FARMING FOR NATURE

THE ROLE OF RESULTS-BASED PAYMENTS

EDITED BY

EILEEN O'ROURKE & JOHN A. FINN

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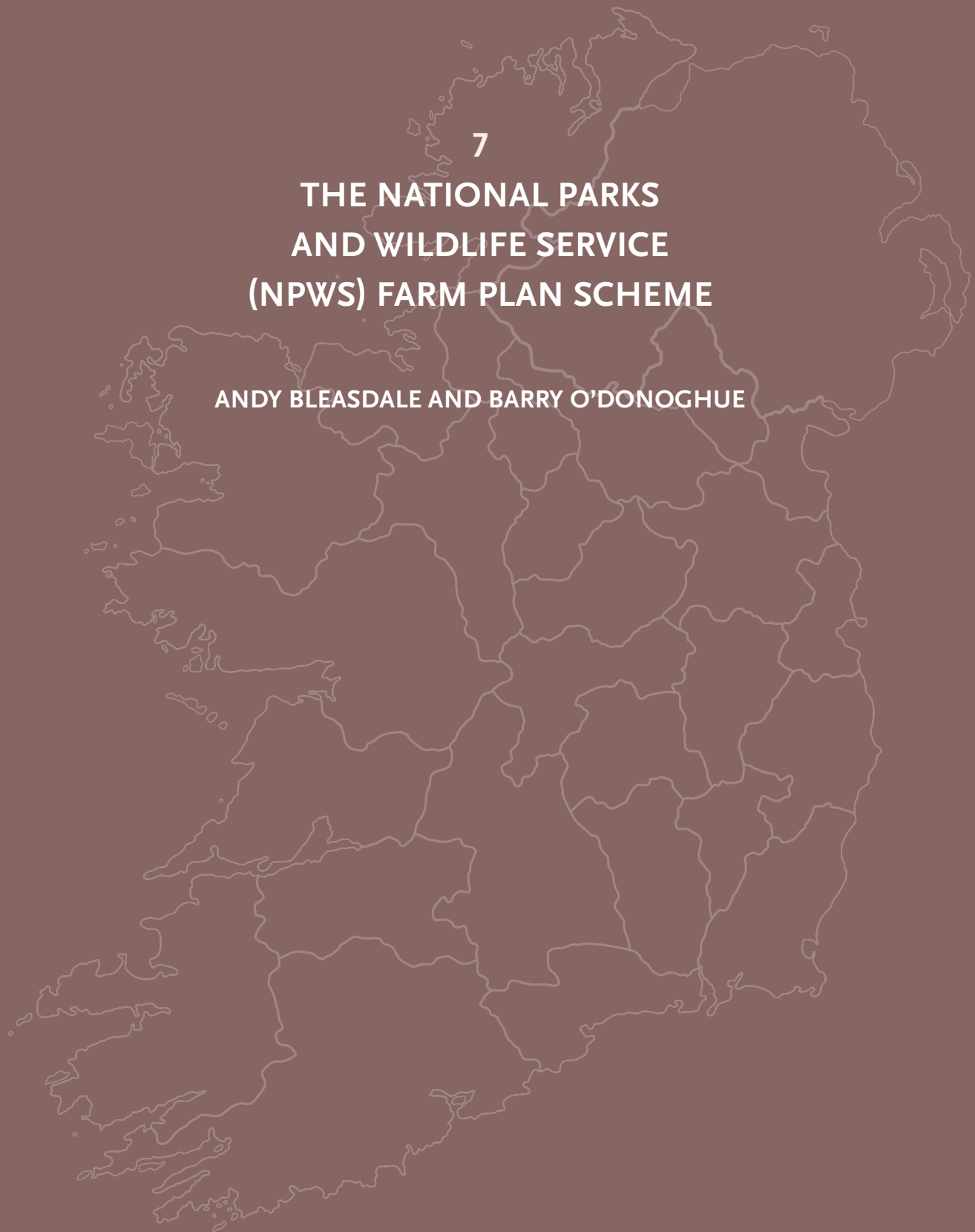
CONTENTS

7

THE NATIONAL PARKS AND WILDLIFE SERVICE (NPWS) FARM PLAN SCHEME

ANDY BLEASDALE AND BARRY O'DONOGHUE



ABSTRACT

The National Parks and Wildlife Service (NPWS) Farm Plan Scheme was launched in 2006. The main purpose of the scheme is to promote a focussed, targeted and innovative approach to farming for habitats and species of conservation interest in some of Ireland's most important biodiversity areas. Measures are tailored for the habitats or species in question, employing flexible and adaptive approaches to maintain and enhance these habitats and species at farm level. By trialling and enacting these plans, valuable lessons are learned, which in turn informs advice to the Department of Agriculture, Food & the Marine (DAFM) on measures that could be delivered under national, co-financed agri-environment schemes (AES).

Almost 800 NPWS Farm plans have been approved since the scheme was launched. As commitments entered into by farmers in the scheme have varied, payments have also varied across the range of plan types. An overview of the different plan types and lessons learned are presented in this chapter. The future of the NPWS Farm Plan Scheme, in a broader national context, is discussed.

INTRODUCTION

The Irish landscape and the habitats within it are the product of thousands of years of interaction with agriculture. During this time our wildlife has evolved to exploit the niches that this interaction has created. This relationship has never been constant; agriculture has always been a dynamic industry and it has responded to changing social and economic conditions. These changes over time have impacted on the landscape and the wildlife within it.

Since Ireland's accession to the European Economic Community in 1973, policies have been progressed to support food production, rural communities and environmental responsibility, but not always in a coherent manner. Headage and premia payments in the 1970s and 1980s encouraged sheep numbers to increase to levels that were clearly unsustainable for the environment, with resultant damage to upland habitats, erosion and siltation of rivers (Bleasdale, 1995). The intensification and specialisation of farming practices has seen the widespread loss of farmland birds in terms of numbers and range and indeed extirpation or national extinction (McMahon, 2007). In an era of cheap food, small and mixed farming enterprises have found it increasingly difficult to maintain viability. Farm holdings have been consolidated or farming has ceased with the land abandoned or converted to commercial forestry, which for the most part has been non-native plantations. The amount and type of traditional or High Nature Value farming that was in Ireland in the early 1970s has shrunk to pockets of the country, of counties and of localities. This loss of biodiversity has also been experienced at farm level.

In Ireland, approximately 1 million hectares are designated as Special Areas of Conservation and Special Protection Areas (collectively referred to as Natura 2000 sites) and Natural Heritage Areas (NHAs). Approximately 13% of the terrestrial area of Ireland lies within the Natura network. It has been estimated that circa 60% of the land in Natura 2000 in Ireland is farmed by up to 35,000 farmers (unpublished NPWS analysis, 2012). However designation does not automatically ensure appropriate management by farmers and other land managers.

Ireland's 3rd assessment on the status of listed habitats and species was submitted to the European Commission in April 2019. A summary report has been published by the National Parks and Wildlife Service which provides an overview of the main findings of the assessments. 85% of habitats are

reported as being in Unfavourable status, with 46% demonstrating ongoing declines. The main drivers of this decline are agricultural practices which are negatively impacting over 70% of habitats, particularly ecologically unsuitable grazing, abandonment and pollution (NPWS, 2019).

The Court of Justice of the European Union has found against Ireland in terms of protection of vulnerable habitats and species, including a ruling in 2002 pertaining to extensive damage in Irish uplands by overstocking of sheep from the 1980s onwards. The Commission closed this case in 2009 following the adoption of measures to restrict sheep numbers to environmentally sustainable levels on fragile peatlands soils. Agri-environmental schemes, including the NPWS Farm Plan Scheme, played a significant role in this. Arising from a case brought by the European Commission, the Court of Justice of the European Union delivered judgment in 2007 on Ireland's implementation of the Birds Directive. The Judgment referred to six separate complaints and gave a ruling in respect of each one. Again agri-environmental schemes played a significant part in the Programme of Measures aimed at addressing the rulings of the Court.

In 2015, the European Commission issued a letter of formal notice to Ireland for failing to, inter alia, adopt the necessary conservation measures required for the country's Special Areas of Conservation (SACs). This was followed by a Reasoned Opinion, which opens infringement proceedings against a Member State and is the basis on which the Commission grounds its case before the European Court of Justice. Naturally agri-environmental schemes will be central to the delivery of conservation measures to address the pressures and threats that are being experienced within the SAC network.

