



# LIFE on Machair

SAOL ar an Mhacaire



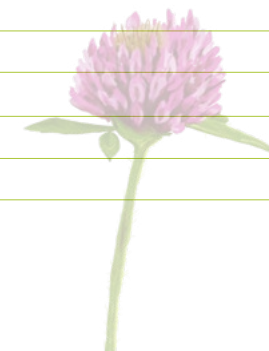


## Contents

Introduction	5
What is Machair?	6
What does Machair mean?	6
Why are Machair systems special?	7
Machair systems	8
Conservation priorities: habitats	10
Machair and Fixed dune grassland habitats	11
LIFE on Machair actions to improve habitat quality	11
Birds of Machair systems	12
Breeding waders	12
Conservation priorities	12
LIFE on Machair actions to improve wader breeding success	13
Pollinators of Machair systems	14
Conservation priorities	14
LIFE on Machair actions to improve pollinator habitat and populations	15
Other Machair species	16
Winter	16
Spring and Summer	16
Autumn	17
Wetlands and Peatlands	17
Ecosystem services	18
Project sites	20
Project objectives and outcomes	22
Project actions	24
Restoring harmony with nature	24
Getting the balance right for Machair	25
The LIFE on Machair Restoration Programme	26
Sustainable tourism and recreation	28
Education and awareness	29
EU LIFE and Natura 2000	30

### Legal notice

This project has received funding from the European Union's LIFE programme under Grant Agreement LIFE20 NAT/IE/000263 LIFE On Machair. The content of this handbook reflects only the author's view. Neither the Executive Agency for Small and Medium-sized Enterprises (EASME) nor the European Commission are responsible for any use that may be made of the information contained therein.





## Introduction

LIFE on Machair is a six year EU funded project running from 2022 to 2028. The project was developed to work with farmers, landowners and local communities in a bid to protect and restore Ireland's network of Machair systems and associated breeding wader and pollinator communities.

There are nine target areas in the project, ranging from Connemara and South Mayo, to Erris in north west Mayo, and Gweedore and Horn Head in Donegal. These target areas represent a sample of Machair sites in Ireland which are important sites for breeding waders and pollinators.

The LIFE on Machair project is being coordinated by the Department of Housing, Local Government and Heritage through collaboration with project partners the Department of Agriculture, Food and the Marine (DAFM), Teagasc and Fáilte Ireland.

The dedicated LIFE on Machair project team will seek to build on the successes of locally adapted programmes, including European Innovation Partnerships (EIPs) and other active LIFE projects, in assisting farmers and other stakeholders to forge sustainable farming and tourism that supports rural communities.



Fuair an tionscadal seo maoiniú ón gClár LIFE an Aontais Eorpaigh faoin Comhaontú Deontais Uimh. LIFE20 NAT/IE/000263 LIFE on Machair.  
This project has received funding from the European Union's LIFE programme under Grant Agreement No. LIFE20-NAT/IE/000263 LIFE on Machair.



**LIFE on Machair**  
SAOL ar an Mhacaire

[lifeonmachair.ie](http://lifeonmachair.ie)

@LIFEonMachair @LIFE-on-Machair

[info@lifeonmachair.ie](mailto:info@lifeonmachair.ie)

## What is Machair?

Machair is a unique and rare coastal system found only in Ireland and Scotland. In Ireland, it is found on the north west Atlantic coast, from Connemara to Donegal.

Machair sites provide an important refuge for threatened breeding wader bird species and pollinators in Ireland. Species such as Dunlin, Lapwing and Redshank rely on these coastal areas as important breeding areas from otherwise intensively farmed and drained wetland areas inland.

Species such as the Great Yellow Bumblebee and the Northern Colletes solitary bee occur only in Machair sites, further highlighting their important role in supporting our national biodiversity.

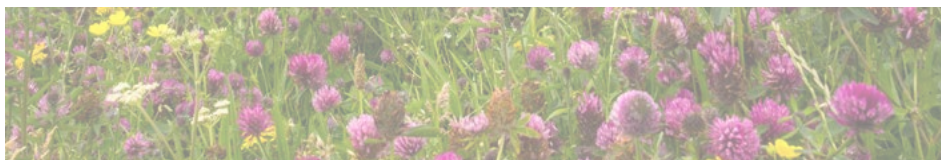
However, the degradation of the supporting Machair habitats means a sward structure that is not suitable for nesting waders (low cover and protection, reduced food resources for chick rearing) and diminishing floral resources for pollinators.

## What does Machair mean?

In Ireland, Machair sites have various names. The word Machair itself comes from Scottish Gaelic, and shares the same origin as our Irish word *maghera* which means low-lying grassy plain. Other words used to describe these areas in Ireland are *duach*, *doogah*, *dumhca* and *muirbheach*.

The names used vary regionally and in Mayo for example, the widely used term on the Mullet peninsula and Achill Island is 'sandy-banks'.

Whatever name we use, Machair sites present complex, cultural farming systems. Working at the systems level helps to ensure an over-arching view is taken to allow the array of component habitats and species co-exist with farming and other uses such as tourism, which have emerged in recent decades.



