

# SUAS PROJECT

Sustainable Development of the  
Wicklow/Dublin Uplands



# SUAS

SUSTAINABLE UPLANDS  
AGRI-ENVIRONMENT SCHEME

Final Report  
2023

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Declan Byrne, Project Manager

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## Executive Summary

The Sustainable Uplands Agri-environment Scheme (SUAS) was a pilot project with the objective of developing innovative and sustainable solutions to the economic and environmental challenges facing farmers and communities in the Wicklow/Dublin Uplands.

The project's aim was to address the economic and environmental challenges through the following actions;

- (i) Establish and effectively activate new commonage management groups to take responsibility for the management of commonages by its shareholders.
- (ii) Complete ecological baseline surveys of individual upland areas to assess what is there, the condition it is in and make recommendations for its management.
- (iii) Increase farmer knowledge of the environmental and management issues on their upland areas, leading to the development of commonage/upland management plans jointly by the farmers, the ecologist and the relevant stakeholders. As the farmers are involved in developing the plans, it was expected that it be more practical and for the farmers to be more likely to carry out all elements of the plan.
- (iv) Support the farmers in implementing their management actions by providing necessary training & support and to trial the practicality of these actions on an upland farmed area. Where actions were to be deemed practical, the plan was to develop guidelines on necessary training & support required for the appropriateness of the action, and costing.
- (v) To develop sustainable grazing regimes for the areas.

The final output of the project provided a proven model framework and approach to assist Irish and European upland farmers and communities facing similar economic and environmental challenges to develop their own solutions.

The project commenced in 2018 and ran until the end of 2022, with a total budget allocation of €1.95m. There was a total of 84 farmers engaged in the project across 14 commonage commonages and 11 non-commonage farmers participating in the project. The total land area managed in the project was 7,126 ha.

The SUAS project represented a comprehensive initiative aimed at promoting sustainable land management practices in upland agricultural areas. Through a combination of targeted interventions, stakeholder engagement, and monitoring efforts, SUAS made significant strides in enhancing environmental conservation, biodiversity, and socio-economic resilience in upland regions.

SUAS has played a pivotal role in promoting environmentally friendly farming practices, such as agroforestry, rotational grazing, and habitat restoration. These initiatives have contributed

to the preservation of fragile upland ecosystems, soil health improvement, and water quality enhancement.

By incentivising habitat restoration and biodiversity-friendly land management practices, such as bracken brashing/bruising, and brush cutting SUAS has fostered the conservation of native flora and fauna in upland areas. Initiatives such as gully planting, heathland mechanical hand harvesting and species-rich grassland management through for example introduction of targeted grazing livestock have resulted in increased biodiversity and habitat connectivity.

The success of SUAS is attributed in part to robust community engagement and capacity-building efforts. Through farmer training programs, workshops, and knowledge-sharing initiatives, SUAS has empowered local communities to adopt sustainable land management practices, thereby fostering a sense of ownership and stewardship over natural resources.

While prioritising environmental conservation, SUAS has also recognised the importance of maintaining the economic viability of upland farming communities. The scheme provided financial support and incentives to farmers transitioning to more sustainable practices, ensuring that conservation efforts are aligned with long-term economic sustainability.

Rigorous monitoring and evaluation mechanisms have been integral to the success of SUAS. Regular assessment of environmental indicators, such as biodiversity metrics, soil health indices, and water quality parameters, enabled adaptive management and continuous improvement of the scheme's effectiveness from 2018 through to 2022.

The insights gained from SUAS implementation have had implications for agricultural policy development and natural resource management strategies. While SUAS was not strictly operating a result based scheme, that the notion of payments for habitat quality along with payments towards supporting actions has been incorporated into the new mainstream agri-environment programme in the form of ACRES Cooperation Project.

Moving forward, there is a need for continued investment in agri-environmental schemes, greater integration of scientific research into policy formulation, and enhanced collaboration between stakeholders to address emerging environmental challenges in upland areas. Longer term schemes are required to ensure positive long term landscape benefit and to afford security and reassurance to farmers in support of longer term farm planning and decision making.

The SUAS project has emerged as a beacon of success in promoting sustainable land management practices and fostering environmental stewardship in upland agricultural regions. By combining innovation, community engagement, and sound governance principles, SUAS has demonstrated the potential for agri-environmental schemes to reconcile agricultural production with environmental conservation objectives.

The legacy of SUAS serves as a testament to the transformative power of collaborative efforts in building a more sustainable and resilient future for upland communities and ecosystems.

## 1. Brief description of the project

### 1.1 Background

The ‘Sustainable Upland Agri-Environmental Scheme’ (SUAS) Pilot Project, was proposed by the Wicklow Uplands Council (WUC) in partnership with Teagasc, to develop and evaluate a practical, stakeholder led and bottom up, scheme to address the complex agricultural, environmental and socio-economic challenges associated with the land management of the Wicklow/Dublin uplands.

This was to be achieved by building the capacity of the farmers and stakeholders to share their collective knowledge in a common language and take on a new leadership role in the development and implementation of an Agri-Environment Scheme (AES).

The planned outcome was to provide guidance on how commonage management groups can be established and effectively used for future commonage management. It would also demonstrate the potential of the farmers and stakeholders to develop and test their own activities or measures, which in combination with those already available can be used to achieve integrated production and environmental objectives. It would provide a flexible supporting framework to assist stakeholders in developing solutions. As such, it would be highly adaptable to other upland areas in Ireland and Europe that face similar problems.

The Project evolved from local research that identified the poor-to-bad conservation status of the Wicklow/Dublin uplands and farmer’s attitudes, understanding and responding to it.

Owen Carton was contracted by WUC to prepare the final project application due to the time commitment required and his technical writing experience, he was funded by DAFM.

#### 1.1.1 Proposed SUAS Innovations:

- i) The establishment of Commonage Groups (CGs), which took responsibility for the development, implementation and delivery of their own Commonage Management.
- ii) Integration of environmental (climate, biodiversity and water) and farming activities into a single management plan.
- iii) The use of an auction-based payment scheme to incentivise the CGs to develop their own solutions to problems they identified on their commonage.

#### 1.2.1 Proposed SUAS Outputs:

- i) A Commonage Management Handbook, based on the lessons learnt that provides policy makers and other upland communities with guidelines on designing and developing future locally led commonage/upland AESs.

- ii) The development and evaluation of a smart phone “app” used by farmers to record their activities and to collect data that provided evidence for:
  - The development of a blueprint for a results-based upland biodiversity payment scheme.
- iii) The production of cost guidelines for activities (measures) applicable to upland environments.

## 1.2 Project Management

Like all EIP projects, an Operation Group (OG) was formed to direct and implement the SUAS project. Pat Dunne of WUC represented the Lead Partner, on a 12 member Operational Group to implement the project. Each member was selected on the basis of having the required technical expertise and experience in his/her specific area of responsibility, for the successful delivery of the project.

- Pat Dunne:** Project chair. Farmer, Wicklow Uplands Council (WUC) member, former IFA National Hill Chair
- Declan Byrne:** Teagasc Drystock Adviser in Wicklow for 20 yrs. On secondment to the role of Project Manager,
- Sean Byrne:** Farmer & former chair of WUC
- Tom Byrne:** Farmer, 2018-2020 Chair of WUC,  
Member Wicklow IFA
- Enda Mullen:** Divisional Ecologist with the National Parks and Wildlife Service (NPWS), former District Conservation Officer with NPWS based in Wicklow Mountains National Park
- Dr. Helen Sheridan:** Farm Landscape Ecology and Agri-Environment Policy Lecturer in UCD, school of Agriculture and Food Science
- Dr. Monica Gorman:** Agricultural extension and innovation lecturer in UCD, School of Agriculture and Food Science
- Dr. Owen Carton:** Independent consultant with extensive experience in the agri-environmental sector including research, research management, administration, operations, policy development, Foresight, and change management.
- Donal O’Keeffe:** Community Water Officer,  
Local Authority Waters Programme.
- Dr. Catherine Keena:** Teagasc Countryside Management Specialist.

**Brian Dunne:** Coordinator of Wicklow Uplands Council.

**Larry O’Loughlin:** Former Teagasc Regional Manager,  
covering both Wicklow & Dublin at various times.  
Former ASA President.

Two of the members of the OG were upland farmers, including the Project Lead. The other members had expertise in conservation; hill farm production systems; agri-environment; ecology; water quality; public relations; financial management and administration. The organisations involved include Teagasc, NPWS, University College Dublin, LAWPRO.

A Project Management Team, consisting of Pat Dunne, Project Lead, Brian Dunne, Project Contact and Declan Byrne, Project Manager were responsible for the implementation and management of the project with direction & support from the OG. A copy of the Operation Group Agreement is available as a separate document.

### **1.3 Project Start-up**

The project received acceptance from the Dept. of Agriculture, Food & the Marine in December 2017. Due to the need to get farmers engaged and start the process of recruiting applicants before the 2018 lambing season, the project started with an interim project manager team consisting of Declan Byrne, Brian Dunne & Owen Carton. This interim arrangement stayed in place until a project manager was appointed, commencing in August 2018.

In this interim period Wicklow Uplands Council used its resources to get the project up and running quickly. These costs were later reimbursed by DAFM. The project was operated through a subsidiary company of Wicklow Uplands Council – WUC SUAS. The sole purpose of this company was the operation of the project. Wicklow Uplands Council staff took responsibility for the legal requirements of the company including set up, ongoing submissions to the CRO and preparation of annual accounts. The SUAS Project office was based in the Wicklow Uplands Council office located in the Parish Centre, Main St, Roundwood, Co Wicklow.

In 2020, in response to an injury one participant suffered while out looking at stock, a set of guidelines on Health & Safety in the Uplands was developed by the project manager for participants carrying out work as part of the SUAS project. These guidelines are applicable for all farmers working in the uplands and was shared with the other EIPS’s and at dissemination events. A copy is included in Appendix 2.

## 1.4 Staff Recruitment

### 1.4.1. Project Manager

A job description was developed for the project manager role and the position advertised. Declan Byrne was appointed following a recruitment process. He was on secondment from Teagasc from August 2018 to the end of the project. It was felt that he was an ideal candidate as he was involved in the development of the project from the beginning and was able to hit the ground running following his appointment. He also already had a working relationship with the upland farmers in Wicklow and the various other stakeholders.

### 1.4.2 Administrator

Administration of the project on behalf of the operational team was contracted to Wicklow Uplands Council. WUC invoiced the project for the service. WUC also provided office space, regular project support and PR assistance to the project through its coordinator, administrative officer and communications officer.

### 1.4.3 Facilitator

The SUAS project planned to have farmers form formal commonage groups for the management of commonages rather than dealing with them as individual farmers. As this was a new innovative approach, there were no guidelines for the formation of these groups. Members of the operation group devised a rough outline for the process and contracted in a qualified facilitator to work with the project manager to develop a template for how to form these groups.

Bobby Lambert, (AshDan), was the chosen facilitator and he refined the planned process. He and the project manager then delivered a series of meetings with each commonage to form these commonage groups. A report was completed at the end of the process with the findings being used to refine the process for taking in commonages in tranche 2.1.

### 1.4.4 Ecologist

It was felt by the operation group that there would be a lot of work in a short period of time in preparing the baseline surveys for the various participating sites in year 1 & year 5, but very little in the intervening years. Because of this, it was agreed to contract out the ecological work rather than hire in a part-time ecologist.

The project management team put out tenders for an ecologist to;

- Do up baseline surveys of the selected sites,
- Draw up management proposals,
- Meet the farmers on the hills to brief them on the ecology of the uplands and to develop management plans with them,
- Monitor the condition of the sites annually and propose any modifications to the plans required,

- Redo the baseline survey at the end of the project to assess changes in habitat quality and condition.

Faith Wilson<sup>1</sup> was the contracted ecologist for phase 1 (and subsequently for the phase 2 & 3 sites) and completed the baseline surveys during the summer of 2018. She and the project manager met each group of farmers for a walk on their upland area. The common response from the farmers was that this was the first time anybody had told them why their land was deemed a Protected area, either designated as a Special Area of Conservation (SAC)/Special Protection Area (SPA)/ National Park, what was actually there and how they should be managing it. It was also a chance for the farmers to tell the ecologist about what they actually do and the challenges they face farming day to day on the hill.

Following consultation between the project manager, the ecologist and the farmers, management plans for each commonage area were agreed. These plans were then submitted to NPWS for screening and for the relevant permissions for certain work or Activities Requiring Consent (ARC) to be undertaken.

## 1.5 Participant Recruitment

As the project was introducing new concepts to farmers, it was decided to take participants into the project in a number of phases, using the lessons learned in each phase to improve the process where necessary for the next phase.

