held a few tunes before coming to the north coast of Clare. Here he spent many decades recording the verbal history of the area. Eugene is now based in Kinvara as a musician and maker of uilleann pipes.

For more information go to www.eugenelambe.com

See pages 18, 24, 26 & 39 for more tales.

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GRAZING FOR BIODIVERSITY IN THE BURREN

By Maria Long

Findings from the exclosures study

The Burren is famous as one of the most botanically interesting
Inside the fenced plots litter increased dramatically, creating a very but a few of its most important habitats. Its impressive biodiversity grass-dominated sward, rather than a flower-rich one. is indebted in no small way to the agricultural traditions of the area. These traditions are many and varied, but one particularly important. Work is continuing on this project, and all of the findings need from grazing or trampling during summer.

work part-time (or full-time) off the farm, leaving less time for tasks such as out-wintering stock. Also, the age profile of Irish farmers is increasing. Other factors include a move away from hardy breeds of cattle, to breeds which need more nutritional supplementation and husbandry. There has also been a substantial changeover from beef cattle to suckler cows. Policies such as the 'Farm Building Scheme', which provided grant-aid for the building of slatted sheds, have also brought big changes. All of these factors combined have resulted in a general decrease in the out-wintering of cattle. The result is the beginnings of land abandonment. This has been identified as one of the main threats to the Burren flora.

So just how important is grazing? What plants might we lose if grazing stopped? In order to answer these and other questions, I established a network of sites in 2006 from which grazers were excluded by fences. The vegetation inside was monitored to see what changes occurred, and how quickly. The most significant changes were seen in grasslands where there was a significant decrease in plant diversity. Certain species disappeared quickly including well-known Burren flowers such as eyebright Euphrasia spp, fairy flax Linum catharticum and yellow rattle Rhinanthus minor. Another big change was in the quantity of litter (the dead plant material that builds up around the bases of living plants).

areas in the country. Limestone pavements, species-rich noticeable difference between inside and out. The proportion of grasslands, turloughs, as well as scrub and native woodlands, are grasses also increased. This marks the start of a trend towards a

system, 'winterage', involves cattle being grazed on the uplands in to be interpreted in the context of its short-term nature (3 years winter. This system developed to take advantage of the unique data collected so far). The exclosures will provide a means for combination of limestone terrain and oceanic climate. Winterage monitoring long-term vegetation change into future decades. So has a number of advantages for flowering plants. Much of the far, they have confirmed for us the crucial importance of grazing dead and dying vegetation is removed (i.e. eaten!) during winter, animals in helping to maintain the floral diversity of the Burren allowing the growth of plants in spring which might otherwise be grasslands. And I have only mentioned here the findings in relation choked and out-competed, and there is relatively little disturbance to grasslands plants – snails and scrub/woodlands are for another

But things have been changing in farming recently. Many farmers Maria Long is currently in the final stages of completing her doctorate in the of large grazing animals: effects on biodiversity in three habitat types in a

Tales heard at a Burren fireside:

Some stories told of the 'old times'. "Not in my father's time nor in his father's time"... but in the time when the old people put the 'Leac Chuimhneacháin' on the brow of Slieve Elva so that travellers making their way along the road by the sea could look up and remember loved ones who had passed away. These old piles of memorial stones are still visible as one looks towards the hill from the main road. Maybe one of those piles was to remember the old man who had arrived in Fanore from Carron because of tension in the house with his new daughter-in-law. He hired with a local farmer in the Caher Valley. He passed away some years later and, when news of his demise reached Carron, his son arrived with an ass and baskets and conveyed his father home, draped across the asses back with his head in one basket and his feet in the other.

By Eugene Lambe

Brehon Law: Life in a ringfort

By Michael Lynch

Ringforts are the most common and easily recognisable. With regard to the homesteads of the upper echelons of society, archaeological monuments in Ireland. They were the homesteads the law dictated the size and character of the ringforts and their of the kings, lords and wealthier farmers of the early Christian buildings. Archaeological records from survey and excavation of period. When constructed with an earthen bank and ditch they are many different features of ringforts compare favourably with the usually known as a 'rath' or 'lios'. Stone built examples, which are information from the law tracts. most common in the Burren, are generally known as 'cashels' or 'cahers'.

society they lived in, comes to us from the early Irish law tracts with 8 sleeping spaces. Reflecting the hierarchical system the or Brehon laws. These confirm that early Irish society was highest ranking bóaire could have a house of 8.5m diameter but hierarchical. Between the 5th and 12th centuries Ireland was made the ócaire was limited to a house of 6m diameter. up of approximately 150 petty kingdoms known as 'túatha'. Each had legal privileges denied to others. The bóaire (strong farmer) and clients of the lords. The lords would have advanced a fief (either land or cattle) to their clients in return for rent, food, labour and other services.

All of the above members of society would have resided in ringforts. Each person had an honour-price which put a monetary value on their status within society. The honour price was an intrinsic part of the legal system where compensation and penalties for only maintained the status quo but perpetuated the inequality in early Irish society. The laws dealt in great detail with all aspects of the lives of the people, particularly their rank and property, and different teams of masons. therefore provide us with a detailed insight into the concerns of Irish society in the early Christian period.

The unit of currency was the milch cow, showing the importance information is available in the noted references. of dairy farming at this time. Other cattle, sheep and pigs were Ref: Kelly, Fergus. 1988. A Guide to Early Irish Law. Dublin. valued at appropriate fractions of the milch cow. An ounce of silver was equal in value to the milch cow and a female slave (a cumal) was three times its value. Land was valued in cumals based on its capacity to support cattle. The law dictated the amount of land Michael Lynch is an archaeologist who also farms in Killinaboy. He is the and number of cattle and other animals that each rank in society should possess.

The houses referred to in the law tracts are generally circular with that of a king measuring up to 12m diameter and accommodating Most of our knowledge of the residents of the ringforts, and the up to 12 sleeping spaces; a lord's house measured 9.5m diameter

túath would have had a king and several lords of different rank who Other structures expected within the ringforts were an outhouse of specific size, a sheep pen, calf pen, pigsty and paved entrance. and ócaire (small farmer), although not privileged, were freemen Corn drying kilns and cow houses seem to have been associated with the ringforts of the king and lords of high rank. Cultivation within the ringfort was not appropriate for the high ranked lords but was expected within the ócaire's ringfort. A ringfort's size depended on its owner's status, with a king's in excess of 40m internal diam. Other identifying elements of a king's or higher lord's ringfort are additional fortifications; up to two extra banks and ditches around raths and walls around cashels. These would have been as much for signifying status as for defensive purposes. That these additional offences were related to the rank of the offended person. This not fortifications were built by labour under the client arrangement can be seen at cashels such as Cahercommaun in the Burren where vertical joints in the walls show that they were built in sections by

> The above paragraphs give only a limited account of the relationship between early Irish law and ringforts and farmers. Much more

Kelly, Fergus. 1998. Early Irish Farming. Dublin. Stout, Mathew. 1997. The Irish Ringfort. Dublin.

Prehistoric Archaeology and Church Plate.



Eugenie Regan of the National Biodiversity Data Centre explains why insects are a vital component of the Burren's fragile ecosystem

Let's start with the truth about insects. They are small, annoying, do love penguins and turtles, I think that insects need their proponents

also -considering they have little to endear us to them in

honesty, the flowers get way too much attention!

the first place. So I'm going to introduce you briefly to

the underworld of insects in the Burren because, in all

not make good pets, there are too many of them, they are not welcome in our homes, and are certainly not high up in the conservation agenda. I mean who really wants to conserve insects?!

My sister thinks I should change allegiances and become a penguin or

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The importance of insects Our ecosystems would collapse without insects. They turtle ecologist instead. And while I do aerate the soil, pollinate flowering plants, control pests,

The wood white butterfly is under threat of extinction in Ireland and Great Britain and in Ireland only occurs in the Burren... The wood white butterfly. Photo by Lisa Clancy.

and reintroduce nutrients into the soil. They are the most diverse biological group in Ireland, consisting of one third of our total biodiversity.

A miniscule army of alien-like wasps keep pest numbers under control with the aid of the equally bizarre-looking ladybird larvae. Beetles burrow through the soils aerating as they go and eating any dead animal thereby nutrient recycling. The rare flowers of the Burren would not exist without the pollinators. And ecology and conservation becomes a delicate balance where conserving a flower means actually conserving a whole interconnected web of plants and animals. This is why insects just cannot be ignored.

The Jewels of the Burren

Not only are the Burren's insects important for keeping the balance of nature, but, in my opinion, they are the 'jewels' of the Burren. The Pearl-bordered Fritillary butterfly is one of the most beautiful and yet rarest of the Irish butterflies, occurring only in the Burren. Two of our rarest bumblebees have their stronghold in the Burren: the Great Yellow Bumblebee and the Shrill Carder Bee. These have both been forced to the margin of their range and are under threat of extinction in Ireland. Another jewel is the Scarce Emerald Damselfly which is a turlough specialist. Some of the Burren wetlands contain thousands of these damselflies at certain times

of the year and when they fly together, it is a dazzling, sparkling

Beetles are often considered the uglier insect group but with over 2,000 different species in Ireland, there are some that are as beautiful as any butterfly or damselfly. The Rose Chafer is a very common sight on a warm summer's day in the Burren. They fly past like a bulldozer in the air - very difficult to know how they achieve airborne flight at all! But their iridescent blue-green exoskeletons must make them one of the most handsome of the Burren insects. The Donacia water beetles are another favourite of mine. They can be found on reeds in wetlands showing off their rainbow-coloured armour.

Other specialities

The Burren is famous for its rare flowers and people travel hundreds and thousands of miles to glimpse them. But in certain obscure circles, the insects of the Burren also have their fans. Coleopterists (a fancy word for obsessive beetle collectors - yes they do exist!) travelled from Sweden, Russia, Germany, the Netherlands, Spain, and Scotland last year to catch one of the

Octhebius nilssoni only occurs in the Burren and one lake in Sweden. Photo by Harald Schillhammer

Ladybird larvae are important for pest control. Photo by Lisa Clancy



world's rarest beetles, *Octhebius nilssoni*. This beetle is only known from the Burren and one Swedish lake. And nobody knows why. An entomologists' puzzle.

The Wood White butterfly is another puzzle for insect scientists. This butterfly remains in only a handful of sites in Great Britain and yet appears to be plentiful in the Burren, it's only Irish location. Even more puzzling was the recent discovery that the Wood White that occurs throughout Ireland is, in fact, two different species. With one butterfly confined to the Burren and the more widespread Irish butterfly not occurring in Great Britain at all.

The study of Irish insects is a fascinating, perplexing, rewarding, and exciting pursuit. Not only are insects a vital component of Ireland's biodiversity but they can also be exquisitely beautiful. Flowers just sit insects are much more exciting! So your challenge for this year is to go out and start observing the Burren's insects. We know so little that your contribution will be invaluable. What flowers are the butterflies feeding at? Where are the bumblebees nesting? Where is that Rose Chafer flying to in such an ungainly fashion? And even a simple record of a species (where and when it was recorded and by whom) can be a valuable piece of information.

If you'd like submit records of Irish insects or of any other group to the National Database, please go to www. biodiversityireland.ie.

Dr. Eugenie Regan is an ecologist, researcher, naturalist and author. She works at the National Biodiversity Data Centre where she co-ordinates projects such as the Irish Butterfly Monitoring Scheme and edits the bulletin, *Biodiversity Ireland*. She has published widely on Ireland's biodiversity, in particular on Ireland's insects. Eugenie is passionate about increasing our knowledge of Ireland's invertebrates and communicating the importance of their conservation.



by Vivienne Campbell

We are all aware of the incredible variety and rarity of the plants that grow in the magical area of the Burren. However what many people do not realise is that as well as looking beautiful, over the years many of these plants have been put to a wide variety of uses. When you stroll through the Burren you could well be passing a remedy for toothache, a rare fabric dye or a tasty wild alternative to our beloved spud.

1. Wood Sage Tuecrium scorodonia

So called because its leaves resemble our culinary sage but this plant is a Germander not a Salvia. It tastes bitter and has been used to stimulate the appetite and the digestion. In folk medicine it is believed to 'cleanse the blood' and so it was used to clear the skin and to treat rheumatism and gout. At one time it was a popular ingredient for brewing beer but it made the liquor quite dark so hops became the favoured plant for this purpose.

2. Early Purple Orchid Orchis mascula

This striking flower has an interesting story. It grows in many countries throughout the world where it is still prized but here its uses appear to have been forgotten. Its tubers are sweet-tasting and are one of the more concentrated plant foods known. At one time they were brought on long sea voyages as a vital food supply. They are also used to make Salep, a delicious fortifying drink still common in the Middle East today but which was also extremely popular in Europe before it was supplanted by coffee.

3. Ox Eye Daisy Chrysanthemum leucanthemum

This cheerful flower is still used in Irish herbal medicine. It has a reputation for relieving coughs and bronchial catarrh. It is thought to be a relaxing tonic drink and can be used in a similar way to chamomile. Externally preparations have been applied to relieve bruises, wounds and ulcers.

4. Burnet Rose Rosa spinossima

In the autumn this delicate wild rose develops dark purple hips which can yield a dye. Extracts of the hips mixed with water turn peach or when mixed with dyers' allum turn a rich violet. Many wild plants can be used to produce dyes, but usually the colours that they yield are yellow or green so the Burnet Rose provides some much needed variety!