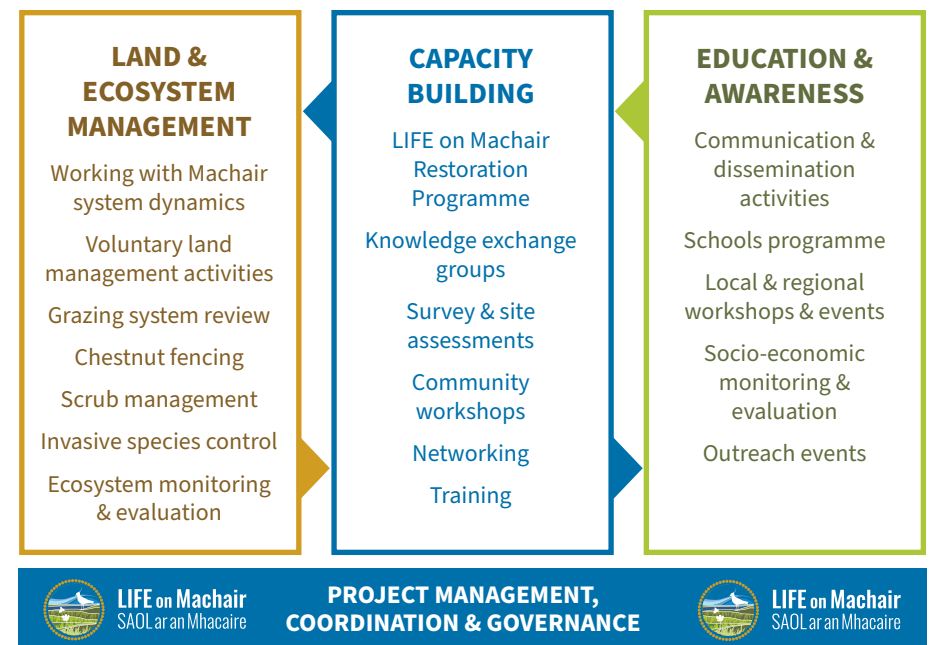
## Why are Machair systems special?

Machair systems comprise an array of unique and precious habitats. Each habitat is home to an assemblage of equally unique and precious wildlife. In LIFE on Machair we focus on nationally threatened breeding wader species and pollinator groups (bees, hoverflies, butterflies and moths).

As well as being unique and special, Machair systems also provide an array of ecosystem services including supporting farming through the grazing of animals, water flow regulation (flood mitigation) and sediment trapping, pollination, soil health, coastal protection and cultural and social heritage.

In recent decades, Machair sites provide a location for valuable recreational and tourism use, for both locals and more far-reaching visitors.

Getting the balance right for the future sustainable farming and recreational / tourism related use of Machair systems, against the backdrop of climate change is a key objective of LIFE on Machair.



