

**Kilmashogue Upland Farm**

**2020 Ecological Survey**



**Final Report**

**20<sup>th</sup> April 2021**

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## Kilmashogue Upland Farm

### 2020 Ecological Survey

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## Kilmashogue Upland Farm

### 2020 Ecological Survey

#### 1. Introduction

A baseline habitat condition and ecological survey and habitat management plan was prepared for the Kilmashogue Upland Farm in 2019<sup>1</sup> and the measures within same underwent screening for Appropriate Assessment<sup>2</sup>.

The implementation of the management prescriptions in the plan began in 2019. The management prescriptions in the SUAS plan for the upland farm aim to retain **Favourable status** for the Annex I habitats present on the site, namely **4030 European Dry Heath** and **4010 Northern Atlantic Wet Heath**. For those habitats which are not Annex I habitats, namely acid grassland, areas of fens and flushes and cutover bog, the habitat condition is based on best expert judgement or in some cases from the perspective of the hill farmer.

Large herds of deer (red/Sika hybrids) graze the farm for which deer culling licences are regularly granted from National Parks and Wildlife Service. The continuation of this practice is necessary to prevent over grazing.

The farm is within the known range of Merlin (*Falco columbarius*), while Kestrel (*Falco tinnunculus*) was recorded during the site surveys. Red Grouse (*Lagopus lagopus*) occurs in the general area and has been recorded from these lands in the past. Some very localised burning has previously been conducted to provide suitable habitat for this species, large scale regular burning is not recommended for this site.

The management prescriptions in the SUAS plan for the Kilmashogue Upland Farm also need to ensure that **Favourable status** is retained for the Annex I bird species which would utilise these lands for foraging purposes, namely:

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

The extent of habitats present within the Kilmashogue Upland Farm and their affinities to either Fossitt (Level 3) or Annex I habitats 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 Kilmashogue Upland Farm as detailed in **Table 1** and mapped on **Figure 4** (See **Appendix 1**).

#### 2. SUAS Vegetation Management Measures

The proposed management measures for the Kilmashogue Upland Farm in 2019 under SUAS were as follows:

##### Year 1 (2020)

1. Continue to burn individual or small clumps of bushes in area 2

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<sup>1</sup> Wilson, F. (2019). Ecological Baseline Survey prepared for Kilmashogue Upland Farm, Kilmashogue, Co. Dublin as part of the Commonage Management Plan for SUAS. 20<sup>th</sup> August 2019. Unpublished report for SUAS EIP.

<sup>2</sup> Wilson, F. (2019). Report for Screening for Appropriate Assessment for a Commonage Management Plan at Kilmashogue Upland Farm, Kilmashogue, Co. Dublin in accordance with the requirements of Article 6(3) of the EU Habitats Directive. 15<sup>th</sup> November 2019. Unpublished report for SUAS EIP.

2. Cut areas of tall heather in areas 2, 3 & 4.
  - a. Cut a fire control line in area 2 to prepare for controlled burning in year 2
  - b. Cut small patches of tall heather in area 1
  - c. Cut fire control lines in area 4 if possible. This may be done mechanically or by hand with brush cutters.
3. Encourage more grazing by sheep in the winter months on areas 2 & 4 using sheep feed buckets.

#### **Year 2 (2021)**

1. Burn small patches or individual bushes in area 2. Consider cutting/flailing the bushes along the east boundary where gorse is taking over and spreading out. This will make fires further in easier to control.
2. Carry out controlled burning in areas 2 & 4 if the fire control lines are in place.
3. Encourage more grazing by sheep in the winter months on areas 2 & 4 using sheep feed buckets.

#### **Year 3 (2022)**

1. Burn small patches or individual bushes in area 2. Consider cutting/flailing the bushes along the east boundary where gorse is taking over and spreading out. This will make fires further in easier to control.
2. Encourage more grazing by sheep in the winter months on areas 2 & 4 using sheep feed buckets.

#### **Shepherding**

**Average time per shepherding:** 2 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:**

- Sheep to be moved off recently burned areas 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 tick diseases.
- Count numbers of deer grazing the farm and areas they are grazing.

#### **Other works to be carried out for the upland farm**

Use feed buckets to encourage more sheep grazing the upland farm in the Jan/Feb and the April/May period.

Use the feed buckets to move grazing pressure to overgrown areas in Jan/Feb time.

