

live 

Llŷn Iweragh Ecomuseums

Summer Newsletter 2022





As a project, we have had an exciting six months, both in Iveragh and Llŷn. We've put together a newsletter which outlines just some of the things we are working on, events we have held and some other pieces of information.

Our team of LIVE Knowledge Gatherers have been extremely busy in the first half of 2022. Over the winter months, they lead numerous guided outdoor events on a range of themes, including medieval heritage, visits to sites such as Cáit na Pluise's cave, birdwatching and whale-watching walks. They also hosted a series of 'lunchtime talks' online on topics such as how to identify wetland birds and jellyfish, Atlantic Rock Art, and the fascinating plants of Iveragh. They have been busy developing resources, some of which are already available on our website and others coming soon. These include digital walking guides, school resources, activity packs and a suite of photo and video resources that will be available for any local individuals or businesses to promote the regions. The team also helped to make the Skellig Coast Dark Sky Festival a success and led a great series of events for Biodiversity Week. The team of Knowledge Gatherers based on Iveragh travelled to UCC to present at the School of BEES Research Day on June the 1st. It was brilliant to showcase the natural heritage of Iveragh to staff in the university.

The current themes that our team are focussing on are:

- Cultural Heritage, including the scientific legacy of Maude Delap and expanding the record of Atlantic Rock Art on Iveragh
- The plants of Iveragh's extensive Atlantic blanket bogs
- Submerged ancient forests
- Whale and Dolphin watching from land and sea
- Biodiversity on traditional farmland
- Coastal meadows and how to make them
- Jellyfish and plankton in our coastal waters
- Lizards and the habitats where they can be found
- Sustainable tourism and how to measure sustainability

The group collaborates closely with a range of local and national initiatives, and they are always keen to meet people, share knowledge, and get new ideas. If you want to get in touch, please email the project at live@ucc.ie. If you see any of the team out and about, say hi!

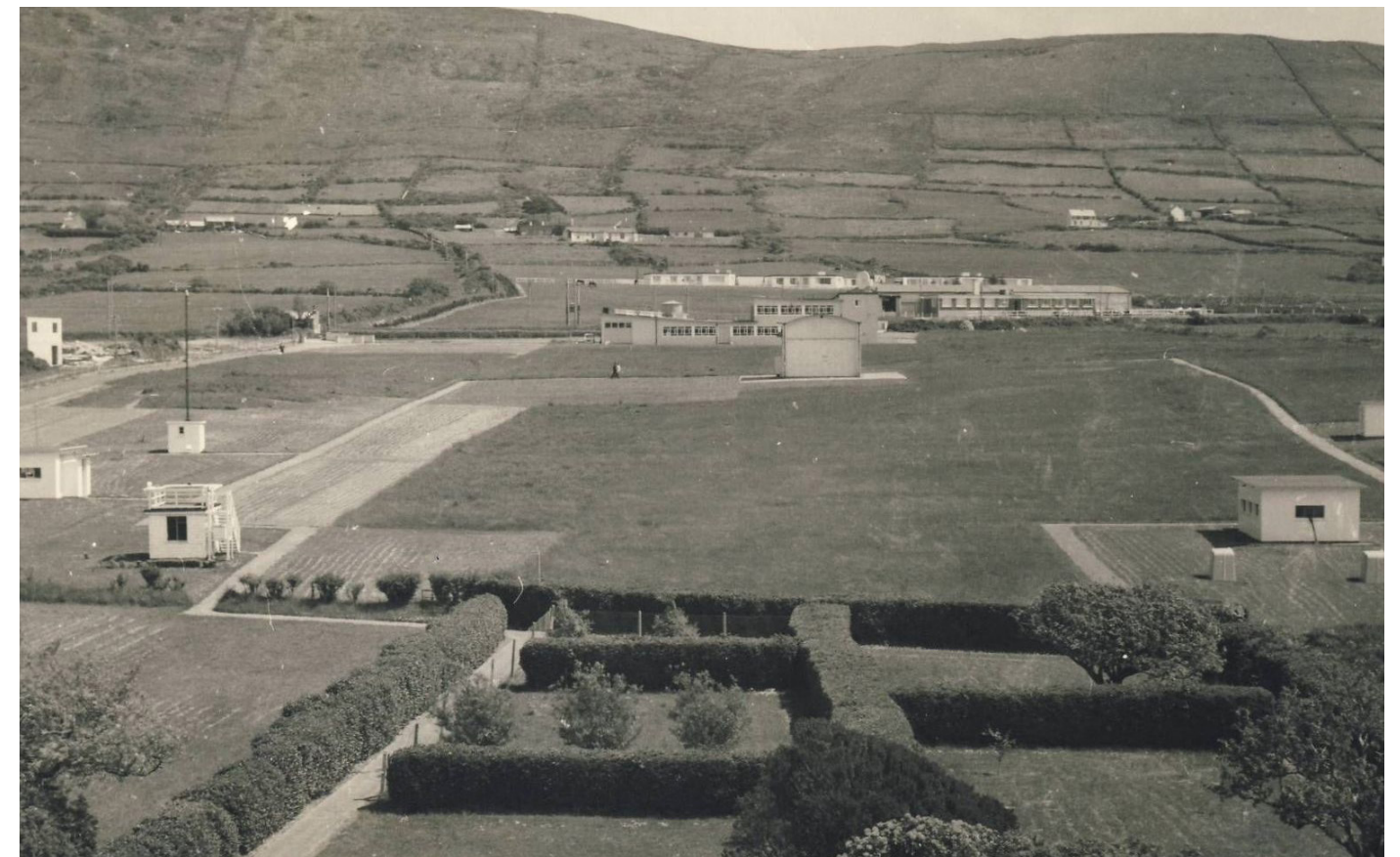


Observatory Partnership

Bringing back meadows to a historic meteorological observatory

Valentia Meteorological Observatory is the most westerly Met Éireann observatory in Ireland. It has done incredible work keeping us informed of environmental changes - from wind speed to seismology - since it was established on Valentia Island in the 1860s. In 1892, it was transferred to its current location, one kilometre west of Cahersiveen on the Iveragh peninsula. The weather forecasting data collected at the Observatory are of national and international significance, as it is where Atlantic weather systems first reach Ireland. The site covers 19 acres and is peppered with whitewashed instrumentation buildings that stand out against expanses of neatly mown lawns.