It was decided to take in 3 commonages and 1 non-commonage upland farmer in phase 1. The recruitment process for getting phase 1 participants is summarised in Figure 1.1 below;

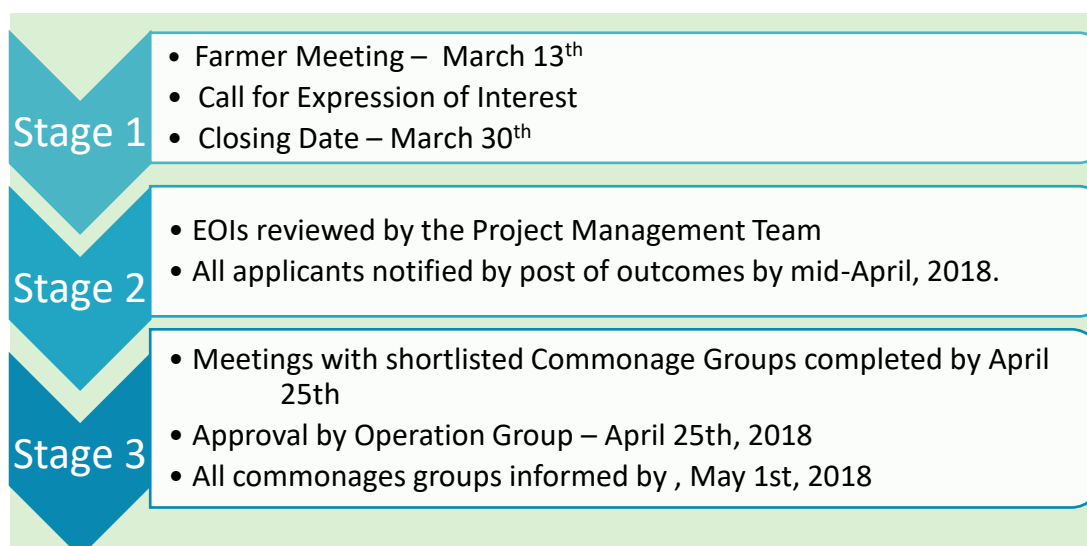


Figure 1.1 Tranche 1 recruitment process, 2018

<sup>1</sup> Faith Wilson – Faith Wilson Ecological Consultant

A full account of this process was prepared and is available as a separate report, (1<sup>st</sup> Round of Commonage and Upland Farm Selection). Lessons that were learned in each phase was used to refine and improve the process for subsequent phases.

*1.5.1 Selected participants Phase 1. 2018;*

**Commonage:** Granamore,  
Ballybeg,  
Glassamullen

**Non-commonage:** Brian Mulligan, Powerscourt Paddocks

*1.5.2 Selected participants Phase 2. 2019;*

**Commonage:** Glassavullaun,  
Corrasillagh,  
Carrigeenduff,  
Slievemweel.

**Non-commonage:** Thomas Broe, Ballynultagh,  
Richard & Cormac Ryan, Kilmashogue.

*1.5.3 Selected participants Phase 3. 2021;*

**Commonage:** Slieveroe,  
Mangans,  
Ballybraid,  
Ballynultagh,  
Glencap,  
Ballinastoe,  
Cunard/Glassamucky Brakes.

**Non-commonage:** Andrew Doyle, Coolbawn;  
Peter Murphy, Garyhoe;  
Donie Anderson, Cunard;  
James Brady, Laragh West;  
Owen Brady, Laragh East;

Patrick Brady, Laragh East;

Luggala Estate;

John Malone, Drummin.

Full details of all SUAS participants is contained in Section 6, Appendices, Appendix 6.1

## **1.6 Facilitation Process**

Following selection to participate in phase 1 of the project, all farmers with interests on each of the 3 commonages were invited to a meeting in the Brockagh Resource Centre in Laragh, Co. Wicklow to commence the process of forming their commonage groups.

A broad format for the process was developed by the operation group, but the facilitator, Bobby Lambert refined the plan and drew up an agenda for the meetings, delivered by himself and the project manager (known as the facilitation Team).

The Facilitation Team provided intensive support to each Commonage Group. All the meetings were conducted as planned with good attendance and participation by members. These included an initial communal meeting for all three commonage groups together, followed by 2 meetings for each of the three individual commonage groups and concluding with a second communal meeting.

These meetings contributed to the development of group capacity, notably with the dialogue and decision-making on the group constitutions. Each of the three Commonage Groups developed its own constitution including:

### *1.6.1 Purpose of the group*

- Membership details, including who is entitled to be a member and conditions of membership,
- Powers and objects of the group
- Operation of the group, including meeting procedures, election and functions of officers and voting structure.

The groups then agreed a process for the development of their commonage management plans, with support from the project ecologist and project manager.

Lessons learned were used to refine the process as new groups were formed for each new phase of the project.

A separate report on this process has been prepared and is available. As a final project output, a guide on how to form commonage groups with supporting documentation has been prepared and is available as a standalone guide.

## 1.7 Habitat Management Plans

Land within the majority of the commonages and upland farms selected for SUAS were included within the boundaries of European Sites of Conservation Importance designated as either Special Areas of Conservation (SACs) under the EU Habitats Directive or Special Protection Areas (for Birds) (SPAs) under the EU Birds Directive. The ecologist, Faith Wilson, commenced the Baseline Surveys on the 4 phase 1 selected sites in June 2018.

A desktop review was completed to inform the management proposals. This included a review of files held by the National Parks and Wildlife Service, satellite imagery, surveys for rare plants, breeding birds, studies on the montane flora of County Wicklow, records held by the National Biodiversity Data Centre, and any previous management plans prepared for the commonages/upland farms or actions implemented. A review of the NPWS/Department of Agriculture commonage framework plans was also completed.

Consultation with statutory agencies such as National Parks and Wildlife Service, Inland Fisheries Ireland, LAWPRO, landowners and other stakeholders was completed.

The following were reviewed;

- National Parks and Wildlife Service history of site management files which records damaging activities within a site such as burning, drainage, turf cutting, trampling, overgrazing, etc.
- The landslide events which are recorded by the Geological Survey of Ireland and the landslide susceptibility mapping prepared by same.
- Water quality data held by the EPA and the status of watercourses and waterbodies under the Water Framework Directive.
- Recreational or sporting activity on the hill (deer and grouse shooting) and the impacts of same (positive and negative).

The commonages and upland farms were walked in their entirety and the habitats were described and mapped to Level Three as described in the Guide to Habitats in Ireland (Fossitt 2000) and according to their correspondence with habitats listed under Annex I of the EU Habitats Directive.

Species which form part of the qualifying interests of the SAC or SPA were also noted and considered as well as other species of note such as legally protected plants or mosses, breeding birds of note listed on the Birds of Conservation Concern in Ireland list, faunal species listed under Red Lists or of local/regional importance, fisheries importance and sensitivity of watercourses within the commonage/upland farm. Habitat maps at this level of detail had not previously been prepared/available for much of the Wicklow Mountains SAC.

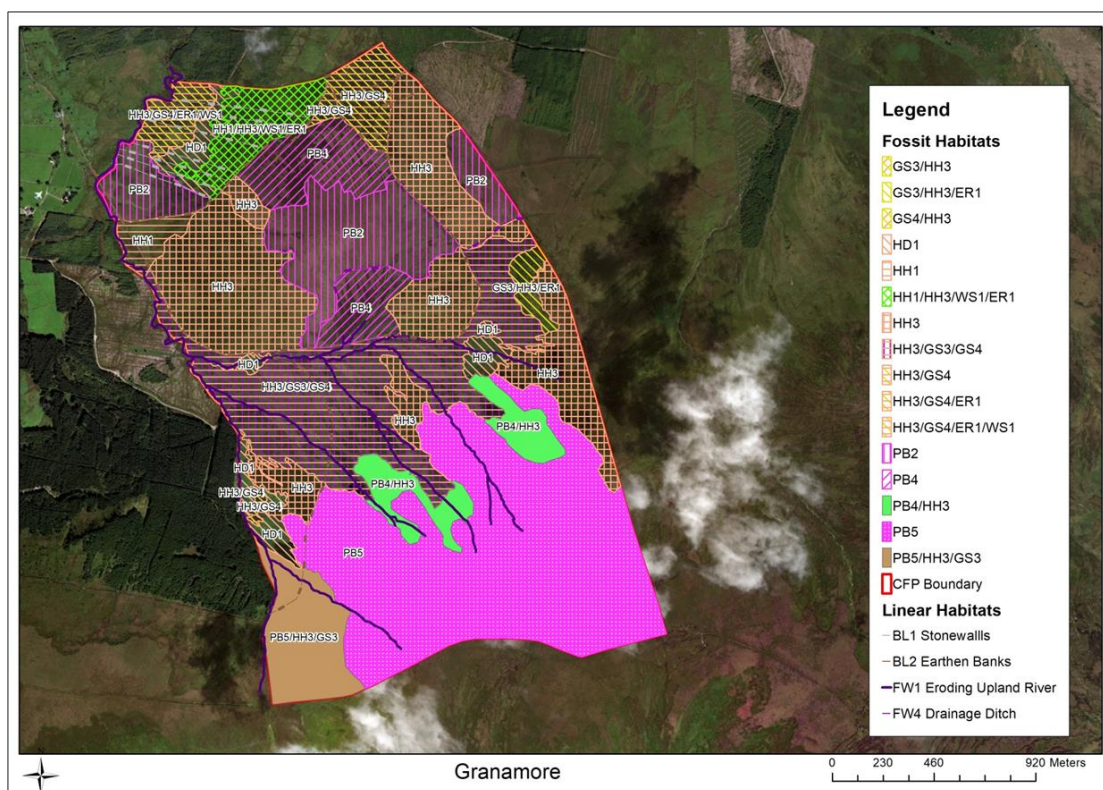


Figure 1.2. Sample of habitats mapped to Level Three (Fossitt, 2000) on Granamore commonage

A number of monitoring stops in each of the habitats present were then completed and the condition of the habitats was assessed. This was done using the standard habitat condition monitoring methodology developed by National Parks and Wildlife Service for the habitats listed under Annex I of the EU Habitats Directive, which form part of the qualifying interests for the designated sites. All EU Member States that are signatories of the EU Habitats Directive have a legal obligation to report on the conservation status of listed habitats and species every six years on a national basis. This methodology was chosen as the results of the SUAS assessments could then be incorporated into the National Conservation Status Assessment for these upland habitats and contribute to the state’s reporting obligations for them under Article 17 of the Habitats Directive.

Habitats were assessed using a series of criteria which look at the national range of the habitat (is it increasing/decreasing), the underlying conditions that drive habitat condition (grazing, hydrology, nitrogen deposition, turf cutting, etc.). The Overall Conservation Status Assessment for each habitat is listed as either:

- Favourable.
- Unfavourable inadequate (change in management or policy is required to return the habitat to favourable status but there is no danger of extinction in the foreseeable future).

- Unfavourable bad (serious danger of becoming extinct, at least regionally).
- There is also an 'Unknown' class which can be used where there is insufficient information available to allow an assessment.

On the basis of these assessments and monitoring stops a habitat condition assessment and map of same was then produced for each commonage/upland farm. This then informed the appropriate management actions, and the commonage was divided into management areas, with management recommendations for each area developed by the ecologist.

The ecologist and the project manager then met with the farmers on their own commonage/upland area for a walk around the relevant areas. This session proved very informative for both the ecologist and the farmers, with a repeated comment by the farmers that this was the first time that anybody had ever told them why their lands had received designations, what of importance was actually on the area and how they should be managed.

It was also an opportunity for the ecologist to hear from the farmers what they are actually doing on the areas, the challenges they face and what they would like to do on the hills.

Management objectives from a farming perspective were discussed and then included within the management plan.

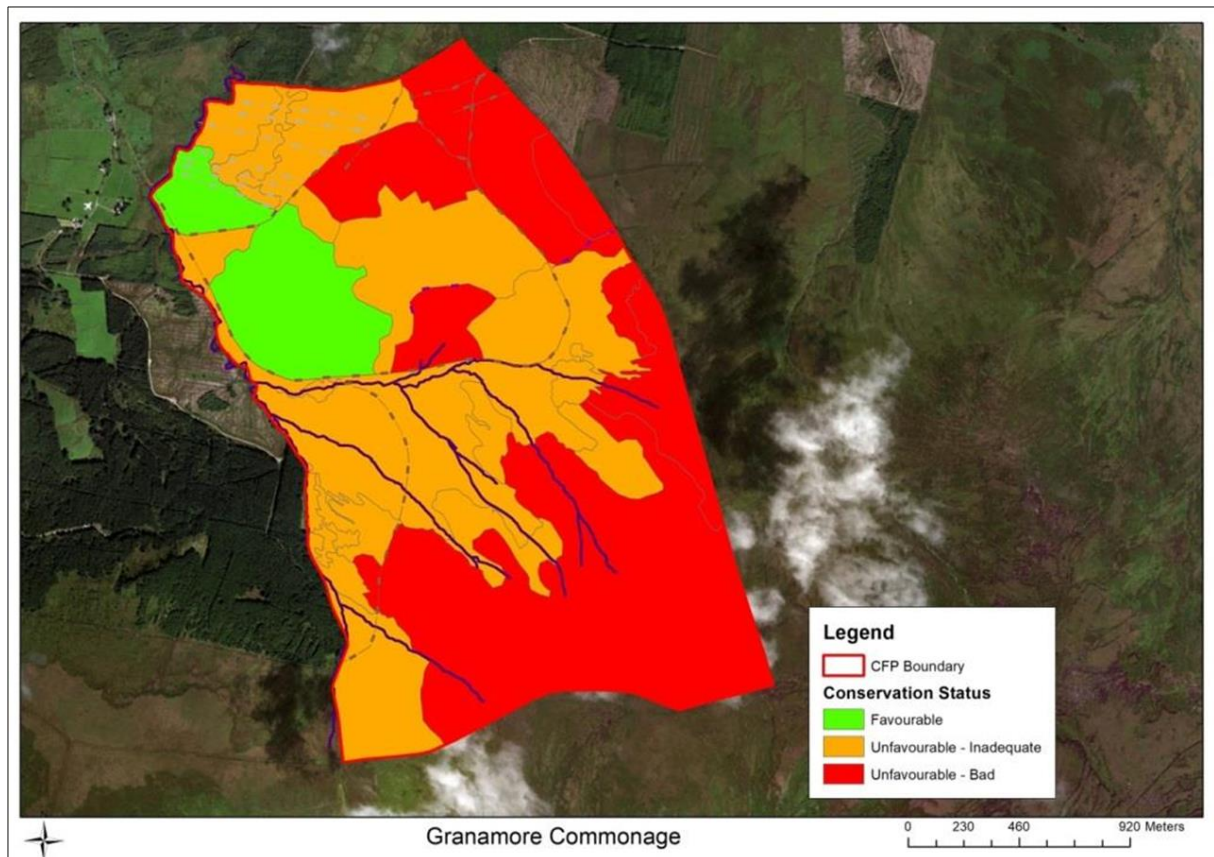


Figure 1.3. Sample Habitat Condition Assessment Map

The baseline survey and management recommendations were presented to the farmers by the project manager. Following discussions, the management options that were deemed to be possible to deliver by the farmers and fell within the scope of the SUAS Project were agreed upon. As many of the upland sites were located within designated areas a report for screening for appropriate assessment was then prepared by the ecologist and submitted to NPWS for ministerial consent before any work was completed.

