

# The CAFRE Journey to better biodiversity on the Hill Farm



Nicola Warden

Senior Biodiversity Technologist, CAFRE

Teagasc National Hill Sheep Conference,  
15<sup>th</sup> February 2024







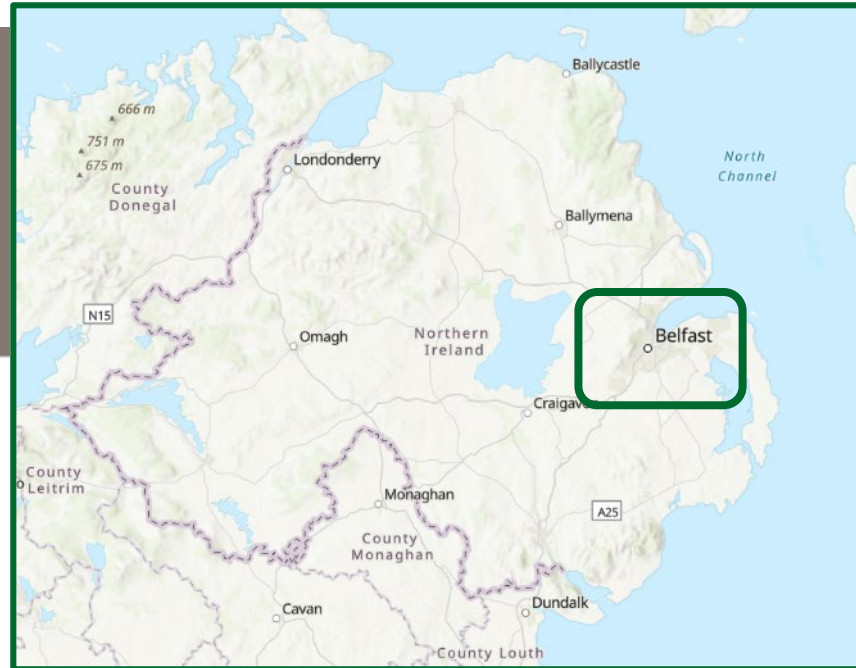
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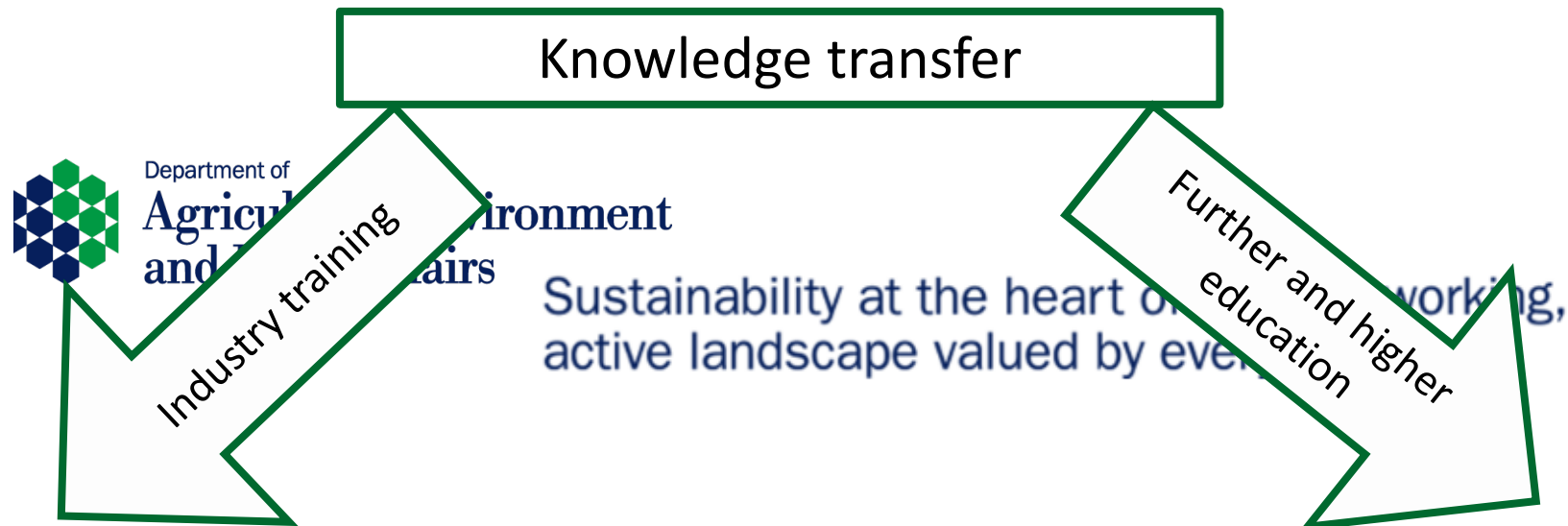


