

Biodiversity



Uplands  
Symposium  
2023



# The CAFRE Journey to better biodiversity on the Hill Farm

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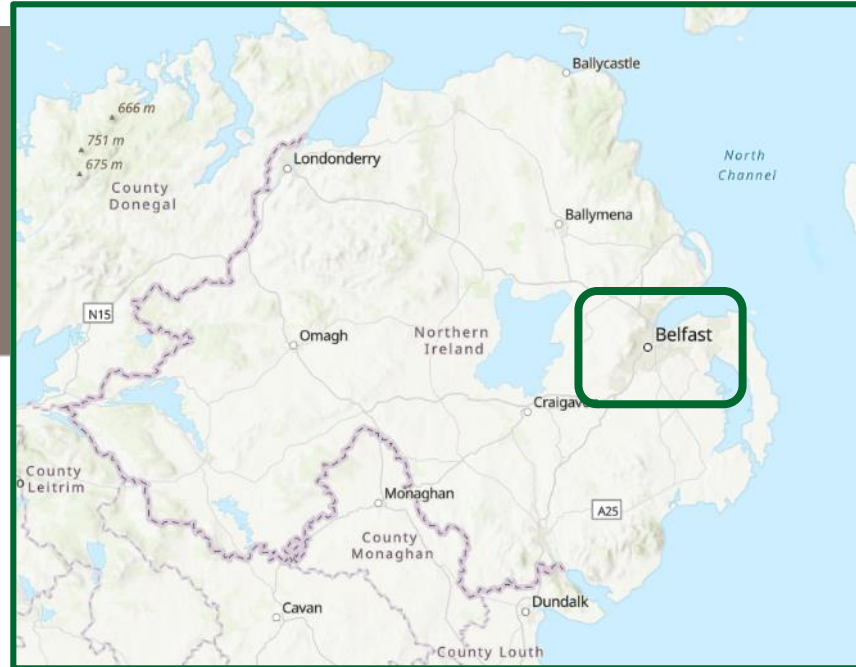
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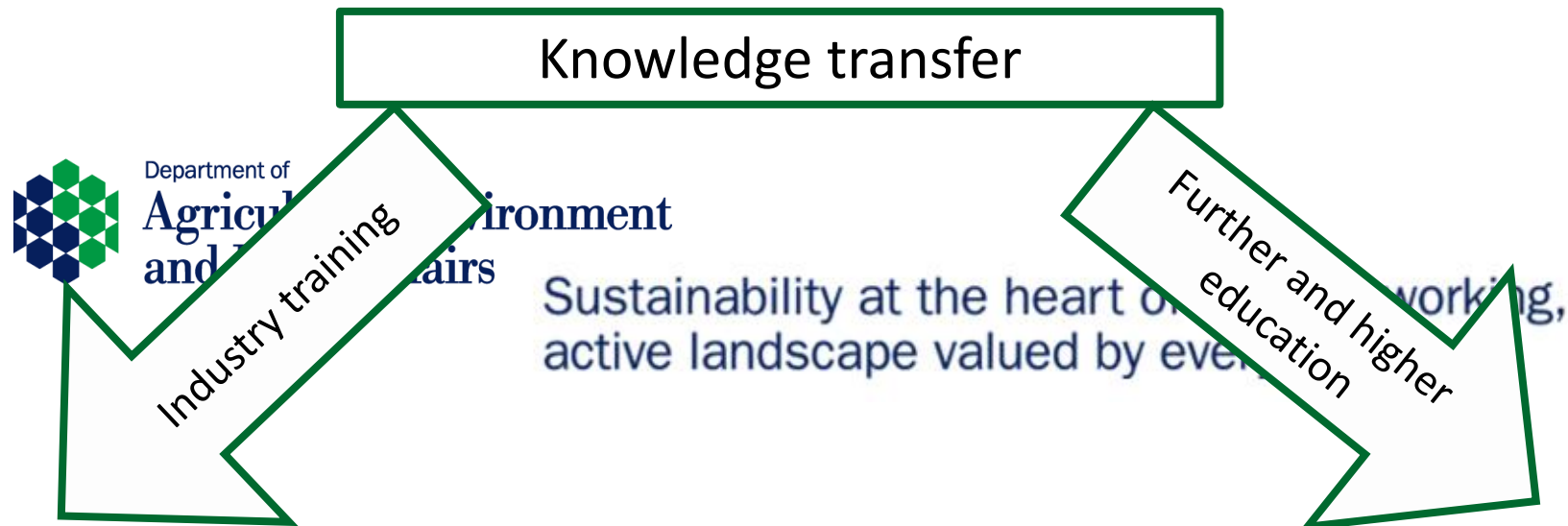


