National Biodiversity Data Centre
A Heritage Council Programme

Explore Your Shore!

Dragonfly Ireland 2019-2024

Citizen Science

Citizen Science at the National Biodiversity Data Centre

Irish Butterfly Monitoring Scheme

CITIZEN SCIENCE

All-Ireland Pollinator Plan
www.pollinators.ie

An Roinn Cultúir, Oidhreachta agus Gaeltachta
Department of Culture, Heritage and the Gaeltacht

National Biodiversity Data Centre
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What is Citizen Science?

-
-
-
-
-

ecsa | European Citizen Science Association

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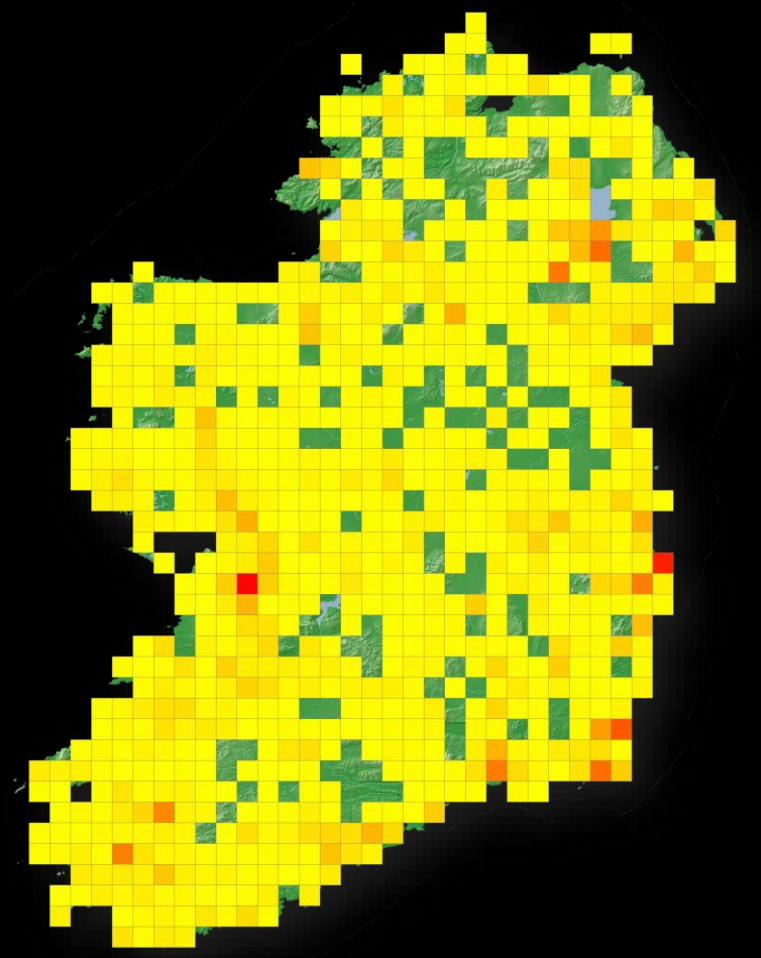
Why Citizen Science?



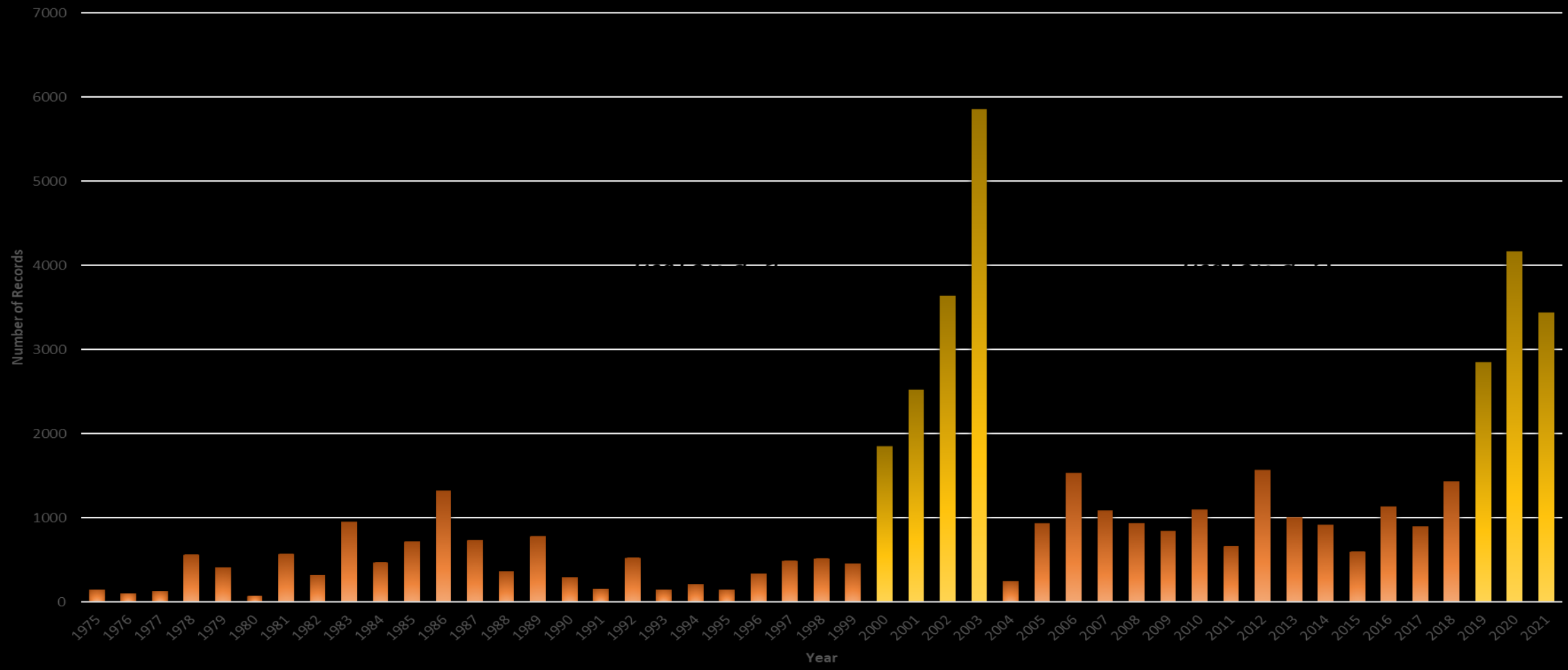
Dragonfly Ireland 2019-2024

CEDaR Centre for Environmental Data and Recording

epa Environmental Protection Agency

National Biodiversity Data Centre
A Heritage Council Programme

Why Citizen Science?



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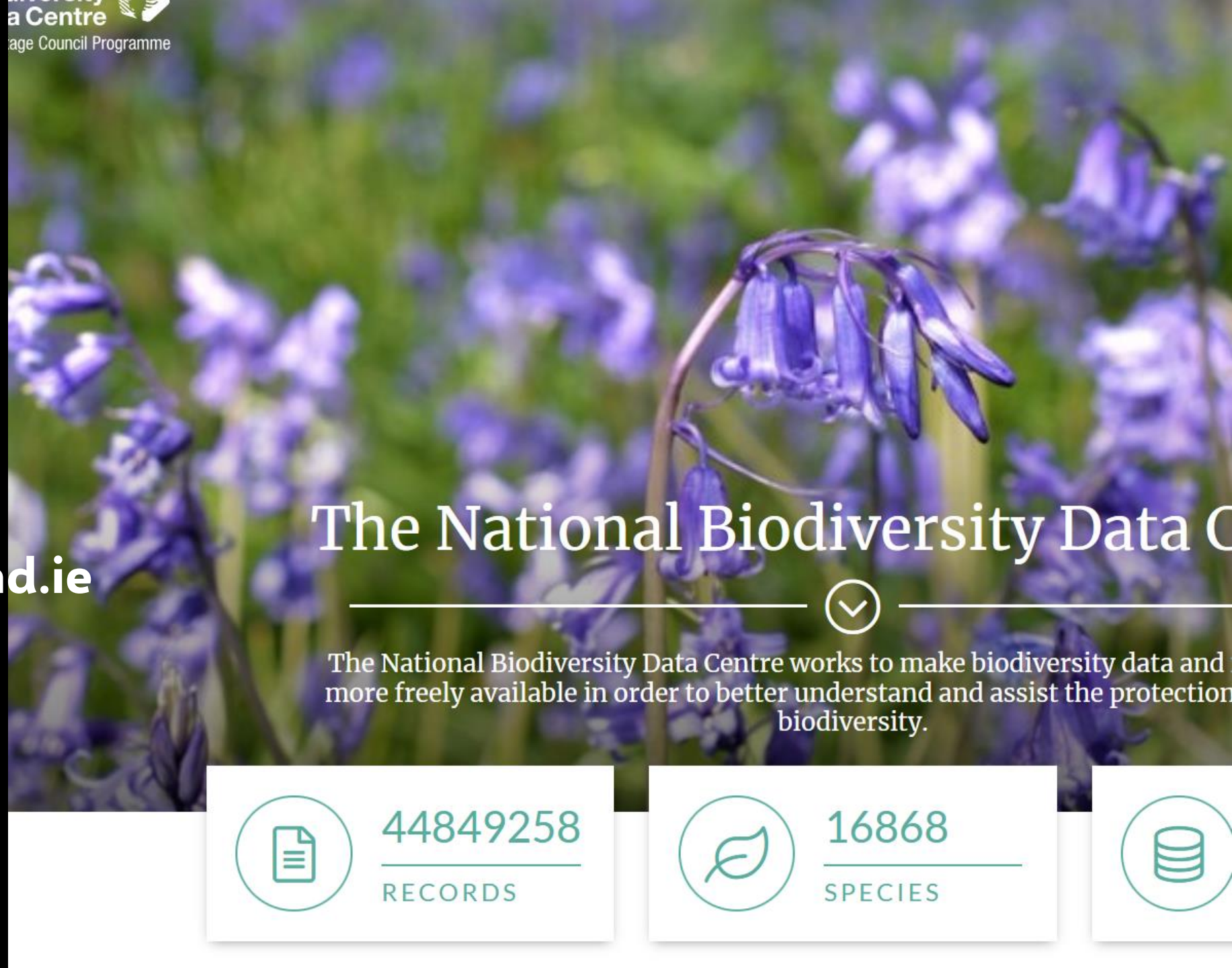
BiodiversityIreland.ie



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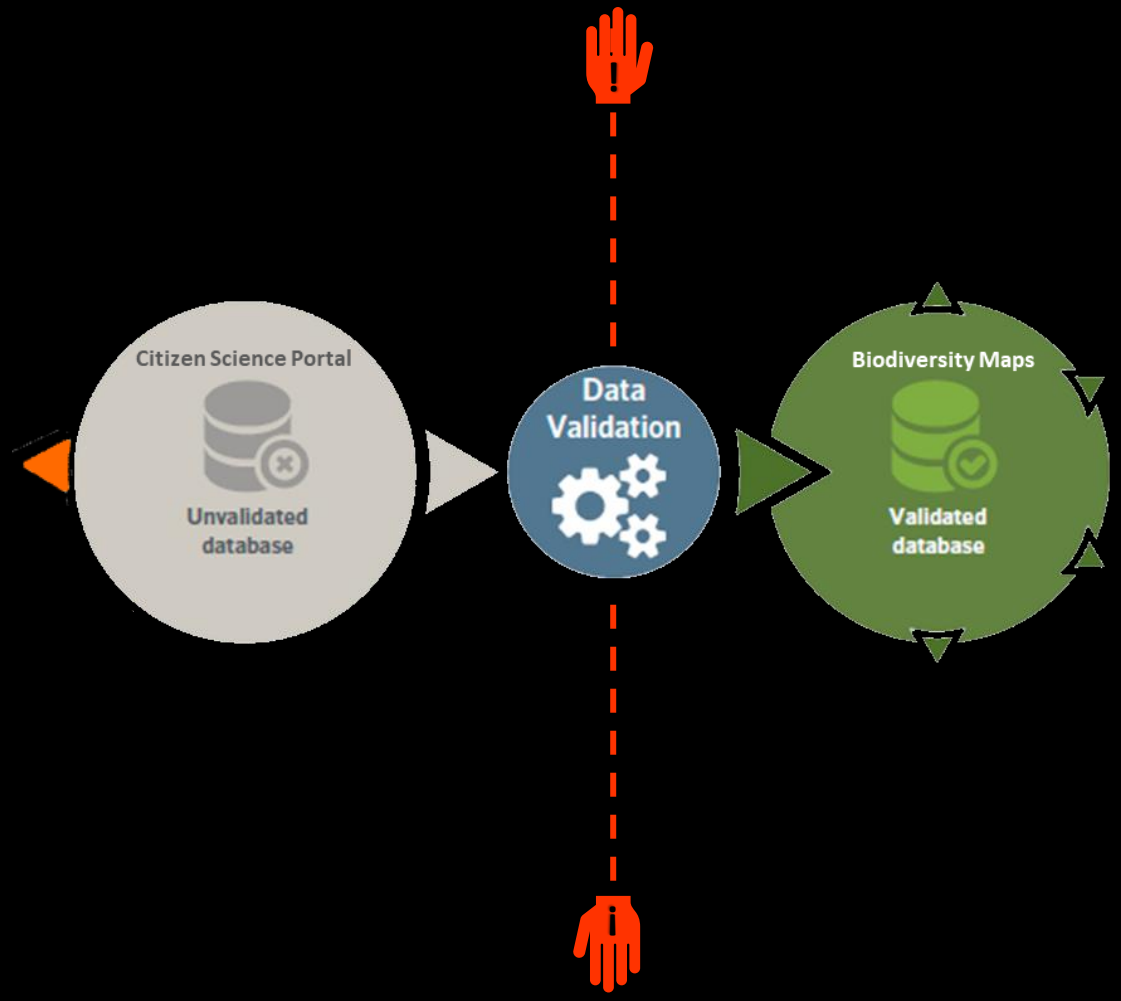

BiodiversityIreland.ie

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About us | Contact us | Mailing list | Facebook | Twitter

Android App | iPhone App | Latest news

Home | Start Recording | Recorder League | County League | Species Stats | View My Records | Compare Years

Click here to start recording GO

Ireland's Citizen Science Portal

Recent records

Ramalina farinacea
2021-01-22
Bree

Eurasian Badger (Meles meles)
2020-08-15
Rathcoole

Common Orange Lichen (Xanthoria parietina)
2021-01-22
Whitechurch, Ballywalter

Common Eider (Somateria mollissima)
2021-01-22
Whitechurch, Ballywalter

Magpie (Pica pica)
2021-01-22
Whitechurch

Grey Heron (Ardea cinerea)
2021-01-22
Whitechurch, Ballywalter

Curlew (Numenius arquata)
2021-01-22
Whitechurch, Ballywalter

Herring Gull (Larus argentatus)
2021-01-22
Whitechurch, Ballywalter

Oystercatcher (Haematopus ostralegus)
2021-01-22
Whitechurch, Ballywalter

Cormorant (Phalacrocorax carbo)
2021-01-22
Whitechurch, Ballywalter

Biodiversity Maps

Mapping Ireland's Wildlife

Biodiversity Maps is a national portal that compiles biodiversity data from multiple sources and makes it freely available on-line.

Number of records	Number of species	Number of datasets	Last updated
5,096,040	17,193	171	15/06/2022

Protected Species

- **Records:** 837,703
- **Species:** 292

Threatened Species

- **Records:** 779,981
- **Species:** 1,332

Invasive Species

- **Records:** 77,530
- **Species:** 174

Higher plants

- **Records:** 1,610,385
- **Species:** 2,844

Mammals

- **Records:** 270,519
- **Species:** 102

Birds

- **Records:** 1,267,495
- **Species:** 540

Species Search

Irish Damselfly

Search

Recently updated datasets	Records added
Explore Your Shore	30
Ladybirds of Ireland	422
Bees of Ireland	6,073
Wasps of Ireland	973
Irish Butterfly Monitoring Scheme	109,028
River Biologists' Database (EPA)	35
General Biodiversity Records from Ireland	4
Earthworms of Ireland	1,025
Dragonfly Records	401
Birds of Ireland	22

Biodiversity Maps

Home | Maps | Dataset | Species | About | Help

Layers | Active | Legend | Reports

Add a new species

Irish Damselfly (Coenagrion lunulatum)

Irish Damselfly (Coenagrion lunul...

Admin Boundaries

National Grids

Habitats

Bat Landscapes

Birdwatch Ireland

Forestry

Protected Areas

Geology

60 km

Scale: 1:2500000 - Resolution: 10km

844740, 512205

Zoom to

Irish Damselfly (Coenagrion lunulatum) - M438076

Recorder	Jamie O'Neill
Determiner	
Taxon	Coenagrion lunulatum
Common Name	Irish Damselfly
Date	23/06/2021

Additional Attributes:

Abundance	<10
County	Galway
Life stage	Adult

Available Images:

Find address or place

Dragonfly Ireland 2019-2024

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SURVEYS > DRAGONFLIES

Dragonfly Ireland

Dragonfly Ireland 2019 – 2024

Dragonfly Ireland 2019 – 2024 is an all-Ireland Citizen Science survey of dragonflies and damselflies, and their habitats, coordinated by the National Biodiversity Data Centre in the Republic of Ireland and by the Centre for Environmental Data and Recording in Northern Ireland. The project is funded by The Environmental Protection Agency as part of a citizen science project examining the potential of aquatic species as bio-indicators of climate change and water quality. **We are looking for volunteers to take part in submitting casual records and conducting site surveys of water bodies and water courses.**

All data collected are available to view and explore on the National Biodiversity Data Centre's Biodiversity Maps system. All Dragonfly Ireland 2019 – 2024 data collected by the National Biodiversity Data Centre is available as Open Access data (CC-BY 4.0) via the Biodiversity

Emperor Dragonfly – Kevin Collins

Privacy & Cookies Policy

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Photo: Roger Hale - *Common Darter*

Dragonfly Ireland 2019-2024

Survey Outputs

- Validated records contributing to 2024 Atlas.
- Exploring value as bio-indicators of freshwater habitat quality & climate change.

Survey Outputs

- Updated Red List of Irish Dragonflies and Damselflies
- Renewed network of trained and experienced recorders

Dragonfly Ireland 2019-2024

Photo: Will Woodrow / Monaghan Co. Co. - *Irish Damselfly*


Irish
Seed Savers


Dragonfly
Ireland
2019-2024
Spotter
Dragonfly
Ireland
2019-2024
Recorder
Dragonfly
Ireland
2019-2024
Monitor

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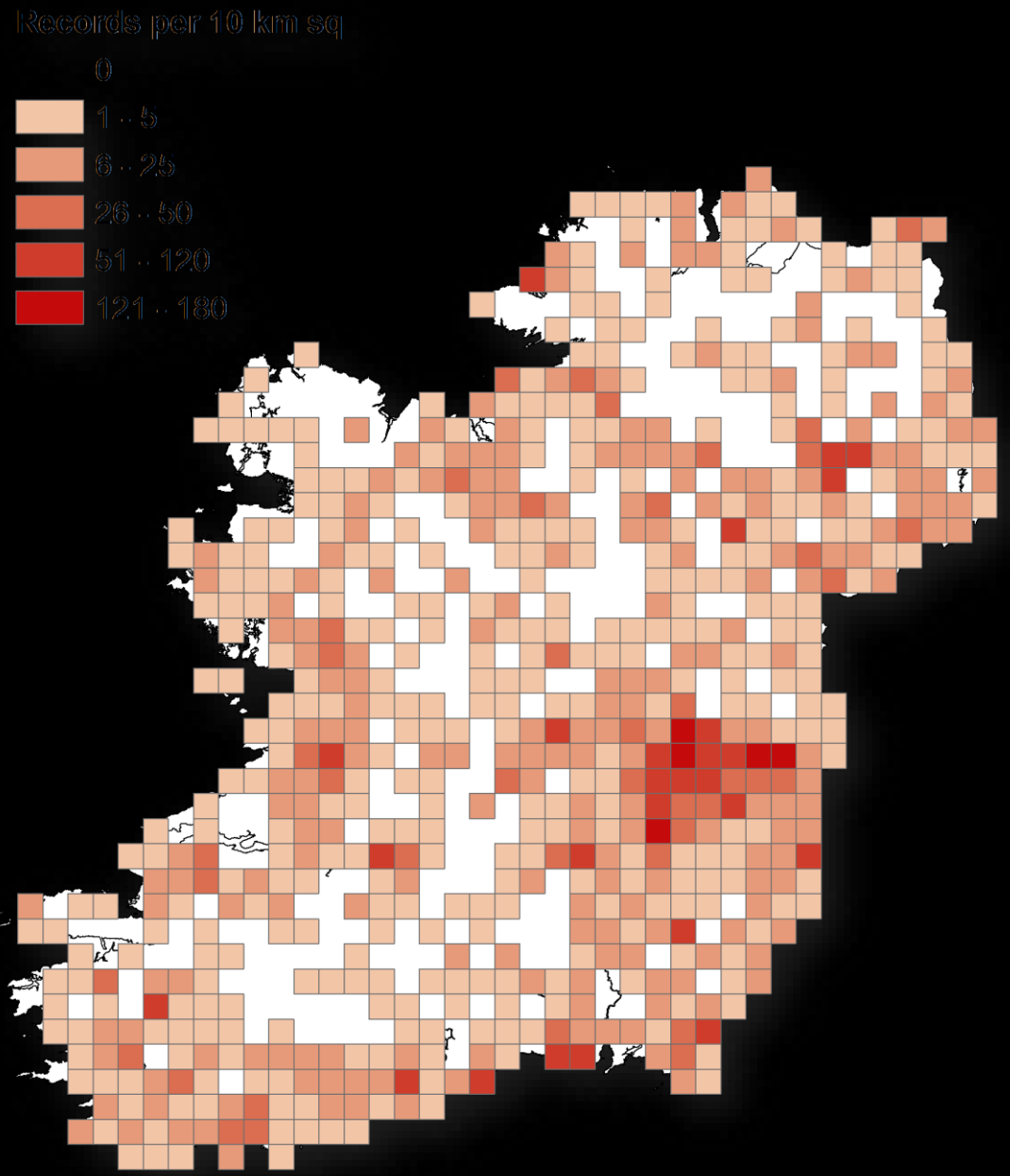

Dragonfly Ireland 2019-2024

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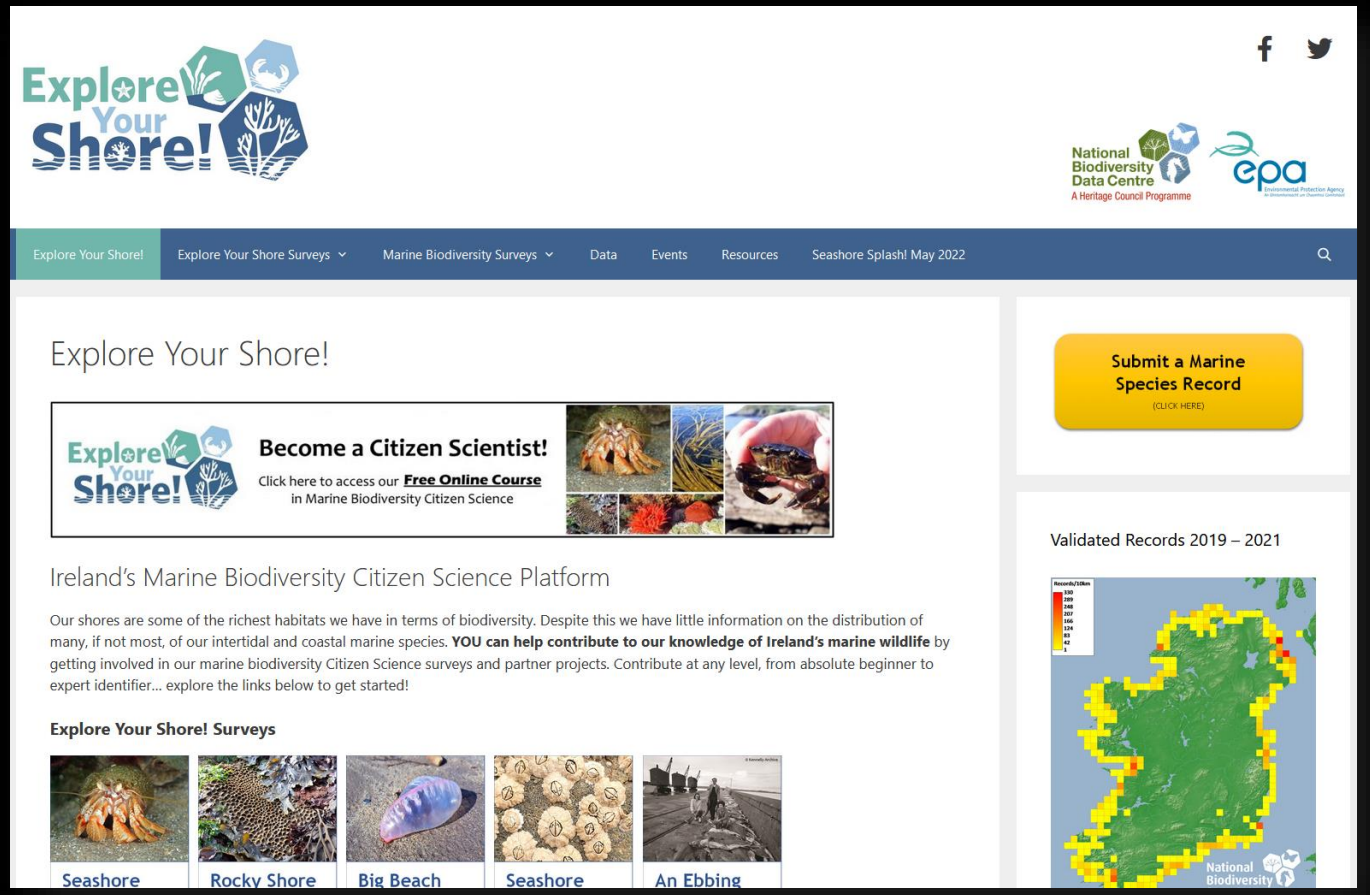
An Ghníomhaireacht um Chaomhnú Comhshaoil



Explore Your Shore!