During repeat visits to the Observatory in 2021 for a separate collaboration (Watching the seasons (ecomuseumlive.eu)), the LIVE team realised the potential of the site's grasslands and hedgerows for biodiversity. The tidy mowing didn't allow the grassland plants to flower and set seed, limiting the amount of nectar and pollen available for insects to eat. Through chatting with the staff, we learned that these lawns had been kept as hay meadows in the past. Up until the 1980s, hay was cut to feed local livestock. In recent times, meadow growing was discontinued, and the site transitioned to short grassy lawns. We thought the reintroduction of meadows would be great for biodiversity, pay homage to the heritage of Valentia Observatory, and celebrate the diversity of wildflowers native to the Iveragh Peninsula.



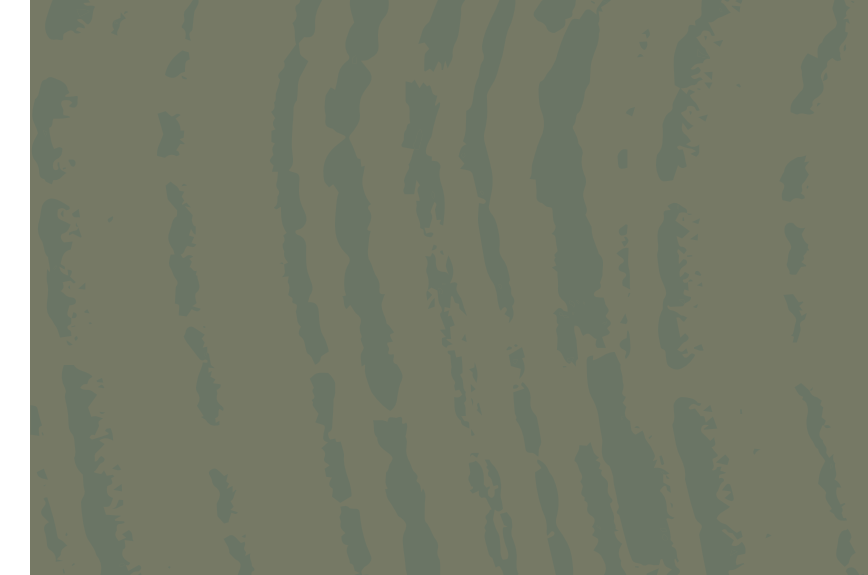
During our first survey of the Observatory, back in October 2021, many Bumblebees (Bumbóga) and Flies (Cuileog) were visiting the last remaining flowers of the season. An encouraging sign from a visit in December was a variety of red and yellow Waxcap Mushrooms (*Hygrocybe* spp.) that were growing across some of the lawns. These mushrooms are a good indicator of low nutrient grasslands and are often found growing where meadows existed in the past. These gems were an encouraging sign. Next, Observatory staff gave valuable feedback, for example, pointing out areas where grass needs to be kept short for accessibility reasons, like launching the weekly ozone monitoring balloon.

Taking their advice into account, we finalised the plan to promote meadows and hedgerows, starting in spring 2022. Five patches of managed grassland will be trialled as meadows by cutting and removing vegetation just twice over the calendar year, approximately 4 acres of meadows in total. Several of the site's hedgerows will also be managed in a

wildlife-friendly manner by reducing the frequency of disturbance. There is also a possibility of rejuvenating certain hedgerows by planting native trees such as hawthorn, blackthorn, or holly where gaps have started to form.

The Observatory site also stretches down to the shore and is influenced by the sea and its accompanying wildlife. Seals are known to live nearby, and while surveying, we came across a seal carcass on the lawn where the meadows are now growing. These environmental influences will further promote different plant and animal communities and boost overall biodiversity.

this event, along with 17 species of bird! The excitement of meadows comes from their development over time, be it across the seasons or many years - as the nutrient load continues to decrease and new and potentially rare species arrive.



Bringing back meadows to a historic meteorological observatory continued...

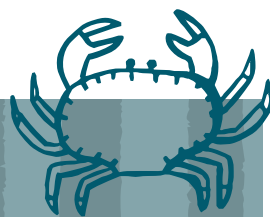
Work has begun on the Observatory's meadows, and the first cut of the year took place in March. Meadows allow plants to flower fully and set seed instead of being mown down when just a few inches high. So far, we have seen more plentiful flowering inside the meadow trial areas. These plants include thyme leaved speedwell (Lus an Treacha), Cuckooflower (Biolar Gréagáin), Sweet vernal grass (Féar Cumhra) as well as the ubiquitous Buttercups (Cam an Ime), Dandelions (Caisearbhán), Clovers (Seamair), and Trefoils (Crobh). Orchids (Magairlín) sprang up in the meadows in early May.

So far this year, Common Carder (Bhumbóg Charda Choiteann), White-tailed (Bhumbóg Earrbhán), and Garden Bumblebees (Bhumbóg Gharraí Bheag) have been spotted at Valentia Observatory, with staff saying that insects overall have been plentiful.

During a public engagement event in May, the LIVE team and the local community surveyed the plant species in the meadows and the lawns. As the meadows are only two months old, we did not expect much difference, but we still found that the meadows contained approximately 25% more species! Most notably, the meadows had well over twice the number of species in flower compared to the lawns. The increase in flowering seen when you transition from lawn to meadow is an immediate benefit for the plants and pollinating insects. Three species of bumblebee were spotted during this event, along with 17 species of bird! The excitement of meadows comes from their development over time, be it across the seasons or many years - as the nutrient load continues to decrease and new and potentially rare species arrive.



Llanbedrog BioBlitz



On July the 2nd, Oriel Plas Glyn y Weddw in Llanbedrog hosted its first bioblitz; a day recording as many plants and animals in one location as possible. It was an early start with Ben Porter up at 5am to listen to the dawn chorus. The birds didn't disappoint, with great spotted woodpeckers, jays, green woodpeckers and tree creepers just some of the species present.



The day continued with walks and surveys led by experts from North Wales, including a bird survey with a difference - Jack Slattery from the RSPB led the seabird session on kayaks, the best place to view the steep cliffs and former quarries along the coastline. However, not all the surveys were above water, with Seasearch conducting both snorkel and dive surveys to collect as much data as possible. There were activities to interest everyone, from butterfly surveys, spider searches, shark egg hunts or a look at the folklore and myths surrounding trees. The more creative visitors had the opportunity to try their hand at wild cyanotypes, making plant prints or creative conservation, making their own wildflower bee bombs.

For many, the highlight of the day was the heathland walk with Ben Porter and Iolo Williams of BBC Springwatch. The enthusiasm and knowledge of both meant the 2-hour walk became a 3 ½ hour walk looking at all sorts of things, from stinkhorn mushrooms, stonechats, and slow worms to wild strawberries!