5. Silverweed Potentilla anserina

This modest little weed grows in many countries and has a fascinating history of uses. The flowering tops are thought to be antiseptic and astringent so a tea has been brewed from them that was used to reduce bleeding and inflammation, to ease sore throats, gastritis and catarrh to name but a few things. A lotion was used to cleanse the skin and to try to reduce freckling and ease sunburn. And that's just the top part of the plant. Geese and pigs love the roots and they could well be on to something good because these roots are edible. The Celts and the Native Americans cooked the roots as a vegetable. It was particularly popular in the Highlands and Islands of Scotland where it was cultivated and cooked like potatoes. It was also





roasted and ground into a porridge. In Yorkshire it was even called 'bread and butter', presumably another reference to its use as a food. And it grows easily and doesn't succumb to blight.

So the next time you are out exploring the Burren please pause and spend some time reflecting with the plants. Humble weeds were treasured for centuries and, you never know, we could well need them again.

Note: A gentle reminder that under the Burren Code you should not remove plants from the Burren. However some of the plants mentioned in this article do grow in other places where you should be allowed to harvest them.

Vivienne Campbell is a qualified Herbalist and lives in the Burren. She recently featured on the hit RTE 1 show Corrigan Cooks Naturally. She takes guided herb walks in the Burren and teaches courses in herbalism at the beautiful organic gardens of the Irish Seed Savers Association in County Clare. Details of her courses and walks are on her website www.theherbalhub.com You can contact her on 086 8899168 or at info@theherbalhub.com



ARCHAEOLOGICAL EXCAVATIONS AT CAHERCONNELL

By Michelle Comber

Caherconnell townland, like many parts of the Burren, is rich in archaeological remains. These include the large cashel called Caherconnell, a more modest sub-circular cashel next to it, a subsquare stone enclosure next to that, and various ancient field walls, hut-sites and mounds.

The archaeological excavations at Caherconnell are part of a longterm research project on the archaeology of ringfort landscapes in the Burren. This work commenced with a survey in 2005 and progressed to a test-excavation phase of sites in Caherconnell townland in 2007. The test digs produced a 10th- to 17th-century date range for activity within the large Caherconnell cashel, and uncovered evidence of prehistoric and medieval activity in the field next to the cashel.

In 2010 research excavations began in earnest and will continue in the summer of 2011. These are currently focusing on two sites - the main cashel called Caherconnell, and a smaller sub-square enclosure to its south.

Caherconnell Archaeological Field School

From O'Davoren to Davoren, from Cahermacnaughten to Caherconnell and from Brehon Law School to Archaeological Field School, education is woven into the tapestry of Burren history and once again finds its home in a stone fort.

An international field school, the Caherconnell Archaeological Field School (CAFS), has been established to continue excavations

within Caherconnell cashel. In 2010 the School excavated the entrance to the cashel, revealing a path inside a medieval entrance. Finds included a decorated bone comb, musket shot and a peg

The medieval entrance comprised two sets of double doors within the entrance passage, each marked by a stone sill and a pair of spud-stones (pivot stones/sockets). The inner sill is of better quality cut stone, with two well-cut and dressed 'door stop' stones inside the door position. Shallow niches in the cashel wall, in line with the outer sill, supported vertical jamb stones. Three of the four jambs (two from either side of the entrance) were located. These are also cut and dressed stones. The dressing suggests a medieval date. This entrance was not the original one, and was probably constructed around the 15th or 16th century when a rectangular house was built inside the cashel.

Inside the cashel a slab-paved path was found leading to/from the entrance, lining up roughly (though not exactly) with the northern half of the entrance. The inexact alignment of the path with the medieval entrance might suggest that the path is earlier in date. A paved surface was uncovered to the north of the path, and an irregular stony surface to the south. Medieval remains were found above these levels, earlier material below

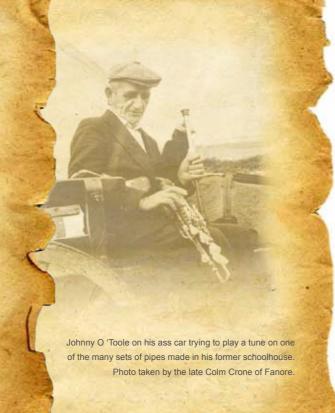
This earlier material represents the primary activity within the cashel, probably dating from the 10th to 12th century AD. The original entrance from this date was completely remodelled in the

Tales heard at a Burren fireside:

Séan Conways waistcoat

This tale was first told to me by my good friend Johnny O'Toole as we cut turf on Slieve Elva above Fanore. The same story was recounted many times as later we warmed ourselves for the second time by that same turf - Séan had a fine greyhound that the lads used to use for killing hares on the slopes of Slieve Elva. Séan was so attached to this animal that when he (the dog that is) died, he couldn't bear to part with him completely, and so to preserve his memory in some little way, he skinned him and fashioned a nice waistcoat for himself. And to increase its visual appeal he designed it with the fur to the outside. Being quite proud of his creation he was wearing it one day as he passed the Old Schoolhouse, where he was once a pupil when, all of a sudden, all the hairs on the waistcoat stood up and he noticed that inside the wall of Minnie Clancy's haggard a big hare lay in the grass. Before he knew what was happening he found himself propelled over the wall in pursuit of the hare and only came to himself fully when the hare went to ground about 5 miles to the south-west behind Ballinalacken Castle!

By Eugene Lambe





Aerial photograph of Caherconnell townland. Credited to Dept. of Archaeology, NUI Galway.

15th/16th century, however excavations did uncover one trace of it – a single post-hole (that would have held a large gate-post).

Work in 2011 will focus on other features visible inside the cashel. Visitors are welcome to view the excavations (Monday-Friday) via the visitor centre at Caherconnell.

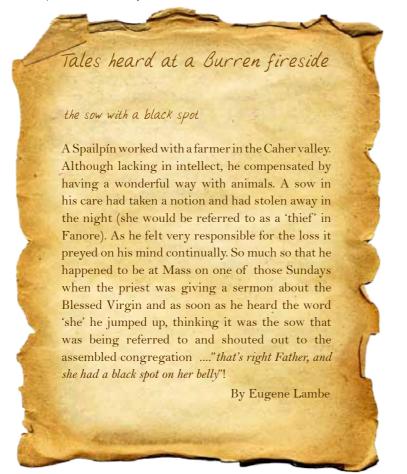
Royal Irish Academy Excavation

A research excavation funded by the Royal Irish Academy also commenced in Caherconnell townland in 2010. This excavation is investigating a sub-square drystone enclosure located about 100m south of the main cashel at Caherconnell. This particular site type has not previously been excavated. A number of such sites are known from across the Burren, however nothing is known of their chronology or function. From surface survey, they appear to form a ringfort/cashel sub-type.

In the interior of the enclosure, excavation uncovered the remains of a circular house, part of another sub-oval structure, and a number of walls sub-dividing the space between the structures. Associated deposits were rich in animal bone and a quantity of artefacts was also recovered. The artefacts included an iron pin. knife, rivet, socket, vessel fragments, fragment of lead, copperalloy fitting, glass bead, fragment of a quernstone, spindle-whorl broken during manufacture, whetstones, stone axe re-used as a whetstone, possible stone bracelet fragment, shaft of a bone pin, fragments of a decorated bone comb, chert tools and waste, and several small pieces of metalworking slag.

Initial analysis, based on the bead, comb and rotary guern, indicates that the enclosure was used during the Early Medieval period. Identifying this as primary or secondary activity awaits C14/radiocarbon results. Once obtained, excavation in 2011 will investigate the interior of this enclosure further, and will either explore why, if the site is Early Medieval in date, it is a different shape to the far more common circular cashels or, if the site is earlier in date, try to find out more about what would be a newly recognised prehistoric site type.

Dr Michelle Comber is a part-time lecturer in Archaeology at NUI, Galway, Co-director of the Caherconnell Archaeological Field School, and Director of the Royal Irish Academy-funded excavations at the square enclosure in Caherconnell townland. Her main research interest lies in ringfort landscapes and all that they contain



TWELFTH-CENTURY PILGRIMS THE BURREN'S FIRST TOURISTS?

By Peter Harbison

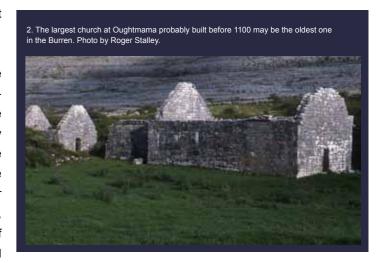
PART 1 - CHURCHES AND ROUND TOWERS

The Burren has been weaving its magic on mankind for over five thousand years, from the time when Poulnabrone dolmen was erected down to the present day. The Stone Age/Bronze Age farmers who built the numerous megalithic tombs were obviously attracted to the region because of good grazing, particularly in winter, even though it may well be those same farmers whom we have to blame for having denuded the Burren of its trees, leaving it the lunar-like landscape that it is today. The tourists that flock daily to Poulnabrone nowadays show how the Stone Age extends its magnetic attraction across millennia - and a recent visit one late November evening with the iconic dolmen rising above its low-lit limestone bedding was an almost mystical experience for me.

The ringforts, mainly stone but occasionally earthen, demonstrate the continuance of human settlement in the first millennium A.D. the homes of herders and owners of cattle and sheep (Fig. 1) whose struggle with nature left little opportunity for them to write their story for posterity. The same is remarkably true of the early Church in the Burren, about which history has surprisingly little to record. Some of the saints associated with Christian sites even have a rather nebulous existence. Liam de Paor suggested that both MacCreiche, who is associated with a holy well near the medieval church of Carran, and the daughter of Baoithe, from whom Killinabov (Cill Iníne Baoithe) gets its name, may have originally been prehistoric deities, but the fact that both have no Christian names of their own would not by itself make them pagans, as a similar system of nomenclature is applied at Kilmacduagh (rather than Kilcolmán) and to St. MacDara, patron of a church in Oughtmama. We are, however, on surer Christian ground when we come to St. Patrick to whom a well in Gleninagh is dedicated, and to St. Columba or Colmcille, who has churches in Crumlin and Glencolmcille called

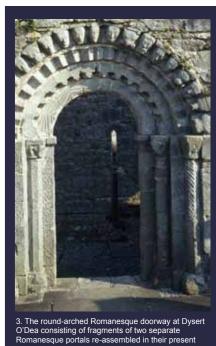


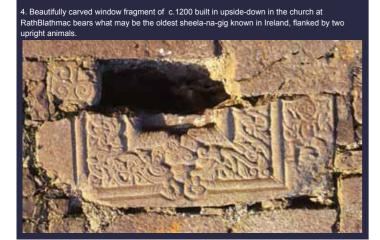
after him but, because it is nowhere mentioned that either of these two saints ever got as far as County Clare, it is most likely that their churches are just an expression of the spread of their individual cults The St. Cronán, of Teampull Chronáin near Carran, is one of a number of probably more local saints of the name, so that we cannot say anything about him, while St. Fachtnan, the founder of the church at Kilfenora, may or may not be identical with a man of the same name who founded a church in Ross Carbery in West Cork in the sixth century.



For an area so blessed with stone, it is remarkable that, for the first five centuries of Christianity in the country, the Burren has

no stone churches to show for itself. Tomás Ó Carragáin's great new book Churches in Medieval Ireland only lists the largest church at Oughtmama (Fig. 2) as being likely to date from before 1100. It is really only in the twelfth century that church building activity in stone begins to blossom in the Burren, not only in architecture but also in the sculpture that goes with it. This is commonly described as the Romanesque period,







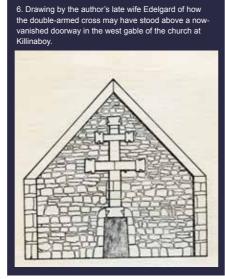
as its churches frequently use the rounded arch as employed by the Romans. The most famous example is the doorway at Dysert O'Dea near Corofin (Fig. 3) which, at a pinch (because carved of limestone), we may still include in the Burren area. There are. however, other twelfth-century buildings in the Burren and its environs which show the same style of carving as used at Dysert – partially characterised by stone heads carved with remarkably high ears - but which do not show any trace of a round-headed doorway. One example, not far from Dysert, is the church of Rath Blathmac which has a number of stones in and around the church carved in the Romanesque style (including a window-fragment bearing what may be Ireland's earliest sheela-na-gig - Fig. 4)). Another is Teampull Chronáin, much modified in the later medieval period, but with individual human heads protruding from the stone surface, and strange animal heads carved on the underside of corbels which supported external gable rafters at the corners. The combination of human head and corbel is found on one example now cemented into the ground in the churchyard of Kilvoydaun near Corofin village - called after a saint whose name also appears in association with a well at Killinaboy. The work of the sculptors' school which carved these monuments reached its zenith on the Cistercian abbey of Corcomroe, which probably dates from the early thirteenth century.

One reason for the richness of the carving, and comparable sculpture on High Crosses at Dysert O'Dea and Kilfenora, as well

as on the Tau Cross, may possibly be explained by the probability of pilgrimage to and in the Burren during the twelfth century. Though never mentioned in historical sources, such activity may fairly be deduced by looking at details of the churches and crosses of the Burren, where religious activities would have probably interlinked with age-old 'patterns' that would presumably have taken place annually at the various holy wells scattered around the region, where devotional practices may well have had their origin as far back as pagan times.

One of the magnets which would have drawn pilgrims to religious sites was the former existence there of relics of one sort or another. One of the most striking evidences for the presence of an important relic in the Burren is the presence of the large double-armed cross on the west gable of the church at Killinaboy (Fig. 5). It has been suggested that it once stood centrally above a doorway (Fig. 6), the flat lintel of which collapsed under too heavy a weight, thereby necessitating reconstruction, which put the cross back off-centre, as we see it today. In medieval times, a double-armed cross frequently housed a relic of the True Cross, and its presence writ large on the Killinaboy gable may indicate the former presence in the church of just such a relic. The original gable is likely to date to within a few decades of the year 1200, at which time such a relic would

have made Killinaboy into one of the major pilgrimage attractions in the Burren and beyond. A well near Gleninagh Castle is unusual in being dedicated to the True Cross, and could mark a place where pilgrims travelling southwards across Galway Bay may have landed on their pilgrims' route to venerate the relic of



the True Cross at Killinaboy. Immediately to the north of the church, we can see the stump of a Round Tower which, had it reached the height of 100 feet of the leaning example at Kilmacduagh less than ten miles away, would have been a very dominating landmark and beacon for anyone approaching the Burren from Ennis and the south, indicating to them where the entrance to the magic landscape lay.