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# CAFRE Technologist

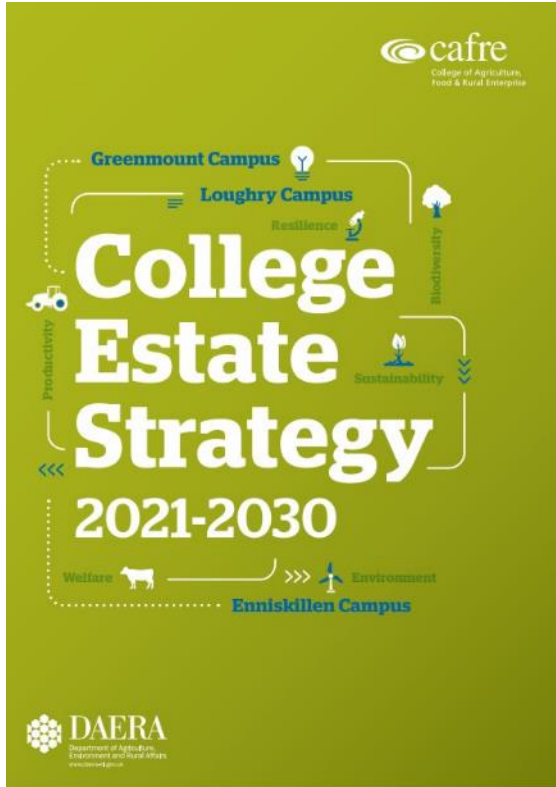




# College Estate Strategy

## CAFRE Estate Strategy Targets

2021 - 2030



**1** CAFRE to be 50% Carbon Neutral by 2030

**2** Eliminate the use of peat in horticulture by 2025

**3** CAFRE air quality to not impact on local habitats and health by 2030

**4** Reduce anti microbial usage by 95% by 2030

**5** CAFRE water to be of “Good” quality status by 2030

**6** CAFRE productive land to be in “Good” soil health status by 2030

**7** Eliminate CAFRE land fill waste by 2025

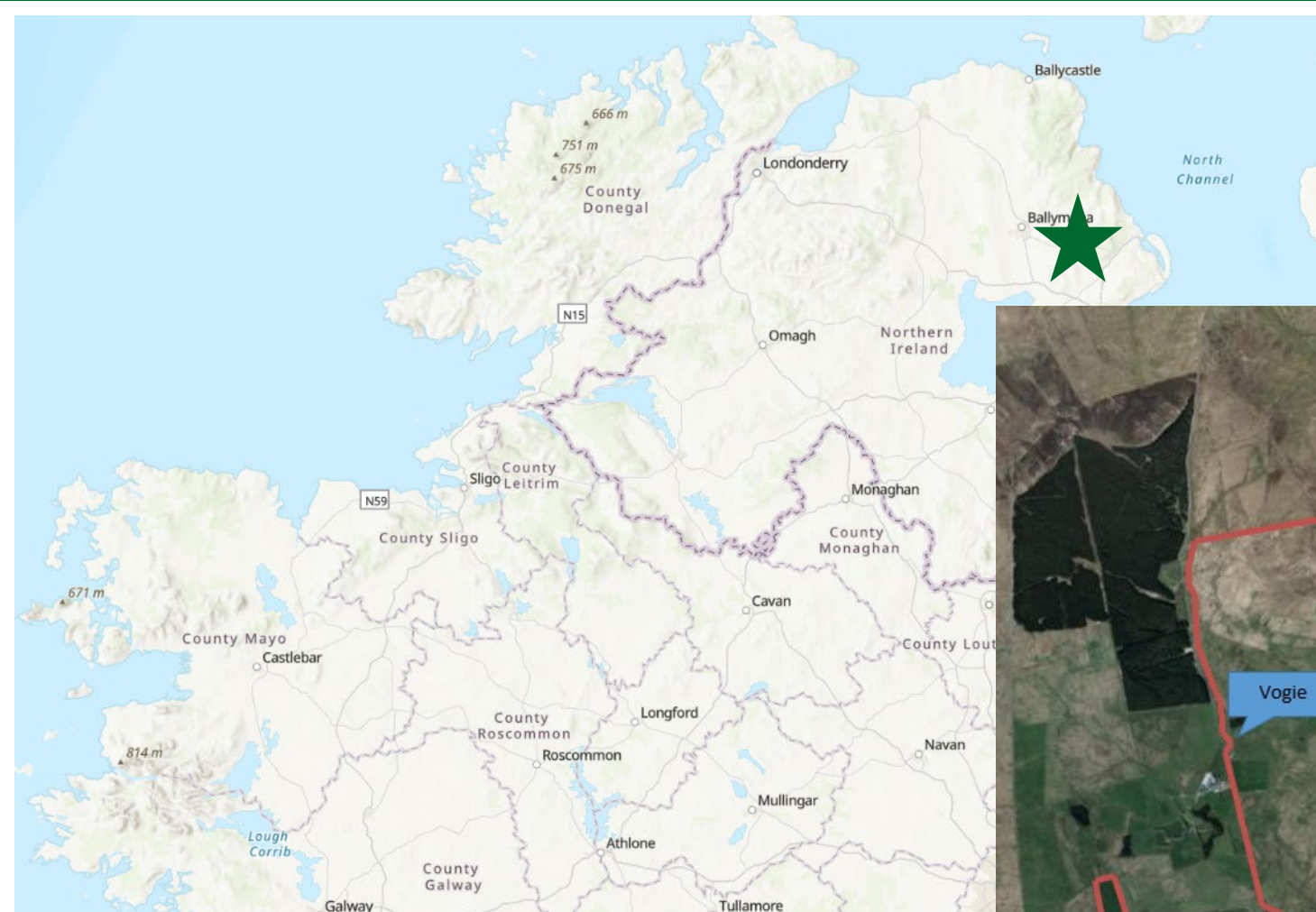
**8** CAFRE habitats to be in favourable condition by 2030



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# Hill Farm Centre





# Hill Farm Centre





<u>Herd Performance</u>	Herd three-year Average
Number of Cows to Bull	112
Scanning %	94
Calving Index	371
Cow Weight (kg)	638
Calf Birth Weight (kg)	35.2



<u>Flock performance</u>	Three-year average	
	Hill Flock	Upland flock
No. of ewes to the ram	349	758
Scanning %	1.48	1.81
Ewe weight (kg)	54.9	64.5
Lamb Wean weight (kg)	27.6	29.95
Kg lamb/Kg ewe mated.	0.63	0.86