Project Goals

- Building a baseline dataset
- Explore marine species as bio-indicators of **climate change** and **water quality**.
- Public engagement and awareness.

epa Environmental Protection Agency

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Explore
Your
Shore!

Shifting Baselines...

Explore Your Shore!

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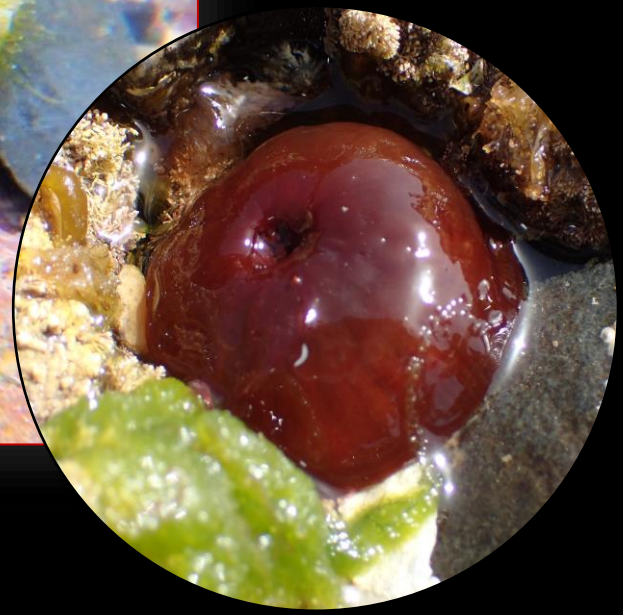
epa Environmental Protection Agency
An Ghníomhaireacht um Chaomhnú Comhshaoil

Explore Your Shore!

Beadlet Anemone

Whole Shore

Anemones



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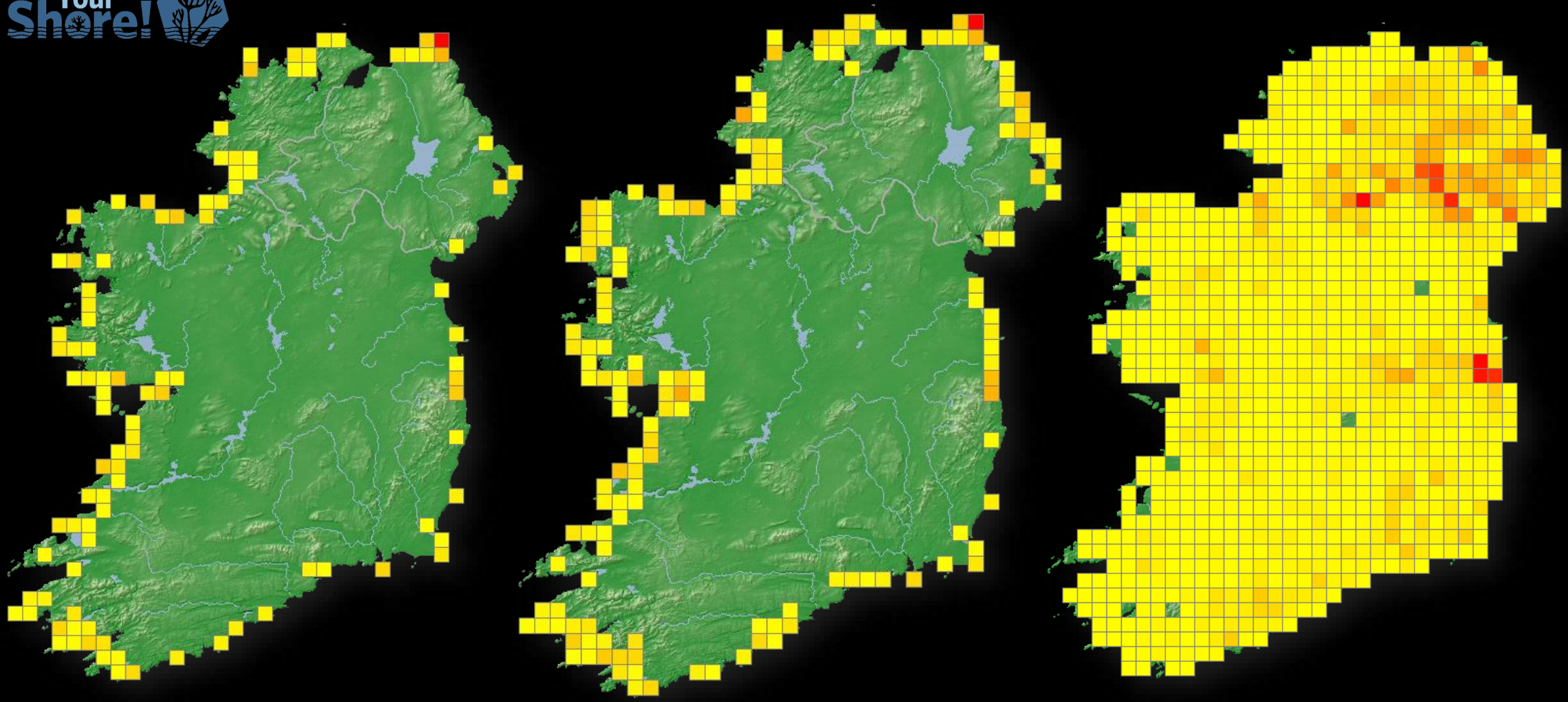

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An Ghníomhaireacht um Chaomhnú Comhshaoil

Explore Your Shore!

Seashore Spotter

Record marine species - even mystery species!

Rocky Shore Safari

Survey plants and animals on your local rocky shore

Big Beach Biodiversity Survey

Survey the marine species on your local beach

Seashore Snapshots

Do Citizen Science with just a camera or smartphone!

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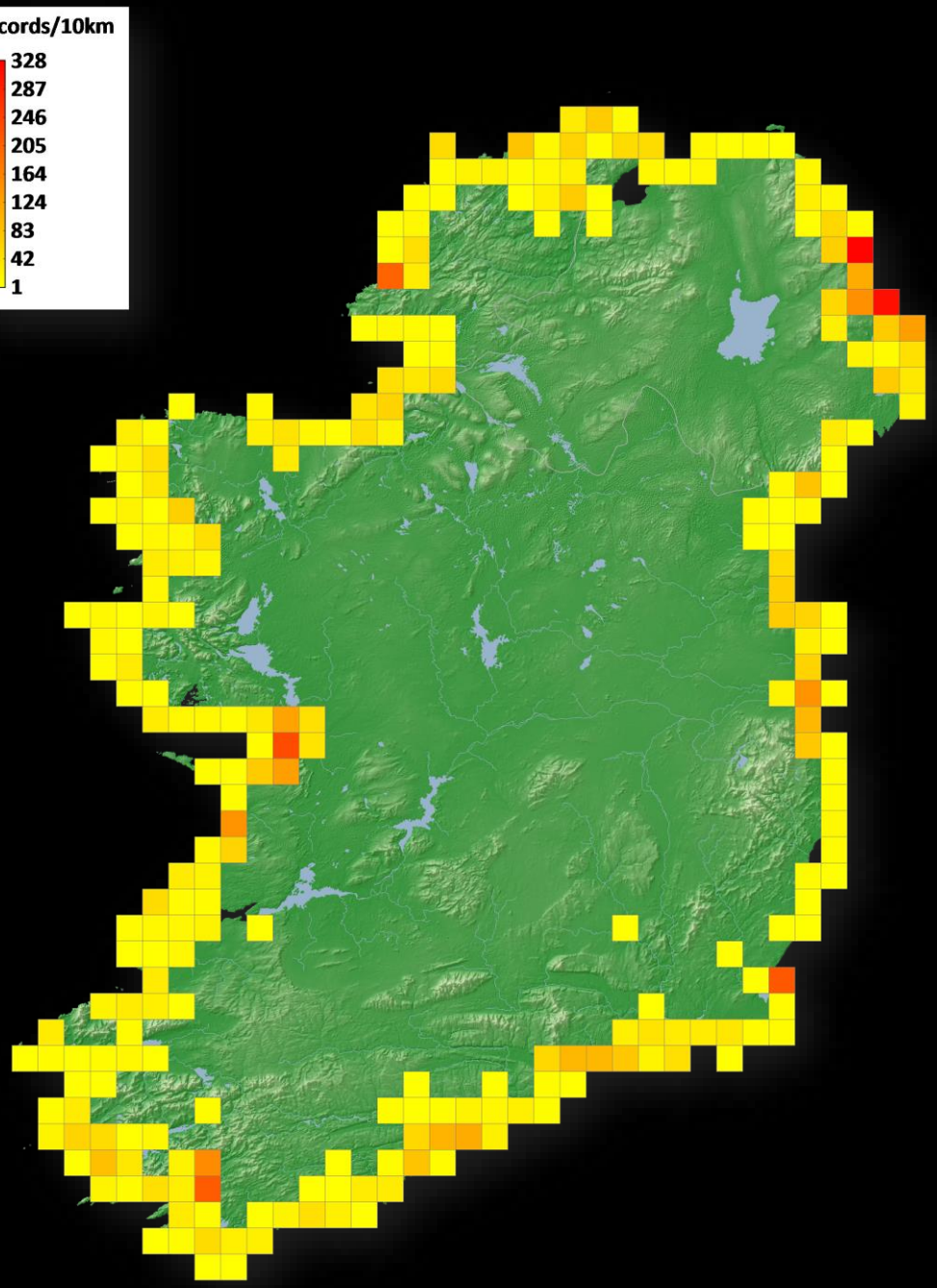
Explore Your Shore!



Records 2019 - 2021

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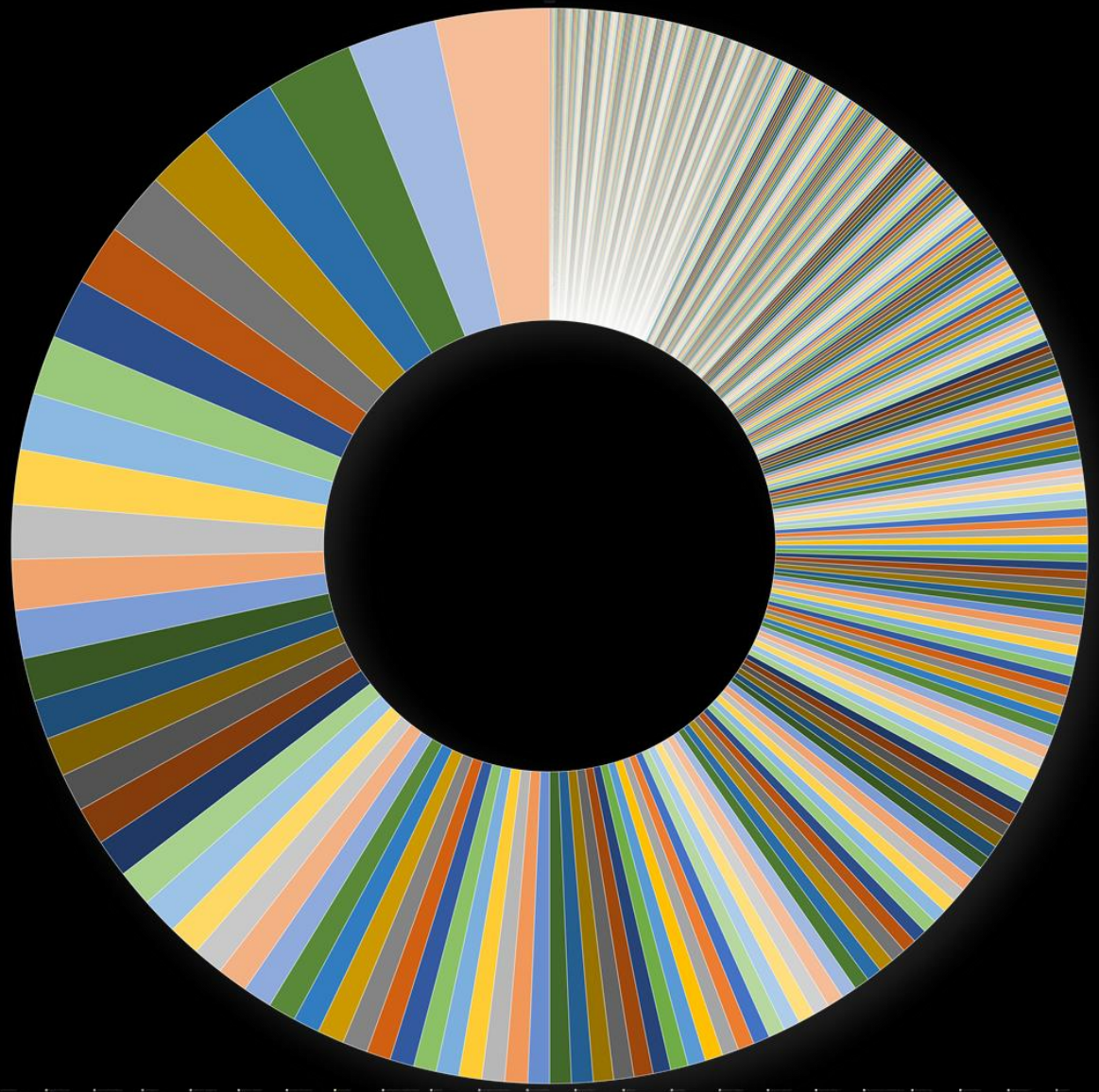
Environmental Protection Agency
An Ghníomhaireacht um Chaomhnú Comhshaoil

Explore Your Shore!



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An Ghníomhaireacht um Chaomhnú Comhshaoil

Explore Your Shore!

Irish Marine Biodiversity Citizen Science Projects

Seasearch Ireland

Diving surveys of marine habitats

Irish Whale and Dolphin Group

Record Sightings and Strandings

Purse Search Ireland

Record Shark, Skate & Ray Eggs

Coastwatch Europe

Do an eco-audit of your local shore

Irish Basking Shark Group

Record basking sharks in Ireland

The Big Jellyfish Hunt

Record Strandings & Sightings

Irish Marine Turtle Records

Record Sightings & Strandings

Irish Marine Recreational Angling Survey

Record Your Sea Angling Catches

King Search

Survey for King Ragworm

KelpRes

Submit records of Irish Kelp Beds

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Irish Butterfly Monitoring Scheme

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Irish Butterfly Monitoring Scheme

The Irish Butterfly Monitoring Scheme is delivered by a network of volunteer recorders who walk a fixed route (transect) on a weekly basis, from 1st April to 30th September each year, generating very detailed information on butterfly populations and flight periods, and how these are impacted upon by land use and climate change.

The Irish Butterfly Monitoring Scheme, established by the Data Centre in 2008, is Ireland's longest running citizen science insect monitoring scheme. It tracks the population status of Ireland's widespread butterfly species based on a network of fixed routes (transects) established and walked by volunteer recorders. Each transect is walked on a weekly basis from 1st April to 31st September each year generating very detailed information on butterfly numbers and flight periods (phenology), and butterfly habitat requirements. The scheme is used to generate a multi-species population index, based around the counts of the most widespread species, as a measure of the health of Ireland's butterfly populations. The Irish Butterfly Monitoring Scheme is one of the monitoring schemes from 22 countries across Europe that contribute to the European Butterfly Monitoring Scheme from which pan-European trends in butterfly populations are generated.

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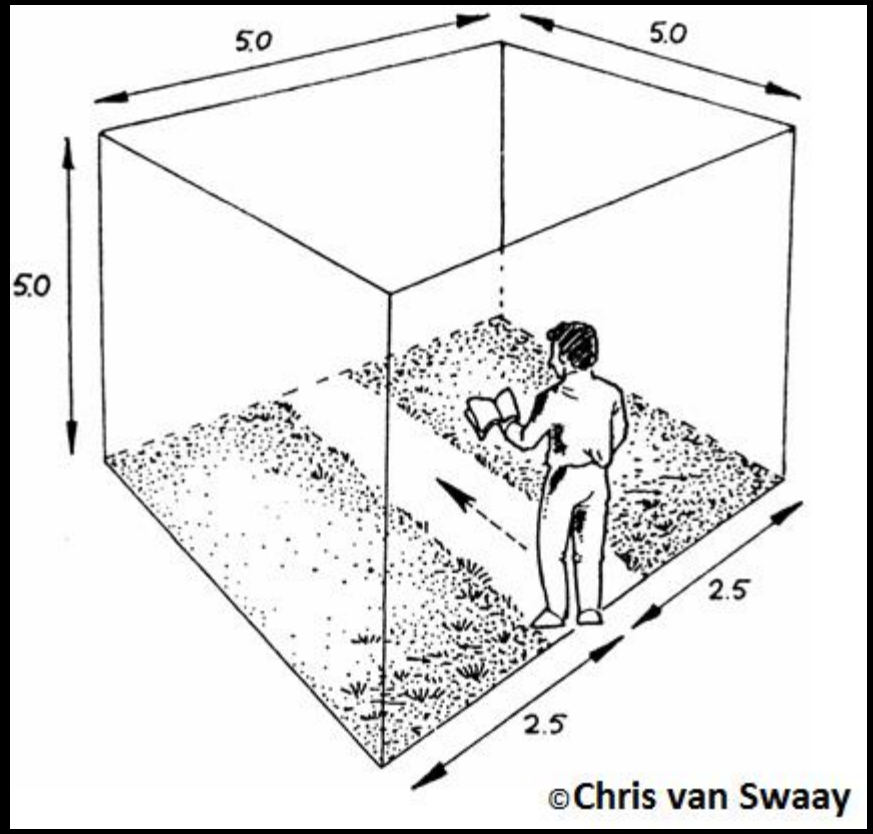
Irish Butterfly Monitoring Scheme



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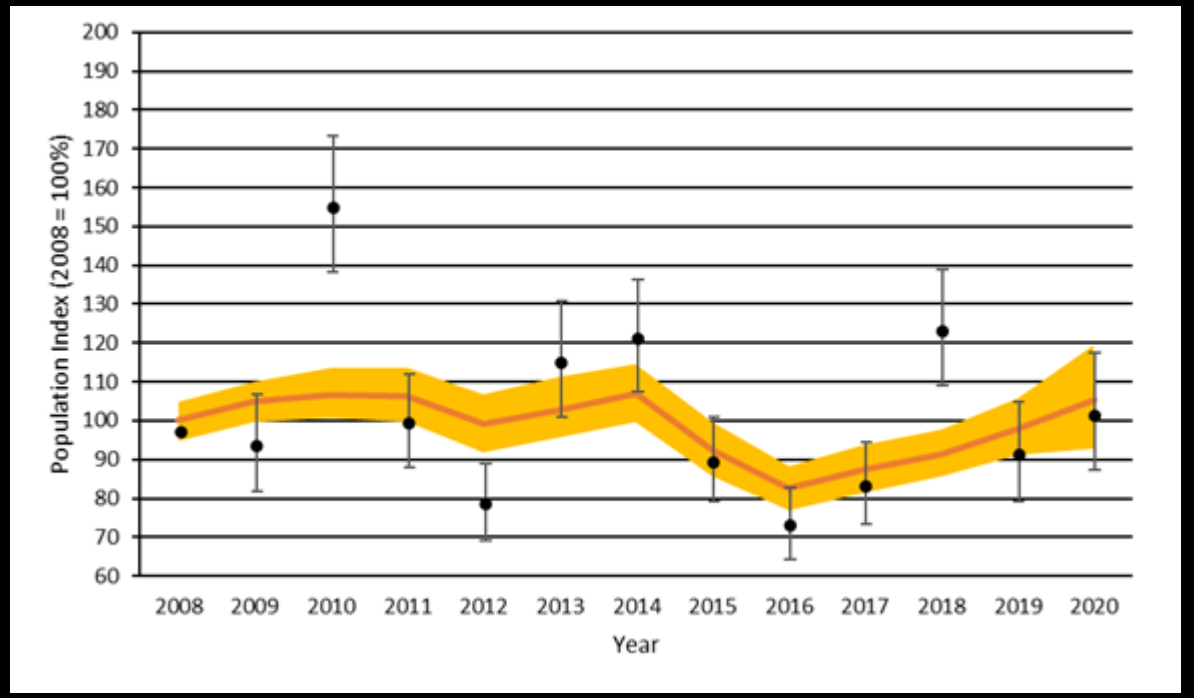
Irish Butterfly Monitoring Scheme



All-Ireland Pollinator Plan

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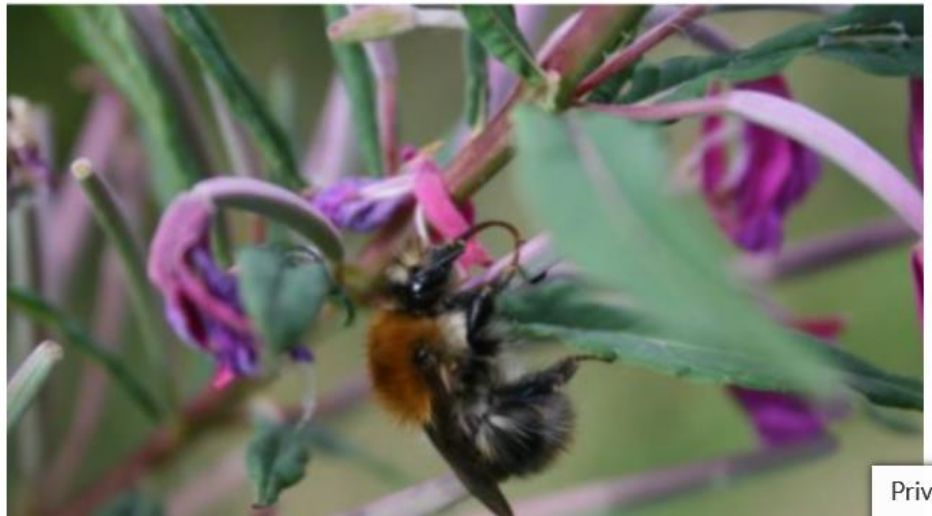
A Heritage Council Programme

SURVEYS > POLLINATORS

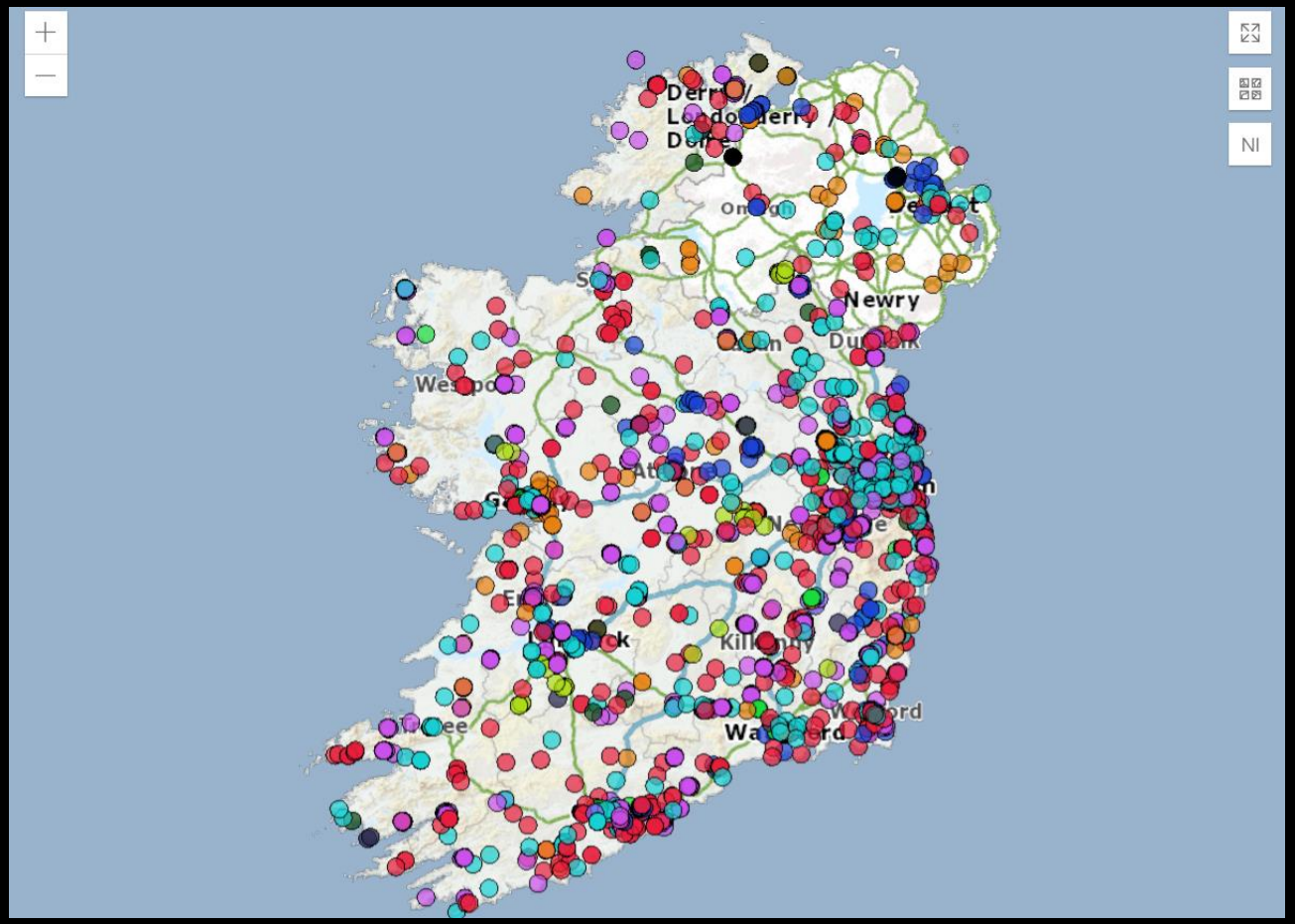
Bumblebee Monitoring Scheme

The All-Ireland Bumblebee Monitoring Scheme monitors bumblebees on a monthly basis from March to October each year, generating detailed information on bumblebee populations and how they are changing.

mThe All-Ireland Bumblebee Monitoring Scheme, established by the National Biodiversity Data Centre in 2012, is one of the first of it's kind globally. It tracks Ireland's widespread bumblebee species and uses the status of the 8 commonest species to generate a multi-species population index as a measure of the health of Ireland's bumblebee populations. It provides vital baseline data that will be used to assess the impact of the All-Ireland Pollinator Plan.



