

Corrasillagh Commonage

2021 Ecological Survey



Final Report

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Corrasillagh Commonage

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1. Introduction

A baseline habitat condition and ecological survey and habitat management plan was prepared for the Corrasillagh Commonage in 2019¹ and the measures within same underwent screening for Appropriate Assessment².

A Commonage Management group was established for the commonage and the implementation of the management prescriptions in the plan began in 2020.

The management prescriptions in the SUAS plan for the commonage set out to address the impacts highlighted in that report so progress is made towards attaining **Favourable status** for the Annex I habitats present on the site – principally **4010 Northern Atlantic Wet Heaths with *Erica tetralix*** , **4030 Dry Heath**, **4060 Alpine and Boreal Heath** and **7130 Blanket Bog**.

The major impacts arise from a legacy of inappropriate grazing (from sheep and also from deer), erosion of peat along the summits and ridges (impacting on upland blanket bog and montane heath), with subsequent severe landslides and damage and losses to acid grassland/dry heath/blanket bog habitat below, invasion of grassland by dense bracken, and localised trampling impacts from walkers and illegal quad activity. Overgrazing is also contributing to erosion, not only on the ridges and summits and the cliffs behind Kelly's Lough but also on the slopes of the commonage above the Carrawaystick Stream. These impacts, coupled with natural exposure, increased rainfall and storm events and clear felling in the uplands pose a serious risk of flooding to the houses, farms and inhabitants of the Glenmalure valley below.

The management prescriptions in the SUAS plan for the commonage also need to ensure that **Favourable status** is achieved for the Annex I bird species, which form the Special Conservation Interests for this SPA:

- Peregrine falcon (*Falco peregrinus*),
- Merlin (*Falco columbarius*).

The extent of habitats present within the commonage and their affinities to either Fossitt (Level 3) or Annex I habitats on the Corrasillagh Commonage were mapped as presented on **Figures 1 and 2 (See Appendix 1)** and their conservation status was assessed and mapped as shown on **Figure 3 (See Appendix 1)**. A series of management prescriptions were drawn up for the commonage as detailed in **Table 1** below and mapped on **Figure 4 (See Appendix 1)**.

¹ Wilson, F. (2019). Ecological Baseline Survey prepared for Slievemweel Commonage as part of the Commonage Management Plan for SUAS. 5th December 2019. Unpublished report for SUAS EIP.

² Wilson, F. (2019). Report for Screening for Appropriate Assessment for a Commonage Management Plan at Corrasillagh Commonage, Co. Wicklow in accordance with the requirements of Article 6(3) of the EU Habitats Directive. 15th November 2019. Unpublished report for SUAS EIP.

2. SUAS Vegetation Management Measures

The proposed management measures for the Corrasillagh commonage in 2021 under SUAS were as follows:

Year 2 (2021)

1. Spray bracken in areas 4, 6, 9 & 10 (approx. 2ha in total) with Asulox to control Bracken. This may be done by quad with hand lance or with knapsack sprayer.
2. Cut/pull more of the self-seeded Sitka spruce trees in area 2.
3. Reduce sheep grazing numbers in area above Kelly's Lake by hunting out neighbouring sheep and using feed buckets to encourage own sheep to graze other non-damaged areas of the hill
4. Discuss repairs to walking track above the zig-zags up with NPWS to see what is possible or practical.
5. Plant some native trees along Kelly's Brook to help prevent erosion and provide some protection from flooding and creating small areas of gully woodland.
6. Look at trialling some peatland restoration measures in at least one area of bare peat.

Year 3 (2022)

1. To be reviewed at the end of year 2.

Shepherding

Average time per shepherding: 6 Hours

No of times sheep are to be shepherded: 2-3 Times per week from 1st May to 30th November.

Identified objective of the shepherding:

- Move off sheep from neighbouring commonages.
- Sheep to be moved off area 1 and along ridges regularly to reduce grazing pressure there and allow vegetation to recover. Move sheep into the taller vegetation regularly to get them to graze these areas.
- Monitor sheep health for signs of ticks or other diseases.
- Count numbers of deer grazing the commonage and areas they are grazing.

Other works to be carried out for entire commonage

Use feed buckets to encourage more sheep grazing the commonage in the Jan/Feb and April/May period. Graze more of them in plot 2, especially over the winter months.

Put a herd of cattle on plot 2 to help control bracken. Leave cattle on the hill for as long as possible and especially over the winter if possible. Can use supplementary feeding to keep them there over the winter.

Set up a number of enclosure sites for deer & sheep in the bare peat areas to see if natural regeneration will take place. May carry out some peat restoration work following discussion with NPWS.