# Machair system

## Breeding waders

Oyster catcher  
Roilleach  
*Haematopus ostralegus*

Lapwing  
Pilibín  
*Vanellus vanellus*

Snipe  
Naoscach  
*Gallinago gallinago*

Red-necked Phalarope  
Falaróp gobchaol  
*Phalaropus lobatus*

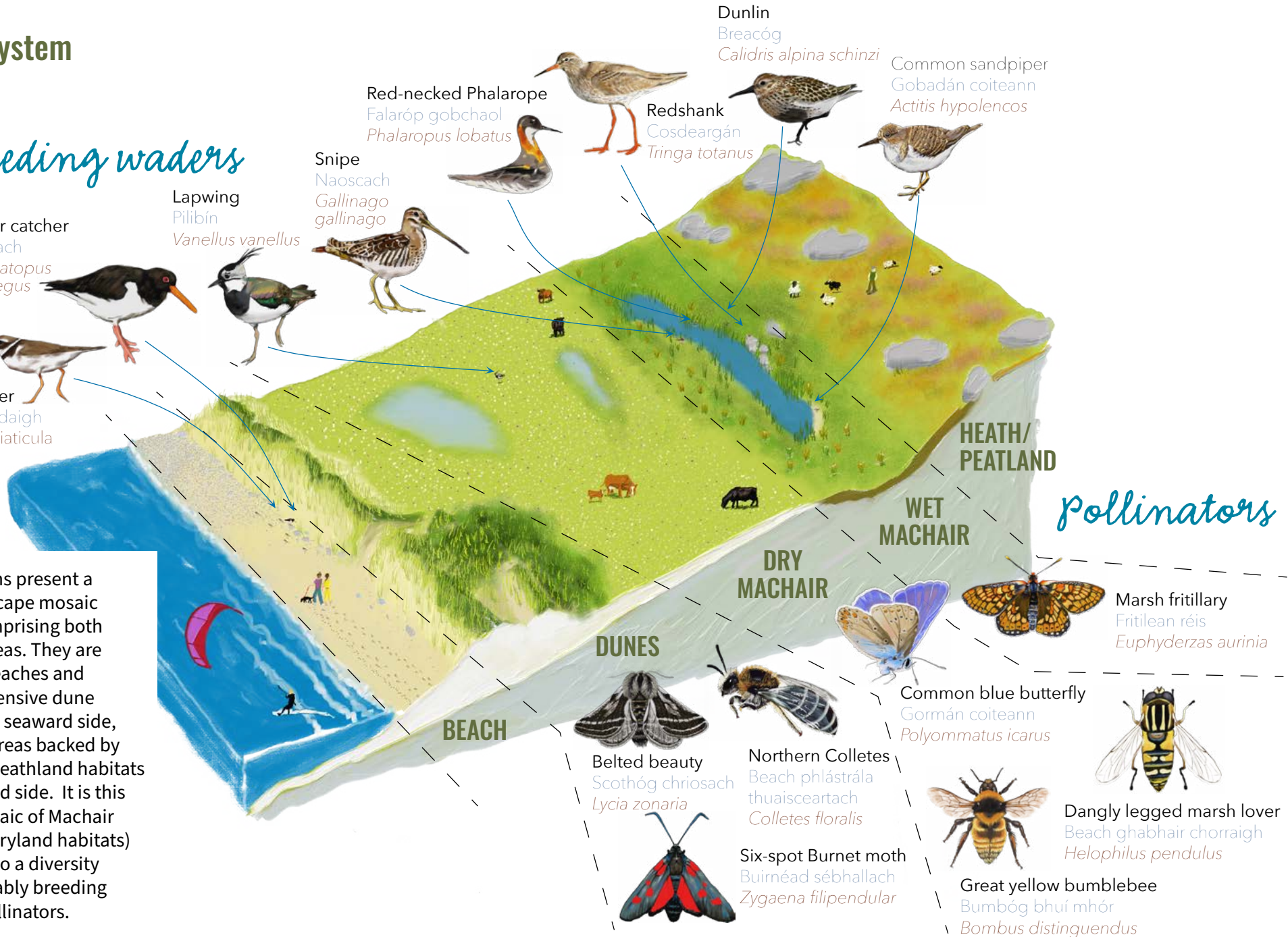
Redshank  
Cosdeargán  
*Tringa totanus*

Dunlin  
Breacóg  
*Calidris alpina schinzi*

Common sandpiper  
Gobadán coiteann  
*Actitis hypoleucos*

Ringed plover  
Feadóg chladaigh  
*Charadrius hiaticula*

Machair systems present a complex landscape mosaic of habitats comprising both wet and dry areas. They are bordered by beaches and sometimes extensive dune habitats on the seaward side, with wetland areas backed by peatland and heathland habitats on the landward side. It is this landscape mosaic of Machair (wetland and dryland habitats) that gives rise to a diversity of species, notably breeding waders and pollinators.



## Pollinators

Belted beauty  
Scothóg chriosach  
*Lycia zonaria*

Northern Colletes  
Beach phlástrála  
thuaisceartach  
*Colletes floralis*

Six-spot Burnet moth  
Buirnéad sébhallach  
*Zygaena filipendular*

Common blue butterfly  
Gormán coiteann  
*Polyommatus icarus*

Great yellow bumblebee  
Bumbóg bhuí mhór  
*Bombus distinguendus*

Marsh fritillary  
Fritilean réis  
*Euphydryas aurinia*

Dangly legged marsh lover  
Beach ghabhair chorraigh  
*Helophilus pendulus*

## Conservation priorities: habitats

A number of habitats found in Machair system are listed as being of conservation interest within the EU (listed on Annex I of the under the EU Habitats Directive) with two recognised priority habitats (those requiring the highest level of conservation and protection). These habitats are Machair grassland (a rare grassland type unique to Machair systems and referred to as ‘Machairs’ with the EU Code \*21A0), and Fixed dune grasslands (referred to as ‘Fixed dunes’ with the EU Code \*2130). *Note that priority habitats listed on Annex I of the EU Habitats Directive are always denoted by an \*.*

In 2019, as part of Ireland’s reporting for the EU Habitats Directive, Machair and Fixed dune grassland were both assessed as being in Unfavourable – Bad conservation status nationally. This means that the habitats are in serious danger of disappearing, at least regionally. Further evidence suggests there has been ongoing degradation since 2013 ([see NPWS 2019](#)).

Within the LIFE on Machair project target areas, project actions will be targeted to improve the conservation status of approx. 1,200 ha of ‘Machairs’ (\*21A0), that is 39% of the total area of Machair grassland habitat in Ireland (and the EU), and approx. 1,000 ha of ‘Fixed dunes’ (\*2130) or 12% of the total area of this habitat in Ireland.



Fixed dune grassland

## Machair and fixed dune grassland habitats

Machair grasslands are coastal plains derived from wind-blown sand and this grassland type is restricted to the northwest in Ireland. Post-Brexit, the entire EU land cover of \*21A0 Machairs occurs in Ireland. The soil underpinning Machair grassland has a significant percentage of shell-derived material, and the vegetation is herb-rich, with a low frequency of sand-binding species. Over millennia the habitat has developed in close association with farming, particularly traditional methods practised up until the 1970s in Ireland.