Consider winter grazing with cattle which could help to break up areas of tall leggy heather.

#### **Details of sheep stocking rates proposed**

Sheep grazing activity shall be monitored accurately for the first year and grazing pressure modified after that depending on habitat condition.

#### **Ecological Assessment**

The Kilmashogue Upland Farm was surveyed in November 2020 by Faith Wilson to examine and review the implementation of the proposed measures conducted in 2020 and make any recommendations regarding same. The observations and recommendations from this visit are set out below.

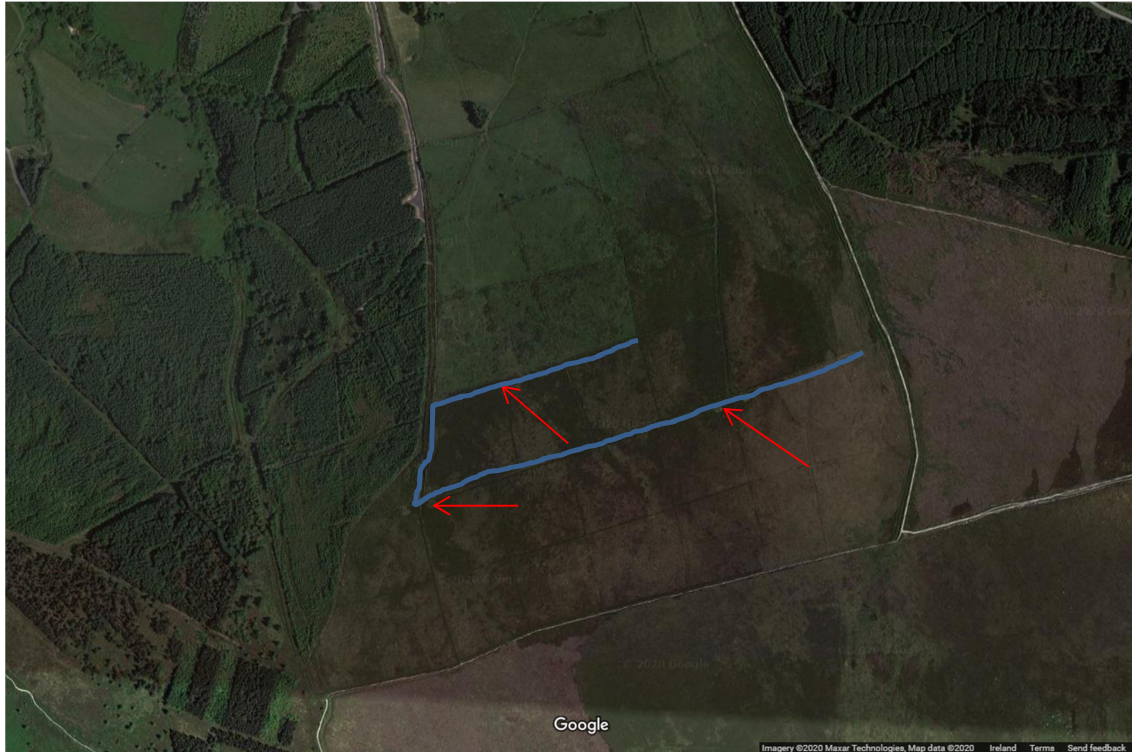


### 3. 2020 Walkover Survey

The following observations, comments on same and recommendations on the works completed in 2020 are presented.

#### 3.1 Firebreaks/Manual Cutting

A firebreak/flailed area along the western and northern edge of the upland farm and along the old track through the centre of the site was manually created on 2<sup>nd</sup> November 2020 by a crew of contractors using brush cutters. This work tackled the areas of dense leggy heather and reduced fire risk to the farm.



**Figure 1. The location of new firebreaks crated at Kilmashogue along the western and northern boundaries of the site and across the central track over the hill as indicated by the red arrows and blue line.**

The cutting has left significant amounts of cut material in this area and it was suggested that perhaps if sheep were put up onto the hill they might browse some of this to reduce it or failing that it should be manually removed as it may form a significant shading impact reducing natural regeneration<sup>3</sup>. In some areas the underlying bryophyte layer has been exposed and most importantly is undamaged/undisturbed by this activity, which would not be the case if it had been burnt (even in a controlled burn).