To the south, a taller Round Tower survives at Dysert O'Dea, and there is some evidence to suggest that there was another example at Rath Blathmac a mile or so distant, also dating from the same time around the second half of the twelfth century - probably the only instance in Ireland where two Round Towers stood on



different sites so close to one another. There is a further tower at Drumcliff near Ennis – and County Clare has other wellpreserved examples on the islands of Inish Cealtra and Scattery in the Shannon. So, could it be, then, that the Round Towers might well indicate places where pilgrims went in twelfth century Clare? If pilgrims coming from Drumcliff and farther south, they may well

have congregated in the neighbouring (and competing?) churches and Dysert and Rath before proceeding further.

For references to material used in this article, see the author's contribution 'The churches of medieval Clare' in Matthew Lynch and Patrick Nugent (eds.), Clare History and Society, Dublin 2008, 1-26. All photos in this article are credited to Peter Harbison unless otherwise stated. This is part 1 of a series of articles by the same author, *High crosses and a T reliquary* will be in the next issue of Burren Insight.

Dr. Peter Harbison spent many of his childhood summers in Corofin, where his interest in archaeology blossomed when reading through the library of his granduncle-in-law Dr. John Macnamara. He has written many articles on Clare topics for various local journals – along with over 20 books on Irish art and archaeology. He is now Honorary Academic Editor in the Royal Irish Academy in Dublin .

Sarah Poyntz puts down her Country Diary pen

By Paul Clements

For more than 23 years Ireland's sole contribution to a much-loved nature column tucked away at the bottom of an inside page of *The Guardian* came from the Burren. The monthly dispatches to the *Country Diary* were written with knowledge and passion by Sarah Poyntz who retired as a diarist in December 2010.

Sarah lives along the coast road at Ballyconry and, in all seasons, she documented the moods of the Burren in its infinite richness. An instinctive observer, her skill was in capturing the character of individual species and describing what makes the place special for her and her friends.

Taking the reader on a journey, she walked the green roads and the seashore, studied the wildlife, checked on the flora, explored the ruins of an abbey or church, and enjoyed a friendly gossip about the weather with her neighbours. All these encounters were squeezed into a condensed and easily readable slot of 350 words. Her stealthy observations and affectionate vignettes of Burren life opened up the area for people who would otherwise not have known of it. Sarah's dairies inspired many to visit the Burren to see it for themselves. Often she received visitors from other parts of Ireland, as well as Britain and further afield, who had read her column in the hard copy of the paper, in the international edition, The Guardian Weekly, or online.

Collectively her diaries represent an engrossing snapshot of local history and lore. Written in a personable style, they spoke to somebody, somewhere in the world, and her personality shone through. Her peeps into local life and the natural curiosities coupled

with evocative word-painting gave pleasure to an avid readership. With Sarah's final column on 9th December 2010 a unique *Country Diary* voice has fallen silent. Her last diary took her on a walk through the Corker Pass between Abbey Hill and Turlough Hill, and her final words that she said aloud to herself sum up her love for the place that she adopted as her home in the mid-eighties: "*This, our Burren, is beautiful beyond compare.*"

Reflecting on her time as a diarist Sarah said writing the diaries had opened up all of the Burren for her from Mullaghmore to the coast and over to the Gort lowlands, and given her the freedom to write in the way she wanted to. "Of course there is a certain sadness about ending something that gives great pleasure, but ends as well as beginnings have to be faced. And after all, I still have my beloved Burren and its splendid people," she said.

Readers of The Guardian and Burren aficionados in particular will miss her gentle humour, her cheerful style and the literary erudition that she brought to the column. Fortunately, she has no intention of giving up writing about the landscape on her doorstep. For those who wish to dip into her past work, Sarah published an anthology *A Burren Journal* in 2000. Perhaps a 21st century collection will now be produced to capture for posterity these enigmatic diaries by the grande dame of Burren writing.

Paul Clements is the author of *Burren Country, Travels through an Irish Limestone Landscape*, a collection of essays about the Burren. He tutors creative writing workshops in Ballyvaughan each spring. More details at www.paulclementswriting.com

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- 1 Balliny
- 2 Ballyallaban
- 3 Carran
- 4 Corkscrew Hill
- 5 Craggycorradan
- 6 Crumlin
- 7 Fahee
- 8 Moyhi
- 9 Murrooghtoohy



Monuments:

- 1 An Rath / Earthen Fort
- 2 Cahercommaun Ring Fort
- 3 Cahermacnaghten Stone Fort / Law School
- 4 Cahermore Stone Fort
- 5 Corcomroe Abbey
- 6 Creevagh Wedge Tomb
- 7 Doonagore Castle
- 8 Dunguaire Castle
- 9 Dysert O'Dea Church & Cross
- 10 Eagle's Rock Fulacht Fia
- 11 Finnevarra Martello Tower
- 12 Gleninagh Castle
- 13 Kilfenora Cathedral & Cross
- 14 Killinaboy Church 15 Kilmacduagh Round Tower
- 16 Leamaneh Castle
- 17 Newtown Castle 18 Noughval Church
- 19 Oughtmama Churches
- 20 Parknabinnia Wedge Tomb
- 21 Poulnabrone Portal Tomb
- 22 St. Colman's Oratory
- 23 St. Patrick's Well
- 24 Templecronan Church



Burren Walks:

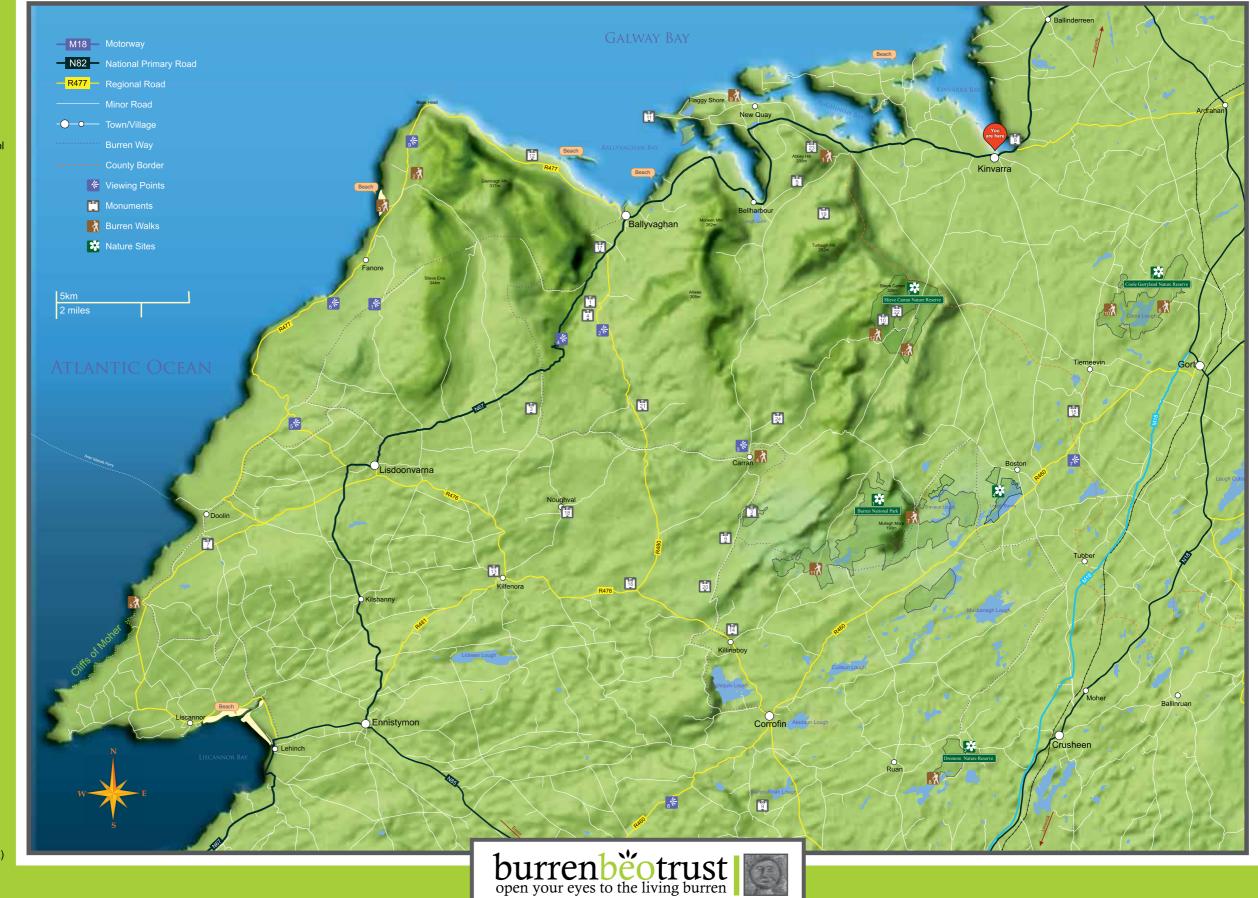
- 1 Abbey Hill
- 2 Black Head Loop
- 3 Caher Valley Loop
- 4 Carran Loop
- 5 Cliffs of Moher
- 6 Coole Park Woodland
- 7 Cooloorta
- 8 Dromore Wood Loop
- 9 Flaggy Shore
- 10 Garryland Woods
- 11 Gortlecka Cross
- 12 Slieve Carran Nature Reserve



Nature Sites:

- 1 Burren National Park
- 2 Coole Garryland Nature Reserve
- 3 Dromore Nature Reserve
- 4 Lough Bunny (Part of Burren National Park)
- 5 Slieve Carran Nature Reserve

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WALKING ACROSS THE TABERNACLE OF STONE

By Tony Kirby

I live on the "cold stone" (shale) as the locals call it. However, my living as a walking guide is eked out on the warm limestone of the Burren. As I gaze to the east through our kitchen window, I can see the famous limestone in the dramatically buckled hill of Mullaghmore in the Burren National Park. The window not only frames my livelihood but also my own favourite walk in the Burren. When taking on Mullaghmore, we tend to leave one car at the end point of the walk at Gortlecka Cross and proceed in the other car to the start point at Cooloorta.

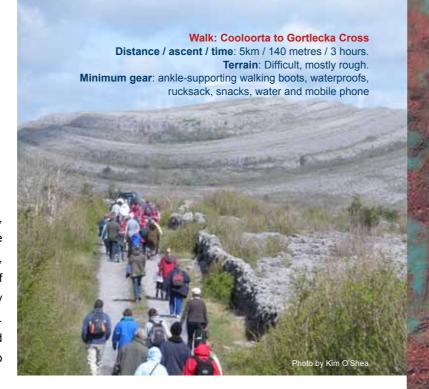
Go through the stile here and step out along a famine relief road built of chipped stones by starving people. This was one of the many useless infrastructural projects that the authorities undertook in their abject response to the Great Hunger of the 1840s. Walk along this road for 1 kilometre until you are level on your right hand side with a very distinctive island of green land hemmed in on all sides by the bare rock.

Leave the famine road at this point and head in the direction of the green land which is, in fact, a drumlin – a glacial formation of what is unusually thick soil for the Burren. The drumlin is home to a wide gamut of wildflower species in spring. In winter its nutritious grasses are much appreciated by out-wintering livestock. The slopes of Sliabh Rua, a sister hill of Mullaghmore, lie beyond the drumlin

On crossing the drumlin you should begin to pick out the arrows of the way-marked trail known as the red route. This is just one of several excellent National Parks and Wildlife Service trails in the Burren National Park which are becoming steadily more popular with walkers.

The trail begins to hug a long drystone wall along the slopes of Sliabh Rua. You are now trekking south west towards Mullaghmore. As you progress, look east to the lakelands of the south eastern corner of the Burren and to the hills of east Clare and east Galway. If visibility is fair enough, you should readily see one of Europe's largest terrestrial wind farms on Slieve Aughty (Galway) and the RTE transmitter on Maghera (Clare).

The summit of Mullaghmore in turn offers its own dramatic vistas. The highlight for me is the view of the Atlantic Ocean to the south



at its confluence with the broad, majestic Shannon. The chimney stacks of the coal burning station of Moneypoint are the landmark for this vista. The summit is also an ideal spot for a snack and a moment's homage to our ancestral pastoralists who are interred under a big jumble of loose stones – a Stone Age/Bronze Age cairn. Should you have the use of just one car you can now retrace your steps to your starting point. Otherwise you can start your descent of Mullaghmore all the time tracking the red route. The target is the roadway just beyond the large turlough (Lough Gealáin) below you. As you descend the slopes of Mullaghmore, you may spot a herd of feral goats. The goat numbers vary wildly in the absence of a management plan for them. However, it is safe to say that Ireland's largest goat population is concentrated in the Burren. The billy goats in particular are a true spectacle. You may also have the good luck to see the fox, the badger or the stoat. The pine marten remains elusive or at least he remains very good at eluding me!

The Lough Gealáin margins are of outstanding interest for wildflowers. If you are walking here in spring, keep an eye out for such gems as the turlough violet *Viola persicifolia*, shrubby cinquefoil *Potentilla fruticosa* and an array of orchids.

