

JULY 2021 - SEPTEMBER 2022 FINAL PROJECT REPORT



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The Comeragh Upland Communities is a European Innovation Partnership project being administered by DAFM. The Project is funded by the EU Recovery Instrument Funding under the Rural Development Programme 2014-2022"



An Roinn Talmhaíochta,
Bia agus Mara
Department of Agriculture,
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Dedication

1967 - 2022

The Waterford Hill Sheep Discussion Group members dedicate the EIP project's work and output to the memory of Willie Fraher, their friend, neighbour, founding member and former Chairman of the Discussion Group.

Ar dheist Dé go raibh a anam



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Acknowledgments

The fourteen participating farmers and the project team wish to thank the Department of Agriculture, Food and Marine for the project funding. They also want to acknowledge the support of Hugh Carey, National Monument Service (Monuments); Philip Murphy, LAWPRO and Cathal Somers, ASSAP (Rivers and Streams); Maurice O'Connor, Daelyn Purcell, Brian Power and James Whelan, Oakwin, (Birds and Fauna); Helen Lawless, Mountaineering Ireland (plants and Walking with Wildlife brochure); Enda Mullen, NPWS (Comeragh Mountain Habitats - Introduction); Julie Larkin, Oakwin, (Habitat education, survey and potential actions); John Casey, Teagasc and Ciaran Nugent, DAFM (Prescribed Burning).

We want to thank our Tuesday Tea Talk speakers, Brendan Dunford, Michael O'Donoghue, Hugh Carey, Michael Desmond, Sean and Sile Murphy and Fran Igoe, who inspired the Comeragh rural community and us with their knowledge and understanding. We acknowledge the support from the Rathgormack and Ballymacarbry Community Centres, who hosted the talks.

Thanks to Hugh MacEneaney, Teagasc, for his assistance and support with the school visits to the three farms. A special thanks to the principals, teachers, and classes of the Kilbrien, Coolnasmear, Rathgormack, Kilrossanty, Ballymacarbry and Touraneena national schools and the Burrenbeotrust Heritage Keepers training course for partially funding our successful farm and upland engagements with the schools.

We thank the hosts of our three successful and informative site visits. Robert Hull, Steven Johnston and Bryan Irvine, CAFRE, Jim Fitzharris, Deerpark Commonage, Bunclody: Mary McAndrew, Pearl Mussel Project, Gary Goggins, Wild Atlantic Nature, John Noonan and Chris Hanrahan, Teagasc, and two farmers, Pat Chambers and Martin Gavin who hosted our visit to Galway and Mayo.

Introduction

In recent years, the Waterford community recognised upland farming on the Comeragh mountains as having the potential to provide public goods or services that build on its natural and cultural heritage. It is evidenced by Waterford City and County Development Plan 2022 – 2028¹. Among its strategic objectives are:

- Integrating climate change and adaptation considerations into land-use policy objectives.
- Protecting, managing, and enhancing the natural heritage, biodiversity, landscape and environment of Waterford City and County.... providing a unique identity and character for the county and city as a natural resource asset.

Comeragh's ecosystem services and public goods include biodiversity and habitats, the provision of clean water, carbon sequestration, landscape, and public access and health. They offer an opportunity for the necessary increase in farmer incomes from the uplands to ensure their economic, environmental, and social sustainability.



The mix of goods and services from the uplands includes food production, water supply and flood control, carbon sequestration, biodiversity and habitats, public health and recreation².

In the scenario figure above, the contribution of each potential service to €1 of farm output might look like this:

- | | |
|---|----------------------------------|
| • Food production provides | €0.35 for every € of farm output |
| • Water supply and flood control provides | €0.20 for every € of farm output |
| • Biodiversity and habitats provides | €0.20 for every € of farm output |
| • Public health and recreation provides | €0.15 for every € of farm output |
| • Carbon sequestration provides | €0.10 for every € of farm output |

¹ <https://consult.waterfordcouncil.ie/en/consultation/draft-waterford-city-and-county-development-plan-2022-2028>

² Adapted from original figure in *Functional land management: A framework for managing soil-based ecosystem services for the sustainable intensification of agriculture* Schulte et al (2014) <https://www.sciencedirect.com/science/article/pii/S1462901113002104>

The mix of goods and services from uplands and commonages³ will vary within and between the Comeragh upland areas, reflecting the natural and cultural resources, the policy objectives and incentives, and the ambitions of those farming the uplands.

The value of these new outputs is not only for those farming the mountain but also for the county's communities. The co-benefits of sharing the natural and cultural heritage of the uplands will contribute to securing a better future for all.

The 2014 National Survey of the Comeragh Mountains Special Area of Conservation (SAC) report⁴ identified the status of the eight mountain (Annex 1) habitats as Unfavourable - Bad.

The survey found the dry and wet heath areas are reducing, contributing to their unfavourable- bad status.

A wide range of agendas and complexities are associated with the natural, cultural and social environment of the Comeragh mountains. These create challenges in developing management solutions to protect and enhance the natural and cultural heritage. However, the mountain's stunning and unique geographic features, its natural beauty, and over 6,000 years of cultural heritage demand that sustainable solutions for the community are found.

The farmers participating in the project have generations of experience with sheep production, and their flock management has responded to the changing economic and policy drivers. For example, wool was the primary output up to the early /late 60s when the demand for wool was high. It has declined to almost nothing today.

Policy changes around that time led to per-head sheep payments. Also, upland farmers began to focus on increasing lamb production to replace the wool income loss due to the market's collapse. The responses were sheep numbers reached almost nine million nationally by the early 90s, which resulted in severe and significant overgrazing on many uplands. In addition, lowland sheep farming practices to maximise lamb production resulted in hill sheep losing their exceptional qualities of being hardy, independent and easily kept.

Once the ecological damage was recognised, new policies (Commonage Framework Plans) were implemented to address the problems. It involved destocking on some mountains and uplands to allow vegetation recovery. Sheep numbers nationally in 2020 had fallen to four million, of which 25% are mountain sheep. The latest policy changes reflected in the new ACRES⁵ scheme focus on delivering environmental goods and services.

Achieving the right upland solutions requires knowledge, understanding, and a commitment to work together by all the key actors. This project represents an initial exploration of how the farmer's upland habitat management knowledge and experiences might be developed.

³ In this report the term "upland" refers to privately owned mountain while commonage refers to mountain areas where two or more farmers or shareholders have grazing rights.

⁴ https://www.npws.ie/sites/default/files/publications/pdf/SPEU09_Comeragh_Mountains_Report_01b_M.pdf

⁵ <https://www.gov.ie/en/press-release/10182-mcconalogue-announces-name-for-15bn-agri-environment-scheme/>

To date, very few, if any, opportunities for such learning have been made available. These new skills will facilitate farmers in implementing the sometimes-challenging management changes required to deliver a broader range and mix of goods and services. Farmers taking ownership of the need for change is critical to its success. Secondly, the project wanted to explore how to build a better relationship between the farming and non-farming Comeragh communities that could enhance the opportunity for better social, economic and environmental outcomes.