All-Ireland Pollinator Plan



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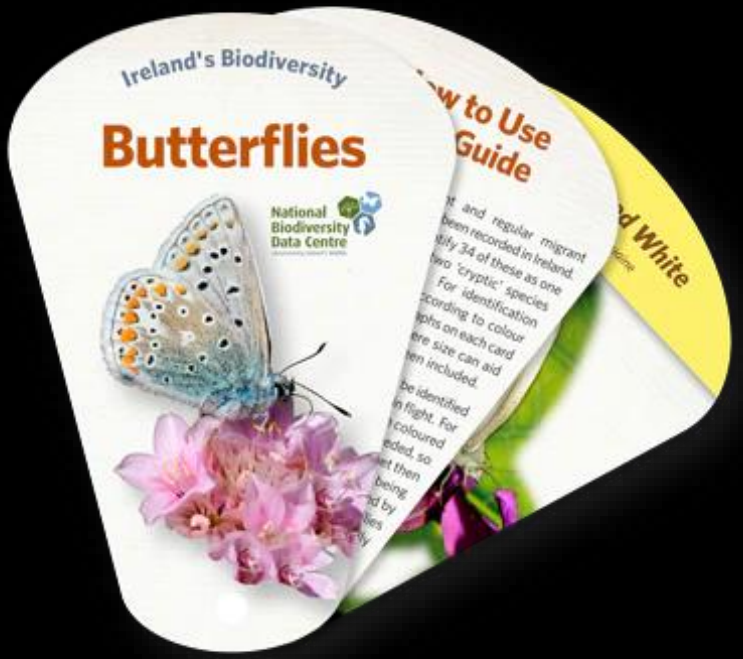
Swatches



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Posters

National Biodiversity Data Centre
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The National Biodiversity Data C

The National Biodiversity Data Centre works to make biodiversity data and
more freely available in order to better understand and assist the protection
biodiversity.

44849258
RECORDS

16868
SPECIES

The role and value of Citizen Science

Damian McFerran, Records Centre Manager.

NIEA Northern Ireland Environment Agency
www.daera-ni.gov.uk

An Agency within the Department of Agriculture, Environment and Rural Affairs
www.daera-ni.gov.uk

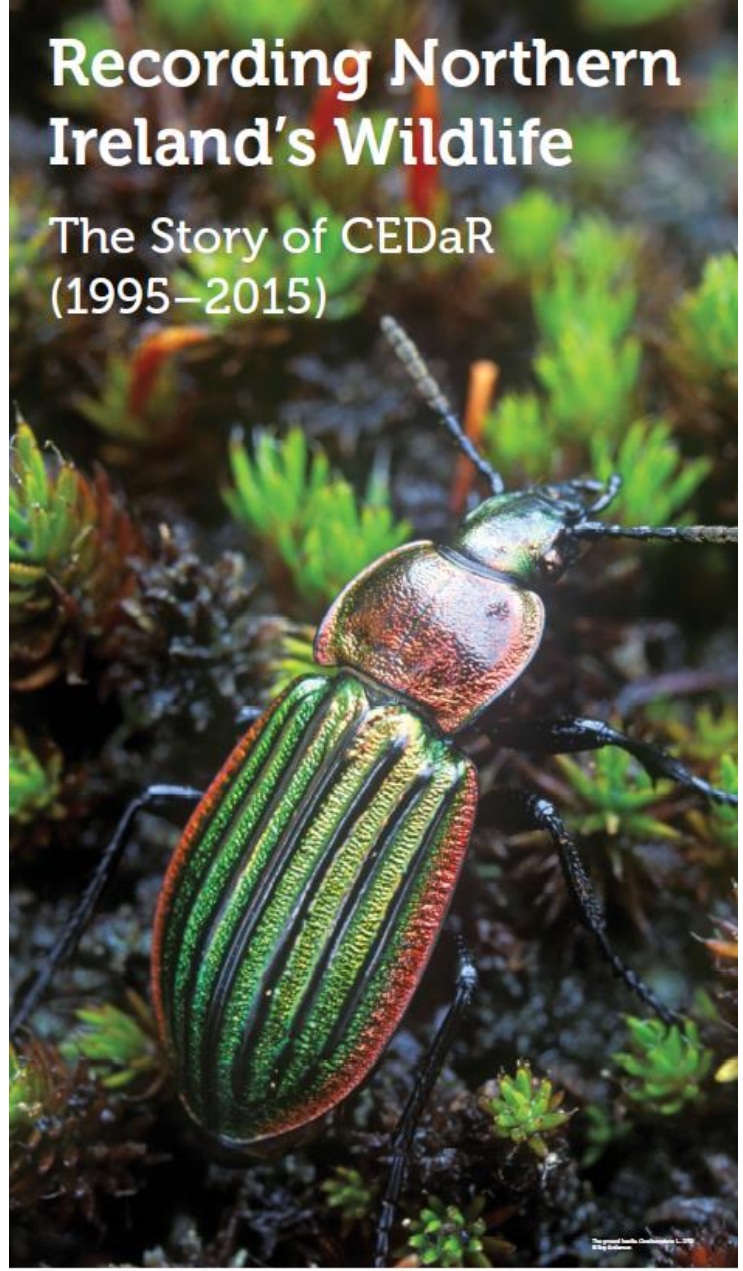
CEDaR Centre for Environmental Data and Recording

NATIONAL MUSEUMS NI


CEDaR
Centre for Environmental Data and Recording
Recording Northern Ireland's Biodiversity
Activities of the Centre include:
Information Requests
Online Recording
Training Courses
Recording Schemes
BioBlitz Support
Publications
Bat Enquiries
Project Support
Collecting Evidence
Feeding into Analysis
www.nmni.com/CEDaR
NIEA Northern Ireland Environment Agency
National Museums Northern Ireland
explore/engage/enjoy
Ulster Wildlife
Have you seen
YFC

Recording Northern Ireland's Wildlife

The Story of CEDaR (1995–2015)



NIEA Northern Ireland Environment Agency
www.doeni.gov.uk/nieа
An Agency within the Department of the Environment
www.doeni.gov.uk

CEDaR
Centre for Environmental Data and Recording

National Museums Northern Ireland
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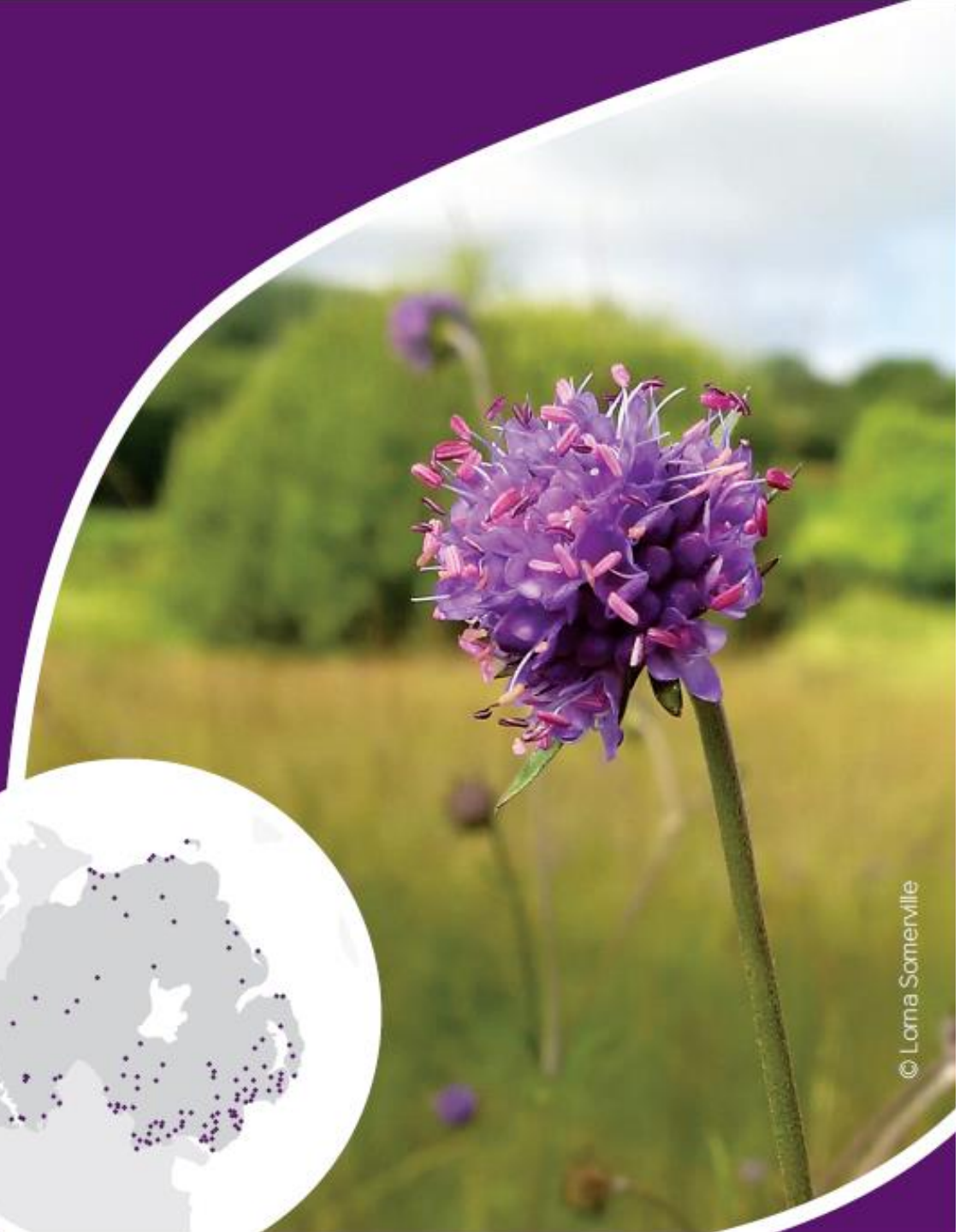
NBN atlas
NORTHERN IRELAND

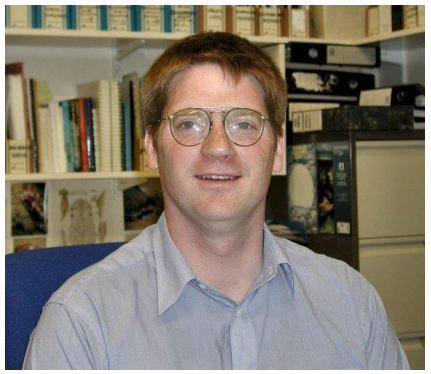
EXPLORING NORTHERN IRELAND'S WILDLIFE AND PLACES



© Lorna Somerville

Devil's-bit Scabious
Succisa pratensis

northernireland.nbnatlas.org




Dr Damian McFerran,
Dept of Applied Plant Science,
Queen's University of Belfast,
Newforge Lane,
Belfast BT9 5PX
Northern Ireland

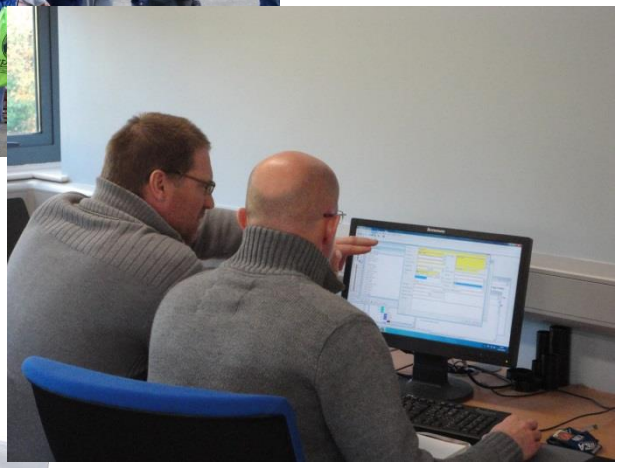

NBN
National Biodiversity Network
CAPTIVATE &
ENGAGE PEOPLE
ABOUT WILDLIFE
www.nbn.org.uk

The Future

In the future, CEDaR will:

- continue to support the individuals and organisations that constitute the Environmental Recorders' Group (ERG)
- continue to encourage the development of Citizen Science projects and ensure that the opportunity to assist with these is available to a wide audience
- continue to address work areas identified by the *Northern Ireland Biodiversity Strategy* and assist the work of partner individuals and organisations
- continue and develop the survey and monitoring of priority species and habitats and assist the flow of information on invasive species
- continue and develop the programme of training courses to encourage biological recording skills and nurture the development of the next generation of recorders
- continue and develop the partnership with the National Biodiversity Network (NBN) and explore all opportunities to develop further the suite of websites available through *Habitas*
- continue and develop the flow of information to the NBN Gateway, investigating the application of new technologies to further encourage and facilitate the collection and release of information.

Getting started, studying butterflies and moths in the field © Robert Thompson




BioBlitz
BioBlitz
PARK


CEDaR
Recording Northern Ireland's Biodiversity
CEDaR
MARITIME
Festival

Recording Wildlife Information

The recording of wildlife information (biological records) by CEDaR is required as part of the *Northern Ireland Biodiversity Strategy*, to inform both policy and decision-making.

In the early years of CEDaR, the creation of a database known as *Inventory of Datasets for Northern Ireland* allowed staff to document the location of biological records and begin the collation of information.

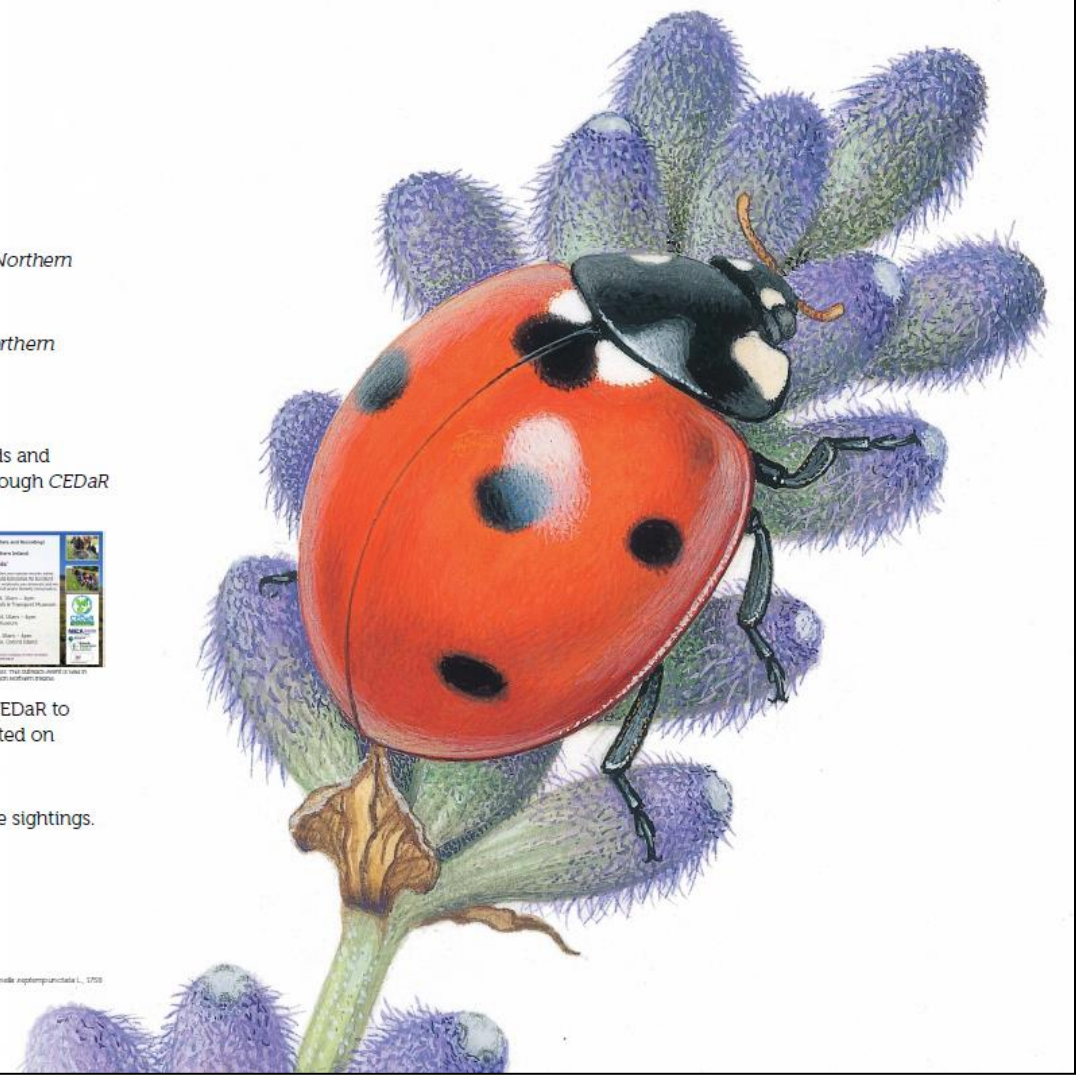
Information is currently received in a variety of formats, such as paper records, recording cards and database or Excel files. In recent years, there has been an increase in information received through *CEDaR Online Recording*.





Wildlife information is collated using a number of databases. These databases have allowed CEDaR to store millions of records about our natural history. Terrestrial and freshwater records are collated on *Recorder 6*, and marine and earth science data on *Marine Recorder* and *GD2*.

There is also a network of expert verifiers who assist with the identification of difficult and rare sightings.



The Seven-spot Ladybird *Coccinella septempunctata* L., 1758
© Richard Lewington

CEDaR Centre for Environmental Data and Recording

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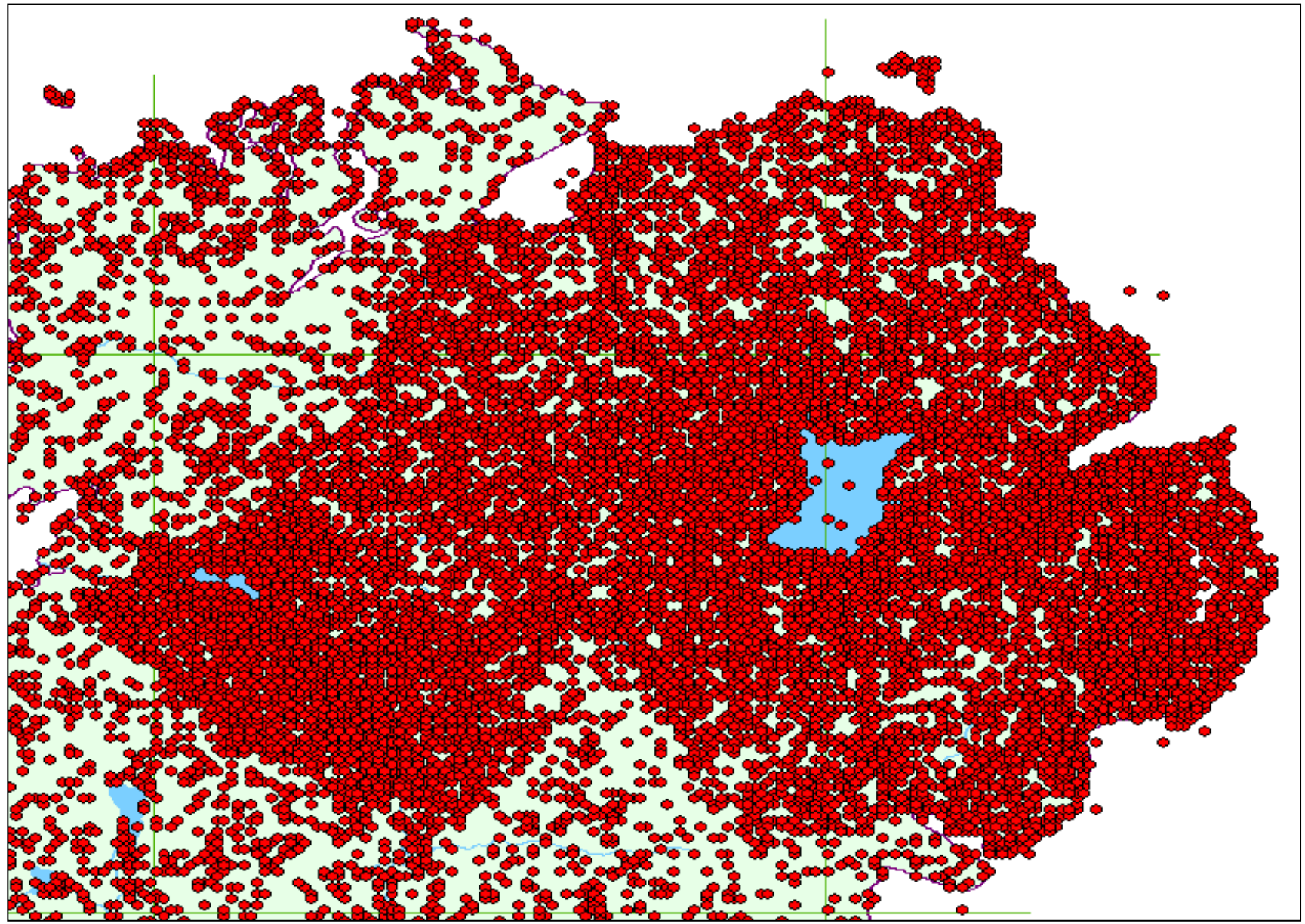
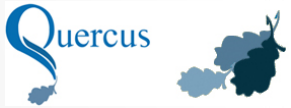


Partnerships



CEDaR
Centre for Environmental Data and Recording

What is a biological record?

A biological record is built up of the following key components:

- **Species** name
- **Location** where the species was observed
- **Grid Reference** of the location
- **Date** of the sighting
- **Recorder** of the species

Recorders are encouraged to supply the maximum amount of additional information relating to their sighting, such as the location's habitat, number of individuals and whether the species was observed directly or from a track or sign.

Why are biological records collected and collated by CEDaR?
Recording the wildlife of Northern Ireland is important as it helps with the monitoring of species and habitats. Biological records allow the impacts of environmental change to be understood and are crucial for the formation of government policy and legislation.

Submitting your records
You can send your biological records to CEDaR in a variety of formats, including spread-sheets, recording cards, database files or via *CEDaR Online Recording*.

There is a network of local experts who will verify your records and decide if any rare or uncommon sightings are correct.

CEDaR
Centre for Environmental Data and Recording

Environmental Recorders' Group

The establishment of the Environmental Recorders' Group (ERG) has been crucial to the development of CEDaR.

ERG was established as a forum for individuals and organisations interested in wildlife recording. The setting-up of ERG has encouraged the flow of data to CEDaR and the dissemination of information for a variety of purposes.

The group meets twice a year to share ideas and expertise. Membership is free and any statutory or voluntary organisation, local society or individual interested in biological recording can join.

An ERG grant scheme (ERG Fund) has been set up to encourage biological and geological recording in Northern Ireland. Funding priority is given to projects which support the objectives of the *Northern Ireland Biodiversity Strategy*.

A registered member is eligible to apply for one grant from the ERG Fund per year. Since 1995, numerous local projects have been funded, from reports and books to recording equipment and species surveys.

Some of Northern Ireland's active lepidopterists (those who study butterflies and moths). Peatlands Park, County Armagh, July 2006 © Robert Thompson

Training, Facebook and CEDaR News

Training

CEDaR has traditionally assisted with the training of biological recorders for numerous projects, such as *Look out for Mammals* and the dragonfly, lichen and orchid surveys.

Since 2012, CEDaR has organised an annual programme of training courses. These have addressed under-recording in a number of species groups and encouraged the submission of records. The tutors for these courses have been local, national or international experts.

Facebook and CEDaR News

CEDaR has used a variety of media to highlight its activities, such as television and radio interviews, newspaper articles and peer reviewed papers.

In recent years, the *Habitas* websites and social media have enabled CEDaR to advertise its activities more widely and to generate feedback and comments on current initiatives.

Facebook and CEDaR News are now used to reach a growing number of partner individuals and organisations. These are also used to highlight a number of Citizen Science (recording) projects and outreach events.

Participants on the orchid training course at Crom Estate, County Fermanagh, July 2022

CEDaR Training Courses 2019

CEDaR Centre for Environmental Data and Recording

Course topic	Delivered by	Date	Location
Craneflies	Pete Boardman	Sat 4 May	Lough Neagh Discovery Centre
Bat Ecology	Karen Healy	Sat 11 May	Roe Valley Country Park
Aquatic Plants	Robert Northridge	Sat 1 June	Crom Estate
Rocky Shores	Julia Sigwort	Mon 10 June	QUB Marine Lab, Portaferry
Moth Dissection	Ken Bond	Mon 17 June	Ulster Museum
Fen Species	NIEA HST	Wed 19 June	Lough Neagh Discovery Centre
Seaweeds	DAERA Plant Team	Fri 28 June	Portrush Coastal Zone
Garden Hoverflies	Ryan Mitchell	Fri 5 July	Lagan Classroom, UFTM, Cultra
Lake Habitats	Tony Waterman	Fri 2 August	Blessingbourne Estate
Invasive Species	NIEA NNIS Team	Wed 21 August	Cultra Manor, UFTM
Slugs and Snails	Roy Anderson	Sat 14 September	Crom Estate
Woodlice	Roy Anderson	Sat 19 October	Crawfordsburn Country Park
Grassland Fungi	Mark Wright	Thur 24 October	Magilligan Field Centre

CEDaR Training courses are **open to all** and **booking is essential**
For more information and to book your place please see www.nmni.com/Whats-on

NIEA Northern Ireland Environment Agency www.daera-ni.gov.uk

NATIONAL MUSEUMS NI

CEDaR
Centre for Environmental Data and Recording

The Web

Since the development of the *Flora of Northern Ireland* website in 2000, a suite of CEDaR websites have been developed through *Habitas*.

Most websites focus on species groups, such as dragonflies, moths and ladybirds. In each, expert-written text features alongside distribution maps and species images. The success of recording projects, such as *DragonflyIreland*, also demonstrates the value that content-rich websites can have in nurturing the development of wildlife identification skills.

Recently, *CEDaR Online Recording* has allowed recorders to submit records via the Internet. In this system, the adding of photographs and the pinpointing of the exact location of the record using online mapping, is invaluable to our expert verifiers.

