

Agriculture and Biodiversity in Ireland

















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Three messages about agriculture and biodiversity

- Traditionally, we've a rich farmland biodiversity but we have lost a lot
- 2. The reasons for the loss will be outlined...
- 3. We can save it with the right policies and supports

Semi-natural grasslands

- 130 species of grasses:
- NB: grasshoppers, crickets and locusts, aphids and hopper insects, many families of flies (including the root-feeding craneflies, and the ubiquitous gall-midges), and a great variety of butterflies and moths (Lepidoptera). ... "Four gall midge species are known to attach cock's-foot...
- All of these insects in turn provide food for animals higher up the food chain.
- Some of these (such as harvestmen among the Arachnida) are grassland specialists, their long legs especially adapted to move among the tall, swaying culms of the grassland jungle.



Species Supported by HNV farming





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Species rich Meadows





Damp pastures/wet grassland













Upland and coastal grasslands





Low intensity +low input grazing essential

Cattle grazing creates short areas with scattered taller tussocks for nesting.





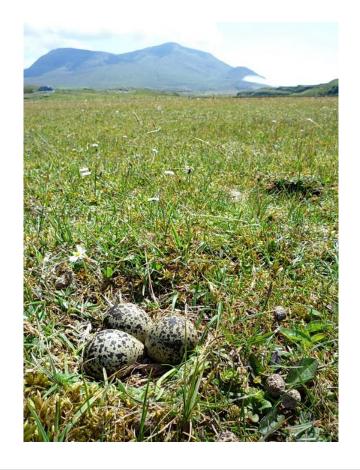
Trampling creates muddy edges to wet areas, essential feeding areas for wader chicks

High water table

Shallow pools rich in invertebrates, important for wader chick feeding.



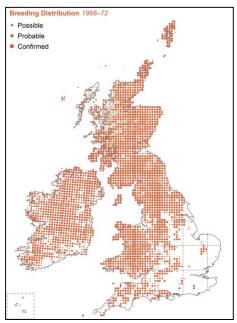




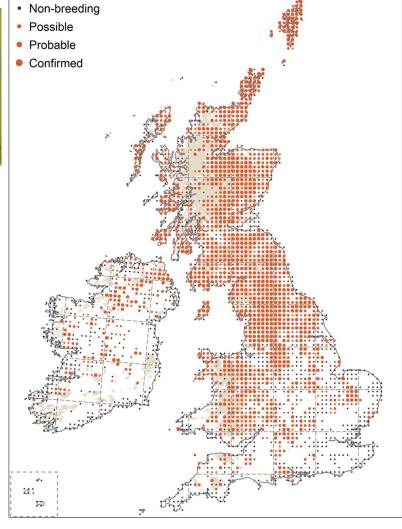


Grazing Essential
Maintains open habitats, with few trees/shrubs

Curlew: going, going, ...





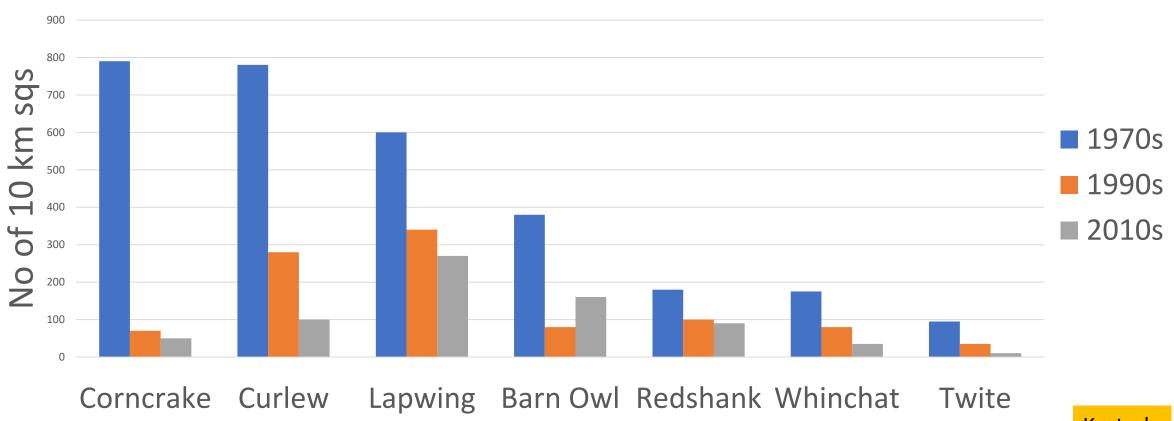


Breeding Distribution 2008–11



Stats on farmland biodiversity

We're still losing it...