Against this background, the project evolved around three innovations inspired by Brendan Dunford, the Burrenbeo Trust, Gwyn Jones, and the many Irish pioneers of Results-Based Payment Agri-environmental Schemes (RBAPS). These are:

- Habitats/biodiversity are integral to the mountain's natural and cultural heritage; *[They are not stand-alone issues].*
- Engaging the hearts and minds of the farmers in addressing the challenges of delivering the required broader range of goods and services. *[The farmers must own the ambitions and plans to provide the extended range of services].*
- Farmer engagement with the non-farming rural Comeragh community. *[Creating the potential for enhanced progress with rural development].*

There were three primary objectives:

1. To develop and evaluate an upland Habitat Management Education¹ module for farmers.
2. To explore the mountain's landscape and cultural heritage (geography, archaeology, placenames, living memories and folklore).
3. To devise mechanisms for sharing the area's natural and cultural heritage with the broader community.

Project Outcomes

The fourteen farmers participated in 25 days of field education with Project Team members, external experts, site visits, community-based tea talks and robust discussion group meetings on the upland and in local community centres. As a project group, we were supported in our work by a wide range of experts who gave their time freely to facilitate and deliver the education.

The extensive list (Table 1) of those who provided support and input to the project provides evidence of the need for farmers, advisers, researchers, educators, NGOs and community members to work together in an integrated top-down, bottom-up approach. This integrated approach is required to develop capacity in upland habitat management and realise sustainable solutions for upland communities.

¹ Education in this report refers to the social and growth process of preparing farmers to manage their mountain to deliver a financial, environmental and social future for themselves, their families and the broader community. Training refers to increasing the farmer's skills to do a particular job, e.g., controlled burning.

Table 1. The list of the many people who supported and delivered the project.

<p>Eileen Delaney, Barry O'Connor, & Karyn Breen - DAFM</p> <p>Brendan Dunford, James Moran, John Finn, Gwyn Jones – Inspiration.</p> <p>Declan Byrne, Brian Dunne & Pat Dunne - SUAS project team - support</p> <p>Julie Larkin, James Whelan & Moss O'Connor – Ecological services.</p> <p>John Casey, Teagasc, Ciaran Nugent, DAFM; - Prescribed burning.</p> <p>Hugh Carey National Monument Services – Walk & Talk.</p> <p>Helen Lawless, Mountaineering Ireland – Walking with Wildlife brochure.</p> <p>James Maher Teagasc – training programme.</p> <p>Rathgormack & Ballymacarbry Community Centres – Hosted Tea Talks.</p> <p>NS Principals from 6 Comeragh primary schools – community engagement.</p> <p>Michael Desmond, Sean & Sile Murphy; Fran Igoe, Speakers Tuesday Tea Talks</p> <p>Philip Murphy, LAWPRO, Cathal Somers, ASSAP – Stream walk.</p> <p>Helen Sheridan, Peter O'Connell, Gaia Scalabrino, Natpro, TCD.</p> <p>Robert Hull, Steven Johnston and Bryan Irvine, CAFRE; Jim Fitzharris, Deerpark Commonage, Bunclody; Mary McAndrew, Pearl Mussel Project, Gary Goggins, Wild Atlantic Nature, John Noonan and Chris Hanrahan, Teagasc, and two farmers, Pat Chambers and Martin Gavin - visit hosts.</p> <p>The Burrenbeo Trust, the Heritage Keepers programme and the Heritage Council – farm visits and school posters</p> <p>Dorothy Ahearne & Ann O'Donovan – Teagasc Office in Dungarvan Admin support.</p>

The structure of the field-based education activities, Tuesday Tea Talks, site visits, and school engagements provide a potential framework for future upland education and training programmes for farmers and community engagement activities.

Dr Anita Naughton, Teagasc, assessed the farmer's experiences from participation in the project. She summarised the results as follows:

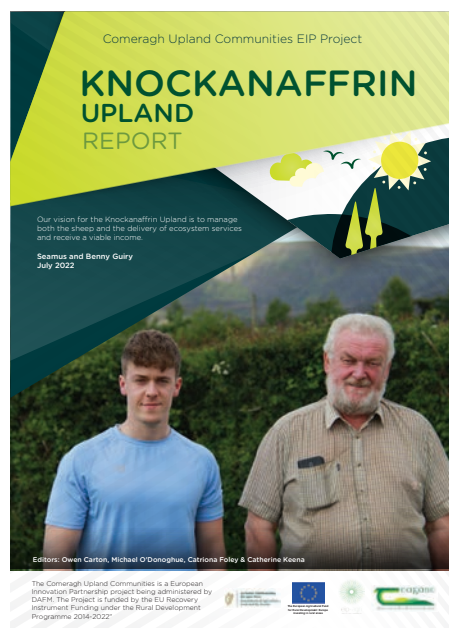
- Farmers acquired new knowledge and skills through engaging with external experts, site visits and the wider Comeragh community.
- Farmers valued the practical approach of 'learning by doing, particularly co-learning with external experts 'on the mountain'.
- Farmers described equitable knowledge exchange between the group and external experts. "they understand where we are coming from, and then we understand where they are coming from."
- Empowerment through acknowledgment of farmers' expertise and their importance within their community, e.g. through school visits.
- Long-term impact as generational knowledge about traditions/history/place names/ local farming practice exchanged and recorded for the future.

Commonage and Upland Reports

Ten Upland or Commonage Reports were produced to provide a legacy and resource for the participating farmers and their families. The participating farmers have a high level of ownership of the report as they were the sole authors of some sections and co-authors of the remaining ones.

Comeragh Upland Communities EIP Project





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An example of a Commonage Report cover and its contents page.

A summary of each section in the report is provided below.

Introduction: The memories and future hopes for their families and uplands written by the farmers are outlined. The reports provide evidence of the tradition of upland farming and their passion for it. The impact of significant snow events in 1947 and the 60s featured prominently in many reports. Other common threads included the change in the flock management system from one based on wool sales to today's system based on lamb sales.

Geography: This section of the report, prepared by Project Team member Michael O'Donoghue, follows a walkover with the farmer or shareholders on their upland or commonage. The Comeragh rock formation processes between 500 and 330 million years ago resulted in the dominance of old red sandstone with smaller areas of limestone and slate. The process resulted from prolonged but persistent movements of the earth's crust. In addition, over 300 million years of weathering led to erosion of the rocks and elements of soil formation.

Between 120,000 and 15,000 years ago, there were several ice ages. The enormous ice masses sculptured the Comeragh rocks to provide today's visual landscape that makes the mountain unique. The mountain's unique glacial landscape includes 14 corries which are of national importance.

The Comeraghs highest point reaches 792 m. Seven main rivers drain into the Suir valley and the Waterford coastal plain, and the river Colligan is the longest at 20 km.

The habitats and biodiversity have evolved in this landscape, forming the Comeragh mountain's rich natural capital.



Placenames: This report section, prepared by Michael O'Donoghue, catalogues the farmers and his sharing of their collective placename knowledge during upland or commonage walkovers. There is virtually no written record of life on the Comeraghs in the past, like other remote upland areas in Ireland. Thankfully, the rich tapestry of Comeragh placenames gives us an insight into life on the hills in times past. They have remained largely intact for over 2000 years because of the mountains' remoteness and often inhospitable nature.

According to Canon Patrick Power⁶, who wrote "The Placenames of Decies", they are vital sources of social history. They highlight many aspects of how people interacted with the mountain environment through the ages. For example, the land is divided into fields for farming, building structures for habitation, constructing pathways for passage, etc.

Monuments: This report section was written with significant input from Hugh Carey of the National Monuments Service, Department of Housing, Local Government and Heritage. It follows a walk for the farmers and project team he led on Coumarglin mountain and a Tuesday Tea Talk presentation.