A big thanks must go to Cofnod, the North Wales environmental records centre, for collecting and compiling the results from the day.

Eco-Social Farming

Collaborations with Kerry Eco-Social Farming

For nearly a decade, Kerry Social Farming has been building a great community across county Kerry. The project involves farmers and farm families hosting participants with intellectual and physical disabilities, acquired brain injuries and those accessing mental health services.

This year saw the official launch of another great addition to this initiative - the Kerry Eco-Social Farming Biodiversity Project (EIP-Agri). By providing training courses on habitat management, invasive species, and biodiversity monitoring, KESF aims to enhance biodiversity across the network of host farms. LIVE has had the opportunity to collaborate with KESF on a number of fronts this year. Knowledge Gatherers Fiach and Calum attended an excellent training course on rhododendron management, delivered on a host farm by Patricia Deane of the South Kerry Development Partnership (SKDP). LIVE were also in attendance at a BioBlitz on another host farm, with a great diversity of wildlife recorded on the day, including plants, mammals, birds, moths, butterflies and bumblebees.

Finally, with LIVE's continuing work on Iveragh's farmland biodiversity, three KESF host farms have been surveyed for bumblebees, butterflies and birds. Each of these farms will receive a full run-down of the species recorded on their farms, and all records will be passed on to KESF Biodiversity Officer Luke Myers.



Farm Surveys

Iveragh's Farmland Biodiversity

Throughout spring and summer, LIVE has been conducting wildlife surveys of Iveragh's farmland. This work aims to identify the various kinds of wildlife that still depend on Iveragh's farmland, focusing on bumblebees, butterflies and birds. By answering the following questions, we can improve our understanding of Iveragh's farmland and its value to biodiversity:

- Does Iveragh's farmland support a wide diversity of birds, bumblebees and butterflies?
- What vulnerable or declining species still rely on Iveragh's farmland?
- What species are missing that we would expect to be present?

Iveragh's rocky, mountainous and coastal landscape is a particularly interesting region for this work. The nature of the terrain limits disturbance to soil and vegetation communities from fertilisers, pesticides and heavy machinery, particularly in hard to reach coastal and upland areas. These areas of low-intensity farmland are exciting areas to survey, as there is always hope that we may encounter relatively uncommon species.

So far, there have been a lot of positives from our farmland surveys. Nearly 50 bird species have been recorded, many listed as high or medium conservation concerns. Of the 15 species of butterfly recorded, the most notable sightings so far have been the 'endangered' Wall Brown, as well as the 'near-threatened' Small Heath and Gatekeeper. Finally, with seven bumblebee species recorded to date, we still have high hopes of encountering the near-threatened 'Red-tailed Bumblebee' and vulnerable 'Red-shanked Carder Bee' before the end of our surveys.

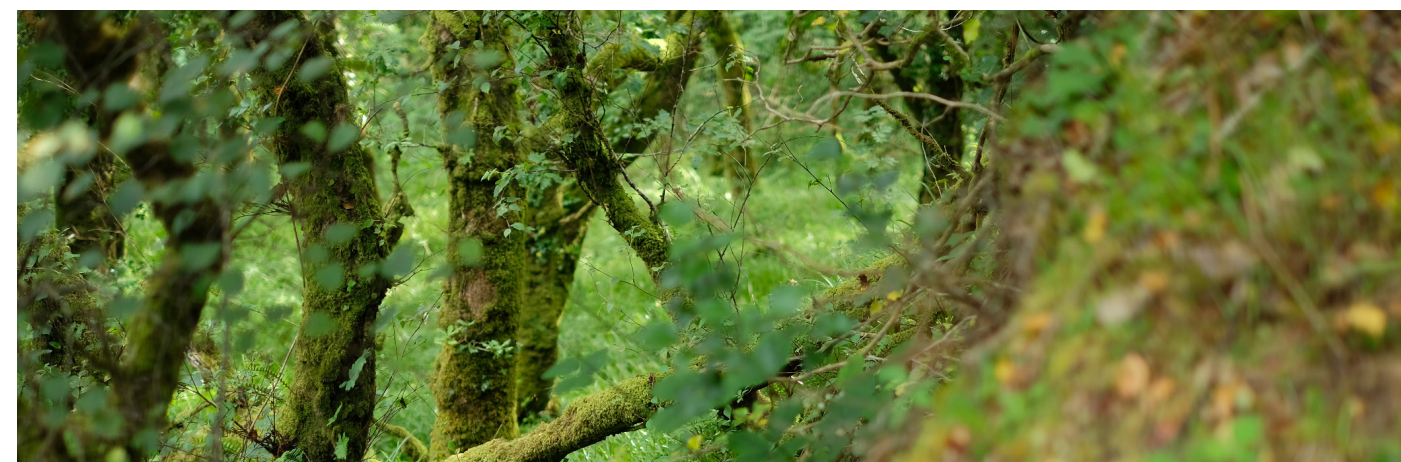




National Trust Nature Surveys

In Wales, in early May, we carried out the first of this year's 'Spotted Rock Rose' counts. The results of this initial count show similar numbers to last year. We are hoping, however, that we will see an increase during later counts this year. A second count will be done later in the year as we work alongside NRW and the Natur am Byth project [Natural Resources Wales / Natur am byth! Saving Wales' threatened species](#) to devise a uniform method of recording and preserving this rare flower.

We also hope to develop an education plan with Natur am Byth to look at specific species and create projects for school groups.



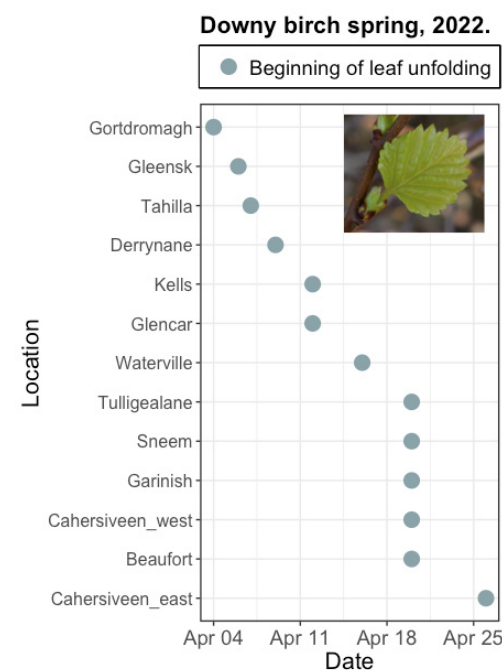
The timing of spring on Iveragh



This spring, LIVE, along with community volunteers, measured the timing of spring on the Iveragh peninsula using our native trees. This involved registering wild trees and returning to them regularly during spring to record the exact day they broke their buds. Following a December workshop and a webinar in January, we had over 100 birch trees registered, some 50 hazels and 20 willows. This is a great way to observe the subtle and beautiful changes that occur in spring. Thanks to the dedication of everyone involved, we collected a lot of useful information that will also help with Met Éireann's long-term seasonal monitoring scheme at their site in Cahersiveen.