Machair grassland forms extensive plains on some of the LIFE on Machair project sites, often with hummocks (notable at The Valley project site) and/or occurring on hillsides (such as at the Murvey project area).

Fixed dune grassland occurs mainly on larger dune systems, found inland of the zone dominated by marram. This habitats occurs where the dune stabilises and the organic content of the sand increases. This is an extremely complex habitat type with a number of sub-types. The vegetation is species rich and can grade into Machair grassland, and they often form a complex together.

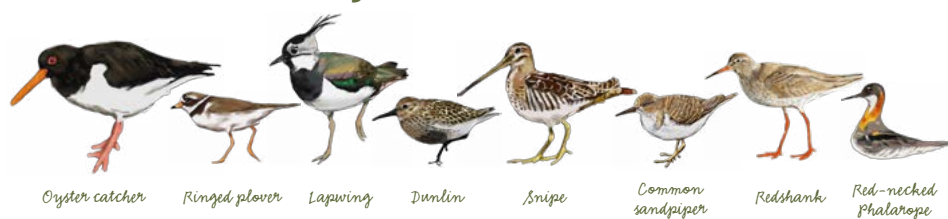
## LIFE on Machair actions to improve habitat quality

The main activities affecting Machair and Fixed dune grassland habitat quality can vary from site to site. In general the habitat should be species diverse, show a good variety in relation to structure and there should be no ongoing damaging activities.

## The key LIFE on Machair actions for habitats are:

- Working with farmers and landowners to identify how to conserve and restore good habitat quality.
- Trialling habitat restoration techniques targeted for each site type.

## Birds of Machair systems



### Breeding waders

In Ireland, breeding waders are one of the most threatened bird groups due to sustained and significant declines in both breeding population and distribution, largely due to changes in land use and specifically agricultural practices. Breeding waders are also in significant decline in Europe, with many species listed as being of concern on the European (EU 27) Red List of Birds and targeted under species action plans.














At 48 monitored Machair and other coastal grassland sites in Ireland, the total population of breeding waders declined by 48% between 1996 and 2019. Nevertheless, Machair systems still support significant proportions of the remaining national breeding wader populations.

### Conservation priorities

The LIFE on Machair project aims to at least halt, but ideally reverse, the significant population declines of breeding waders in Irish Machair systems. Within the LIFE on Machair project sites, the total breeding wader population declined from a peak of 529 pairs in 2009 to 259 pairs in 2019, a decline of 50% in the total population. Dunlin populations suffered the greatest decline within project sites, from 46 pairs in 2009 to just eight pairs in 2019 (an 83% decline).

LIFE on Machair project actions will aim to benefit the full suite of waders (eight species) which are known to breed within the project sites, listed in the table below. In the table we also highlight the conservation status of each bird in Ireland. The conservation status of species in Ireland is signalled using a traffic light system, and for the LIFE on Machair targeted species, only one species is in the Green category (good conservation status). The full rationale for the designations are outlined in the Birds of Conservation Concern in Ireland publication.

A list of the breeding wader species targeted by the LIFE on Machair project.

		ENGLISH NAME	IRISH NAME	LATIN NAME	LIFE on Machair PROJECT SITE*
CONSERVATION STATUS	 AMBER	 Common sandpiper	Gobadán coiteann	<i>Actitis hypoleucos</i>	Lough Roonagh & Inishkea islands
	 RED	 Dunlin	Breacóg	<i>Calidris alpina schinzii</i>	Lough Roonagh & Inishkea islands
	 RED	 Lapwing	Pilibín	<i>Vanellus vanellus</i>	Attempted breeding at all project sites
	 RED	 Oystercatcher	Roilleach	<i>Haematopus ostralegus</i>	Inishkea islands
	 GREEN	 Ringed plover	Feadóg chladaigh	<i>Charadrius hiaticula</i>	Connemara & Mayo sites
	 RED	 Red-necked phalarope	Falaróp gobchaol	<i>Phalaropus lobatus</i>	Roonagh, Inishkeas, Mullet & Donegal sites
	 RED	 Redshank	Cosdeargán	<i>Tringa totanus</i>	Connemara & Mayo sites
	 RED	 Snipe	Naosach	<i>Gallinago gallinago</i>	Probably present in all sites, but difficult to survey

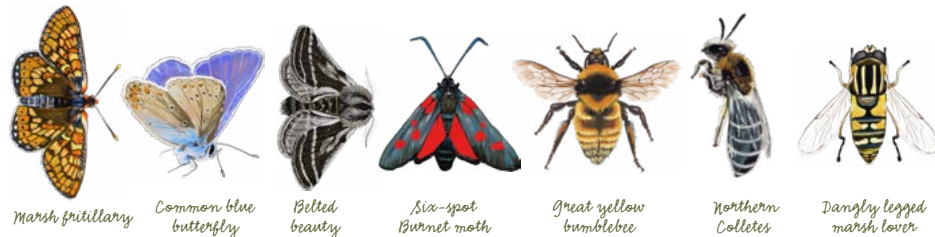
\*Breeding pairs present and recorded in the LIFE on Machair 2022 baseline survey.