Details of sheep stocking rates proposed

In 2019, there were approx. 600 ewes on the hill, at various times of the year. There were high losses of hoggets and so they were took down early and didn't go back.

The plan is for to have 400 to 450 sheep (ewes & hoggets) on the hill for 9-10 months of the year, which will happen over the next 2 to 3 years and will involve a change in breeding for Pat and Patrick. Numbers will be recorded accurately in 2020 and if amendments need to be made to this plan, it will be done at the end of 2020.

Pat Dunne is also proposing to keep 6-7 cattle on the area below the fence to help bracken control. It is planned to keep these cattle out all year round and will need a small pen and crush at the bottom of the hill for routine works and testing. This will be incorporated into the existing sheep pen that is already there and the SUAS project will fund it.

Ecological Assessment

The commonage was surveyed in September 2021 by Faith Wilson to examine and review the implementation of the proposed measures and make any recommendations regarding same. The observations and recommendations from this visit are set out below.

3. 2021 Walkover Survey

The following observations, comments on same and recommendations on the works completed in 2021 are presented.

3.1 Bracken Control

Bracken control was implemented in 2020 and 2021 along the edges of the zig zags track. Recent spraying was conducted of the bracken along the zig zags path and on the slopes above the track as you enter the lands.

There has been quite a lot of regrowth of bracken that was sprayed previously, so bracken growth seems particularly strong this year. In some areas on the returns on the track there has been a very good kill rate. The cattle are also accessing these areas, which is helping to open them up. The areas where the odd bit of buckler fern had been sprayed have recovered very well. Cattle are definitely moving through some of the bracken areas and opening them up.



Plate 1. Bracken treatment on slopes above the track as you enter the hill.



Plate 2. Bracken treatment adjoining the zig zags track.



Plate 3. Regrowth adjoining the track has been very strong.

Bracken treatment under the little knoll of Cloghernagh where the bracken is very dense and below the bracken is heavy leaf litter. The bracken here had just been re-sprayed. There is some grass regrowth but still an awful lot of leaf litter. The cattle have been in here which is interesting. It would

be interesting to try and keep the cattle in an area and try to assess their trampling impacts as opposed to having both spraying and cattle, if possible.



Plate 4. Bracken treatment under Carrignagreine.



Area of bracken control visible on Google Earth.

3.2 Upland Gully Woodland Restoration/Native Woodland Establishment

The establishment of gully woodland along the Carrawaystick Stream and its tributaries in the commonage commenced in early 2021.



Plate 5. Restoration of native woodland habitat along the watercourses began in 2021.



Plate 6. It is recommended that a copse of native woodland is established adjoining the existing trees at Carrignagreine.

It is recommended that a copse of native woodland is established in Area 11 below Carrignagreine.

Small areas of native woodland could also be established in Area 2 in areas of outcropping rock/scree where bracken treatment will be difficult to implement. This could be done through the use of fencing/exclosures (covering several square meters) erected around existing isolated trees to allow natural regeneration to occur or through direct planting.



Plate 7. Some enhancement planting or the erection of exclosures is recommended around existing native trees in Area 2.

Along the watercourse where the tree planting has gone in, they are in general very well sited and well placed. Most of them seem to be doing ok. A few shelters have come off, just bent away from the posts so they need another cable tie around them.

Some scattered Sitka spruce have come in from the plantation on the far side of the river and they should just be cut out of it.

3.3 Track Works

Extensive track repairs and drainage works have been conducted along the zig zags track. This work has been sensitively done and is recovering well.

The disturbed ground either side of the track where the works were done has all begun to revegetate nicely, mostly with common bent grass, a little bit of sheep's fescue, tormentil, common dog-violet, a little bit of marsh violet, heath bedstraw, occasional jointed rush, occasional mat grass, foxglove, some bracken, very occasionally there was wood-sorrel.

Other species along the edge of the track are sheep's sorrel, sweet vernal grass, jointed rush and very occasionally purple moor-grass.

The quad is doing a bit of damage up on the top slope where it is in the purple moor-grass flushed area. There is a lot of bare peat and some tracks are starting to form, so we need to think about doing some track repairs here to make this a sustainable route for the quad.

Obviously, the majority of the zig zags are fine at this point but between the cattle moving up here, but primarily the quad, we're starting to have a lot of bare peat, so it needs to be tackled sooner rather than later.



Plate 8. Repairs are required on the upper section of the zig zags used by the quad.



Plate 9. Repairs are required here.