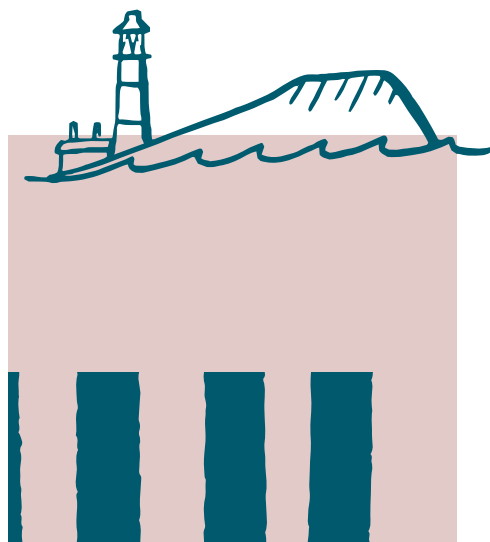
One of our most common trees that supports so much life on Iveragh is the Downy birch (Beith chlúmhach, in Irish). The data shows that birch trees all across Iveragh began unfolding their leaves at different times throughout April. Over 100 native insects depend on birch for at least part of their life cycle, so having this extended period when new leaves are available can act as a buffer for insects that might emerge early or late. Climate change is also shifting the timing of seasons; this information is essential to monitor how this timing is changing.

LIVE is also running a monthly 'Seasonal Changes' newsletter that updates what plants you can expect at various times of the year, with news on general and rarer plant sightings such as the blooming St. Patrick's cabbage in April or the Kerry lily in June. Stay updated by following us on social media or visiting our website.



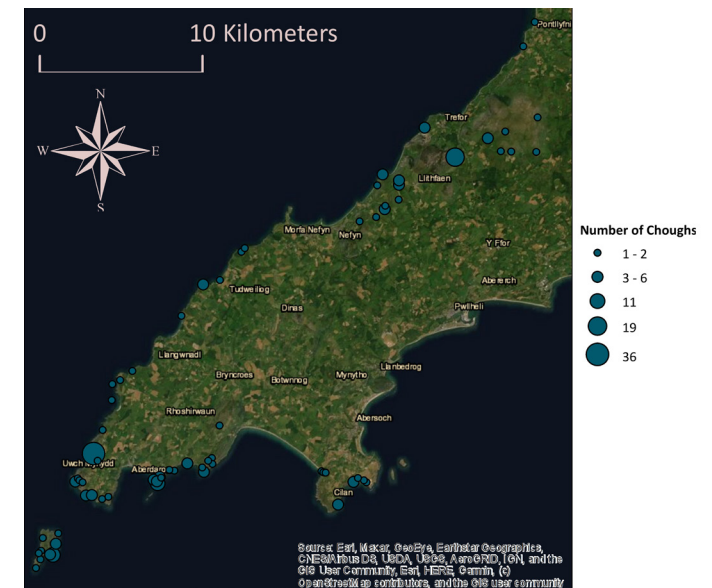


Pen Llŷn & Iweragh Cough Count



The communities of Pen Llŷn and Iweragh showed great appreciation for our Red-billed Choughs last March, with over 75 volunteers participating in the first cross-border 'Cough Count'. The interest shown by the local community in these birds is very encouraging, given the importance of our two peninsulas to the choughs of northwest Europe. This importance is underpinned by the designation of Special Protection Areas (SPAs) on both Llŷn and Iweragh, largely to protect the peninsulas' chough populations and the habitats they rely on.

National chough surveys recently indicated that chough populations across the UK and Ireland are relatively stable, although there were some concerning declines in certain regions. These national surveys are usually conducted every ten years in the UK. However, there was nearly two decades of a gap between Ireland's 2002/03 national chough census and the most recent census carried out in 2021. These censuses provide invaluable insights into the health of national and regional chough populations. However, more frequent updates would help us determine how our choughs are faring in the years between censuses.



Iweragh's inaugural chough count saw twenty-six surveyors record 64 choughs in challenging weather conditions. In addition to choughs, surveyors on Iweragh reported sightings of some other local birdlife, including skylarks, fulmars, white-tailed sea eagles, merlin and hen harrier.

Fifty-one surveyors took part in the Llŷn Peninsula's second ever 'Cough Count' on a beautiful day in northwest Wales. The surveyors' recorded 254 choughs on the day – a credit to the long-term monitoring programmes on the peninsula's chough populations. The standout sightings from Pen Llŷn included skylarks, red kites, peregrine falcons, a sparrowhawk, and a green woodpecker.



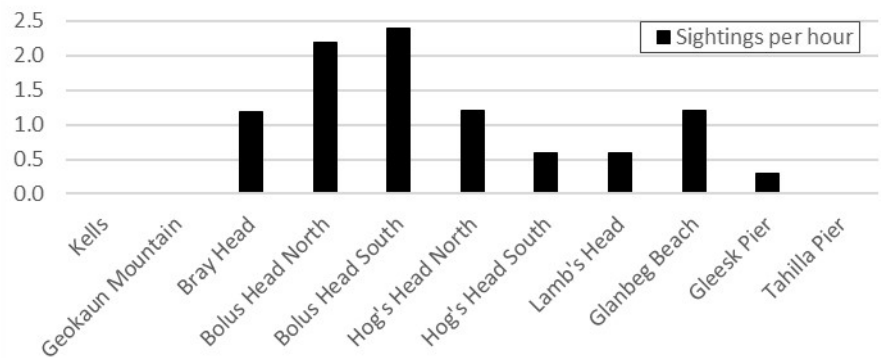


Iveragh Cetaceans

The Iveragh peninsula is bordered by Kenmare Bay to the south, Dingle Bay to the north, and the open Atlantic to the west. These waters contain a mix of shallow, sheltered inlets, rocky reefs, wild and exposed bays, sandy seabeds and deep channels. While many visitors and residents will have spotted whales and dolphins from the land or sea in the area, and most fishers and tour boat operators will be able to share stories of bow-riding dolphins and breaching minke whales, we wanted to investigate the real potential for marine wildlife tourism on Iveragh. Which are the best viewing sites? When is the best time? What is someone likely to see if they try to spot wildlife from the land?