### The key LIFE on Machair actions to improve wader breeding success are:

- Working with farmers and landowners to identify how to conserve and maintain existing populations.
- Trialling habitat and predation management actions (nest protection wardens and predator control fencing for ground predators).



## Pollinators of Machair systems



Pollinators are an intrinsic feature of coastal habitats, and they are vital for maintenance of the diverse, flower-rich sward in the target EU Annex I habitats Machairs (\*21A0) and Fixed dunes (\*2130).

Drivers of pollination decline include land-use change, intensive agricultural management and pesticide use. Habitat degradation is implicated in pollinator decline through loss of resources for pollinators in the landscape (e.g. forage, shelter and breeding sites). While bees and butterflies are often the most obvious pollinators, moths and flies (especially hoverflies) play a significant role in delivering pollination but also from the perspective of species diversity.

### Conservation priorities

LIFE on Machair will focus on these four groups of pollinators (*outlined in table*), while recognising there are a number of pollinator groups also present in the Machair systems. For many pollinator species there are limited data and a big part of the LIFE on Machair project will be to establish what species are present on each site and relative levels of abundance between sites.

### The key LIFE on Machair actions to improve pollinator populations are:

- Establishing the baseline presence / absence and likely trends in population status at each site.
- Working with farmers and landowners to identify how to conserve and maintain existing populations, and by trialling habitat management actions and targeted measures such as those developed through the Great Yellow Bumble Bee EIP and Farmland Pollinators EIP.

An overview of the conservation status of pollinator groups monitored by the LIFE on Machair project.



#### POLLINATOR    CURRENT STATUS



#### Bees

Populations of over 50% of Irish bee species have declined since 1980 and since 2012, bumblebees have declined by 17%. Machair systems are an important habitat for pollinators including species assessed as vulnerable on the EU Red List. For example, the Great Yellow Bumblebee and Northern Colletes.



#### Butterflies

This group has suffered a decline of 6%, and 17% of the native Irish butterfly fauna is under threat of extinction, with a further 15% Near Threatened. Ireland's only Annex II listed insect, Marsh Fritillary, can be found in wet Machair habitats.



#### Hoverflies

There are up to 180 species of hoverfly in Ireland. Hoverflies are true flies in that they appear to have only two wings. A Red Data List for Irish hoverflies is presently in development.



#### Moths

Up to 8% of species in Ireland are threatened and another 4% are Near Threatened or Data Deficient. Some of the more commonly recognised moths include the Six-spot Burnet Moth, and less common are Belted Beauty.



## Other Machair species

While LIFE on Machair is focused on key Machair habitats, breeding waders and pollinators, there is an array of other species to be found throughout the year on these sites.



Whooper swans

Photo by Micheál O'Brain.

## Winter

In winter months Machair sites are important for winter swans and geese, such as Whooper Swan and Barnacle Geese. These are good months to explore the shore (keep the dog on a lead!) and watch flocks of Turnstone, Sanderling, Knot and other iconic species such as Curlew feeding among pools and seaweed.

Each winter over 400 skilled volunteers, NPWS Rangers and BirdWatch Ireland staff monitor wintering water-bird populations at their wetland sites across the Republic of Ireland. The Irish Wetland Bird Survey (I-WeBS) is coordinated by BirdWatch Ireland and funded by the National Parks and Wildlife Service. See [BirdWatchIreland.ie](http://BirdWatchIreland.ie) for more details.



## Spring and Summer

You can explore your seashore for an array of seaweed species and sea creatures. Check out some of these habitats and species on this useful link: [ExploreYourShore.ie](http://ExploreYourShore.ie)



And while walking through a Machair site you may even hear a Corncrake! If you do, head straight over to [CorncrakeLIFE.ie](http://CorncrakeLIFE.ie) and report it.



Corncrake Traonach

## Autumn

Often flocks of juvenile wader species start to gather on Machair sites (where there has been successful breeding). Chough can also be seen feeding through the dry grassland areas.

You can also get involved throughout the year in activities on Machair sites led by Clean Coasts to clean up our shores. See [CleanCoasts.org](http://CleanCoasts.org) for more details.



Chough Photo by Micheál O'Brain.

## Wetlands and Peatlands

Wetlands are critical habitats within the Irish landscape and provide an array of ecosystem services with Machair systems. Check out the [CommunityWetlandsForum.ie](http://CommunityWetlandsForum.ie) for a great list of resources and supports for communities and learn more about wetlands at [RamsarIreland.com](http://RamsarIreland.com).



Peatlands are wetlands, and many of the LIFE on Machair sites are backed by peatlands on the landward side. Check out some exciting peatlands work being done through the LIFE IP Wild Atlantic Nature [wildatlanticnature.ie](http://wildatlanticnature.ie)



## Ecosystem services

As well as being unique and special in terms of habitat and species supported, Machair systems also provide an array of ecosystem services.