In parallel, there are many challenges facing agriculture and rural communities that can result in significant changes to land use patterns. While change is inevitable, an opportunity does exist to seek to manage change in order to preserve important habitats and species, while working in partnership with the farming community and other stakeholders.

THE NPWS FARM PLAN SCHEME

Since its establishment in 1979, NPWS has engaged in local management agreements with landowners. This was initially mainly on an *ad hoc* basis, as required. For example, fertiliser may have been purchased in the spring for a farmer who facilitated a flock of Whooper Swans or White-fronted Geese

over the winter months. This was, in essence, a locally-led approach. At the turn of the millennium however, it became apparent that there was a need for a structured mechanism of supports for targeted action and agreements between NPWS and local landowners and from this, the NPWS Farm Plan Scheme was developed.

The National Parks and Wildlife Service runs a Farm Plan Scheme (www.npws.ie/farmers-and-landowners/schemes/npws-farm-plan-scheme) to work with farmers to develop and deliver plans to create, maintain and enhance conditions for some of Ireland's most important habitats and species. Lessons learned, at what is a relatively small scale, can inform approaches to deliver on Ireland's biodiversity commitments (Bleasdale and O'Donoghue, 2015). The NPWS Farm Plan Scheme provides an important learning opportunity to test measures prior to national application, where appropriate, by the Department of Agriculture, Food and the Marine (DAFM) (Bleasdale and Dromey, 2011). In some cases, at certain scales and for more specific interventions, the NPWS Farm Plan Scheme may be the most suitable and responsive mechanism for incentivising conservation.

The NPWS Farm Plan Scheme was launched in 2006 after a period of planning and development involving NPWS officials, contracted agri-environmental planners and pilot farmers. The scheme is underpinned by a published set of Terms and Conditions, (www.npws.ie/sites/default/files/files/npws-farm-plan-scheme-terms-conditions-2017.pdf) that outline the various administrative protocols and parameters relating to farm plans, as well as the obligations of the plan participant, farm planner and NPWS administrators.

At farm level, measures are tailored towards the biodiversity and management requirements of particular fields or areas of conservation importance. In total, 779 NPWS farm plans have been approved. Plans are typically of five-year duration, with the participant free to leave at any time. To date, the NPWS Farm Plan Scheme has developed ten broad plan types (Table 7.1) across a wide geographical distribution (Figure 7.1). As different undertakings are required for different species or habitats, standard payment rates differ across the range of plan types (Table 7.1).

The NPWS Farm Plan Scheme has to date focussed predominantly on birds (Fig. 7.1), with more than 53% of plans targeted at Breeding Waders, Chough (*Pyrrhocorax pyrrhocorax*), Corncrake (*Crex crex*), Geese/Swans and Hen Harrier (*Circus cyaneus*). In addition, the commonage and Shannon

Callows plans were initially driven by concern for bird species (primarily Red Grouse and Corncrake respectively). All of these species are listed as Birds of Conservation Concern in Ireland (Colhoun & Cummins, 2013) and all of the bird plans to date have been based in Special Protection Areas.

Between February 2006 and 2019, a total of approximately €28 million was spent in circa 23,000ha under the scheme. This average investment of approximately €2m per annum has provided an opportunity to develop appropriate methods of managing the targeted habitats and species and to receive feedback from farmers, ecologists and planners. This experience informed the NPWS advice to DAFM on measures for consideration under the Irish Rural Development Programme and CAP Strategic Plan. It also provided financial supports to farmers with High Nature Value (HNV) farmland across various parts of Ireland, primarily in designated areas.

Below:
Figure 7.1
Distribution of NPWS farm plans according to type and proportion

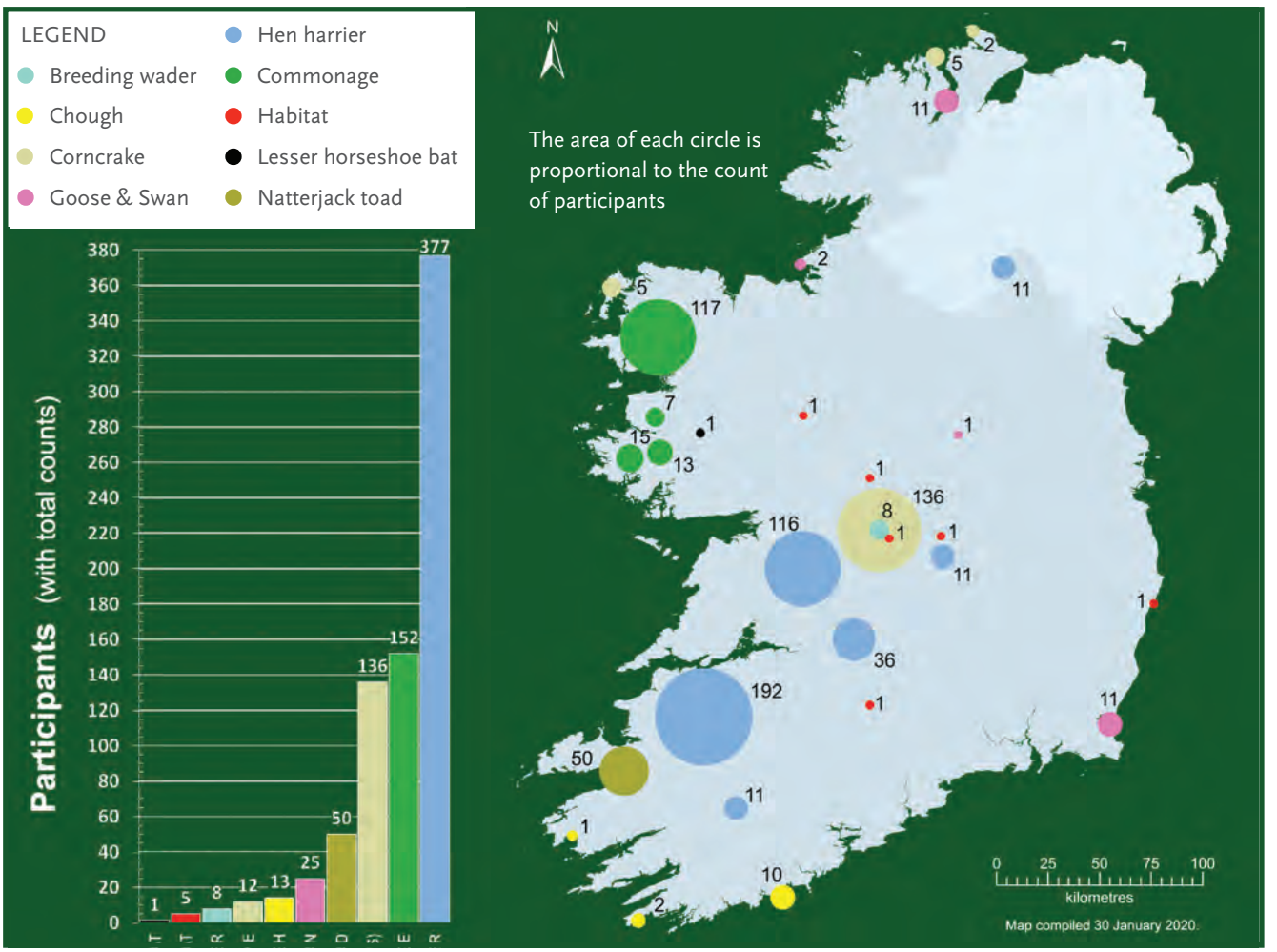


Table 7.1.

TYPES OF NPWS FARM PLANS, NUMBER OF PLANS AND MEDIAN PAYMENTS FOR THESE PLANS

PLAN TYPE (COMMENCEMENT DATE)	NUMBER OF PLANS	MEDIAN PAYMENT PER PARTICIPANT (€)
Commonage (2006)	186	N/A
Habitat plans – dune, fen, turlough, esker (various dates)	5	12,459
Geese and Swans (2006)	25	11,549
Shannon Callows (2008)	136	2,239
Corncrake – outside the Shannon Callows (2012)	12	5,460
Chough (2008)	13	4,195
Hen Harrier (2008)	377	7,347
Natterjack Toad (2008)	50	1,000
Lesser horseshoe bat (2017)	1	4,337
Breeding Wader (2014)	8	8,977

Farmers involved in the scheme have often commented that the interest shown in their farm *via* the NPWS Farm Plan Scheme gave them a sense of pride because the land that was heretofore termed 'marginal' was now at the centre of considerations for the NPWS and that their management of that land was important.