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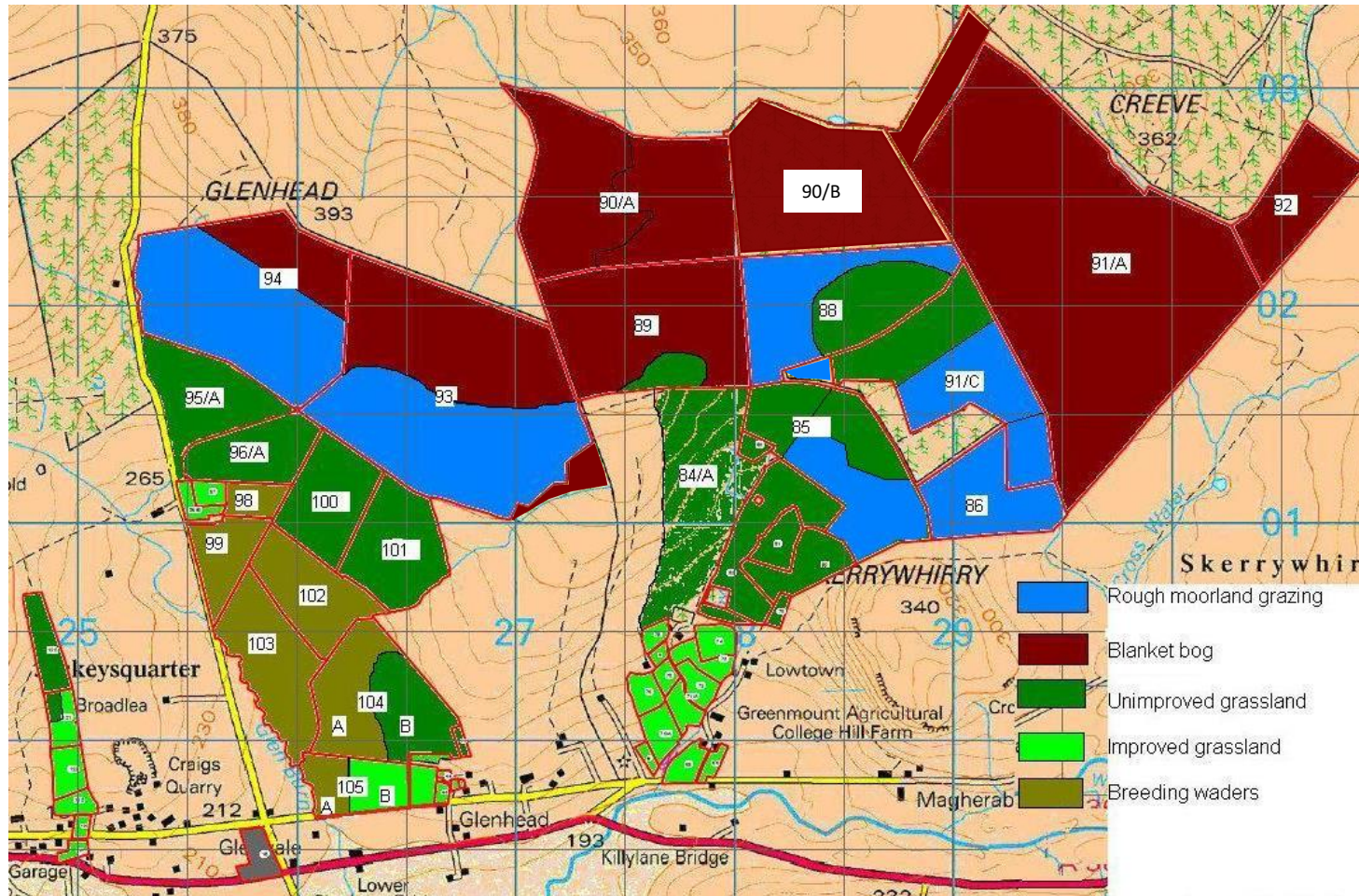