In January 2019, the commonage groups and upland farmer signed off on their management plans so that work could proceed. A copy of the baseline reports and annual monitoring reports for all the sites is available on the SUAS webpage <http://www.wicklowuplands.ie/suas-reports/>.

A similar process was followed for the phase 2 participants with their uplands being assessed by the ecologist and management plans agreed. Copies of the baseline reports annual monitoring reports are also available for these sites.

Phase 3 participants only commenced at the end of 2021. As the SUAS project finished at the end of 2022, it was not practical to get baseline surveys and management plans drawn up as for new participants because the scheme would be over before they got a chance to carry out the work. Successful Phase 3 applicants were offered the following package of measures;

1. Commonage participants must form Commonage Groups to participate,
2. Record stock numbers going to and from the hill,
3. Complete training on habitat quality & management options for the uplands in 2021,
4. Develop habitat management plan in 2022,
5. Attend stock management training event,
6. Plant 200 Native Broadleaf trees (exact number to be agreed with project manager subject to appropriate permissions),
7. Applicant's Proposed project as agreed with project manager & subject to appropriate permissions.

#### Note-

- Option 7 was a chance for applicants to come up with their own proposals for their upland area. Option 7 was subject to approval of the Project Management Team and was costed on an individual basis.

## 1.8 Management Actions

### 1.8.1 Grazing Management

Many of the habitats found in the uplands today have developed as a result of man-made activity in the past such as the clearance of the trees that once grew on them. Their current condition is a result of their management over the past few hundred years, mainly grazing, but also drainage, burning and turf cutting as well as activities such as natural erosion. From a farming perspective one of the most important management tools in the uplands is grazing.

There is not enough data or expertise available to determine the appropriate grazing management for upland areas based on current information available. It is determined by the habitats present, the condition of those habitats, level of grazing by other species such as deer, the interaction with surrounding areas, issues identified, priority issues on specific upland areas and the target habitat condition being sought.

The approach taken by SUAS was for;

1. The ecologist to identify the habitats present and assess the condition of the habitats.
2. The farmers to record grazing activity on the hills (types of stock, numbers, dates actually on the hills, and areas of the hills where the stock graze).
3. The project manager to collate the information and at the end of year 1, discuss with the ecologist and the farmers to see what changes to the grazing management are required to address the issues found or to increase or decrease grazing pressure on certain areas of the hill.
4. The farmers to continue to record grazing activity and reassess each year.

As cattle and horses were traditionally grazing on the hills and provide a different type of grazing that is more suited to certain habitats, it was planned to reintroduce both horses & cattle on to some of the hills where possible. Horses were reintroduced onto Ballybeg Commonage while cattle were reintroduced onto Corrasillagh Commonage, Ballybeg Commonage, Glassavullaun Commonage and in phase 3, to Ballybraid Commonage, Cunard/Glassamucky Brakes & Slieveroe Commonage. A separate report on grazing carried out and the lessons learned is available on the SUAS website.

Paid shepherding of sheep by one shareholder on a commonage to reduce workload and provide a greater degree of control of the grazing was trialled under SUAS in 2018 & 2019. It wasn't successful in achieving better grazing management and some farmers were opposed having their sheep hunted around the hill by other people, so it was discontinued after 2019.

In order to extend the grazing by sheep in the period late December to early March, the project provided feed buckets for the sheep grazing the hills at that time of the year. This was a new approach and was readily accepted by farmers as it provided supplementary

nutrition to the sheep encouraging them to keep the sheep out longer. It rewarded the farmers who were providing this grazing (only given to sheep out on the hill) and gave them confidence to leave the sheep out longer. When bad weather came, there was supplementary feeding there for the sheep. The buckets can be used to encourage grazing in areas of stronger vegetation that the sheep don't normally graze, to keep them in more sheltered areas in bad weather and also in the case of snow, the sheep tended to stay nearer the buckets and could be gathered off the hill easier.

A guide for managing grazing for habitat improvement as opposed to for animal production has been developed and is contained in Appendix 4, "The 4R's of Upland Grazing."

### 1.8.2 Other Actions

- Controlled burning.
- Heather & gorse cutting/mulching.
- Bracken control
  - Chemical control, using tractor mounted sprayers, knapsack sprayers, weed wiper.
  - Bracken bruising, both trailed by quad and tractor mounted.
  - Use of livestock (cattle & horses)
- Roadway/access repairs, carried out by contractors & directly by farmers.
- Fencing repairs.
- Upland Gully tree planting.
- Heather restoration project.
- Gully blocking (using peat and timber dams to slow the flow of water off the hill and reduce peat erosion).
- Fencing off enclosure areas.
- Deer recording.

*Note-Details of actions carried out on each site is available in the annual reviews for each site completed by the project ecologist and available on the website.*

A separate report on each one of these actions has been prepared and is available.

### 1.8.3 Training

- Wildfire training.
- Quad safety training.
- Pesticide Application Training.
- Habitat training Course for new SUAS Participants (links to recordings of the training course are available on website).

- Study Tour was offered to all participants. See Appendix 5 of this report.

## 1.9 Participant Recording

It was proposed to develop a phone app for participants to make record keeping simpler for participants and have them available in real-time for the management team. This app was developed in 2020 following 2 years' experience working with the participants to determine what records were required and the easiest way to record them. Full details of the recording app are contained in Appendix 3.

### 1.9.1 Key Performance Indicators (KPIs)

The original project KPI's were

- the number of participating sites,
- the number of participating farmers,
- the number of commonage groups formed,
- and the works carried out on each site.

### 1.9.2 Closing Evaluation

The Sustainable Uplands Agri-environment Scheme (SUAS) embarked on a pioneering journey in 2018, aiming to tackle the intertwined challenges of environmental degradation and economic instability in the Wicklow/Dublin Uplands. Over the course of four years, SUAS has left an indelible mark, not only in terms of tangible outcomes but also in fostering a spirit of community engagement and environmental stewardship.

SUAS set out with a multifaceted approach, encompassing community mobilisation, ecological assessments, knowledge dissemination, and practical on-ground interventions.

Through its strategic interventions, SUAS has made significant strides in promoting sustainable land management practices and enhancing the ecological resilience of upland agricultural areas.

Key achievements of the SUAS project include:

**Environmental Conservation;** SUAS prioritised the conservation of fragile upland ecosystems through initiatives such as agroforestry, rotational grazing, and habitat restoration. By incentivising biodiversity-friendly land management practices, SUAS has contributed to the preservation of native flora and fauna, increased biodiversity, and improved habitat connectivity.

**Community Empowerment;** Central to the success of SUAS has been its emphasis on community engagement and capacity-building. Through farmer training programs, workshops, and knowledge-sharing initiatives, SUAS empowered local communities to become stewards of their natural resources, fostering a sense of ownership and responsibility.

**Economic Sustainability;** While focusing on environmental conservation, SUAS recognised the importance of maintaining the economic viability of upland farming communities. By providing financial support and incentives for transitioning to sustainable practices, SUAS ensured that conservation efforts were aligned with long-term economic sustainability.

**Monitoring and Evaluation;** Rigorous monitoring and evaluation mechanisms have been integral to SUAS's success. Regular assessment of environmental indicators enabled adaptive management and continuous improvement of the scheme's effectiveness, ensuring that interventions were evidence-based and impactful.

**Policy Influence;** Insights gained from SUAS implementation have informed agricultural policy development and natural resource management strategies. The incorporation of SUAS principles into mainstream agri-environment programs underscores its relevance and impact in shaping future policy directions.

### 1.9.3 Outline of Value for Money (VFM);

**Cost-Effectiveness;** Despite a budget allocation of €1.95 million and a budget spend of ~€1.783 million, SUAS has delivered tangible outcomes, including improved biodiversity, enhanced soil health, and water quality enhancement, across 7,126 hectares of upland agricultural land. The cost per hectare managed demonstrates a reasonable allocation of resources for the scale and scope of interventions undertaken.

**Impact & Outcomes;** SUAS has demonstrated value for money through its measurable impacts on environmental conservation, community empowerment, and economic sustainability. By leveraging targeted interventions and stakeholder engagement, SUAS has maximised the return on investment in terms of long-term ecological resilience and socio-economic benefits.

**Efficiency;** SUAS's comprehensive approach, integrating ecological assessments, community engagement, and practical interventions, has optimised resource utilisation and minimised wastage. The scheme's emphasis on adaptive management and continuous improvement further enhances efficiency by ensuring that resources are directed towards interventions with the greatest impact.

**Sustainability;** SUAS's legacy extends beyond the project duration, with implications for long-term landscape benefits and agricultural policy development. By promoting sustainable land management practices and fostering environmental stewardship, SUAS has laid the foundation for enduring positive impacts on upland communities and ecosystems.

In conclusion, the SUAS project represents a compelling example of value for money in agri-environmental programming. By combining innovation, community engagement, and sound governance principles, SUAS has demonstrated the transformative potential of collaborative efforts in building a more sustainable and resilient future for upland communities and ecosystems.

## 2. Financial Report

### 2.1 SUAS Project Financial Report

The SUAS Project was allocated a total amount of €1,950,000 towards the implementation of the project. This allocation was in line with the estimated budget submitted in the original project plan (Figure 2.1).

The SUAS Project adapted continuously throughout its implementation in order to reflect lessons learnt, and therefore the budget was also adapted accordingly. All expenditure incurred was in line with the Project's objective to evaluate a practical scheme to address the complex agricultural, environmental and socioeconomic challenges associated with the land management of commonages and farms in the Wicklow and Dublin uplands.

The Project was operated by WUC SUAS, a wholly owned subsidiary of Wicklow Uplands Council. Annual Financial Statements were independently audited each year by IFAC Audit Services Ltd.

Direct Costs	Year 1	Year 2	Year 3	Year 4	Year 5	Total
<b>Direct Costs</b>						
Action 1 - Farmer Time	€54,200	€60,590	€60,590	€60,590	€55,550	<b>€291,520</b>
Action 2 - Farmer Time & Costs		€161,700	€161,700	€161,700	€161,700	<b>€646,800</b>
Auction Payments		€50,000	€50,000	€50,000	€50,000	<b>€200,000</b>
Project Manager	€30,000	€60,000	€60,000	€60,000	€60,000	<b>€270,000</b>
Travel & Subsistence	€4,000	€7,000	€7,000	€6,000	€5,000	<b>€29,000</b>
Dissemination Events		€1,200	€1,200	€1,200	€6,960	<b>€10,560</b>
Printing & PR	€3,000	€3,000	€3,000	€3,000	€5,500	<b>€17,500</b>
IT Equipment	€3,500					<b>€3,500</b>
Room Hire & Refreshments for all CG meetings	€16,800	€13,300	€13,300	€13,300	€13,300	<b>€70,000</b>
Accountancy/Audit Provision	€5,000	€5,000	€5,000	€5,000	€5,000	<b>€25,000</b>
Operational Group	€19,600	€19,600	€19,600	€19,600	€19,600	<b>€98,000</b>
External Consultants	€45,200	€12,200	€12,200	€12,200	€39,000	<b>€120,800</b>
<b>Sub-Total</b>	<b>€181,300</b>	<b>€393,590</b>	<b>€393,590</b>	<b>€392,590</b>	<b>€421,610</b>	<b>€1,782,680</b>
<b>Project Animation Costs</b>						
Setting up finance System	€5,000					<b>€5,000</b>
Electronic Recording System	€15,000					<b>€15,000</b>
Project Start up	€33,270					<b>€33,270</b>
<b>Sub-Total</b>	<b>€53,270</b>					<b>€53,270</b>
<b>Running Costs</b>						
Project Manager	€3,270	6540	6540	6540	6540	<b>€29,430</b>
Adminstrator	€8,872	€8,872	€8,872	€8,872	€8,872	<b>€44,360</b>
CG Administrator	€735	€5,250	€5,250	€5,250	€5,250	<b>€21,735</b>
Office rental	€8,400	€8,400	€8,400	€8,400	€8,400	<b>€42,000</b>
Telephone & Internet	€1,440	€1,320	€1,320	€1,320	€1,320	<b>€6,720</b>
Insurance	€385	€385	€385	€385	€385	<b>€1,925</b>
<b>Sub-Total</b>	<b>€23,102</b>	<b>€30,767</b>	<b>€30,767</b>	<b>€30,767</b>	<b>€30,767</b>	<b>€146,170</b>
<b>Total</b>						<b>€1,982,120</b>

Table 2.1 Budget Submitted in the original Project Plan

## 2.2 Original Budget vs Actual Expenditure

The Project Plan submitted an estimated budget of €1,982,120 (Figure 2.1), the project on approval was allocated a maximum budget of €1,950, 000.

Of that, €1,138,320 (57%) was allocated towards farmer payments comprised of:

- Action 1 Farmer Time - €291,520
- Action 2 Farmer Time & Costs - €646,800
- Auction Payments - €200,000.

The remaining €843,800 (43%) of the budget was allocated to all other non-farmer costs.

Following approval of the Project Plan, Action 1 and Action 2 were renamed as ‘Direct Farmer Payments’ and ‘Indirect Farmer Payments’. As the name suggests, Direct Farmer Payments were made directly to farmers for project activities e.g. time spent carrying out actions, meetings, training, habitat score payments etc. Indirect Farmer Payments related to items or materials purchased on behalf of the farmers and any contractors hired to carry out specific actions to assist the farmers in the delivery of their management plans. The auction payment system was proposed to allow farmers to develop their own bespoke proposals or measures for consideration by the operational group and would be included as a direct or indirect costs as appropriate.