These include but are not limited to:

### Provision of grazing biomass

Grazing of Machair sites is highly valued due to the nature of the drier ground in winter months and also the healthy condition of animals grazed there. In recent years however stocking levels have increased and there has been a general switch from traditional breeds of cattle and sheep to continental / lowland breeds. The changes in animal type can have repercussions in relation to habitat as well as costs for farmers to maintain stock less suited to these conditions.



### Water flow regulation (flood mitigation) & sediment trapping

There is an intricate and complex relationship between Machair habitats and groundwater, and the LIFE on Machair project areas have a number of flushes and springs connected which help maintain the habitats. Machairs are classified as Groundwater Dependent Terrestrial Ecosystems (GWDTEs). Coastal lagoons and lakes (often found within Machair complexes) and Machair wetlands are critical for flood mitigation and help trap sediment flowing through catchments with knock on benefits for water quality.



### Coastal protection

Coastal erosion and flooding is a feature of dynamic coastlines such as the north west of Ireland. However, in recent decades, increased storm intensity and flooding events have increased pressure on coastal areas. Machair systems provide a significant degree of coastal protection, but reduced resilience due to reduced habitat quality renders these sites less capable of providing protection.



## Pollination & soil supporting services

Pollination is essential for a number of crops produced commercially as well as domestic produce. Valuing the role of pollination has been carried out through a number of studies, but the decline in invertebrate communities can also be linked to soil health. Both these ecosystem services are critical for Machair ecosystem health and resilience. The use of herbicides, pesticides and animal welfare products can tip the balance here.

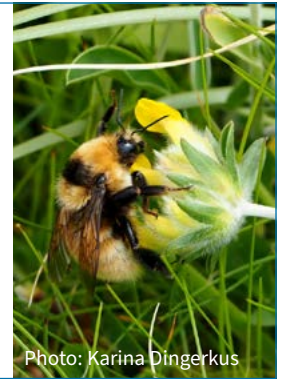


Photo: Karina Dingerkus

## Recreational and tourism use

In recent decades, tourism along the western seaboard has increased significantly. These areas are highly attractive and require appropriate planning and regulation of access to ensure damage to coastal sites is mitigated. Machair commonages are often confused as 'common land' – though they are in private ownership. Camping and trafficking can have significant impacts on habitat quality but in particular has deleterious consequences for breeding waders.



## Cultural and social heritage


Apart from the strong farming traditions on Machairs, there is a myriad of archaeological (distant and recent past) that make these sites hugely important from a heritage perspective. Mesolithic and Neolithic artefacts are still being uncovered at some sites, and many of the Machair sites were centres of the monastic tradition in Ireland (such as the Inishkea Islands) but also for Viking settlement (such as at Doonloughan). Places like the Inishkea Islands, de-populated in the 1930s, present a view of our more recent past. Maintaining the integrity of this heritage is important both from local and national heritage perspectives.



# Project sites

The project target areas are outlined in the map below. Each of the LIFE on Machair project target areas lie within and/or are part of a Natura 2000 site. The Natura 2000 site names and codes (SAC and SPA) are listed overleaf. In some instances the project target areas form a subset of habitats within these larger complexes.



TYPE	CODE	NAME / PROJECT TARGET AREAS 
SCI	IE0000147	Horn Head and Rinclevan SAC
SCI	IE0000507	Inishkea Islands SAC
SPA	IE0004004	Inishkea Islands SPA
SPA	IE0004037	Blacksod Bay/Broad Haven SPA
SPA	IE0004093	Termoncarragh Lake and Annagh Machair SPA
SCI	IE0001141	Gweedore Bay and Islands SAC
SCI	IE0001497	Doogort Machair/Lough Doo SAC
SPA	IE0004235	Doogort Machair SPA
SCI	IE0001529	Lough Cahasy, Lough Baun and Roonah Lough SAC
SCI	IE0001932	Mweelrea/Sheeffry/Erriff Complex SAC
SCI	IE0002074	Slyne Head Peninsula SAC
SCI	IE0002129	Murvey Machair SAC
SCI	IE0000470	Mullet/Blacksod Bay Complex SAC

**SCI:** Sites of Community Importance, **SPA:** Special Protection Area, **SAC:** Special Areas of Protection



Roonagh Lough SAC

## Project objectives and outcomes

The overall objectives of the LIFE on Machair project are to improve the conservation status of Ireland's Machair grassland and Fixed dune habitats and the ecological conditions for breeding waders and pollinators within the project sites. The project will run over the course of six years, from 2022 to 2028.

**Specific actions relating to farming and land management will be integrated through the LIFE on Machair Restoration programme and these will include:**

- Working with farmers and landowners to develop and roll out agricultural management agreements on project sites. These agreements will incentivise and reward farmers for improving habitat quality while in return delivering essential support for breeding waders and pollinators in the long term.
- Providing opportunities and support for local farmers and communities to engage in capacity building and knowledge sharing on the sustainable management of Machair sites.
- Developing and implementing site-specific conservation interventions (e.g. revegetation, predator control) to address acute threats to the targeted habitats and species.