**Hill sheep have an important  
environmental role**





# Hill Farm Centre







**QUEEN'S  
UNIVERSITY  
BELFAST**

**afbi** AGRI-FOOD  
& BIOSCIENCES  
INSTITUTE

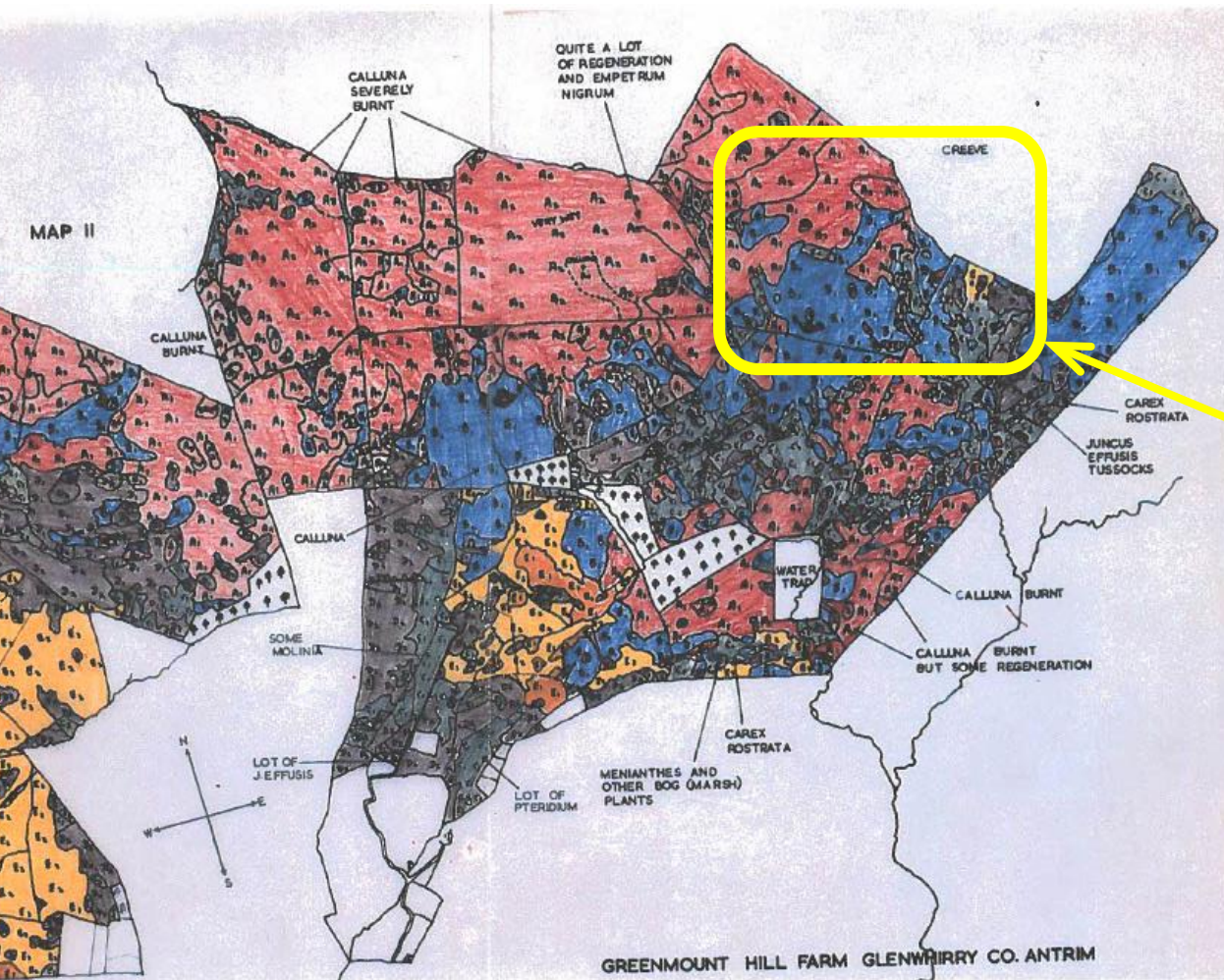


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# History of the Hill Farm





# Glenwherry Hill Regeneration Partnership

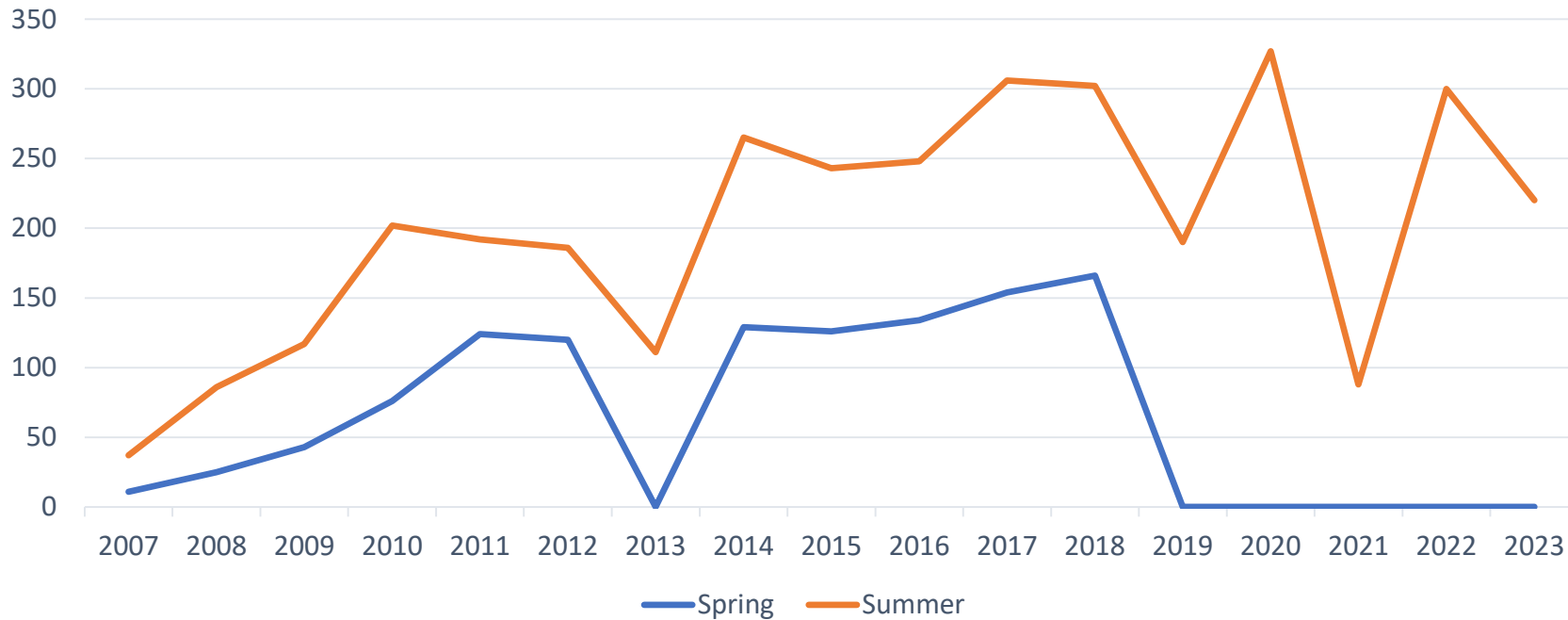