Stats on farmland biodiversity

- 85% of EU protected habitats in Ireland have bad or inadequate status
- 70% of those impacted negatively by agriculture practices (fertilizer use, drainage)
- Lost 28% of lowland hay meadows since 2013 due to intensification
- One third of our 99 wild bee species are threatened with extinction.
- The NPWS Article 17 report to the European Commission on the status of protected species (2019) including water-dependent species states 'The Agriculture category represents the highest percentage of High-importance pressures (Figure 9) relative to other categories, with the incidence predicted to increase over the next 12 years; this has been linked to the threat from fertiliser and pollution on selected fish species.

NPWS (2019). The Status of EU Protected Habitats and Species in Ireland, pg 90

https://www.npws.ie/publications/search?title=article+17&keyword=&author=&series=All&year=&x=31&y=8

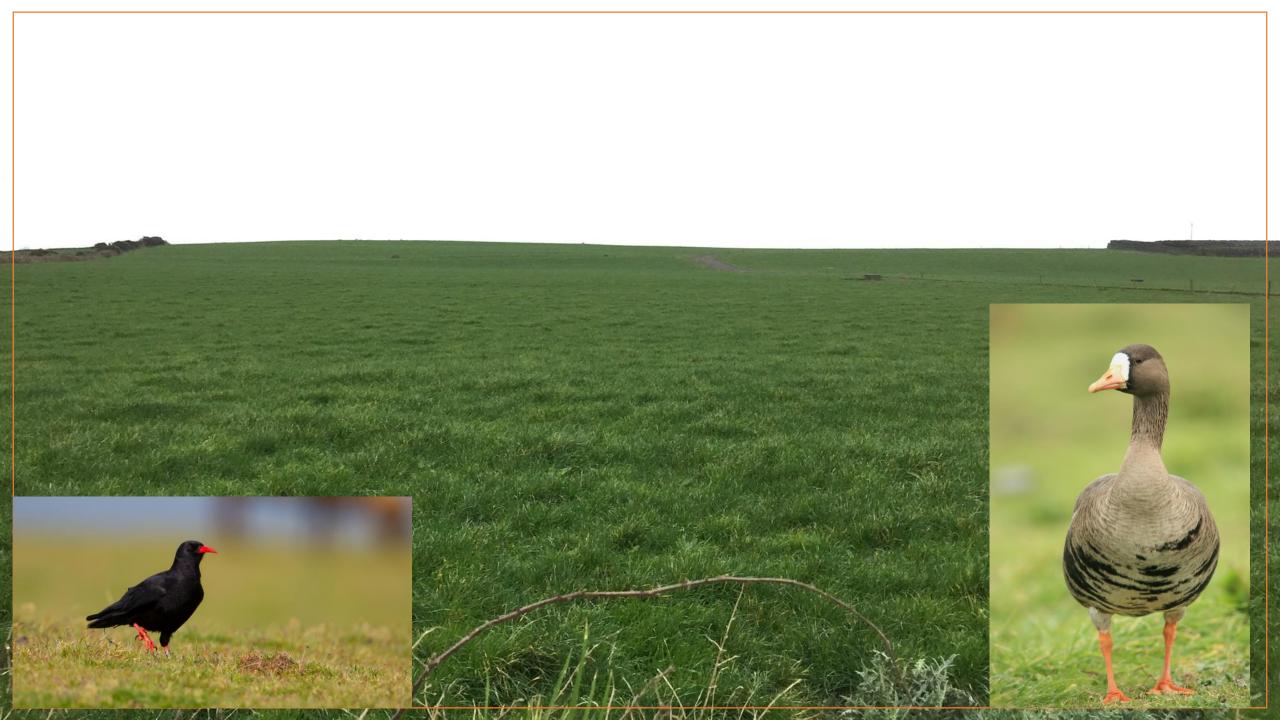


Why is this happening:

- Policy drivers (national policy Food Wise 2025 + CAP) focused on increased production (loss of milk quota) and farmers are in an international commodity market
- Failure to require public money for public goods.
- Failure to adequately implement EU nature laws on agriculture land

Causes:

- Historical impacts include mechanisation and change from hay to silage production
- Changes from mixed farming to mainly beef and dairy.
- Intensification of livestock production to monocrop perennial rye grass (drainage, ploughing, reseeding, field enlargement, increased fertilizer usage
- Burning in the uplands and inappropriate grazing on fragile habitats
- Hedgerow removal and inappropriate management
- Predation of eggs and chicks by foxes and corvids also now a significant pressure







BirdWatch Ireland studied the movements and foraging patterns of Barn Owls using GPS tracking devices. The map shows the movements of an adult male Barn Owl in Co. Cork in 2017, which shows the importance of hedgerows and edge habitats in an intensive agricultural landscape, which were the main habitats used for hunting by the bird throughout its home range. The red dots show where the bird was stationary, orange dots represent slow foraging flight and yellow dots are where the bird was in fast or transit flight. This data shows that the interior of the fields were largely ignored and most foraging focused on hedgerows, field margins and edge habitats.

More info here: https://www.youtube.com/watch?v=UNE-VhtXCoA&t=29s

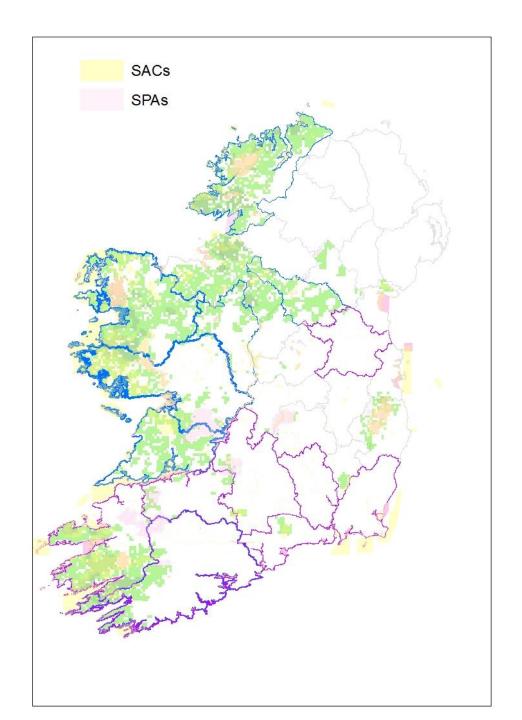
What can be done? *Move away from intensification... diversify*More investment, training and targeted results based schemes through CAP –
50% of CAP money ring fenced for farmers to support farmland biodiversity



Farmers participating in training on habitat conditions important for waders as part of the BirdWatch Ireland **Curlew EIP** funded by **DAFM**

Hen Harrier

Support High Nature Value Farmland (HNVf)



Pilot schemes - Results Based approaches

Farmers thoughts on results-based approach

"Farmers feel that a well-designed, locally adapted and flexible agri-environment schemes will improve farmer engagement in the delivery of agri-environment measures"

"Farmers like the principle that farmers producing higher quality environment products are awarded with higher payments."

"Farmers felt that schemes like this can make them more conscious about positive environmental management in general."

