

The role of Humane Cable Restraints in Conservation



Wales **GWCT** Cymru
FOLLOW THE SCIENCE
DILYNWCH Y GWYDDONIAETH

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& Advisor for Wales & NW England

Responsibility of Welsh Ministers

Under the Environment (Wales) Act 2016 Welsh Ministers must take all reasonable steps to maintain and enhance species listed in Section 7

There are at least eight Section 7 species proven to benefit from the management of foxes

HCRs play a vital role in targeted, humane and effective predation management



Environment (Wales) Act 2016

2016 anaw 3

PART 1

SUSTAINABLE MANAGEMENT OF NATURAL RESOURCES

General duties of public authorities

7 Biodiversity lists and duty to take steps to maintain and enhance biodiversity

- (1) The Welsh Ministers must prepare and publish a list of the living organisms and types of habitat which in their opinion are of principal importance for the purpose of maintaining and enhancing biodiversity in relation to Wales.
- (2) Before publishing a list under this section the Welsh Ministers must consult the Natural Resources Body for Wales ("NRW") as to the living organisms or types of habitat to be included in the list.

- (3) Without prejudice to section 6, the Welsh Ministers must—
 - (a) take all reasonable steps to maintain and enhance the living organisms and types of habitat included in any list published under this section, and
 - (b) encourage others to take such steps.

- (4) The Welsh Ministers must, in consultation with NRW—
 - (a) keep under review any list published by them under this section,
 - (b) make such revisions of any such list as appear to them appropriate, and

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Species declines

Lapwing declined by 77% in Wales

Curlew estimated by 81% in Wales

Curlew – the most the most pressing bird conservation priority in Wales

Forecast extinction in Wales by 2033

Approx. 500 -600 pairs left

Approx. 400 -500 pairs left



Species ~~declines~~ extinction!

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Briefing from the League Against Cruel Sports

Agriculture (Wales) Bill – achieving a ban on snares in Wales

Misleading information

It has been claimed that an exemption for ‘humane’ cable restraints is needed to save ground nesting birds such as the curlew.

In its recent response to the Agriculture (Wales) Bill, the RSPB explained –
“The RSPB does not use snares because they are non-selective and risk catching non-target mammals such as hares, badgers and deer. In addition, we do not consider that snares are a humane way of controlling predators.”

We CAN conserve these species if we use HCRs

Waders x 3 fold increase with predation management

Curlew productivity x4 higher with predation management

← 26% of foxes culled were first caught in restraints

At one location 80% of →
Foxes culled were first caught in restraints

Journal of Applied Ecology
Journal of Applied Ecology 2010, 47, 263–272 doi: 10.1111/j.1365-2664.2010.01793.x

Changes in breeding success and abundance of ground-nesting moorland birds in relation to the experimental deployment of legal predator control

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¹The Game & Wildlife Conservation Trust, Forest in Teesdale, Barnard Castle and ²The Game & Wildlife Conservation Trust, Fordingbridge, Hampshire, UK

Summary

1. An 8-year-field experiment on moorland in northern England manipulated the abundance of legally controllable predators whilst maintaining consistent habitat conditions. Subsequent changes in both the breeding success and abundance of five ground-nesting bird species were monitored: lapwing *Vanellus vanellus*, golden plover *Pluvialis apricaria*, curlew *Numenius arquata*, red grouse *Lagopus lagopus scoticus* and meadow pipit *Anthus pratensis* and the abundance only of snipe *Gallinago gallinago* and skylark *Alauda arvensis*.
2. Control of fox *Vulpes vulpes*, carrion crow *Corvus corone*, stoat *Mustela ermine* and weasel *Mustela nivalis* reduced the abundance of fox (–43%) and crow (–78%); no changes were detected in already low stoat or weasel abundances.
3. Reductions in foxes and crows led to an average threefold increase in breeding success of lapwing, golden plover, curlew, red grouse and meadow pipit.
4. Predator control led to subsequent increases in breeding numbers (≥1.4% per annum) of lapwing, curlew, golden plover and red grouse, all of which declined in the absence of predator control (≥17% per annum).
5. **Synthesis and applications.** Controlling predators is a potentially important management tool for conserving a range of threatened species. Considerable sums of public monies are currently spent on habitat improvement for conservation and some of these public funds should be used to underpin habitat works with predator removal.