The SUAS Project had a total expenditure of €1,738,994 (Figure 2.2). With a total allocation of €1,950,000 available, this means that a balance of €211,006 was not drawn down.

While the full allocation was not drawdown all project milestones were achieved or exceeded. Project expenditure was divided between three categories;

Payment Category	Amount	Percentage of total costs
Direct Farmer Payments	€757,504	43%
Indirect Farmer Payments	€270,724	16%
Admin & Implementation Costs	€710,766	41%
<b>Total Expenditure</b>	<b>€1,738,994</b>	<b>100%</b>

Table 2.2 Category outline of SUAS project expenditure

The combined direct and indirect farmer payments represented 69% of the total expenditure with admin & implementation costs representing the remaining 41%. This ratio of farmer to non-farmer payments was proportional with the original budget.

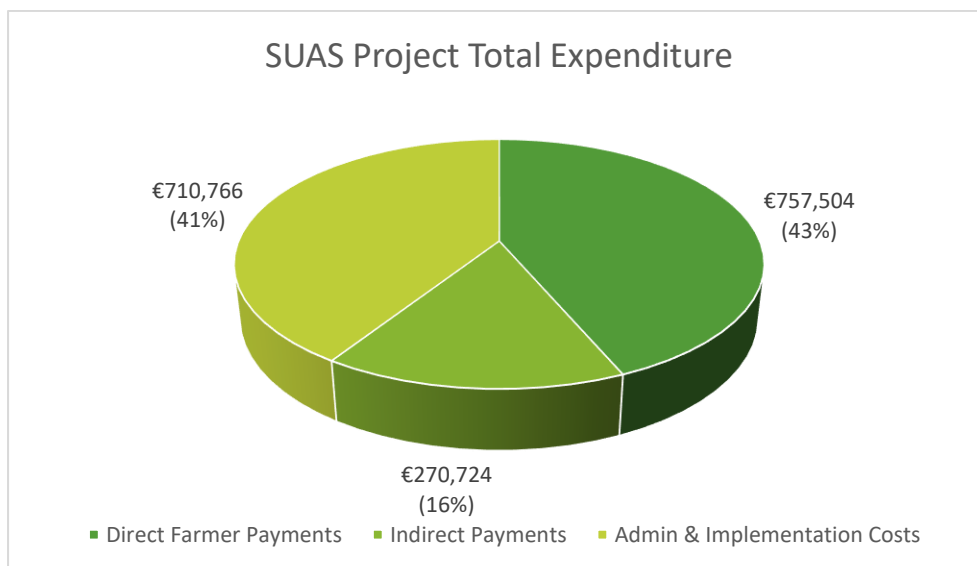


Figure 2.1 The distribution of project expenditure between Direct, Indirect and Admin & Implementation costs.

Figure 2.2 shows all expenditure over the lifetime of the project. Expenditure was initially low and increased year on year. The administration & implementation costs remained at a relatively constant level while the combined farmer payments increased steadily each year. The largest portion of the administration & implementation costs was associated with the Teagasc fee for the secondment of the Project Manager and the contract for ecological services.

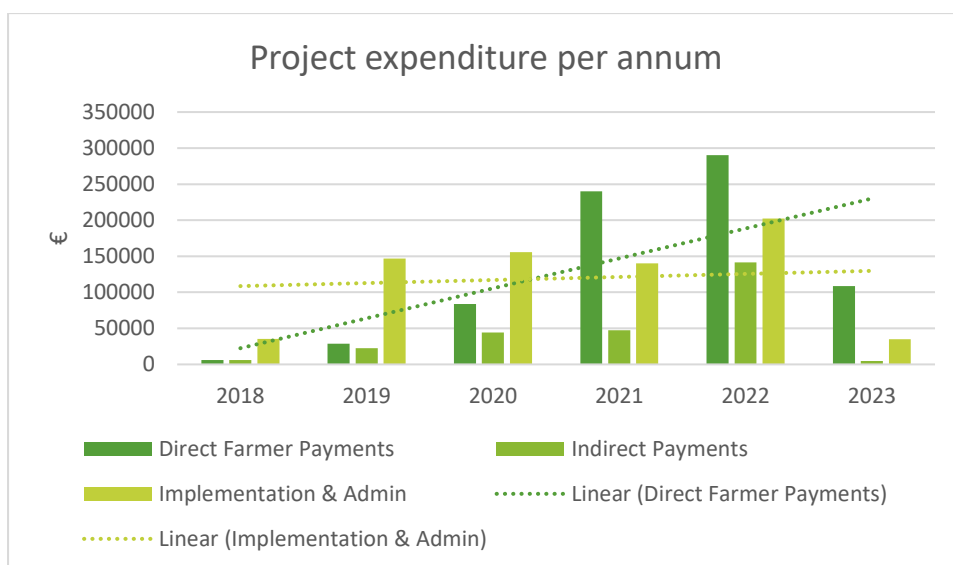


Figure 2.2 SUAS Project Expenditure per Annum

## 2.3 Farmer Payments

The SUAS Project dealt with a vast range of commonages and non-commonage areas, all of varying type and conditions e.g., size of area, numbers of shareholders or individual farmers, habitat condition etc. There were also three phases of induction of participants and therefore providing an overall average of payments issued to farmers does not give a true reflection of the payment structure.

A total of 84 farmers participated and these were inducted under three separate phases:

Year	Phase	Commonage Groups	Non Commonage	Total Farmers (Individual Herd No.)
2018	1	3	1	24
2019	2	4	2	22
2022	3	7	8	38
<b>Total</b>		<b>14</b>	<b>11</b>	<b>84</b>

Table 2.3 Commonage and Non commonage SUAS participants 2018-2022

While the farmer payments were modest in 2018 and 2019, they increased steadily each year as the project got established and built on lessons learnt (Figure 2.3). Initially direct payments were made on the basis of time spent or works completed e.g., meetings, training, shepherding, works *etc.* This rate was set at €14.50 per hour. However, it was found that the rate was not providing enough incentive for the completion of some actions and therefore this was increased to €20 per hour from 2020 onwards.

Despite the increased rate per hour, the uptake of some habitat management actions remained low. Therefore, the Operational Group introduced a habitat score payment in 2021. The score payment was developed to recognise the areas in good condition and to encourage farmers to uptake additional habitat management actions to improve areas that were low scoring. The system was developed on the basis of, the better the condition of the habitat, the higher the score, with higher scores receiving higher payments.

The introduction of that habitat score payment in the autumn of 2021 significantly increased the direct farmer payments issued from 2021 onwards. It also resulted in an increased uptake of habitat management actions which is reflected in the increased indirect farmer payments in 2022 (Figure 2.4). This increase was largely associated with payments to contractors for vegetation management works, tree planting efforts, drain blocking supplies *etc.*

The induction of the additional Phase 3 commonages in 2022 also contributed to the increased farmer payments issued in that year. However, it should be noted that the habitat

score payment was not available to the phase 3 sites, but they could form a commonage group and carry out simple habitat management actions.

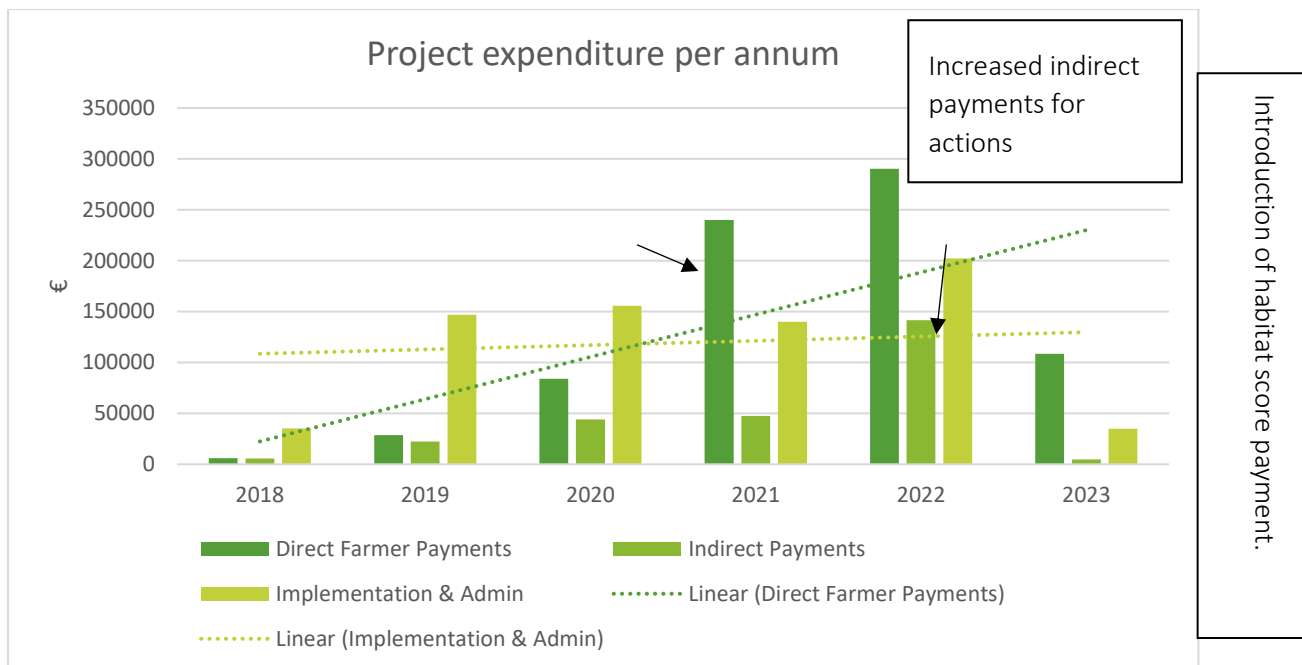


Figure 2.3 Impact of introduction of habitat score payment.

While the introduction of the habitat score payment resulted in a significant increase in direct farmer payments issued, the largest proportion of direct payments related to payments for time spend and works carried out – see Figure 2.4.

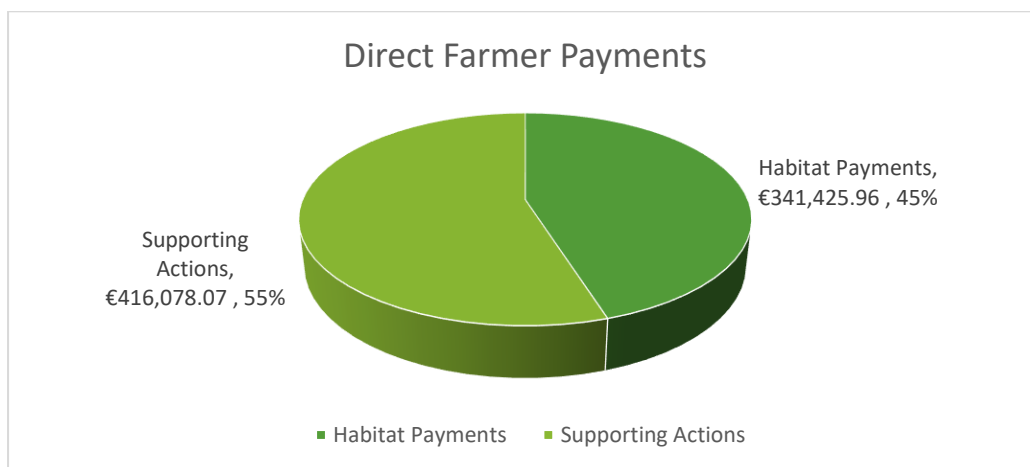


Figure 2.4 Direct Farmer Payments: Supporting Actions vs Habitat Payments

## 2.4 Project Allocation Underspend

As stated previously, the SUAS Project had a total expenditure of €1,738,994. A total allocation of €1,950,000 was available, this means that there was a balance of €211,006 not drawn down.

While the full allocation was not drawdown all project milestones were achieved or exceeded.

There are a number of reasons that the full allocation was not drawdown. The original budget was estimated based on a number of unknown variables *e.g.*

- the timeframe for participants to form a commonage group;
- the costs associated with that process;
- true habitat condition of the sites was unknown prior to completion of the detailed baseline surveys and subsequently the habitat management actions required, and associated costs, could only be predicted prior to surveying.

Ultimately the level of uptake of the management actions by the farmers was unknown and the auction payment system was reliant on farmers bringing their own ideas forward. It was found that those costs were much lower than predicted.

The main reason for not realising the estimated projected budget was due to farmers not claiming money as expected in the project plan. This had a resulting reduction in administrative fee concurrently.

Farmer payments were not made because;

1. Most sites did not require a lot of management other than getting grazing management back on track (This was a project unknown until the ecological surveys were carried out on participating sites)
2. Farmers did not show enthusiasm about carrying out detailed habitat restoration work even though there was money available to them for it.
3. Farmers did not come forward with ideas for the €200,000 k set aside for the auction payments.
4. There was a decrease in meetings attended by the farmers which was costed into the project budget. Commonage Groups were formed more easily and there was no requirement to facilitate meetings for little purpose.
5. The project had planned for costs of venues & refreshments for these meetings also. Many meetings were held in houses, in farmyards, on the hills or in local halls with low costs attributed.

Furthermore, the administrative support provided by Wicklow Uplands Council, and the Project Manager secondment through Teagasc, resulted in reduced admin and implementation costs.

The Operational Group had envisaged that there would be a significant level of works or interventions required to improve the habitat condition on most sites. However, on the many sites the ecological surveys found that most appropriate action was to improve the grazing system and allow recovery time from historic illegal fires, rather than physical intervention actions.