Through the web, CEDaR is providing an opportunity for people to access the information they need in order to enhance their knowledge and enjoyment of the natural world.

www.nmni.com/cedar

www.habitas.org.uk

Centre for Environmental Data and Recording - CEDaR on Facebook

Greater Butterfly-orchid *Platanthera chlorantha* (Custer) Richb. © Robert Thompson

Habitas

Plant life/Animal life/Minerals, Rocks & Fossils

Ulster Museum

Plant life

Wild plants

The Flora of Northern Ireland

The new *County Armagh scarce, Rare and Extinct Vascular Plant Register* has been published!

Orchids of Ireland

European Orchids

Garden plants

Garden Flora of Northern Ireland

Lichens

Animal life

Insects and invertebrates

DragonflyIreland

Ground Beetles of Ireland

Butterflies and Moths of Northern Ireland

Ladybirds of Ireland

Invertebrate Ireland

MolluscIreland

Marine life

Encyclopedia of Marine Life of Britain & Ireland

Sponges of Britain and Ireland

Catalogue of the Irish and British Marine Mollusca in the collections of the National Museum of Ireland - Natural History

Mammals, Amphibians & Reptiles

CEDaR

Centre for Environmental Data and Recording

CEDaR - Centre for Environmental Data and Recording

Submit Records Online

Information Service

CEDaR News

Training and Events

Surveys

BioBlitz

Recording

Recorder 6

Bat enquiries

Environmental Recorders' Group

Publications

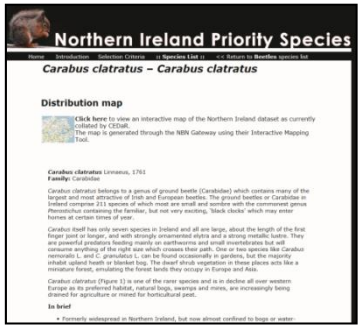
Aim & objectives

Contact us

Find us on Facebook

Literature

Irish Natural History Literature OnLine



CEDaR Centre for Environmental Data and Recording

NATIONAL MUSEUMS NI

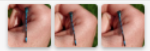
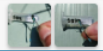
Home | Record | Explore | Summarise | Activities | **Verify** | Forum | Help

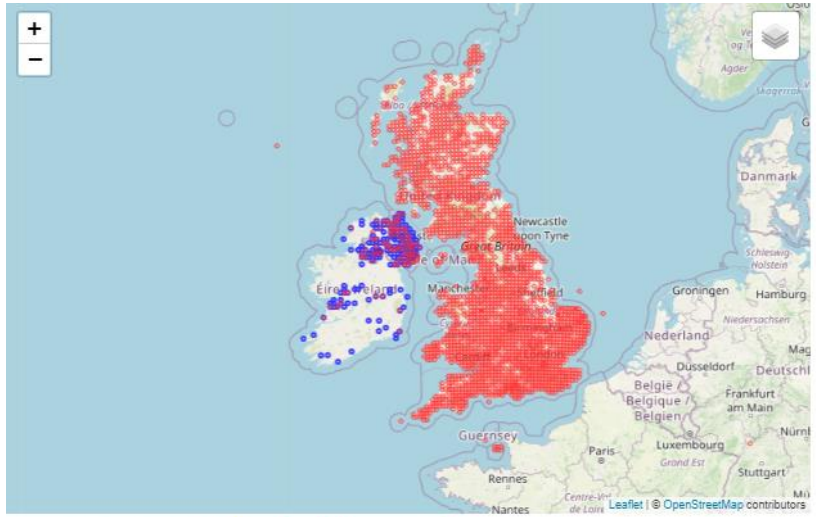
Verification

This is the current version of the verification page. A full guide to its use is available on the verifiers' resources page.

Search: **Context:** Dragonflies; Ireland; McFerran, Damian **Status:** Accepted **Photos:** -no filter-

Filter: Select filter... Apply Reset Create a filter

ID	Src	Species	Common name	Location	Map ref.	VC no.	Date	Recorder	Determiner	Media	Checks	Last updated
25711831	29|126	*Pyrrhosoma nymphula*	Large Red Damselfly	Corbally Fen	J452385	H38	07/06/2022	McFarlane, Claire				16/06/2022 11:52
25711830	29|126	*Libellula quadrimaculata*	Four-spotted Chaser	Corbally Fen	J452385	H38	07/06/2022	McFarlane, Claire				16/06/2022 11:52
25711829	29|126	*Ischnura elegans*	Blue-tailed Damselfly	Corbally Fen	J452385	H38	07/06/2022	McFarlane, Claire				16/06/2022 11:52
25711828	29|126	*Coenagrion pulchellum*	Variable Damselfly	Corbally Fen	J452385	H38	07/06/2022	McFarlane, Claire				16/06/2022 11:57
25711827	29|126	*Coenagrion puella*	Azure Damselfly	Corbally Fen	J452385	H38	07/06/2022	McFarlane, Claire				16/06/2022 11:57
25711826	29|126	*Coenagrion lunulatum*	Irish Damselfly	Corbally Fen	J452385	H38	07/06/2022	McFarlane, Claire				16/06/2022 12:12
25711690	29|126	*Pyrrhosoma nymphula*	Large Red Damselfly	Cullentra Lough	H475474	H36	05/06/2022	McFarlane, Claire				16/06/2022 11:53
25711689	29|126	*Libellula quadrimaculata*	Four-spotted Chaser	Cullentra Lough	H475474	H36	05/06/2022	McFarlane, Claire				16/06/2022 11:53
25711688	29|126	*Ischnura elegans*	Blue-tailed Damselfly	Cullentra Lough	H475474	H36	05/06/2022	McFarlane, Claire				16/06/2022 11:53
25711687	29|126	*Enallagma cyathigerum*	Common Blue Damselfly	Cullentra Lough	H475474	H36	05/06/2022	McFarlane, Claire				16/06/2022 11:53
25711686	29|126	*Coenagrion pulchellum*	Variable Damselfly	Cullentra Lough	H475474	H36	05/06/2022	McFarlane, Claire				16/06/2022 12:07
25711684	29|126	*Coenagrion puella*	Azure Damselfly	Cullentra Lough	H475474	H36	05/06/2022	McFarlane, Claire				16/06/2022 12:08
25711586	29|126	*Pyrrhosoma nymphula*	Large Red Damselfly	Round Lough	H443483	H36	05/06/2022	McFarlane, Claire				16/06/2022 11:53
25711585	29|126	*Ischnura elegans*	Blue-tailed Damselfly	Round Lough	H443483	H36	05/06/2022	McFarlane, Claire				16/06/2022 11:53
25711584	29|126	*Enallagma cyathigerum*	Common Blue Damselfly	Round Lough	H443483	H36	05/06/2022	McFarlane, Claire				16/06/2022 11:53
25711583	29|126	*Coenagrion pulchellum*	Variable Damselfly	Round Lough	H443483	H36	05/06/2022	McFarlane, Claire				16/06/2022 12:13



Actions:

Details | Comments | Recorder experience

ID|status|checks	25711831 | ✓ | 👍
Accepted name (as entered)	*Pyrrhosoma nymphula* (Sulzer, 1776)
Common name	Large Red Damselfly
Location	Corbally Fen
Vice County	Down
Grid ref	J452385
Date seen	07/06/2022
Recorder	McFarlane, Claire
Determiner	-
Dataset	CEDaR Recording :: Dragonflies
Sample comment	-
Occurrence comment	-
Additional occurrence attributes	
Submitted on	10/06/2022 15:51
Last updated on	16/06/2022 11:52
Certainty	Certain
Abundance	10
Additional sample attributes	
CMS Username	Claire McFarlane
Recorder attributes	

BioBlitzes

In partnership with the National Biodiversity Data Centre in Waterford, CEDaR has assisted with the annual *BioBlitzIreland* competition.

The aim of this event is to record as many species as possible from particular sites over 24 hours. The site where the greatest number of species is recorded becomes *BioBlitzIreland* Champion.

Crawfordsburn Country Park, County Down (2012), Colebrooke Estate, County Fermanagh (2013) and Glenarm Estate, County Antrim (2014) were selected as the Northern Ireland sites.

During these competitions, the greatest number of species were recorded from each of these three sites and they were all crowned champions.

In 2013, CEDaR organised the week-long marine BioBlitz, *Blitz the Lough! 2013*, in Strangford Lough, County Down. A mini-BioBlitz was also undertaken at the Ulster Folk and Transport Museum, Cultra, County Down.

In 2014, CEDaR managed the *Garden BioBlitz* project throughout Ireland.

CEDaR is grateful to the broad network of individuals and organisations that helped to make every BioBlitz such a success.

Some of the BioBlitz team from Crawfordsburn Country Park, County Down in 2012

GARVAGH FOREST'S

1ST COMMUNITY BIOBLITZ

Meet Creepy Crawlies and Cool Critters

SATURDAY 25TH JUNE

11.00 AM - 1.00 PM

Wildlife Missions

Followed by a Community Picnic with Live Music so don't forget your picnic!

Orienteering with a Difference

Guided Forest Expeditions

Learn how to be citizen scientist

There will be parking available at St Paul's Church of Ireland Carpark. From there, please follow the arrows to our Base Camp outside the Forest Service Offices. For further information please contact Karin on 07966 202184

COMMONING POSSIBILITIES

Garvagh People's Forest

Publications

Since its establishment, CEDaR has managed the production of numerous publications.

The list of materials published includes annual reports, books, conference proceedings, catalogues, rare-plant registers and scientific papers.

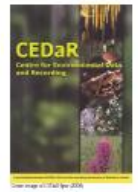
These publications have only been made possible through the development of excellent working relationships with amateur and professional naturalists and numerous natural history photographers.

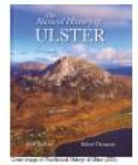
Events throughout Ireland have been organised to formally launch several publications and these have occasionally been attended by Government representatives.

Increasingly, recording cards, postcards and flyers have been produced to encourage recording and to advertise the growing number of partnership events. There have also been several revisions of a flyer that is used at outreach events and to advertise the role of CEDaR.

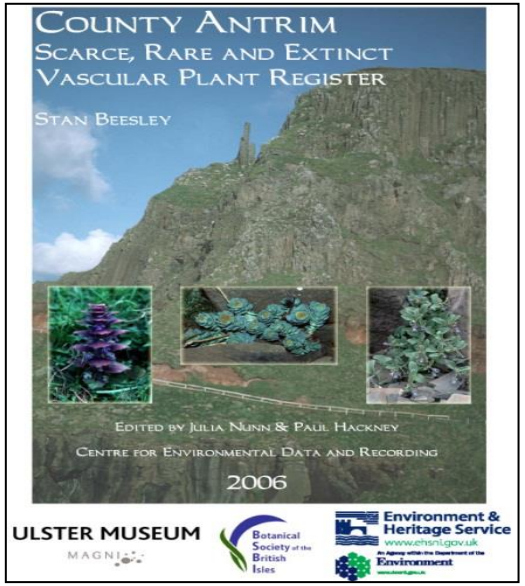
CEDaR also manages a number of websites which forms part of *Habitas*.

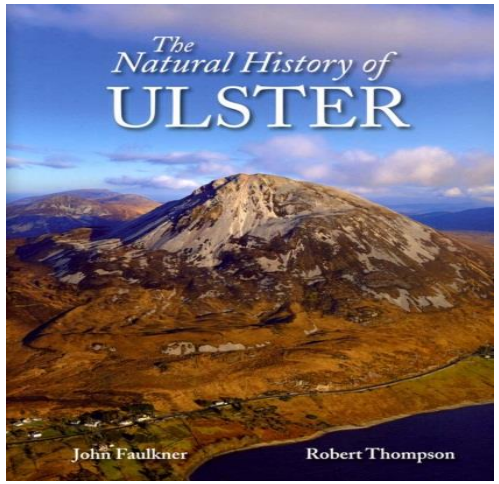
These websites include information on species surveys, literature, geology and Northern Ireland's Priority Species. They are an important tool in the dissemination of information about CEDaR and the projects that it manages.

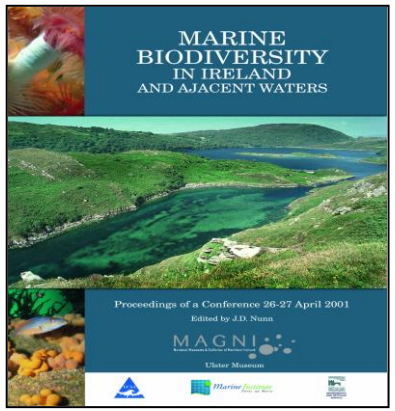


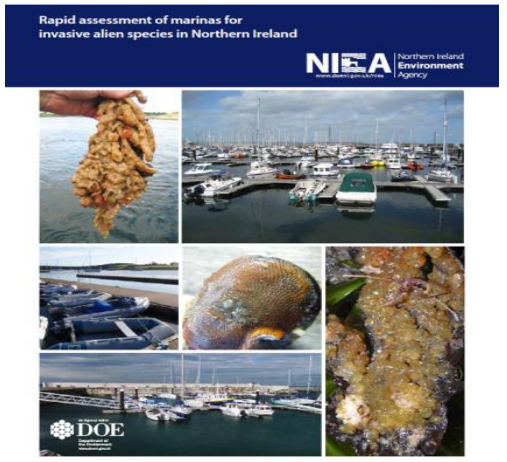


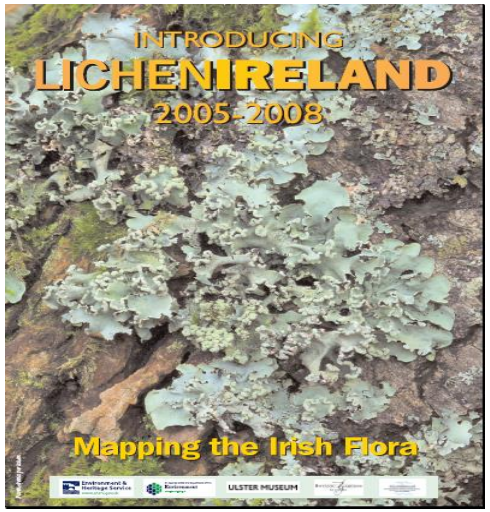
Sea slug *Polycera quadrilineata* (O F Müller 1776) © Bernard Picton











CEDaR
Centre for Environmental Data and Recording

NATIONAL MUSEUMS NI

Bat Calls and Information Requests

Bat Calls

The Wildlife (Northern Ireland) Order 1985 gives full protection to bats and their roosts.

CEDaR provides a point of contact for bat enquiries.

Enquiries (bat calls) range from general interest, requests for talks, advice on species and their roosts to dealing with the fear of bats.

Bat calls are logged and referred to licensed members of the Northern Ireland Bat Group or staff of the Northern Ireland Environment Agency (NIEA). Licensed bat experts will offer advice and collect sick and injured bats.

Information Requests

CEDaR provides access to information on the wildlife of Northern Ireland and its coastal waters.

Whilst ensuring the confidentiality of sensitive biological records, information is released through the Information Request Form. Information is made available for a variety of purposes, such as research, conservation, education, planning and commercial enquiries.

If the enquiry is commercial, a charge may be made. This charge is based on the time required to process the request. The income generated through information requests is made available to the Environmental Recorders' Group (ERG) Fund.

Are you Batty about Bats?

Do you want to learn about Bats and how to help them?

Young Bat Workers Club

Come along and learn about the fascinating world of Bats. You will be able to take part in loads of activities and even meet some of our bats!

We meet at Ulster Folk and Transport Museum, Cultra on the 3rd Thursday of each month, between October and May

(Starting Thursday 19th October at 7.00pm).

7.00pm – 8.30pm

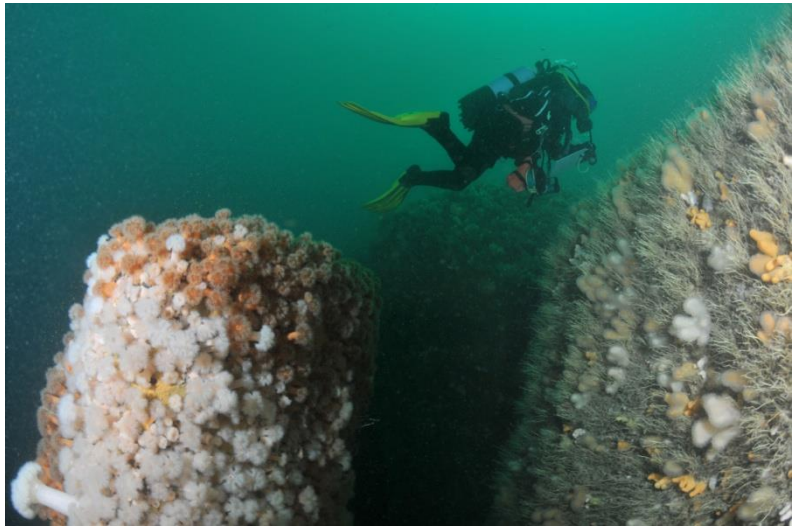
All girls and boys of Primary School age are welcome.

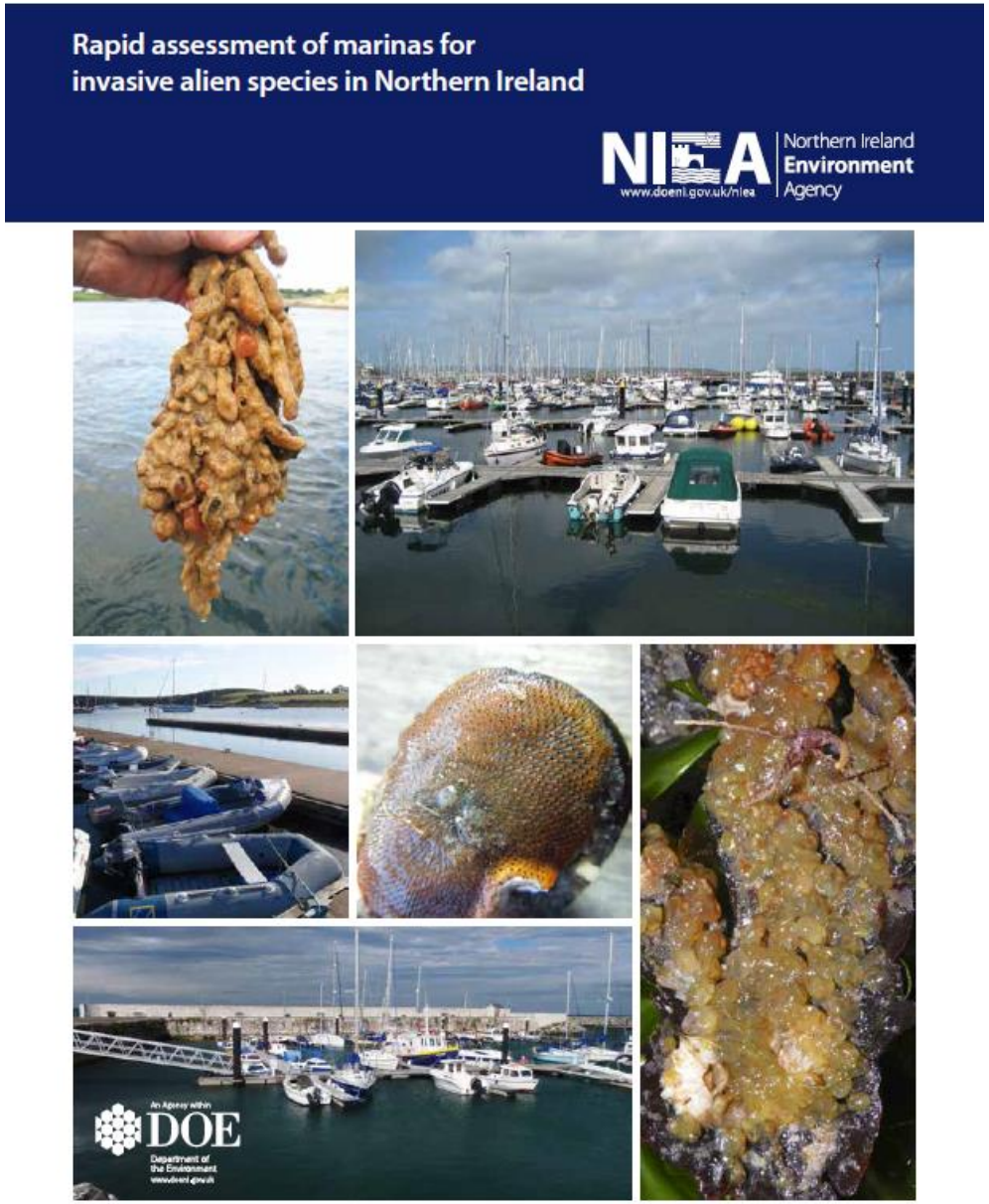
Bookings open now at

http://nmni.com/uftm/What-s-on/Events/Young-Batworkers-Club

For more information call:

Robin- 07972196066 or Donna- 07902929868





Research and Development Series 13/06
A report commissioned by the Northern Ireland Environment Agency

Rapid assessment of marinas for invasive alien species in Northern Ireland

Authors - Dan Minchin & Julia Nunn

Contractor – Dr Dan Minchin, *Marine Organism Investigations*, 3 Marina Village, Ballina, Killaloe, Co. Clare

Associate – Dr Julia Nunn, *Centre for Environmental Data and Recording*, National Museums Northern Ireland, 153 Bangor Road, Cultra Holywood, Co. Down

NIEA Client Officer-John Early, Northern Ireland Environment Agency

This report should be cited as follows -

Minchin, D.M and Nunn, J.D. (2013) *Rapid assessment of marinas for invasive alien species in Northern Ireland*. Northern Ireland Environment Agency Research and Development Series No. 13/06

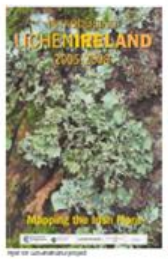

CEDaR
Centre for Environmental Data and Recording
Recording Northern Ireland's Biodiversity
CEDaR
Centre for Environmental Data and Recording

Projects

CEDaR has assisted the collection of records for many local, national and international recording projects. CEDaR particularly encourages involvement with Citizen Science projects.

Citizen Science projects, such as the *Cuckoo Recording Scheme*, encourage everyone to make a contribution to biological recording by adding their records to our knowledge of the status and distribution of species.

Some of the earliest projects included, *The Northern Ireland Mammal Recording Scheme, New Atlas of the British and Irish Flora* and *The Millennium Atlas of Butterflies in Britain and Ireland.*



CEDaR has also managed a number of all-Ireland recording projects: *DragonflyIreland, LichenIreland* and *OrchidIreland.* CEDaR is currently assisting recording for the *Atlas of Mammals of Ireland.*

Through the CEDaR Initiative programme, a number of projects have also been managed, such as the Cuckoo, Marsh Fritillary, Scarce Crimson & Gold and Micro-moth surveys.

CEDaR has also assisted with *The Shore Thing, The Big Seaweed Search* and the contract for *Rapid assessment of marinas for invasive alien species in Northern Ireland.*

Biota / Animalia / Chordata / Vertebrata / Aves / Cuculiformes / Cuculidae / Cuculus / Cuculus canorus

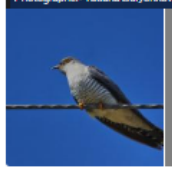
Cuculus canorus Linnaeus, 1758

JSON

CUCKOO

species Accepted **Name authority:** UKSI **Establishment means:** Native Northern Ireland Priority Species

Overview | Gallery | Names | Classification | Records | Literature | Sequences | Data Partners



+

Common cuckoo

The **common cuckoo** (*Cuculus canorus*) is a member of the cuckoo order of birds, *Cuculiformes*, which includes the roadrunners, the anis and the coucals.

This species is a widespread summer migrant to Europe and Asia, and winters in Africa. It is a brood parasite, which means it lays eggs in the nests of other bird species, particularly of dunnocks, meadow pipits, and reed warblers. Although its eggs are larger than those of its hosts, the eggs in each type of host nest resemble the host's eggs. The adult too is a mimic, in its case of the sparrowhawk; since that species is a predator, the mimicry gives the female time to lay her eggs without being seen to do so.

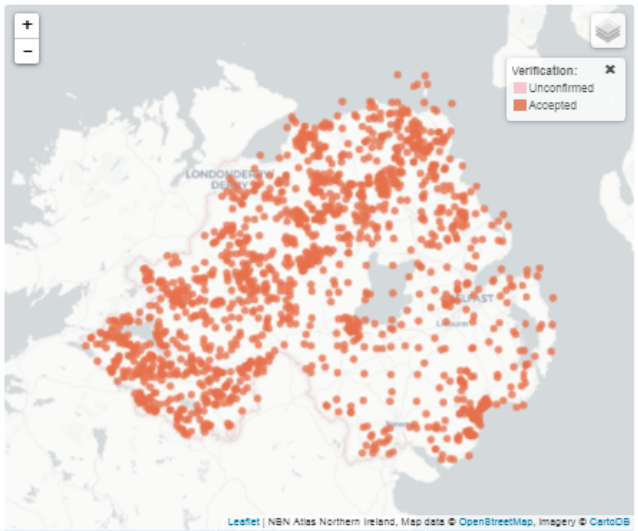
Source: http://en.wikipedia.org/w/index.php?title=Common_cuckoo&oldid=859097634
Rights holder: Wikipedia authors and editors
Provided by: Encyclopedia of Life

Online Resources

- NI Priority Species
- JSON
- Biodiversity Heritage Library
- PESI

2,920 records (2,920 in total)

This map contains both point- and grid-based occurrences at different resolutions



Analyse data | Interactive map | View records

Receive alerts when new records are added

Datasets

7 datasets have provided data to the NBN Atlas Northern Ireland for this species.