Our knowledge gatherer, in consultation with the Irish Whale and Dolphin Group, various local tour boats and Sea Synergy, has selected 11 sites around the peninsula to study. She carries out 'effort watches' regularly from these sites. An effort watch is a standardised way of looking for marine mammals using the same technique for the same length of time.

Over the winter months (December to April), Bolus Head was the most successful site, with sightings rates ranging between 0 and 3 whale or dolphin sightings per hour watched. Nearby Ducalla had an average sighting rate of 2.4. The total number of animals observed over these months ranged from 0 (Tahilla Pier, Geokaun Mountain and Kells) to 63 (Bray Head). Many of her watches were cancelled over the stormy winter, and sites can be more or less important for animals at different times throughout the year, so Christina advises some caution when looking at these results.



Average sighting rates by effort watch site



During nearly 52 hrs across 31 watches, Christina recorded seeing whales, dolphins or porpoises 38 times. Each sighting can contain several animals. The most common species identified was Minke Whales. However, we can confidently say that dolphins are far more common in the waters of Iveragh than whales or porpoises. Dolphins often travel in groups, and it isn't always possible to identify the species from land. Christina recorded five sightings of common dolphins, 1 of bottlenose, and 16 sightings where she could not tell the species.

Besides collecting data, during the winter months, we held online talks on cetaceans, coastal birds, and outdoor events. Through these events, 23 Iveragh locals and regular visitors came together to begin group effort watches and share details of their cetacean encounters. Hopefully, these watches will continue long after our project has ended.

We had an initial meeting in April to find out how more information on whale and dolphin watching could benefit tour boat operators. We invited the Irish Whale and Dolphin Group (IWDG) to hold a course on how to identify marine wildlife, how to behave in a boat around them, and their distribution around Iveragh. We had 13 participants at this training day, two of which have become regular contributors of sightings data to the IDWG. They are responsible for half of the records from Iveragh within the same month the course was held! An excellent result.





Marine Litter

The issue of marine litter around the Llŷn and Iweragh peninsulas has been something we have been considering. On the Welsh side, our partners, the National Trust, have recently recruited two new ‘Coastodians’ who will care for Llanbedrog beach, collecting litter and microplastics regularly along the coastline. They’ll be building up a group of volunteers through their work too, so eventually, there will be a big team keeping our coastline tidy for the wildlife and beachgoers.

We have also had some Duke of Edinburgh (Gaisce equivalent in the UK) volunteers to work around the coastline of Llŷn, targeting some of the litter hotspots on a 5 day litter picking spree. Using the newly acquired LIVE litter picking equipment, they collected a mountain of bin bags full of rubbish at some of the Ecoamgueddfa and National Trust sites.

Members of the Irish team have also been out and about tackling the issue of marine litter. Earlier this summer, we joined Sea Synergy for a World Ocean Day beach clean. We hope to be able to continue this work over the coming months.

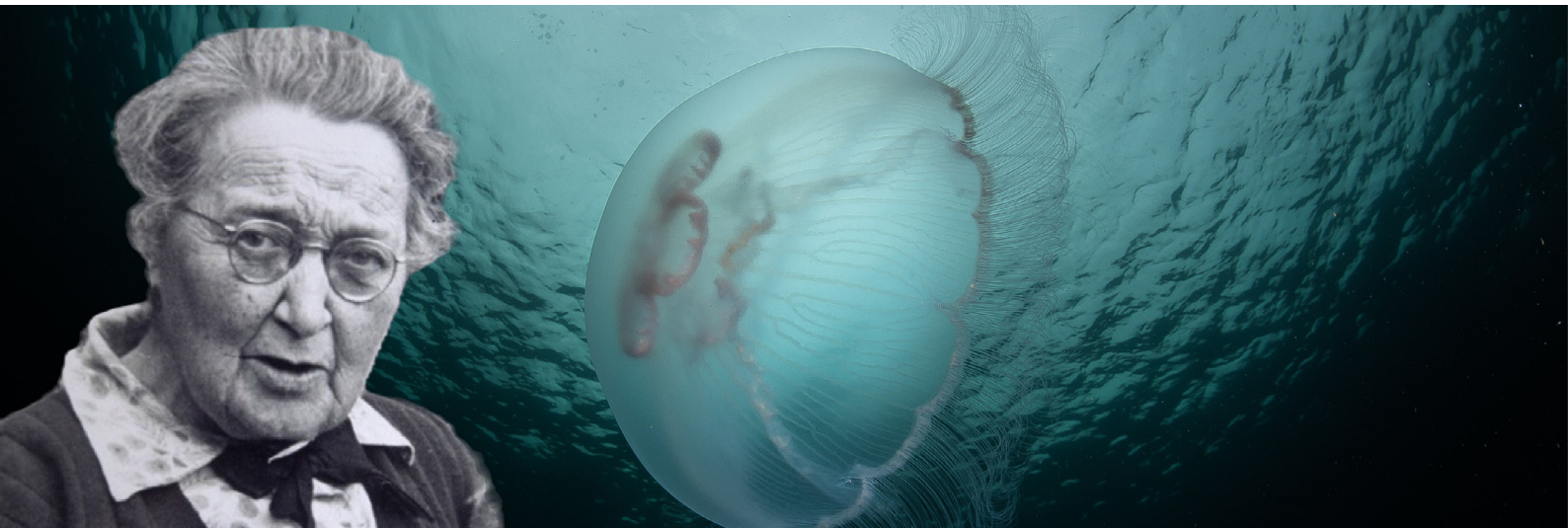


Iweragh Archaeological discoveries

Over the last months, Knowledge Gatherer Aoibheann Lambe has been trekking the land here in Iweragh, looking for ancient rock art and other monuments. Luckily, in Iweragh, she rarely needs to travel far. Kerry currently has the country’s highest proportion of monuments to head of population; one national monument on record for every 12.8 people in the county.

As the continuously growing number of discoveries shows, many more monuments remain as yet unrecorded. Apart from rock art, among the nationally rare monuments reported to the National Monuments Service within the last four years by Aoibheann are a copper mine, a rock shelter and two stone circles. Recent discoveries include a barrow identified by Tom Horgan of Waterville and a stone row discovered by Maggie and James O’Shea, which will be added to the list shortly.