## 2.5 Auction Payment

The Project Plan included a budget of €50,000 per year (or €200,000 overall) for an ‘auction payment option’. The auction payment was included to allow and encourage farmers and commonage groups to develop proposals for new actions or activities they wished to undertake which were consistent with achieving their environmental targets. Despite encouragement from the Project Manager, there were few ideas brought forward to avail of the measure.

As this allocation was not utilised fully the operational group encouraged additional activities including;

- bare peat restoration efforts and extra drain blocking works in conjunction with National Parks and Wildlife Service.
- An important Cultural Heritage Recording Project was also developed and a complete report on findings produced (Separate Document).

## 2.6 Response to Underspend

As it became clear that the project would not use the full allocation the Operational Group responded with a number of actions.

These included but not limited to:

Response	Impact
Extra participants accepted into the project	The Project Plan aimed to work with 5 commonages and 2 non-commonage areas.  SUAS worked with a total of 14 commonage and 11 non commonages. The third phase in 2021 accepted all interested applicants.
Increased Hourly Rate	The hourly rate for works was raised from €14.50/hr to €20/hr to encourage further uptake of actions

<p>Habitat Score Payment</p>	<p>The payment brought increased attention to actual habitat condition and encouraged the uptake of habitat management actions to improve scores.</p>
<p>Bare Peat Restoration and Bog Rewetting Efforts</p>	<p>The Project Manager and Ecologist worked with local NPWS staff to identify some areas within the project area to trial bare peat restoration and drain blocking/peat rewetting.</p> <p>The remote nature of the sites required transport of materials by helicopter. While the results will not be seen within the lifetime of the project, they will have a long lasting impact and provide important study areas for future works.</p>
<p>Cultural Heritage Project</p>	<p>A cultural heritage recording project was initiated in 2021. The aim of the project was to record the stories of the farmers and heritage features of a number of SUAS commonages to gain a better understanding of the Cultural Heritage of the sites.</p>

Table 2. 4 Outlined response to project underspend including impact.

### 3. Lessons Learned

#### 3.1 Sites/Habitats

The uplands are generally open habitats (even if fenced, the fence does not stop wildlife or issues crossing) and need to be assessed within the context of the overall landscape.

All sites are different with individual issues, mosaic of habitat types & habitat condition, ownership/shareholders, grazing requirements, habitat and restoration actions required, pressures from surrounding areas.

It is not possible to generalise sites. Each site must be individually assessed, and suitable plans developed by all stakeholders involved. Habitats, habitat condition & issues change very quickly and some areas in very good condition can be very close to areas in bad condition. Sites must be fully walked to assess properly.

There is a requirement to know the history of the site (particularly burning history) and also the current management practices to give an understanding of the site to be able to draw up management plans for the future.

A farmer looks at the uplands and sees ‘a hill’. An ecologist looks at the uplands and sees a wide diversity of habitats each requiring different management measures or actions depending on the condition of each. There is no simple action across the hill that will get those habitats into ‘favourable’ conservation status.

The impacts of historic management or incidents on the hill such as uncontrolled burning has had significant impacts on many upland habitats and this was reflected in their habitat condition assessment, water quality and other areas such as landslide susceptibility.

The National Condition of Upland Habitats under Article 17 of the EU Habitats Directive as reported in 2007, 2013 and 2019 remain in unfavourable condition – there has been no improvements in the condition of these habitats over the last twenty years. This national trend was reflected in the Wicklow/Dublin Uplands also.

Habitat	Area			Structure & Functions			Future Prospects			Overall Status		
	2007	2013	2019	2007	2013	2019	2007	2013	2019	2007	2013	2019
3110 Oligotrophic Isoetid Lake Habitat	F	F	F	U - B	U - B	U - B	U - B	U - B	U - B	U - B	U - B	U - B
3130 Mixed Najas Flexilis Lake Habitat	F	F	F	U - B	U - I	U - I	U - B	U - I	U - I	U - B	U - I	U - I
3160 Acid Oligotrophic Lake Habitat	F	F	F	U - B	U - I	U - I	U - B	U - I	U - I	U - B	U - I	U - I
3260 Vegetation Of Flowing Waters	F	F	F	U - B	U - I	U - I	U - B	U - I	U - I	U - B	U - I	U - I
4010 Wet heath	U	U - I	U - I	U - B	U - B	U - B	U - B	U - B	U - B	U - B	U - B	U - B
4030 Dry heath	F	U - I	U - I	c	U - B	U - B	U - I	U - B	U - B	U - I	U - B	U - B
4060 Alpine and Boreal heath	U - I	F	U - I	U - I	U - B	U - B	U - I	U - B	U - B	U - I	U - B	U - B
6130 Calaminarian Grassland	F	U - I	U - I	F	F	U - B	U - I	U - I	U - I	U - I	U - I	U - I
6230 Nardus grasslands*	U - B	U - B	U - B	U - B	U - B	U - B	U - B	U - B	U - B	U - B	U - B	U - B
7130 Blanket bogs (* if active bog),	U - B	U - B	U - I	U - I	U - B	U - B	U - B	U - B	U - B	U - B	U - B	U - B
8110 Siliceous screes	U - I	F	F	U - I	U - I	U - I	U - I	U - I	U - I	U - I	U - I	U - I
8210 Calcareous rocky slopes	U - I	F	F	U - I	U - I	U - I	U - I	U - I	U - I	U - I	U - I	U - I
8220 Siliceous rocky slopes	U - I	F	F	U - I	U - I	U - I	U - I	U - I	U - I	U - I	U - I	U - I
91A0 Old Oak Woodland	U - B	U - B	U - B	U - B	U - B	U - B	U - B	U - B	U - B	U - B	U - B	U - B

U	Unknown
F	Favourable
U - I	Unfavourable - Inadequate
U - B	Unfavourable - Bad

Table 3.1

### 3.2 Water Quality Monitoring

Small headwater streams are a significant habitat resource and play an important role capturing and regulating the flow of water to rivers downstream. These headwaters support a myriad of species, but they are vulnerable to pollution and can influence water quality further downstream. Many of the streams in the Wicklow and Dublin Uplands eventually flow into reservoirs that in turn provide drinking water to North County Wicklow and Dublin, e.g. the Poulaphouca, Vartry and Bohernabreena Reservoirs and so it is really important to protect and maintain water quality in these headwaters.

The SUAS Project was keen to monitor water quality across participating sites. The purpose –

- To establish a baseline of water quality before any actions were carried out.
- To identify any pressures that could be addressed by habitat management actions.
- Follow up monitoring to determine if the habitat management actions had an effect on water quality in the surrounding streams.



Image 3.2.1 : Participants involved in field investigation work, water quality sampling techniques and discussion (2022)

Aquatic macroinvertebrate monitoring was conducted across nine SUAS sites at twenty-nine unique sample locations in 2019/2020 and this was repeated in 2022. The samples were assessed according to the Small Streams Risk Score (SSRS). The SSRS is a biological risk assessment system for identifying rivers that are definitely ‘at risk’ of failing to achieve the ‘good’ water quality status goals of the Water Framework Directive (WFD). The presence or

absence of specific groups of macroinvertebrates and their relative abundance determines the risk category. The categories are:

- Probably not at risk
- Intermediate (Stream may be at risk)
- Stream at risk

Of the twenty-nine locations sampled most remained unchanged (15) or improved (11) with two locations disimproving.

The water quality monitoring determined that, in general, the ecological health of the streams over three sites had improved and the remaining six unchanged.”

These efforts were the first attempt to determine if these small streams were at risk of not achieving good water quality status and therefore provide an important baseline for any future monitoring efforts.

### **3.3 Actions**

Some actions can have unexpected or negative effects on other areas/habitats. Big problem with grazing management is where some areas on the hill need an increase in grazing while others need to reduce it, looking at stock numbers on a hill alone is not sufficient.

Cutting/controlled burning can be good approach to improve overgrown vegetation, but overgrazing can be experienced in these areas afterwards causing damage, stock can be pulled into these areas as regrowth comes up leading to reduced grazing in other areas that need it.

The main activity which has resulted in the unfavourable condition of many of the commonages and upland farms assessed had been uncontrolled burning. Fires within the SAC have been mapped by NPWS and in some instances commonages have been burnt repeatedly.

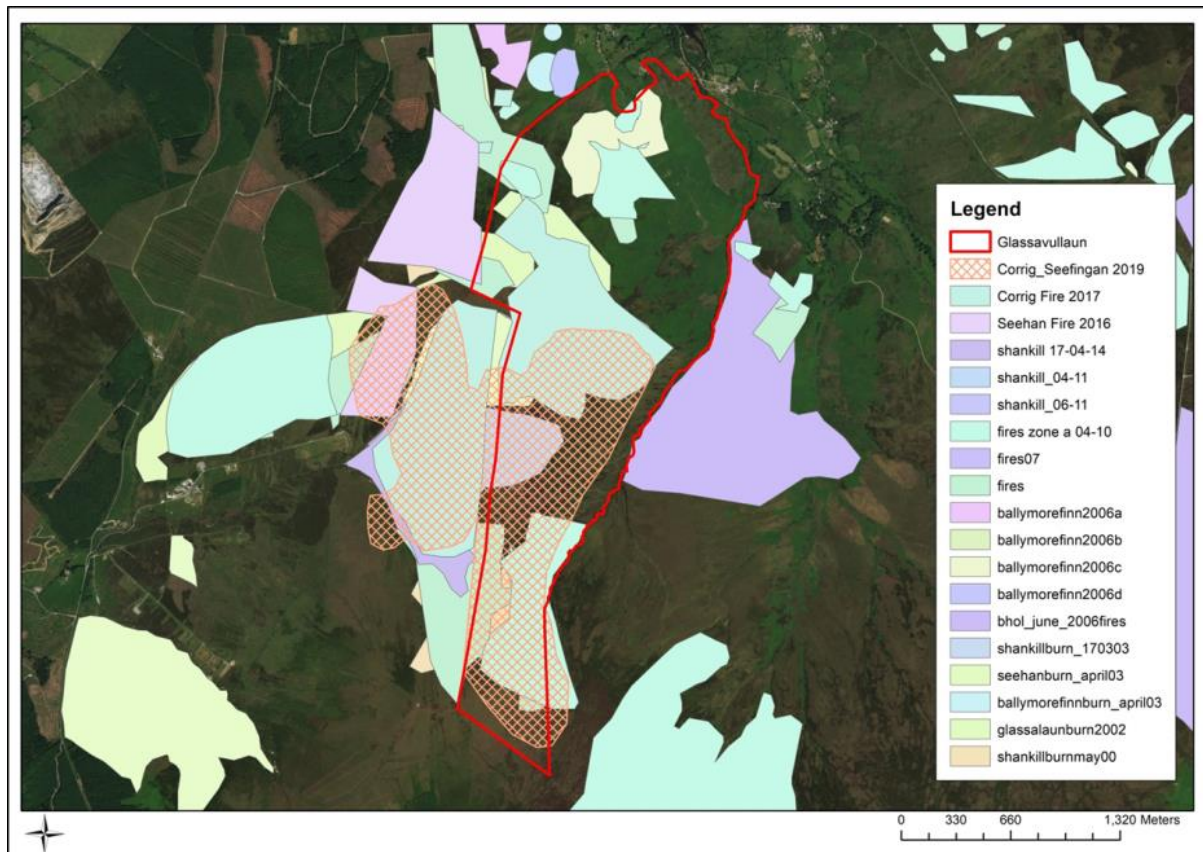


Figure 4.1

Uncontrolled burning is:

- Resulting in the loss of peat/soils,
- Damaging grazing,
- Increasing bracken in the uplands,
- Damaging habitats of international importance,
- Impacting on the fauna and invertebrate diversity of our uplands,
- Contributing to carbon emissions – the carbon released from the fire in Killarney National Park was the same as the emissions from 13,000 vehicles in one year,
- Damaging the potential for peatland to sequester carbon,
- Contributing to flooding intensity and flood risk downstream,
- Impacting on water quality including our drinking water supplies.

The main aim of controlled burning is to rejuvenate heather and develop forage for sheep. The SUAS surveys found that flailed areas in the fire break created for a controlled burn have regenerated better than the areas within, which were subject to a controlled burn.

### 3.4 Farmers Doing Actions

It is hard to get farmers to carry out actions. They will do something they like, but the project had to push hard to get most work carried out. The most successful actions across all sites in SUAS were the ones organised by the project manager.

Farmers don't know everything. We cannot assume they will know what to do. We need to plan out actions looking at the overall site and all its issues and not focus on just individual actions, as farmers will choose what suits them best and not worry about the overall long-term results for the site.

There are four categories of farmer when it comes to carrying out actions;

- Most farmers will do their best to do what you want them to do.
- Some will try to get away with the bare minimum of effort possible.
- Some will do nothing and hope they get away with it. If there are no penalties and little inspections, the numbers falling into this category increase.
- There are a small minority who thrive on getting one over on the system. They want to be able to brag about how they got away with things even if it is easier to do it right from the start.

Decoupled payments is the worst thing that ever happened for environmental management. The focus is now on "how much money can we get for doing as little as possible".

Most farmers are not interested in carrying out actions just for the payments they receive. If they are working off-farm, have health issues, are too old or are otherwise too busy with life in general, they will not carry out actions just for the payments offered. There needs to be a bigger carrot here.

On commonages, the benefits of individuals work is diluted across all shareholders, which causes friction where some do nothing at all and will benefit from the work of those who do.

Payments/rewards should be directed to those who are delivering the actions & management that is wanted.

#### 3.3.1 Grazing

Sheep move across hills & commonages. Sheep don't always graze where they are supposed to and can be causing damage elsewhere that there are no penalties for. Similarly, if they graze elsewhere, they may be improving habitats there but are not doing it where they are supposed to be and so the farmer gets no reward for this good work. There is nobody really looking at this issue of where sheep actually graze, not even NPWS who are leasing out grazing rights to farmers on their land.