Prehistoric civilisations did not leave behind written records, so we cannot read about them. The Comeragh mountains have a long and fascinating history of human occupation stretching back over 6,000 years. Archaeology helps grow our knowledge and understanding of the people who lived on the mountain over that long period.



⁶ https://waterfordireland.tripod.com/rev__patrick_power_-_historian.htm

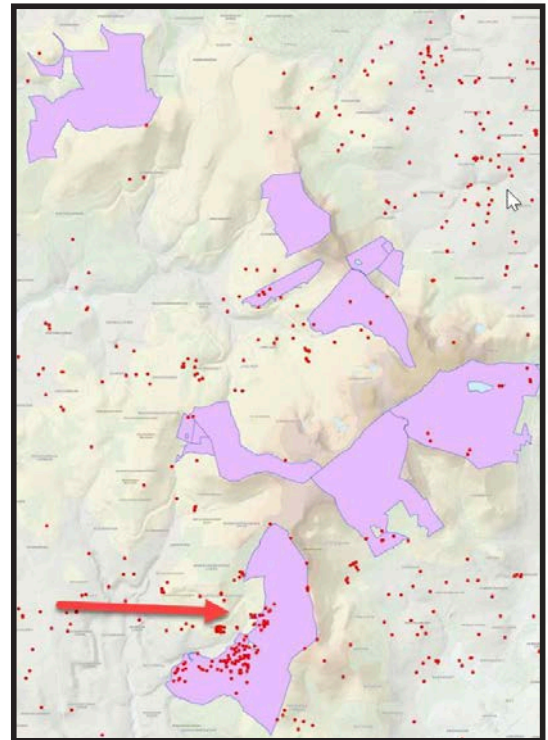
The monuments tell us about social life, religious beliefs, culture, and people's knowledge in the period the monuments were built. They are our heritage and a symbol of pride and give local communities a sense of identity.

It is interesting to remember that farming was one of the first essential developments in the history of man. The cultivation of crops and domestication of animals originated in the Middle East about 12,000 years ago and gradually spread across Europe, reaching Ireland about 4000 BC. This period is referred to as the Neolithic or New Stone Age. This "new" concept of farming was brought to Ireland by early European immigrants and is still evolving today.

Farming began in Ireland with the domestication of goats, sheep, cattle and pigs and the cultivation of a primitive form of wheat and barley. The hunter-gatherer population adopted it over time because it provided a more reliable food source for them and their families.

The first farmers cleared dense oak and elm forests to plant crops and enable their animals to graze. Many early farming sites favoured sheltered places near quality water sources. It created a year-round food supply and allowed people to live in permanent settlements, although hunting and gathering wild foods remained important and provided supplementary foods.

The earliest standing archaeological monuments in the County Waterford date from 4000 to 1200 BC and are seen in places like Coumaraglin. They include field walls, enclosures, hut sites, standing stones, fulacht fiadh, barrows, kerb circles, and rare ritual monuments such as ring cairns, cairn circles and keg circles.



Coumaraglin commonage has the highest concentration of monuments in the Comeragh mountains.

Rivers and Streams This report section was prepared by Philip Murphy, Local Authority Waters Programme (LAWPRO), and the Project Team following a stream walk near Mahon Falls with Agricultural Sustainability Support and Advisory Programme's (ASSAP) Cathal Somers. Streams and lakes on the Comeraghs are an integral and vital part of its diverse ecosystem.

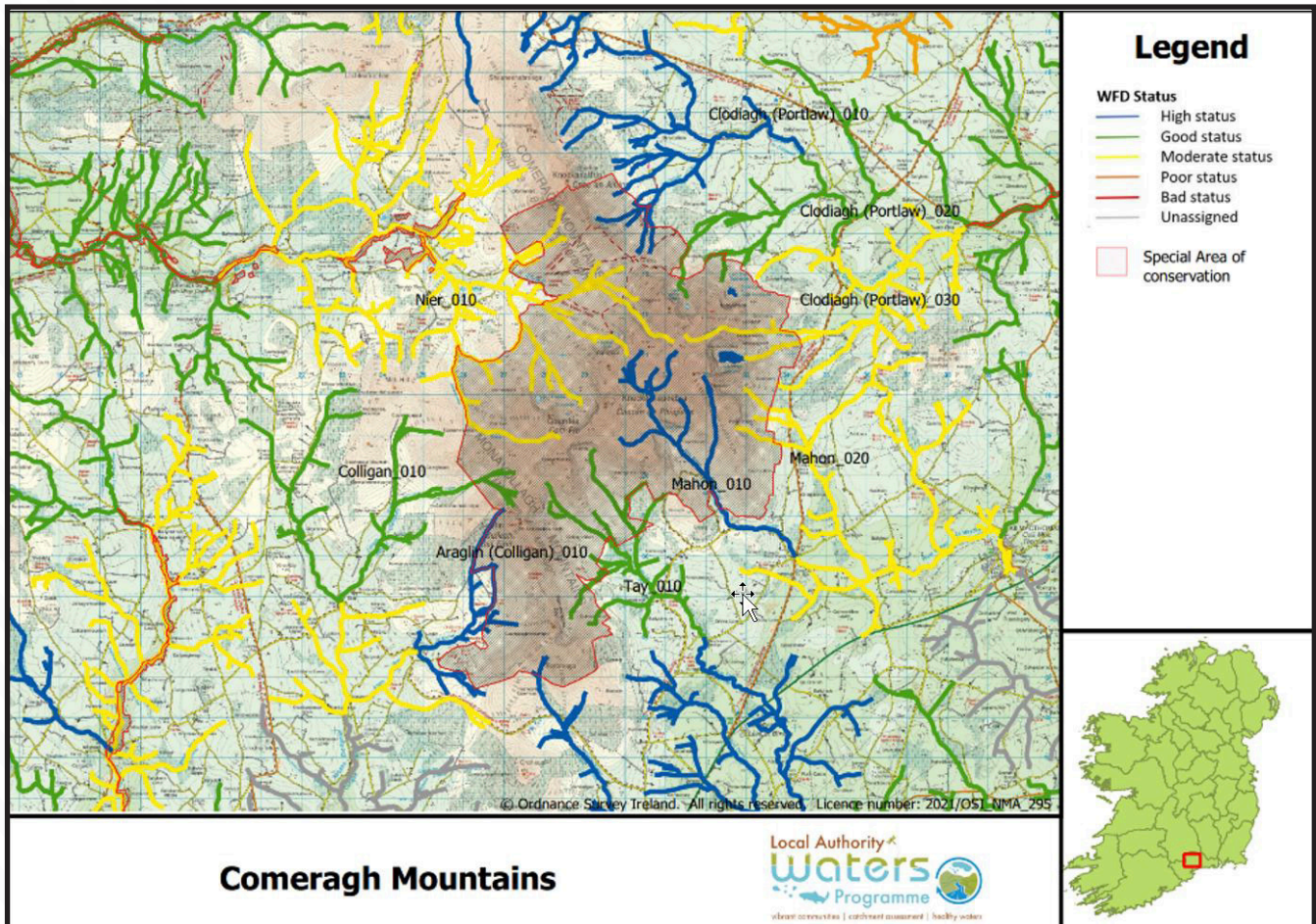


Dry and wet heaths and upland bogs dominate the Comeragh uplands. The intensity of the farming activities on these lands is low. A 2017 EPA report indicated that farming practices on these uplands generally do not impact water quality⁷. The health of the larger downstream rivers and estuaries depends on maintaining good or high ecological status in the Comeragh headwater streams.