Payments for engaging in measures are based on costs incurred or income foregone and are roughly the same as payments for similar measures in, for example, the Green, Low-carbon Agri-environment Scheme (GLAS) implemented by DAFM. However there are some important differences, depending on the measure and the approach taken by either NPWS or DAFM. For example, there is not an overall individual cap on the amount a participant can receive in the NPWS Farm Plan Scheme (it is limited at €5,000/year per participant for GLAS and €2,000/year for GLAS+). Another point of difference is that payments for the creation of Early Late Cover in NPWS Corncrake farm plans are costed and paid separately from meadow payments, focussing attention and money on the component parts, whereas GLAS pays a flat per hectare payment. The NPWS Farm Plan Scheme for Corncrake also allows cutting if birds are not present, thereby being more adaptive and responsive. The NPWS Farm Plan Scheme is designed to be flexible and, subject to funding being made available, plans and new approaches could be further developed for a range of habitats or species.

The Prioritised Action Framework for Ireland (www.npws.ie/news/prioritised-action-framework-launch) prioritises the objectives and types of conservation measures, and where these measures will be delivered, as required by Article 8 of the Habitats Directive. In addition, plans are also considered where NPWS identify a requirement for delivering interventions that will (a) help a particular site, habitat or species achieve favourable conservation condition and/or (b) provide useful experience in managing for a habitat or species heretofore not catered for under the agri-environment schemes of the Rural Development Programme/CAP Strategic Plan. The scheme is not targeted according to geographic location, rather towards some of the most important conservation sites or sites in greatest need of intervention. In accordance with previous iterations of the NPWS Farm Plan Scheme, farm plans have occurred in Natura sites, although this is no longer a prerequisite for entry to the scheme.

Prior to budgetary constraints the Scheme was open for general entry for particular measures; however, selection and entry to the Scheme is now undertaken by the National Parks and Wildlife Service, rather than by general application. Because the scheme is acting predominantly as a test bed to trial new or particular approaches, farmers or sites with particular habitats or species are targeted. The Prioritised Action Framework informs decisions on what habitat or species targets are prioritised, or what farms are targeted for entry to the NPWS Farm Plan Scheme. The NPWS also considers: the return that can be gained from investing in a particular plan; the expected biodiversity outcome; the learnings that can be taken forward and the potential of the plan to inform future AES measures.

Farmers that are in other national AES are generally not eligible to join the NPWS Farm Plan Scheme, unless it can be clearly shown that measures undertaken in either scheme are entirely separate or complementary to avoid any risk of double-funding, i.e. paying for similar actions or outcomes on the same land.

OVERVIEW OF FARM PLAN SCHEME DELIVERED TO DATE

Commonage plans

The management of commonage land with respect to grazing has been a cause of significant concern since the early 1980s. Ireland committed to undertake a comprehensive assessment of the condition of commonages throughout the country and surveys commenced in 1999 and continued until 2006. The surveys were jointly administered by the Department

of Agriculture and the NPWS. Circa 440,000 ha of commonage was surveyed by 50 teams of trained planners resulting in the preparation of approximately 4,400 commonage framework plans (CFPs). The findings of the commonage plans were communicated to the relevant farmers with sheep quota in October 2002 by the Department of Agriculture. Sheep were destocked, where necessary, arising from the findings of the CFPs.

Subsequently NPWS co-ordinated a re-assessment of some large commonage blocks commencing in 2004 and 2005. The resurvey of commonage blocks continued until 2010. Two large blocks in Counties Mayo and Galway were deemed to not have demonstrated sufficient recovery and consequently further grazing interventions were required. These interventions commenced in the Owenduff/Nephin Complex SPA in November 2006, to run for a five year period. A similar intervention commenced in the Twelve Bens/Garraun and the Maumturk Mountain Complex SACs in November 2008 for a five year period. Farm plans were prepared that specified reduced stocking levels, as required, and off-wintering as mandatory on commonages. These interventions were co-ordinated by NPWS and operated across REPS, AEOS and NPWS Farm Plan schemes. REPS and AEOS farmers were paid €2,000 per annum for compliance with the additional grazing restrictions in the Co. Mayo and Co. Galway grazing restriction areas. Farmers in the NPWS farm plan were compensated for off-wintering and destocking, at agreed rates.

Arising from a second resurvey in the Owenduff/Nephin range in 2010, it was concluded that some areas were showing significant recovery but approximately half of the SPA had not recovered to a sufficient extent, and revised restrictions were necessary for a further two years. Both grazing interventions concluded in November 2013.

A separate evaluation of commonages (in 2008) which had a destocking greater than 50% showed that significant recovery had been delivered at a national level in the years since the original CFPs were prepared.

Geese and Swans

Ireland is of international importance in terms of the numbers of Greenland White-fronted Geese *(Anser albifrons flavirostris*) and Whooper Swans (*Cygnus cygnus*) that visit every winter. In recent decades these birds are mainly found on improved agricultural grassland, where they make use of the grass for feeding before they return to their breeding grounds in Greenland and Iceland respectively. This is an obvious imposition on the farmers who

manage the fields these birds feed on, resulting in a reduced sward or "bank of grass", in addition to a "panned" or compacted field surface. The NPWS Farm Plan Scheme works with farmers to facilitate significant numbers of geese and swans in the winter period, by delivering a quality sward of c. 15cm on grassland and generally closing off from grazing of livestock and machinery operations from mid-October to March.

One of the first NPWS farm plans accommodated over 800 Greenland White-fronted Geese, over 1,500 Whooper Swans and over 1,200 Greylag Geese (*Anser anser*) in an intensive farm in an SPA in Donegal.

CASE STUDY
WEXFORD SLOBS

The Wexford Harbour and Slobs area in south east Ireland are of international importance for several species of waterbirds and support an average of close to 50,000 waterbirds each winter, making it one of the top three sites in the country for numbers and diversity of wintering birds. The combination of estuarine habitats, including shallow waters for grebes, diving duck and seaduck, and the farmland of the polders, which include freshwater drainage channels, provides optimum feeding and roost areas for a wide range of species. It is one of the two most important sites in the world for Greenland White-fronted Goose (close to 10,000 birds per annum). The geese feed almost entirely within the Slobs and roost at The Raven (a separate SPA). The site also has internationally important populations of Mute Swan (543), Light-bellied Brent Goose (1,469), Bar-tailed Godwit (1,696) and Black-tailed Godwit (790).

Obviously, this number of wildfowl, in particular geese and swans, has the potential to come into conflict with farming, given the birds will eat grass and crops as well as lead to panning of the surface and a lag in the growth of grass in the spring. The NPWS Farm Plan Scheme has been instrumental in maintaining positive relationships between farmers and conservation interests in the area. One of the most interesting features of the approach taken with these farm plans, of which there have been 11, covering some 1,338 ha, has been that they have effectively been managed as an overall unit, by one farm planner, enabling management at a landscape scale. The birds obviously do not operate on a farm by farm basis, rather take an overview of the landscape themselves and select the best places from day to day. The approach here has enabled coherent planning on a multiannual basis, to ensure that there is always a rotation of high quality habitat across the overall area. For example, spreading of slurry has been managed to ensure there is always a substantial area that is 'clean' and not recently treated, while reseeding of lands has similarly been undertaken on a rotational basis to ensure that there is always a substantial area of lush green growth available for the geese or swans.

Figure 7.2
Wexford Slobs © Alyn Walsh, NPWS

Chough

The Irish Chough population makes up approximately 60% of a geographically distinct and isolated northwest European population of circa 1,500 pairs. Chough is listed in Annex 1 of the Birds Directive and SPAs were designated in Counties Waterford, Cork, Kerry, Clare and Donegal and an NPWS farm plan prescription developed in tandem for interested farmers. This primarily entailed maintaining and enhancing habitats such as earthen or stone embankments, maritime turf and coastal heath and dry acid grassland. Areas of scrub were removed where appropriate, to allow increased foraging area. Silage cutting and grazing regimes were tailored to ensure that at least 40% of the target area was a "tight sward" of 2-3cm, which favours the Chough's requirement to feed on surface and soil invertebrates. Where farmers had to carry out dosing of livestock, plan participants were required to avoid ivermectins and use levamisoles and cypermectins.

Corncrake (including Shannon Callows)

The modernisation of agriculture has impacted negatively on traditional strongholds for Corncrake in Ireland. Since 1993, the NPWS have been proactively working with farmers to protect Corncrake adults, nests and chicks from mowing. A responsive or adaptive approach is required to conserve this species, given the nature of its ecology. The efforts for Corncrake in the NPWS Farm Plan Scheme were initially focussed in the Middle Shannon Callows SPA and subsequently efforts have been delivered in the other SPAs selected for Corncrake in accordance with a national policy framework (NPWS, 2014).