Key-words: carrion crow, curlew, fox, golden plover, lapwing, predation, upland management

Introduction

Native vertebrate predators can limit the population size of their prey (Messier & Côté 1985; Sinclair *et al.* 1998). Culling such predators is widely used for protecting domestic stock (Allen & Sparkes 2001) or enhancing game abundance (Potts 1986). The benefits of predator control (PC) for conservation are receiving growing recognition (Gibbons *et al.* 2007). However, such management can be contentious if predators and prey are valued differently by different stakeholders (Redpath *et al.* 2004) and the effects of PC must be properly quantified.

Amongst birds, ground-nesting species are particularly susceptible to predation by avian and mammalian predators and negative impacts of predation have been recorded for gamebirds and waterfowl on incubating adults, eggs and chicks (Manström, Kenward & Engren 1988; Newton 1993). The effects of predators on populations of other ground-nesting species such as waders (Charadriiformes) are less well studied (Hill 1988; Bolton *et al.* 2007), although predators are known to have a substantial impact on their breeding success (Baines 1990; Grant *et al.* 1999).

Generalist predators such as foxes and carrion crows have increased markedly in the United Kingdom in recent decades (Tapper 1992; Gregory & Marchant 1996), associated with increased food availability and declines in the number of gamekeepers (Hudson 1995; Fuller & Gough 1999). The impact of increasing predator numbers on prey populations may be exacerbated when coupled with habitat deterioration, which can increase a prey species' susceptibility to predation (Baines 1990; Evans 2004). There is, however, a need to quantify the benefits of PC on target species in isolation from variation in habitat quality.

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European Journal of Wildlife Research (2022) 69:6
https://doi.org/10.1007/s10344-022-01631-5

ORIGINAL ARTICLE

Lethal predator control on UK moorland is associated with high breeding success of curlew, a globally near-threatened wader

David Baines¹ · Kathy Fletcher¹ · Nicholas Hesford¹ · David Newborn¹ · Michael Richardson¹

Received: 3 March 2022 / Revised: 14 November 2022 / Accepted: 29 November 2022
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Abstract

The UK supports a quarter of Eurasian curlew *Numenius arquata*, so a recent halving of numbers has impacted the global population. Low breeding success is a frequently cited cause of decline. We considered breeding success in relation to predator indices and habitat measures within 18 moorland-farmland blocks across several UK regions. Each block comprised one site where gamekeepers lethally controlled predators on moors managed for red grouse *Lagopus lagopus scoticus* (grouse moor) and another on similar habitat where predators were not controlled (non-grouse moor). More wader species occurred on grouse moors, which supported twice the density of waders as non-grouse moors. Curlew productivity was fourfold higher on grouse moors (1.05 fledglings pair⁻¹) than non-grouse moors (0.27). Hatching and fledging success was negatively linked to a combined index of corvids and fox, which were three- to fourfold fewer on grouse moors but were unrelated to 11 habitats and two livestock grazing variables. Similar patterns were observed in three of four other wader species. These behaviour-based findings were validated by observations on actual nests and broods. Grouse moors appear to act as source populations, thereby slowing the current rapid decline. To halt declines and promote curlew recovery in the UK uplands, we recommend that predator control on grouse moors is maintained and longer term land use policies are developed to render landscapes less friendly to currently high levels of generalist predators.

Keywords Red grouse · Fox · Corvids · Heather moorland · Gamekeeper

Introduction

Waders are in steep decline often following wetland drainage, their conversion for agriculture, and subsequent intensification of agricultural practices (Wilson *et al.* 2007; Pearce-Higgins *et al.* 2017). The Eurasian curlew *Numenius arquata* (hereafter 'curlew') is an example of a severely declining wader, with a 25% decline across its European range in the last 15 years (BirdLife International 2010). Consequently, curlew is classified 'globally near threatened' on the Red List of Threatened Species (www.iucnredlist.org).