Fieldwork by the LIVE project in the last year has taken us across many tracts of land, either following waymarked trails or crossing private land with the kind permission of the landowners. During these surveys, we or people joining us have made discoveries of standing stones, enclosures and rock art. Some sites were known locally and presumed recorded; others hadn’t been correctly mapped when they were first recorded, and a few had been overlooked until now, perhaps for thousands of years. Christina, a marine biologist on the LIVE team, hasn’t only spotted whales, porpoises and dolphins in her surveys conducted from land but has also discovered a standing stone and an enclosure where none was recorded previously. After studying the descriptions for the monuments listed in the vicinity of these sites, we realised that the standing stone had been previously recorded, but in the wrong place!



Finding Maude Delap

Maude Delap was Ireland's first female marine biologist. She was largely self-taught and made some very important scientific finds. Her legacy is remembered locally in South Kerry, and her work is well known among the scientific community; however, there are still gaps in knowledge around how she worked and carried out some of her research. As Knowledge Gatherer for the LIVE project, Jane Sheehan began to seek out and catalogue Delap's notebooks, letters, and other documents scattered between institutions. The main aim was to create a definitive list of where all Maude's material is kept and help share this information with the public.

The Valentia Island Heritage Centre houses an exhibit on Maude Delap within its three display rooms. The exhibit is wonderfully decorated with examples of sea life found in Valentia Harbour and information boards about Maude's life and work. Their collection includes sketchbooks and journals belonging to Maude, photos of her and her family, and her original golden microscope. Though many of Maude's personal artefacts are in safe storage, pictures from her sketchbooks are on display within the room. Jane was kindly given access to digital

scans of one of Maude's sketchbooks, which gave great insight into Maude's skill as a naturalist. Her elaborate sketches show that she had keen attention to detail and could replicate on paper the tiny identifiable characteristics of microscopic plankton she viewed under her microscope.

After visiting the Heritage Centre, the next institution Jane turned to was the Natural History Division within the National Museum of Ireland in Dublin. She began her search within their archives, looking for correspondence belonging to the Delaps. The Delap's corresponded mainly with Dr Robert Francis Scharff, a zoologist who has contributed greatly to our understanding of Irish flora and fauna and Keeper of the Natural History Division. Maude sent letters asking for help identifying animals and plants found by her or others in the community. Often, these letters were accompanied by the specimen of the plant or animal in question. Delap would wrap up the specimen and send it by train to the museum. The specimens that the Delap family collected and sent to the museum are still contained within their archives. There are over 102 submissions, ranging from fish to whale bones to birds, turtles and jellyfish!

Thanks to the hard and excellent work of the curators and staff of the museum down through the years, the specimens sent by the Delap family are wonderfully preserved.

Success in Dublin led Jane to reach out to the Library and Archives of the Natural History Museum in London. Within the archives is a Special Collection of material belonging to Edward T. Browne, a friend and mentor to Maude throughout her life. Within his journals, Browne kept all the plankton records posted over to him down through the years. Also found were a large sum of loose drawings belonging to Maude. However, Jane was delighted to see five filled sketchbooks belonging to her. These five sketchbooks are filled with sketches of jellyfish, complete with her detailed notes and observations. There were even drawings and notes belonging to Delap's reclassification of a species of microscopic jellyfish. Jane had seen sources mention this discovery but had not found any material to back it up. Therefore, it was fantastic to find evidence for one of her scientific contributions. The sheer amount of care and consideration which goes into protecting these archives can be seen by the quality of the material to this day. Maude's delicate pencil strokes look fresh and new, even 100 years on.

The relatives of Maude Delap also provided invaluable information to me about her. They have their own collection of Maude and her family's archives and materials, along with fond memories and anecdotes of their parent's time with the aunts Maude, Connie

and Mary on Valentia Island. Combining all the information gathered in the past year has not only painted a better picture of Maude as a person but has also helped fill in gaps about her research and experimental design. It has raised awareness around Delap's research and life story and the urgent need to collect and categorise information around her. And there is still more material surrounding Maude yet to be found and brought to light. A receipt given to a family member of Maude's states that the many years of correspondence between Maude and Edward Browne is housed within archives of the Marine Biological Association Laboratory in Plymouth. For now, having a definitive list of where her information is, is a resource for anyone interested in learning more about Maude and the Delap family. We hope to see a greater interest in Maude in the coming years, as she is not just an inspiration for women in science and trailblazing scientists alike but many historians, poets, and artists.

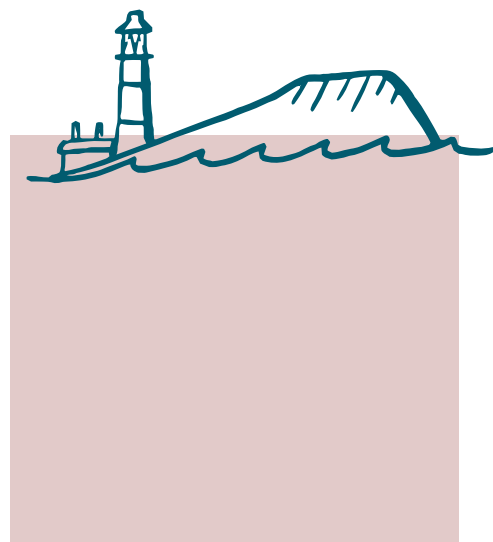


NMNH:1921.14.1 © Natural Museum of Ireland Natural History Division





From Iveragh to Pen Llŷn



Following the successful first post-pandemic cross-border visit in November 2021, when the Welsh team visited Kerry, the Iveragh team were delighted to travel across to Pen Llŷn.

The Irish contingent split into two. Project Manager, Lucy Taylor, travelled in March with Knowledge Gatherers Linda Lyne, Calum Sweeney and Fiach Byrne. Iveragh Local Coordinator Orla Breslin, and Marketing Officer, Clodagh Cahill travelled a few weeks later in April. Both visits followed a similar 4-day schedule and included visits to each Ecoamguedda site, meetings with local stakeholders, and opportunities to meet more of the LIVE Project Team in person.

Guided by the Llŷn team, we visited Nant Gwrtheyrn, 'the Nant', a heritage and conference centre situated in an old quarry village where people come from all over the world to learn Welsh, admire the views, and shoo the wild goats from wildflowers. Amgueddfa Forwrol / Llŷn Maritime Museum is small but packed with historical marine treasures and stories from across the peninsula, including Madrun, the famous skeletal remains of a woman buried beneath the church around early C12th.

Plas yn Rhiw, a beautiful National Trust manor house overlooking Cardigan Bay with gardens and walks, was a stunning setting to meet with Laura Hughes and Robert Parkinson to learn more about their activities and discuss potential collaborations and connections. Exploring and chatting over a cup of tea in the gardens felt like a real treat after months of talking through the laptop screen. We also visited Porth y Swnt, another National Trust site, but quite different. It's a unique interpretation centre that uses poetry and art installations to showcase the tumultuous waters around Pen Ycill and the legendary island of Bardsey – the island of 20,000 saints.