Plate 10. Heavy poaching and eroding peat on the quad route.



Plate 11. Additional repairs required here.

3.4 Cattle Grazing

The herd of Black Galloway cattle which were introduced to the hill in 2020 have been doing a fantastic job of opening up the areas of dense tussocky purple moor-grass and allowing other species to grow and recolonise there including *Sphagnum* moss at the base which had been previously shaded out.



Plate 12. Dense tussocks of *Molinia* in Area 3.

The grazing impact of the cattle on *Molinia* could be clearly seen during the site visit – a complete contrast to the browsing pattern of sheep. Their dung was also evident across the areas that they had grazed where it was being utilised by a variety of coprophilic (dung loving) invertebrates, which were then fed on by birds – increasing biodiversity on the hill.

In 2021 the use of radio tracking collars on the cattle was trialled. This system allows the animals to be released onto the open hillside and their locations are monitored.

Where the cattle have been grazing at the top of the zig zags, there has been a huge improvement in the sward. Previously, this was pretty much dominated by tussocky purple moor-grass and now there is ling heather, cross-leaved heath, tormentil, deergrass and heath rush. The sward has really opened up and is now accessible to sheep, people and cattle. There is no obvious poaching damage from any of the cattle. It is definitely delivering the conservation objectives envisaged and it is likely that the sheep should start to use this area more. There is occasional bog asphodel and some of the mosses are starting to regenerate under the *Molinia*.

It is not clear if the cattle have also grazed outside the fence in Area 3 which is a mixture of wet heath and cutover bog. The cutover bog has regenerated very nicely, with both bog cottons, deergrass, cross-leaved heath, bog asphodel, heath rush, ling heather, and very rarely a little bit of purple moor-grass. There are some nice small pools with good sphagnum within them; there is *Sphagnum capillifolium* and *Sphagnum papillosum*. There is very good moss cover underneath a bit of tormentil. Some of the areas are quite strong with purple moor-grass but there is quite a nice balance with occasional little seeps and flushes. It is in good condition now. There is also a lot of round-leaved

sundew, more rarely tormentil and very occasionally marsh lousewort. There is a series of little runnels going through it which go to the river. At the margins there is *Polytrichum commune* moss and there is also bilberry.



Plate 13. Purple moor grass being favoured by the Belted Galloways on the hill.



Plate 14. Dense areas of *Molinia* starting to be grazed by the Galloways.



Plate 15. Bilberry regeneration on grazed *Molinia* tussocks.



Plate 16. Regeneration of cross leaved heath, deer grass, tormentil and ling in browsed *Molinia* tussocks.

Trial grazing of the cattle in Area 20 and 25 might be worth investigating to see what impact they have on the mat grass there.



Plate 17. Trial grazing of cattle in areas where mat grass is frequent would be beneficial to assess their impact on same.

3.5 Walking Track Repairs

The walking track up Corrasillagh to Leohard is in need of urgent repair works. This track was assessed by Chris York as part of a wider walking track condition survey conducted in 2021 and his recommendations for this part of the main access route to Lugnaquilla need to be implemented.



Plate 18. Trampling pressure on deeper peats at the stile on the walking track from the zig zags.



Plate 19. Trampling pressure on the deeper peats above the stile.



Plate 20. Eroding peat on the walking track.

3.6 Quad Impact on the Mountain

The impact of quad activity on the hillside was obvious on this visit.



Plate 21. Quad on the hill beginning to cause damage.

The quad seems to be doing a bit of damage coming up and down the open mountain side; a lot of the peat seems very disturbed underneath and it feels like it is possibly the water is coming in underneath the peat layer. I would be a bit nervous about what that is doing and there is a risk of a slippage. The ground is very torn up; I am not sure if that is from the cattle or previous quad damage and ground has settled back or what.

3.7 Management for 2021

A review of the works which were proposed for 2020 and 2021 in the plan, coupled with the outcomes from the 2021 walkover was conducted. Items highlighted in red have not been completed. This has informed the proposed works for 2022.

2020

1. Carry out necessary repairs to the Zig Zags roadway to allow improved access by quads for management purposes. Gateway out through the fence to be levelled up to allow easier access and prevent erosion.
2. Spray bracken alongside the track in area 2 for sheep gathering, as existing track is closing in and it is hard to move sheep along it. Spray approx. 2-3m wide either side of the track using quad with hand lance.
3. Spray bracken in areas 4, 6, 9 & 10 (approx. 2ha in total) with Asulox to control Bracken. This may be done by quad with hand lance or with knapsack sprayers as it is inaccessible for tractors.
4. Remove self-seeded sitka spruce trees in area 2.
5. Reduce sheep grazing numbers in area above Kelly's Lake by hunting out neighbouring sheep and using feed buckets and active shepherding to encourage own sheep to graze other non-damaged areas of the hill
6. Put in small sheep pen (approx. 3m X 3m) near the gateway in the fence across the hill for holding sheep for treatment, etc.
7. Fence off at least 2 enclosure areas to see what recovery rates are like in areas 1 & 17

Items highlighted in red have not been completed.