Browse the list of datasets and find organisations you can join if you are interested in participating in a survey for species like *Cuculus canorus* Linnaeus, 1758

- Northern Ireland Priority Species
- Scottish Rural Development Programme
- Scottish Biodiversity List

SPECIES | LOCATIONS

- Species search
- Priority Species
- Invasive Species
- Sensitive Species
- All species lists

nmni.com/CEDaR/Recording

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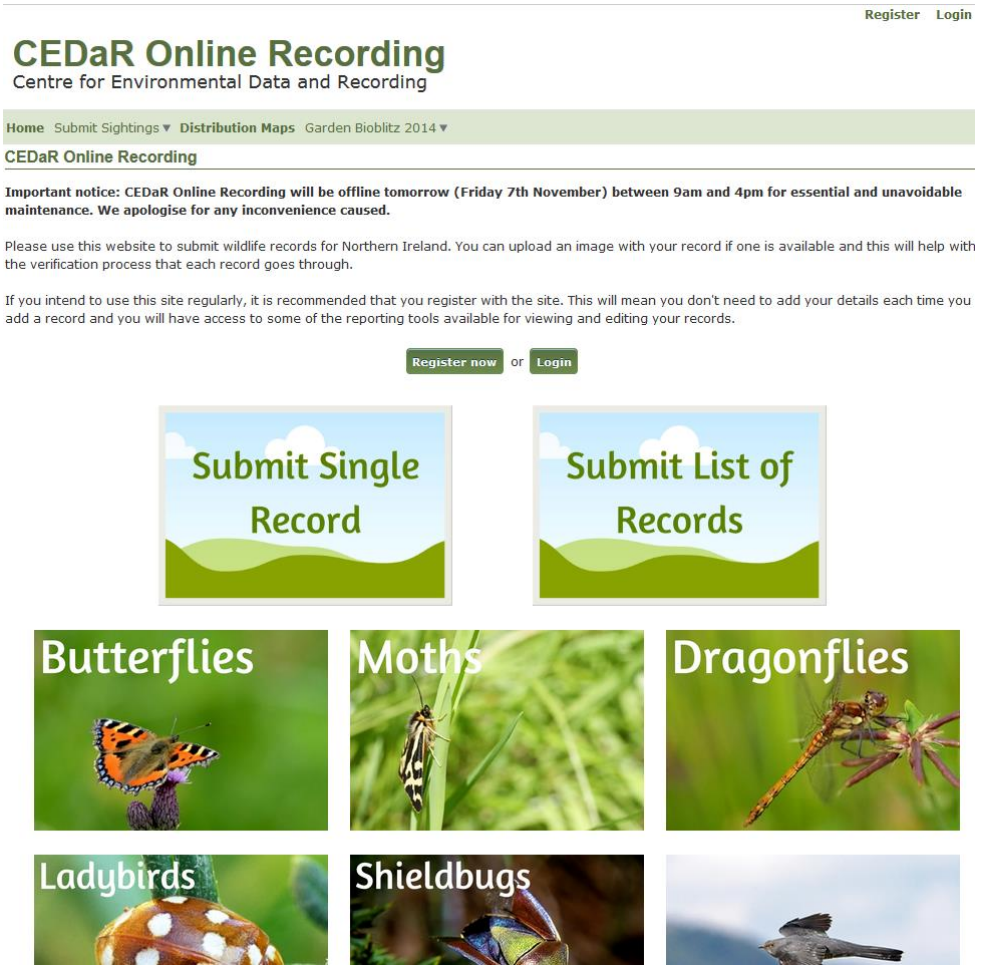
Centre for Environmental Data and Recording

ORCHIDIRELAND Recording

Location name	Scraffy Castle dog Road	Date of visit	27/06/2009
Grid ref.	H 22 76	County	H 36 Tyrone
Recorder(s)	R H Northridge	Altitude (m)	200
Determiner(s)	RHN	Card Compiler	RHN

Anacamptis pyramidalis		*Dactylorhiza majalis* subsp. *traunsteinerioides*		*Neotinea maculata*	*D. fuchsii* X *Gymnadenia conopsea*
Cephalanthera longifolia		*Dactylorhiza majalis* var. *brevifolia*	✓	*Neottia nidus-avis*	*D. maculata ericetorum* X *Gymnadenia conopsea*
Coeloglossum viride		*Epipactis atrorubens*		*Ophrys apifera*	*D. majalis* var. *brevifolia* X *G. conopsea*
Dactylorhiza fuchsii	1b ✓	*Epipactis helleborine*		*Ophrys insectifera*	*D. fuchsii* X *D. incarnata*
Dactylorhiza fuchsii subsp. *hebridensis*		*Epipactis palustris*		*Orchis mascula*	*D. fuchsii* X *D. incarnata* var. *cruenta*
Dactylorhiza fuchsii var. *okellyi*		*Epipactis phyllanthes*		*Orchis morio*	*D. fuchsii* X *D. maculata ericetorum*
Dactylorhiza incarnata subsp. *incarnata*		*Gymnadenia conopsea*		*Platanthera bifolia*	*D. fuchsii* X *D. majalis occidentalis*
Dactylorhiza incarnata subsp. *cruenta*		*Gymnadenia conopsea* subsp. *borealis*		*Platanthera chlorantha*	*D. fuchsii* X *D. majalis traunsteinerioides*
Dactylorhiza incarnata var. *coccinea*		*Gymnadenia conopsea* subsp. *conopsea*		*Pseudorchis albida*	*D. fuchsii* X *D. majalis* var. *brevifolia*
Dactylorhiza incarnata var. *haematodes*		*Gymnadenia conopsea* subsp. *densiflora*		*Spiranthes romanzoffiana*	*D. incarnata* X *D. maculata ericetorum*
Dactylorhiza incarnata var. *hyphaematodes*		*Hammarbya paludosa*		*Spiranthes spiralis*	*D. maculata ericetorum* X *D. majalis occidentalis*
Dactylorhiza maculata subsp. *ericetorum*	4b ✓	*Listera cordata*		Hybrids	*D. maculata ericetorum* X *D. majalis traunsteinerioides*
Dactylorhiza majalis incl. subsp. *occidentalis*	2 ✓	*Listera ovata*	27 ✓	*Coeloglossum viride* X *Dactylorhiza fuchsii*	*D. maculata ericetorum* X *D. majalis* var. *brevifolia*

* In submitting these records, I/we agree that the data can be utilised for *Irish Fish* conservation purposes.



New technologies

Designing for different media

- mobile phones
- HD TVs / larger screens
- Tablets

Constant development

- apps
- new languages
- new design techniques

Habitas

Plant life/Animal life/Minerals, Rocks & Fossils

NATIONAL MUSEUMS NI

Plant life

Flowering plants

The Flora of Northern Ireland

Scarce, Rare and Extinct Vascular Plant Registers

European Orchids

Garden Flora of Northern Ireland

Lichens

LichenIreland

Minerals, Rocks and Fossils

Earth Science Conservation Review

The Jurassic at Larne

Holey Rocks!

Rocks and Fossils of Northern Ireland

Animal life

Insects and invertebrates

DragonflyIreland

Ground Beetles of Ireland

Butterflies and Moths of Northern Ireland

Ladybirds of Ireland

MolluscIreland

Marine life

Encyclopedia of Marine Life of Britain & Ireland

Sponges of Britain and Ireland

Catalogue of the Irish and British Marine Mollusca in the collections of the National Museum of Ireland - Natural History

Mammals, Amphibians & Reptiles

Mammals, Amphibians and Reptiles of Northern Ireland

CEDaR

Centre for Environmental Data and Recording

CEDaR - Centre for Environmental Data and Recording, Training, Events, Information, Enquiries, etc. all now on National Museums NI website

Submit Records Online

Northern Ireland Priority Species

Northern Ireland Priority Species

Invasive species

Invasive Alien Species in Northern Ireland

Literature

Irish Natural History Literature OnLine

Northern Ireland

environment link

News

EU Matters May 2019

EU Matters April 2019

GFA, Brexit & Environment Report

Events

A beach near Strangford, Co Down – Beachwatch

Brackagh Moss Nature Reserve, near Portadown – Scrub Control

Inishowen, County Donegal

Jun 2019

						01
02	03	04	05	06	07	08
09	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

2019

- About Us
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- Members
- Publications
- Nature Matters NI
- Projects
- Opportunities
- Contact
- Links
- Funding
- Search
- Social media
- Subscribe

Calendar View

List

Submit event

Select Category

- Show all events
- Multiple events
- Members Only
- Conferences
- Days Out
- Skills & Training
- Talks & Lectures
- HLF Catalyst
- EU Hub

January

		01	02	03	04	05
06	07	08	09	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

February

				01	02	03
04	05	06	07	08	09	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28			

March

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04	05	06	07	08	09	10
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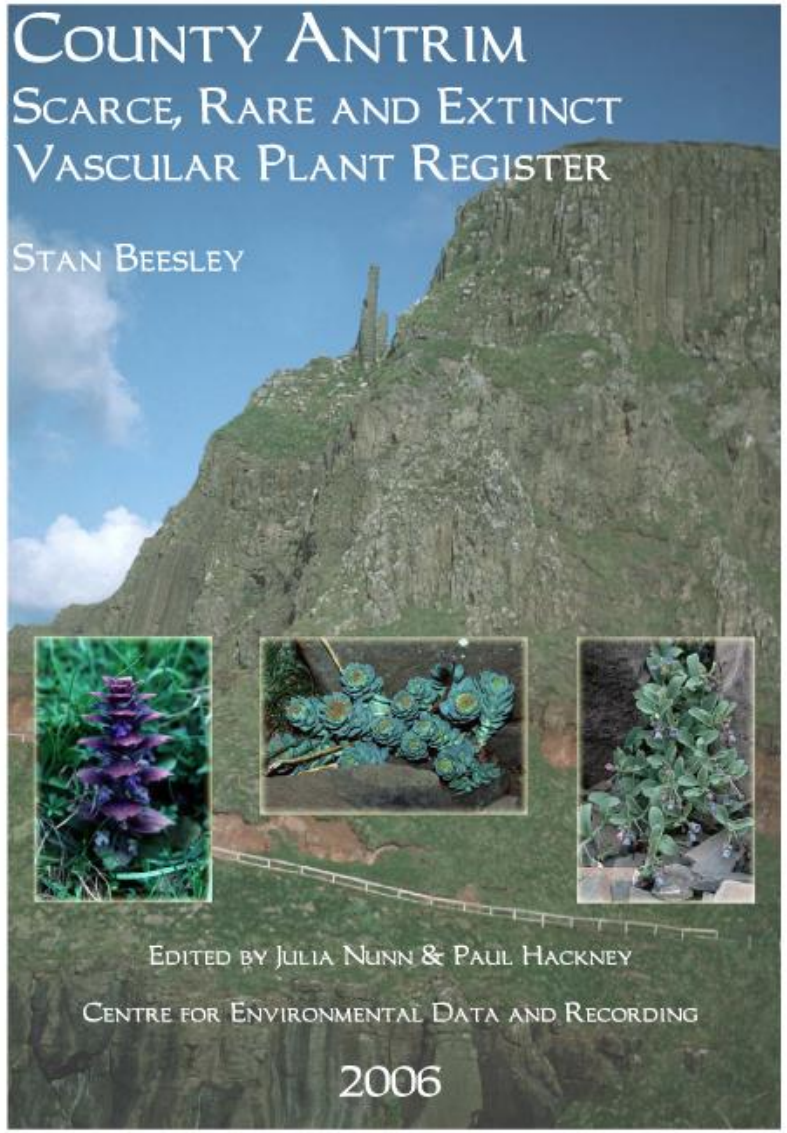
Recording Schemes

Taking part in a recording scheme or survey is a way for you to become more involved with biological recording.

By becoming a 'Citizen Scientist' you will be asked to follow certain methodology to collect data in a standardised format to enable more robust analysis. Surveys can be on a local, national, all-Ireland or international scale. For information on active recording schemes and surveys in Northern Ireland please see CEDaR's developing webpages or contact us for more information.



ULSTER MUSEUM
MAGNI

Botanical Society of the British Isles

Environment & Heritage Service
www.ehsni.gov.uk
An Agency within the Department of the Environment

to be worth £10
local economy.

EYE ON NATURE

Recently a short-eared owl settled on a fence post 40m from me and then on the ground close to the shore. The last remembered local sighting, in The Rosses, was accidentally shot in 1944.
Martina Sweeney, Maghery, Co Donegal.

I watched a group of six crossbills (both male and female) feed on the cones in Scots pines close to our house in the Glens of Antrim. How rare are they?
Brian Scott, Cushendall, Co Antrim.
There are several local populations on this island, one in north Antrim.

I encountered a massive wasp-type insect flying near my house. It was yellow and black with yellow eyes, long yellow antennae and trailing its hind legs behind it.
Ivan Gillespie, Bun Beag, Co Donegal.
It was a female wood wasp, also called a horntail, a sawfly with a trailing ovipositor. She lays her eggs in tree trunks where they take two or three years to mature before they emerge.

I discovered that my nasturtiums were covered with tiny green and yellow caterpillars. They ate their way through most of the leaves then disappeared.
Mary Jo Sullivan, Drogheda, Co Louth.
They were the caterpillars of small white butterflies.

Michael Viney welcomes observations at Thallabawn, Carrowniskey PO, Westport, Co Mayo. E-mail: viney@onu.ie. Include a postal address.

Flowering of orchids is notoriously unpredictable

MICHAEL VINEY

ANOTHER LIFE

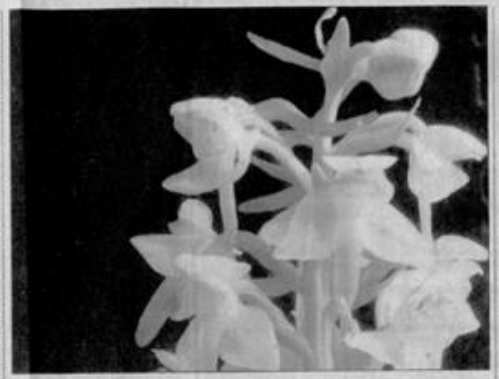
A SPECTACULAR orchid summer! From unmown football fields in Dublin suburbs, grassy pleas in Kerry villages, coastal dunes all round the island, come wonderstruck reports of the flowers in huge numbers – shocking-pink pyramidals, marsh orchids in royal purple, other spotted-leaved sorts in every frilly shade between. Down the boreen, on a river bank, cluster greater butterfly orchids, intricate in ivory.

Such an obliging show of most – indeed, possibly all, by the time the season ends – of this island's species, sub-species and varieties could not have been better arranged for the OrchidIreland survey, run from the Ulster Museum.

And its recorders, amateur and professional, however well briefed in workshops, will be pleased to have handy *The Orchids of Ireland*, the new book that offers the last word (at least for now) on their notorious variation.

The spotted orchids, particularly – dactylorchids, as they're known – are so prone to shades of difference in size, flower colour and leaf-marking that the number of their species is still not agreed and experts grow vehement in discussion. A misfortune was the failure of the late, great painter of the island's orchids, Raymond Piper of Belfast, to publish the work of some 40 years because, in his study and portraiture of individual flowers, he could never find an end.

For all his fieldwork, his scrupulous peering through a magnifying glass at every detail of orchid engineering, every nuance of *labellum, rostellum* or *epichile*, Piper was not a professional botanist, nor had the scientist's necessary cool. Dr Tom Curtis, on the other hand, author of the new orchid book, brings a certain resignation to his own lifelong passion for the plants. "Within the species found in Ireland," he writes, "it has to be accepted that some individual plants in any one population may never be assigned with certainty and even experts may be unable to give a definite name to certain specimens." His own list of Irish orchids runs to 44 species, subspecies and varieties, and getting on for half with *Dactylorhiza* in their name. The marsh orchids alone show dramatic differences, their luscious flower colours precisely rendered in Robert Thompson's photographs. As for the leaves of dactylorchids, it is "spots like those of a leopard or merging fields of dark pigmentation," says Curtis, that most often point to the hybrid plant. Sorting them out can make the specimens of a sunny coastal dune-slack "dactylorchid heaven or hell, depending on your point of view". His book is backed by more



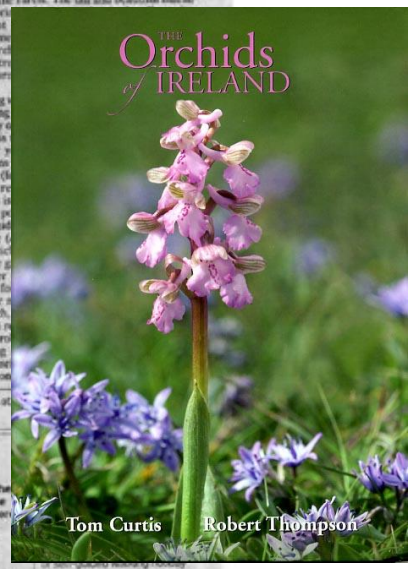
than 35 years of fieldwork, many as chief research botanist with the National Parks and Wildlife Service. But while this gives its pages a sober authority, it is also intended for the amateur orchid enthusiast, with helpful maps and splendid habitat photographs as guides to where species can be found.

Most of them like calcareous or neutral ground, with very few in the acid habitats of heaths, bogs or mountains. And while one might expect ancient refuges to provide the most excitement, the disturbed ground of quarries, road embankments and motorway margins can show dazzling thousands of blossom spikes – some compensation, as Curtis notes, for destruction of ancient, lime-rich eskers in excavation of sand and gravel.

The most exotic-looking orchids are not always the rarest. The tall and beautiful marsh hellebore, frequent sometimes small orchid Lady's tr miniature knees.

Along swapping of many orchid in low for blossoms hearts. (I Curtis re species i usually g Orchid storage for testic and the summer energy fo After research, orchids re quite pro growing more use moves on

Details at



HORIZONS

SYLVIA THOMPSON

CONSERVATION CONFERENCE

More than 300 representatives from heritage trust organisations around the world will attend the 13th International Conference of National Trusts in Dublin in September. The theme of the conference is Conservation in a Changing Climate.

"We need policy changes that encourage building re-use over new builds and a mindset change – championed by our leaders – which encourages citizens to play their part in

of John of An Ireland. e. See

FROGS AND BOGS

The Bog of Allen Nature Centre in Lullymore, Rathangan, Co Kildare, will celebrate International Bog Day on Sunday, July 26th from 2pm to 5pm. Activities will include a guided walks across the bogs and pond dipping, nature crafts and frog searches for younger children. The centre, which is run by the Irish Peatland Conservation Council, will also hold nature summer camps for seven- to 13-year-olds from Monday, August 10th to Friday, August 14th, from 10am to 1pm each day. Camp activities will include an

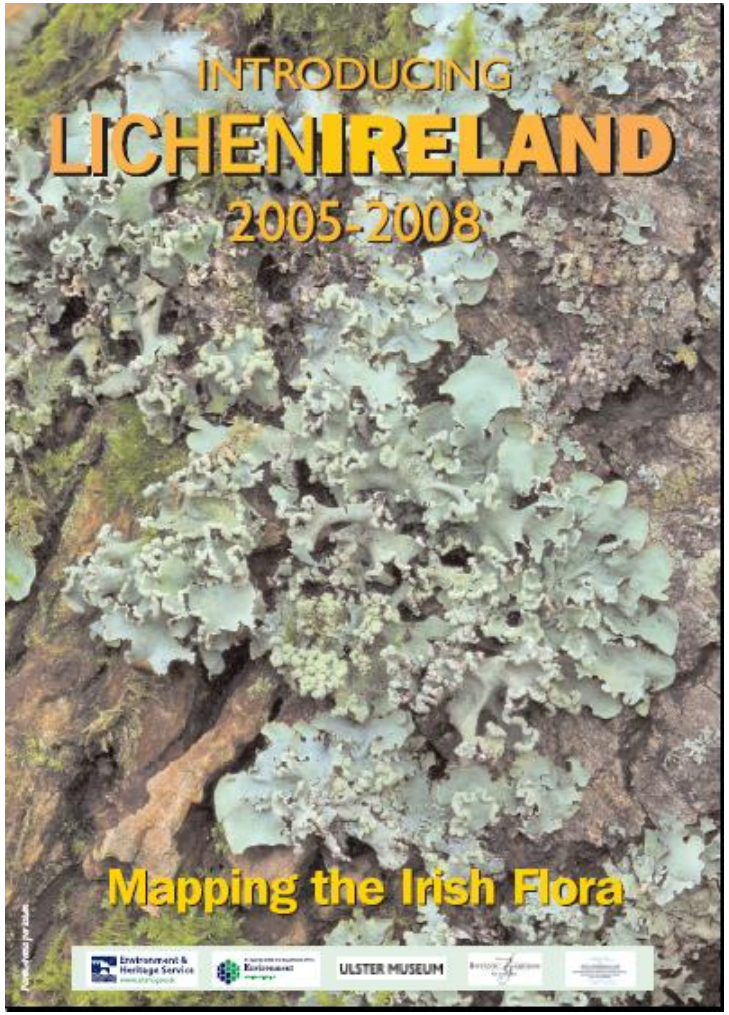
BROADLEAF APPEAL

The planting of broadleaf trees is on the increase, according to Joe Barry in the current issue of *Crann* magazine. "There is a common misconception that the afforestation schemes promote the planting of monocultures of conifers only," he writes.

Barry gives examples of how almost 40 per cent of trees planted in Co Leitrim and 48 per cent of trees planted in the Mid-Western Forestry scheme were broadleaf. "It is increasingly evident that more and more landowners also wish to plant lasting and sustainable woodland that gives them more than just a

in the mountains of Co Wicklow or Co Kerry. Plenty of testimonials and photos to whet your appetite.

Irish Times 18 Jul 2009



LICHENIRELAND

2005-2008

www.habitas.org.uk

This project is initially a four-year study to determine the status and distribution of lichen species throughout the island of Ireland. Lichenireland is supported by National Parks and Wildlife Service; National Botanic Gardens, Glasnevin; Environment and Heritage Service and the Ulster Museum.

In order to raise the profile of the group, this project will:

- engage new and existing lichen recorders (training, where appropriate, will be given)
- collate the existing lichen data set on the Recorder database
- undertake field recording from sites and habitats throughout Ireland
- provide a website to disseminate information on the project and species.

Other possible publication formats will be discussed as the project evolves.

If you would like to participate in LICHENIRELAND contact:

Dr Damien McFerran, Project Manager, CEDaR, Ulster Museum, Botanic Gardens, Belfast BT9 5AB
Telephone +44 (0)28 9038 3154 or damien.mcferran@magni.org.uk

Mr Howard Fox, Lichenologist, National Botanic Gardens, Glasnevin, Dublin
Telephone +353 (0) 1 8040326 or howard.fox@opw.ie

LichenIreland

- Web-site of Irish lichens
- Training of rangers
- Distribution of saxicolous and epiphytic lichens throughout the island of Ireland
- Published products – ‘Lichenlite’ card…

Dúchas The Heritage Service
An Roinn Comhshaoil agus Rialtais Áitiúil
Department of the Environment and Local Government

Environment & Heritage Service
www.ehsni.gov.uk

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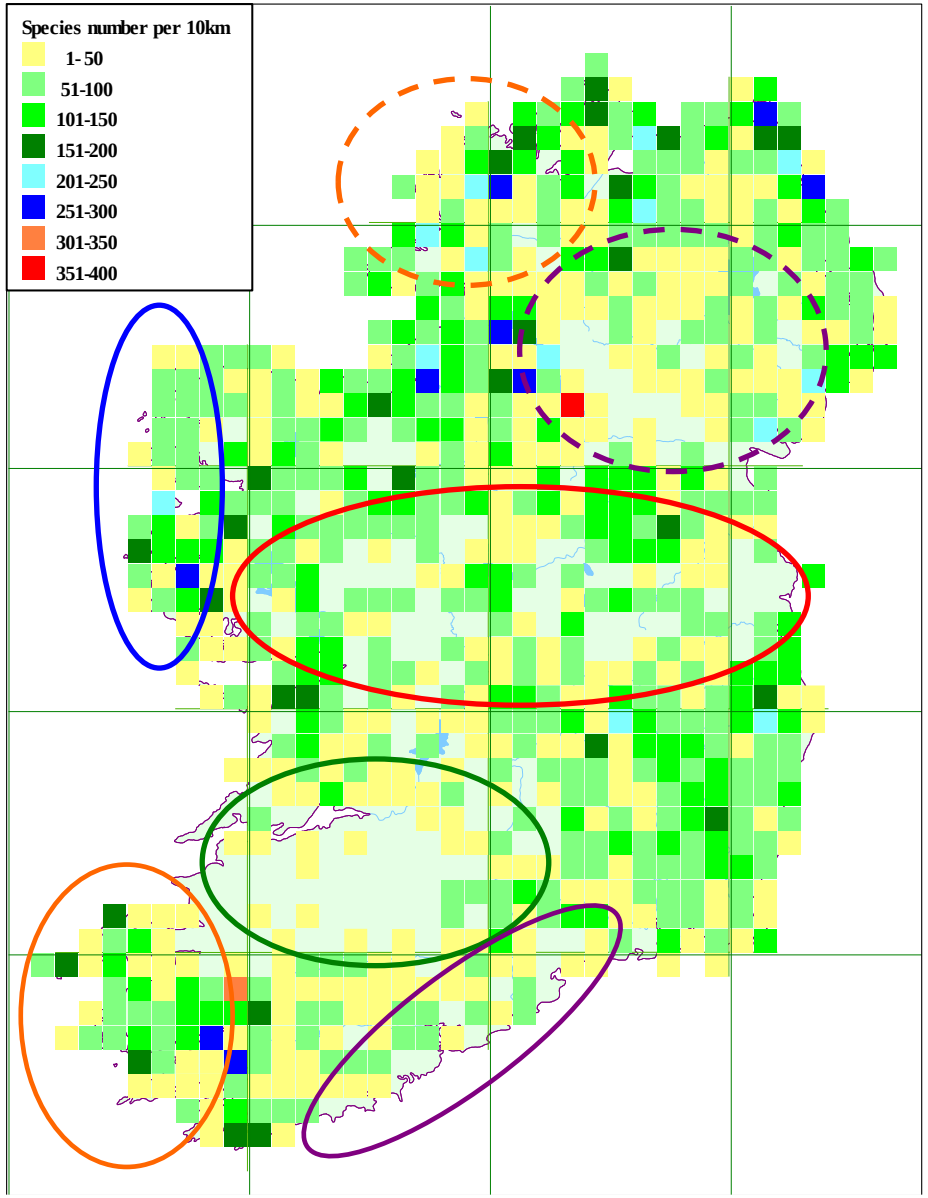

10km distribution of Lichen taxa, with 2007/08 fieldwork areas.