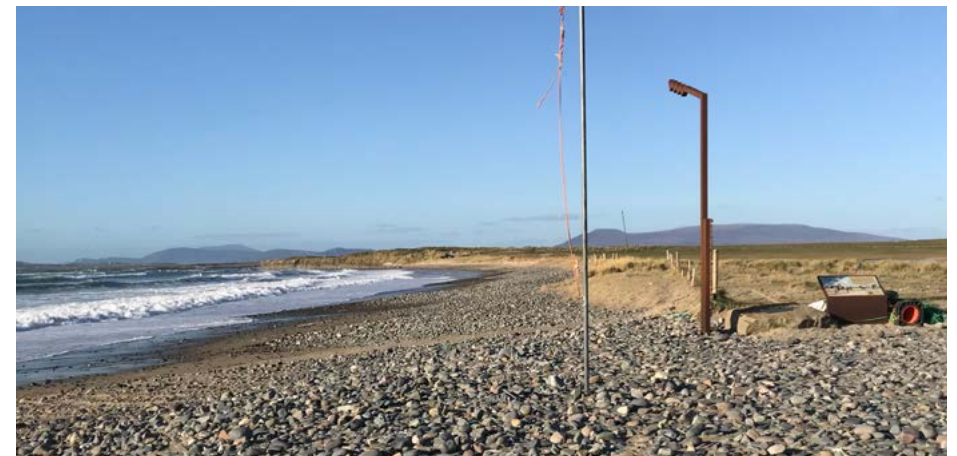


*Predator fence installation*

**While working with farmers and landowners, we will also work with Local Authorities, local communities and tourism providers with specific actions relating to:**

- Coordination of community workshops in project target areas to explore the sustainable use of Machair sites for tourism and recreation. The aim of these workshops will be to raise awareness and also help to scope out solutions reduce the negative impacts of recreational users on intensively used areas through developing a sustainable tourism model for Machair sites.
- Support of local community initiatives developed during the workshops through the provision of small grants (seed funding) for eco-friendly tourism initiatives.
- Development and coordination of a primary schools programme in project target areas to raise awareness about Machair systems habitats and species, and how to care for them.

In this way, the project will employ an integrated management approach working to raise awareness of, and develop appropriate guidance for, Machair systems in Ireland. This will underpin a framework for informed management policies (farming and tourism) for Machair sites post LIFE on Machair, while developing technical guidance for concrete conservation actions within a network of Machair and wader Natura 2000 sites.



*Wild Atlantic Way*

## Project actions



### Restoring harmony with nature

Farming is integral to the development and conservation management of Machair systems. For generations, farmers have worked on these areas using a low intensity, extensive management approach that helped to create the unique mosaic of open habitats, and their resultant species diversity.

As EU policy and farming practices have changed our ways of farming across Ireland since the 1970s, farming on Machair sites has changed considerably. This has been most notable in relation to changes in type of grazing animals (a general shift from cattle to sheep), the intensity of grazing (higher stock levels) as well as changes in the timing and duration of grazing.

The changes in farming have reduced the habitat quality and in many sites this has rendered the habitats less resilient to effects of climate change, as well as less capable of supporting breeding waders and pollinators. Coupled with increased use for recreation and tourism, some of the project target areas are in need of immediate restoration.

### Getting the balance right for Machair

The LIFE on Machair project team will work closely with the local ACRES Cooperation Project teams to develop shared solutions to complement the ACRES 2022-2028 CAP programme and Natura 2000 site objectives.

Some of the specific challenges identified through engagement by the LIFE on Machair project team with local farming groups to date include:

CHALLENGE	APPROACH
<b>Farming of Machair systems in line with Natura 2000 habitat conservation</b>	What are the right levels for: nutrient management, appropriate grazing management, out-wintering, summer grazing, reducing the use of pesticides etc.
<b>Working in dynamic Machair systems</b>	How to address natural erosion and flooding? How to build resilience to climate change effects?
<b>Building back eroded &amp; ongoing eroding sites</b>	What is the potential for hydro-seeding, native seed collection and spreading and the role of seaweed application? What about chestnut fencing and where to establish its best use?
<b>Managing for breeding waders</b>	Specific actions for breeding waders trialled through the project will include signage, fencing to reduce predator / livestock / human access, as well as predator assessment and control.
<b>Managing for pollinators</b>	Specific actions for pollinators trialled through the project will include actions relating to general farming practices which should benefit both habitats and pollinators. Specific actions will relate to the development and implementation of extensive / low intensity grazing regimes, signage and monitoring to inform pollinator needs / other actions as they are identified on a site by site basis.
<b>Issues relating to planning</b>	What regulatory processes / mechanisms apply in Natura 2000 sites?
<b>Commonage governance</b>	How do we ensure the right level of grazing is adhered to?
<b>Control of invasive species / scrub</b>	What invasive species are where? How do we manage short and long term clearance?