2021

1. Spray bracken in areas 4, 6, 9 & 10 (approx. 3ha in total) with Asulox to control Bracken. This may be done by quad with hand lance or with knapsack sprayer. Care will be taken to avoid any non-invasive native ferns present as these are not the target species.
2. Cut/pull any remaining self-seeded sitka spruce trees in area 2.
3. Reduce sheep grazing numbers in area above Kelly's Lake by hunting out neighbouring sheep and using feed buckets to encourage own sheep to graze other non-damaged areas of the hill (where possible)
4. Discuss repairs to walking track above the zig-zags up with NPWS to see what is possible or practical.
5. Plant at least 150 native trees along Kelly's Brook to help prevent erosion and provide some protection from flooding and creating small areas of gully woodland.
6. Keep the cattle grazing on the hill and trial the use of GPS fencing to allow more controlled grazing activity, particularly in *Molina* dominated areas.
7. Fence off at least 2 enclosure areas to see what recovery rates are like in areas 1 & 17
8. Cut/pull any self-seeded sitka spruce trees from the adjoining plantation in area 3.

Other works to be carried out for entire commonage

Use feed buckets to encourage more sheep grazing the commonage in the Jan/Feb and April/May period. Graze more of them in plot 2, especially over the winter months.
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4. Appendix 1. Maps & Management Recommendations