When you reach the road, turn right and walk the final kilometre to Gortlecka Cross. On your way be sure to look across the turlough to Mullaghmore and recall the words of the late philosopher John O'Donoghue – *Mullaghmore* is like a tabernacle of stone. *Once glimpsed it can never be forgotten*. Amen.

www.heartofburrenwalks.com

Tony Kirby is a walking tourism operator in the Burren and the author of *The Burren and the Aran Islands A Walking Guide*.

Mapping the Burren

By Christine Grant, Olive Carey & Clare Heningar

Mapping the Burrren is a new archaeology project set up in 2010, designed as a pilot to assess the effectiveness of using high resolution satellite imagery to undertake broad scale mapping of archaeological remains on Burren. It follows on from two previous projects, both funded through the Heritage Council:

- an investigation into the effect of scrub regeneration on archaeology and the habitats of the Burren in 2006;
- a collaborative project based in NUIG looking at landscape and settlement in 2008.

It was clear from both studies that there are a large number of unrecorded monuments on the Burren. To understand and conserve the archaeology of the Burren we need to have a full survey of its archaeological remains.

The first phase looks at the archaeology of the North-East Burren, the area being bounded by Aillwee Hill to the west, Turlough Hill to the north, Turloughmore Mountain to the east, and the Carron depression to the south. The project was funded by the Heritage Council with additional logistical support provided by the School of Archaeology in NUIG.

Three study areas were chosen for the pilot project, Aillwee Hill, Rannagh West and Termon \ Gortaclare. All recognisable manmade features were mapped creating a comprehensive record of the archaeological and more recent cultural remains. Remote mapping (or sensing), is not a new concept but has not been used extensively for archaeological purposes in Ireland; it has significant benefits. It allows you to create a map before even you go into field. Once in the field you can classify what you have mapped.

This project was designed to test and develop a model for best practice that would accommodate a full survey in a way that is efficient in terms of time and costs. The project has successfully shown that this methodology is more efficient than standard survey methods and has important implications for the viability of conducting a full survey of the Burren. The results have been very rewarding.

A large number of features have been recorded in all three areas, particularly field boundaries, dating from both the prehistoric and historic periods as well as modern cultural features such as booley houses and turf thuiles. The recorded prehistoric archaeology

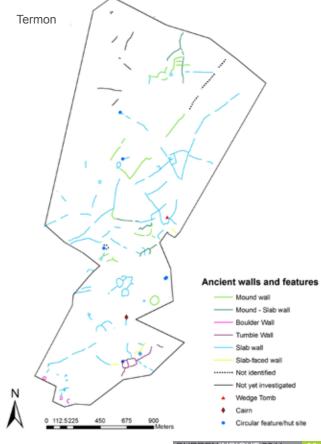
of the area includes the significant archaeological complex on Turlough Hill (Bergh 2008). A number of wedge tombs are also located within the study area; these, along with cairns, are among the most numerous of the prehistoric monuments on the Burren. Indeed the Burren has the most important concentration of wedge tombs in Ireland. An important group of cairns also occur in the study area.

There is a clear need for deepening our understanding of the contemporary landscape within which these monuments were constructed. Through this project it has been possible to begin to recognise the limits of prehistoric settlement features in some areas. This will allow us to develop a better understanding of the how people farmed and travelled within the landscape during the prehistoric period.

Also of interest is the extent of the later slab wall field systems which have yet to be studied in detail by archaeologists. The survey also took note of the variety of styles of wall building in the more modern field walls, with a variety of wall types that have not been described and studied hitherto. The survey will provide a large amount of data that will be of benefit to future studies.

Thanks are due to the various landowners who kindly gave their permission to survey on their farms.

You can keep track of the results of the project on the dedicated website www.mappingtheburren.com



Satellite image of T

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Roche Family members, Rinnamona Lake, Co Clare Source for all images - RRG 2008 (Rinnamona Research Group).

Letters from an Archive

By Anne Byrne

'Christmas Day 1933. The postman came with the post and he was given a glass of stout and offered tea which he refused. He told who had gotten letters from America, All the time that I have been here anyone who came in was given wine, whiskey or port depending on their age or status and we had it on several occasions.'
(Extract Diary of Solon Kimball Rinnamona, Co Clare)

Two slim brown folders, frayed with age lie on my desk. Bundles of correspondences on thin, yellowing, brittle sheets of paper of various sizes, neatly labelled and categorised, lie inside. Carefully arranged in alphabetical order by sender, some letters are type-written on headed note paper, letter characters paler here, darker there, reflecting the uneven spread of ink on typewriter ribbon or the varying force of finger striking typewriter keys. The day, month and year are noted, the address of the recipient placed on the top, left hand corner of the page, followed by a singular *Dear Sir*. The content is closely crowded onto the page, utilising all available space, signed off with the flourish of a handwritten signature, bold in blue ink. Handwritten letters in pencil on pages torn from school copy books have their places in the archive too, carefully numbered page by page.

Some bundles of letters are substantial, indicating regular exchanges of correspondence, perhaps maintaining old or building new relationships. Others are once-off invitations to attend events or a kind acknowledgement for books received from secretaries of learned societies and State bodies. The personality and character of the writer is suggested by the quality and shape of the paper, the colour of the ink, the size and form of the handwriting, the forceful expression of ideas, the colloquial use of language, the formality of tone, the regretful refusal, the polite inquiry, the gossip conveyed, the rude interjection, the news of the day. The immediacy of the voices and the urgency of the content is as compelling as the materiality of the physical presence of the letters. As pencil gives way to ink or blue colour to red, I muse that longer letters may have taken a number of days to complete. the author interrupted. distracted by the pressing mundane. Preserved for over eighty years, these fragile letters were intended by social anthropologists Conrad Arensberg and Solon Kimball to be kept and read at some future time, perhaps by themselves or by an unknown person. The anthropologists were part of the Harvard-Irish Survey research team (1930-1936) who came to Ireland in the early years of the twentieth century to conduct an archaeological and anthropological study of a 'modern society'. The published works of the Survey shaped the evolution of Irish archaeology and social anthropology. While the physical anthropology publications receive less attention, *Family and Community in Ireland* (1940, 1968, 2001) by Conrad Arensberg and Solon Kimball is a controversial, classical, frequently cited ethnographic study of Irish rural family and community life based in Clare emphasising the importantce of reciprocal relations of neighbours and kin for the continuity of the farm family, economy and community.

Professional Letters

The letters of the Harvard-Irish Survey archive reveal that the bulk of the correspondence pertains to the professional and organisational aspects of initiating, managing and maintaining a large research expedition abroad over a long period. As such the letter is an important medium of professional exchange and ongoing contact. These include letters between the main architects of the Survey, Earnest Hooton and William Lloyd Warner as they seek funding from sponsors, clarify the rationale of the Survey, involve other significant academic and influential players and plan comprehensive media campaigns in the US and Ireland. The aim of the latter is to broadcast the intention to undertake 'a scientific study of a modern nation' while preparing the local people to accept, for the long duration, groups of American anthropologists and archaeologists living and working in their midst.¹

Much of the correspondence between Arensberg and Kimball moves between the US and Ireland as they negotiate their contacts with the Irish town and country people, preparing the way for each other as one arrives or the other leaves. They exchange observations, ideas, anlaytical schema and plans for lectures and publications. These intellectual exchanges are mediated by the slow passage of the time taken to write, send, read, respond and dispatch the letters across the ocean. In the 1930s the material conditions of the postal system were such that, borne by ship, it took two weeks for a letter to travel from the east coast of the US to the west coast of Ireland. Their letter relationship is affectionate and considerate. They pay careful attention to each other's thoughts and ideas, taking time to work out an understanding of Irish culture and communities. Though their letters always contain gossip, inquiries about the wellbeing of family and adventures of friends in the US, the bulk of the content is a dialogue about Ireland.

Why did the American researchers settle in Clare? Clare was much

1 Extract from a letter by Eamon de Valera, leader of Fianna Fáil, the party that came to power in 1932. His motivation for supporting a 'scientific' study was mirrored in the extensive efforts deployed by the Irish State to create a national culture and a distinctive Irish identity. The revival of the Irish language and Gaelic games, for example, were part of that project.

visited by Irish and European scholars; the place where writers and artists came in search of inspiration and authenticity might also extend a welcome to anthropologists from the next parish – America. The Irish Folklore Commission worked in Clare and Séamus Ó Duilearga provided an extensive range of contacts for Arensberg and Kimball, writing directly to people in Clare with requests either to provide accommodation or to put the anthropologists in touch with people who were knowledgable about local customs, mores and folkways. The Americans may have been influenced by Eamon de Valera, head of the Irish Free State government and whose party, Fianna Fáil, dominated Clare politics and from whom they secured a letter of approval for the venture. In a letter to Hooton, Warnetr notes 'I got the letter I wanted from de Valera signed on offical stationary and I have used it in the proper guarters and kept it out of sight in other places.' His cautionary deployment of this letter of access was necessary given the fractious, volatile political context of a society in the aftermath of the War of Independence (1919-1921) and post-Civil War (1922-1923). Eventually both Arensberg and Kimball lived with farm families in Lough, Rinnamona and Inagh interspersed with time spent in the Queens' Hotel in Ennis and other hostelries in west Clare.

Personal Letters

Letters of introduction are also a feature of the private correspondence. Arensberg's family background is one of industrial wealth and property ownership and the resultant network of familial connections were made available to him in Europe. A letter of introduction to author, physician and prominent member of the Irish literary revival movement. Oliver St John Gogarty, for example is in the archive. The private and personal letters home to parents, family, loved ones and friends reveal the displacement keenly felt as the young Arensberg resigned himself to a long, cold winter in Clare, aware of the intellectual, physical and emotional challenges of coming to know and understand a culture both similar and strange. The anticipation of letters from home bring some comfort to Arensberg as he writes to his sweetheart. 'It is just a month since I set sail and since we had that glorious day together in New York and yet it seems a terrible age... I don't go into Clare (Ennis) for another week, so I don't know what has happened to anyone, not having had a single letter of any sort. They are piling up in Ennis, at least I hope so, for I want to have a regular feast when I arrive there a week from now and read them all'.

His observations on the comparative emptiness of the countryside, the bleakness of the vernacular architecture and modest dietary fare are shared in correspondence with his family. Arensberg travelled by bicycle from Limerick to Connemara stopping in Kinvara and Galway described in a long letter to his mother. 'I spent a day reading Vanity Fair in Limerick and then set out on my bike alone into County Clare (where we are going to start work in time). At times the low riverside country was pretty...after Ennis you

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Margaret Roche Rinnamona, Co Clare Attached photo of Martin Sullivan.





Anthropologist (1910-1997)

Anthropologist (1909-1982)

begin to go up again into the rolling brownish green countryside, criss-crossed with stone walls, and sparsely besprinkled with cottages, and then beyond a stinking little town called Gort; I turned seaward again and at a place called Kinvara I came to the seaside of the west... I rose on Sunday (the next day) good and stiff, and lolled about the tiny country Hotel in Kinvara till about 12 o'clock, watching the entire population go and come from mass – and ate my usual Irish breakfast. Irish country people, it seems, have only one meat-meal a day, dinner about two o'clock, and in the morning and in the evening eat their 'tea', with bacon and eggs if they are hungry. I suppose most of them haven't even the one meat meal, but the benighted foreigner gets it willy-nilly, and for his other meals perforce follows Irish custom. Worse food and worse cooking I don't remember, and as for varying the menu from beef and potatoes it is unheard of.' But despite the diet he is impressed both by the welcome he received from country people and the importance of conversation to daily life. 'Ireland's people are remarkably pleasant to talk and to chat with - they have little other communal life than that of conversation'.

Research Letters

Examining another bundle of corrrespondences, the unexpected unfolds. A series of letters from farmers, a shopkeeper, a town clerk, a solictor, banker, a clergyman and a labour movement offical are carefully filed, each set of corrspondence marked with the author's name. These letters contain detailed descriptions of small town and country life, conditions of labour and relations of power but crucially from the point of view of those who lived there. A small farmer, writing in reply to a request from Kimball in 1936, explains credit relations between shopkeepers and farmers from his own experience. 'You asked me what is meant by gombeenism. Well I will tell you. Supposing you know you know the most of the shopkeepers in Ennis. I will give you myself for instance...I could be dealing there for years their was a bill of five pounds in me there. I used pay two pounds raise couple of bags the bill was up again to five another day I would pay the five. I wanted stuff they would Dr Anne Byrne is a sociologist with the School of Political Science and give stuff that would raise the bill again and so on I was never clear. They wanted me to leave them my whole years produce and to find it out I would have an attorney letter before a week when more information contact anne.byrne@nuigalway.ie

I did not leave the money to themselves they are all right going robbers so the finish up of all of them is to go to the bad and to the devil because they are not being honest so that is gombeenism.' His letter details his customary obligation to the credit system and the consequences in law should he default on his debts. He vividly communicates his indignation for shopkeepers charging higher rates to debtors, who are obliged to continue to trade with them – precisely because of the obligation of their debts. Another letter reveals the perspective of the shopkeeper who describes the apprenticeship system, the employment of shop assistants, marrying into a shop, and rituals associated with 'walking the shop', descriptions of the lives of single women as shopkeepers, shopkeeper-customer etiquette and the economic and familial relationships between town and country people. He explains why shopkeepers prefer to recruit country lads as apprentices. 'Some employers will not take a Towns boy - reason; being polished up and cultured a bit, the country lad gets preference, (1) he can be more easily bent to the employers will, in doing many small jobs outside of his new calling (2) it is expected that people will give their trade where the boy is employed and also his folk will canvas their friends to support the House. In other words its better business to get in the country lad'. Based on their own experiences and observations, these letter writers provide insider information and local examples of ongoing communal relations from a distinctive and personal point of view. Perhaps this was the first time small farmers and shopkeepers had been requested to observe the lives around them from an anthropological perspective and as such they and the other letters from insiders represent a rich resource for continuing scholarship on the archives of the Harvard-Irish Mission to Clare. In the time in which the research was carried out trusted contact with local people was crucial for providing the insider's perspective on cultural, political and economic relations. But little trace is usually left of local voices perspectives and practices. These letters fill that gap to some extent.