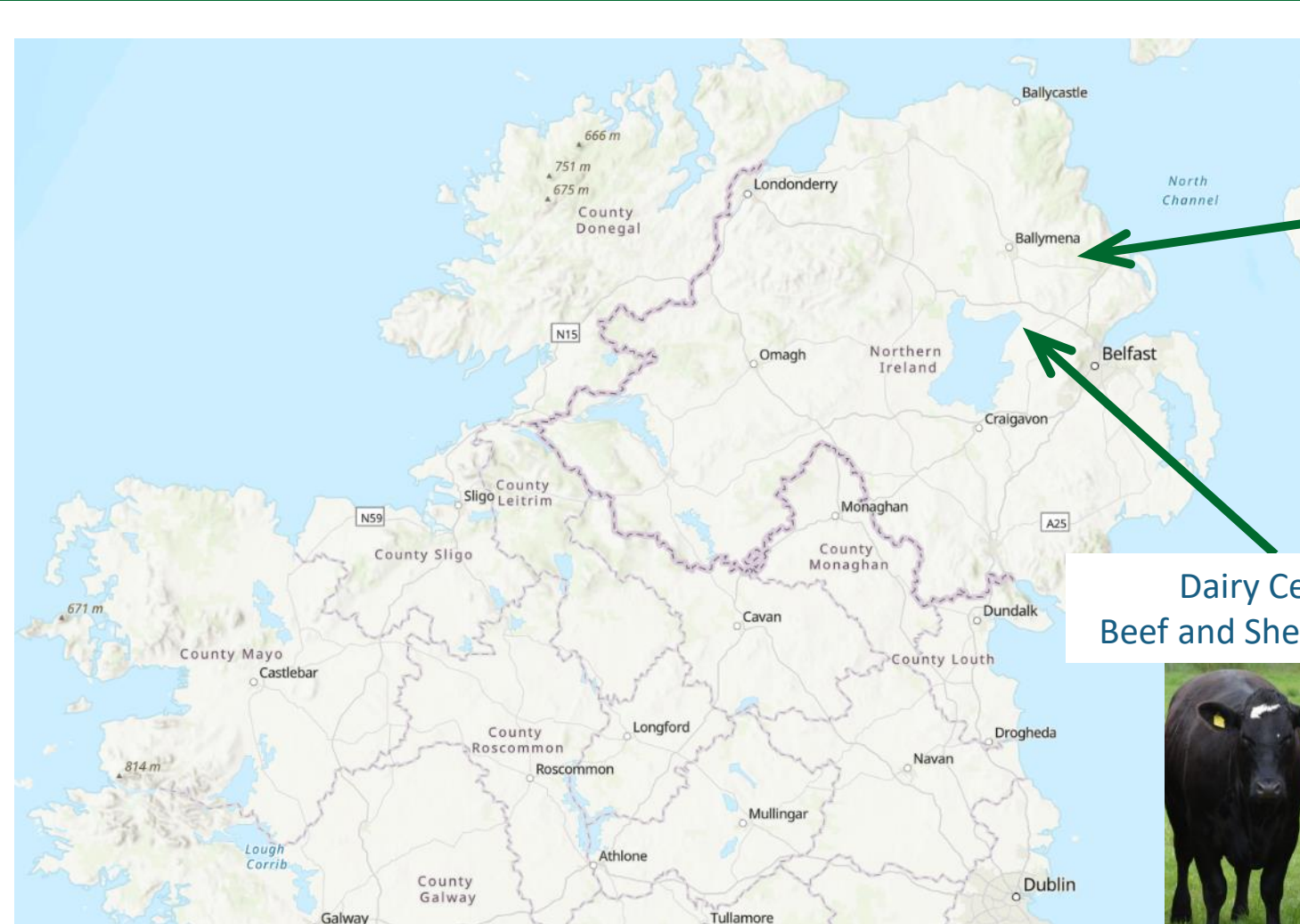
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Department of  
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Dairy Centre  
Beef and Sheep Centre