The UK curlew population of 58,500 breeding pairs (Woodward *et al.* 2020) represents a quarter of the global population, with larger numbers found only in Finland and Russia (Brown *et al.* 2015). A halving of the UK breeding population in the last 25 years since 1990 is amongst the highest decline recorded (Balmer *et al.* 2013; Harris *et al.* 2018), adversely impacting global population size more than in any other country (Brown *et al.* 2015). Declines in curlew and other waders have been so intense in lowland grasslands of southern England (O'Brien and Smith 1992), that remaining waders are increasingly restricted to nature reserves and designated sites (Ausden and Hiron 2002). The bird assemblage of upland habitats in Great Britain is of global conservation importance (Thompson *et al.* 1995), but here, several species, including curlew and northern lapwing *Vanellus vanellus*, have also declined in recent decades (Sim *et al.* 2005; Balmer *et al.* 2013) following agricultural intensification and afforestation at landscape scales (Valkama *et al.* 1999; Ratcliffe 2007; Dallmer *et al.* 2010).

Survival rates of adult waders, including curlew, remain high (Berg 1994; Catchpole 1999; Taylor and Dodds 2013). Instead, low breeding success, with predation often cited as a cause, often drives declines in European waders (Berg 1992; Grant *et al.* 1999; Valkama *et al.* 1999). Reviews in Europe showed unsustainable increases in clutch predation of 40%

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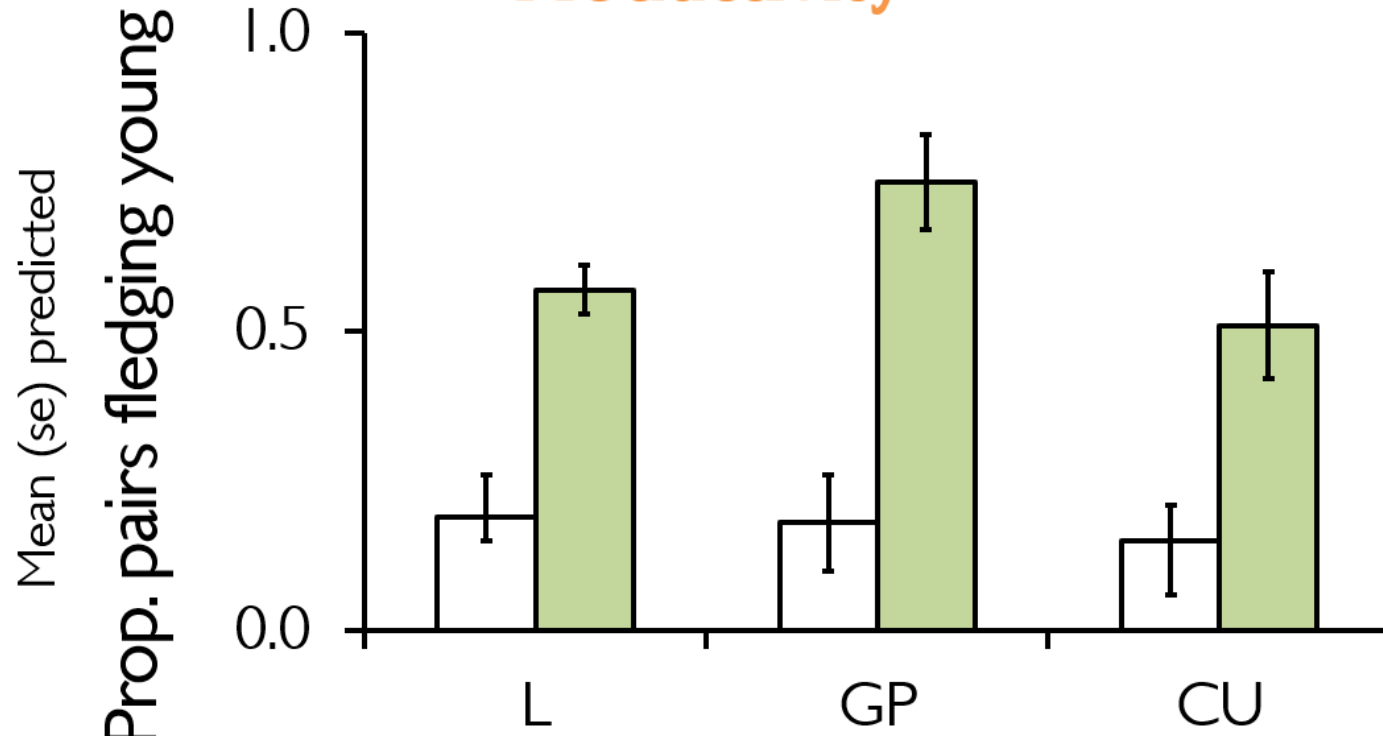
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Published online: 14 December 2022