⁷ https://www.epa.ie/publications/research/biodiversity/EPA-RR-209_webEssentra.pdf

The most recent water quality reports indicate that the rivers with sources in the Comeraghs generally have a good or high-quality ecological status.

LAWPRO works on the smaller tributaries of the main river channels. They work on river lengths where declines in water quality have been identified by the EPA. They identify the sources and work with the communities to address them. Philip Murphy demonstrated the process of kick sampling to examine the macroinvertebrates⁸ that live in the river bed and provide an indication of water quality.



The rivers with sources in the Comeraghs generally have a good or high-quality ecological status.

The supply of drinking water and flood control are two ecosystem services potentially deliverable by the uplands. These two services are linked to upland biodiversity. Functioning upland bogs and wet heath can slow the water flow down the mountain following heavy rainfall reducing the risk of lowland flooding. In addition, they will reduce the potential for sediment loss, which adds significantly to the cost of water treatment for human consumption. For example, the Glenary river is the primary water source for the water treatment plant used to supply the town of Clonmel and the surrounding area serving a population of 10,750 and delivering supplies of 3,734 m³ of water per day⁹.

The appendices provide best practice advice for upland farmers for some of their activities that potentially impact water quality negatively.

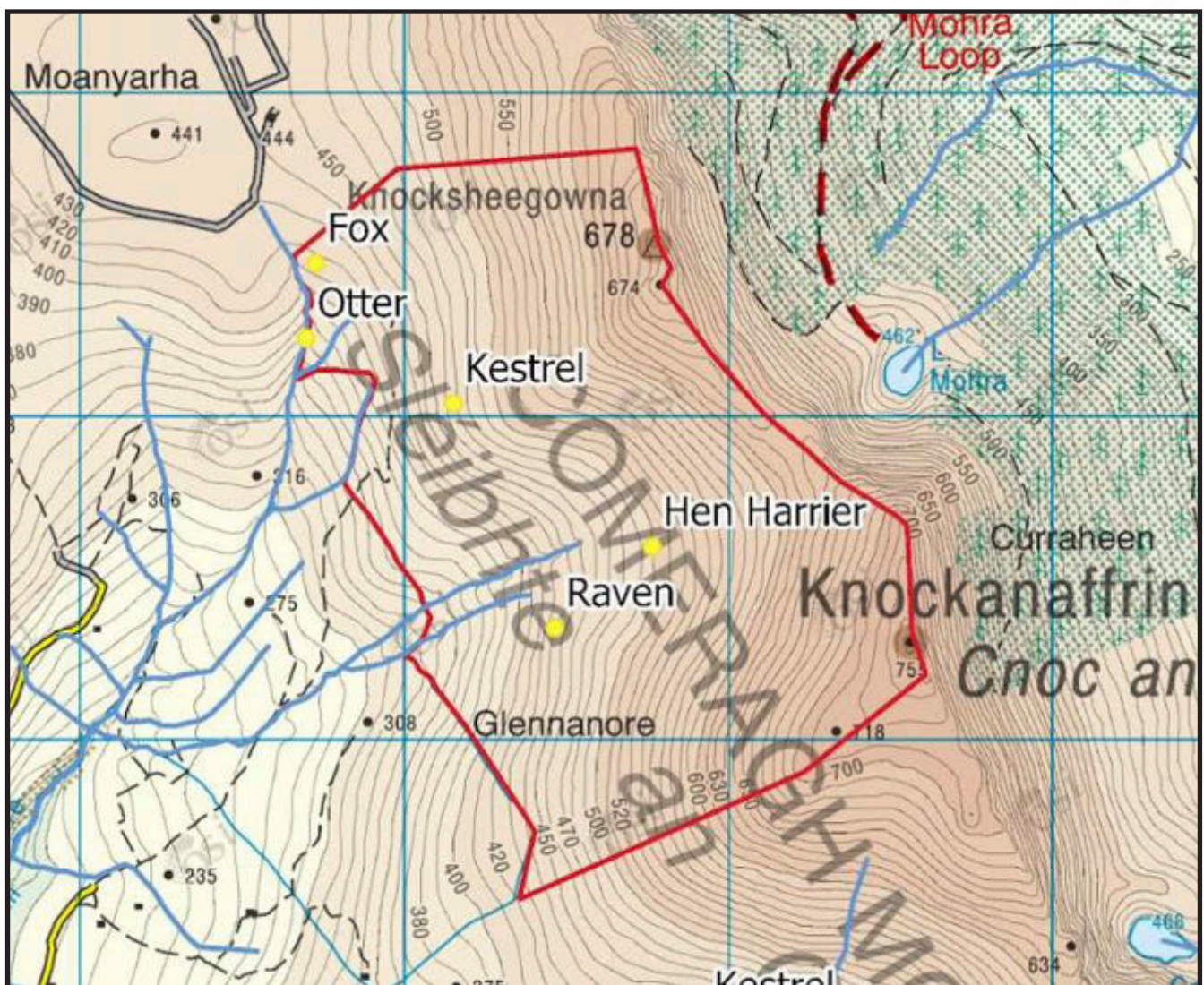
⁸ Macroinvertebrates are small aquatic animals such as insect larva, snails, worms, beetles etc. Where streams and rivers are unpolluted there is a great variety and abundance of these species. However, in polluted streams and rivers the numbers and types of macroinvertebrates is usually lower and many of the rare and sensitive species are absent.

⁹ <https://www.epa.ie/publications/compliance--enforcement/drinking-water/audit-reports/tipperary/Glenary-06.09.18.pdf>

Bird and Fauna surveys: This section was prepared by Daelyn Purcell and Maurice O'Connor, Oakwin, following their high-level bird and fauna surveys on the commonages and uplands.

The focus of the fauna survey was to identify the presence of mammals on the uplands or commonages surveyed. The focus was on species listed in the Habitat Directive. The authors undertook a vantage point survey on several commonages for the bird survey.

The location of the bird species observed and the evidence of the fauna species found were marked on the upland or commonage map.



The location of the birds and mammals found on the Glennanore commonage.

Comeragh Mountain Birds, Fauna and Plants: The section was prepared by James Whelan, Maurice O'Connor (Oakwin), and Helen Lawless (Mountaineering Ireland). The report provides pictures and a short description of the most common birds, plants, and fauna found on the mountain. It will provide reference material for the farmers and their families.



Heath Spotted Orchid

Na circíni

Dactylorhiza maculata

Ireland's most common orchid, the Heath Spotted Orchid has pink-mauve flowers and dark spots on its leaves; it occurs on heath and bogs. Orchids grow slowly, taking several years to bloom. Orchid seeds carry no food reserves, making them incredibly light for successful wind dispersal. Survival after germination depends on tapping into a soil fungus which helps the young orchids gather essential nutrients.

Flowers June to August; Plant up to 30 cm in height.