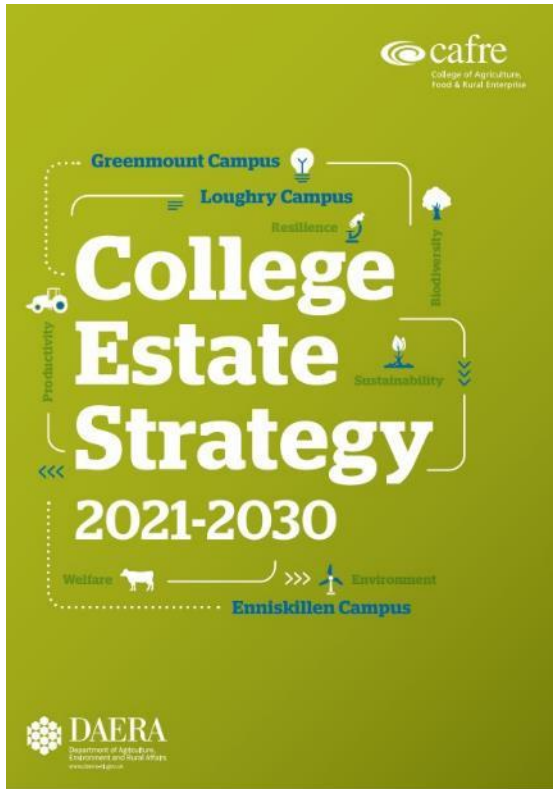
# CAFRE Technologist





## 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



# 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

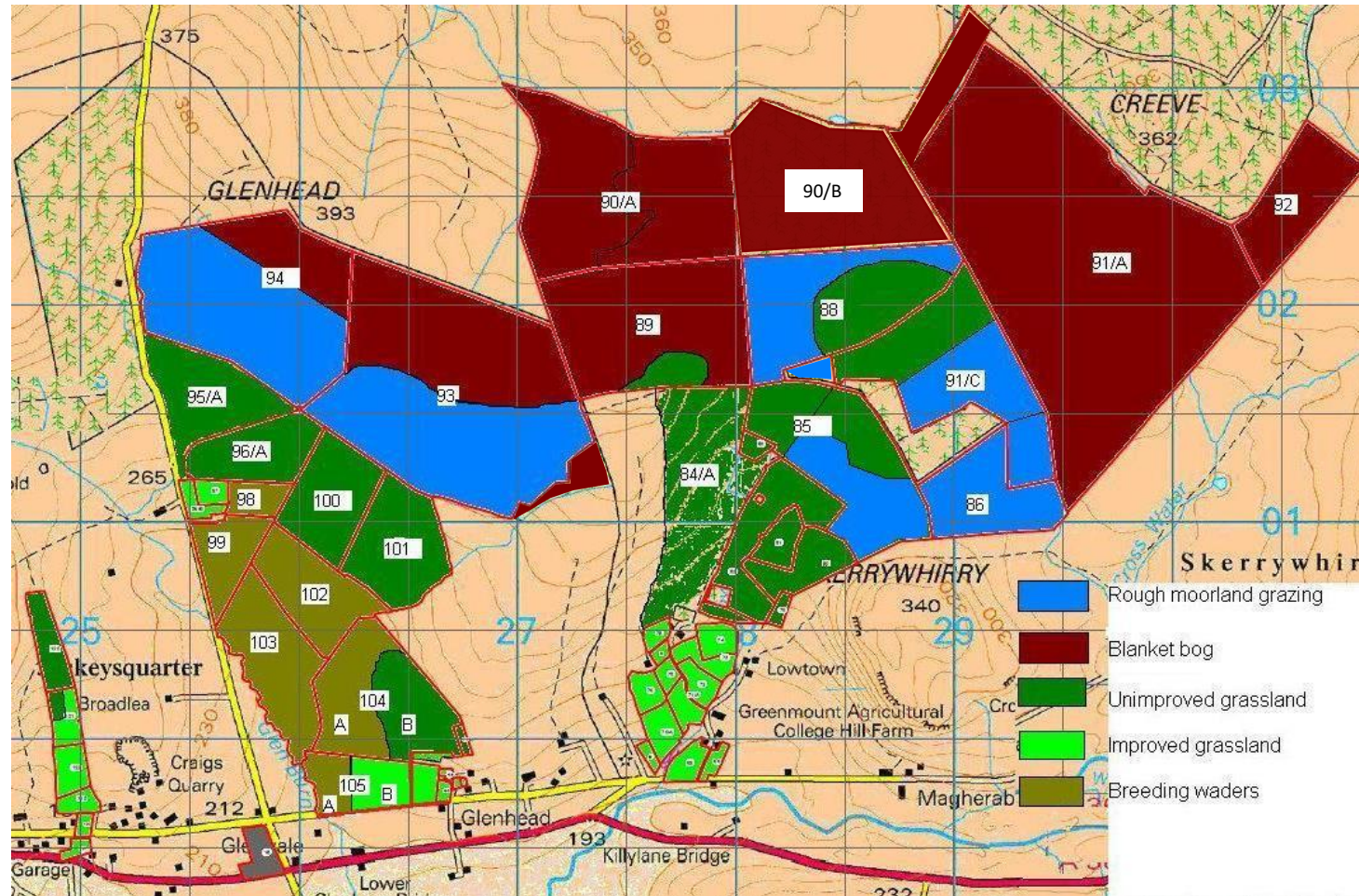


<u>Flock performance</u>	Three-year average	
	Hill Flock	Upland flock
No. of ewes to the ram	349	758
Scanning %	1.48	1.81
Ewe weight (kg)	54.9	64.5
Lamb Wean weight (kg)	27.6	29.95
Kg lamb/Kg ewe mated.	0.63	0.86