The Shannon Callows is one of the great floodplains in north-west Europe and is very important for biodiversity; it was previously also important for Corncrake. The NPWS Farm Plan Scheme attempted to manage cutting of meadows at farm and site level in a staggered way (i.e. varying dates) over the 5 years of the plan, and to deliver centre-out mowing to ensure the conservation of the species. The NPWS Farm Plan Scheme was delivered in parallel to REPS (Rural Environment Protection Scheme), and follow on AEOS (Agri Environment Options Scheme) plans for Corncrake in the SPA, and it was hoped that the integrated effort would serve to increase the breeding and hatching success of the species in the site. The measures for Corncrake in the NPWS Farm Plan Scheme were delivered in association with a prescription for traditional management of grazed lands, to maintain an extensively farmed system overall.

Although there are still NPWS farm plans and GLAS plans active in the Shannon Callows, the last Corncrake type plan under the NPWS Farm Plan Scheme expired in 2013. The conclusion of efforts for Corncrake in the site was as a result of the functional extinction of the species in the site, despite the specific conservation efforts described above. It is concluded that the frequency and duration of summer flooding in the site, as well as heavy predation rates resulted in the poor breeding and hatching of the species in the meadows on the Callows.

In 2013, a new approach to engaging with farmers for Corncrake conservation was piloted in the last remaining Corncrake strongholds. The main premise of this is to "forward plan"; to attract birds to particular fields that would be "set aside" for Corncrakes. Early and Late Cover (ELC) stands of vegetation (primarily nettle beds, although other options are available) are introduced within or adjacent to those fields, whereby these stands would be available and attractive before the general grassland area

would have grown in the summer. The farmer is paid to delay mowing, grazing and field operations until 15 July at the earliest. If the fields become 'active' (i.e. hold a calling male or breeding Corncrakes), mowing is held off until 20 August or 01 September and the farmer is paid accordingly. The creation of ELC entails significant field skills and dedication and is paid at an enhanced rate, compared to the delayed mowing element of the plan.

In addition to the NPWS Farm Plan Scheme in the SPAs, a separate Corncrake Grant Scheme (CGS) is operated by NPWS regional management to provide a means within and outside the SPA network to work with farmers to protect Corncrake. This 'toolbox approach' is necessary when dealing with species such as Corncrake.

Above from left to right

Figure 7.3

Species-rich meadow produced as part of an NPWS Corncrake farm plan © Barry O'Donoghue, NPWS

Figure 7.4

Creating a cover crops, including as early cover for Corncrake upon their arrival from Africa © Feargal Ó Cuinneagáin

Figure 7.5

The created nettle bed, which also serves as cover through the entire Corncrake breeding season © Feargal Ó Cuinneagáin

CASE STUDY
MULLET PENINSULA

It is fair to say that Feargal Ó Cuinneagáin is not a "typical farmer". He is a vet, who farms land for Corncrakes and for various other rare and common species, as well as producing crops of hay or silage for neighbouring farmers each year. Feargal bought a 10 hectare plot on the Mullet Peninsula in Co. Mayo with the sole purpose of helping Corncrake. The National Parks & Wildlife Service (NPWS) and Feargal entered an agreement under the NPWS Farm Plan Scheme in March 2016. The objective of the plan was to return Corncrakes to the farm, but also to take a holistic approach to supporting biodiversity including Twite (another 'red-list' bird), Chough, Barnacle Geese, pollinators, and habitats in their own right. The Agri-Ecology Unit of NPWS and Michael Martyn Agri-Environment Consultants worked closely with Feargal in designing and implementing a series of measures to convert what was a monoculture of grass to diverse hay meadows that would have been commonplace throughout the Irish countryside in previous generations.

Michael Martyn, the farm planner explains what changes have taken place, from the first turning of the sod:

> "It is said create the habitat and the species will come. On this farm the species rich meadows with abundant yellow rattle produce an open sward favoured by the Corncrake for nesting. But early in the season when the Corncrake arrives back from overwintering in Africa to begin the breeding cycle again, nesting cover and food source is in very short supply in this

Figure 7.6
A happy farm plan participant with results in the background © Feargal Ó Cuinneagáin

exposed coastal landscape. In response to this, the plan set about creating Early and Late cover (ELC) plots. If Corncrake arrive onsite, mowing is delayed until late summer. The centre-out mowing is used and a generous headland remains uncut and this and the ELC margin provide a refuge for broods to escape into cover safely. For Twite and other farmland birds, a cereal/brassica mix such as kale, mustard or radish and triticale was sown. This creates both a Summer/Autumn crop and a Winter crop producing bird seed of different sizes, insect food and cover while doing so in the 'hungry gap', the late Winter/ early Spring period. The plan adopts a holistic approach, creating the traditional agricultural habitat mosaic and restoring natural habitats on the farm."

Feargal, who has a great appreciation for wildlife, has been delighted with results delivered within a short few years.

"For me, entering the NPWS scheme has been a welcome boost due to the farming income I receive, as well as having advisory support. Since I joined, there has been a remarkable increase in the rare and threatened wildlife on my farm. Twite arrived in 2017 with at least twenty six birds feeding on the crop we created. There were no Corncrakes present when I joined, and in the summer of 2018 there were six calling males. In the winter, Barnacle Geese graze on the farm. The air is filled with the sound of Skylarks in the summer. A family of Chough have started to nest in a neighbouring derelict building, after I installed a nest box provided by the NPWS. I have also managed the hay meadow, specifically by focussing on Red Clover, as well as planting Phacelia and Kale, resulting in a benefit to the threatened Great Yellow Bumblebee."

Figure 7.7
Successful planting and establishment of a new fruit bearing hedgerow comprising native species, introduced as part of a Hen Harrier farm plan. © Barry O'Donoghue, NPWS

Hen Harrier

The Hen Harrier is an Annex I species that has seen significant declines in Ireland as a result of changes in the upland landscape. Afforestation (primarily with Sitka Spruce) of natural and semi-natural habitats including heather moorland and HNV farmland, has been a significant change in this landscape in recent decades, in association with other factors such as decoupling of farm payments, an ageing farming population, rural population decline, limited succession and increased predation. These factors have had consequences for the suite of open landscape and ground nesting bird species that once flourished in these areas including Skylark (*Alauda arvensis*), Meadow Pipit (*Anthus pratensis*), Red Grouse (*Lagopus lagopus*), Curlew (*Numenius arquata*), Snipe (*Gallinago gallinago*) etc. The Hen Harrier, being a bird of prey, is an indicator species and a decline from an estimated 250-300 breeding pairs in the 1970s to 108 confirmed breeding pairs in 2015 may reflect a wider decline in biodiversity and ecosystem health. The intensification of agriculture, including reclamation,

reseeding, removal of scrub habitat, unmanaged burning etc., have also had a negative effect. In 2007, in tandem with the designation of the SPAs, NPWS introduced a measure for Hen Harrier under the NPWS Farm Plan Scheme. The primary approach taken was to support and deliver a mosaic of habitats including tussocky vegetation, scrub, rush, hedgerows and wild bird cover, through appropriate grazing or capital works. There was significant interest in this scheme by farmers in the Hen Harrier SPAs.

CASE STUDY
SLIEVE BLOOMS

Conor McEvoy is a young farmer, bucking the trend of an ageing and declining farmer population managing High Nature Value farmland in the uplands. He inherited his father's farm in the Slieve Blooms in Co. Laois in 2017. This land has been in his family for generations. At the time when the farm plan came into place, Conor's father Eamonn was just about to completely plant the farm with forestry, predominantly Sitka Spruce.

> "The farm plan was effectively the first time that the State seemed to value our type of land" says Conor. "Until then, our generally wet and poor agricultural land was something we were conditioned into thinking was something to be ashamed of, certainly nothing to be proud of. I have often heard of this land being referred to as 'forestry land', that it was good for nothing else really. Many of our neighbours left farming when they opted for the large Government grants to plant their land. We very nearly went the same way. The farm plan valued the habitats and the species that shared the farm with our cattle. It gave us a sense of pride, that our farm and our management were very important for a magnificent bird called the Hen Harrier, which is rare in Ireland and across Europe. I am proud to continue to look after my family's heritage, but so too the natural heritage of the area."