Irish Stoat

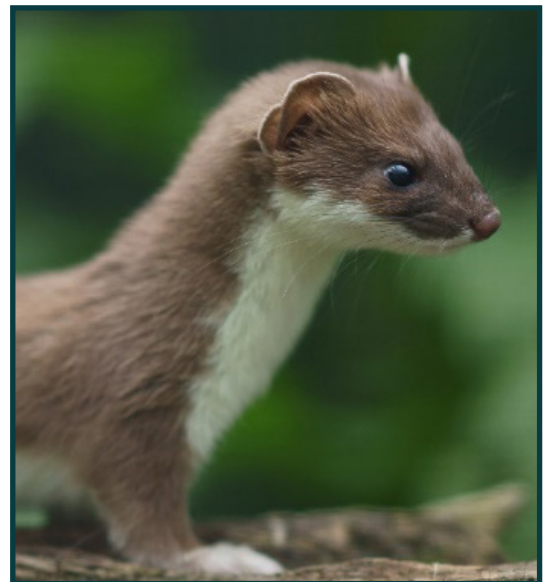
LEAST CONCERN | Protected

Easóg Éireannach

Mustela erminea hibernica

Length (incl. tail) 33-46cm

Stoats are often mistakenly called 'weasels' even though they don't occur in Ireland. The Irish Stoat is a subspecies only found in Ireland and the Isle of Man. They can be difficult to spot because they like to stay close to cover. It escapes predators by sprinting along walls, hedges and vegetation, often to dens where rats and rabbits formerly burrowed. They will predate inhabitants of such burrows if needs be. Stoats can be identified as small mammals with a long, low-lying body with a reddish-brown back and cream throat and belly with a black-tipped tail. Known for their courage, they will kill adult rabbits much larger than themselves to feed their kits.



Sparrowhawk **GREEN**

Spioróg

Accipiter nisus

29-41cm

Sparrowhawks, considered the most common bird of prey in Ireland, are widespread in woodland, farmland with woods and larger parks and gardens. They rely on the element of surprise and can manoeuvre around trees and hedges to prey on small garden birds or pigeons. Sparrowhawks prefer to nest in dense woodland and breed in May and July. Until the chicks can be left unguarded, the male does all the hunting, feeding both the chicks and the female. They are on the smaller side, with broad wings, long tails and long, thin yellow legs and eyes.

Flock Management and Stocking Rates. This section was prepared by the participating farmers, outlines their flock management on their commonages and uplands, and provides an estimate of the stocking rates. It gives a 2021 baseline on flock management.

Details

Farmer: [REDACTED]

Upland area: [REDACTED]

Lowland area available [REDACTED]

Farm Information and Flock management

Labor: Mostly myself, with the help from my son and my brother. Five men come to support the family doing shearing. For gatherings (February, July, August and October), we get extra help - two to four men - with dogs and quads.

Facilities: Fairly good handling facilities - Two footbaths also act as a sheep handling race. Sufficient housing is available if required.

Breed Ewes = Pure Scotch
Rams = Charolais and Scotch

Numbers (November 2021)

- Ewes = 280
- Hoggets = 80
- Rams = 7

Mating plan (November)

- Ewe target Condition Score = 3.0 to 3.5
- Location: Lowland
- Number of ewes per ram = 35

Lambing (March 17)

- Location: lowland
- Target Lambs weaned per ewe = 1.1

Lamb management

Eighty scotch ewe lambs are kept for breeding. About 36 ewe lambs and mothers return to the hill in late July for hefting. Weather lambs remain on lowland until the lambs are sold at Cahir mart.

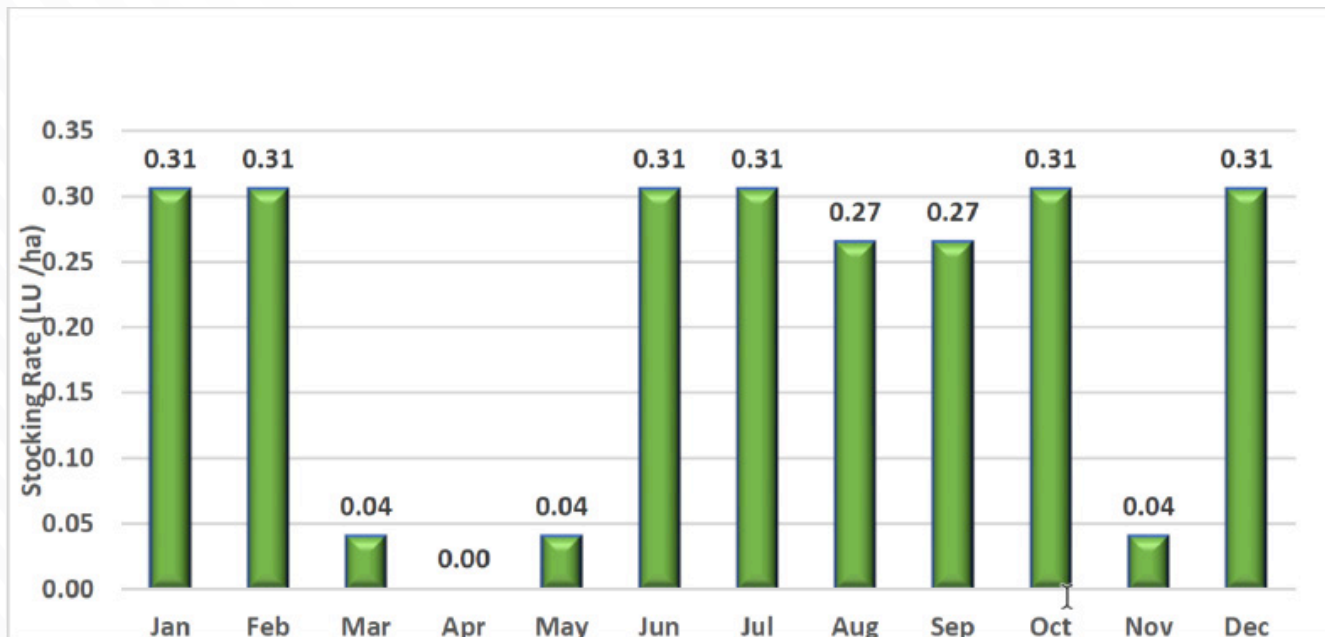
Health

In February, when the ewes are brought down, they are vaccinated with Covexin 10. Faecal samples are taken to assess the worm burden. Sheep get trace elements boluses for crucial phases of lambing, breeding, growth and thrive. The ewe lambs going to the mountain get Heptovac P twice, while the remainder get Covexin 10. Worm dosing is based on dung samples.

Grazing

- Lowlands: November, April, May and June
- Supplementary feeding: Baled silage fed on the hill between late December and the end of February.