#### 3.3.2 The 4R's of Upland Grazing

Grazing is not all about numbers, Timing, Type of Stock & Areas Actually Grazed are also important. Appendix 4 presents the 4 R' matrix.

### 3.5 General Comments

- Changes in habitat conditions occur slowly, and responses to measures put in place by farmers may require a 10 to 15-year timeframe. Therefore, providing evidence of habitat improvements may not always be possible within a five or six-year timeframe.
- The condition of some unfavourable bad habitats may be beyond restoration due to prohibitive costs, lack of practical, implementable measures in rugged upland terrains and the long recovery timeframes. These include large scale rewetting actions, landslide prevention or amelioration, controlling invasive species (including bracken, gorse, and rhododendron) and peat erosion.
- Engaging with relevant agencies (e.g. NPWS), experts, and other community groups is essential.
- Recognition that we do not have all the answers to the challenges of halting and reversing biodiversity loss, enhancing ecosystem services, and preserving habitats and landscapes.
- Where habitat scores are low, there needs to be a minimum payment to encourage participation. Some of these sites contain deep peat in danger of erosion and should be priority areas for management, but these areas will be excluded from the scheme unless there are sufficient farmer payments.
- Farmers need to have an idea of their potential habitat scores/income before engaging a planner to develop a management plan because if payments are meagre, they may decide not to participate at all.
- We also note that some excellent habitats of national importance are excluded from CP areas as they are not Natura sites.

### 3.6 Specific Comments

The SUAS Project trialled the formation of Commonage Groups to bring shareholders together to implement measures on the upland. The experiences and outcomes have been highly positive in adopting, implementing, and delivering agreed upland measures.

The success of Commonage Groups depends on allowing adequate time and support for Group formation and development. SUAS has shown that Groups can overcome many obstacles, including long-running feuds between shareholders. The money invested in Groups has and will continue to pay dividends on the uplands.

Training involves learning and understanding the targets for the habitats (show them what the habitats in good condition should actually look like and improve understanding of why a

habitat is in poor condition from an ecological and grazing perspective) and the measures required to achieve them. Relevant ongoing training programmes, including site visits, are essential to building the capacities of farmers and shareholders to manage the upland challenges. Farmers and shareholders must be compensated for the time they invest in training.

Participation by farmers and Commonage Group members with the ecologists, hydrologists, ornithologists, environmental scientists, field officers, and farm advisors in the initial and ongoing assessment of the upland habitats and biodiversity is crucial.

There is limited expertise in habitat management and particularly peatland restoration in the uplands in Ireland. The majority of peatland restoration works have been completed on raised bog habitats in the midlands. Upskilling in this important area in terms of habitat restoration and climate action response will be needed at a national level. Expertise in ameliorating the impacts of trampling from recreational users in the uplands is building and this type of work in combination with other habitat management skillsets such as peatland restoration, brush cutting, handling and operating flails and other equipment for heather cutting, planting of trees in the uplands, dealing with invasive species such as rhododendron, rebuilding of upland stone walls, etc. can all offer potential significant rural employment and additional farm income.

### 3.7 Habitat Management Plan Development stages

The initial site/habitat assessment of the upland by the advisor/planner/ ecologist was critical and **must** involve farmer and shareholder participation. The key outputs of this assessment are determining:

- Baseline conditions, site targets and priorities.
- The management actions required to
  - Maintain the habitat.
  - Improve the habitat.
- Selecting the appropriate grazing levels (Type of stock, number, timing, areas to be grazed).
- The habitat score, and score payments.

The next step was for the farmer or Commonage Group and the Project Team to agree on the Management Plan.

- It included details of who grazes what stock on the commonage & who is responsible for carrying out the measures.
- If contractors or other investment required and organising payments for services delivered.

Following agreement of the Management Plan between the Commonage Group and Project Team, it needed to be implemented, monitored, and updated.

- Are measures carried out (and if done, are they done correctly)
- Are measures delivering as expected?
- Are Grazing levels appropriate to the carrying capacity.
- Habitat condition.

## 4. Actions for the Future

Throughout the SUAS pilot project, the power of collaboration and innovation in addressing the complex challenges facing upland communities was witnessed. From implementing sustainable farming practices to conserving biodiversity and enhancing ecosystem services, commonage and individual farmer participants have demonstrated in many areas dedication and commitment towards a shared vision for a thriving upland landscape.

Several key actions emerge as essential to build upon the successes of SUAS.

- **Scaling Up Best Practices;**

Identify and scale up the most effective sustainable farming practices and environmental management strategies demonstrated during the pilot project and through engagement activity with wider upland communities and other European Innovation Programmes. This includes leveraging lessons learned and engaging with stakeholders to facilitate knowledge sharing and dissemination.

- **Enhancing Resilience;**

Develop and implement resilience-building initiatives to mitigate the impacts of climate change and other environmental stressors on upland agricultural production. This may involve integrating climate-smart practices, promoting diversified land use, and fostering adaptive capacity within upland communities.

- **Strengthening Policy Support;**

Advocate for policies that incentivise sustainable upland agriculture and environmental conservation. This includes nurturing partnerships with policymakers, stakeholders, and advocacy groups to promote legislation that supports the long-term viability of upland farming communities.

- **Prioritise Research and Innovation;**

to address emerging challenges and opportunities in upland agriculture and environmental management. This entails supporting interdisciplinary research efforts, nurturing collaboration between academics and industry leaders, valuing nature based solutions and investing in technology-driven solutions.

- **Empower Upland Communities;**

to actively participate in decision-making processes and take ownership of sustainable development initiatives. This includes providing access to resources, training, and capacity-building programs to encourage local leadership and collective action.

- **Establish Robust Monitoring and Evaluation Mechanisms;**

to track the progress and impact of sustainable upland agriculture and environmental initiatives. This involves leveraging data-driven (scientifically based) insights to inform adaptive management strategies and ensure accountability.

- **Strengthen Partnerships;**

between government agencies, non-governmental organisations, research institutions, and private sector actors to adopt a collaborative and holistic approach to upland agriculture and environmental management.

By embracing these actions and building upon the foundation laid by the SUAS pilot project, we can pave the way for a more sustainable, resilient, and equitable future for upland communities.

Continuing to strive towards a harmonious balance between agricultural productivity and environmental conservation, ensuring the prosperity of current and future generations in upland landscapes.

## 5. Dissemination of Project Findings



### 5.1 Project Dissemination Routes and Channels

Throughout the project lifetime from 2018 to 2022, the Sustainable Uplands Agri-Environment Scheme project activity communications and importantly the learnings and findings were disseminated through various channels to maximise outreach and impact.

Table 5.1 outlines dissemination dates, channels and details. This includes;

- regular social media postings,
- updates on dedicated project websites detailing methodologies and results.
- traditional media outlets such as radio, television, and print.
- agricultural-related journals and newspapers.
- Stakeholder engagement was prioritised, with ongoing workshops tailored to both agricultural practitioners and professionals and landscape conservation professionals and the wider community.
- presentations and seminars at relevant events.

Date	Channel	Details	Link if Available
31/01/18	WUC/SUAS Blog	Wicklow Uplands Council leads the way with Innovative SUAS Project.	<a href="http://www.wicklowuplands.ie">www.wicklowuplands.ie</a>
27/02/18	WUC/SUAS Blog	Wicklow Uplands Council to launch SUAS Project.	<a href="http://www.wicklowuplands.ie">www.wicklowuplands.ie</a>
06/03/18		New date to launch SUAS Project.	
14/03/18	WUC/SUAS Blog	SUAS Project – Expression of Interest forms.	<a href="http://www.wicklowuplands.ie">www.wicklowuplands.ie</a>
06/04/18	WUC/SUAS Blog	Sustainable Uplands Agricultural Scheme (SUAS) - Project Manager Position.	<a href="http://www.wicklowuplands.ie">www.wicklowuplands.ie</a>
05/10/18	WUC/SUAS Blog	Board Member Pat Dunne, (SUAS Operational Group Member), Shortlisted for 'Farming for Nature' Award.	<a href="http://www.farmingfornature.ie/nominees/pat-dunne">http://www.farmingfornature.ie/nominees/pat-dunne</a>
18/02/19	WUC/SUAS Blog	2 <sup>nd</sup> Round of SUAS Project Applications and Information Event Announced.	<a href="http://www.wicklowuplands.ie">www.wicklowuplands.ie</a>
26/02/19	WUC/SUAS Blog	Controlled burning	 <b>WhatsApp Video</b> <b>2019-02-26 at 18.53.</b>
27/02/19	WUC/SUAS Blog	Wicklow Uplands Council condemns uncontrolled burning in the Uplands.	

01/03/19	WUC/SUAS Blog	Wicklow Uplands Council disappointed Controlled Burning season not extended	
01/08/19	WUC/SUAS Blog	SUAS Open Day and demonstration event in West Wicklow	<a href="http://www.wicklowuplands.ie/suasproject">www.wicklowuplands.ie/suasproject</a>
16/09/19	WUC/SUAS Blog	SUAS Project at the 2019 National Ploughing Championships	
10/09/19	WUC/SUAS Blog	SUAS Project at EIP-Agri Network Event	<a href="http://www.nationalruralnetwork.ie/eip-agri">http://www.nationalruralnetwork.ie/eip-agri</a>
03/02/20	WUC/SUAS Blog	The Future of Hill Farming in the Dublin Mountains Information Event (6 <sup>th</sup> Feb)	
07/02/20	WUC/SUAS Blog	Information Event held on the Future of Hill Farming in the Dublin Mountains	
05/03/20	WUC/SUAS Blog	Disappointment no announcement made on Extending the Controlled Burning Season.	
April 2020	"Today's Farm-Teagasc"	"Forming Commonage Groups through SUAS"-Teagasc Magazine, pg 32-34 on Glassamullen Commonage	Today's Farm March to April 2020 Teagasc Magazine
13/03/21	RTE Countrywide	Controlled burning issue in uplands including Wicklow Uplands.	 20210313_rteradio1-countrywide-wickl
18/06/21	WUC SUAS training video?	Uplands Tree Planting Video	 Upland Tree Planting Video.mp4
23/8/21		Mullaghclevaun-Barnacuillian – Peat erosion	Problems coping the video
26/08/21	Heritage Week WUC SUAS Event	Kilmashagogue Event on the farm of Cormac & Richard Ryan (SUAS participants)  (Attended by Minister Pippa Hackett, Ecologists Faith Wilson & Enda Mullen, Cllr Steven Matthews, IFA Reps, Rewilding Wicklow etc	No link but see invite
02/02/22	WUC/SUAS Blog	SUAS Project spotted on popular Signpost Web Series. (TEAGASC)	<a href="#"><u>Teagasc Youtube Channel.</u></a>
28/02/22	WUC/SUAS Blog	Invasive Tree Species being removed from Glencap Commons.	
04/03/22	WUC/SUAS Blog	Tree Planting Initiative on the Glassamucky Brakes/Cunard Commonages.	

17/05/22	WUC/SUAS Blog	News on SUAS Project Initiative for National Biodiversity week	
21/05/22	WUC/SUAS Blog	Granamore Commonage Nominated for A Farming for Nature Award	
02/06/22	WUC/SUAS Blog	SUAS Project Hosts German Study Visit	
22/06/22	WUC/SUAS Blog	SUAS Project at Teagasc Open Day	
28/07/22	WUC/SUAS Blog	Minister Malcolm Noonan Visits Peatland Restoration Project in the Uplands	
22/11/22	WUC/SUAS Blog	SUAS Conference	
12/01/23	WUC SUAS Blog	SUAS Project to feature on Ear to the Ground	<a href="https://www.rte.ie/.../ear-to-the-ground/">https://www.rte.ie/.../ear-to-the-ground/</a>

Table 5.1 Project dissemination overview – including dates, channels and detail This is not a comprehensive listing.

## 5.2 Future Dissemination Efforts

Even though the project has concluded, the dissemination efforts continue, with project findings, methodologies, and insights still being shared through presentations, talks, and publications.

The project webpages will remain live and updated by Wicklow Uplands Council in house team as is required. The SUAS web pages serve as a valuable repository of information and resources for those interested in sustainable upland agriculture and environmental management.

## 6. Appendices

### 6.1 Appendix 1.

#### Details of SUAS Participants

Townland	Farmer/Commonage	Participants	Area Ha
Powerscourt Paddocks	Brian Mulligan	1	308
Kilmashogue	Richard & Cormac Ryan	1	35
Ballynultagh	Thomas Broe*	1	84
Coolbawn	Andrew Doyle	1	31
Garyhoe	Peter Murphy	1	18
Luggala Estate	Luggala Estate	1	1,745
Laragh East	Owen Brady	1	29
Laragh West	James Brady	1	5.9
Laragh East	Patrick Brady	1	10
Cunard	Donie Anderson*	1	4
Drummin	John Malone	1	147
		No of Shareholders	
Granamore	Commonage	10	454
Glasnamullen	Commonage	5	284
Ballybeg	Commonage	8	92
Corrasillagh	Commonage	3	370
Carrigeenduff	Commonage	4	674
Glassavullaun	Commonage	5	370
Slievmweel	Commonage	5	108
Mangans	Commonage	2	75
Slieveroe	Commonage	2	58
Ballybraid	Commonage	2	180
Ballynultagh	Commonage	3	350
Cunard/Glassamucky Brakes	Commonage	10	370
Glencap	Commonage	9	300
Ballinastoe	Commonage	7	1,025
	<b>Totals</b>	<b>84</b>	<b>7,126</b>

Table 6.1 Shows participant entry into SUAS on a Phased Basis.

Phase 1 Participants, Phase 2 Participants, Phase 3 Participants

\*Two farmers are also in a commonage in the SUAS Project

## 6.2 Appendix 2



# Health and safety in the Uplands



It should be noted that anyone following these guidelines does so at his/her own risk and the SUAS Project cannot be held accountable for accident or injury to anyone using them.