On the eastern boundary of the site access areas of gorse and longer vegetation adjoining the Wicklow Way walking track were also cut on the 2<sup>nd</sup> November 2020 by a crew of contractors using brush cutters – again to reduce fire risk. My recommendation is that it is no longer appropriate to consider using burning as a management technique on the upper slopes of the hill as these works have successfully opened up the hill to allow grazing animals into these areas which was the objective from a farming point of view. It is important for biodiversity and breeding birds that some areas of long heather and mature gorse remain on the hill.

<sup>3</sup> See recommendations in Section 6.2.1 in the baseline survey report.



**Plate 1. Manual cutting of ling heather along the northern boundary of the hill.**



**Plate 2. A fire break has now been created between the hill grazing and the forestry plantation to the west.**





**Plate 3.** The central access track has also been manually cut in 2020 to open up the hill for grazing.



**Plate 4.** Manual cutting of the central track – note uniform outcome.





**Plate 5.** A rich *Sphagnum* layer has been retained – this is easily lost by burning.



**Plate 6.** Localised cutting of western gorse in Area 2.

There was also some localised manual cutting of western gorse clumps on drier ground on old peat hags within the cutover blanket bog in Area 2.



While the manual cutting of long vegetation has most certainly effectively created a firebreak on the edges of the hill from a structural perspective for fauna and biodiversity it would be important to try and see if we could introduce diversity of structure to the sward as an outcome of the process whereby some long leggy areas, low areas and intermediate heights are created in the heather.

This would artificially restore the objective of achieving all growth phases of *Calluna vulgaris* in areas of dry heath outside the boundaries of sensitive areas with  $\geq 10\%$  of cover in mature phase.



**Plate 7. Areas of regenerated cutover mountain blanket bog with intact *Sphagnum* moss layer and crowberry.**

### **3.2 Controlled Burning**

As in previous years there has been ongoing localised controlled burning of clumps of gorse in Area 2 on the hill. An examination of these showed regeneration of large volumes of gorse seedlings and also purple moor grass in the burnt patches.

The outcome from this type of activity will be monitored as it is questionable as to whether it is delivering additional grazing of any benefit or just encouraging the further spread of gorse in higher densities.

The manual cutting back of the vegetation along the central trackway has exposed the stone walls and peat banks associated with the land improvement attempts of Calbeck on the hill.





**Plate 8. Stone faced banks on Calbeck's Hill.**



**Plate 9. The ruins of three habitations are present on the hill.**



### 3.3 Faunal Observations

Two pairs of red grouse were flushed during the walkover survey and fresh grouse droppings were recorded.

Four raven were recorded.

A snipe was flushed from the wet flushed areas.

A kestrel was hunting over the hill.



Plate 10. Fresh grouse droppings.



Plate 11. City vistas from the hill.





**Plate 12. Kestrel hunting over the hill.**



**Plate 13. Functioning mountain blanket bog which has regenerated well in former cutover areas.**

### 3.4 Management for 2021

A review of the works which were proposed for 2020 in the plan, coupled with the outcomes from the 2020 walkover was conducted. This has informed the proposed works for 2021.

#### 2021

1. Cut small patches or individual gorse bushes in areas 2 & 3 and stop them.
2. Cut small patches (approx. 10-15m by 10-15m) in tall heather in Area 4. Aim to cut at varying heights.
3. Encourage more grazing by sheep in the winter months on Areas 2 & 4 using sheep feed buckets.
4. Plant 100 native trees – along the western boundary with Coillte and on the northern earthen banks at the foot of the SUAS area as well as elsewhere on the farm.
5. No works in Area 1 apart from monitoring of grazing.
6. Explore the option of cattle grazing on the hill to help diversify the height of the sward.

#### 2022

1. Encourage more grazing by sheep in the winter months on areas 2 & 4 using sheep feed buckets.
2. Explore the option of cattle grazing on the hill
3. Further cutting of gorse in areas 2 & 3 can be carried out using brushcutters.
4. Option of further tree planting should be explored.