We had more chats and panads (cuppas) in Pwllheli, learning about the social enterprise Felin Uchaf, famous for its storytelling, with hand-built houses, nature trails and productive community gardens. Walks up some of the hills around Pen Llŷn, which house Iron Age hill forts with hundreds of round houses, tested our legs and gave us a sense of the scale of the peninsula.



Finally, we visited Oriel Plas Glynn y Weddw, an art gallery and café set in a Victorian Gothic Mansion in the village of Llanbedrog, which already has excellent connections to the Irish Gaeltacht regions through the Celtic Connections programmes over the years. We even managed to squeeze a few more meetings and conversations to learn more about the Llŷn Landscape Partnership, the Welsh Coastal Path, and sustainable and regenerative tourism in action.

They were very interesting and thought-provoking trips for the Iveragh teams visiting, learning how the Llŷn peninsula works together. The collaboration between tourism attractions and locations that on the outside may vary greatly in theme, type, and size, but pull together under the ecomuseum concept and umbrella to co-develop a tourism brand that works as a tide that rises all boats, big and small.

National Biodiversity Conference 2022



The LIVE team attended [Ireland's National Biodiversity Conference 2022](#) to connect with local, national and regional priorities, meet with current collaborators, make new connections, and share learnings to bring back to our partners in Kerry.

While it is agreed that there is a biodiversity crisis in Ireland, as declared by the government, there seems to be less agreement on implementing change. It was also clear that nothing will improve without support both from local communities and for communities, including those who make a living from the land, who are best placed to implement many of the required actions.

While it was regularly noted that nature is critical for human health and well-being, this is not the only reason we should be concerned about biodiversity loss. Food production and tourism, industries that are critical to our region's economic well-being, also depend on healthy ecosystems. The LIVE team provided input into the upcoming National Biodiversity Action Plan to emphasise the importance of consulting with stakeholders in farming, fishing and tourism.

In reflecting on the themes repeated during the conference, it was clear that LIVE is taking the right approach by adopting the ways of working listed in the Wales for Future Generations Act.

Prevention of further damage is a key priority for all of us in addressing the current biodiversity crisis. The conference was criticised for not including a

diverse enough range of stakeholders. We hope that in LIVE, we are inclusive and involve all voices. Collaboration is key to everything we do, and we hope this exemplifies the type of 'whole of society' approach required to address societal issues, big and small. Integration ensures that our actions have an amplified impact – if everything is integrated into a larger set of actions, they can become powerful. We strive to integrate our work with that of larger bodies, ongoing initiatives, and local enterprises.

There are challenges, and we were inspired to renew our efforts in certain areas. For example, the effect of Covid 19 and lockdowns has meant that we have not sought the involvement of stakeholders in decision-making as much as we could. As we move into the final year of LIVE, we need to refocus our plans toward the long term to ensure that the community's needs are considered beyond our funding's lifetime.

Overall, it was inspiring to hear from other groups and projects and to be reminded of why we need to focus on a more regenerative model of tourism that sustains the economic and overall well-being of our local communities and the rich environment that sustains us.

To learn more about Ireland's Citizens Assembly on Biodiversity Loss, which will also feed into the upcoming [Biodiversity Action Plan](#). Click [here](#) to watch a beautiful video created by Crossing the Line Productions to remind us of the biodiversity we wish to protect.

Conference attended (Wales)

Sustainable and Regenerative Tourism: Conferences, events, workshops, and community conversations

In July 2021, knowledge gatherer Leonie Schulz joined the LIVE team to support research that investigates more sustainable, and in the best-case-scenario, regenerative forms of tourism in the two project areas. Based on the Llŷn Peninsula, she primarily works with the Welsh project team; Arwel Jones, Gwenan Griffith, and Dr Einir Young.

As a team, and individually, Arwel, Gwenan, Einir, and Leonie have attended sustainable/ regenerative tourism conferences, events, workshops, and community conversations to exchange ideas with similar projects. Einir and Leonie have also presented LIVE outputs at several events about ecotourism, community regeneration, and sustainability. As a result of their attendances, they have been able to refine research methods and resources.

On 19th May, Einir and Leonie gave a presentation at an online conference organised by Aberystwyth University: Community regeneration post-COVID-19: challenges and opportunities. Einir's presentation was entitled "Sustainable", "holistic", "regenerative" – can these hijacked words, which are losing their meaning through overuse, be reclaimed and redefined by communities through a culture-led approach?" Building on Einir's discussion about the greenwashing and the incorrect use of certain terms in different sectors, Leonie presented definitions of sustainable tourism, ecotourism, and regenerative tourism, as generally accepted in the tourism research community. In her presentation "Challenges and opportunities of developing regenerative tourism on the Llŷn Peninsula", she also talked about LIVE's approach of developing sustainable and regenerative tourism actions. Both presentations ended with a lively discussion about sustainability in general and

in the tourism sector more specifically. As part of the discussions, we exchanged ideas about opportunities for creating regenerative tourism experiences.

On 29th June, Leonie participated in the Regenerative Tourism Workshop, which was organised by the Rural Futures Hub at Aberystwyth University and the Cambrian Mountains Initiative. The objectives of the workshop were to define regenerative tourism within rural Wales, to discuss opportunities and challenges for developing regenerative tourism in rural Wales, and to identify guiding principles for regenerative tourism in rural Wales. While Leonie represented LIVE and our approach to developing regenerative tourism on the Llŷn Peninsula, she learned from industry stakeholders about other initiatives, actions, and strategies.

On 8th July, Leonie presented LIVE and some of the tourism research outputs at a community conversation of the Horizon 2020 funded project named [Be.CULTOUR](#). Gwynedd, represented by Arwel and Gwenan, is a mirror ecosystem of the project. The event was focussed on designing and planning strategic approaches, actions, and visions for the valorisation of local circular cultural tourism for the coming season. It involved useful discussions about the risk of overcrowded tourism destinations, under-exploited remote heritage sites, and how to monitor and manage visitor flows – topics that we are focussing on as part of LIVE. Following Leonie's presentation, Leonie has been invited to attend, alongside Arwel and Gwenan, a tourism [Policy Learning Lab](#) in Brussels, as the Be.CULTOUR community was interested in hearing more about LIVE and the research methods.