# Hill Farm Centre







**QUEEN'S  
UNIVERSITY  
BELFAST**

**afbi**

AGRI-FOOD  
& BIOSCIENCES  
INSTITUTE

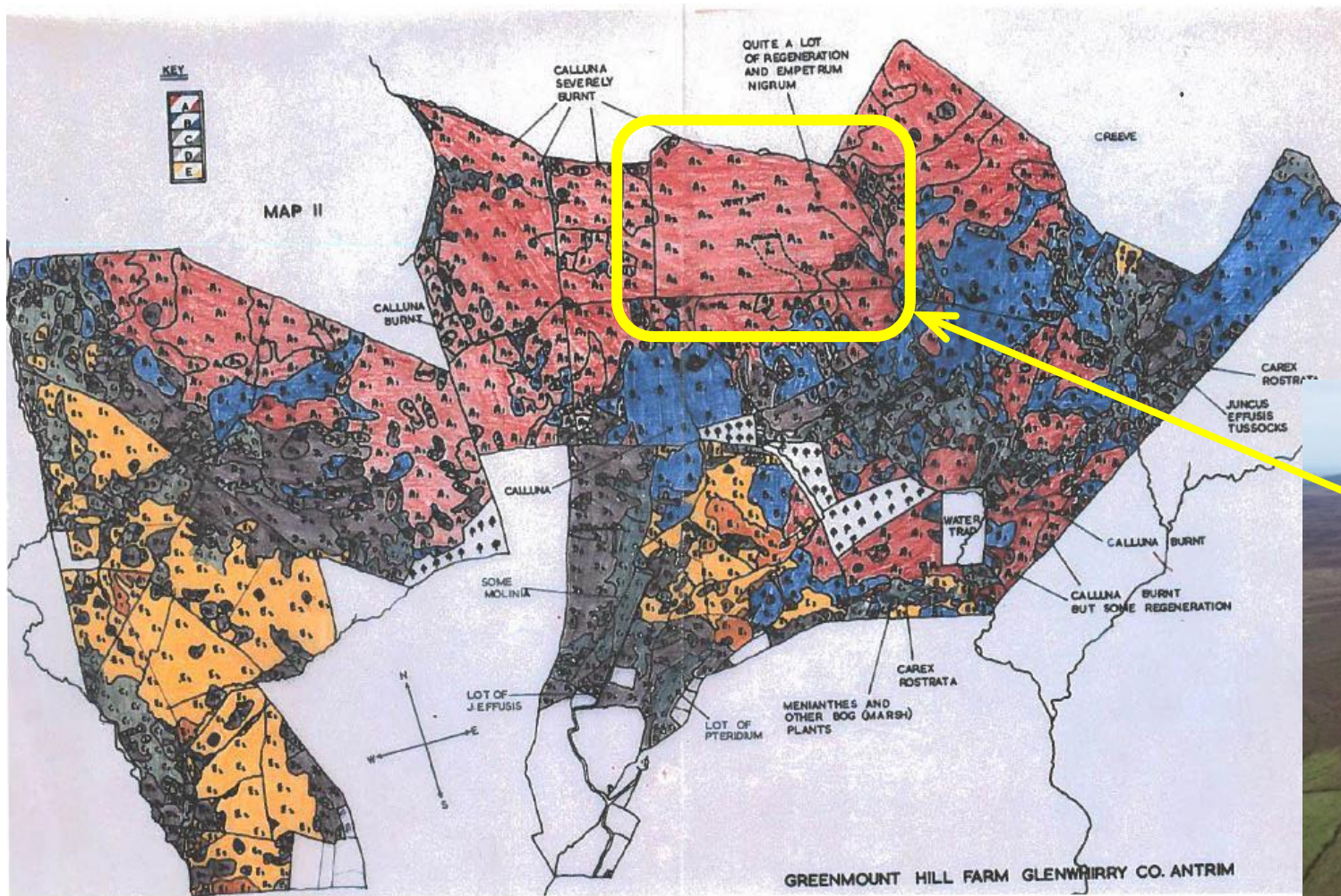


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