# Red Grouse



## IGCT SPRING/SUMMER GROUSE COUNT 2007-2023



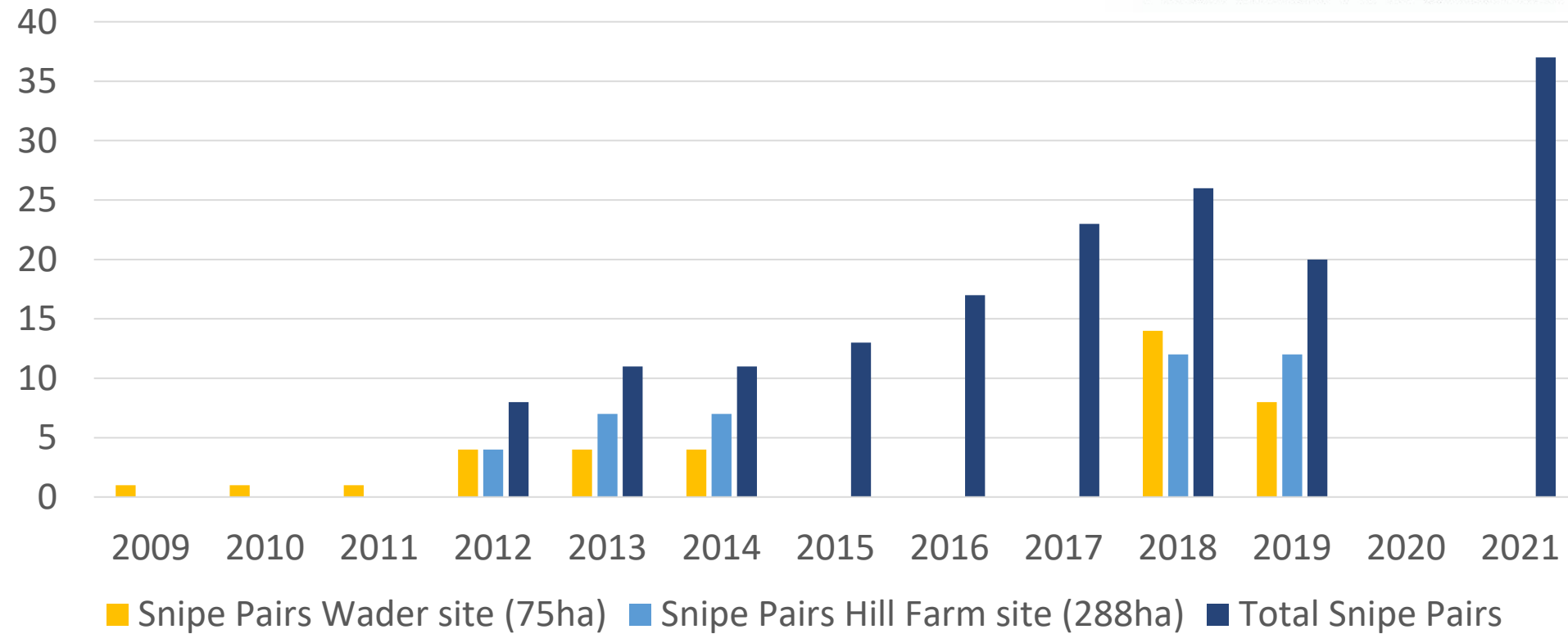


# Snipe



CAFRE Hill Snipe Pairs 2009-2021

Northern Ireland



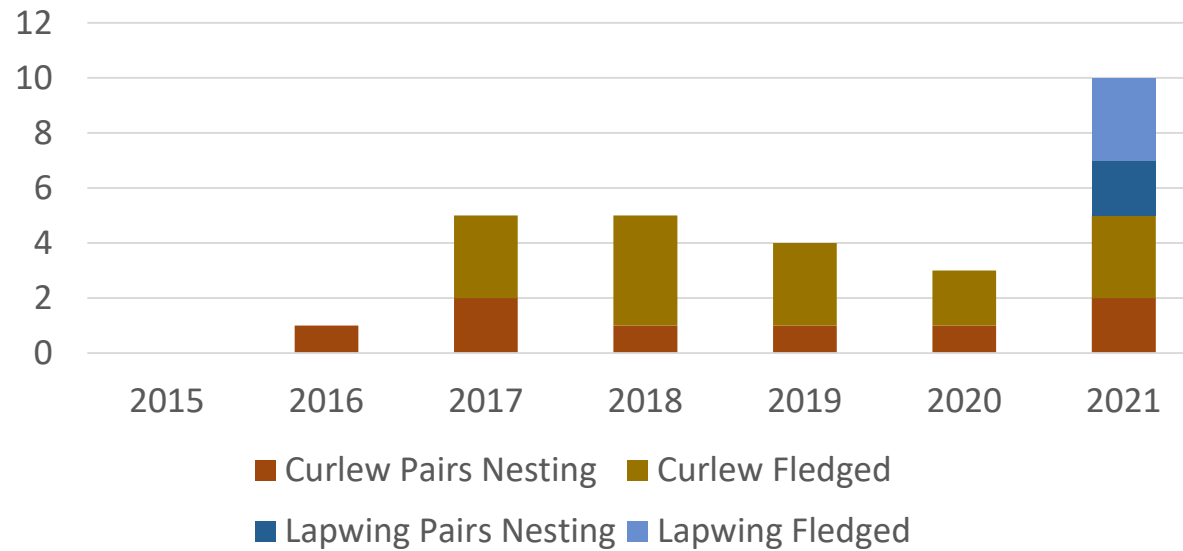
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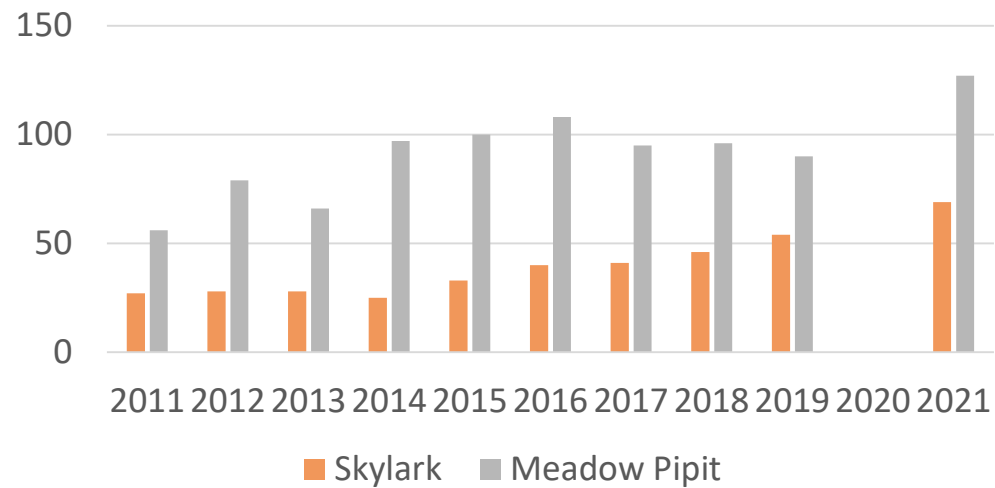