Health and safety is a very serious consideration for farmers and each farmer is responsible for his/her own safety and for ensuring that their health and safety procedures are in compliance with all statutory requirements at all times. Working in the uplands requires suitable health and safety procedures and equipment to ensure a safe working environment for all farmers and contractors working there. It also requires a certain level of fitness and awareness of the physical environment for those undertaking such work. The guidance included below is based on common sense. In the event of a health and safety incident, common sense is imperative as circumstances will vary in every case.

### Planning

Farmers should be aware of the daily weather forecast for the area and only proceed up the hill if it is safe to do so

Always be aware of the terrain you are working in and take steps to avoid trip hazards e.g. rocks

When carrying out work, ideally no one person should be doing this on their own and people working on the hills should be in close proximity to each other and communicate regularly to ensure everybody is ok. If further apart, they should make contact by phone at scheduled times, and more frequently when working in difficult terrain or carrying out more dangerous operations.

### Essential Equipment for Walking/Working on Mountains

Quality footwear with good ankle support.

Appropriate clothing for the weather; (warm clothes, waterproof jacket and trousers).

Dehydration and hunger can rapidly lead to exhaustion, so suitable snacks and water should be carried if they are going to be on the hill for an extended time. Due to the high numbers of animals present in the uplands, drinking from mountain streams is not recommended.

A fully charged Mobile Phone (coverage may be poor in mountain areas).

#### Extra Items for Longer Walking/Working times

Additional high energy food and liquids, including a hot drink in winter.

### During The Walk/Work

To avoid getting lost, check where you are at regular intervals.

Dangerously steep areas should be avoided where possible and stock can be monitored in these areas with the use of binoculars from suitable vantage points.

Drink often and eat regularly.

Watch for changes in the weather; if it deteriorates be prepared to alter the route or return early.

Ensure you have enough time to get back to base before dark.

In the event of being late to a meeting point, you should not rush to get there as hurrying across upland terrain is likely to result in an injury. Instead, contact their colleagues to inform them that you will be late and proceed at normal pace paying due diligence to potential hazards.

Cover skin in rough herbage to prevent ticks (Lyme Disease)

Check for ticks after coming off hill & watch for symptoms of Lyme disease. Consult doctor if symptoms appear.

### Lone Workers

Never work alone with a chainsaw or other dangerous equipment on a mountain. It is recommended to bring someone else along even if just to raise the alarm in case of an emergency.

Always inform somebody if you are going up on the uplands, including areas you expect to be in, departure time & expected return time. Contact should be made with that person on your return, and failure by you to make contact with them should prompt them to try contact you and failing that, to raise the alarm to your possible non-return.

### What to Do in an Emergency

Stay calm, assess the situation methodically and work out a plan of action.

Call the Mountain Rescue Service. Phone 999 or 112 and ask for Mountain Rescue, but remember it is a voluntary service and should only be contacted in a genuine emergency.

If you need to send people to phone for help, make sure they can find their way and that they have written details of the your location and the nature of any injuries.

If you summon help using a mobile phone, keep it switched on and in coverage, so that Mountain Rescue can call you back.

Treat any injuries to the best of your ability and keep the casualty warm and comfortable.

### Quad use

Only suitably experienced riders should be allowed to use a quad on hill/upland areas.

Appropriate training should be undertaken, due to the increased hazards and risks associated with working on hill/upland areas.

Quads should be suitable for the terrain they will be working on and should be in good working order.

Extra care needs to be exercised when carrying loads or pulling trailers/machinery

Suitable helmet, gloves and boots should be worn when using quads.

### Tractors

Only suitably experienced drivers should be allowed to bring tractors onto upland areas

Only 4 wheel drive tractors suitable for the terrain they will be working on should be used and they should be in good working order.

### Brush-cutter/Chainsaw use

Only suitably experienced persons should use any dangerous equipment for cutting vegetation.

Appropriate training should be completed, paying particular attention to health & safety while working

All recommended PPE should be worn

Equipment should be checked to ensure it is in suitable working condition

Never work alone if using potentially dangerous equipment

### Spraying

Only suitably certified sprayers to be used for spraying

Operators must be suitably qualified, for either knapsack or boom spraying.

All recommended PPE should be worn

Manufacturer's guidelines for mixing and application should be strictly followed

Areas being sprayed should be closed off if the public have access & appropriate signage put in

## 6.3 Appendix 3

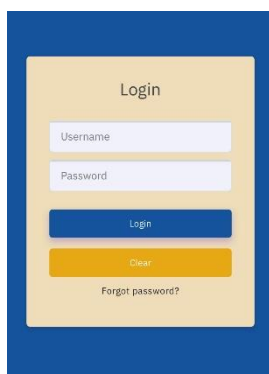
### SUAS Recording App

The SUAS Project has developed an app for submitting all your records for the project, so that it can be done straight away and does away with the need for so much paperwork. It can be done on your smartphone or can be done on a computer if you prefer, but the screenshots used in this guide are from a phone. Your username is your herd number and I will text each of you with your password and a link to the site. You can save this on your home screen on the phone to make getting back into it easier in future and most phones also allow you to save your passwords so that you can go straight in in future.

The app is easy to use once set up, so even if you need help to set it up, it is easy to use afterwards. If anybody has any problems, let me know and I will help you sort it out.


The web address is: <https://login.suaseiproject.ie/home>

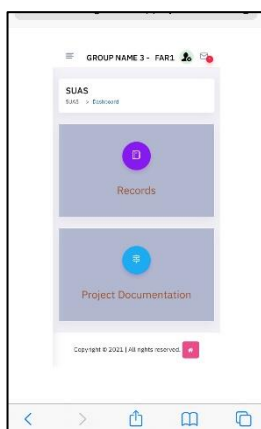
This brings you to the login page.



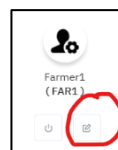
Type in your username and password that I sent you by text and you will go to the homepage shown below.

There are two options at this stage, one for you to input your records and the other to see relevant SUAS documentation that I will add to over time.

On any page on the app, if you hit this button,  on the bottom of your screen, you will be brought to this page.



If you open the app on a computer, you can change your password by hitting the button shown below, but this is not available through your smart phone. While it is always recommended to change your password, the app will work with the one I issued you.



When you hit the records button, you will be taken to this page with a further series of options/buttons. Each button takes you to the page for inputting the various records that may be required to submit.

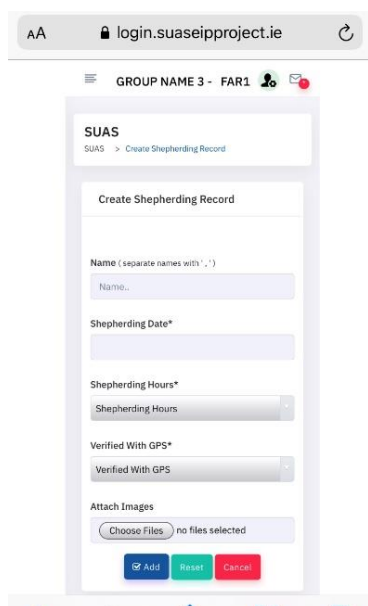
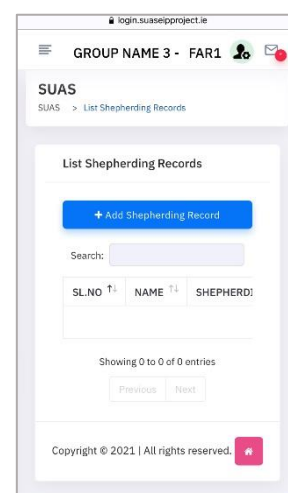


you

When you hit the “Shepherding Records” button, you will be brought to this page.



Records already submitted will also appear on this page for you view whenever you wish. Hit the blue button “Add Shepherding Records” to input new records and you will go to the page below.



This is where you record any shepherding carried out as part of the management plan, and as agreed with the project manager (just looking at stock is covered in the score based payment, but if there is any shepherding for a specific reason included in the plan, this is where it should be recorded).

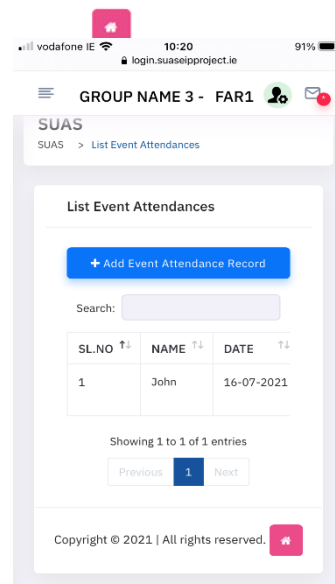
Put in the name of the person who actually did the shepherding, the date it was carried out, the number of hours and whether it was recorded with a GPS tracking app or not.

Where the tracking app has been used, take a screenshot of the summary page and save to the photo gallery on your phone.

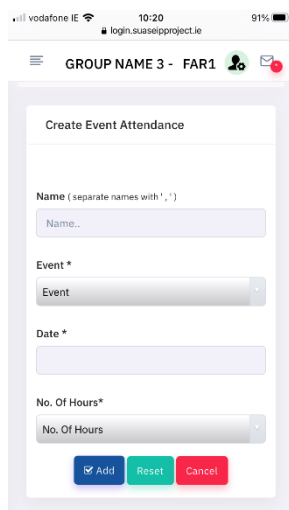
Hit the “Choose Files” button under Attach Images, select photo library or photo gallery depending on your phone and select the screenshot you have saved there. Then hit Add and

the photo should appear beside the choose files button. Now hit the blue Add button and your record is submitted. If you made a mistake, you can use the reset or cancel buttons to go back and start again. Hit the home button when you are finished.

When you hit the “Training/Event Attendance” button you will be brought to this page.



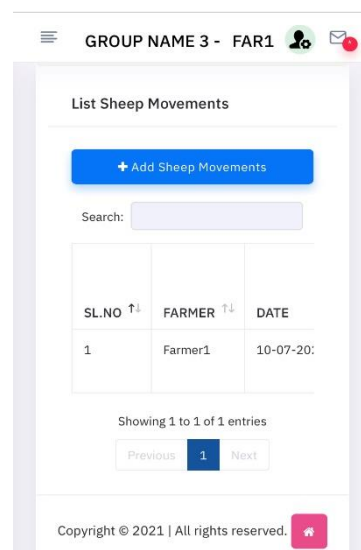
Records already submitted will appear on this page for you view whenever you wish. Hit the blue button “Add Event/Attendance Records” to input new records and you will go to the page below.



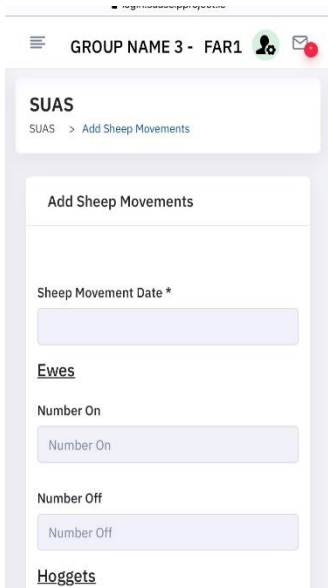
Put in the name of the person(s) who attended in the box provided. Select the event from the drop down menu. The date & no. of hours will be filled in automatically. Hit the “Add” button to submit.

For events/meetings or something else that is not in this menu, I am getting an option to fill in your own details built in at the minute & when you select “Other” from the events menu, you can fill in the details yourself. You have to hit the Add button or your records won't be submitted.

When you hit the “Sheep Movements” button, you will be brought to this page.



Records already submitted will appear on this page for you view whenever you wish. Hit the blue button “Add Sheep Movements” to input new records and you will go to the page below.



Select the date of the sheep movements (scroll through the calendar that appears and click on the date you want).

Records are divided up into Ewes, Hoggets & lambs, just like the paper forms previously used. Select the number in each category that either went on to or off the hill on that date.

You can have sheep going on to & off the hill on the one record, provided it was on the same day, but you need a separate record for every date.

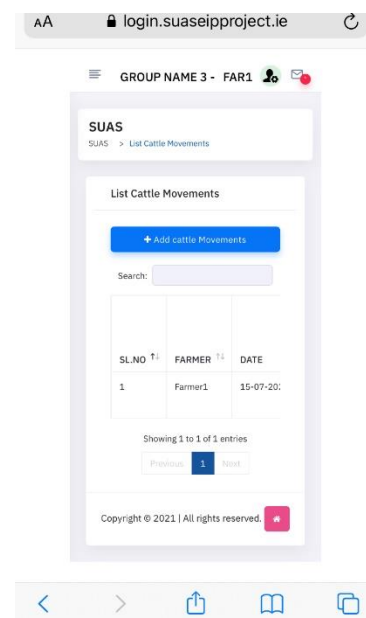
Remember to hit the “Add” button at the bottom of the page to submit the record before you leave this page.

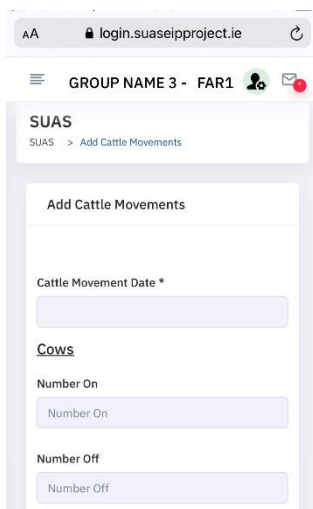


When you hit the “Cattle Movements” button, you will be brought to this page.



Records already submitted will appear on this page for you view whenever you wish. Hit the blue button “Add Cattle Movements” to input new records and you will go to the page below.