In pilots in Ireland Results Based Approaches (RBAPS) have been very well received by participant farmers

https://rbaps.eu/about/messages-from-our-rbaps-farmers/

RBAPS Project

Developing Results Based Agri-environmental Payment Schemes in Ireland and Spain

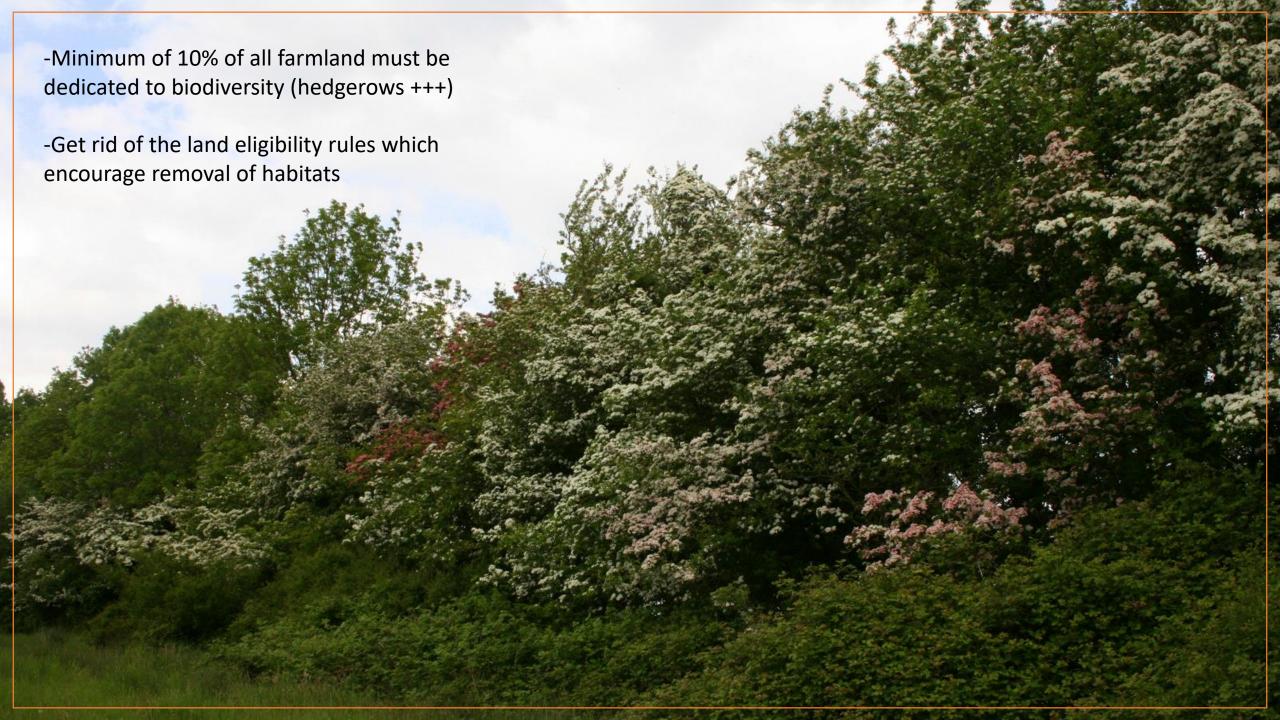


WELCOME TO THE RBAPS IRELAND AND SPAIN PROJECT

The RBAPS project was a three and a half year project in Ireland and Spain working with farmers and stakeholders developing ways to reward farmers for delivering biodiversity on their lands. The key element of results-based method of delivering payments is that the amount of money paid to the farmer, reflects the quality of wildlife (biodiversity) that is delivered on their farmed land.









"Emissions in Irish agriculture have steadily increased by 14% since 2011, largely due to increasing dairy cow numbers and nitrogen fertiliser use."



"Continued reduction of the suckler herd would make an important and cost-effective contribution to mitigation within the sector, achieving a significant reduction in numbers of cattle by 2030 "

THIS IGNORES THE IMPORTANCE OF THESE AREAS FOR FARMLAND BIODIVERSITY...!

New EU Farm to Fork and Biodiversity Strategies

20% cut in fertilizer use

50% cut in pesticide use

30% of land protected for nature

At least 25% of agricultural land is under organic farming

Legally binding nature restoration targets

Irish Government must endorse these in full

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