CAFRE Hill Curlew & Lapwing 2009-2021



CAFRE Hill Skylark & Meadow Pipit 2011-2021




 giving  
nature  
a home  
**Northern Ireland**

Curlew

Photo courtesy of Neal Warnock

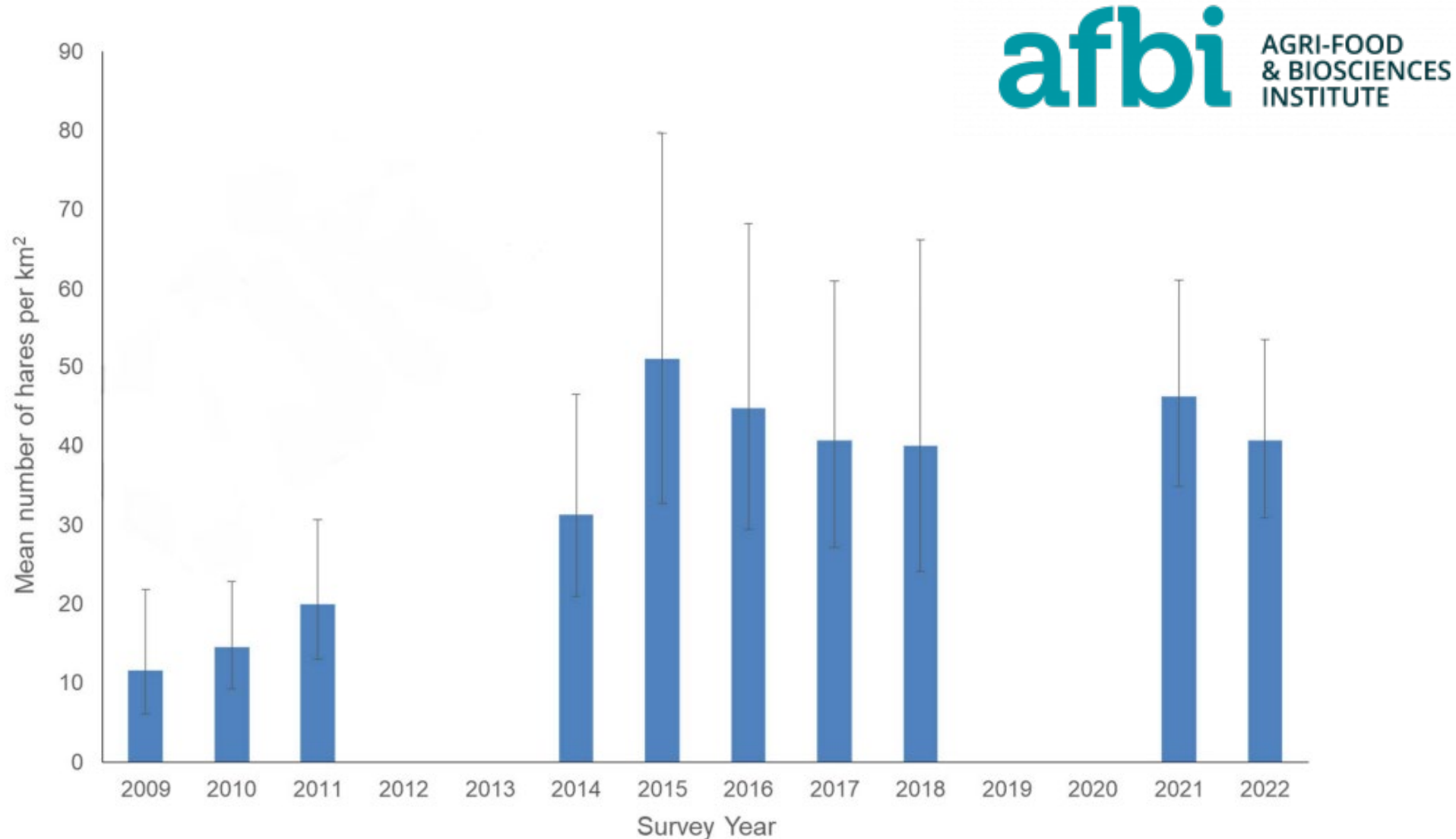


Lapwing





# Mean density estimates for Irish hares in Glenwherry study site



Photos. I. Montgomery



# Technologies to increase Biodiversity



1. Forest to Bog



2. Virtual Fencing



3. Water Resource





# Forest to Bog



Trees removed late 2019



1.