Home What are lichens? The Project Recording References Glossary Links Species List

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Many more papers relating to the natural history of Ireland (terrestrial and marine) may be found at the Irish Natural History Literature website: www.habitas.org.uk/literature

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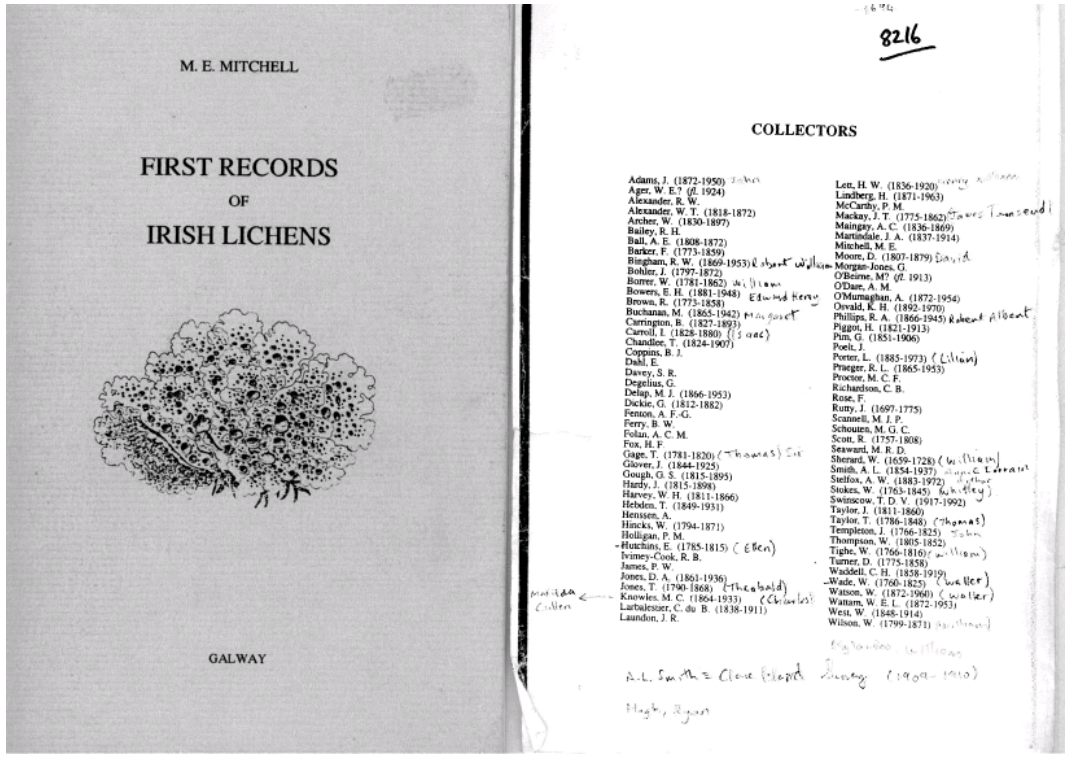
http://www.habitas.org.uk/literature/



M. E. MITCHELL

FIRST RECORDS
OF
IRISH LICHENS

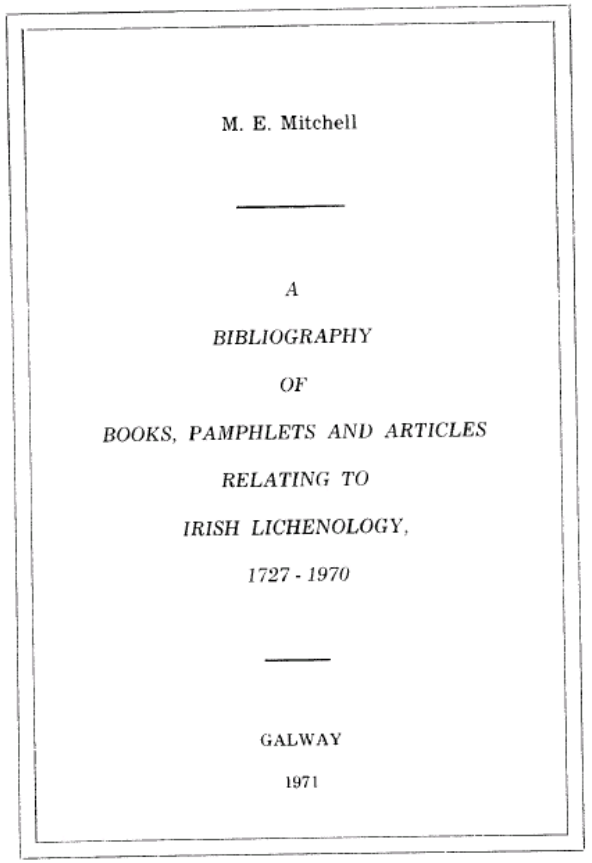
GALWAY

8216

COLLECTORS

Adams, J. (1872-1950)
Ager, W. E.? (fl. 1924)
Alexander, R. W.
Alexander, W. T. (1818-1872)
Archer, W. (1830-1897)
Bailey, R. H.
Ball, A. E. (1808-1872)
Barker, F. (1773-1859)
Bingham, R. W. (1869-1953)
Bohler, J. (1797-1872)
Borrer, W. (1781-1862)
Bowers, E. H. (1881-1948)
Brown, R. (1773-1858)
Buchanan, M. (1865-1942)
Carrington, B. (1827-1893)
Carroll, I. (1828-1880)
Chandlee, T. (1824-1907)
Coppins, B. J.
Dahl, E.
Davey, S. R.
Degelius, G.
Delap, M. J. (1866-1953)
Dickie, G. (1812-1882)
Fenton, A. F.-G.
Ferry, B. W.
Folan, A. C. M.
Fox, H. F.
Gage, T. (1781-1820)
Glover, J. (1844-1925)
Gough, G. S. (1815-1895)
Hardy, J. (1815-1898)
Harvey, W. H. (1811-1866)
Hebden, T. (1849-1931)
Henssen, A.
Hincks, W. (1794-1871)
Holligan, P. M.
Hutchins, E. (1785-1815)
Ivimey-Cook, R. B.
James, P. W.
Jones, D. A. (1861-1936)
Jones, T. (1790-1868)
Knowles, M. C. (1864-1933)
Larbalestier, C. du B. (1838-1911)
Laundon, J. R.
Lett, H. W. (1836-1920)
Lindberg, H. (1871-1963)
McCarthy, P. M.
Mackay, J. T. (1775-1862)
Maingay, A. C. (1836-1869)
Martindale, J. A. (1837-1914)
Mitchell, M. E.
Moore, D. (1807-1879)
Morgan-Jones, G.
O'Beirne, M.? (fl. 1913)
O'Dare, A. M.
O'Murnaghan, A. (1872-1954)
Orvald, K. H. (1892-1970)
Phillips, R. A. (1866-1945)
Piggot, H. (1821-1913)
Pim, G. (1851-1906)
Poelt, J.
Porter, L. (1885-1973)
Praeger, R. L. (1865-1953)
Proctor, M. C. F.
Richardson, C. B.
Rose, F.
Rutty, J. (1697-1775)
Scannell, M. J. P.
Schouten, M. G. C.
Scott, R. (1757-1808)
Seaward, M. R. D.
Sherard, W. (1659-1728)
Smith, A. L. (1854-1937)
Stelfox, A. W. (1883-1972)
Stokes, W. (1763-1845)
Swinscow, T. D. V. (1917-1992)
Taylor, J. (1811-1860)
Taylor, T. (1786-1848)
Templeton, J. (1766-1825)
Thompson, W. (1805-1852)
Tighe, W. (1766-1816)
Turner, D. (1775-1858)
Waddell, C. H. (1858-1919)
Wade, W. (1760-1825)
Watson, W. (1872-1960)
Wattam, W. E. L. (1872-1953)
West, W. (1848-1914)
Wilson, W. (1799-1871)

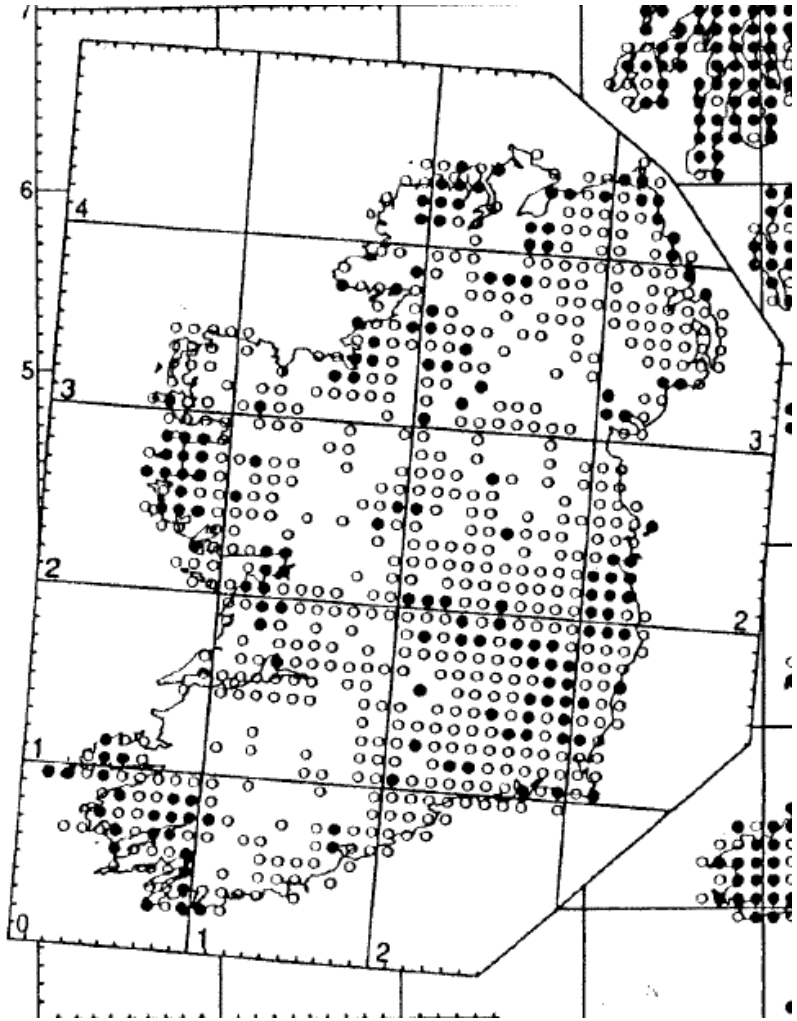
A.L. Smith = Clare Island Survey (1909-1910)

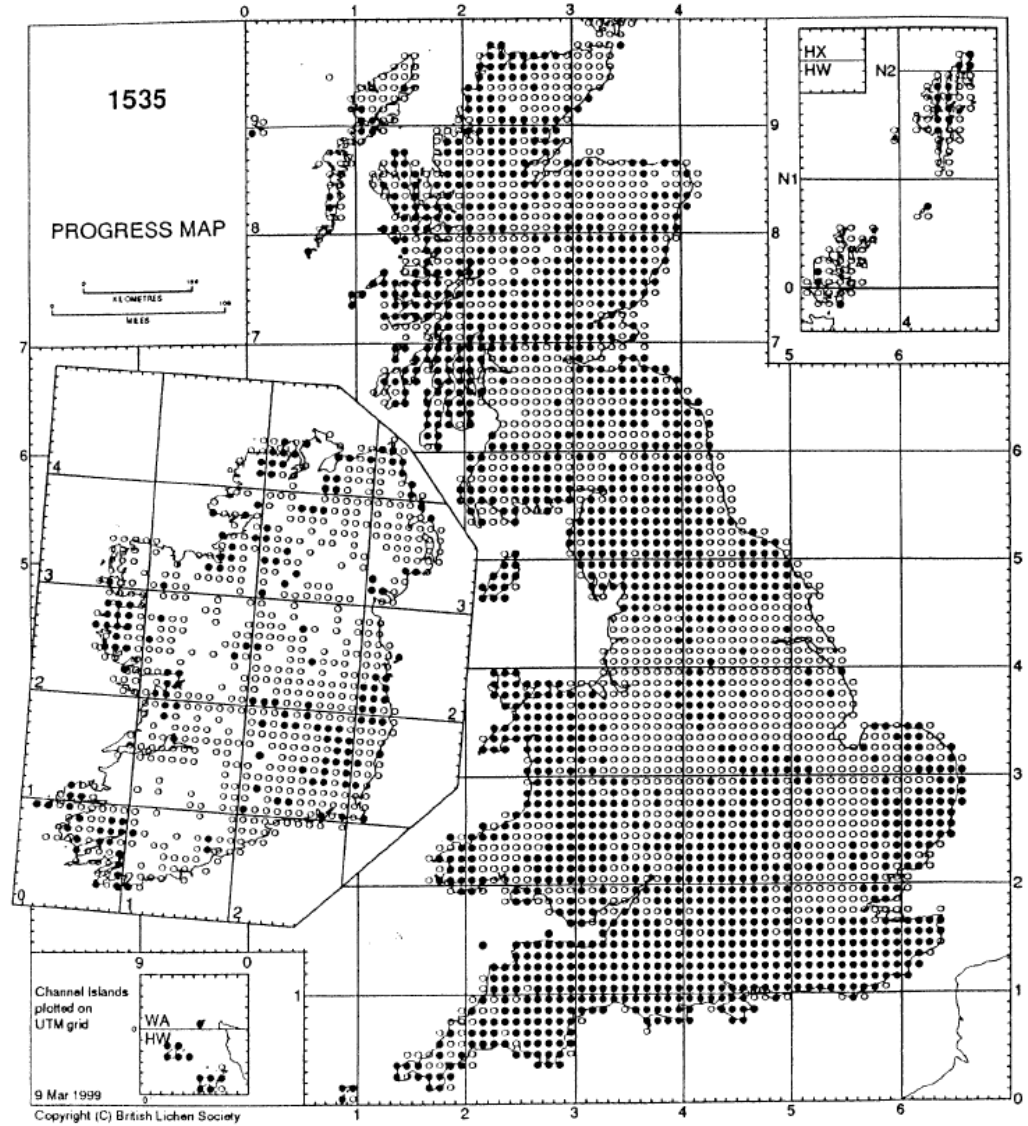


M. E. Mitchell

A
BIBLIOGRAPHY
OF
BOOKS, PAMPHLETS AND ARTICLES
RELATING TO
IRISH LICHENOLOGY,
1727 - 1970

GALWAY
1971




1535
PROGRESS MAP
KILOMETRES
MILES
HX
HW
N2
N1
Channel Islands
plotted on
UTM grid
WA
HW
9 Mar 1999
Copyright (C) British Lichen Society

Raiders of the lost lichen strike gold

Another Life
Michael Viney

It was seven feet up in an old, gnarled and very prickly whitethorn in a winter-flooded pasture in south Cork. In summer the leaves would have hidden it, but on a bare winter branch the golden-eye lichen, *Teloschistes chrysophthalmus*, positively glowed – fluttering its eyelashes, one might almost say, at a thoroughly gobsmacked English lichenologist.

I wrote here a couple of weeks ago on the progress of LichenIreland, the intensive, 26-county survey of a somewhat neglected legion of our flora. But it is worth coming back to the subject to celebrate something as beautiful – and exceedingly rare – as the golden-eye, and to thank Vince Giavarini, from Dorset, for finding it, and Robert Thompson, Ulster's gifted nature photographer, for sticking his stepladder deep in the mud to climb to sprays of thalli (fruits), the size of bright sovereigns. They have added the 1,208th species to the island's lichen database.

Golden-eye, as Giavarini says, is not only one of the world's most attractive species, but "the Holy Grail of the lichen world for which bottles of single malt whiskey have been offered as an enticement to searchers". It has also not been seen in Ireland for 150 years. By extraordinary coincidence, last year produced two similar discoveries – one in an orchard in Herefordshire and the other on Guernsey, in the Channel Islands – both, significantly, after a similar sort of absence.

The Cork lichens are perhaps three or four years old, and it is well worth visiting the website of Guernsey's natural history society – www.societe.org.gg/press/20071203_lichen.html – to see the golden-eye in its fully developed glory. The president of the society spotted it on a bush during a walk on the island's cliffs.

While the scientists aren't swearing to it, the fact that the species is more at home in the Mediterranean makes the finds a clear candidate as a sign of global warming. But the lifestyle of a lichen makes its dispersal a distinctly chancy affair.

The golden-eye lichen, found at Inchy Bridge, Co Cork by Vince Giavarini. Photograph: Robert Thompson

A lichen is not a plant but a symbiotic partnership of a fungus with a colony of algae or cyanobacteria (sometimes both). It reproduces in two ways – by windblown spores from the fungus that meet up by chance with the right algal or bacterial partner, or, more reliably, by ejecting particles in which cells of both partners are bonded, called soridia, that also fly on the wind.

That Irish lichens can be brilliantly coloured, as well as subtle and exquisite shades of grey, we know from the blazing oranges and reds of *Xanthoria* and *Caloplaca* on seaside rocks (especially glorious where fertilised by perching seabirds). But some colours can still amaze. A photograph came from a reader, Mark Shorten, whose dog had brought him a stick near the shore at Mizen, Co Cork. It was a long-fallen branch of furze, coated with lobes of a brilliant blue lichen that neither he nor I had ever seen.

Vince Giavarini, consulted, knew it as cobalt crust, or *Pulcherricium caeruleum*, a lichen that colonises the underside of fallen trees such as hazel and ash – "a shy species", as he said, that will happily grow in the dark. It is the most intensely blue of all lichens (nearer indigo than cobalt, depending on its moistness) and its beauty is expressed in its Latin name – think of "pulchritude".

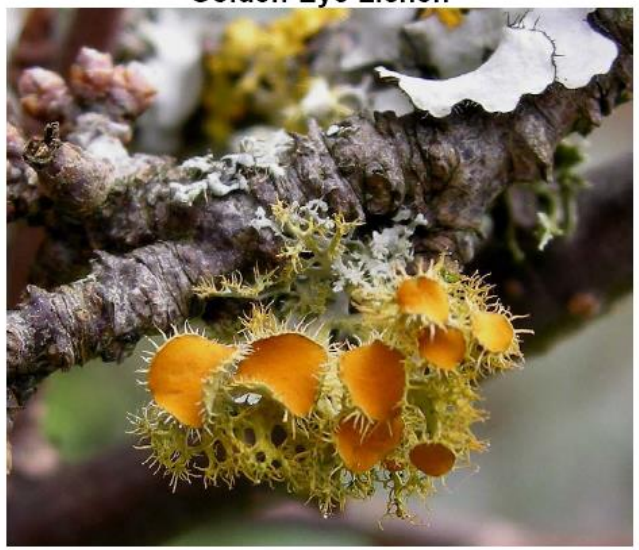
LichenIreland (find it at www.habitas.org.uk) is funded from north and south but co-ordinated at the Ulster Museum, where Dr Damian McFerran runs the already-extensive Cedar nature database. He enlisted lichenologists from the UK to help Irish fieldworkers record the distribution of perhaps 50 to 100 species in each of the island's 10km squares.

Even after three years and some 17,000 records, there are still more than 200 squares without any lichens on the database. There are particular gaps on the coasts and uplands, and the woodlands are still waiting for a systematic search. It may take another two years, but Ireland's richness in lichens, born of rare clean air and moist winds, is worth the effort.

MARCH WILL BRING National Tree Week and a whole programme of events to get families out under the

Irish Times article, 26 January 2008 on the rediscovery of *Teloschistes chrysophthalmus*.

Species Dossiers for Ireland:
TELOSCHISTES CHRYSOPHTHALMUS **(L.)Th. Fr.**
Golden-Eye Lichen

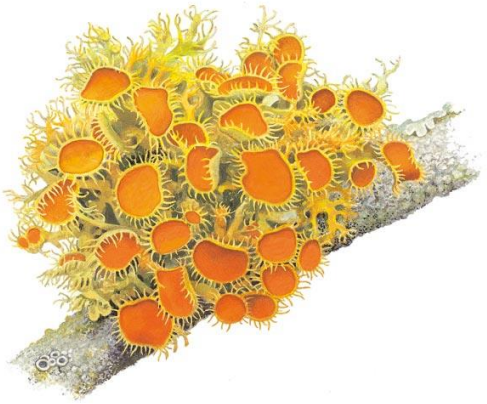


REPORT FOR MUSEUMS AND GALLERIES OF NORTHERN IRELAND

VINCE GIAVARINI
Ecologist
Poole BH15 2QG

March 2008

***Teloschistes chrysophthalmus*, Cork.**



Richard Lewington '08

« Previous Species | Next Species »

Parmotrema perlatum (Huds.) M.Choisy

Click on the thumbnails to enlarge the images
(these will open in a new window)

© Robert Thompson

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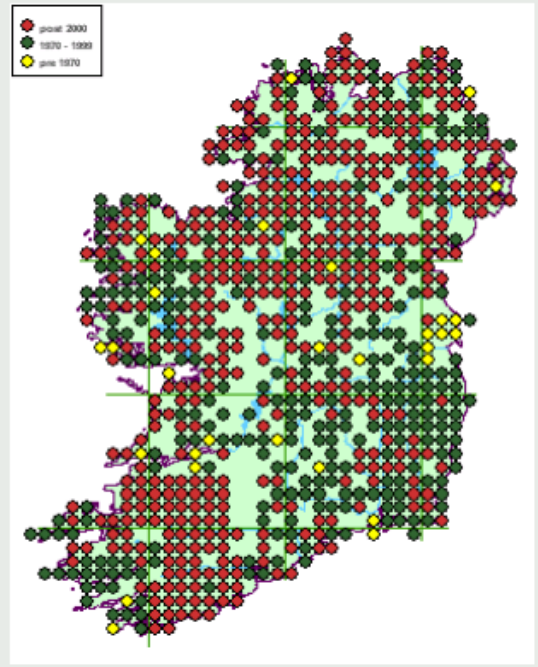


Click on map to open large map in new window
(Maps updated: October 2008)

A strongly foliose lichen, smooth and blue-grey on top, dark and ciliate ('hairy') underneath, and often with powdery soralia on the undulating edges. Common on trees and bushes in rural habitats, and also common on well-lit acid and intermediate rocks especially in coastal habitats.

Key characteristics

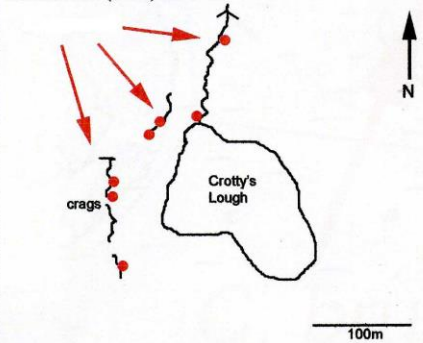
- Smooth blue-grey colour with marginal soralia.
- Dark ciliate underside.

Species	Vice-county number	Vice-county
	H6	Waterford

Locality	Land Owner/Occupier	SAC/pNHA?
Comeragh Mountains, Crotty's Lough		yes - SAC & pNHA 001952, Comeragh Mountains

Grid Ref. GPS? Yes	alt. (m)	Date d/m/y	Recorder
S32681290 S32601274 S32401252 S32471277 S32561264	380 - 430	9/6/2008	

Sketch Map of site showing Location of Species: indicate North (arrow) and scale



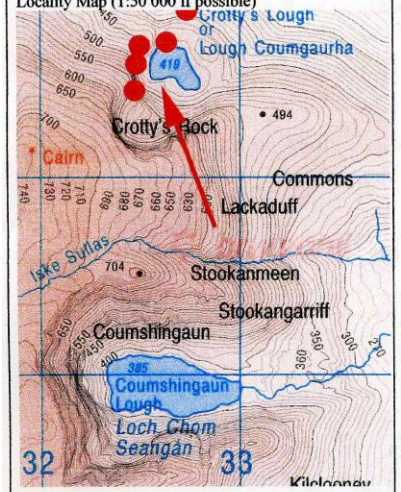
Describe substrate(s), e.g. rock/soil/tree type; wet/moist/dry, sunny/shaded habitat features e.g. aspect, slope, vegetation cover/height

Big conglomerate boulders on slopes below corrie and on rock faces above lough.

Size of population
Hundreds of cushions.

Sporophytes present (stage)
Yes (mature).

Locality Map (1:50 000 if possible)



Associated species

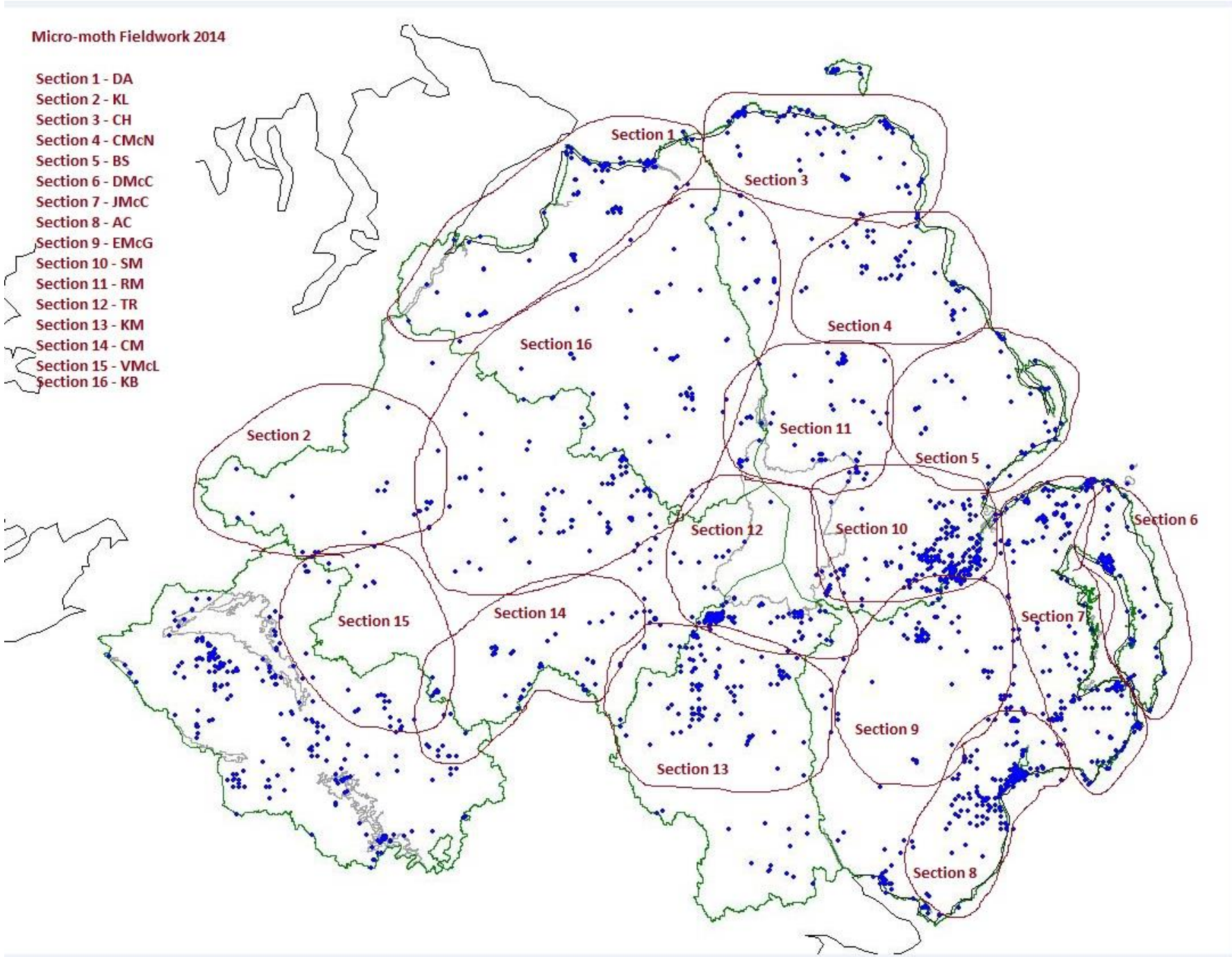
Photographs
Yes

New record at this site/older record refound
new record

Voucher specimen no.