Sociology in NUI, Galway with teaching and research interests in stories, gender issues and rural lives, past and present. Research on the Harvard why not when I was not clear. If I went to town for a half sack of Irish Mission (1930-36) was funded by the Irish Research Council for the flour and got it at a shilling cheaper at any other house and they Humanities and Social Sciences Senior Research Fellow progreamme. For



Pol an Ionáin

by Brian Mooney

I suppose you could call their longing an immortality of sorts. And how long was it since a soughing of wind has last sharded the, 'Thing's,' mute reflection in the water. I was thinking

these thoughts to myself when the little girl, Pilar, cried, 'It's a Goddess.' Euridice, I thought, pining for Opheus to conjure up Dreamworlds out of the cave's steep shafts and shadowy, dim-lit flues.

Then, suddenly, there it was. all light and darkness, hanging, a gigantic chrysalis, death and life, inseparably coiled. the Great Stalactite.

Mankind bound. Enough that death was no snake's pelt to be sloughed off like a perished skin. But then there were the godsman's mainly deadlier than any spitting asp's venom At first, there seemed no reason to doubt them. After all. hadn't they dealt with Demeter? And what was Orpheus' truculence to the guile and gall of Prometheus?

For her part she would always remember his hurt look as, striding out into the light, he turned back to find her, still enveloped in darkness, and ceased strumming his lute.

How would it all end, I wondered, when the chrysalis finally sundered? Could Orpheus mutate into his own music? Or would the Goddess, Euridice, just flounder then drown in her own dream.

Poet Brian Mooney wrote this when he visited Pol an Ionáin - otherwise known as Doolin Cave. As part of the group that descended into the cave, there was a young Argentinian called Pilar (who was approximately 8 years old) who on seeing the 27ft statactite hanging from the roof and its even more memorable reflection in a well-lit pool beneath, exclaimed 'It's a Goddess'. This reminded the poet of the Orpheus/Euridice myth from Greek mythology: the Greeks way of confronting the impasse of death. For some reason the sight of the stalactite seemed to project one back to the time when that myth was created to try and come to terms with the mystery: the predicament of man before Christ took death on and defeated it. Hence the poem.

> Photo by Doolin Cave. BURRENINSIGHT 2011 37

Cuimhneamh an Chláir



Agricultural activities as seen here feature prominently in recordings conducted by Cuimhneamh an Chláir.

By Tomás Mac Conmara

In November 2010, Paddy Gleeson from O'Callaghan's Mills in east Clare died at the age of 106. He was Ireland's oldest man. The passing of such an old man sparked a sense of interest in the past and our local history, represented by national broadcast media coverage. It also created an enhanced awareness of the loss represented by the passing of our elders. I had the privilege of recording Paddy Gleeson on many occasions since 2004 when he was ninety-nine years old. Others too, gravitated towards Paddy to document his considerable memories over his final years. However, as illustrated below, there are many people across County Clare, who, only a few short years shy of Paddy's considerable age, are capable of evoking the same sense of the past and can offer an insight into a time and place that is sometimes unrecognisable in contemporary society. As a society, we are witnessing the disappearance of an older way of life, and it is our duty to make every effort to collect and preserve what facets remain.

Our elders in Clare provide a unique insight into our history. In fact, they offer the last opportunity for this insight to be backed up by the force of personal testimony. They are the 'children of the revolution', being the first generation to grow up following independence in the twenty-six counties. They have lived through Economic Wars, World Wars and numerous recessions. They were there when the country was first illuminated by electric light and saw the earliest aeroplanes cross the sky. They knew people who witnessed the famine, had parents who marched with Parnell, and who knew Biddy Early personally. They are natural storytellers, whose formative years were immersed in a vibrant oral tradition. They lived most of their lives in a time when entertainment was inextricably connected to the centuries old art of conversation, story telling, music and song. Yet, for all their experience and wisdom, they remain largely silent. In an era, where much of society has become characterised by materialism and the need for profit, the time is surely ripe to now invoke that aspect of our tradition that is so much a part of our identity.

Cuimhneamh an Chláir was formed by a group of volunteers in February 2009. It is an independent and voluntary group that records, documents, archives and shares the memories, experiences, customs, traditions and practices that characterise County Clare. The initiative aims to document through digital recordings, the memories of Clare's remaining elderly population.

Since, the establishment of Cuimhneamh an Chláir, over one hundred and twenty five of Clare's oldest citizens have been digitally recorded by our entirely voluntary group. At the time of writing, ten of those recorded have passed to their eternal reward. Fifty-three of those recorded are over the age of ninety with nine over the age of one-hundred. With each recording, the value of our work is reinforced by the realisation that once lost, no contrivance on earth can bring these unique memories back.

Going back on Cuairt!

Cuimhneamh an Chláir has decided to refer to volunteer recorders as 'Cuairteoirí', as a conscious reference to the traditional practice of social visiting, which was known as going on cuairt. In the past, going on cuairt involved visiting houses in the locality where stories would be told, and often poems recited, songs sung and music played. This practice ensured the survival of Ireland's ancient lore and tradition along with the creation and remembrance of local histories and traditions. As implied in the name of our group, we aim to record both folklore and oral history. Although distinct, the thread that runs through both, and that which we ultimately seek, is memory.

As a countywide project, it is hoped that our movement will have considerable benefit to the intellectual and cultural life of the people of Clare. It will benefit intergenerational community development, reminiscence therapy, enhanced cultural awareness and engagement as well as bequeathing a rich resource of folklore and oral history for future generations. Fundamentally, it will afford the opportunity and encourage realignment towards our rich cultural inheritance. A Guide for Oral History in the Native American Community states, in relation to a project conducted around the Suquamish people in the North-western United States, that the benefits are "not only a successful project of documentation, but also one of cultural renewal".

In a place like the Burren, where much of the consciousness is influenced by that unique natural landscape, another unique set of memories exist. Cuimhneamh an Chláir intend to contribute towards the documentation of these over the coming years.

Tomás Mac Conmara is the Project Coordinator of Cuimhneamh an Chláir. For more information visit www.clarememories.ie or contact the group by emailing clarememories@eircom.net or at 087 9160373.



Building the Burren's Economy from the inside out:

Ardrahan Diaspora Project

By Rory O'Shaughnessy

2011 unfortunately looks set to see an upsurge in the number of people emigrating from the Burren Region. The sad scenes we thought we would never endure again of another young generation packing bags and taking to the skies in search of work and opportunity elsewhere have returned. Emigration and the Irish abroad is a subject which will receive renewed attention in the next few years and is the basis of an exciting new pilot project taking place in some of the parishes on the Galway side of the Burren.

The community of Ardrahan, with 29 other parishes, is to partake in the South East Galway Diaspora Project a pilot of the Ireland Reaching Out (IRO) concept. The concept, which was the brainchild of Galway technology entrepreneur Mike Feerick, was developed in the wake of the 2009 Economic Forum at Farmleigh. This innovative project was launched in November by economist David McWilliams and hopes to reconnect parish communities with those who have left the area, and their descendants.

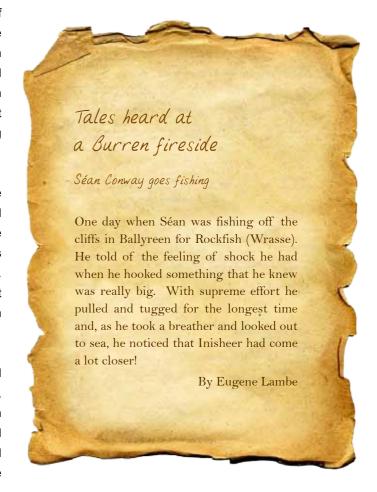
The concept is simple; instead of waiting for Irish-Americans and their global counterparts to come to Ireland to trace their roots, community groups at a townland, village or parish level will search for them. Those who left, and their descendants, are identified and traced worldwide and invited to become part of an extended "virtual" community online. By doing so major new networks are

established which could have huge social, cultural and economic benefits on a local and national level. Every parish will have its own Ireland Reaching Out website which will have information about the parish and its diaspora. To initiate what can become a lifelong relationship each parish, once it has identified its living descendants, will extend an invitation to a "Week of Welcomes" to be held in June 2011 with the objective of attracting approx. 25-30 people back in the programme's first year.

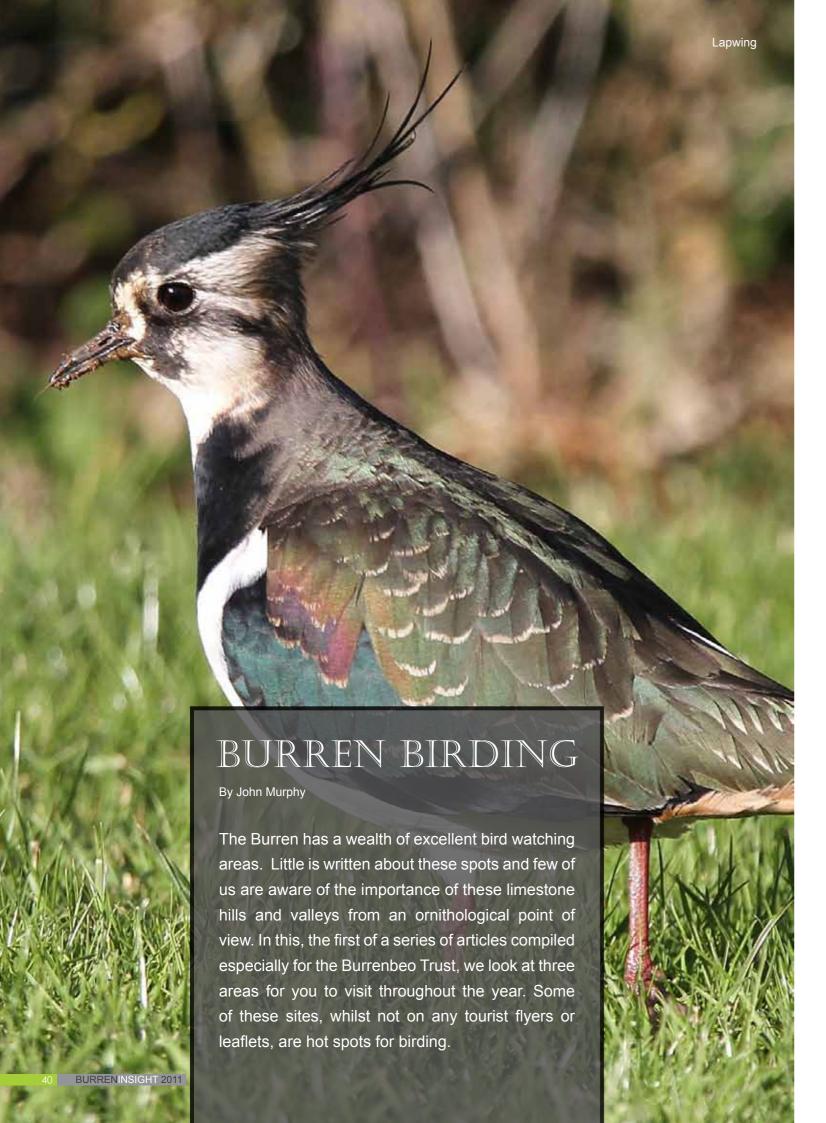
The first stage of the project is to identify all those who have left in living memory; this is being done at present through a parish survey of all the longer established families in the area. The next stage will search records, such as the 1901 and 1910 censuses, much of which is now available online. The goal of the pilot project is to identify 44,000 diaspora members equal to the population of the South East Galway region.

The whole project, although still in its infancy, has received hugely positive acclaim both locally and nationally and is to be launched in the US by President Barack Obama and the Taoiseach in the White House on St. Patrick's day. 2011 looks set to be an exciting year in South Galway.

Rory O'Shaughnessy is the team leader of the Ardrahan Diaspora Project. He is also a heritage enthusiast and a stone mason by trade. For more information on the project, contact Rory on 087 4065646 or email rory oshaughnessy@eircom.net



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Bell Harbour

Bell Harbour is a small village on the main road (N67), half way between Ballyvaughan and Kinvara. This inlet is well worth visiting, especially from September through to early April. On low tide the mudflats feed a multitude of ducks and wading birds. Waders including Redshank, Greenshank, Curlew, Oystercatcher, Snipe, Dunlin and Turnstone can all be seen probing the mudflats in winter. They are joined by the large goose-sized Shelduck, smaller ducks such as Mallard, Wigeon and Teal. Every winter a rare visitor hangs out with our Teal - its American cousin, the Green-winged Teal has been coming here for over six years.



Little Grebes can also be found on the main river channel at the mouth of the Bay, while Grey Herons stalk the tide line. The electricblue Kingfisher is often found sitting on the pier edge. Gulls come here to roost and wash, including Black-headed Gulls, Common and in the past, the scarce North American Ring-billed Gull has been located at Bell Harbour on many occasions.

Mullaghmore & Knockaunroe

During the summer months the air is filled with the calls of summer migrants that have returned from Africa to breed in the scrub. Willow Warblers sing from perches throughout the fringes of the limestone pavement; they are joined in song by Common Whitethroat, Blackcap, Chiffchaff and, occurring here in exceptional density, Cuckoos.

This region of the Burren is home to a dwindling population of the Yellowhammer. They cling on in the eastern Burren; Mullaghmore is the centre and stronghold. In summer, up to six or seven pairs breed in and around the immediate vicinity of the National Park. A visit here at anytime of the year might reward you with a sighting of this brightly coloured yellow bunting.