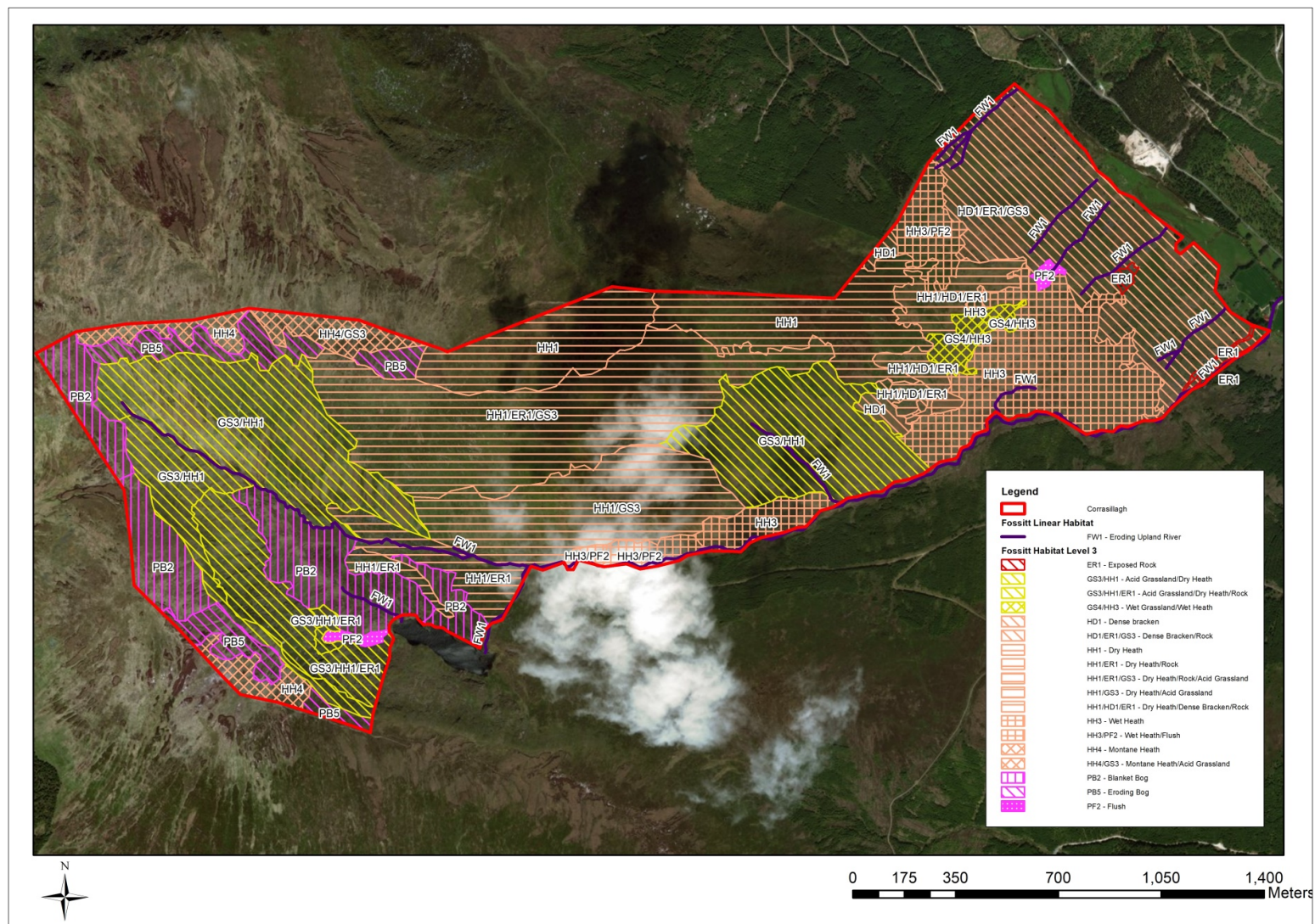


Figure 1. Habitats mapped to Level Three (Fossitt, 2000) within the Corrasillagh commonage.