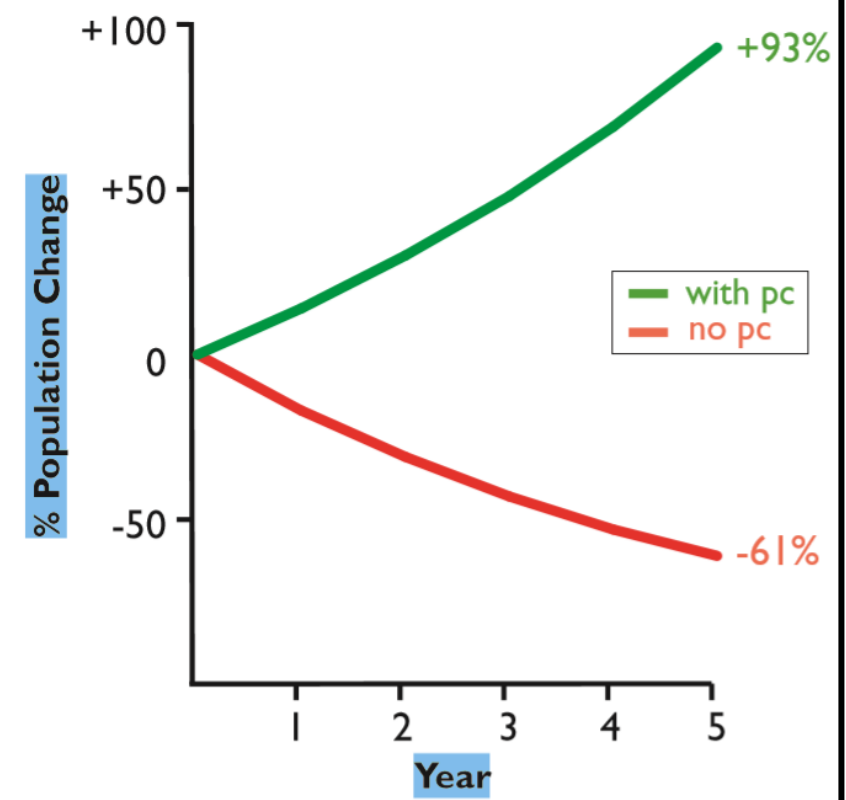
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We CAN conserve these species if we use HCRs

Upland Predation Experiment Wader Productivity



Predicted effect on curlew population



Can the RSPB conserve curlew without using HCRs?

D. Douglas et al. 2023 RSPB paper suggests that they cannot

Curlew nesting success and curlew breeding abundance did not differ between trial and reference sites.

(Despite killing 500 foxes over 4 years over 6 sites)

The RSPB model is not successful at conserving curlew

Curlew Life Project Wales? ≈0.26 productivity

(despite killing 213 foxes)

Lake Vyrnwy Wales? ≈0.00 productivity



The whole truth?

“It is estimated that nearly three-quarters of the animals caught in snares are classed as ‘nontarget’”

Close enough but let’s explore the detail....

Species	Fox	Hare	Badger	Other
Captures	14	7	14	9
Escapes (snare intact)	0	5	9	7
Escapes (component failure)	0	0	0	0
Captured and held	14	2	5	2
Alive, uninjured	14	2	5	2
Severe Injury/dead	0	0	0	0
Predated	0	0	0	0

Table 5.14. Summary of captures made during trial 2 with snare type D

Briefing from the League Against Cruel Sports

Agriculture (Wales) Bill – achieving a ban on snares in Wales

The whole truth?