This newfound sense of pride in their management and land inspired Conor and his father Eamonn to bring in particular types of stock, including highland cattle and ponies that would open up some of the areas that were being dominated by scrub. They created 'rides' through thick gorse to increase the surface area and linear habitats available for harriers to hunt and for passerines and small mammals to live. They trialled strip mowing of rushes, which was later applied in the national agri-environment scheme, GLAS. They created over 200m of new native hedgerow, including fruit bearing trees that would serve to feed small birds and small mammals over the winter. They cleaned up areas of the farm that had been damaged by supplementary feeding and they grew a hectare of wild bird cover, which hosts bird life and small mammals. This was the first trial

Figure 7.8
Conor and Eamonn McEvoy, continuing their family heritage of farming with nature. © Barry O'Donoghue, NPWS

> **"The farm plan valued the habitats and the species that shared the farm with our cattle. It gave us a sense of pride, that our farm and our management were very important for a magnificent bird called the Hen Harrier, which is rare in Ireland and across Europe.**

of a results-based Hen Harrier farm plan, which has now been applied more widely by the Hen Harrier Project EIP (European Innovation Partnership). The habitat quality on the farm has improved over the years and sightings of hunting Hen Harriers are now commonplace each summer, a sign that the farm is obviously hosting significant numbers of other wildlife.


HITACHI

Natterjack Toad

The Natterjack Toad (*Epidalea calamita*) is Ireland's only native toad species and is listed on Annex IV of the Habitats Directive. The natural range of the Natterjack Toad in Ireland is confined to a small number of coastal sites on the Dingle and Iveragh peninsulas in Co. Kerry. This range has contracted substantially from what it once was and individual sites were becoming geographically isolated from one another, with risks of associated genetic bottlenecks and population unviability. In 2007, NPWS developed a measure to counter this by providing new ponds for the toads to breed in and to enhance the connectivity between sites. There has subsequently been good uptake, across approximately 50 farms, where 94 ponds were created. As the toad requires a short sward to physically chase its prey, but with tussocks to support invertebrate prey, grazing is a key consideration of these plans also. The most recent monitoring report found good evidence of the new ponds being colonised with successful spawning at some of those sites (Sweeney et al., 2013).

from top:

Figure 7.9
Male and female Natterjack Toads in amplexus, with spawn strings.
© Barry O'Donoghue, NPWS

Figure 7.10
Natterjack Toad pond being created in County Kerry.
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Breeding Waders

Breeding Waders are a particularly vulnerable group of ground nesting birds and farm plans were developed in cooperation with BirdWatch Ireland in the Shannon Callows for Lapwing (*Vanellus vanellus*), Snipe, Redshank (*Tringa totanus*) and Curlew as a group. The NPWS initially ran a "Breeding Wader Grant Scheme" from 2006 to 2015, with a set prescription including stocking rates and exclusion dates. In 2014, the first attempt at a results-based scheme for breeding waders in Ireland was trialled, with a scorecard developed and implemented. This was then further developed in the RBAPS project (https://rbaps.eu/; see Chapter 6) which was implemented in Ireland from 2015 to 2018.

Lesser Horseshoe Bat

The Lesser Horseshoe Bat (*Rhinolophus hipposideros*) is an Annex II species that is found in Ireland only in counties Cork, Kerry, Limerick, Clare, Galway and Mayo. It breeds mainly in old buildings such as farmhouses and outbuildings. It uses the farmed landscape primarily through the connectivity of hedgerows and is often associated with nearby native woodland. In 2017, NPWS introduced the first farm plan for Lesser Horseshoe Bat, focussing

on the connectivity foraging/commuting routes, provision of night roosts (away from the main roost), avoidance of ivermectins and the securing of a maternity roost, which was in danger of collapse. The plan is primarily driven by capital intervention in Year 1, with an annual payment thereafter for maintenance. The plan also serves a useful purpose as a trial for applying a results-based approach to planning for Lesser Horseshoe Bats, by monitoring the quality of habitat before and after intervention. It has been shown that such interventions have a positive effect, with increased bat numbers at roosts even within the first year after work.

Habitat-focussed plans

The NPWS farm plans targeted at commonage, dunes, eskers, fens, and turloughs could essentially be categorised as grazing type plans, whereby the NPWS Farm Planner worked out an appropriate stocking rate and grazing regime and provided a prescription for the plan participant to follow. In some cases, interventions are also required to manage scrub that may impact negatively on the habitat in question.

Other plans, measures and programmes

In addition to the NPWS Farm Plan Scheme, NPWS have also invested in the following types of agreements with landowners:

- Curlew Conservation Programme (https://www.npws.ie/farmers-and-landowners/schemes/curlew-conservation-programme)
- Corncrake Grant Scheme
- Land leasing/conacre

It is important to retain a range of tools in the farm planning toolkit, to suit particular requirements. For example, the Corncrake Grant Scheme is a very important facility to draw upon where Corncrake nest in fields that are not covered by existing NPWS or DAFM contracts with farmers and where the farmer is encouraged into an annual commitment to manage for Corncrake in the year in question.

ENGAGING FARM PLANNERS

Agri-environmental planners have been trained by NPWS on particular conservation issues and to enable farm plan preparation since the inception of the scheme. This included classroom sessions and field visits, with direction and leadership from respective experts on particular habitats or species. A panel of farm planners was formed for particular plan types, from which a prospective applicant can select a planner to prepare a farm plan. In certain cases, specialists were brought in as the farm planners, and no training was required i.e. they were fully competent on what was required in particular instances for particular species or habitats.

The farm planner is contracted by NPWS to identify the habitats and species on the farm, consider issues at field level, liaise with the landowner(s) and design actions that the plan participant is to follow in order to maintain, enhance, restore or create habitats. NPWS pay for the farm planner, to maintain independence from the plan participant and thus the integrity of the plan and annual compliance certification.

In addition, up to 10% of the plans are audited each year, to ensure that what is being paid for is what is being delivered in terms of habitat, and that all paperwork is in order, including the annual compliance certification of the farm planner. Farm planners are considered on probation for particular plan types until one of their first three plans has been audited and approved. If the standard of farm plan is at that stage deemed adequate, the planner receives approved planner status. If the standard of the audited plan is not deemed adequate by the NPWS, the planner will be allowed to produce one more plan. This plan will be audited, if it is deemed adequate the planner will receive approval. If this second audited plan is not deemed adequate the probationary approval will be revoked. There is regular engagement between NPWS and approved farm planners, with drafts of farm plans being discussed and developed in a collaborative manner. Throughout the lifetime of any plan, there is ongoing communication between the planner and NPWS and the plan participant, with a view to consolidating positive results and building towards progression.

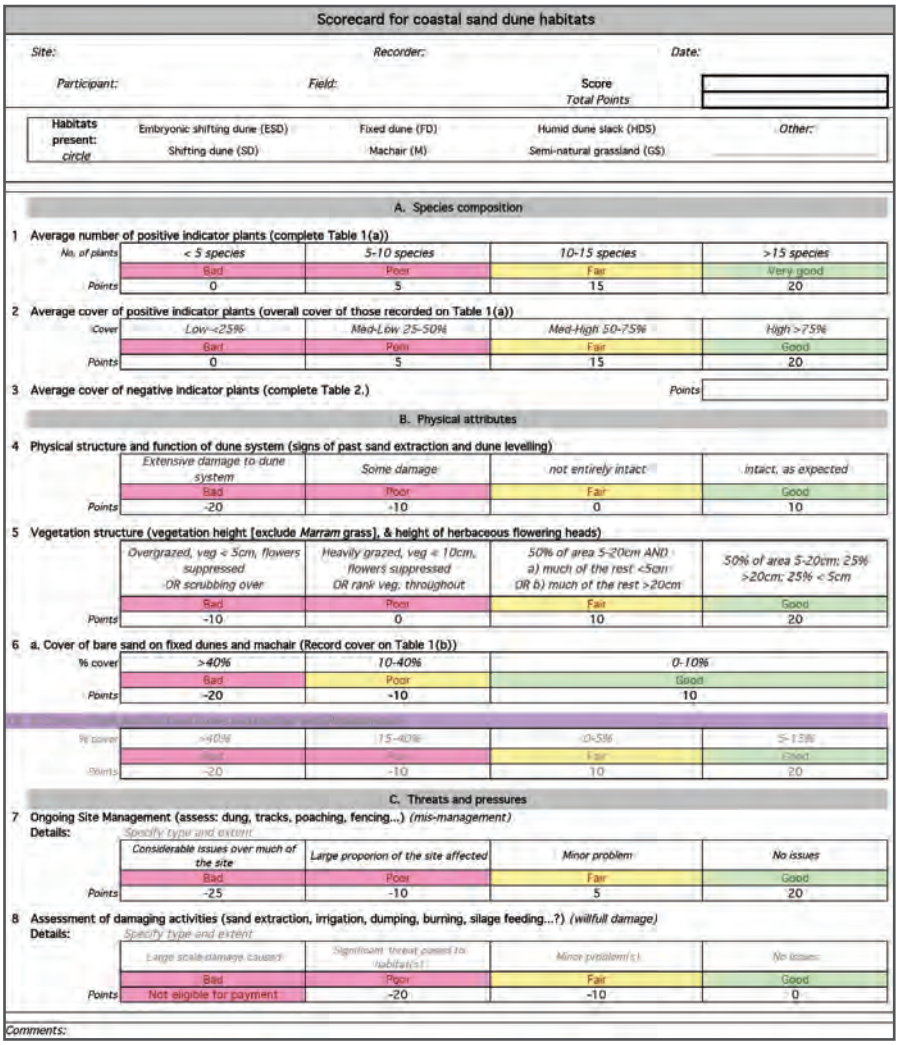
PRESCRIPTION-BASED OR RESULTS-BASED NPWS FARM PLANS?