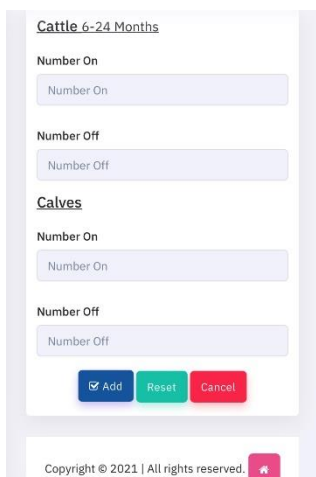


Select the date of the sheep movements (scroll through the calendar that appears and click on the date you want).

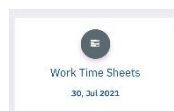
Records are divided up into Cows, Cattle 6-12 months & Calves, just like the paper forms previously used. Select the number in each category that either went on to or off the hill on that date.

You can have cattle going on to & off the hill on the one record, provided it was on the same day, but you need a separate record for every date.

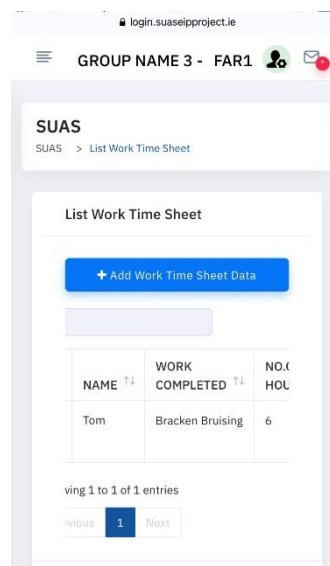
Remember to hit the “Add” button at the bottom of the page to submit the record before you leave this page



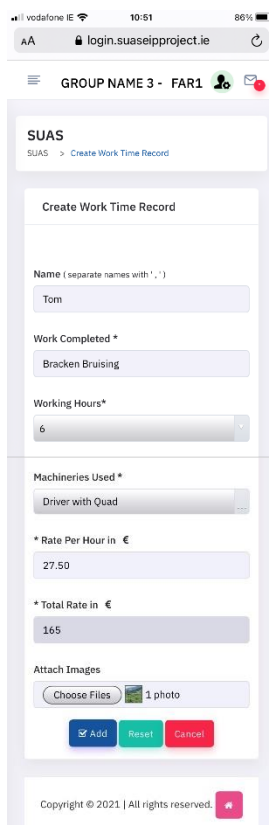
When you hit the “Work Timesheets” button, you will be brought to this page.



Records already submitted will appear on this page for you view whenever you wish. Hit the blue button “Add Work Timesheet Data” to input new records and you will go to the page below.



NAME	WORK COMPLETED	NO. OF HOURS
Tom	Bracken Bruising	6



Fill in the name of the person who actually does the work. More than one name can be put in here if more than one person is doing the same work.

Put in a description of the work that was carried out and where if relevant.

Select the number of hours (total no. if more than one person listed above).

Select the machinery used or labour only if no machinery is used. Machinery rates include the operator and the machine, so labour doesn't have to be claimed separately.

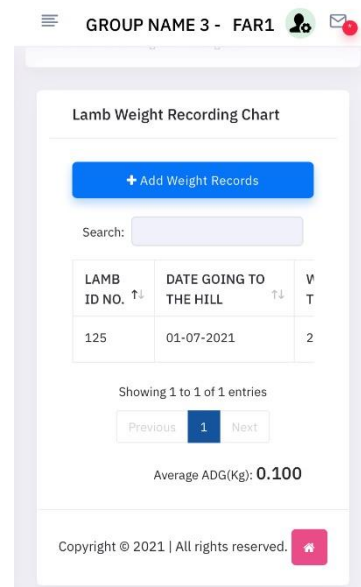
The rate per hour & total payment is calculated automatically. If the machine used is not on the list, let me know and I will update the list.

As proof of work carried out, you can upload photos (up to 5) taken of the work being done/completed or screenshots of tracking app on the phone. Hit the "Choose Files" button; select Gallery or Photo Library depending on your phone; select the images you want to upload; hit Add. The photos should appear or be listed beside the "Choose Files" button. Hit the "Add" button to submit your record.

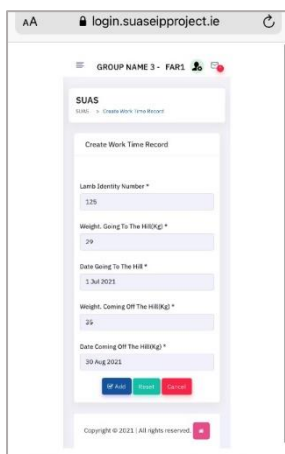
When you hit the "Lamb Weight Records" button you will be brought to this page.



Records already submitted will appear on this page for you view whenever you wish. Hit the blue button "Add Weight Records" to input new records and you will go to the page below.

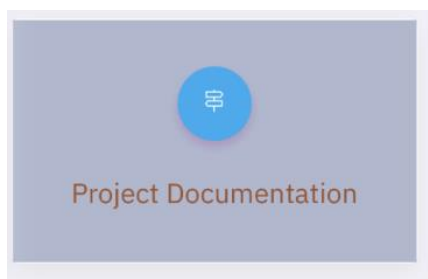


LAMB ID NO.	DATE GOING TO THE HILL	V
125	01-07-2021	2



- Put in the tag number of the lamb.
- Put in the weight of the lamb going to the hill
- Select the date the lamb went to the hill from the calendar that appears & select ok.
- Put in the weight of the lamb coming in off the hill.
- Select the date the lamb came in off the hill
- Hit the “Add” button to submit your record

**Note-** You have to fill in a separate record for each lamb & you have to record both the weight going to the hill & the weight coming off the hill at the same time. (2021 instruction).



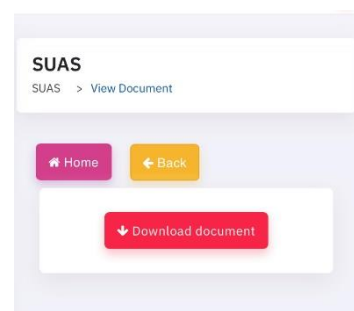
When you hit the “Project Documentation” button, you will be taken to a list of all relevant information from the SUAS project. This will include some general information & documentation and also the reports and reviews for your upland area/commonage. I will be updating this over time as new information and reviews become available.



This is an example of the information that will be available, but is individual to each commonage or non-commonage participant.

Just touch the document you want to access and you will get the following options;

Touch the red “Download Document” button to continue or the yellow “back” button to go back to the list of all documentation available.



Depending on the make of phone you use, you may be asked another question about do you want to download the document, in which case you select yes, or you may be asked if you want to View or Download the document, in which case the quickest option is to select view.

6.4 Appendix 4

# The 4R's of Upland Grazing

**• Right Type of Stock**



Animals that will survive and thrive on the hill

Animals that will provide the right type of grazing



Stock that contribute to a viable farm enterprise



Animals that will survive and thrive on the hill



Stock that contribute to a viable farm enterprise

**• Right Number of Stock**



Enough to graze the available vegetation

Damage from Supplementary feeding



Most of our hills have too many stock in late summer and not enough for rest of year

**• Right Time of Year**



In early summer & late winter, sheep eat heather & courser vegetation

In late summer, sheep eat mostly grassy vegetation



In early summer, stock will eat Molinia Grass



In early summer & late winter, sheep eat heather & courser vegetation



In early summer, stock will eat Molinia Grass

**• Right Areas of the Hill**



Encourage more grazing on undergrazed areas

Reduce grazing on overgrazed parts of the hills



Avoid overgrazing on recently burned or cut areas

## 6.5 Appendix 5

### SUAS Study Tour

#### 6.5.1 Northern Ireland 2022

##### Background:

When SUAS was developed, there was always a proposal to bring the participating farmers on the study tour to see sites and works being carried out that were relevant to the SUAS Project. Unfortunately, no tours were possible during 2020 & 2021 due to Covid, so it was held off until September 2022.

Places on the study tour was offered to all SUAS participants and everybody who expressed an interest was brought along.

##### Visit to Tynan Abbey

Tynan Abbey is owned and farmed by Kate Kingan and Peter Mant. Peter showed us around the farm giving us details of the history of the estate and the current farming systems. The farm is 800 acres, 550 of which is in grass, and has been farmed by Peter & Kate for the past 2 years. They run 500 ewes and 250 cattle, including a herd of Dexters. They joined the NI Sheep Programme two years ago and want to focus on improving grassland management, animal health, improving fertility with the overall objective of increasing farm profitability and planning for the future.



We were also met at Tynan Abbey by Graeme Campbell, Senior Agricultural Inspector, Countryside Management Delivery Branch, Department of Agriculture, Environment & Rural Affairs and Senan White, NI Sheep Programme Manager, Cafre. They gave us an overview of the current Environmental Farming Schemes (EFS) and what Tynan Abbey is doing as part of this scheme. They also spoke about the possible future direction of these schemes and had a very good discussion with study tour participants on both farming and environmental issues.



### 6.5.2 Visit to Cafre Hill Farm at Glenwherry

The Hill Farm Centre is located at Glenwherry in the Antrim Hills between Ballymena and Larne. Partially situated within the Antrim Hills Special Protection Area (SPA) for Hen Harrier and Merlin, the Hill Farm Centre extends to almost 1,000 hectares and has 100 suckler cows and 1,100 breeding ewes. The enterprises at the Hill Farm Centre demonstrate to students and farmers effective management practices of upland and hill land with a focus on the integration of livestock and environmental management. Improvements in environmental management have been driven by targets set as part of the Glenwherry Hill Regeneration Project.

Bryan Irvine, Senior Biodiversity Technologist with Cafre met us for the day. Following a quick overview of the farm and the research work being carried out, we went on a tour of the farm.

First off, we met Merlin Becker, who is the Gamekeeper for the farm. His main focus is on predator control both on the farm itself and on neighbouring farms and he demonstrated the many varied tools he uses. He also gave us details of the extent of the predator control and the resulting increases in target species.



Next we looked at the grazing management of the various habitat types and Bryan showed us some samples from their water monitoring systems. He explained out how they are improving the quality of the water feeding into the local reservoir and how that is saving them money in treatment costs.



Bryan also showed us some areas that have been rewetted through drain blocking and the rapid recovery in mosses in the adjoining areas.

Merlin then showed us some areas that had controlled burning carried out last year. He explained out how they chose the locations, how they controlled the burns and showed us the resulting recovery following the burn. The heather was on blanket bog/wet heath and was much different to the heather we are trying to burn on dry heath in Wicklow & Dublin.

We also saw a drier area of heather that was cut with a tractor & mulcher and the recovery from the cutting. They were surprised with the results and are planning to explore this option further, similar to what has been taking place in SUAS over recent years.

Next we saw an area that has been taken out of commercial forestry and rewetted. The area is not economically viable for forestry and the rewetting will slow up water flow and improve water quality entering the reservoir downstream. We saw the techniques used and Bryan was very informative about what worked and what didn't, providing plenty to think about.



Following lunch, Natasha Ferguson gave us an overview of the cattle & sheep enterprises. We got a tour of the new modern sheep shed, kitted out to the highest specifications with the latest technology. Natasha explained out the cattle & sheep breeding policies on the farm including the use of virtual fencing for more controlled management of the open hill areas.

It was interesting to hear about how the cattle were out wintered on certain areas to control the vegetation there for snipe habitat rather than going in with machines. Rush control is major issue on the farm and we got details of various trials over the years leading to their current rush management strategy.



Participants on the Study Tour

### 6.5.3 Itinerary

#### SUAS Study Trip to Northern Ireland

#### Itinerary

##### Wednesday 14<sup>th</sup> September

*Bus Pick-up Times*

Rathdrum 11:00am

Roundwood 11:25am

Knocklyon 11:55pm

Lunch in Castleblaney 1:30pm

Arrive at Tynan Abbey Estate 2:45pm

- Meet Graeme Campbell, CAFRE for tour of environmental initiatives being carried out on the estate.

Check-in Flagstaff Hotel 6:30pm

Dinner & Discussions 7:30pm

##### Thursday 15<sup>th</sup> September

Breakfast 8:00am

Depart Hotel 8:40am

Arrive Glenwherry Hill Farm 10:00am

Meet researchers and take environmental tour of farm

Lunch 1:30pm

Look at beef & sheep - sheep house, facilities

Depart Glenwherry at approx. 4:00pm.

Arriving in Rathdrum at approx. 8:00pm

#### 6.5.4 Study Tour Participants

Name	Commonage/Site
John Mallick	Ballybeg
Marcella Mallick	Ballybeg
Pat Doyle	Slievemweel
Mary Doyle	Slievemweel
Pat Dunne	Corrasillagh
Peter Murphy	Ballybraid
Peter Molloy	Glasnamullen
Johnny Power	Glasnamullen
Myles Maguire	Granamore
Michael Keegan	Luggala
Dan Molloy	Ballinastoe
Owen Brady	Laragh East
Glen Jones	Glassavullaun
Brian Jones	Glassavullaun
Peter Jones	Glassavullaun
Paddy Broe	Ballynultagh
Tom Broe	Ballynultagh
Terrence Murphy	Cunard Glassamucky Brakes
Patsy Murphy	Cunard Glassamucky Brakes
Brian Murphy	Cunard Glassamucky Brakes
Donie Anderson	Castlekelly
	<b>Non-farmers Representing</b>
Declan Byrne	SUAS Project Manager
Brian Dunne	Wicklow Uplands Council

Appendix 6 – SUAS Cultural Heritage Pilot Project Separate Document

## SUAS Cultural Heritage Pilot Project



"Oh they were joyful days going up on that commonage. You know, you're out there in the open, fresh air, you just seem at peace with everything, like. You're just happy to get the number of sheep you have on the hill and you're happy coming in if you have your number right."

Críostóir Mac Cárthaigh

20 January 2023