#### **4. Appendix 1. Maps & Management Recommendations**



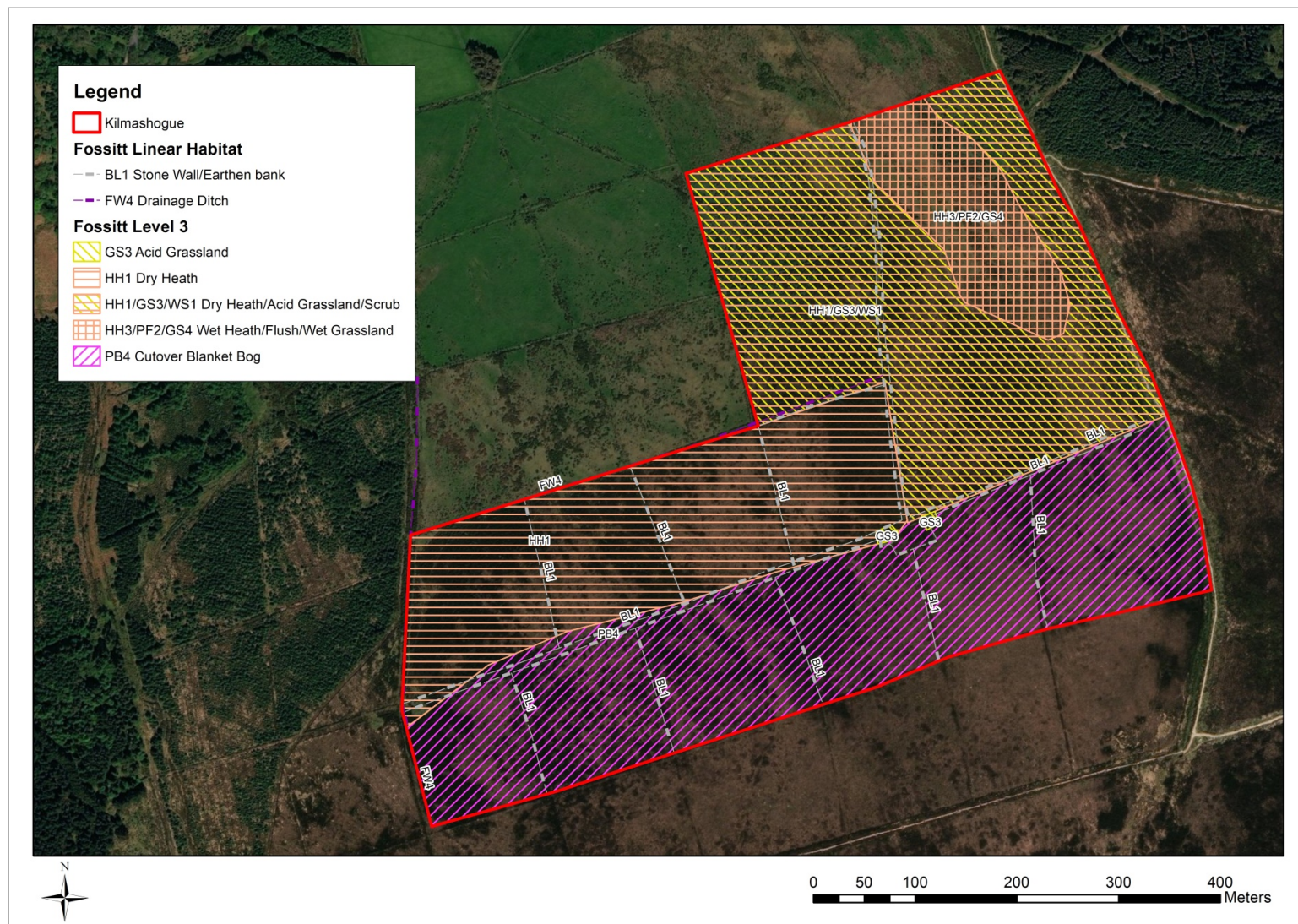


Figure 1. Habitats mapped to Level Three (Fossitt, 2000) within Kilmashogue Upland Farm.