The main approach adopted by the NPWS Farm Plan Scheme since its introduction in 2006 has been a prescriptive one. These prescriptions were developed in tandem with habitat or species specialists and agri-environmental planners. While farming organisations would have been consulted at a general level, the prescriptions themselves were not informed by farmers. However, on the ground, NPWS farm plans have always maintained the flexibility to work with what makes best sense for the farmer, provided the intended results are achieved. Over the years, new ways of approaching the delivery of habitat condition have been informed by farmers, to varying degrees, largely dependent on how much the farmer 'bought into' the overall objectives of the scheme. The flexible approach of the NPWS Farm Plan Scheme allows new information, whether scientific or practical, to be brought into measures on the ground.

Looking at Article 12 (Birds Directive) or Article 17 (Habitats Directive) assessments for habitats or species relevant to the NPWS Farm Plan Scheme, it is difficult to translate national trends for a habitat or species to the outputs of a relatively limited NPWS Farm Plan Scheme operating in discrete geographical areas. While intuitively the NPWS plans have contributed positively to biodiversity, it is difficult to always make direct links between these interventions and the conservation status of habitats or species either locally or nationally. Results were largely measured in terms of whether the farm plan participant abided by his/her prescriptions or not e.g. were the rushes cut, was the pond created, was the hedgerow planted, the scrub cleared, the sheep off-wintered, the fence erected or the field reseeded, and so on.

NPWS has an ambition to better document the results of measures delivered in existing plans. Since 2015, NPWS have also moved towards measuring quality of habitat on an annual basis. The NPWS Farm Plan Scheme was the first to employ quality scoring for breeding wader, Hen Harrier and Lesser Horseshoe Bat. Since 2019, the Scheme is trialling scoring of farm plans for Esker and coastal grasslands and Corncrake habitat. Precisely determining the return for investments in agri-environment schemes across Europe has been an on-going issue. It is clear that close evaluation of impacts is needed (EU Commission, 2011) and that results-based payments offer a new approach to achieve results and measure impact (Maher et al., 2015). It is the intention of NPWS to have a clear results-

based focus in all future NPWS farm plans. This is to ensure the Farm Plan Scheme can measure the impact of interventions and, in parallel, incentivise participants to strive to deliver the best condition habitat that they can. With the prescriptive approach that has been largely employed to date, participants were not encouraged to strive for optimal condition. At the same time, NPWS intend to retain what some refer to as a 'hybrid' approach, to pay for supporting measures to allow the plan participant to increase their score (and subsequently increase the value of the habitat or environment). Direct results have been observed for breeding waders from interventions such as predator-proof fences, scrub clearance or scrape creation that would not have been realised by scoring the quality of the habitat alone.



Scorecard for coastal sand dune habitats

Site: *Recorder:* *Date:*

Participant: *Field:* Score / *Total Points*

Habitats present: *circle*				
	Embryonic shifting dune (ESD)	Fixed dune (FD)	Humid dune slack (HDS)	*Other:*
	Shifting dune (SD)	Machair (M)	Semi-natural grassland (GS)	

A. Species composition

1 Average number of positive indicator plants (complete Table 1(a))

No. of plants	*< 5 species*	*5-10 species*	*10-15 species*	*>15 species*
	Bad	Poor	Fair	Very good
Points	0	5	15	20

2 Average cover of positive indicator plants (overall cover of those recorded on Table 1(a))

Cover	*Low=<25%*	*Med-Low 25-50%*	*Med-High 50-75%*	*High >75%*
	Bad	Poor	Fair	Good
Points	0	5	15	20

3 Average cover of negative indicator plants (complete Table 2.) *Points*

B. Physical attributes

4 Physical structure and function of dune system (signs of past sand extraction and dune levelling)

	Extensive damage to dune system	*Some damage*	*not entirely intact*	*intact, as expected*
	Bad	Poor	Fair	Good
Points	-20	-10	0	10

5 Vegetation structure (vegetation height [exclude *Marram* grass], & height of herbaceous flowering heads)

	Overgrazed, veg < 5cm, flowers suppressed OR scrubbing over	*Heavily grazed, veg < 10cm, flowers suppressed OR rank veg. throughout*	*50% of area 5-20cm AND a) much of the rest <5cm OR b) much of the rest >20cm*	*50% of area 5-20cm; 25% >20cm; 25% < 5cm*
	Bad	Poor	Fair	Good
Points	-10	0	10	20

6 a. Cover of bare sand on fixed dunes and machair (Record cover on Table 1(b))

% cover	*>40%*	*10-40%*	*0-10%*
	Bad	Poor	Good
Points	-20	-10	10

% cover	*>40%*	*15-40%*	*0-5%*	*5-15%*
	Bad	Poor	Fair	Good
Points	-20	-10	10	20

C. Threats and pressures

7 Ongoing Site Management (assess: dung, tracks, poaching, fencing...) *(mis-management)*
Details: *Specify type and extent*

	Considerable issues over much of the site	*Large proporion of the site affected*	*Minor problem*	*No issues*
	Bad	Poor	Fair	Good
Points	-25	-10	5	20

8 Assessment of damaging activities (sand extraction, irrigation, dumping, burning, silage feeding...?) *(willfull damage)*
Details: *Specify type and extent*

	Large scale damage caused	*Significant threat posed to habitat(s)*	*Minor problem(s)*	*No issues*
	Bad	Poor	Fair	Good
Points	Not eligible for payment	-20	-10	0

Comments:

Figure 7.11
Example of a scorecard for coastal grassland to be used by the NPWS Farm Plan Scheme. Higher scores will result in higher payments, thereby incentivising a reduction in threats and pressures and an increase in habitat quality.

Scoring protocols have been designed for breeding waders (which were developed during the RBAPS project), Hen Harrier (which was subsequently developed by the EIP Hen Harrier Project (www.henharrierproject.ie), Lesser Horseshoe Bat and Esker. For Lesser Horseshoe Bat, habitat features and their condition were scored for quantity and quality, focussing on two main aspects of their ecology – shelter and feeding. There is a separate section on the scorecard for roost condition (how suitable it is and how stable it is), and an additional section for hunting habitat (quantity, type, connectivity and condition of hedgerow/woodland). Scores can be increased by supporting actions, paid for by the farm plan. Specifically for esker grassland, it is intended to adapt the RBAPS species-rich grassland scorecard. A scorecard for coastal grasslands is being trialled in 2019, as is a Corncrake habitat scorecard, focussing on early cover and meadow quality.

In addition to the positive ecological impact of NPWS farm plans, there was an obvious added-value in terms of knowledge exchange between the farmer, the farm planner and the administrators. It has been encouraging to see positive relations formed and maintained, which has fostered positivity amongst the participating farmers for biodiversity. Achieving farmer buy-in and understanding of the objectives of any farm plan is critical to delivering results (Burton and Schwarz, 2013; Cullen et al., 2018). The importance of good advisory supports and regular engagement and communication cannot be underestimated in terms of realising results.

Finally, and regardless of the types of farm plan being delivered or the delivery mechanism, learning from the experiences of others is important to ensure better outcomes from such interventions into the future (Ó hUallacháin and Finn, 2011).