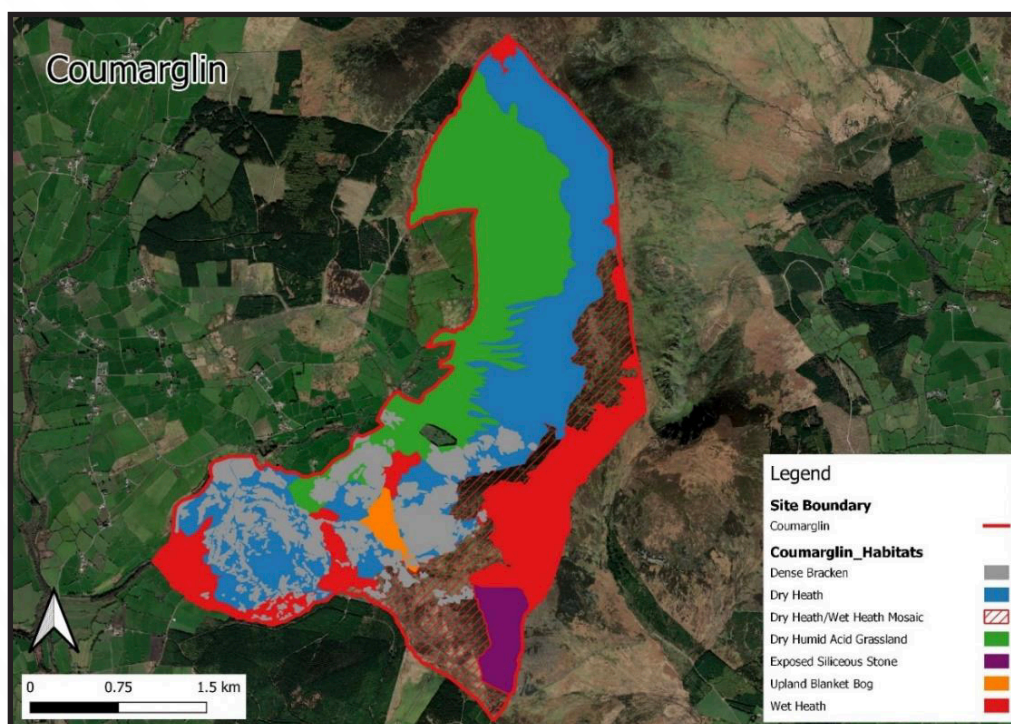
Mountain sheep, primarily Scottish Blackface, were the stock used on the mountain. Estimates of stocking rates on the uplands and commonages suggested that the number of sheep and the time spent on the hill were in-line with current grazing advice.



The estimated monthly stocking rate on one upland that is a dominantly dry heath and dry, humid acid grassland upland.

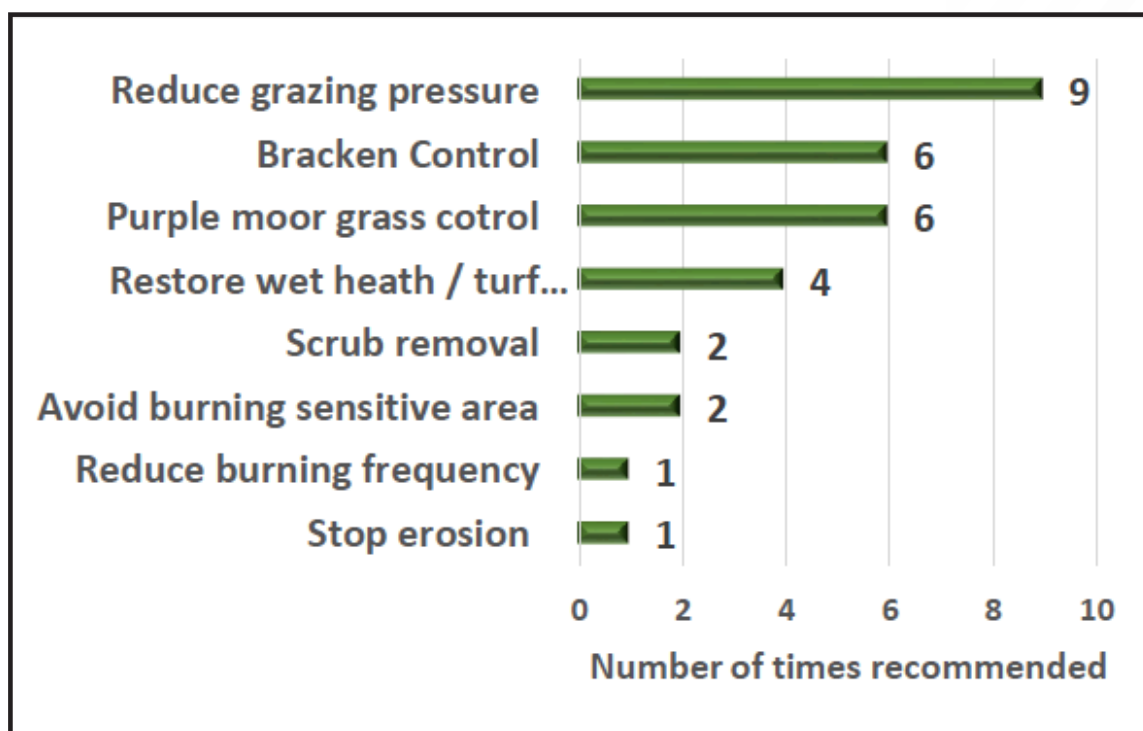
The Comeragh Mountain Habitats: This section, prepared by the Project Manager with support from Enda Mullen, NPWS, provides the background to the legislation around the Comeragh SAC habitats, the 2014 National Survey of Upland Habitats results, and the NPWS conservation objectives. It lists the activities requiring consent (farming and management practices) on SAC commonage or upland. It also briefly describes some of the main Comeragh mountain habitats.

Habitat Survey Results and Potential Actions: This section, prepared by Julie Larkin, Oakwin, provides a record of the upland walks undertaken by farmers with Julie as she assessed the habitats and their condition. It maps the habitats found on commonage or upland and outlines the potential actions required to improve them where necessary.



An interesting outcome was that the ecologist's habitat reports mirrored what the farmers intuitively knew about their upland or commonage. They linked the naming of the habitat type and descriptions to their knowledge of its grazing potential. The ensuing discussions facilitated their appreciation of the habitat dynamics and an improved understanding of potential actions recommended to maintain or improve habitat conditions.

The ecologist provided a list of potential actions to improve habitat conditions on the ten uplands surveyed. There were 31 possible actions in the ten upland reports. The number of times the range of measures identified by the ecologist in the ten commonage reports are summarised below.



The number of times a habitat improvement measure was recommended by the ecologist in the ten upland and commonages reports.

Reducing grazing pressure was the most common potential action, accounting for almost 30% of all the possible activities on the ten commonages. Bracken and purple moor grass control accounted for 20% of the potential actions.

- The grazing pressure observed on the uplands was linked to the bracken or purple moor grass areas, which reduced the size of heaths or acid grassland available for sheep grazing.
- The use of cattle grazing to reduce the area of bracken on dry heath and purple moor grass on wet heath was suggested. However, there was little enthusiasm for implementing the action amongst the farmers. Fencing and cattle management were the issues of concern.
- The farmers wanted to control bracken but were very challenged as to how it could be achieved. It resulted from the significant bracken areas located on parts of the upland unsuitable for machinery.
- Cutting/crushing or bruising bracken are slow long-term options and not suitable on all upland terrains; spraying that can be effective but again is limited by terrain and the availability of the spray Asulox from 2022 onwards.

- The upland bog habitats and some heaths were assessed as poor. The action suggested for these was to restore them by fencing off areas or rewetting. Fencing was an option; however, there are challenges in planning and implementing the measure on the uplands and commonages.
- The concept of bog restoration was discussed. The farmers did not consider it a possibility. It was partly due to their experience of bog rewetting studies on CAFRE's Glenwherry upland farm. They had formed an idea of what was involved in the process but could not see it operating on their upland for many reasons, including access. They found it very difficult to consider the scale of the work required to achieve the objective. The large peat gullies around the periphery of the bogs made it challenging to visualise the rewetting process. In addition, there was concern about who had the right to receive payments for carbon sequestration on a commonage with several or more shareholders.
- Legacy burning of the uplands has impacted some commonages' habitat conditions. The prescribed burning training provided those burning with a greater awareness of what areas should (dry heath) and should not (wet heath and upland bog) be burnt and the size and shape of the areas.
- Scrub control can be implemented as there were no large areas that required control and could be managed by the shareholders or farmer.
- Controlling erosion from recreational users was suggested on one upland.