2.

3.



val

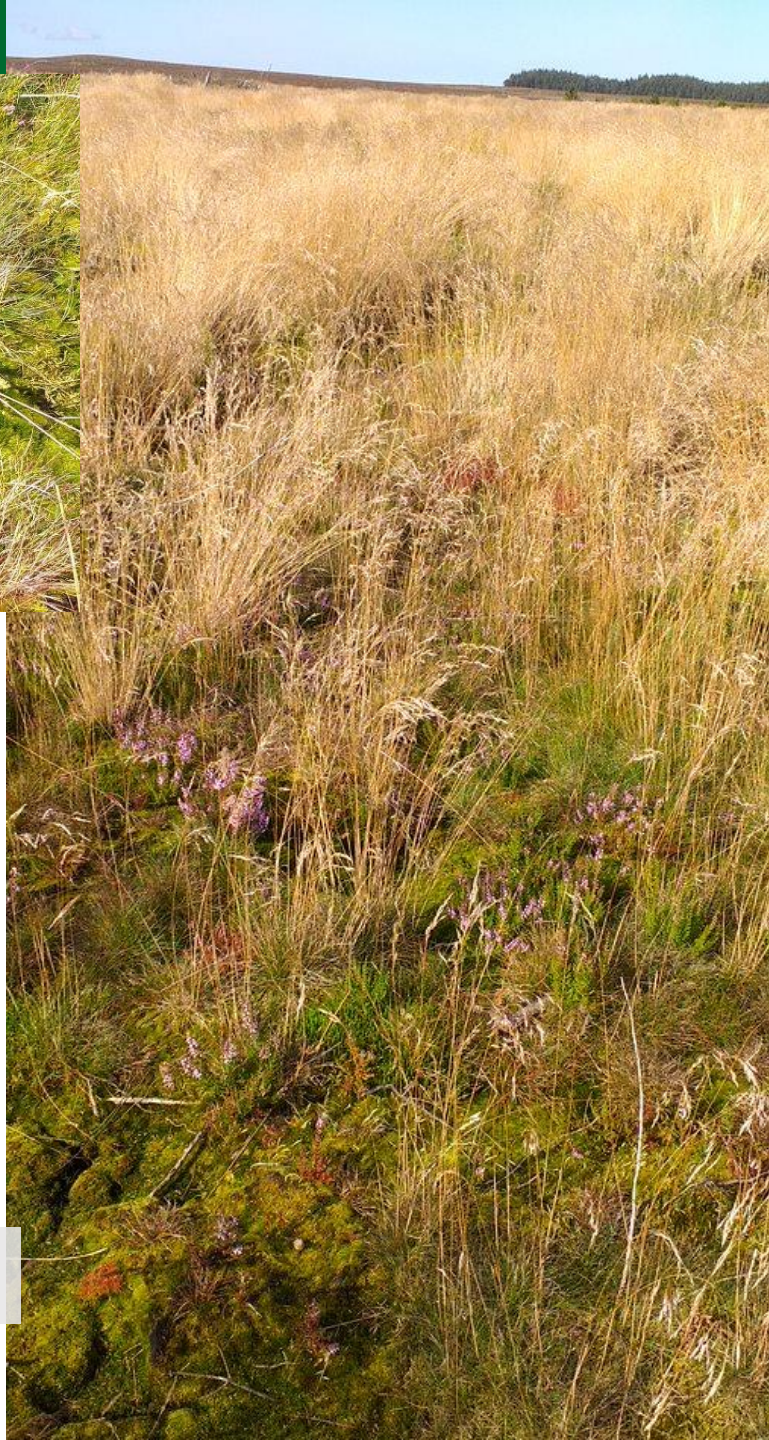
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December 2020