- 30 animals, 21 self released
- 5 restrained badgers ALL were **released unharmed**
- 2 others (1 dog and 1 pheasant) both were **released unharmed**
- The 2 remaining hare and 14 foxes were dispatched according to the protocol and sent for examination by a pathologist

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Opinion or Scientific Proof?

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“As these devices are cruel and indiscriminate by nature, there is no such thing as a humane snare”

Except.....

Defra Report 2012, snare type D (the HCR):

“None of the captured animals in this trial had any of the indicators of poor welfare included in the AIHTS for restraining devices”

“In summary, in this trial snare type D was predicted to meet the requirements of the AIHTS (99% confidence) for restraining devices and the inclusion of welfare indicators for nontarget species does not alter this.”

Short et al. 2012:

“With a well-designed snare (*the HCR*), entanglement can largely be avoided through choice of snare location as described in UK best practice guidelines. Correct hardware and use meets AIHTS”

Agreement on International Humane Trapping Standards

Welsh Government already recognises the AIHTS in law, implemented within The Humane Trapping Standards (England and Wales) Regulations 2019

These Regulations have been: (a) made by both the Welsh Ministers and the Secretary of State, and (b) laid before both the National Assembly for Wales and the UK Parliament

These are the highest humaneness standards available internationally. Welsh Government should not be seen to have double standards – especially when considering animal welfare.

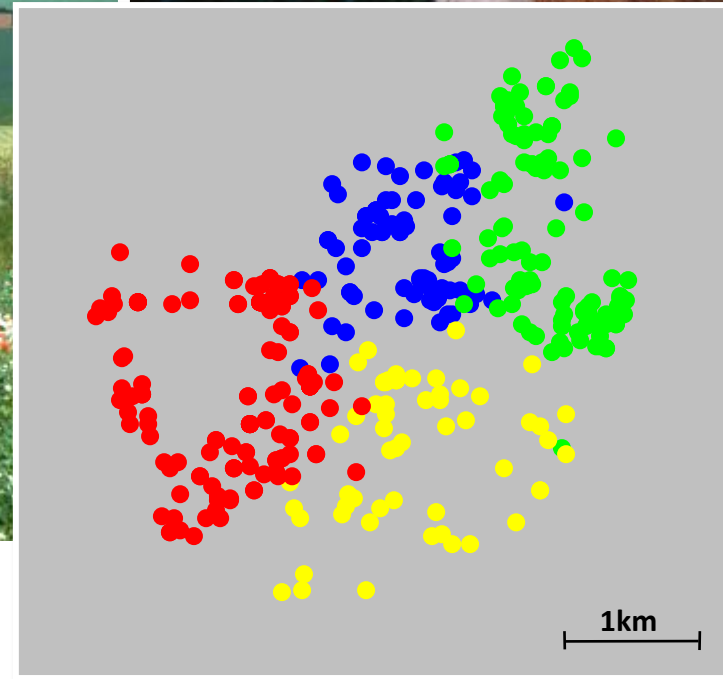


A non-target passing beneath a HCR



06/21/2012 22:40:52

Fox restraints in research



Sometimes you need every tool in the tool box

You cannot see foxes through tall vegetation in the nesting season

No matter how good the thermal and NV are it is not X-ray vision

HCRs are needed to effectively conserve vulnerable ground nesting species



Why are HCRs so important?

Otterburn – 26% of foxes culled after being caught in a restraining device

Langholm – 21%

North Wales ICA – 80%

Camlad Valley SMS – 24%

PMP SMS – 30%

Nature Fund – 69%

Avon Valley – 10%

Loddington – 33%

Royston – 44%

Mean = 37%



There is no other method of fox control which is as efficient or as effective as a Humane Cable Restraint in all scenarios, at all times of year

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These fantastic conservation achievements would not have been possible without restraints

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Mean = 37%

There is no other method of fox control which is as efficient or as effective as a Humane Cable Restraint in all scenarios, at all times of year

What we're asking for – a licence for HCRs

Do not ban HCRs – they are too valuable a conservation tool

Scientific evidence demonstrates they are needed to conserve our vulnerable ground nesting Section 7 species in Wales.