It was clear from the discussions that the farmers wanted to maintain or improve the condition of their habitats. For example, they agreed to implement achievable measures, e.g., scrub control immediately and prescribed burning. Where the actions required significant input, e.g., controlling areas of bracken or bog restoration, the farmers said they did not have the physical, knowledge, or financial resources to implement them.

They also identified the need for:

- High-quality, evidence-based Irish studies to provide a basis for their management decisions to deliver a broader range of outputs. Of existing studies, most focus on lamb production. In addition, there is no guidance on upland grazing and management options relevant to the delivery of ecosystem goods and services, e.g., evidence-based grazing management advice for the range of upland habitats and their current quality status.
- Demonstration and advisory services to support them in addressing the challenges they identified.
- Clearly defined actions and mechanisms for achieving the Natura 2000 network conservation objectives. In particular, agreed achievable targets are absent for sites in unfavourable conditions (e.g., extensive areas of invasive species), and affordable management actions can restore these sites to favourable conditions.
- For uplands outside of the Natura 2000 network, there is a widespread absence of clarity about the ecological targets and, therefore, no corresponding local management plans.

- Evidence of the costs involved in habitat restoration or maintenance nor clarity on how they should be implemented.

Other Project Activities

The six Tuesday Tea Talks series (Table 2) focused on Comeragh's natural and cultural heritage elements and were integral to the education and community engagement.

Table 2. The schedule of the six Tuesday Tea Talks.

Date	Venue	Speaker	Talk Title
October 6 th 2021	Rathgormack	Dr Brendan Dunford	Working together to sustain our rural communities and their heritage: Reflections from the Burren.
October 19 th 2021	Ballymacarbry	Michael O' Donoghue	Geography, Geology, Geomorphology of the Comeraghs.
March 1 st 2022	Rathgormack	Hugh Carey	The archaeological complex of Coumaraglin Mountain.
March 15 th 2022	Ballymacarbry	Michael Desmond	The story of a cluster village on the Comeraghs.
March 29 th 2022	Rathgormack	Sean & Sile Murphy	A bit of Comeragh folklore.
April 12 th 2022	Ballymacarbry	Dr Fran Igoe	Comeragh rivers and lakes.

The diversity and number of attendees provided evidence of their value as a mechanism for building relationships between the farmers and the broader Comeragh upland community.

Farm visits for six local primary shools were organised by the farmers, supported by Teagasc and the Project Team. The farmers described how they managed their upland flocks, including health and shearing, the plants on the mountain and demonstrated the skills of a good sheepdog. The visit was supported by the Burrenbeo Trust Heritage Keepers Training Programme¹⁰. The six Comeragh primary schools proved to be another simple but effective community engagement strategy.

The classes from six local primary schools with their teachers



¹⁰ <https://burrenbeo.com/hk/>

The feedback from the schools following the visits included:

- “The pupils particularly loved seeing the sheep and lambs, being able to feed and handle them.”
- “We were all so impressed with the skill involved in shearing a sheep and shocked to hear the low monetary value of a fleece today compared with 40 years ago.”
- “The children loved the sheepdog display and learnt how they are trained.”
- “The passion of the farmers for their job and the mountains shone through, their pride in what they do and their interest in keeping it sustainable for future generations was very evident.”

The content of the Comeragh Mountain Birds, Fauna and Plants section was adapted to provide i) a Walking with Wildlife brochure and ii) three school posters.



Mountaineering Ireland and the project team developed the Walking with Wildlife brochure. The project team members and the farmer who participated in the Burrenbeotrúst’s Heritage Keepers Training Programme produced the school posters. Both formed part of the project’s strategy to engage with the broader community. The posters were distributed to the six primary schools in June, and the Walking with Wildlife brochure will be launched in early October 2022.

The Group made **three visits** to sites involved in upland research and activities. The visits were integral to the farmer's education, where they could see and experience new ideas and approaches to multi-functional upland management. The first visit was to **CAFRE's Hill farm Centre¹⁰, Glenwherry, County Antrim**. The hosts were Drs Robert Hull, Steven Johnston and Bryan Irvine. Dr Johnston provided the Group with information on their research on the Glenwherry flock breeding programme. Dr Bryan Irvine provided some thought-provoking insights into his research on upland ecosystem services.



The second was to the **Deerpark commonage** on the Blackstairs mountains, where shareholder Mr Jim Fitzharris explained his work on bracken control over the last five years. His work included spraying, cutting, rolling and aftercare flock management.



The third visit was to the **Pearl Mussel and the Wild Atlantic Nature projects** hosted by Mary McAndrew, Pearl Mussel Project, Gary Goggins, Wild Atlantic Nature, John Noonan and Chris Hanrahan, Teagasc, and two farmers, Pat Chambers and Martin Gavin. The farmers saw cattle grazing in Delphi, Co. Galway, high-scoring blanket bogs near Newport, Co, Mayo.



¹⁰ <https://www.cafre.ac.uk/about-us/our-facilities/agriculture-facilities/hill-farm-centre/>

Recommendations

- There is a need to develop regionally based upland education courses for farmers on the joint delivery of market and public goods. The project's educational approach and outputs may provide some guidance in this respect.
- Farmers participating in future Agri-Environment Climate Measures (AECM) should be required to undertake comprehensive education in year one with an output of integrated production and habitat management plan. Their plan is to be implemented in subsequent years with ongoing training activities.
- Develop a national participatory research and knowledge transfer programme. The research and advice will provide the knowledge farmers require and the basis for their payments in delivering new environmental goods and services.
- There is a critical need to build the capacity of and develop a cadre of specialist upland management advisers to mentor and support farmers in delivering change.
- There is a need to develop, provide and finance restoration programmes for the extensive areas of unfavourable – bad upland habitats that farmers or shareholders cannot deliver.
- Innovative funding schemes under the new Rural Development Programme should consider targeting measures that support integrated farmer and rural community activities based on the natural and cultural heritage of the upland communities.

Appendix 1

LLOC 5007 Project Finance

The total budget awarded to the project was **€118,720**. The project expenditure was **€116,965.50** (Table A1.1). The financial evidence presented below, and the project outcomes in this report indicate significant value for money.

Table A1.1. The breakdown of the project expenditure for the Comeragh Upland Communities project from June 2021 to October 2023.

Personnel	€25,519.50
Travel	€5,385.46
Other Direct	€1,552.00
Administration	€2,107.62
Implementation	€28,287.42
Admin	€62,852.00
Farmer payments	€54,113.50
Total costs	€116,965.50

Farmers' payments were €54,113.50 and represented just over 46% of the total expenditure. The amount was for the 340 days the 14 farmers participated in the project – an average of 24 days each for participating in the project's educational activities.

Other project costs were €62,852 or 54% of the total expenditure. The breakdown of the non-farming project costs is shown in Fig A1.1.