The fringes of Knockaunroe Turlough support breeding waders including the Common Sandpiper, Redshank, Ringed Plover and Lapwing. In the middle of the turlough, Common Gulls nest on lone

rocky islands. In recent years Little Egrets are present throughout summer and winter and have begun to nest not far from here.

Corrantoo

Corranroo Bay on the landward side of Aughinish Bay, on the boarder of Clare and Galway, is full of surprises. This inlet is exceptionally good for wildfowl in winter and holds a mixed breeding colony of terns and Black-headed Gulls in summer. There are many smaller approach roads into the bay from which you can view birds feeding around the shoreline.

In winter birds commonly seen feeding along the shore here are Wigeon, Teal, Little Grebe, Mallard, Brent Geese, Snipe, Redshank, Greenshank, Oystercatcher, Dunlin, Curlew, Lapwing and Bartailed Godwits. Red-breasted Mergansers, Cormorants and Shags can be observed diving for fish with the occasional Great Northern Diver or Black Guillemot drifting in on the tide from Galway Bay.

In summer Sandwich Terns nest on a small island south of Rineen Castle, Doorus. If you take the road down to the castle there is an old weir from which one can observe terns returning from hunting sprees on their way to the island colony with bills full of Sand Eels for their hungry chicks. Common and Arctic Terns also breed on this island in small numbers. Rareties found here in the past include Gull-billed Tern, Mediterranean Gull and Roseate Terns. Regularly seen chasing gulls and terns in this area are Peregrine Falcons. Also - keep an eye out for Otter along the shore.



John Murphy is the founder and chairperson of Birdwatch Ireland Clare Branch. He is also the founder and director of Waxwing Wildlife Productions, who have just completed their 2nd six-part wildlife documentary series for TG4. The first series was about invasive and new wildlife in Ireland. The latest series is about wildlife species that have been lost in the country. All photos in this article are by John Murphy. For more information go to www.clarebirdwatching.com or www.waxwingfilms.ie

Dr. Sinéad Biggane takes us through some of the bats that exist in the Burren. County Clare's largest Lesser Horseshoe bat hibernation site. Photo by Sinéad Biggane.

Nine species of bat are known to occur in Ireland and all of All Irish bats feed on insects and are faced with the problem of them are found in County Clare: Soprano pipistrelle (Pipistrellus surviving the winter when the number of flying insects is greatly pygmaeus), Common pipistrelle (Pipistrellus pipistrellus), reduced. In late autumn, when food is scarce and temperatures Nathusius' pipistrelle (Pipistrellus nathusii), Daubenton's bat begin to fall, bats become torpid during the day. Their core body (Myotis daubentonii), Natterer's bat (Myotis nattererii), Whiskered temperature drops, breathing and heart rate slow and oxygen bat (Myotis mystacinus), Brown Long-eared bat (Plecotus auritus), supply to the tissues is reduced. The most important organs Leisler's bat (Nyctalus leisleri), and Lesser Horseshoe bat such as the brain and heart receive a reduced blood supply. At Rhinolophus hipposideros). A tenth bat species, the Brandt's bat this stage in autumn bats will still arouse and feed each night. As (Myotis brandtii), was discovered in Ireland in 2003. This species winter progresses and temperatures drop even further, bats enter is very similar to the Whiskered bat and it may be possible that the a sustained period of deep torpor or hibernation. In deep torpor two have been confused in the past. It has been found in a number small fat stores go a long way. By using just a few milligrams of of locations around the country but its status as an Irish bat species fat each day, a well-fed bat may have the potential to hibernate for is still questionable.

give birth to just one pup every second year, so any disturbance beneficial to do so. to a maternity roost could take years to recover or wipe out the entire colony. In winter their requirements change as they hibernate Hibernation depends on choosing the right site. All species mines and hollow trees.

over a year. Even under ideal conditions bats arouse occasionally and will forage in winter if temperatures are mild enough for insects The site where a bat lives is called a roost. Bats will use various to fly. It is not uncommon to see bats foraging at dusk on a mild different roosts throughout the year depending on different evening in deepest winter. It may take up to an hour for a bat to environmental factors. In summer, female bats need warmth and be fully active and, once the arousal process is started, it is often gather in large numbers in sites called maternity roosts to give birth irreversible. Frequent arousal uses up a lot of energy, equivalent to and raise their young. Depending on the species, maternity roosts as many as ten days hibernation, and thus reduces the length of vary from domestic dwellings to derelict cottages to trees. Maternity time that they can hibernate without feeding. Left undisturbed, bats roosts are extremely important and must not be disturbed; bats will only arouse out of torpor when conditions are optimum and it is

and need a roost with a cooler, constant temperature and so often need a cool, humid and stable microclimate. Lesser horseshoe move into underground sites such as caves, cellars, ice-houses, bats, Myotis species (i.e. Daubenton's bats, Natterer's bats and Whiskered bats) and Brown Long-eared bats use underground

hibernation can take place for a sustained period of time. Lesser largest and most important in Europe. horseshoe bats are the only Irish species without the ability to crawl and therefore have to hang freely upside down by their feet making While the majority of bat hibernation sites are on record there may them immediately visible in a cave and very prone to disturbance. caves and are a lot more difficult to see.

"One particular cellar in Clare had over 668 hibernating lesser horseshoes bats last winter making it the largest and most important in Europe."

All Irish bat species are protected under the Irish Wildlife Act receive any new records of bat caves. (1976 & amended 2000). In addition Lesser horseshoe bats are an Annex II species under the E.U. Habitats Directive. This means Dr Sinéad Biggane is Conservation Ranger for North-East Clare with the Rangers during spells of extreme cold weather. Each year over clarebatgroup.webs.com. They can be contacted at 2,500 Lesser Horseshoe bats are counted in these sites giving an clarebatgroup@gmail.com

sites such as caves in which to hibernate. The temperature in a insight into the County's current population. One particular cellar in cave is buffered against the extreme fluctuations that may occur Clare had over 668 hibernating lesser horseshoes bats last winter outside. This enables bats to maintain a constant temperature thus making it the largest hibernation site in Ireland and one of the

Natterer's bats hibernating in limestone crevice. Photo by Tina Aughney

still be smaller caves around County Clare as yet unknown. If bats Other bat species will be hidden away in rock crevices within the are discovered during recreational use of caves it is important that they remain as undisturbed as possible. Bats should not be touched or removed from their hibernating area. Torches should not be shone on the bats for prolonged periods as this will warm the air surrounding them causing them to wake up thus using up largest hibernation site in Ireland and one of the valuable fat reserves. The cave should be vacated as soon as possible. More information on bat hibernation sites can be obtained from your local NPWS Conservation Ranger who are also happy to

that summer and winter sites with large numbers of these bats can National Parks and Wildlife Service. Sinéad has been studying the ecology be designated Special Areas of Conservation (SACs). Some of the of bats since 1998 and her Doctoral research was completed at the National most important caves and cellars are grilled and padlocked to limit University of Ireland Galway on the ecology of the Lesser Horseshoe bat human entry while still allowing bats to fly in unrestricted. In County Clare. She has been a committee member of Bat Conservation Clare there are many hibernation sites designated as SACs for the Ireland (BCI) since its inception in 2004. Sinéad is also one of the founding protection of lesser horseshoe bats. These sites are monitored members of the Clare Bat Group which holds regular bat walks and talks regularly by the National Parks and Wildlife Service Conservation throughout the county in summer. Details are posted on their website www.

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Bees are the most important pollinator of crops and native plant species in Ireland. They are a key component of our wildlife and one of the busiest, least appreciated work forces we have. If people were to take over the job of pollination from bees it would probably require a workforce larger than the entire Irish population! In Ireland crops such as apples, strawberries, raspberries, tomatoes, carrots and onions are reliant on bees for pollination; and without bees many of our native plant species would quickly go extinct because they wouldn't be able to produce any seeds

It might surprise you to know that most bees don't produce honey. In Ireland, only the honeybee does, and it's just one small component of our bee fauna. We also have 20 species of bumblebee and 80 species of solitary bees, adding up to a total of 101 native Irish species.

Like honeybees, bumblebees are highly social insects. They live in colonies consisting of a queen, many female workers and some males. Unlike honeybees whose colonies last year-round, queen bumblebees hibernate over-winter and emerge in spring, make a nest, often in an abandoned mouse nest, and lay eggs in it. Fertilized eggs become female worker bees, whose job it is to raise the young and look after the colony. Unfertilized eggs become males who, without a thought to helping out with housework/childcare, instead head out and search for another queen with which to mate. In actual fact, the poor bumblebee males are forcibly driven out and have to live off nectar and pollen and spend the night on flowers or in holes! Towards the end of the season (late summer) fertilized eggs will become new queens instead of workers. Except for the new queens who go into hibernation until the following spring, the whole colony dies as winter approaches.

Bumblebee species are identified by the colour pattern on their thorax and

abdomen. We commonly think of black and yellow stripes but there are many other colour patterns to watch out for. The Red-Tailed Bumblebee *Bombus lapidarius* is entirely jet black with a red tail, and the Large Carder Bee *B. muscorum* gets the prize for best looking bumblebee with a ginger thorax and pure blond abdomen.

Although most people don't know they exist, the vast majority of bee species in Ireland are solitary rather than social bees. When a male and female solitary bee have mated and prepared a nest for their eggs, they die off leaving the eggs to overwinter, and the young to emerge the following year and fend for themselves. Solitary bees look very different from bumblebees. Some species are small and black like ants with wings, while others have black and yellow striped bodies like wasps. Solitary species nest in various different ways. Leafcutter solitary bees cut circular pieces out of leaves with their teeth and carry them back to line their nests, often in hollowed out twigs or bamboo canes. Mining solitary bees make their nests by digging holes in the ground. One solitary species called *Osmia aurulenta* lives in sand dunes and will only nest in empty snail

Only female bees (both the queen and workers) can sting but they are generally not at all aggressive unless their colony is disturbed. The sting on most female solitary bee species wouldn't be able to pierce human skin, but watch out for bumblebees as they can sting you more than once. Honeybees only get one chance as they lose their sting and die once it has been used.

Are Irish bees declining?

Unfortunately more than half of Ireland's bee species have undergone substantial declines in their numbers since 1980. A conservation assessment of bees in Ireland produced in 2006 (National Red List of Irish Bees) found that six species are critically endangered, seven are endangered, 16 are vulnerable and 13 are near threatened. Sadly, three bee species have become extinct in Ireland within the last 80 years.

The Burren is key for the survival of Ireland's bees

Bees are declining primarily through habitat loss, particularly of flower-rich grasslands, hay meadows and field margins. Currently in Ireland, bumblebees like the Great Yellow Bumblebee *B. distinguendus* and the Shrill Carder Bee *B. sylvarum*, who need flower rich habitats, are almost homeless and at real risk of extinction. The Great Yellow Bumblebee is now found only in the Aran Islands, the Burren, and the Mullet Peninsula in County Mayo. The Shrill Carder Bee has declined dramatically in both Ireland and Britain but the good news is that it is still found across the Burren. At present the Burren is by far the most important location for this species, not just in Ireland but also in Britain.

Not only is the Burren key for our very rare species, it is also a

bumblebee hotspot. Three quarters of Ireland's bumblebee species are known to live in the area. Unfortunately we don't know very much about solitary bees in the Burren, but it is likely that the area is equally important for those species.

One important thing you can do to help bees in the Burren, is to leave areas of your lawn uncut during summer to allow wildflowers to grow and provide an additional food source for bees. This may seem odd in such a flower rich area, but bees also need somewhere to nest and that can be tricky on limestone. It's likely that within areas of the Burren they have to travel far from their home to forage, so providing little garden pit stops can make their lives a lot easier.

Sadly bees are having a tough time in Ireland, but thankfully the Burren continues to provide them with an important home. Fingers crossed they'll be happy in this home for many generations to come. More information on bees, their distribution, and what is being done to help them is available through the National Biodiversity Data Centre (www.biodiversityireland.ie).

If you're interested in learning to identify the different bumblebee species we have in Ireland, the Data Centre has produced a small pocket identification guide to bumblebees.

Úna FitzPatrick has been working as an ecologist at the National Biodiversity Data Centre since 2007. Following her Ph.D. in plant molecular biology, she worked on the conservation biology and genetics of Irish bees. For more information on Irish pollinators see www.biodiversityireland.ie



Walks and Talks

burrenbëotrust

The Burrenbeo Trust hosts a series of heritage walks and talks throughout the year. The walks take place on the first Sunday of each month at 2pm and the talks on the third Thursday of each month at 8.30pm in different locations throughout the Burren. Everybody is welcome. All walks and talks are free to Trust members; a minimum donation of €5 is requested from non-members. To find out the exact location of the upcoming walks and talks please look up the events page on www.burrenbeo.com or phone 091 638096.



Be there, be prepared!

For the Burrenbeo Trust walks, we suggests the following:

- Wear comfortable and sensible walking shoes. Much of the Burren's terrain is uneven, so for comfort please ensure you are wearing suitable footwear.
- The walks generally take 2-2.5 hours. They are held in the afternoon so that each individual has the chance to have a good hearty lunch before heading into the great outdoors!
- The weather in Ireland is variable and can change fast. So come prepared with warm clothes and waterproofs. In case of good weather, do not forget sunscreen and a hat as the rock reflects the sunshine and can cause sunburn.

A WALK WITH ONE OF THE BURREN FARMERS

By Laura Read

Last fall I spent two weeks getting to know the Burren and its farmers in order to pitch story ideas to magazines and newspapers. The plant life and archaeology of the place so intrigued me that even after half a dozen rambles in different locations, I was curious to see more. So the day before my flight home, I cancelled interview appointments in order to do one more farmer-led hike.