## The LIFE on Machair Restoration Programme

In March 2023 the LIFE on Machair project began piloting a farmer participation payment programme, the LIFE on Machair Restoration Programme, which will involve a process of engagement with farming communities in the project target areas over the duration of the project.

### The LIFE on Machair Restoration Programme will include an annual schedule of planning events & training workshops based on:

**Participation** – working together to develop and implement targeted site management.

**Knowledge exchange** – building a historical picture of how the sites have changed over time and how that can inform future management.

**Planning and implementation of restoration actions** – this will involve trialling practical measures such as re-seeding but also establishing governance structures for commonages to regulate stocking levels appropriate to each site.

**Capacity building in relation to site management** – learning by doing between the project team and farmers will help inform best practice for coastal restoration and management across agencies.

**Identifying sustainable farming practices to be incorporated into the next cycle of CAP** – linking with farm advisors and with the ACRES Cooperation Project teams we can ensure the appropriate agri-environmental measures are targeted for coastal sites in the next CAP cycle (post 2028)

**Farm advisors** provide a key supporting network for farmers and a series of training workshops for farm advisors will also be developed with the assistance of our project partners Teagasc and piloted across the wider farm advisor network.

The Terms and Conditions are now finalised. Please contact us if you are interested in signing up for one of our project target areas: [info@lifeonmachair.ie](mailto:info@lifeonmachair.ie)

As the programme is piloted we will be sharing knowledge and experiences through our newsletters and regular updates. Sign up to our newsletter or follow us on social media to follow our progress.

 @LIFEonMachair  @LIFE-on-Machair

[lifeonmachair.ie](http://lifeonmachair.ie)



## Sustainable tourism and recreation

Ireland's natural environment is the cornerstone of Irish tourism and it is recognised that visitor experience is improved when natural habitat is presented in its unspoiled state. With this mind, in tandem with the farmer participation programme, the LIFE on Machair project team will work with Fáilte Ireland to coordinate a series of community workshops for locals, tourism business and service providers at target areas, and members of Local Authorities over the duration of the project.

These workshops will integrate participation of key stakeholders to raise awareness of the sensitivities of Machair systems and the potential to integrate and embed sustainable tourism and recreational practices across the target areas.

### The main focus of the workshops will be developing ways to:

- Reduce the impacts of recreational activities on the Machair systems.
- Encourage new and existing local tourism initiatives to avoid impacting negatively on Machair systems.
- Highlight how these systems provide a sustainable tourism opportunity to locals.
- One of the outcomes related to these workshops, will be the development of a guidance document to facilitate sustainable tourism at Machair sites by Fáilte Ireland.

A community fund will also be administered to provide seed funding towards the development of eco-friendly initiatives that will contribute to the project's objectives.

*More details of community workshops and funding opportunities to follow in 2023.*



## Education and awareness

A key action of all EU LIFE programme funded projects relates to building public awareness and education in relation to Natura 2000 sites and their habitats and species. This will be one of the key roles of our community engagement officers.

### From 2023 we will work to develop:

- A coordinated programme of community engagement targeted at local, regional and national awareness raising about Machair systems, and
- A schools programme for children local to the project target areas.

Details of local events and our schools programme will be updated through the course of the project.



*LIFE on Machair project beneficiary training day on the Mullet peninsula, July 2022*

## EU LIFE and Natura 2000

**The LIFE programme** is the EU's funding instrument for the environment and climate action since its inception in 1992. The European Union recognises that a transition to a sustainable economy requires major shifts in investments towards new infrastructures, new technologies, new business models, and new modes of production and consumption of all types of goods and services, including food and natural resources. Through its targeted support to policy and market uptake actions, the LIFE programme aims to preserve, protect and improve the quality of the environment, protect human health and pursue the prudent and rational utilisation of natural resources.



To date, LIFE has co-financed approximately 4,000 projects across the EU, contributing more than €3 billion to the protection of the environment.

**Natura 2000** is a European network of important ecological sites stretching over 18% of the EU's land area and more than 8% of its marine territory. It is comprised of Special Areas of Conservation (SAC) and Special Protection Areas (SPA) designated by Member States under the Habitats Directive and the Birds Directive, respectively.



The aim of the network is to ensure the long-term survival of Europe's most valuable and threatened species and habitats. Up to 13% (9,060km<sup>2</sup>) of Ireland's land area is included in the Natura 2000 network, plus marine areas, across a total of more than 400 sites.





# LIFE on Machair

SAOL ar an Mhacaire



[lifeonmachair.ie](http://lifeonmachair.ie)

[info@lifeonmachair.ie](mailto:info@lifeonmachair.ie)

 @LIFEonMachair  @LIFE-on-Machair



Fuair an tionscadal seo maoiniú ón gClár LIFE an Aontais Eorpaigh faoin Comhaontú Deontais Uimh. LIFE20 NAT/IE/000263 LIFE on Machair. This project has received funding from the European Union's LIFE programme under Grant Agreement No. LIFE20 NAT/IE/000263 LIFE on Machair.