# History of the Hill Farm





# Glenwherry Hill Regeneration Partnership

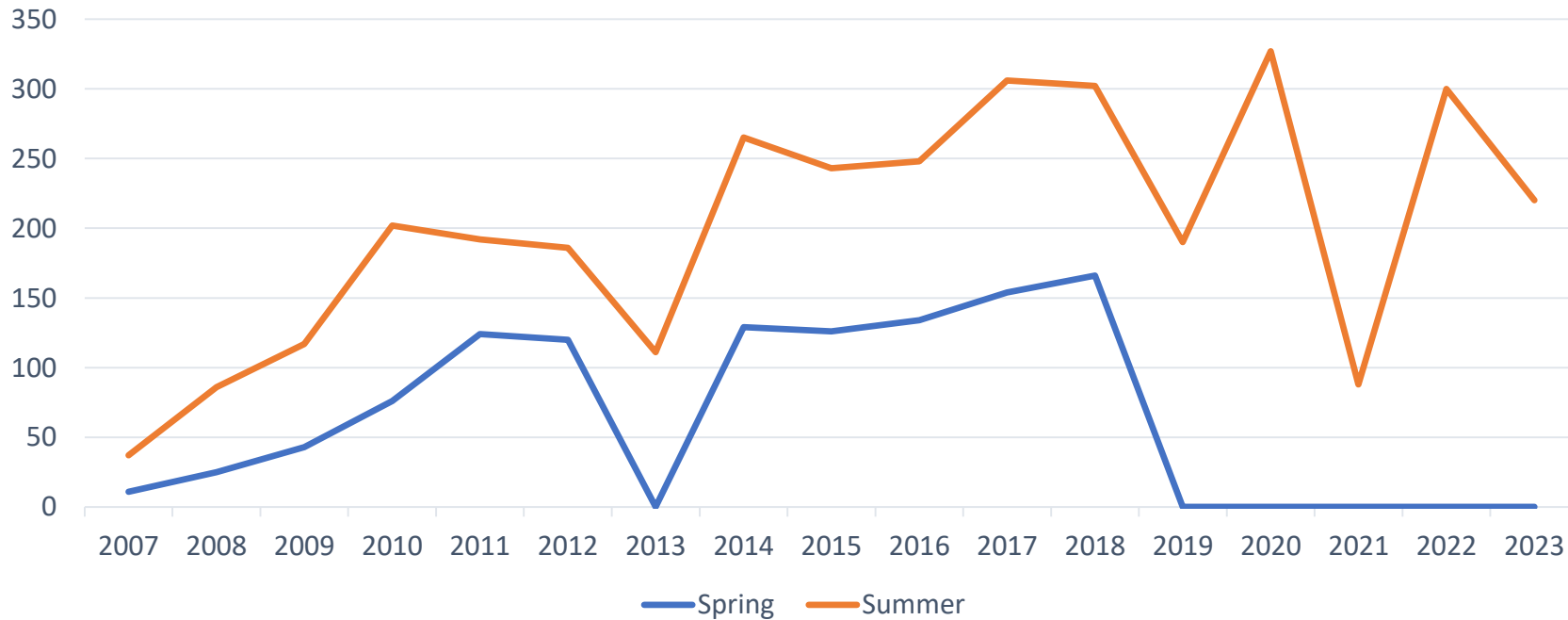




# Red Grouse



## IGCT SPRING/SUMMER GROUSE