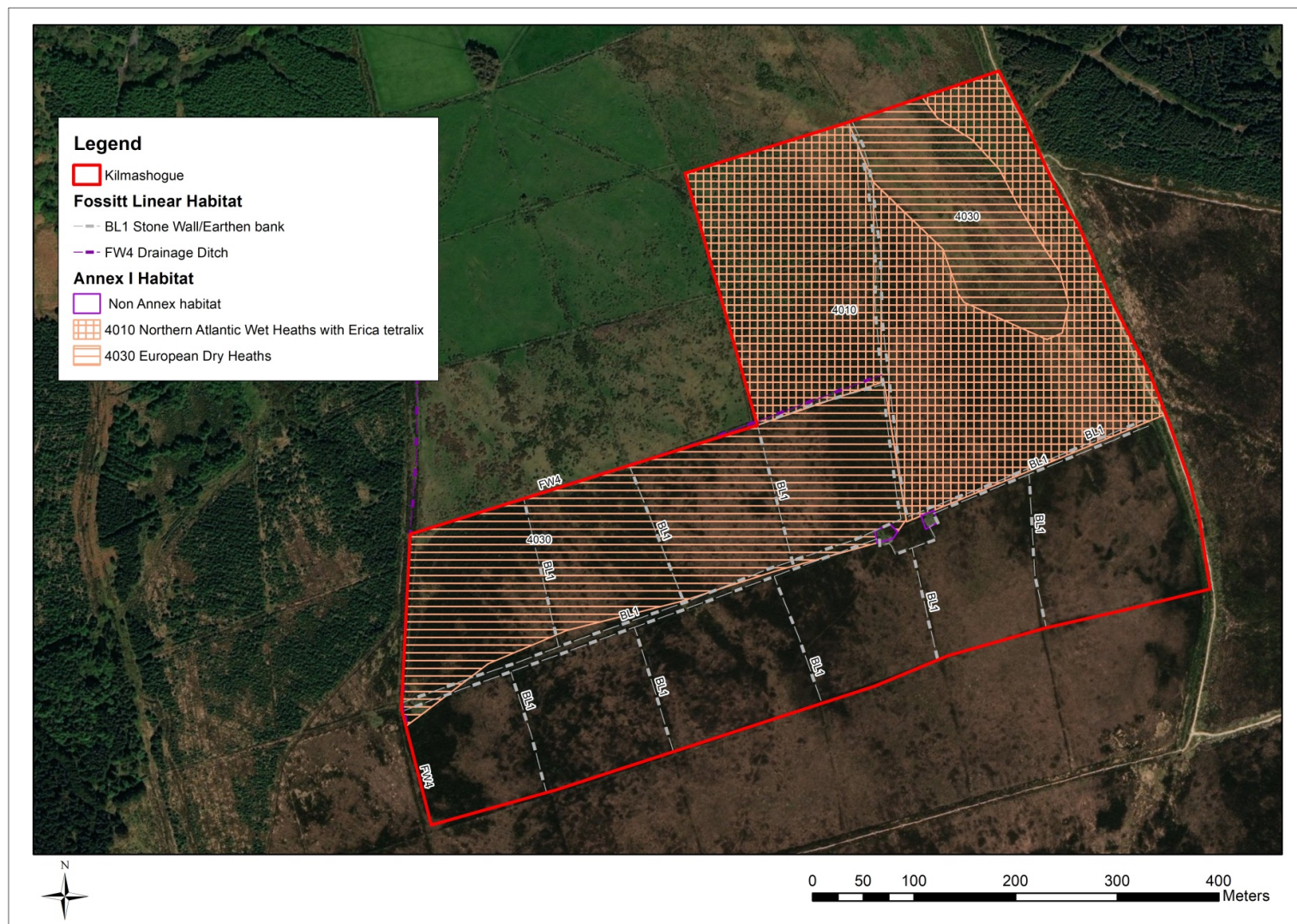


Figure 2. Habitats mapped according to their correspondence with Annex I habitats within Kilmashogue Upland Farm.