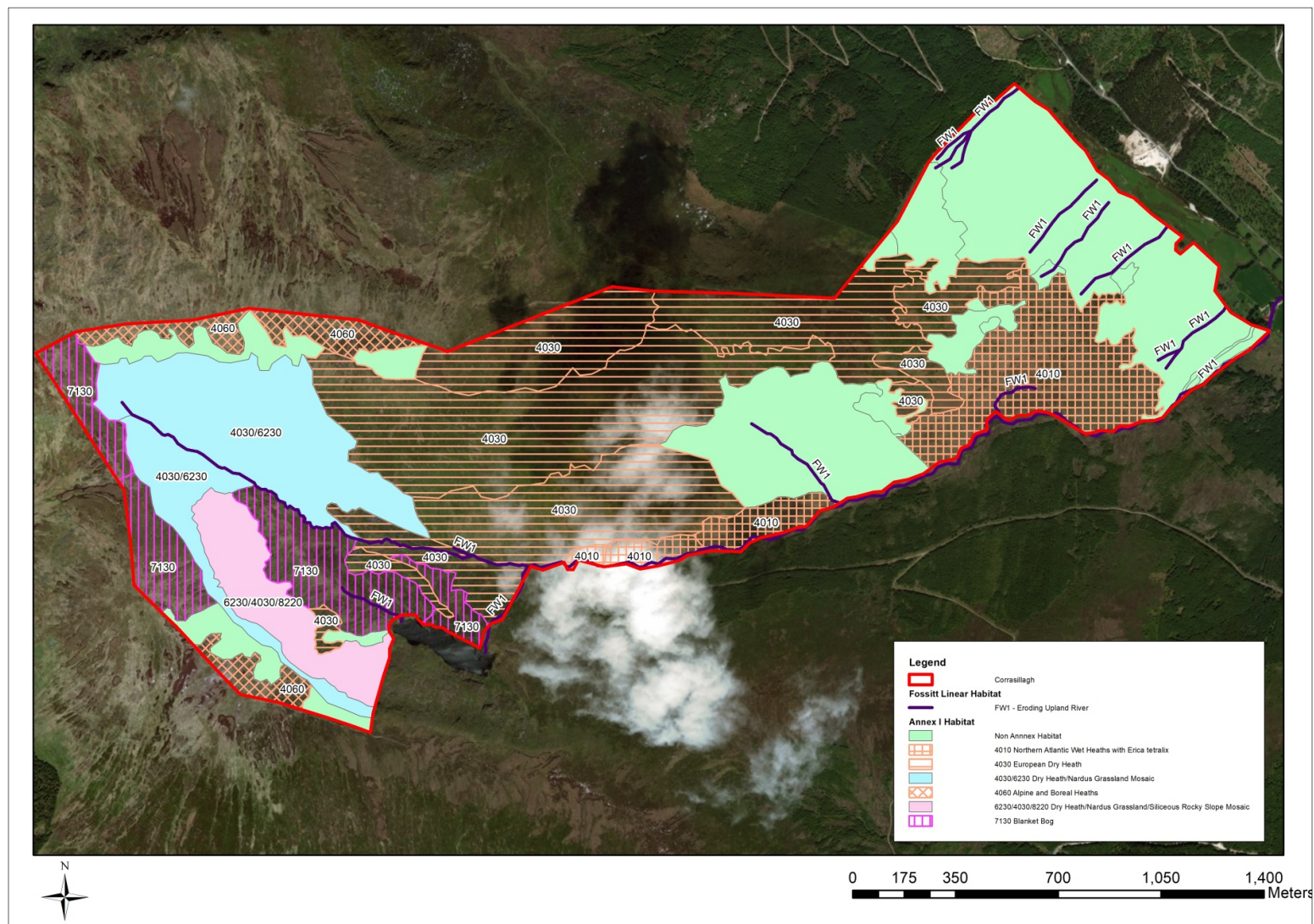


Figure 2. Habitats mapped according to their correspondence with Annex I habitats within the Corrasillagh commonage.

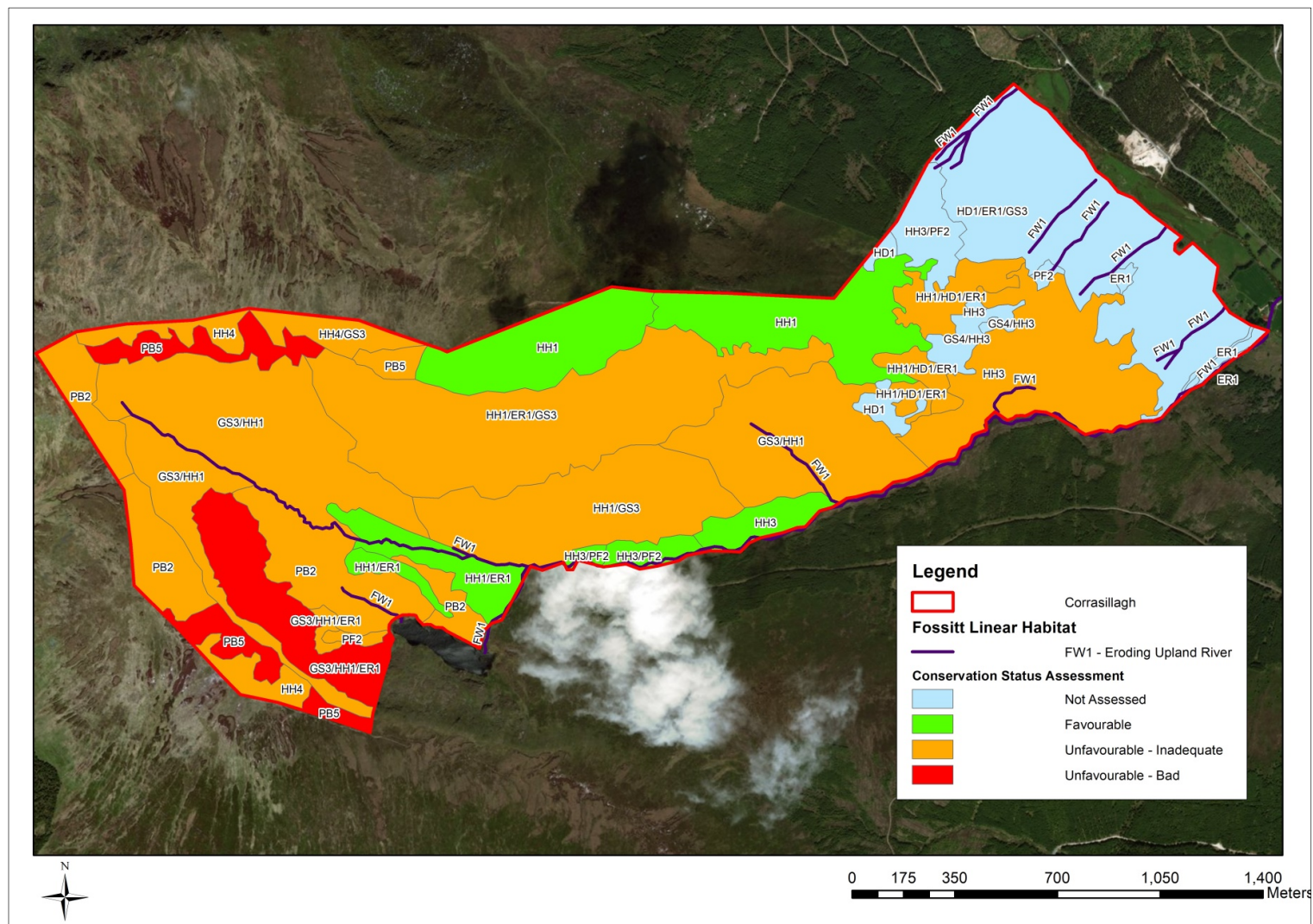


Figure 3. Habitat Condition Assessment for Corrasillagh Commonage.