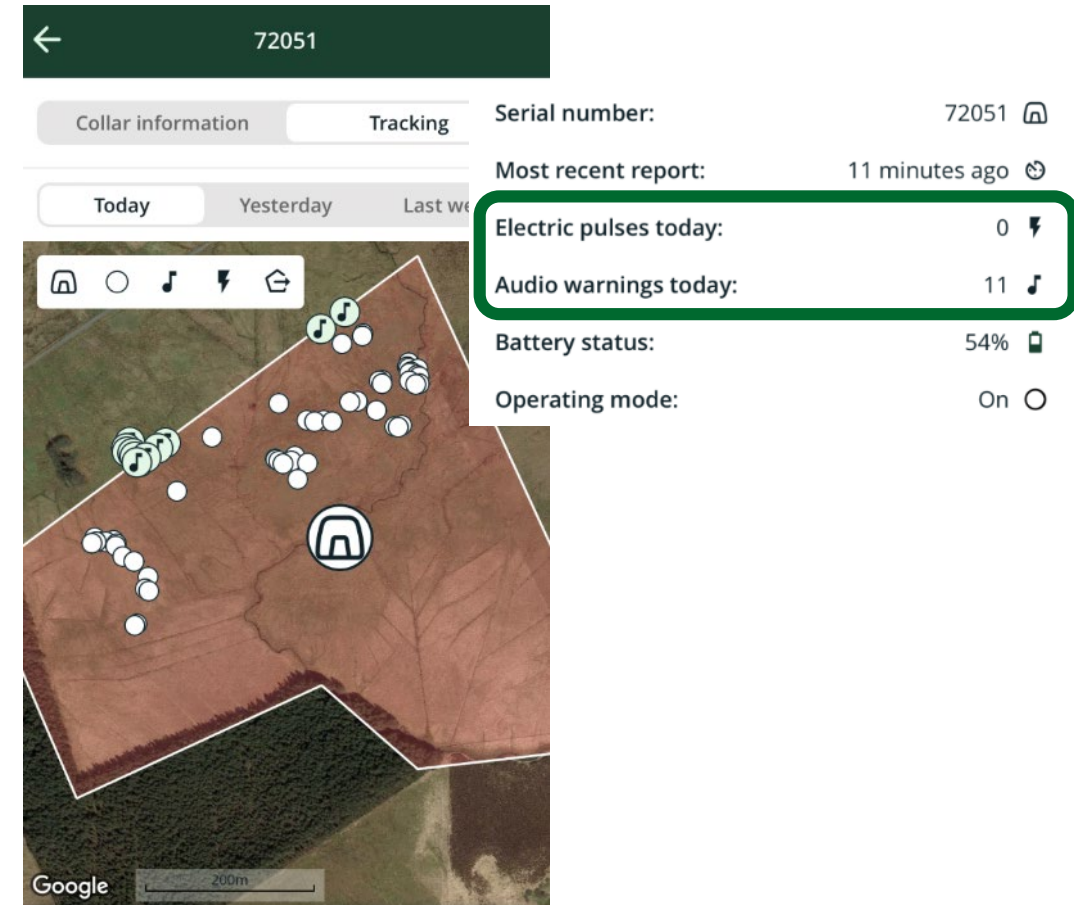
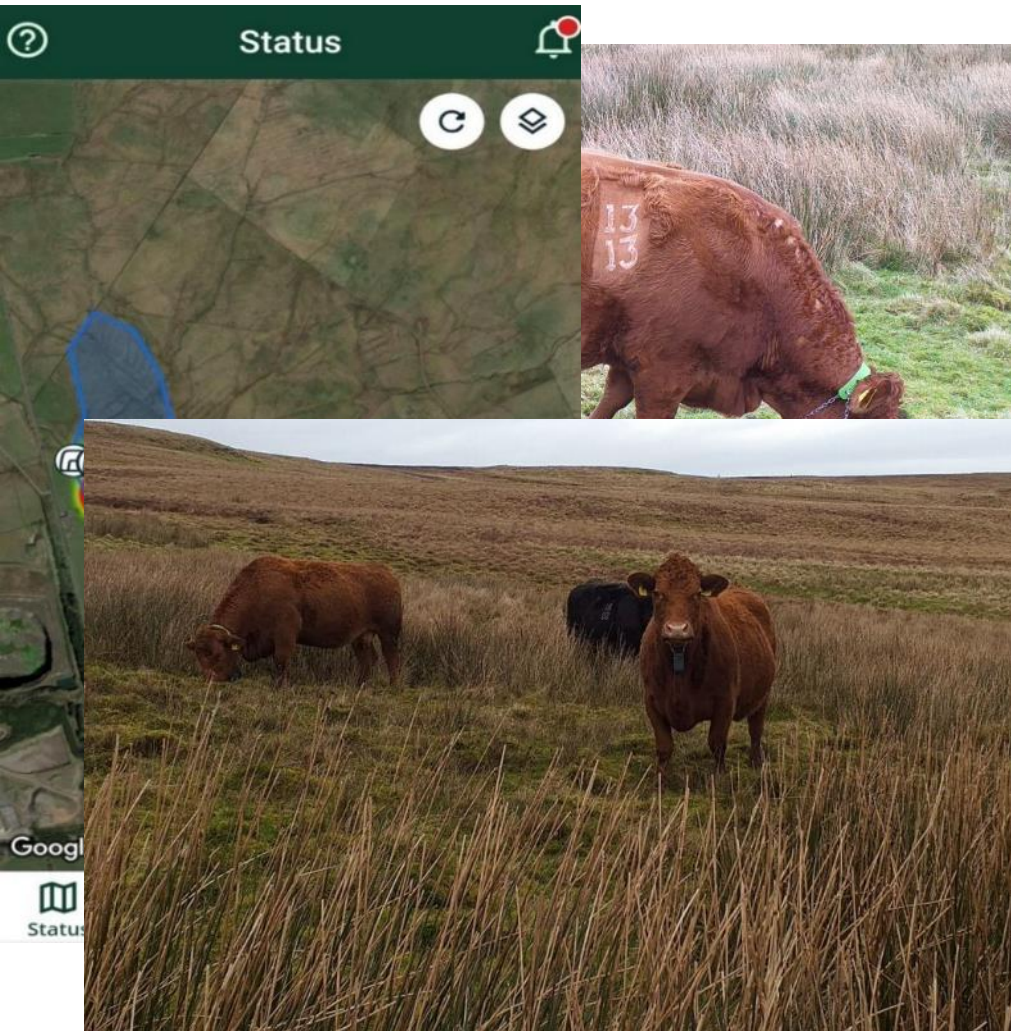


August 2022





# Virtual Fencing





# Virtual Fencing



## Benefits of winter grazing:

- Saving in winter silage
- Reducing  $\text{NH}^3$  emissions by 10 – 20% of herd
- Improving cow fitness for calving
- Improved habitat condition





# Water Resource



July 2021



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# Challenges

- Heavy resource
- Sensitivity of publicizing and promoting the work
- Compromise





Thank-you for listening!

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