Threats and proposed Conservation Measures
Site immediately threatened: No

No immediate threats identified. It is not known whether a proposed hotel complex below the lough is likely to have any effect on the site.


Micro-moth Fieldwork 2014
Section 1 - DA
Section 2 - KL
Section 3 - CH
Section 4 - CMcN
Section 5 - BS
Section 6 - DMcC
Section 7 - JMcC
Section 8 - AC
Section 9 - EMcG
Section 10 - SM
Section 11 - RM
Section 12 - TR
Section 13 - KM
Section 14 - CM
Section 15 - VMcL
Section 16 - KB
Section 1
Section 3
Section 4
Section 16
Section 2
Section 11
Section 5
Section 6
Section 12
Section 10
Section 15
Section 14
Section 7
Section 9
Section 13
Section 8

Planning

Concept development

- Nature in built-up areas
- Working with communities in Urban Villages (Derry-Londonderry)
- Aimed at a new audience
- Museum visit, using sites and collections to explore a particular species group
- Engaging and informative
- Enjoyable experience to encourage future visits

… Discover Birds

Image © Karl Hamilton

Ulster Museum visit

- Saturday 19th March 2016
- 35 mostly older children (and 3 leaders)
- Looking at different feathers through microscope
- Gallery talk
- Discover Nature with binoculars and scopes (RSPB)
- Goody bags:-

  Bird identification guide

  notebook and pen

  complimentary family ticket

National Museums Northern Ireland
explore/engage/enjoy

NIEA Northern Ireland Environment Agency
www.doeni.gov.uk/niea
An Agency within the Department of the Environment
www.doeni.gov.uk

Ulster American Folk Park visit

Image © Karl Hamilton

- Saturday 19th March 2016
- 44 Younger children (and 6 leaders)
- Split into smaller groups
- Mantella Environmental Education – live birds
- Binoculars and spotting scope
- Goody bags:-

  Bird sticker book

  notebook and pen

  complimentary family ticket

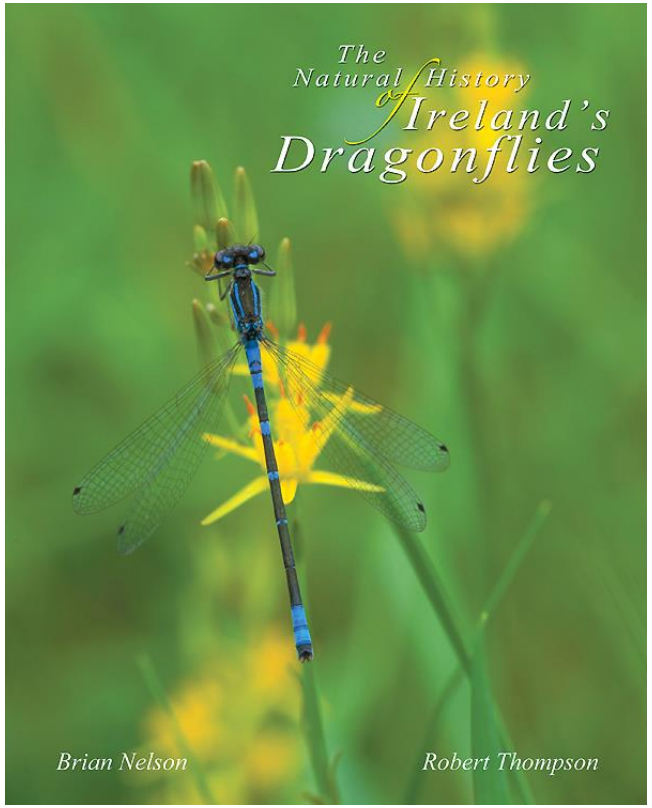
Ladybirds in Ireland and the Harlequin threat

(N. Ireland ladybird survey 2005)

Roy Anderson

Agricultural & Environmental Science

Queen's University



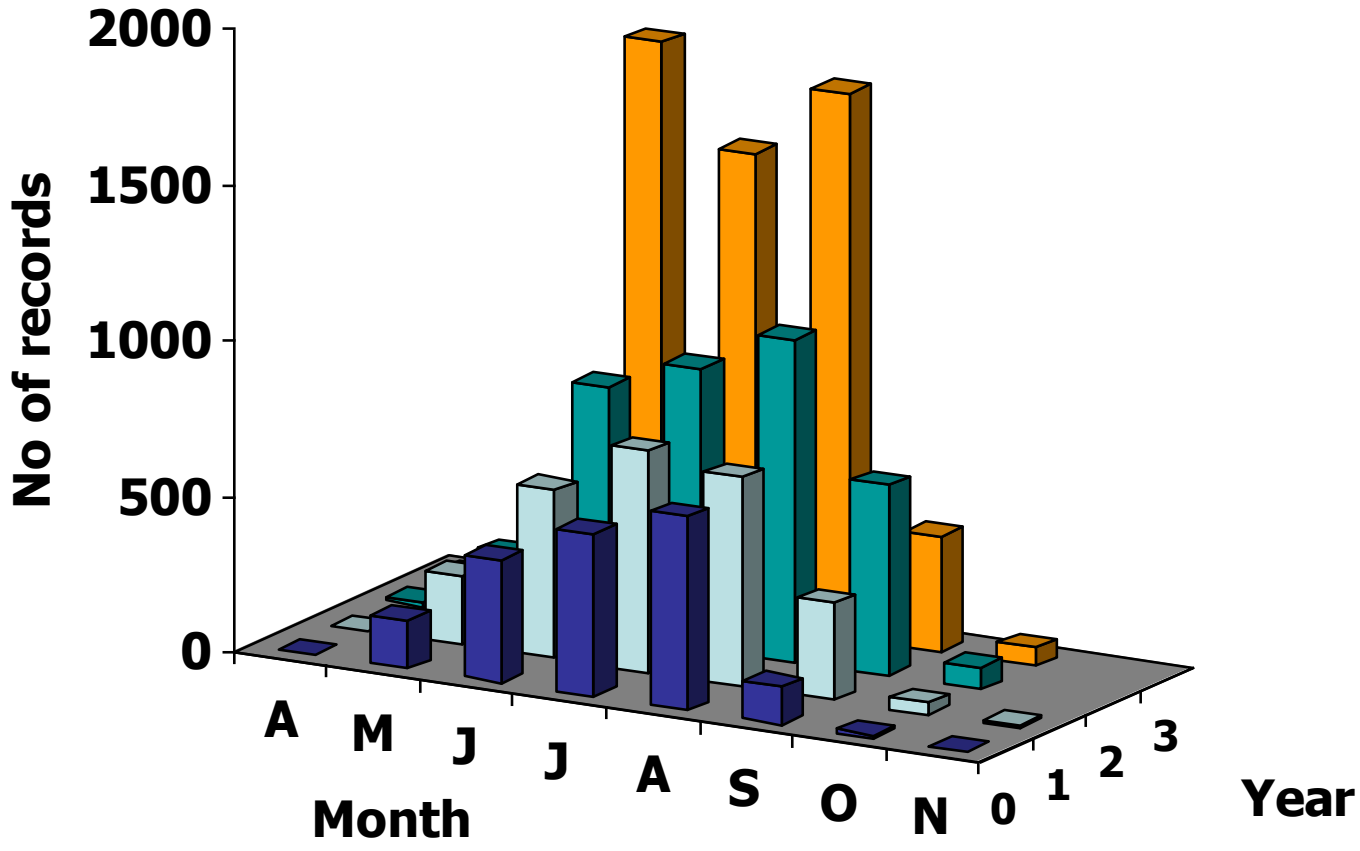
Dúchas The Heritage Service
An Roinn Comhshaoil agus Rialtais Áitiúil
Department of the Environment and Local Government

ENVIRONMENT AND HERITAGE SERVICE

ULSTER MUSEUM
MAGNI
Museums & Galleries of Northern Ireland

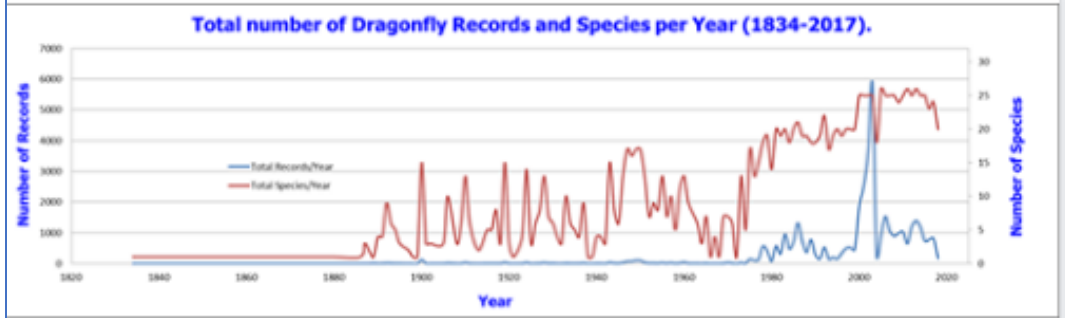
An Chomhairle Oidhreachta
The Heritage Council

Recording effort



DragonflyIreland
Published by Damian McFerran [?] · October 3, 2018 ·

I am currently working my way through the Dragonfly records that I've collated and come up with a few interesting representations of current knowledge. See attached example, others to follow.



478 People Reached

43 Engagements

Boost Post

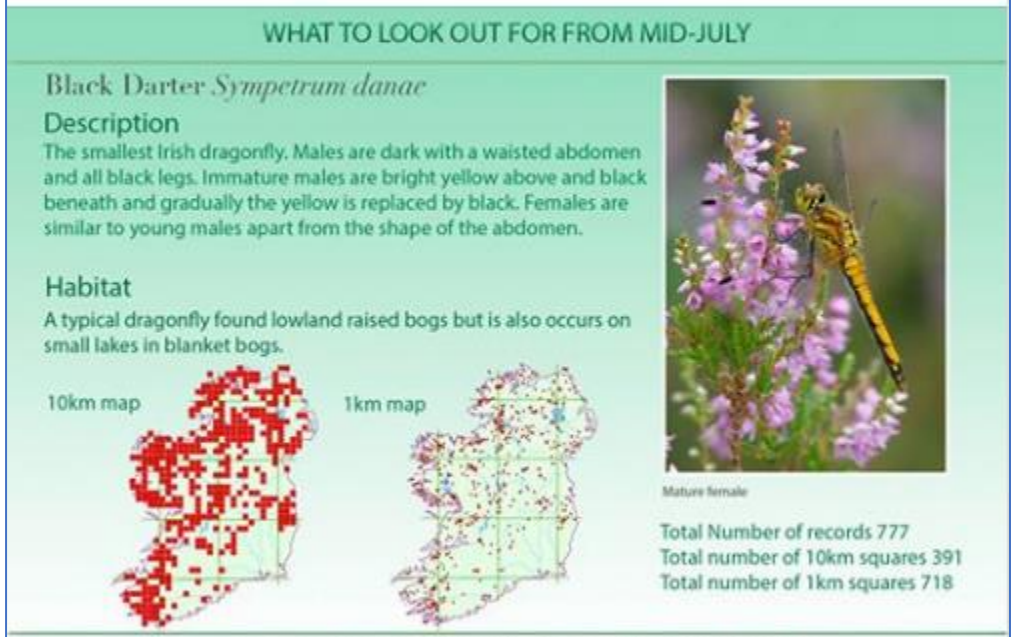
Chris Kelly, Declan Coney and 5 others 1 Share

Like Comment Share

Write a comment...

DragonflyIreland
Published by Damian McFerran [?] · July 6, 2018 ·

Thought it might be useful to catch up on the distribution of the Black Darter. Please do keep sending through your records. Thanks, D.



2,566 People Reached

137 Engagements

Boost Post

CEDaR Centre for Environmental Data and Recording

NATIONAL MUSEUMS NI

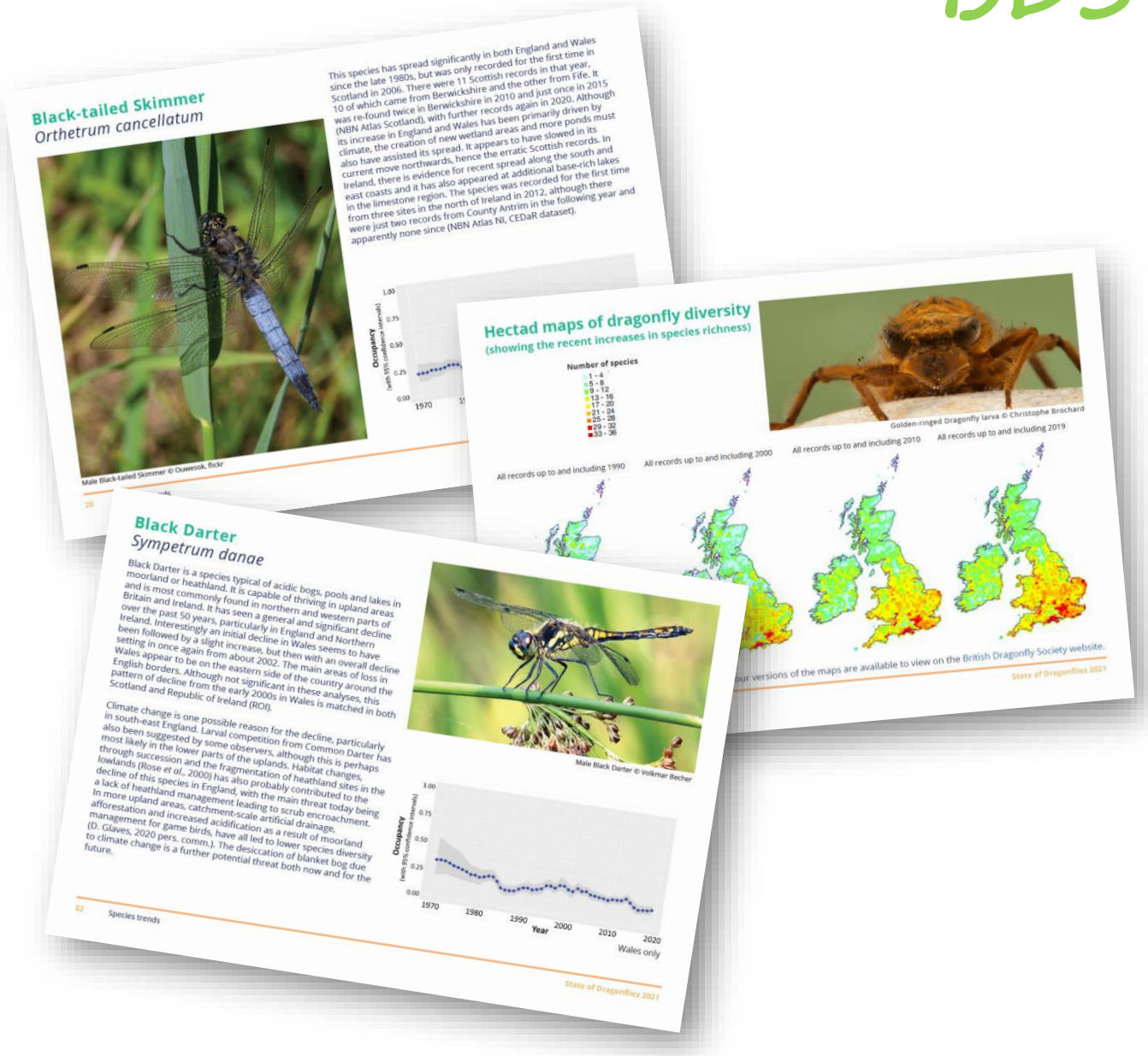
EUROPEAN CONGRESS ON ODONATOLOGY (ECOO)

WELCOME TO THE 6TH EUROPEAN CONGRESS ON DAMSELFLIES AND DRAGONFLIES IN SLOVENIA 2022

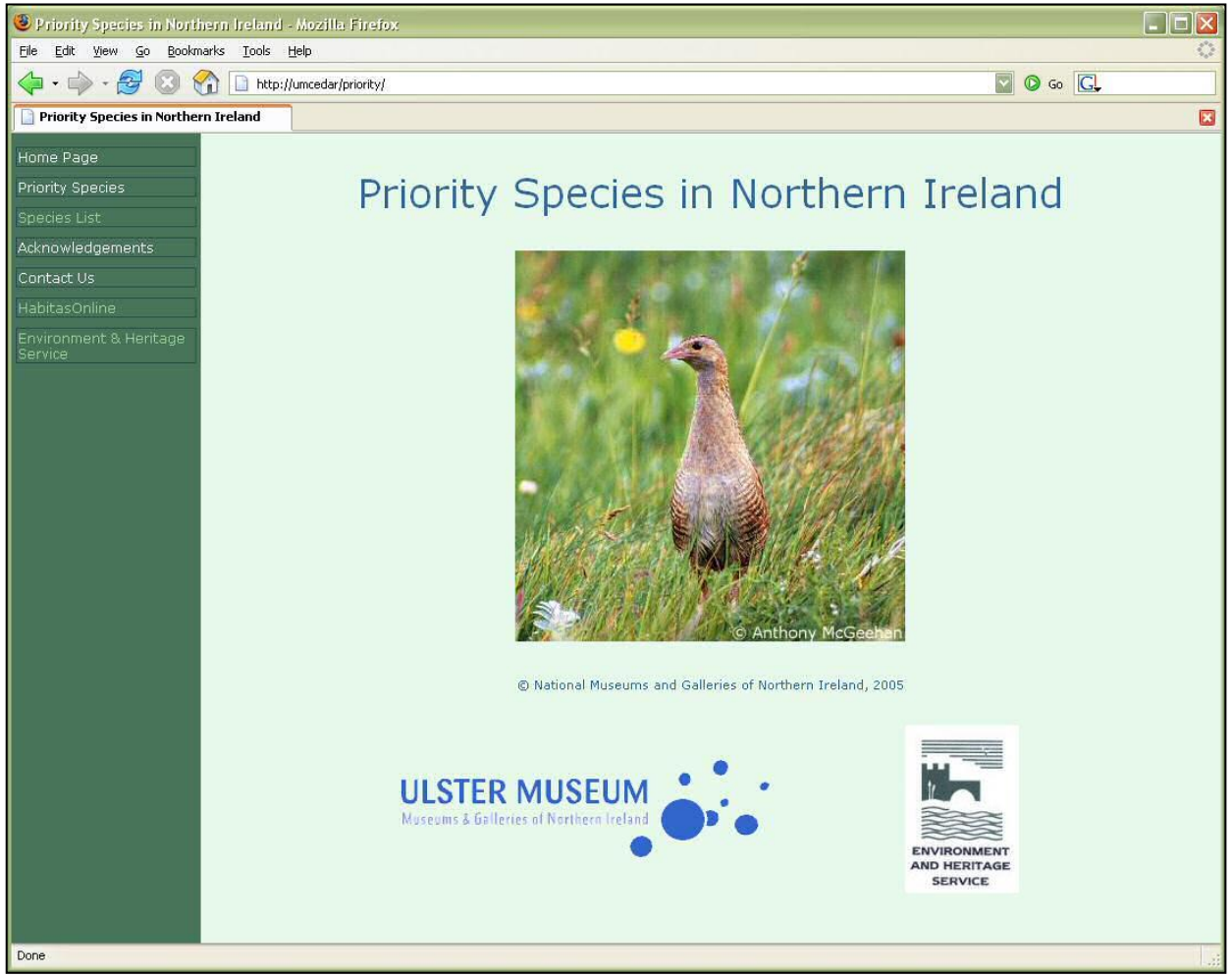
Search

Dragonfly Ireland 2019-2024

BDS State of Dragonflies



epa Environmental Protection Agency
An Ghníomhaireacht um Chaomhnú Comhshaoil


Priority Species in Northern Ireland - Mozilla Firefox
File Edit View Go Bookmarks Tools Help
http://umcedar/priority/
Go
Priority Species in Northern Ireland
Home Page
Priority Species
Species List
Acknowledgements
Contact Us
HabitasOnline
Environment & Heritage Service
Priority Species in Northern Ireland
© Anthony McGeehan
© National Museums and Galleries of Northern Ireland, 2005
ULSTER MUSEUM
Museums & Galleries of Northern Ireland
ENVIRONMENT AND HERITAGE SERVICE
Done

Northern Ireland's Priority Species & Species of Conservation Concern

In ***Biodiversity in Northern Ireland: Recommendations to Government for a Northern Ireland Biodiversity Strategy***, the Northern Ireland Biodiversity Group recognised the need to develop lists of Northern Ireland priority species (which require conservation action) and species of conservation concern (which require monitoring because they may need conservation action in the future).

Draft lists of Northern Ireland priority species and Northern Ireland species of conservation concern (SOCC) were published in *Northern Ireland Biodiversity Strategy Proposals* in 1999.

In 2004 these lists were reviewed by:

- collating proposals and supporting information supplied by experts on species groups
- refining and applying the selection criteria

The current list comprises 457 Northern Ireland SOCC species, 271 of which have been selected as Northern Ireland priority species because they are considered to be under particular threat and require particular conservation action. The remaining species of conservation concern (186) require monitoring because they may need conservation action in the future.

Brief introduction to Priority Species

In Northern Ireland there are a number of plants and animals that are under threat and require conservation action. These species have been identified as Priority Species and the list stands at 271. Criteria have been developed to ensure that Priority Species have been chosen using a scientific basis.

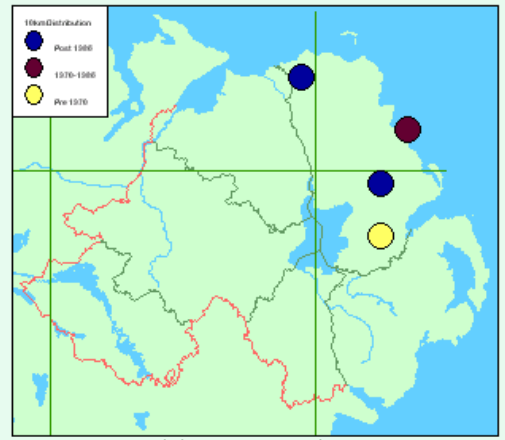
The availability of a list of named species assists those involved in the conservation of biodiversity to concentrate efforts, by guiding decisions on where to target action and invest resources.

The following web pages provide an introduction to some of the Priority Species in Northern Ireland.

Brief introduction to Species of Conservation Concern

All 457 species listed are considered to be species of conservation concern (SOCC species). However, a number (271) of these species have been identified as Priority Species and detailed information on these species can be found elsewhere on this web site.

Collema dichotomum – River jelly lichen



Click on map to enlarge

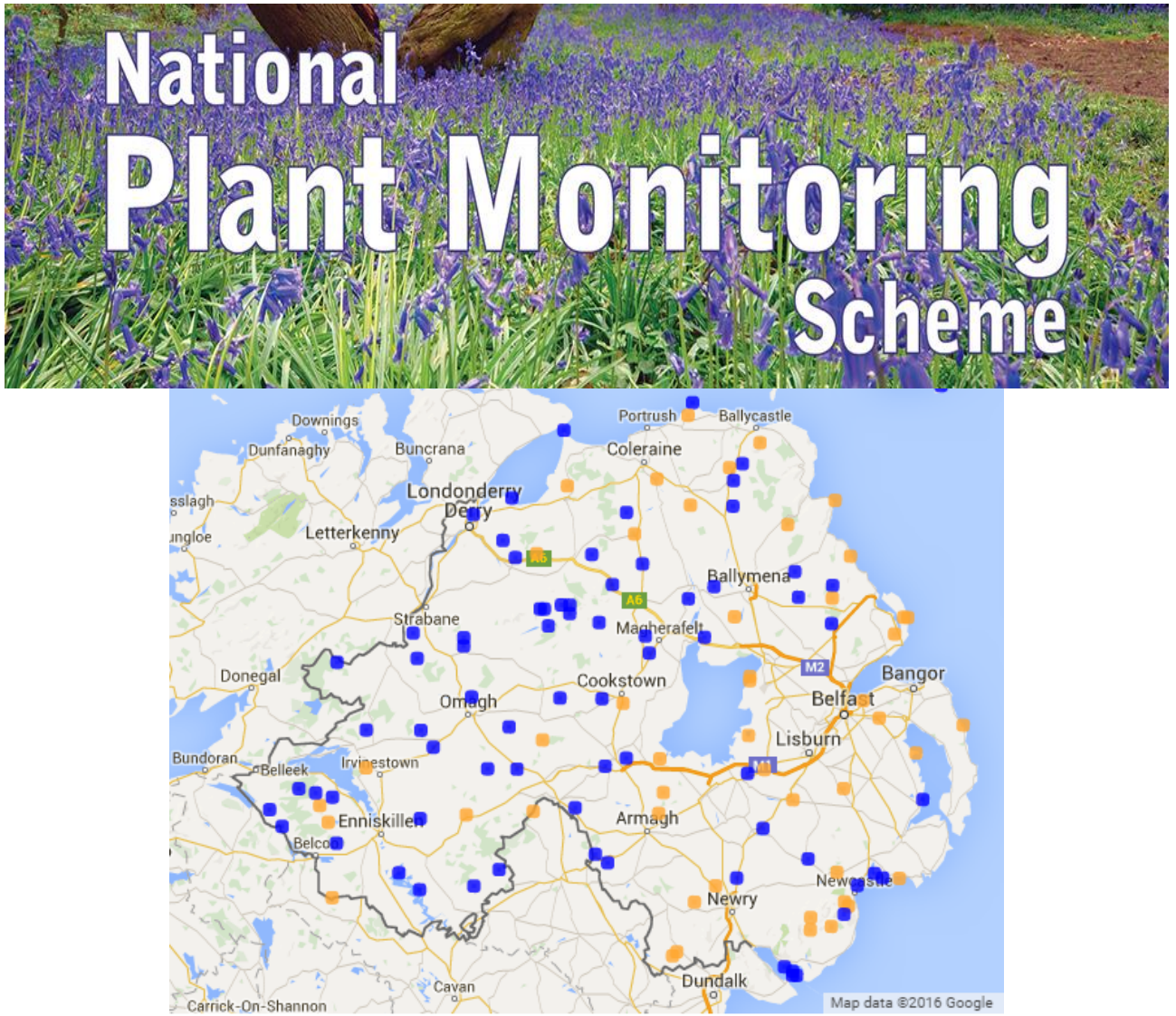
Collema dichotomum (With.) Coppins & Laundon
Family: Lecanorales

Collema dichotomum looks more like a seaweed than a lichen. It is known only from one site in Northern Ireland – Glenarm, County Antrim. The species is described by Duncan (1970) as dark grey-green and deeply lobed. It forms colonies and lives partially submerged in freshwater, on siliceous river rocks.