SELECTED RESULTS OF THE NPWS FARM PLAN SCHEME

Commonage

A resurvey of the Red Grouse population within the Owenduff/Nephin Complex SPA was carried out in 2012, ten years after such a survey was previously carried out (Murray and O'Halloran, 2003). The reduction in grazing pressure and recovery in habitat, supported by the NPWS Farm Plan Scheme and coordinated by NPWS, facilitated an increase in Red Grouse numbers in the site. This survey (Murray et al., 2013) showed that Red Grouse numbers can recover quickly when habitat is managed appropriately. This survey estimated a population of 790 – 832 birds within

the SPA, representing 3.08 – 3.25 individual birds per km². This represents an effective doubling of Red Grouse within the SPA within ten years. The off-wintering period started to take effect after 2006, and Red Grouse were seen in locations that they had not been recorded in prior to this measure. In the 2002 survey, six of the twelve 1 km² squares surveyed (50%) had no evidence whatsoever of Red Grouse, with eight of the twelve (66%) not having active pairs. The 2012 resurvey showed signs of Red Grouse in all twelve squares (100%), with active pairs also in all twelve squares (100%). Heather was estimated as having improved cover in eleven of the twelve squares (92%) in 2012 than in 2002, figures that compare favourably with Commonage monitoring data.

Similar results have been delivered elsewhere outside of the NPWS Farm Plan Scheme where active management has been undertaken. An annual survey of the Boleybrack Red Grouse Project in Co. Leitrim counted at least 85 grouse on Boleybrack Mountain in 2012. This compares to only three calling Red Grouse males encountered when the project first started in 2007. It is clear, however, that further management is required at landscape level to ensure improved management of habitats in Ireland for Red Grouse (Cummins et al., 2010, 2015)

The European Court of Justice case against Ireland, C-117/00, was closed in 2009 on foot of Irish commitments to continue interventions to resolve the serious overgrazing of hills in the grazing interventions areas in Counties Mayo and Galway, and in commonages across Ireland.

Corncrake

There were an estimated 4,000 Corncrake calling males in the early 1970s but numbers have reduced dramatically since then. While the population declines have somewhat stabilised since conservation efforts were enacted by the State in 1993 (O'Donoghue and Bleasdale, 2015), the geographical range of Corncrakes has reduced further. This includes the loss of the Corncrake population in the Shannon Callows, in spite of targeted agri-environmental measures delivered by NPWS and DAFM. Unfortunately, summer flooding during the 1990s and 2000s exacerbated the loss of the Corncrake from the Shannon Callows.

There have been some good success stories outside of the Callows where the NPWS Farm Plan Scheme assisted in creating early cover for the bird, particularly in areas where this resource is scarce. Where these early cover areas are successfully established, the birds will be attracted to them. This is

a particularly important result, as it also results in Corncrake being attracted away from the more intensive silage fields towards areas where there are commitments to delay mowing under a Farm Plan Scheme.

Hen Harrier

The measures implemented for Hen Harrier through the NPWS Farm Plan Scheme were central to securing thousands of hectares of farmed habitat to support the ecology of the species. The Scheme also helped promote positive relations between the NPWS and local landowners in the SPAs. However, approximately just 10% of landowners participated in the scheme due to the fact that many were at the time in REPS or AEOS and that the scheme was closed to general application in April 2010 due to budgetary curtailment. Nonetheless, and given the competing pressures and threats to the Hen Harrier (i.e. further afforestation, development of wind farms, increase in predator numbers, etc.), the efforts of the NPWS Farm Plan Scheme for Hen Harrier were important. The techniques and approaches delivered through the NPWS Farm Plan Scheme were instrumental in informing DAFM of prescriptions for GLAS and in progressing efforts for Hen Harrier under the European Innovation Partnership model.

Chough

For Chough, the population-scale impact of the scheme could be deduced with reasonable confidence, given that the farms involved in the Farm Plan Scheme were home to a significant proportion of the local population's habitat usage, and other land use change was not significant during the period of the plans. O'Donoghue et al. (2015) reported that over the duration of the Farm Plan Scheme for Chough in a discrete area, the breeding productivity of local Chough increased. In 2008, at the outset of the first Chough farm plans, a comprehensive survey of the Seven Heads SPA was undertaken by NPWS and BirdWatch Ireland (Trewby et al., 2010). This survey was repeated in 2012 and again in 2014. The main objectives of the surveys were to record breeding numbers, locations and productivity. The breeding productivity (young reared per attempt) of Chough in the SPA increased over the period of the Farm Plan Scheme from 1.08 in 2008 to 2.15 in 2012 and 2.50 in 2014.

Breeding waders

The provision of quality habitat structure and composition for breeding waders is obviously a key requirement of any agri-environmental measure aimed at securing their presence and breeding success at a site (Lauder and Donaghy, 2008). However, it is apparent that habitat alone is just one part of the equation and that (given the strength of meso-predator populations including fox, mink and hooded crow) predation control and nest protection is a fundamental requirement for breeding success. Sites protected with predator proof fencing have greater breeding productivity than those without (Malpas et al., 2013). Not all sites can have predator proof fencing, so direct predation control will be required in such areas. Agri-environmental measures focussed on breeding waders should always include reference to predator habitat and the need to manage it through non-productive investments.

LESSONS LEARNED

It is clear from the operation of the NPWS Farm Plan Scheme that a landscape approach is required for bird and bat species. Positive results have been realised for Greenland White-fronted Geese and Whooper Swans when actions have been planned across neighbouring farms that extend contiguously over hundreds of hectares. A piecemeal approach to breeding waders or Corncrake for example may not deliver sufficiently on a local or regional basis (for example if lands bordering a breeding wader farm plan are a haven for predators). In the absence of significantly enhanced funding, a landscape-scale approach will always be a challenge for the NPWS Farm Scheme. It is certainly something that should be encouraged in the schemes and projects such as GLAS, EIPs, INTERREG and dedicated LIFE projects, working in parallel to the NPWS farm plan scheme.

In future, it may be worth considering adopting geographical or landscape themes for Agri-Environment Schemes, rather than habitat or species themes. For example, an Agri-Environment Scheme for the Stack's Mountains of County Kerry could be an all-encompassing local programme for carbon, water, and biodiversity including Hen Harrier, Curlew, Red Grouse, Marsh Fritillary, species-rich grassland and so on.

It is clear that when operating with a limited budget, but almost unlimited demands, that it is important to strategically look at where funds are to be

directed. A deadline for applications each year would be required, to be assessed by a panel of NPWS specialists and senior management according to site specific and national needs, as well as value for money. For example, is the habitat or species already covered under another scheme, what is the conservation status of the habitat or species locally or nationally and could a new approach for a previously untargeted habitat or species be developed as an Agri-Environment Scheme through the NPWS Farm Plan Scheme?

The requirement for nest protection interventions (including direct predation control) has also been a learning point. Focussing on habitat is fundamental, but if there is a high risk of predation, enhancement of habitat is often not enough to stop that predator finding the nest and taking eggs or chicks or adults and thus rendering the time and money invested in habitat works redundant.

Non-productive investments have proven to be a vital tool in the toolbox for the NPWS Farm Plan Scheme to make immediate and telling interventions. Examples to date have included nest protection fences, wader scrapes, toad ponds, removal of scrub from threatened habitats, introduction of bird cover crops, hedgerows, securing of building structures, etc. When undertaken at an early stage in the plan, these interventions act as a springboard both in terms of actions to follow, in terms of landowner involvement and particularly in terms of ecological benefit.

In terms of participant buy-in and understanding, it is imperative that plans are clear and intuitive and not cluttered with too much information or background material. This can all be present and is often necessary, but the actions should be clearly summarised and displayed, ideally in the space of a couple of pages, with a map showing the plots and an associated table detailing what is to happen in each plot and when.

The lessons taken from the engagement on the ground in developing prescriptions for particular habitats and species have proven valuable in designing AES options and up-scaling under the Rural Development Programme. For example, all of the bird target species/groups trialled under the NPWS Farm Plan Scheme were prioritised under GLAS and some were taken forward under the European Innovation Partnerships.

In addition, lessons continue to be learned through engagement with other programmes and projects, such as the intervention being delivered at landscape scale in the Burren (Parr et al., 2010; see Chapter 3) and which is a source of inspiration both in Ireland and internationally.

PERCEPTIONS OF OTHERS

Figure 7.12
Example of NPWS Farm Plan map and layout of actions for hen harrier.

The NPWS Farm Plan Scheme is viewed by administrators, farmers, farming organisations, environmental Non-Governmental Organisations (eNGOs) and others as a valuable instrument for a number of reasons.