Practical Nature Connection



One issue identified in our Environmental Knowledge Survey of the Iveragh Peninsula, which we carried out in 2021, is the lack of training opportunities locally for those already working in outdoor education in some capacity, at a business or voluntary level. By talking with local residents and with experienced environmental educators, we were able to see that there was a need for upskilling opportunities: a need for more practical skills for those who either had qualifications in some form of environmentalism but little community-based experience or those who had some experience, but maybe not the confidence for a place-based community approach to environmental work.

The annual Discover Derrynane weekend was an excellent opportunity to address this need. We facilitated a collaborative event between established outdoor educators Cathy Eastman (Forest Connections) and Niamh Ní Dhúill (LEAF Ireland) and the beautiful and fit-for-purpose location - the gardens of Derrynane House.



Under the Forest Connections programme (Coillte, Dept of Agriculture), Niamh and Cathy led a practical, experiential learning workshop. Through active participation, the attendees learned practical skills such as how to set up an outdoor classroom, incorporate topics such as citizen science and active citizenship into practical activities, and disseminate vital and sometimes gloomy information about climate change in a relaxed and informal way. The workshop culminated in planting several native trees in the Derrynane Gardens and the potential for an environmental education network that can continue to grow.

This workshop followed a one-day awareness training event that Leave No Trace Ireland facilitated in Cahersiveen in April. The training allowed LIVE staff and local attendees to examine our attitudes toward nature and how we behave when we are outdoors. The group had great knowledge before the day, so the debates and discussions were lively and well-informed. As well as learning new ways of looking at our behaviour and new outdoor skills, we all came away with memorable moments to reflect on and personal connections made and strengthened.

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Sustainable Tourism



The LIVE-project team is undertaking tourism research to explore opportunities for implementing sustainable tourism strategies on both peninsulas. The research focuses on involving local stakeholders to identify desirable actions for 1) extending the peak visitor seasons, 2) promoting the natural and cultural heritage, including the Welsh and Irish languages, and 3) developing regenerative tourism experiences.

In the first year, LIVE knowledge gatherer Soli Levi, led a study entitled 'Knowledge gaps and aspects of Iweragh peninsula's natural environment important to local communities'. This study, identified several knowledge gaps and aspects, which were divided into three categories: environmental knowledge, e.g., about specific species, general wildlife, and natural and cultural aspects; natural and cultural features and their influence on resident well-being and sense of pride of the area; and outdoor activities as a form of interaction between individuals and their natural environment. We are currently in the process of developing resources to visualise the results. In the meantime, please feel free to watch Soli's [webinar](#), in which she presents her study.

Following Soli's work, we are in the process of conducting four additional research projects:

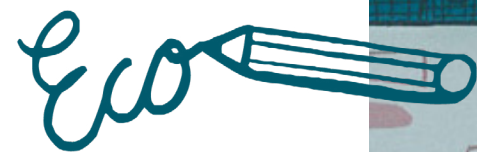
Engagement with natural and cultural heritage on the Llŷn and Iweragh peninsulas: This is a social media research study to identify how, where, and when visitors and residents on the Llŷn and Iweragh peninsulas engage with natural and cultural heritage. The aim of the study is to investigate user-generated data from social media platforms (Instagram, Twitter, Flickr, Strava, Komoot, AllTrails, and Wikiloc) to identify visitor patterns and popular natural and cultural sites and assets, especially outside traditional peak tourist seasons. This data will be used and compared with existing tourism and recreation data (e.g., visitor numbers, visitor and resident satisfaction levels with sites/assets, tourism's contribution to preserving local art and culture, infrastructure improvements) to identify sustainable natural and cultural tourism opportunities.

Key performance indicators - Identifying sustainable and regenerative tourism opportunities on the Llŷn peninsula: In cooperation with Gwynedd Council, one of the LIVE's project partners, we are developing key performance indicators (KPIs) for sustainable tourism. These include socio-cultural, environmental, and economic impacts. Based on the extensive list of KPIs within the [Gwynedd Sustainable Visitor Economy Framework](#), the aim for LIVE is to monitor tourism trends, evaluate the current tourism context, and identify challenges and opportunities for sustainable tourism development on the Llŷn peninsula. As part of this research, we will be holding workshops with local stakeholders to identify the most important KPIs for the Llŷn peninsula and develop actions to manage tourism impacts, positive and negative.

Tourism carrying capacity on the Iweragh Peninsula: The European Observation Network for Territorial Development and Cohesion (ESPON) have commissioned the Austrian Institute for Regional Studies and Modul University to carry out a project on the carrying capacity for tourism in the Iweragh Peninsula. In collaboration with local tourism stakeholders, the project assessed the current tourism situation. Based on the findings, LIVE will engage with local stakeholders to define sustainable tourism for Iweragh in order to develop and shape policies and action plans for the long-term and sustainable development of the local tourism industry.

Creating visitor experiences - Developing a sustainable/ regenerative tourism strategy for Pen Llŷn and Iweragh: This year, we are conducting a survey to gather information about visitors' interests in the cultural and natural heritage of the two peninsulas, and how we can create more sustainable tourism experiences. This research will contribute to achieving our project aims: to enable Pen Llŷn and Iweragh to be a home and a destination, providing opportunities for the communities today and in the future to prosper in their own locale on their own terms whilst enriching the visitor experience, and moving away from 'extractive' tourism to developing regenerative tourism, where visitors leave their holiday destination better than they found it.

As knowledge exchange between the two peninsulas is an important aspect of LIVE, anonymous data and findings will be shared with project partners in Wales and Ireland. The findings will also be presented at public (community) events, webinars, and may be presented at conferences, and published in journals. We regularly update our [Tourism Research webpage](#) to keep stakeholders informed about our research projects and findings.



Keeping in touch with Llŷn Iweragh Ecomuseums

Launched in January 2021, we are very proud of our website, www.ecomuseumlive.eu. While primarily a tool for sharing information about the project, we are delighted that it looks so well aesthetically. Recently we have revamped the site, and it now contains more information and outputs from our work through the year. Some of the new additions to the website include a video gallery, the addition of several new blogs and storymaps and an events calendar which contains the dates and details of all our upcoming events.

Our project is bilingual with both English and Welsh as working languages. In addition, the website and some of our resources and social media content is also available in Irish. We would like to have more Irish content but have not yet secured a regular translator for this work. Promoting Irish and Welsh as living languages is integral to the aims of LIVE, so we hope to resolve this in the near future.

In addition to the website, we have also got a very active social media presence. Llŷn Iweragh Ecomuseums can be found on Facebook, Twitter, and Instagram. We share information about events, local stories of interest, and tidbits of information about our research. Please follow us to keep up to date with the project.

If you would like to contact us directly, you can also do so by email at live@ucc.ie.



www.ecomuseumlive.eu