COUNT 2007-2023



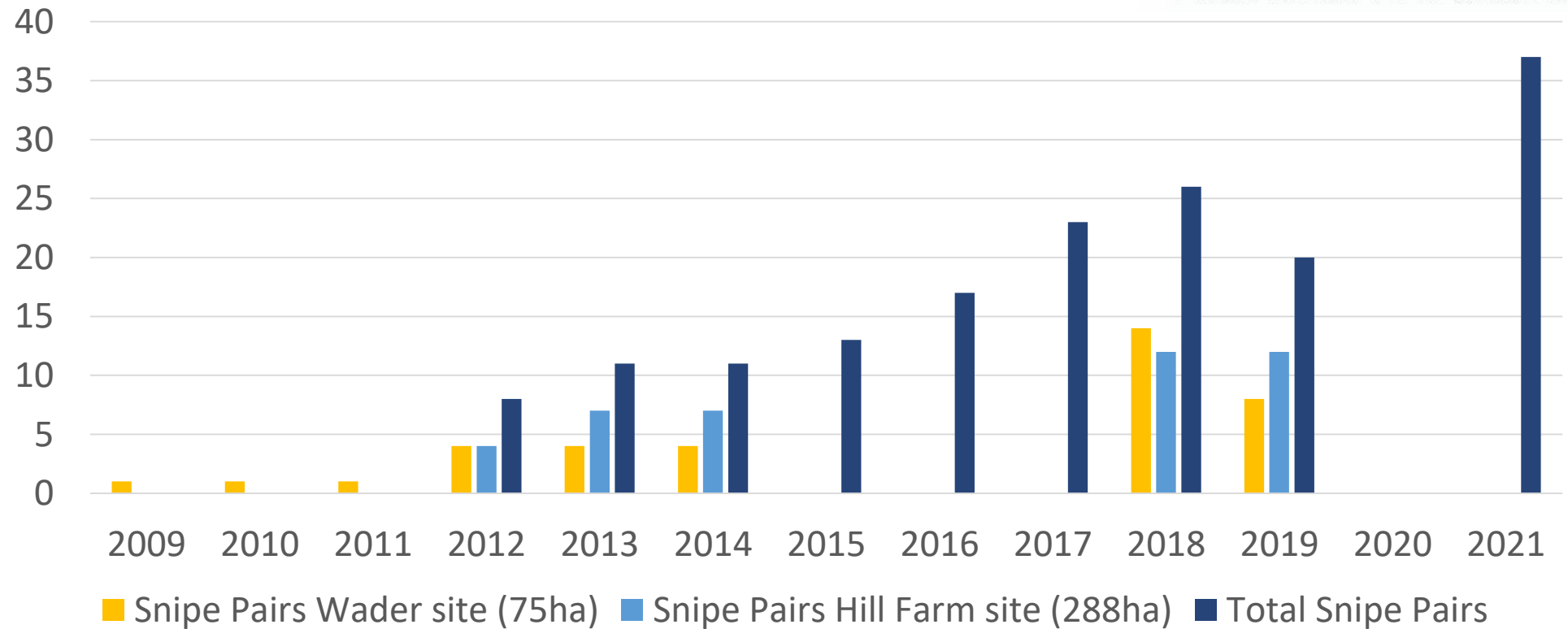


# Snipe



CAFRE Hill Snipe Pairs 2009-2021

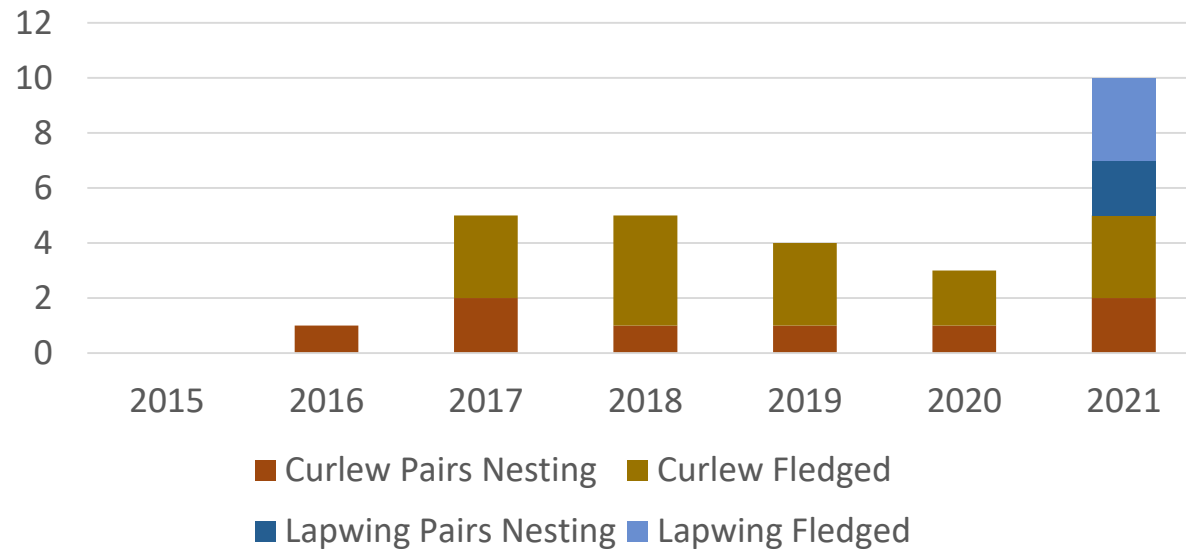
 giving  
nature  
a home  