It provides a positive platform for engaging with farmers in some of the most important High Nature Value farmland areas of Ireland, including Natura and NHA sites. Participants in the scheme often comment that the engagement from NPWS Agri-Ecology Unit, local NPWS and the farm planner has provided them with an understanding of how important their fields are for particular habitats or species and that this in turn instilled a sense of pride and responsibility. On the other hand, it is fair to say that

a number of participants in designated areas viewed their farm plan as a form of 'compensation' for the restrictions associated with the designation. It should be borne in mind that the NPWS Farm Plan Scheme payments (as with any agri-environmental scheme) are based on participants going above their legal obligations. In the same way, local NPWS officials have commented that the NPWS Farm Plan Scheme has allowed greater and more positive communication with key farmers in their area.

The NPWS Farm Plan Scheme is generally seen as flexible and adaptable to work towards tailored solutions. A criticism however has been the capacity of the scheme to cater for as many plans as farming organisations, eNGOs or landowners would wish to see approved. In addition, and like RDP schemes, the plan duration of 5 years is seen as being too limited.

The Department of Agriculture, Food and the Marine has found the NPWS Farm Plan Scheme particularly useful in drawing upon experience of managing for particular habitats and species, prior to inclusion of measures for the same habitats and species under RDP schemes.

The NPWS recognise the importance of 'heart' in delivering sustainable conservation results. Many of the participants that have taken part in the NPWS Farm Plan Scheme have been inspired and equipped with the confidence to go above and beyond the prescriptions to create improved outcomes for the habitats and species found on their farm. This is of course chiefly due to the character of those people, but all that was needed was a recognition from the authorities of how important those individuals and the land held in their family for generations were on a local, national and international level. On a wider scale, it is important for the wider community to understand the importance of what these landowners are doing to safeguard and nurture what are becoming increasingly rare habitats and species of wildlife in Ireland. The NPWS Curlew Conservation Programme is a prime example of this. This much loved bird was once a common sound in the Irish countryside but has declined by 97% since the 1980s. Sites where the species is still surviving are a priority and what landowners do in those sites is obviously of immense importance, given that the Curlew is on the brink of extinction in Ireland and any loss from Ireland would reduce the international breeding range of the species. These landowners have been championed by the Curlew Conservation Programme and worked closely with it, in a positive and proactive way. The local communities have engaged in the conservation story, with on-going interaction and dialogue as to how important their locality is for Curlew and how proud they are

Figure 7.13
Some aspects of community engagement by the NPWS Curlew Conservation Programme. Children contributing art, education talks to local people, the Curlew Cup, and a Gaelic Football competition between local schools from Curlew areas

of this. This in turn leads to greater positivity around conservation efforts by NPWS. Indeed, most of those employed on the Curlew Conservation Programme are from the local areas themselves. It is hoped that in time, the narrative on conservation will be led by the local communities; that it is not about the Government or the EU wanting to protect Curlew, but that it is conservation by the community, because they want to keep their area special and retain the links to our natural and cultural heritage.

FUTURE POLICY CONTEXT

The NPWS Farm Plan Scheme will continue as an important scheme in the national context of;

- the Prioritised Action Framework for Ireland
- the National Biodiversity Action Plan and its contribution to the EU Biodiversity Strategy to 2020
- delivering direct interventions for nature conservation in a relatively quick and reactive and proactive way
- providing a learning opportunity for enhanced approaches to farm planning for particular habitats and species
- maintaining an interface between the NPWS, with primary responsibility for nature conservation, and those who manage the land on which the nature conservation priorities exist
- responding in a timely and proactive way to compliance cases against Ireland

NPWS has been and will continue to be involved in a number of other

initiatives to progress and shape agri-environmental policy at a national and European level. Examples to date include the Results Based Agri-environment Pilot Scheme (RBAPS), AranLIFE, KerryLIFE, the Burren Programme and LIFE Atlantic Crex.

The NPWS Farm Plan Scheme, while a national scheme, has adopted what may be considered a 'locally-led' approach. The case studies of the goose/swan in for Wexford and the Natterjack Toad plans in Kerry show how a coordinated and coherent approach can work to deliver at a landscape level necessary for the ecological requirements of the target habitats or species. The Corncrake case study shows how a plan ostensibly designed for Corncrake can grow to become something much more holistic; provided the one-to-one engagement and encouragement of an individual landowner. The Hen Harrier case study shows how one-to-one engagement can inspire a farmer to not alone continue farming, but to bring a new purpose and pride to the management of their land. Careful consideration will have to be given as to how the locally-led approach is rolled out across the country. The necessary knowledge, experience or expertise will need to be available locally or provided through appropriate supports and structures.

CONCLUSIONS

The NPWS Farm Plan Scheme has been entirely funded by the national exchequer since its inception, at a relatively small scale of operation, but nonetheless it provides an important function in the evolving agri-ecology policy space.

The NPWS seeks to engage with rural communities and farmers to ensure that habitats are enhanced and key species protected, in a way that involves the local people, provides support (both financially and in terms of advice) and is appropriate to the local level and ultimately delivers results. It provides a number of opportunities for supporting and promoting positive interaction between landowners and Ireland's natural heritage. Lessons learned through trialling innovative and bespoke measures for particular habitats and species allow better informed approaches to deliver on Ireland's biodiversity commitments. While in some cases the NPWS Farm Plan Scheme will provide an important learning opportunity for particular agri-environmental measures, in other cases it may be the most suitable and responsive mechanism for incentivising conservation. It is vital, in the

overall context of agri-environmental schemes, to retain on a relatively small scale, the facility to experiment and learn, either from failures or successes.

The NPWS Farm Plan Scheme offers a mechanism for engaging with individuals in a joint conservation effort. Each party in this process has a role to play. Although the Scheme started out as a prescriptive, expert-led, top down, approach (and this is still necessary in many cases), it has over time evolved to be more landowner and community-involved and encourages feedback and ideas that are relevant to the plan, especially from the land managers.

The NPWS through the Agri–Ecology Unit will continue to provide vision, conservation guidelines, ensure consistency of approach and administer the scheme. The regional staff of the NPWS can provide local support and site based advice to planners and participants alike. Farm planners are the principal interface between the participant and the NPWS and their enthusiasm and professionalism serves to bring conservation interests and agricultural realities closer together in this joint enterprise. Of course, the key player in implementing the measures on the ground will always be the participant. The goodwill among the owners and managers of sites/lands that are important for biodiversity is the principal resource of the scheme.

The methods of the NPWS Farm Plan Scheme are not written in stone, never to change again. Like the scheme itself it is intended to evolve practices as lessons are learned and new challenges and indeed new opportunities are encountered.

ABOUT THE NATIONAL PARKS AND WILDLIFE SERVICE/ DEPARTMENT OF CULTURE, HERITAGE & THE GAELTACHT

The Department of Culture, Heritage and the Gaeltacht has a diverse portfolio. Its broad mandate is to promote and protect Ireland's culture and heritage; to advance the use of the Irish language; and to facilitate the sustainable development of the islands. The Department is the statutory authority for nature conservation in Ireland, with responsibility for implementing national and EU nature conservation law. The Department also has a number of statutory functions under planning law, in particular in relation to plans or developments which may impact on areas designated as Special Areas of Conservation (SACs), Special Protection Areas (SPAs)

and Natural Heritage Areas (NHAs). The National Parks & Wildlife Service (NPWS) of the Department is responsible for the formulation and implementation of policy and legislation relating to nature conservation and biodiversity. Within the NPWS, the Science and Biodiversity Section is responsible for the delivery of specialist scientific information and advice. Such advice pertains to the distribution of species, habitats and sites of conservation importance, their conservation status, the management of such sites, the selection of species, habitats and sites for statutory protection and the criteria for such protection, and other specialist advice as may be required from time to time.

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Agricultural habitats cover approximately half the European Union (EU) and an estimated 50% of all species and several habitats of conservation concern in the EU depend on agricultural management. Reversing the loss of European biodiversity is clearly dependent on the conservation of farmland biodiversity.

Results-based approaches are the focus of a growing discussion about improved biodiversity conservation and environmental performance of EU agri-environmental policies. This book outlines lessons learned from a collection of Irish case studies that have implemented results-based approaches and payments for the conservation of farmland habitats and species. The case studies include prominent projects and programmes: the Burren Programme, AranLIFE, KerryLIFE, the NPWS Farm Plan Scheme and Result-Based Agri-environmental Payment Schemes (RBAPS) project.

This work is intended for an international audience of practitioners, policymakers and academics interested in results-based approaches for the conservation of biodiversity and the provision of ecosystem services.

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