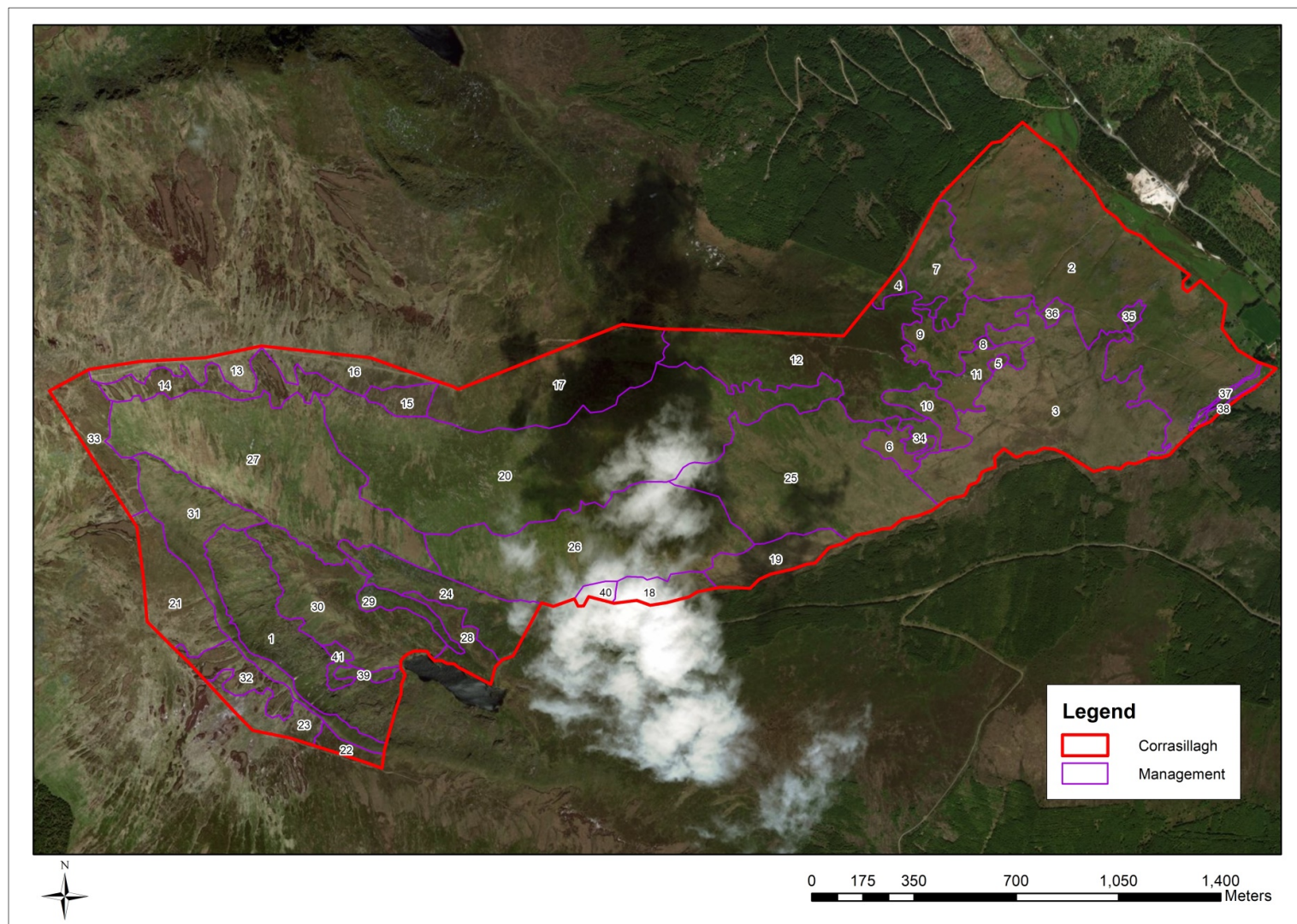


Figure 4. Management measures for Corrasillagh.

Table 1. Habitats present on Corrasillagh Commonage and Management Recommendations.