**Northern Ireland**







CAFRE Hill Curlew & Lapwing 2009-2021



CAFRE Hill Skylark & Meadow Pipit 2011-2021

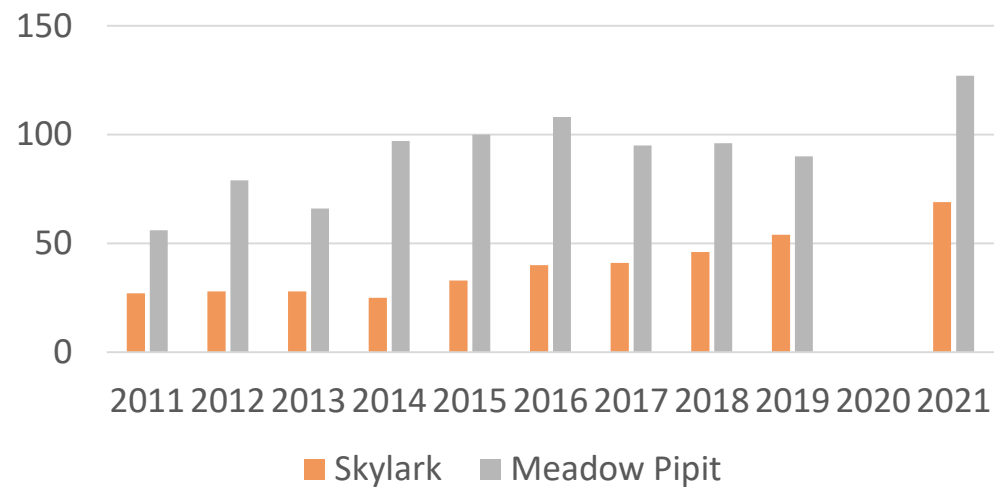
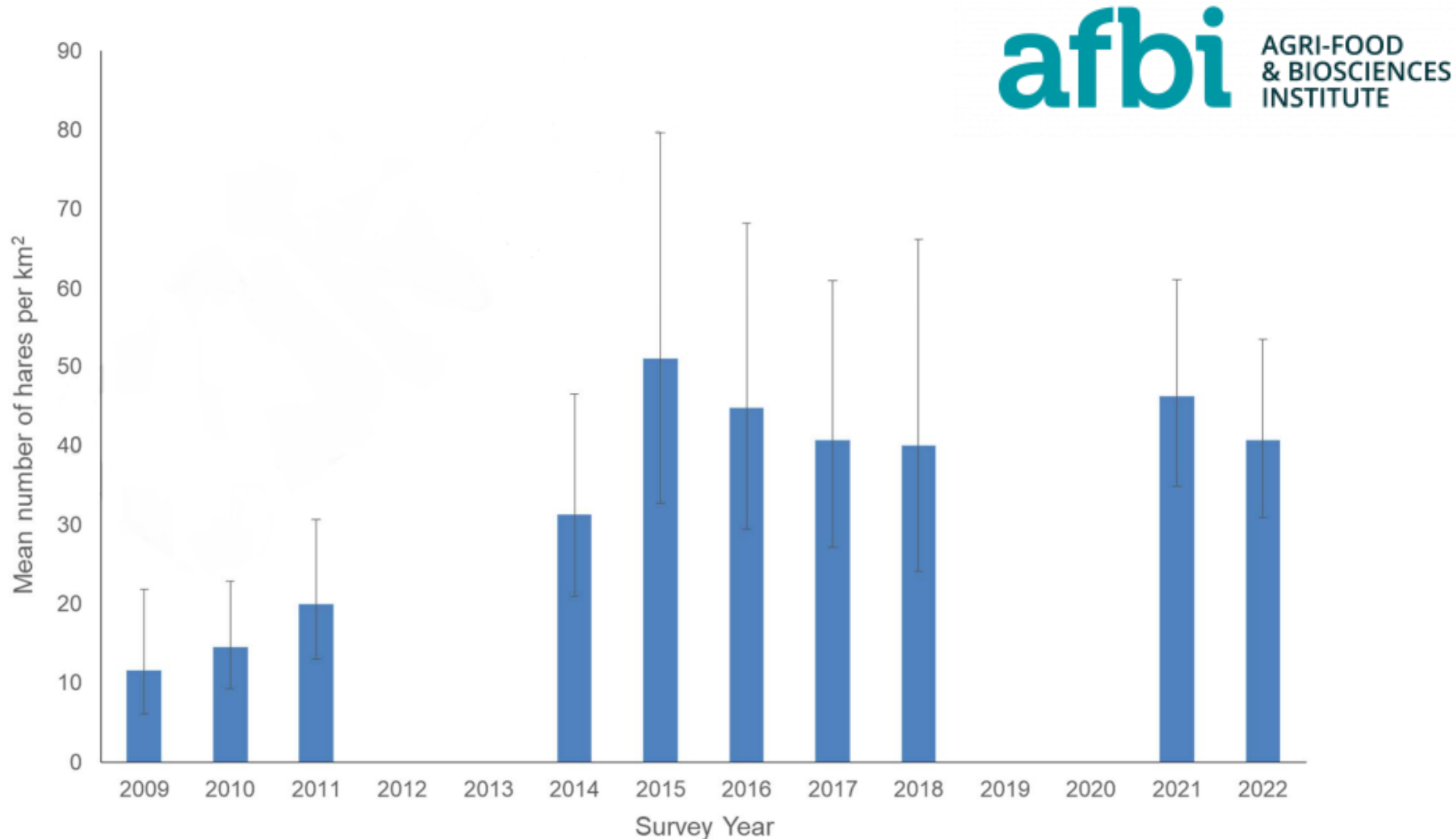