The Burrenbeo Trust excursion I joined was led by Pat Nagle. Our plan was to tour the parcel near the Slieve Carran Nature Preserve where he grazes suckler cows in wintertime. The Nagle family continues a tradition that began 6,000 years ago with the Burren's earliest settlers. Early farmers built structures out of available fieldstone without using mortar. The ruins of walls, homesteads, corrals, tombs and underground chambers survive today. Some have been restored and are accessible to tourists. Others – hundreds of them – are on private land and have been viewed only by landowners and select groups such as ours, which included more than a dozen adults and children from around the region.

As with most Burren hikes I'd done, this route started out ascending a hill. Above us was a high stony ridge, and we ambled toward it across uneven grass and rocks. The Burren's limestone was formed undersea starting 340 million years ago from layers of calcified marine life and plant debris. Over time it was uplifted, folded and squished into the undulating shapes we see today. One Burren quality that I love is how, from afar, its rocky surfaces

appear absolutely empty and inhospitable but, up close, you find small worlds of life. Inside of potholes, crevices and mini meadows, there are abundant wildflowers, grasses, snails, and caterpillars, not to mention all of the invisible insects and worms that dwell in the soil. Whenever someone in our group crouched to identify a flower or a bug, many of us would fall to our knees to see, the adults crowding in along with the children as we bent close.

Chatting with a man and woman from Lahinch who had never hiked into the Burren upland, I fell behind the group. Up ahead, the others gathered below a cliff band peering at some sort of slot in the ground. As I arrived, to my surprise, a child popped out of the slot. When he moved away, another young head appeared. There was a two-holed tunnel underground, Patrick explained – a "souterrain" or concealed chamber that ancient farmers may have used for hiding treasure or storing food. Almost everyone took a turn wriggling through.

Pat pointed out an overgrown circular wall of stones nearby. It was at least 1,000 years old, and as large in footprint as some of the old Georgian farmhouses I'd seen around the area. It might have been a chief's house, or perhaps some sort of gathering place.

As I descended the hillside, the smell of moist grass and soil wafting from underfoot, I felt giddy. I'd planned to be indoors today, but instead, here I was once again enjoying the Burren's sculptural beauty in the company of the likeable people preserving its treasures just as the many farmers have done for centuries. Lucky me.

Laura Read's writing/photography appear in Adventure Sports Journal, National Geographic Traveler, the San Francisco Chronicle Magazine, MIT Technology Review and online soon at Viamagazine.com. All photos by Laura Read unless otherwise stated. For more information go to www. ReadWriteShoot.com



THE BURREN AS BOTH A PLAYGROUND AND A CLASSROOM

By Joanna McInerney

quietly profound and wildly spectacular.

walks have been recently developed with Shannon Development. Burren activities. Fáilte Ireland, National Parks and Wildlife Service (at Mullaghmore and Slieve Carron) and with local landowners. These are in Carron, There are numerous caves to explore in the Burren. These

The Burren is a unique and very special outdoor playground. Ballyvaughan, Black Head, the Caher Valley and Mullaghmore. Where else can you walk across smooth limestone pavements. There are printed maps and route details available and markers visit ancient tombs and monuments, explore hidden hazel woods to follow en route. For the off track walker, there are numerous or gaze at gatherings of electric blue gentians? The Burren is both options – Turlough Hill, Oughtmama, Gleninagh to name but a few. These are privately owned and commonage areas, farmed by local people, so it is vital both the Country Code and Burren Code are The best way to explore to Burren is on foot – a number of looped adhered to – indeed these codes of practice are applicable to all

> underground systems have a unique landscape of their own stream ways, passages, stalactites, curtains (a kind of stalactite) which give the impression of walking through time. As well as the commercial caves of Aillwee and Doolin, there are a number of 'wild' caves that can be explored - BUT only in the company of experienced cavers. Both the Clare Caving Club and the Burren Outdoor Education Centre provide these.

> With its limestone cliffs and crags, the Burren also offers plenty of options for rock climbing. Ailladie, south of Fanore, is a renowned rock climbing area with a high concentration of high quality routes. Ballyrian, Oughtdara, Scailp na Seisri and Eagles Rock are other rock climbing areas.

> > BEING OUT AND ABOUT IN THE BURREN HELPS DEVELOP AWARENESS AND UNDERSTANDING OF THE BURREN'

And now to the sea ... and another way to experience the Burren. Sea kayaking along the Burren bays and coast offers opportunities to see the Burren from the water while glimpsing seals and sea birds. Easier trips can take in Poll na gCloch bay from Bell Harbour and along the Gleninagh shore. The more experienced kayakers can do the longer coastal journeys, including the classic Cliffs of Moher trip. This can involve a committing 12 mile journey under towering sea cliffs and is for experts only.

And finally to surfing. The big wave called Aileens under the Cliffs of Moher is famous for its size and extreme difficulty but the Burren coast including Fanore and Lahinch is renowned for surfing and body boarding. A number of surf schools on both places provide lessons and boards to those who might need them.

The Burren as an Outdoor Classroom

The Burren is an ideal Outdoor Classroom and the Burren Outdoor Education Centre offers opportunities for people of all ages to learn while and through being outdoors. This is learning by doing, learning through adventure, learning by experience and participation. Being out and about in the Burren helps develop awareness and understanding of the Burren – questions are asked and information given - how is limestone eroded, why are some pavements so smooth, why do caves form, what are clints and grykes? Our geography and ecology field study programmes study karst and coastal environments.

These outdoor and adventure experiences also promote other types of learning – developing skills like map reading, and kayaking for instance. A key area in outdoor learning is the development of life-skills. These include being given and taking responsibility, working in a team, developing trust and respect, dealing with fear, accepting challenge etc - all of these can be explored through learning and being outdoors.

Having the unique landscape of the Burren in which to do this is indeed a privilege.

Joanna McInerney, outdoor enthusiast and director of Burren Outdoor Education Centre. Find more information on recreational activities in the Burren on www.burrenoec.com.





The Burren

Ireland's Newest Ecotourism Destination

By Edel Hayes

The Burren Ecotourism Network was officially launched by Darina Allen on 3rd March 2011 in Gregan's Castle Hotel, Balllyvaughan. Over the last few years, a group of dedicated tourism businesses, facilitated by the Burren Connect Project, have been going through a rigorous training and certification programme. The network is one of only two accredited ecotourism destinations in Ireland. Their vision is that establishing ecotourism in the Burren will aid the sustainable development of its communities, environment and heritage.

The network is offering visitors opportunities to engage with the protected landscape of the Burren in a manner which is sustainable both in terms of the environment as well as the community. Accommodation, food, farming, outdoor activities, culture and heritage are all part of the network, which has woven together all the elements that make the area attractive to visitors looking for authentic tourism experiences. Tourism businesses involved in the network are committed to local produce, conservation and the community, as well as to continuing high standards in sustainability.

The network shows their commitment to ecotourism principles by:

- Using environmentally sustainable practices
- Bringing people into nature
- · Promoting the natural and cultural heritage
- Contributing to conservation and education programmes
- · Maximising benefits for local communities
- Ensuring visitor satisfaction
- Marketing responsibly
- · Increasing cultural respect and awareness

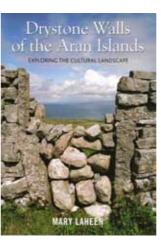
The network is piloting the first national ecotourism certification programme from Ecotourism Ireland and the importance of this initiative as a national pilot can be seen in the level of support it has received over the last few years with collaborating agencies such as Clare County Council, Shannon Development and Fáilte Ireland.

The variety of experiences offered includes farm walks, sustainable building techniques, wildlife surveying, organic gardening, ceramics, flax weaving, natural sculpture making, guided Burren walks, guided bird-watching tours, vegetarian cooking, holistic therapies, traditional Irish Music and dancing sessions in the local pubs, painting, story-telling and much much more.

For more information on the tourism experiences on offer, please see **www.burrenecotourism.com**

DRYSTONE WALLS OF THE ARAN ISLANDS: EXPLORING THE CULTURAL LANDSCAPE

The Collins Press, Cork, 2010 review by Stephen Ward



Passing a shop window in Ballyvaughan, my eye was caught by this book which shows a 'stonegate' or 'bearna'. I once watched a farmer on Aran drive a few cattle into a tiny field and proceed to block the gap with a 'stone-gate' of boulders which had obviously served this purpose many times before, having had the edges knocked off and become rounded. Almost as surprising as his use

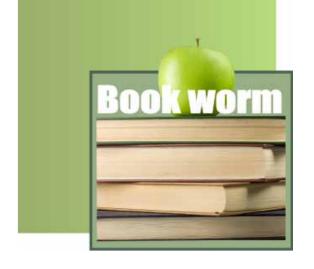
of stone was the speed with which he 'shut the gate'. And yet this unique way of life is not recognised nor the landscape it has produced protected.

Mary Laheen's book is an in-depth consideration of the amazing cultural heritage to be found on the Aran islands. To clear the land of stones and to provide shelter for livestock and vegetables, an incredibly intensive pattern of walls was built. Each farm has access to the shore for sand and seaweed to spread on the land, crag for wintering cattle, sheltered fertile land and freshwater. Drystone walls comprise all the boundaries in such density that it comes close to being a built landscape. 'Making one's way through the labyrinthine fields and lanes, map in hand, is similar to discovering an unknown city ... one retains a sense of appreciation, if not awe, at the sheer extent of human endeavour.'

The author observes that 'we have lived through a time when the Irish countryside has been subject to irreversible and destructive forces of change' and that 'there is a general sense of powerlessness and apathy in the face of landscape destruction which is occurring in Ireland at such a rapid rate.' The Aran islands have not been immune, but pastoral farming has favoured the retention of many of its features.

Despite Ireland being a signatory to the European Landscape Convention 2002 there is no clear policy on its protection and management; it is left to those who live there and those who care about them to make the case for their protection. Remarkably, although the landscape has continued to evolve, the Aran Islands retain medieval features and are still much as described in the Compossicion Book of Connought 1585.

Despite being proposed by Galway County Council, the Aran Islands were not included in the Irish Government's 2009 tentative



list of World Heritage Sites. Mary Laheen makes a persuasive case that they should be recognised as a World Heritage Cultural Landscape. She concludes that because of the precarious balance between traditional agricultural use and the development of tourism, itself a factor in the abandonment of land, there is an urgent need for an overall management plan.

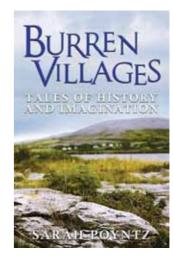
In addition to presenting a powerful case, this book is richly illustrated with maps and photographs and is essential reading for all those who care about the future of these fascinating islands.

BURREN VILLAGES: TALES OF HISTORY AND IMAGINATION.

Compiled & edited by Sarah Poyntz .

Mercier Press, Cork, 2010

Review by Hilary Allen



Anyone with more than a passing interest in the Burren and its myriad facets will be enthralled by this treasure-trove of a book. Compiled and edited by Sarah Poyntz, a self-styled "blow-in" with a passionate interest in, and an intimate knowledge of the area and its people, she knows just who to go to for the stories and information that need to be passed on while the telling is good.

In Remembering John O'Donohue, Leila Doolan speaks of a "rare bird" who was "druid and priest, folklorist and storyteller". She gives us her memories of a man in whose company everyone was enriched, sharing with them his knowledge and deep interest in every aspect and development of the natural world around and the complexities of human life and influences, who "pointed to a spirituality that seemed to be possible for the church but somehow

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absent from it". Clearly a man some will always miss or, having read this book, regret never having met.

Jim Hyland's wide interest and knowledge concerning his home village and its environs, provides us with what he calls An Outline of the Area. And so it is, but as full of the long history of the village, both ancient and modern, as could be possible in one short chapter, with personal memories, actual and hearsay. "The past is remembered, the present made memorable".

George Keegan came to A Birder's Paradise, Paul Clements is On Cloud Nine watching as "The limestone chameleon-like, sceneshifts at the whim of the light and weather". Stephen Ward "retired to walk the Green Roads" and Maryangela Keane "married in". They all came with one interest and found others, to which they open our eyes. As Maryangela found "the scientific phenomena of the Burren can be explained, but the spiritual phenomena have to be experienced".

This is a book that can be dipped into to suit the mood of the reader, but if that's what you do, be careful not to miss anything Fascinating history and vivid imagination there is, but the emotional response to this unique area expressed by the contributors is the reality of the here and now.

The ancient family names you see around, bearers' of which you meet and many you wish you had met; descriptions of recent change and development; wildlife to look for, archaeology to discover, combine to give the visitor a feeling and some understanding of the heart of the place. For the resident it is a record to treasure and a gift for any far flung exile for an evocation of home.

And joy upon joy – poems by those known afar and those known at home, all extolling the pleasures to be found in "the paradox of the Burren" as it is styled in his preface by Fintan O'Toole, another "blow-in".

TURNED OUT NICE: HOW THE BRITISH ISLES WILL CHANGE AS THE WORLD **HEATS UP**

by Marek Kohn, Faber & Faber, London. 2010 Review by Stephen Ward

One winter's evening, Sharon Parr and I sat with Marek Kohn by the fireside in O'Loclainn's whiskey bar in Ballyvaughan. Marek was researching a book on climate change and I recall thinking that I was glad it wasn't me. That book is now published with one chapter devoted to the Burren and, as the title implies, Marek's view is that things may 'turn out nice'. Winters here have never



been as sharply defined and he predicts that as the climate warms they will be even less so.