Id	Annex I Code	Fossitt Code	Area (m2)	Area (Ha)	Conservation Status Assessment	Management Prescription
1	6230/4030/8220	GS3/HH1/ER1	152973	15.30	Unfavourable - Bad	<p>Reduce stocking density in key areas</p> <p>Shepherd out trespassing sheep and deer</p> <p>Allow vegetation to recover and slopes to stabilise</p> <p>Peat restoration works higher on the ridge should also assist in reducing landslip risk</p>
2		HD1/ER1/GS3	486222	48.62		<p>Bracken Control</p> <p>Several options – see what impact sheep have, graze with cattle, spray bracken</p> <p>Remove self-seeded Sitka spruce</p> <p>Could enter into the Native Woodland Scheme as a Protection Forest for the farm and valley</p> <p>Minor repairs to Zig Zags track – ongoing...</p>
3	4010	HH3	274357	27.44	Unfavourable - Inadequate	<p>Reduction in deer numbers</p> <p>Reduction in grazing pressure</p>
4		HD1	6798	0.68		Control bracken
5		GS4/HH3	2461	0.25		
6		HD1	19268	1.93		Control bracken
7		HH3/PF2	59515	5.95		Reduction of browsing pressure from deer and sheep will aid this area
8		HH3	2139	0.21		Reduction of browsing pressure from deer and sheep will aid this area

9	4030	HH1/HD1/ER1	58978	5.90	Unfavourable - Inadequate	Control bracken Track repair works
10	4030	HH1/HD1/ER1	25951	2.60	Unfavourable - Inadequate	Control bracken
11		GS4/HH3	32833	3.28		
12	4030	HH1	196186	19.62	Favourable	Track repair works
13	4060	HH4	36452	3.65	Unfavourable - Inadequate	Track repair works Peatland Restoration Works Destock/reduce grazing pressure to allow vegetation to recover
14		PB5	59836	5.98	Unfavourable - Bad	Peatland Restoration Works Destock/reduce grazing pressure to allow vegetation to recover
15		PB5	19399	1.94	Unfavourable - Inadequate	Peatland Restoration Works Destock/reduce grazing pressure to allow vegetation to recover
16	4060	HH4/GS3	46484	4.65	Unfavourable - Inadequate	Track repair works Peatland Restoration Works Destock/reduce grazing pressure to allow vegetation to recover
17	4030	HH1	163751	16.38	Favourable	Track repair works Destock/reduce grazing pressure to allow vegetation to continue to recover
18	4010	HH3/PF2	26464	2.65	Favourable	
19	4010	HH3	48288	4.83	Favourable	
20	4030	HH1/ER1/GS3	489178	48.92	Unfavourable - Inadequate	Reduction of browsing pressure from deer and sheep will aid this

						area
21	7130	PB2	77712	7.77	Unfavourable - Inadequate	Track repair works
22		PB5	12504	1.25	Unfavourable - Bad	Track repair works Peatland Restoration Works Destock/reduce grazing pressure to allow vegetation to recover
23	4060	HH4	35534	3.55	Unfavourable - Inadequate	Track repair works Peatland Restoration Works Destock/reduce grazing pressure to allow vegetation to recover
24	4030	HH1/ER1	79394	7.94	Favourable	
25		GS3/HH1	260561	26.06	Unfavourable - Inadequate	Destock/reduce grazing pressure to allow heath vegetation to recover
26	4030	HH1/GS3	269969	27.00	Unfavourable - Inadequate	Destock/reduce grazing pressure to allow heath vegetation to recover
27	4030/6230	GS3/HH1	327416	32.74	Unfavourable - Inadequate	Destock/reduce grazing pressure to allow heath vegetation to recover Quad Damage
28	7130	PB2	30909	3.09	Unfavourable - Inadequate	Quad Damage
29	4030	HH1/ER1	19914	1.99	Favourable	
30	7130	PB2	137842	13.78	Unfavourable - Inadequate	Quad Damage
31	4030/6230	GS3/HH1	111777	11.18	Unfavourable - Inadequate	Destock/reduce grazing pressure to allow vegetation to recover
32		PB5	38178	3.82	Unfavourable - Bad	Track repair works Peatland Restoration Works

						Destock/reduce grazing pressure to allow vegetation to recover
33	7130	PB2	57105	5.71	Unfavourable - Inadequate	Track repair works Peatland Restoration Works Destock/reduce grazing pressure to allow vegetation to recover
34	4030	HH1/HD1/ER1	12580	1.26	Unfavourable - Inadequate	Control bracken
35		ER1	4906	0.49		
36		PF2	5549	0.55		
37		ER1	3128	0.31		
38		ER1	3352	0.34		
39		PF2	7525	0.75	Unfavourable - Inadequate	
40	4010	HH3/PF2	7766	0.78	Favourable	
41	4030	GS3/HH1/ER1	9264	0.93	Unfavourable - Inadequate	