Photo courtesy of Neal Warnock



# 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



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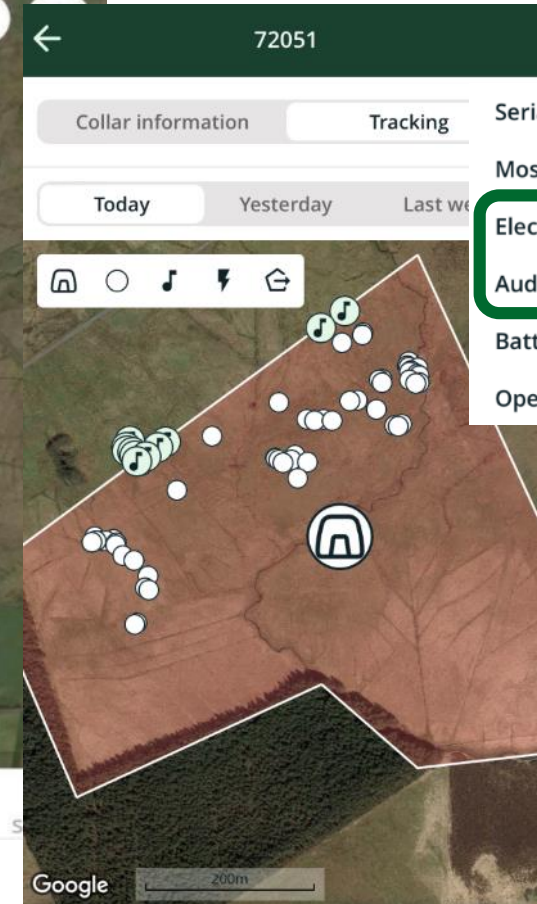


August  
2022





# Virtual Fencing



Serial number:	72051
Most recent report:	11 minutes ago
Electric pulses today:	0
Audio warnings today:	11
Battery status:	54%
Operating mode:	On





# 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







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