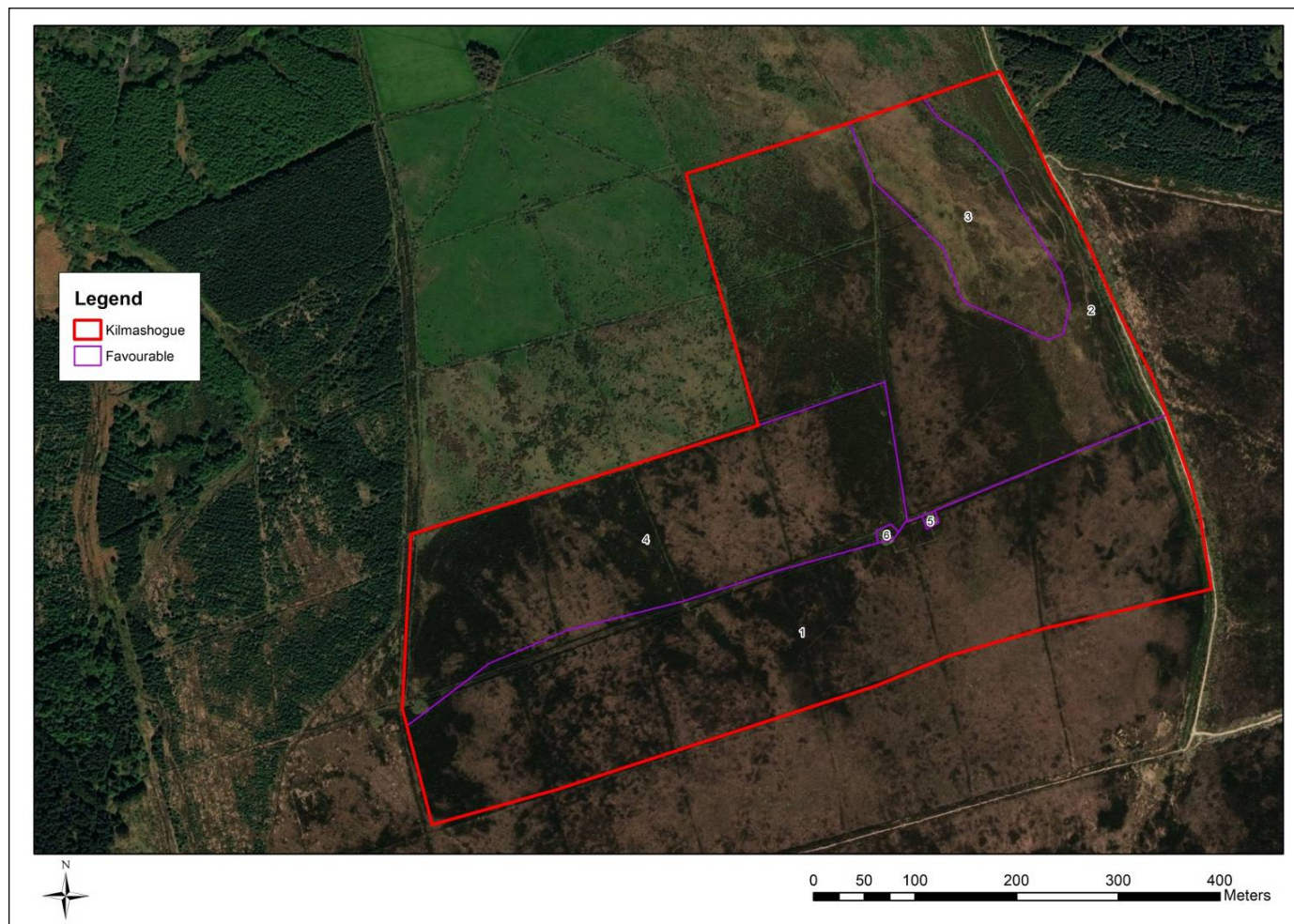


Figure 4. Management measures for Kilmashogue Upland Farm.



**Table 1. Habitats present on Kilmashogue Upland Farm and Management Recommendations.**

<b>Id</b>	<b>Annex Code</b>	<b>Fossitt Code</b>	<b>Habitat</b>	<b>Area (m<sup>2</sup>)</b>	<b>Conservation Status</b>	<b>Management Prescription</b>
1		PB4	Cutover Bog	114801	Favourable	No uncontrolled burning Control deer No other specific measures required
2	4030	HH1/GS3/WS1	Dry Heath/ Acid Grassland/Scrub	98607	Favourable	No uncontrolled burning Cut and remove encroaching gorse Winter grazing with cattle could help to break up areas of tall leggy heather
3	4010	HH3/PF2/GS4	Wet Heath/Flush/Wet Grassland	23316	Favourable	No uncontrolled burning Cut and remove encroaching gorse in areas of wet heath/flush Winter grazing with cattle could help to break up areas of tall leggy heather
4	4030	HH1	Dry Heath	73569	Favourable	No uncontrolled burning Winter grazing with cattle could help to break up areas of tall leggy heather Could trial some manual cutting of leggy heather if required
5		GS3	Acid Grassland	177		No measures required
6		GS3	Acid Grassland	257		No measures required