They are much more selective and ARE humane – Welsh Government AIHTS

Licence HCRs for conservation of ground nesting birds

- compulsory training and registration
- HCR identification tagging
- **Twice daily checks**

Licences can easily be revoked if bad practice occurs

Easier to spot un-licensed activity

Vicarious liability for landowners as a deterrent??

Ban snares to end abhorrent practice, but license Humane Cable Restraints for best practice conservation of vulnerable ground nesting birds

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Licence **To use the Minister's words:**

- “the Bill is about preventing inhumane methods being used, and
- it doesn't prevent more humane methods of control”

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Expert Opinions – Ecologists, Ornithologists and Conservationists

With a lifetime of observing and surveying bird life on the uplands of North Wales I have been shocked to see the decline in our breeding Curlew population. I have no doubt in my mind that to bring about the urgently needed recovery of Curlews we need to employ effective long-term control of Foxes. I have witnessed the humane cable restraint being used for Fox control on moorland where curlews currently breed and am convinced of both its high level of welfare as a means of capture and its efficacy in controlling overall Fox numbers. I urge Welsh

Government to reconsider its position on a ban on humane cable restraints if they are serious about their commitment to the recovery of breeding Curlews in Wales.

John Lawton Roberts, Conservationist and Welsh Ornithological Society Lifetime achievement award winner 2013.

'Do not underestimate the current predicament many species of ground nesting birds find themselves in. Changes in land management practices and increased predation place many of our iconic upland bird species at risk of extinction. Once they are gone, they are gone. I no longer hear the curlew from my house, a bird species once intimately associated with the uplands around here, and present only three years ago. I have only seen one golden plover locally in the last thirty years. This decline in wildlife is significant and happening on our watch. Predator control is a vital part of wildlife management. Conservation groups have been managing grey squirrels, mink, and foxes for many years, to positive effect. It is possible to reverse the decline of wildlife. Humane Cable Restraints are one tool in the box to help land

managers control predators, but they occupy a special place – used with care and precision they are selective and effective, and work in situations that other methods cannot. They are not the inhumane snares of old, they restrain the target species to allow for managed, humane control, or release. Humane Cable Restraints are part of the solution. Please don't view them as part of the problem.'

Howard Davies, Independent Environmental Advisor, current IUCN Board Member, previously Chief Executive the National Association for AONBs and previous NRW chair for Protected Areas Committee and Board Member

"You either decide that you want curlews in an area, and all the science tell us what we need to do to retain them in that area, or you don't. And if you don't want to do some of the nasty things, the predator control that might be unpalatable to some people that's fine, but you've got to accept that your breeding curlew and lapwing, in the current landscape that you've got, this anthropogenic landscape that we've created you're not going to keep them."

Prof Russel Wynn, Project Manager Curlew Recovery Partnership.

'By restricting control measures against foxes and crows. In the modern landscape, there can be no sense in more protection for already-thriving crows and foxes while this is detrimental to species, like Curlew, teetering – in Wales – on the verge of local extinction.'

Nick Myhill, Conservationist, Powys.

"Certainly I don't think it's worth shooting the odd fox, you've got to go for them hard."

Prof Ian Newton OBE FRA FRSE. Senior Ornithologist NERC (retired) Past President British ornithologists Union.

"Every penny of public money put into the conservation of ground-breeding species will be in vain, if further layers of protection are given to generalist predators and, for example, you ban fox snares and Larsen traps. I would love to tell the politicians in the UK, what they have now and what they risk destroying, based on what we have lost here in Holland. Predation is something that can be managed and must be managed or we will lose the battle to prevent the extinction of our waders. We cannot leave it up to nature, we need to make an active choice and if we decide to save our beautiful birds, half measures are no good."

Eddie van Muram, Black-tailed Godwit conservationist with 30 years' experience in Groningen province, Holland

"To lose the humane cable restraint will make the job much more difficult, it might even make it impossible.... I might say to myself if they are going to make it impossible to do the job I might as well give up."

Dai Thomas, Powys Moorland Partnership SMS field worker.

Make no mistake, the evidence shows banning HCRs will stop us being able to save curlew and other ground nesting birds in Wales

What is your alternative to protect these species – that is proven to work and is humane?