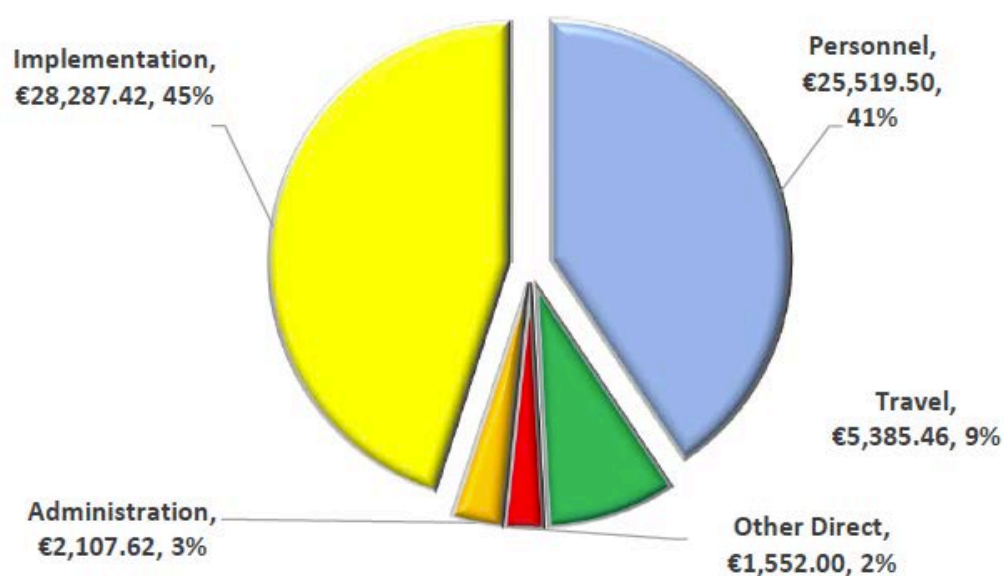


Figure A1.1. The breakdown of the non-farmer project costs.

Personnel costs were €25,519. It paid for the Project Manager (€19,080) and the Project Geographer (€6,439). The daily rate was €159 – similar to that paid to the farmers.

Over 82% of the **implementation costs** (€23,430) were for the ecological services (education walks, habitat assessment (page 14) of the ten uplands, preparation of the Comeragh Mountains Birds, Fauna and plants (pages 11 and 12), and participation in farmer meetings). The daily rate was €240 per day.

A further payment of €2,000 to Mountaineering Ireland for preparing the Walking with Wildlife brochure (page 18). The printing costs of the four uplands and six commonage reports (pages 5 to 17) were just over €2,000.

Travel costs of €5,385.46 were associated with the three site visits. (page 19).

There was a project underspend of €1,754.50.

Recommendation. The project used a chequebook account rather than an internet banking account. The lesson learnt was that all future EIP projects should be obliged to use internet banking. It will save considerable time and resources when dealing with project finances.

Appendix 2

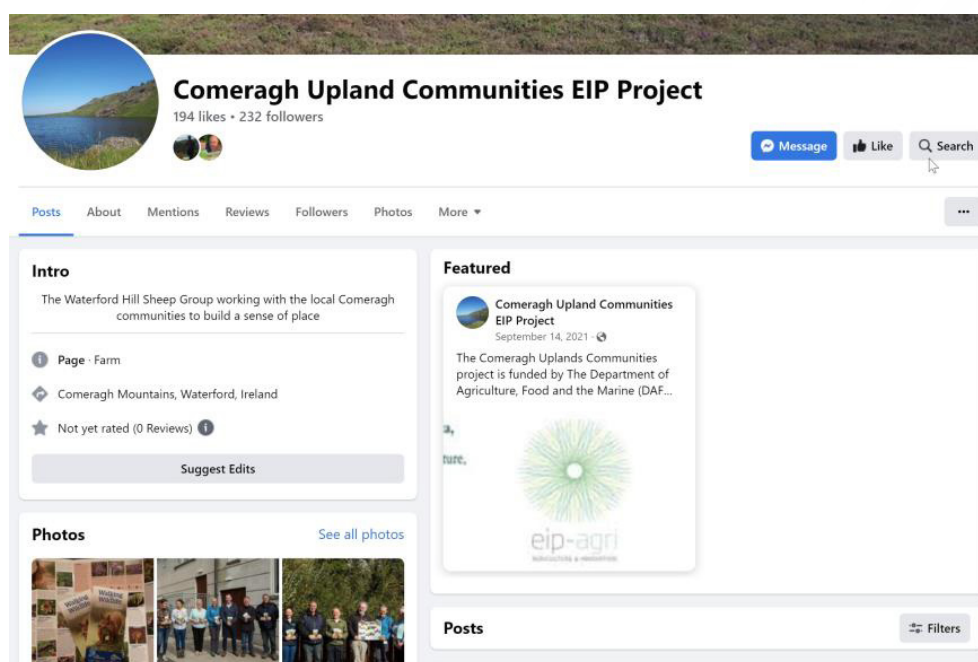
LLOC 5007 Project Dissemination

There were numerous project dissemination activities that included:

1. Four upland and six commonage high-quality bound reports provide the farmers and their families with a project legacy document that includes background notes to support their educational activities (see pages 2 to 17).

2. Facebook page as our social media outlet. It provides valuable commentary on the project activities.

<https://www.facebook.com/ComeraghUplandCommunities/>



3. There was a project presentation on **Teagasc's Signpost Series Webinars** on July 29th, 2022.



4. The **Launch of the Walking with Wildlife brochure** was covered in the media. <https://www.nationalruralnetwork.ie/eip-agri/eip-agri-news/comeragh-uplands-and-communities-eip-project-launches-walking-with-wildlife-guide/>

Comeragh Uplands and Communities EIP Project Launches Walking with Wildlife Guide

Nov 24, 2022 | EIP-AGRI News



5. Community Outreach

The main community outreach activities were those associated with the six Tuesday Tea Talks and the farm visits for the six primary schools (pages 17 and 18).

6. Presentations

All presentations were prepared and presented by the Project Team – Owen Carton, Catriona Foley, Catherine Keena, and Michael O'Donoghue.



The Comeragh Uplands Communities EIP Project

Visit of Ashoka European Fellowship Group
March 7, 2022

Weaving for a Thriving Planet



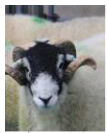


The Comeragh Uplands Communities EIP Project

EIP Advisory Committee
April 21st, 2022
Virtual Meeting



The Comeragh Uplands Communities is a European Innovation Partnership project being administered by DAFM. The Project is funded by the EU Recovery Instrument Funding under the Rural Development Programme 2014-2020.



The Comeragh Uplands Communities EIP Project

Draft Project Summary and Recommendations

Presentation to Dr Stan Lalor & Dr Anne Marie Butler



June 13th, 2022




Comeragh Group Place Plan Proposal

The Comeragh Project Team who participated in the Heritage Keepers training course.


These slides provide an outline of our proposal for a primary schools project –
Our Mountain – Our Place – Our Heritage





The Comeragh Upland Communities EIP Project



NI Biodiversity Policy Group
July 26th, 2022







The Comeragh Upland Communities is a European Innovation Partnership project being administered by DAFM. The Project is funded by the EU Recovery Instrument Funding under the Rural Development Programme 2014-2022.




The Comeragh Upland Communities EIP Project

Farmers got new knowledge and skills through engaging with external experts & learning by doing on the mountain.

Empowered upland farmers through acknowledgement of their importance within their broader rural community.

Long-term impact as generational knowledge about traditions/history/place names/ local farming practice exchanged and recorded for the future.



Water supply & flood control

Carbon sequestration

Public Health

Food Production

Biodiversity










The Comeragh Upland Communities EIP Project

South East Regional WFD Operational Committee
Ballymacarbry Community Centre
October 7th 2022












The Comeragh Upland Communities EIP Project

Burren Winterage School
October 28th, 2022

The Comeragh Upland Communities is a European Innovation Partnership project being administered by DAFM. The Project is funded by the EU Recovery Instrument Funding under the Rural Development Programme 2014-2022.