Summers, on the other hand, may not be as wet as they used to be. The climate might become too dry for wild flowers on the high Burren, but they may gain 'added protection against the grasses that might compete with them more vigorously if the summers were wetter'. He

comments that 'the possibility that climate change might take a unique habitat further in the right direction is a novel addition to the catalogue of reasons to feel that the Burren has rules of its own.'

The Burrren chapter is entitled Mountain Avens which, based on evidence from elsewhere, he suggest 'may be able to cope with markedly higher temperatures than those of the Burren.'

Provided ways can be found to sustain farming, 'cows would enjoy more clement weather out on their winterages, and richer grazing in longer growing seasons'. The Burren 'will continue to be amongst the strongest of candidates for funds to support agriculture that serves environmental ends.

As to the impact on the rock fabric itself, the annual increase in erosion will probably be only a few hundreths of a millimetre leading Marek to conclude 'climate change will have an affect on the rock, but you couldn't really call it an impact.'

The one feature he predicts may be adversely affected are the turloughs which, by the middle of the century, could lose 45% of the area climatically suitable for them.

The book is well-researched. The chapter for the Burren alone draws on thirty-three sources. Out of the myriad predictions of the potential impact of climate-change, this is the first one that I have read which specifically addresses how it might impact upon the Burren. Marek concludes 'As the climate warms, there will be many villages abandoned because of hunger, but those will be in the other world, beyond Europe, to the south'.



IDENTIFICATION GUIDE TO IRELAND'S BUMBLEBEES

by Úna Fitzpatrick, Andrew Byrne & Bryan J Pinchen National Biodiversity Data Centre 2010. Review by Stephen Ward



Whilst the Guinness Book of Records is not normally the first thing to come to mind when reviewing a book, this is a remarkably small-pocket, short, concise and reasonably priced guide. Termed a swatch, it comprises 24 pear-sized plastic pages hinged by a screw. Thirteen of the pages are coded according to whether the true bumblebee has a white, red, ginger or blonde tail; a further five pages are devoted to cuckoo bees which, as

their name suggests, lay their eggs in the nests of true bumblebees from which they extract a terrible price.

There is guidance on catching bees in a net and transferring them to a specimen tube or clear plastic bag to facilitate examination at close quarters before release. Of particular concern is the decline in the occurrence across Ireland of several species. This links to the particular interest of the NBDC - building a picture of current distribution. Fortunately the Burren has been largely unaffected by intensive agriculture and habitat change and provides a refuge for many species. This swatch is available for sale at cafebeo. So buy your swatch and get recording.

The format is such that let us hope it is one of a series.

IRELAND'S ANIMALS MYTHS. LEGENDS & FOLKLORE

Niall Mac Coitir, Original watercolours by Gordon D'Arcy Review by Brigid Barry

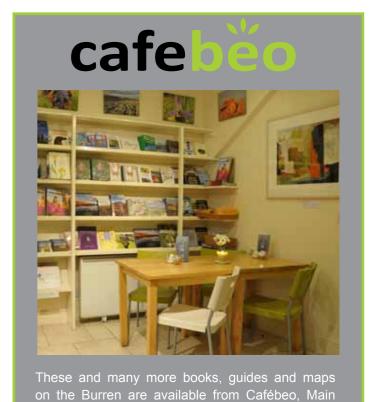
Following the success of his previous books relating to Ireland's natural history, Niall Mac Coitir has compiled another fascinating book on the myths, legends and folklore, this time on Ireland's animals. The book is arranged into the classical elements of fire, air, earth and water, which may seem strange to the reader but not when you consider their habitat and characteristics. Such as a dog is an earthy animal whilst a wolf is fiery. This is also largely based on animals that were traditionally loved, used and those that were hunted.



The book is split up in an easyto-read fashion with a chapter given over to each animal, and each chapter split into folk beliefs and customs which discusses the personalities and spirits of the animals, myths and legends to illustrate the history behind the animals and relationships with humans which accounts for the interactions with us, whether they were maintained within the

household or hunted for food, fur, sport or as vermin. This is a book that is not just about the animals in ancient Ireland, but an insight into the people and cultures that existed around them. It is a delightful and intriguing read.

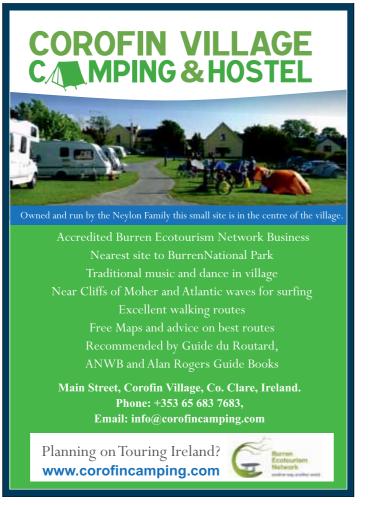
The book is richly illustrated by Burren resident and Trust Patron, Gordon D'Arcy. Gordon recently finished a series of fantastic wall murals in the Burrenbeo Trust Information Centre in Kinvara. If, on a recent visit to Cafebeo, you wished to take Gordon's paintings home with you - now's your chance - buy the book!



Street, Kinvara.

On the trail of the Burren Green, Burren Insight, Issue 2, page 17 the full name of the Burren Green moth should read Calamia tridens occidentalis.

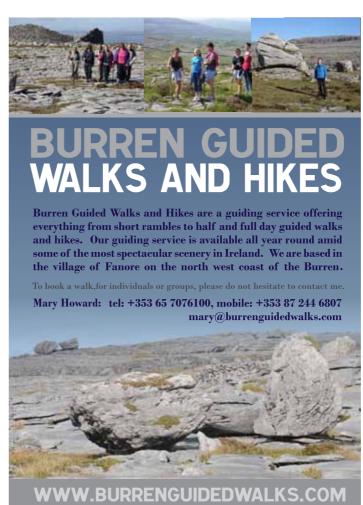


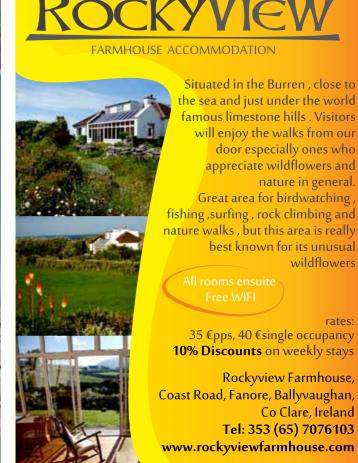








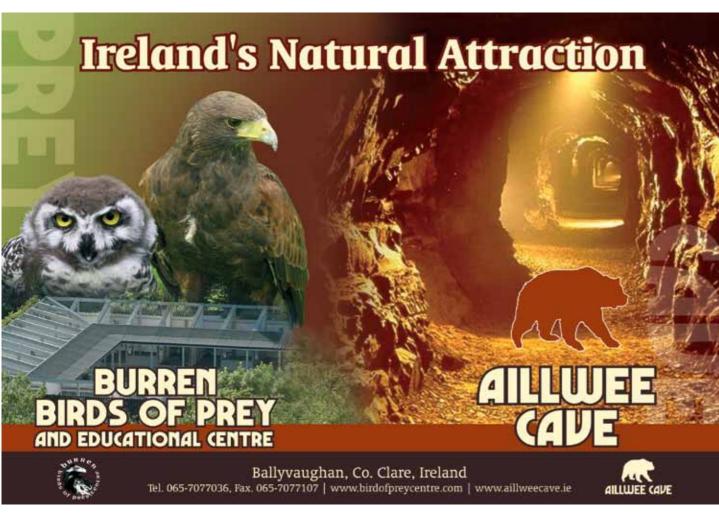




Situated in the Burren, close to the sea and just under the world famous limestone hills . Visitors will enjoy the walks from our door especially ones who appreciate wildflowers and nature in general. Great area for birdwatching, fishing, surfing, rock climbing and nature walks, but this area is really best known for its unusual wildflowers 35 €pps, 40 €single occupancy 10% Discounts on weekly stays

Co Clare, Ireland

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Hotel Doolin is a luxury 4 star boutique hotel located in the heart of Doolin, famed for its' Irish Music and culture. Set amidst the backdrop of the Cliffs of Moher and on the fringes of the Burren National Park, our central location allows you to explore and discover a most beautiful part of the world.

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Call in and meet our dedicated Events and Wedding Manager who will be only too pleased to show you around our facilities and discuss your event requirements

 View our contemporary banqueting suite which caters for weddings, banquets, conferences and parties

Dine with us

Hotel Doolin offers a host of dining options from our hotel restaurant which serves a fusion of modern and traditional fare to the informal Fitz's Bar or Sonas Pizzeria

Experience lunch and dinner prepared for you by our award winning chef Dan O' Brien using locally sourced products and ingredients from our onsite polytunnel

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- Bar food served all day until 9pm in Fitz's Bar
- Dinner served each evening from 6.30pm in hotel restaurant
- Informal dining at Sonas Pizza Cafe

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Environmental Ethos at Hotel Doolin

Hotel Doolin has achieved the Silver Standard Green Hospitality Award.
The award was granted based on the hotel's performance in implementing
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BURRENINSIGHT 2011

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Trust Membership Application

name		
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Membership categories (please circle one annual membership option)		
Individual	€40	
Couple	€50	
Family	€60	
Concession (unwaged/Student/O.A.P)	€30	
Gift Pack	€50	
Life membership	€1,000	
Additional donation		
For payment by credit or Laser card please con I authorise you to debit my:	mplete this section	
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with the amount		
Card number		
Expiry date / /		
Security code (last 3 digits on back of card)		
Cardholder signature		

You can also join online at www.burrenbeo.com

For payment by cheque, please insert your details on the form and make your cheque payable to: Burrenbeo Trust Ltd.

Completed forms/cheques to be returned to:
Burrenbeo Trust, Main Street, Kinvara, Co. Galway, Ireland



Members

How can we help you?

Get **more** from your Burrenbeo Trust membership

What

Get more information

Get more knowledge

Why

Make more informed decisions

Make more impact

Make more friends

How

Do more walks and talks
Do more volunteering
Support.... Cafébeo

How can you help us?

By making professional introductions to further our charity

By sponsoring one of many programmes

By sharing any expertise that you may have in fundraising

By being active in the community by joining the Burren Conservation Volunteers

By displaying our information in your business, local community centre etc

By inviting us to do a presentation at one of your businesses, committees etc

By feeding into the Trust network by sending us news and events to the e-newsletter

By becoming a champion for the Burrenbeo Trust in your area

By using the Burrenbeo Information Centre for any educational needs relating to the Burren.

burrenbëotrust Ireland's premier heritage landscape charity!

A community that is investing in the future of the Burren – be part of it!

The Burrenbeo Trust is a registered charity dedicated to the Burren and its people. We rely on membership fees and the work of our volunteers to carry out our extensive work programme which includes education, information provision, research, advocacy, conservation and much more. Everyone has a part to play in the Trust, so why not join us!

By becoming a member of the Burrenbeo Trust you will directly support our growing programme as outlined by our achievements to date.

Burrenbeo Trust achievements this year

Education, the Burrenbeo Trust:

- Graduated 75 young Burren Experts between the ages of 9-12 from the Ecobeo heritage programme. This brings the total trained to 720 over nine years
- Registered over 90 individuals as part of the Burrenbeo Conservation Volunteers programme. Carried out 9 community based action days
- Trained over 60 individuals in the adult heritage programme
- Carried out various outdoor experiential learning days for youth groups and adults
- Produced the 3rd issue of Burren Insight
- Held monthly walks and talks with heritage experts with over 850 attendees in 2010
- Weekly introductory Burren walks throughout the summer

Information, the Burrenbeo Trust:

- Continued to develop the largest and most used website in the Burren www.burrenbeo.com with over 700 unique visitors a day
- Sent out a monthly e-newsletter to nearly 3000 subscribers on news and events of the Burren
- Ran the Burren's first conservation café with all proceeds going directly back in to the Trust's activities
- Developed a heritage information centre with heritage panels on the Burren and a children's learning zone
- Hosted over 300 undergraduates and graduates with information lectures and workshops from academic institutions across the globe
- Continued to develop ptinted materials profiling the Burren eg. maps and educational posters

Research, the Burrenbeo Trust

- Worked in collaboration with the Burren IFA, Burren Connect, Burren Farming for Conservation Programme and the local authorities to explore the possibility of a community charter for the Burren
- Hosted a butterfly workshop in collaboration with the National Biodiversity Data Centre to train individuals on a national scale to collect data on these indicative species

Advocacy, the Burrenbeo Trust:

- Worked closely with other organisations in the Burren
- Organised a Burrenbeo roadshow to profile both the Burren and the Trust amongst 50 businesses in the Burren
- Contributed regularly to the local, national and international media
- Organised an event to profile the Burren and the Trust in Dublin





Invest in the future of the Burren

You or your business could invest in the sustainable future of the Burren by funding specific Burrenbeo projects. For example:

Ecobeo Education Programme

The Burrenbeo Trust runs a 20-week heritage course in primary schools throughout the Burren. To help us continue this work you could fund a school in the Burren in the participation of this innovative programme.

Burrenbeo Conservation Volunteers

Ireland's largest conservation volunteer group was established by Burrenbeo to tackle important conservation issues. Funding is needed to develop the skills and support the training of volunteers in this a critical conservation effort.

Wild Child - Young Explorer's Club

Burrenbeo Trust is developing an experiential learning and outdoor field club for children. We are presently seeking sponsors for this new and exciting venture.

Heritage Walks and Talks

With the support of leading heritage experts, Burrenbeo Trust carries out a monthly guided walk and a lecture in the Burren. Last year over 850 people attended our walks and talks which has increased the potential for the informed protection of our living landscapes.

The Burrenbeo Trust is part of the Charity Tax Donations Scheme which means your money goes further with a system of tax rebate. If you would like any further information on how you can get involved in any of our programmes please contact the Trust