In brief

- Found on basalt rocks in the Glenarm River at Glenarm Park, County Antrim (Nick Stewart, 1992)
- It prefers a high humidity environment, rocks with liverworts and mosses, and fluviatile environments
- It can be seen all year round. The thallus may be swollen and more obvious after rain. The colonies are likely to be under more water in winter and therefore less easy to find
- It is listed as a UK Priority Species
- Its main threats are changes in water levels or general environmental deterioration (for example, silage effluent, slurry or other domestic pollution in the water).

Species description
The foliose thallus of a *Collema* is swollen when wet. The upper surface of the lichen is generally olive-green when wet and brown-black and opaque when dry. The upper cortex and lower cortex are tissue boundaries, composed of cells that are practically impossible to distinguish from subcortical cells (Howard Fox pers. comm.). In the Genus *Leptogium*, both cortices have more solid networks of cell walls when observed by microscope. The lichen attaches to rocks beneath by hapters (aerial organs of attachment from the lower surface) or white rhizines. Isidia are frequent. Apothecia are pale, reddish or dark brown with


National
Plant Monitoring
Scheme
Downings
Dunfanaghy
Buncrana
Portrush
Ballycastle
Coleraine
Londonderry
Derry
Letterkenny
Ballymena
A6
Strabane
Magherafelt
Donegal
Cookstown
Bangor
Belfast
Omagh
Lisburn
M2
M1
Bundoran
Belleek
Irvinestown
Enniskillen
Armagh
Belcoo
Newry
Dundalk
Cavan
Carrick-On-Shannon
Map data ©2016 Google

POMS

UK Pollinator Monitoring Scheme

Pollinating insects play a vital role in our environment, ensuring that many of our crops and wild plants are able to set seed and produce fruit. We need to know how pollinator populations are changing, and with your help we are gathering data on a wide range of flower-visiting insects.

Help gather evidence on changes in insect populations

1. ***FIT Count* Surveys can now start if the temperature is over 13°C on a sunny day or over 15°C on a cloudy day. Download the app to carry out a survey https://ukpoms.org.uk/fit-count-app**
2. ***1km square monitoring* will begin at the start of May (if above temperatures are met). For information on how to volunteer contact Pauline.campbell@daera-ni.gov.uk**

1

The ten minute count...

Spend ten minutes counting pollinators to contribute a Flower-Insect Timed Count (FIT Count)

Send in your results via the FIT Count recording form or FIT Count app

2

...or something bigger

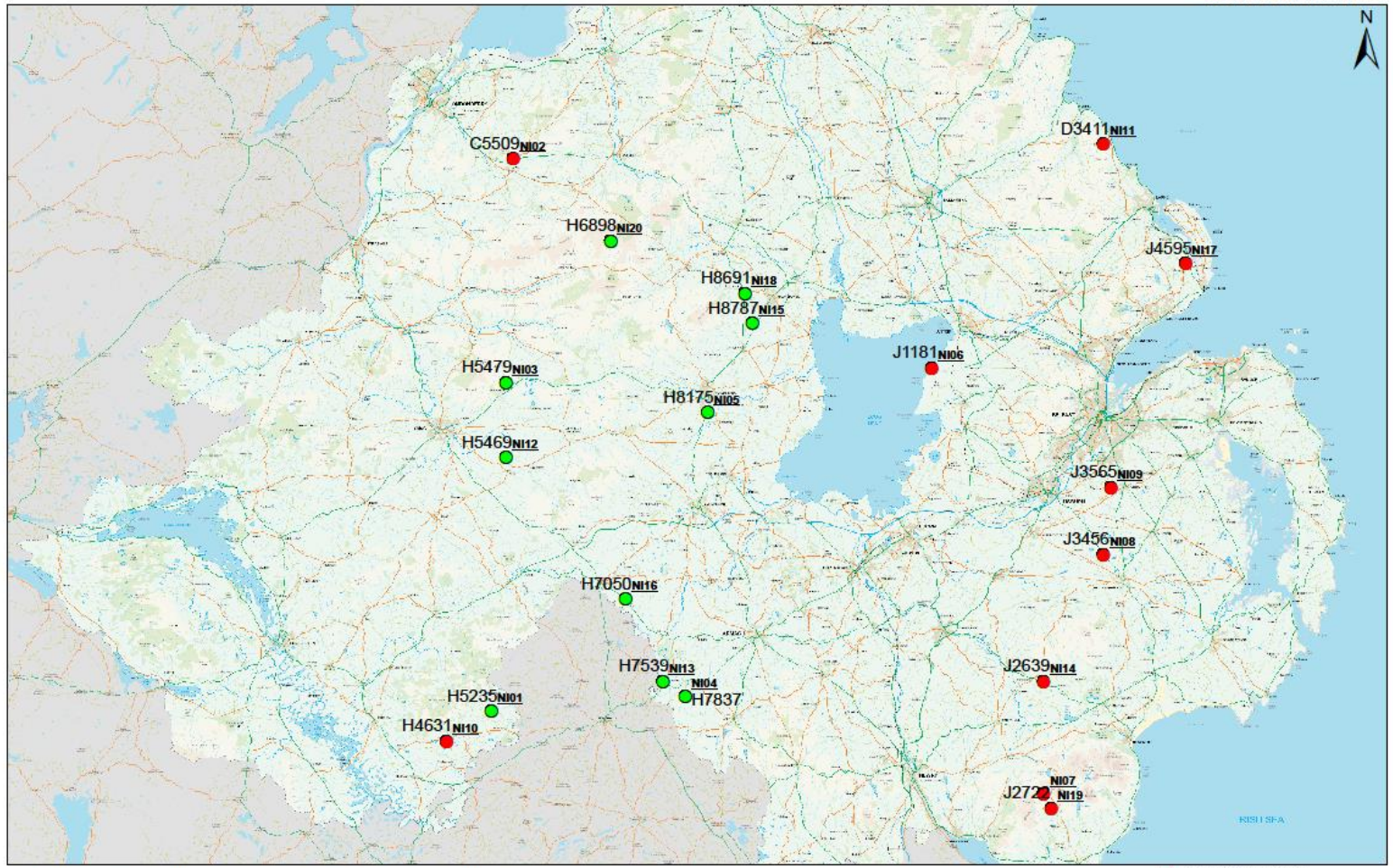
Adopt a 1 km square and help us carry out a systematic survey of insects and flowers

PoMS is the only scheme in the world generating systematic data on the abundance of bees, hoverflies and other flower-visiting insects at a national scale. Together with long-term occurrence records collated by the Bees, Wasps and Ants Recording Society and Hoverfly Recording Scheme, these data will form an invaluable resource from which to measure trends in pollinator populations and target conservation efforts.

https://ukpoms.org.uk/

UK Centre for Ecology & Hydrology · Bumblebee Conservation Trust · Butterfly Conservation · Hymettus · BTO · University of Reading · University of Leeds · Natural History Museum · Department for Environment Food & Rural Affairs · Scottish Government · Agriculture, Environment and Rural Affairs · JNCC

Coordinates: 279,615 , 372,050



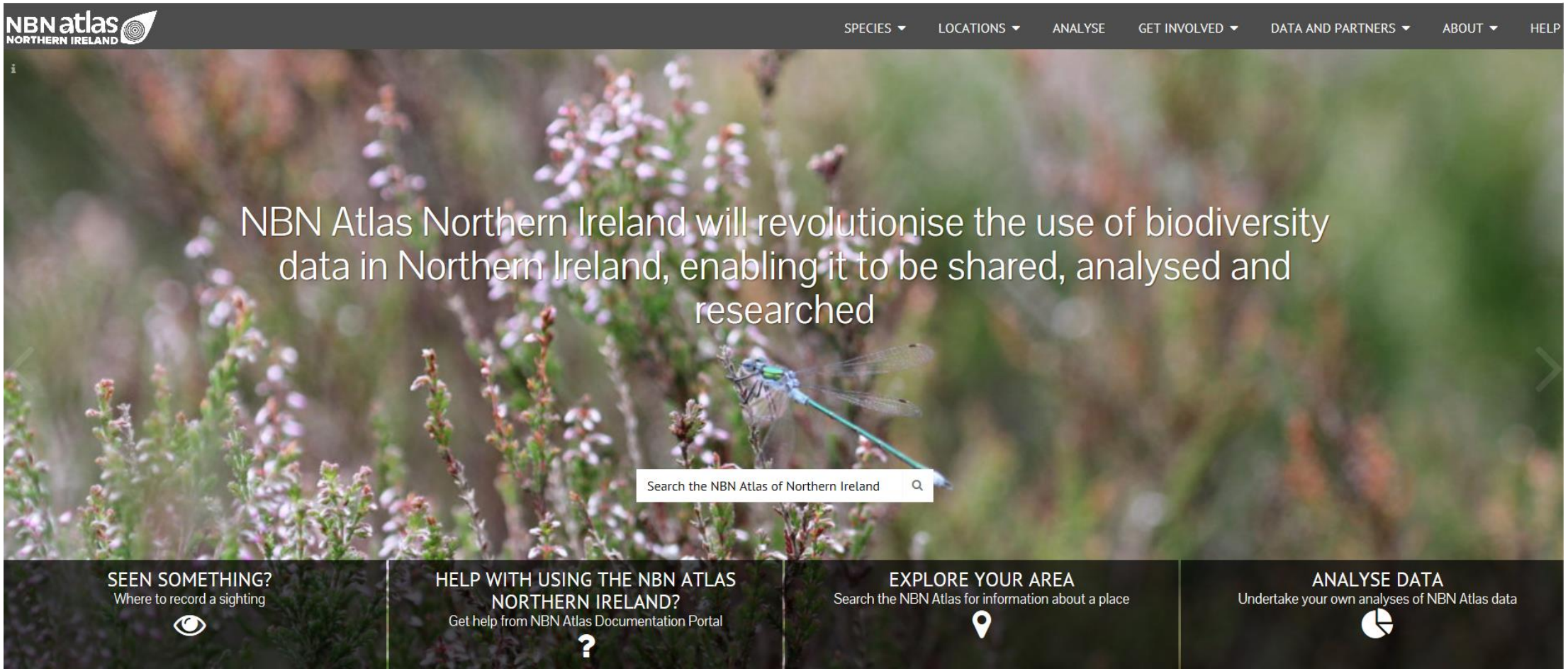
Title: **PoMS 1km square monitoring 2022**
Scale: **1:463,030**
Drawn by: **daera-mcaleenana**
Date: **12 May 2022**

Description:

Red unavailable; Green available.

Working with the Department of Agriculture, Environment and Rural Affairs
www.daera-ni.gov.uk

NIEA Northern Ireland Environment Agency
www.daera-ni.gov.uk/niea



CEDaR Centre for Environmental Data and Recording

NATIONAL MUSEUMS NI

Rathlin

OCCURRENCE RECORDS (27,038)

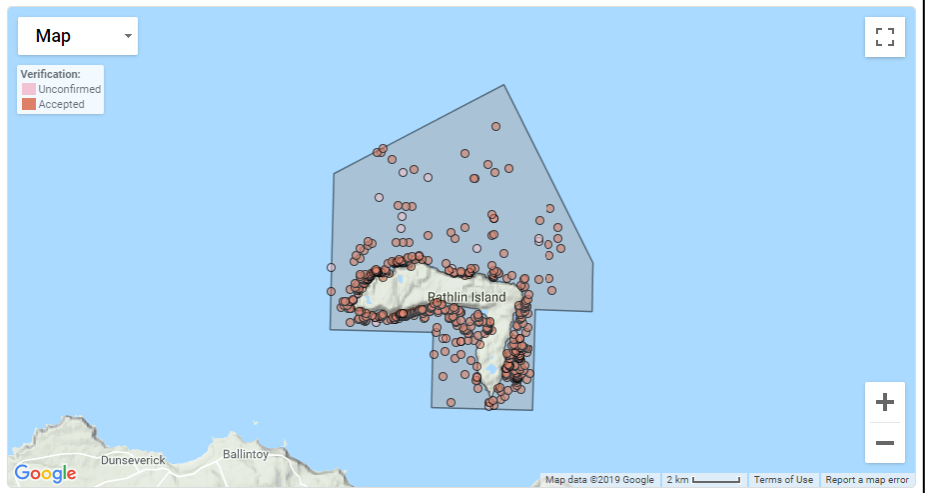
Explore by species | Explore by taxonomy

Group	Species	Records
All Species	1. Abietinaria abietina	86
Mammals	2. Abraxas grossulariata : Magpie	4
Birds	3. Abrostola tripartita : Spectacle	2
Insects	4. Abrostola triplasia : Dark Spectacle	1
Amphibians	5. Acanthicolepis asperrima	1
Reptiles	6. Acanthis cabaret : Lesser Redpoll	37
Fishes	7. Acanthis flammea : Redpoll	1
Molluscs	8. Acanthochitona crinita	1
Crustaceans	9. Acanthodoris pilosa	22
Myriapods	10. Acarospora fuscata	5
Spiders and allies	11. Accipiter nisus : Sparrowhawk	16
Worms	12. Achillea millefolium : Yarrow	1
Fungi	13. Acrocephalus schoenobaenus : Sedge Warbler	39
Plants	14. Acrochaetium alariae	1
	15. Acrochaetium microscopicum	2
	16. Acrochaetium parvulum	2
	17. Acrochaetium secundatum	8
	18. Acrochaetium virgatulum	1
	19. Acrochaetium	1
	20. Acrocnida brachiata	8
	21. Acronicta psi : Grey Dagger	1
	22. Acronicta rumicis : Knotgrass	3
	23. Acrosiphonia arcta	2
	24. Acrosorium ciliolatum	66

View records | Download records

Time Controls and Map

1850 - 2019



Map opacity controls

Belshaws Quarry

OCCURRENCE RECORDS (17)

Explore by species | Explore by taxonomy

Group	Species	Records
All Species	1. Aglais io : Peacock	1
Mammals	2. Agriphila straminella : Straw Grass-veneer	1
Birds	3. Bombus pascuorum : Common Carder Bee	1
Insects	4. Cepaea (Cepaea) nemoralis : Brown-lipped Snail	1
Amphibians	5. Columba palumbus : Woodpigeon	1
Reptiles	6. Erithacus rubecula : Robin	1
Fishes	7. Fringilla coelebs : Chaffinch	1
Molluscs	8. Motacilla cinerea : Grey Wagtail	1
Crustaceans	9. Palomena prasina : Green Shieldbug	1
Myriapods	10. Pararge aegeria : Speckled Wood	1
Spiders and allies	11. Parus major : Great Tit	1
Worms	12. Pieris brassicae : Large White	1
Fungi	13. Sciurus carolinensis : Eastern Grey Squirrel	2
Plants	14. Troglodytes troglodytes : Wren	1
	15. Turdus merula : Blackbird	1
	16. Vanessa atalanta : Red Admiral	1

View records | Download records

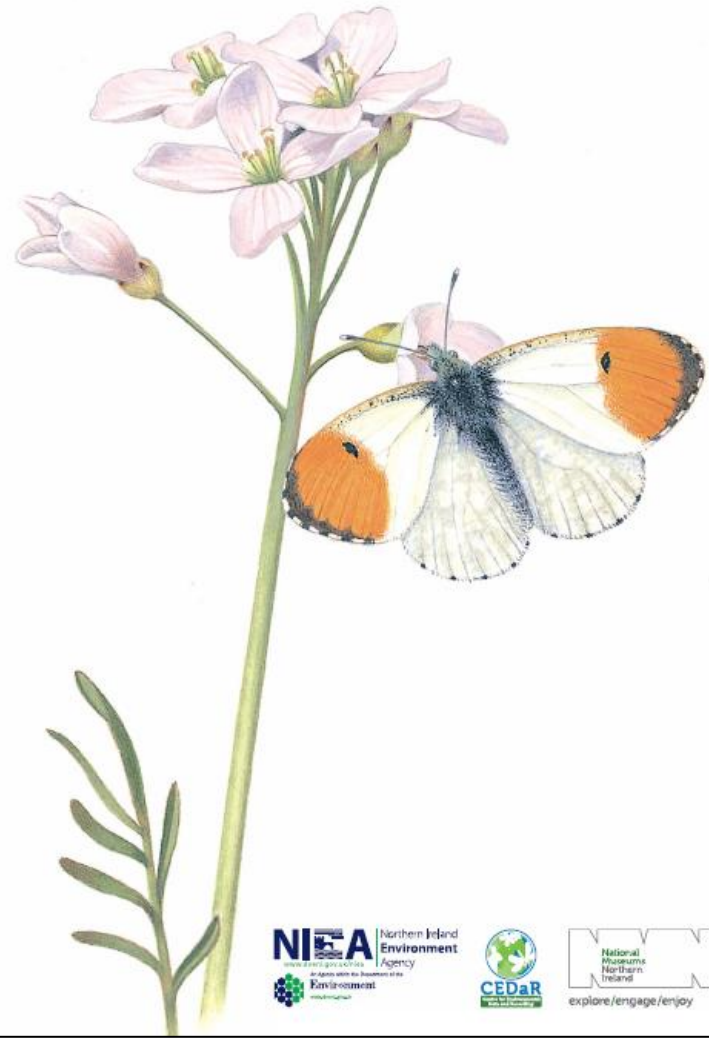
Time Controls and Map

1850 — 2019

Map opacity controls

Recording Northern Ireland's Wildlife

The Story of CEDaR (1995–2015)



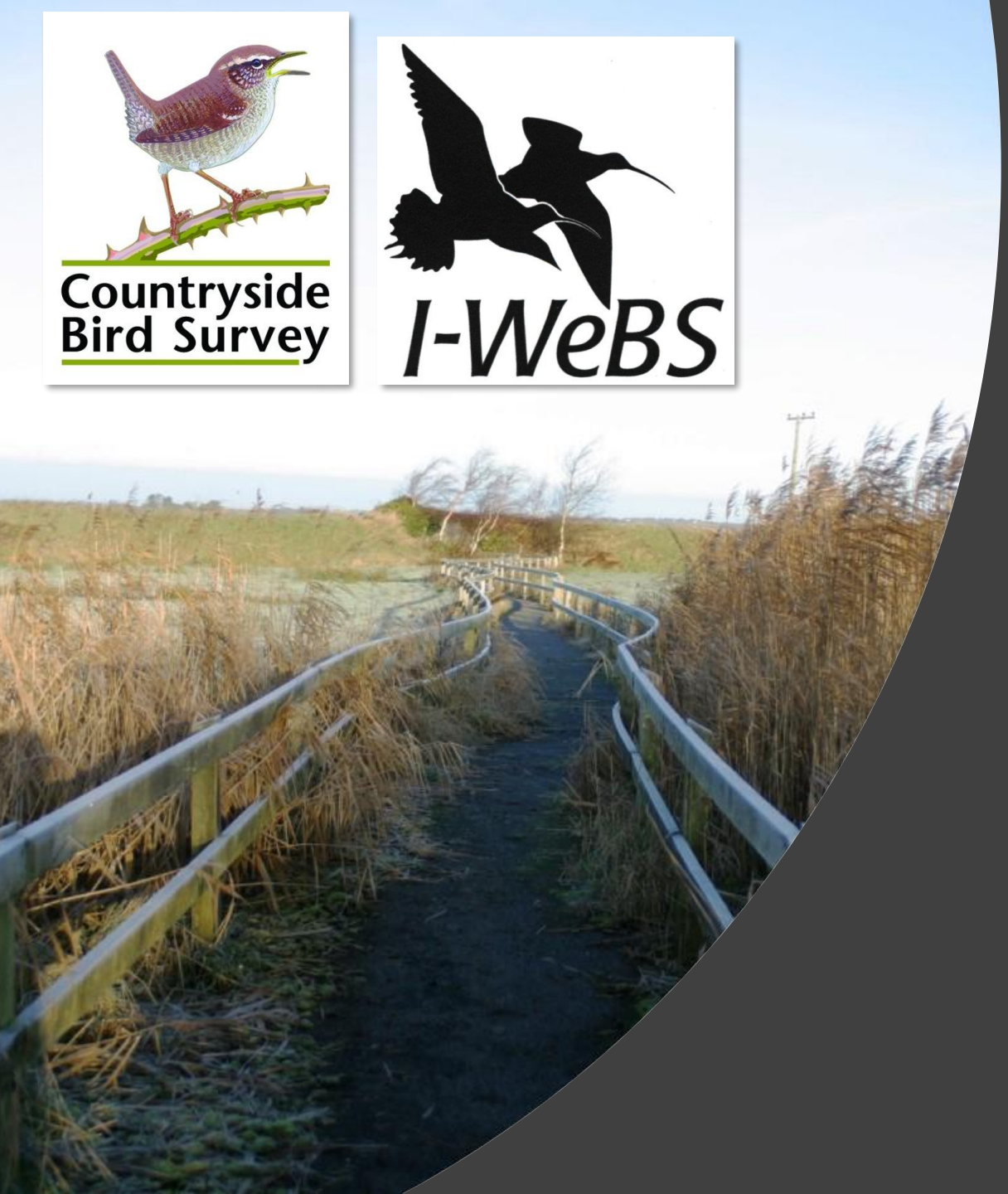
The Orange-tip Butterfly, Anthocharis cardamines (Linnaeus, 1758) on Cuckooflower, Cardamine pratensis L. © Richard Lewington

Northern Ireland Environment Agency

CEDaR Centre for Environmental Data and Recording

National Museums Northern Ireland

explore/engage/enjoy



Intro to the Irish Wetland Bird Survey and the Countryside Bird Survey

By Niamh Fitzgerald

Agenda

1. Welcome, background to bird monitoring in Ireland.
2. The Irish Wetland Bird Survey (I-WeBS) – background, methods.
3. The Countryside Bird Survey (CBS) – background, methods.
4. Data uses.

Why monitor birds (I)

- To identify sites of importance for designation, nationally and internationally – EU Bird's Directive.
- Ireland's obligations to monitor and report under the EU Birds Directive (Article 12)
- Long-term monitoring – trends in abundance and distribution, informs species and site protection; assess effectiveness of conservation measures.

Why monitor birds (II)

- Birds are effective bioindicators – they reflect the health of our habitats and ecosystems.
- Relatively visible and easy to survey, wide ranging, upper trophic level consumers… Indicators of environmental change – e.g. climate change, fish stocks…
- Birds are conspicuous, ‘aesthetically pleasing’, a good ad for promoting biodiversity among the public.

Background to bird monitoring in Ireland

BirdWatchIrelan
protecting birds and biodiver

How much hunting is sustainable?

BirdWatchIreland
protecting birds and biodiversity

Monitoring

↓

Assessment of status

↓

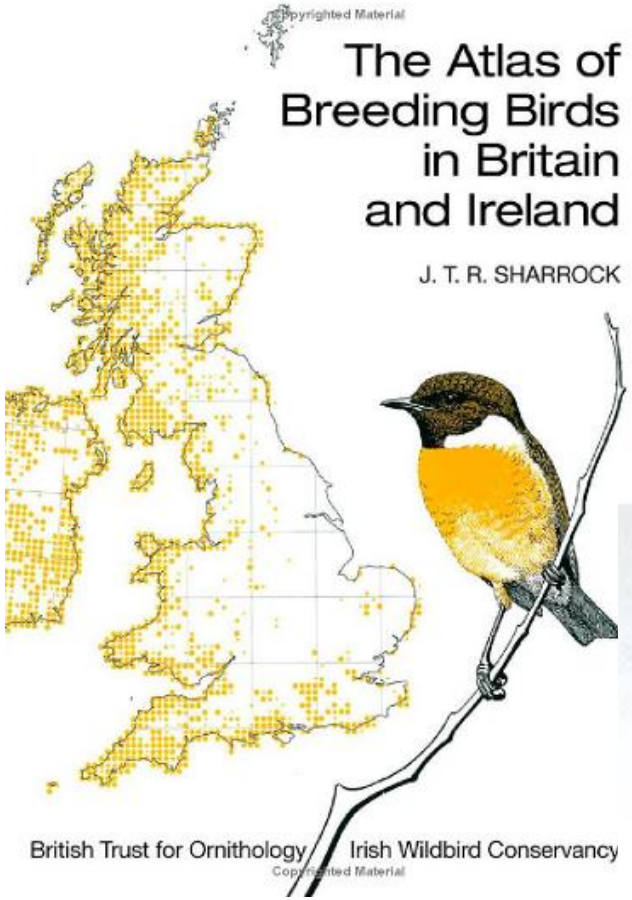
Prioritise/ take appropriate action

↓ ↓ ↓

Site protection

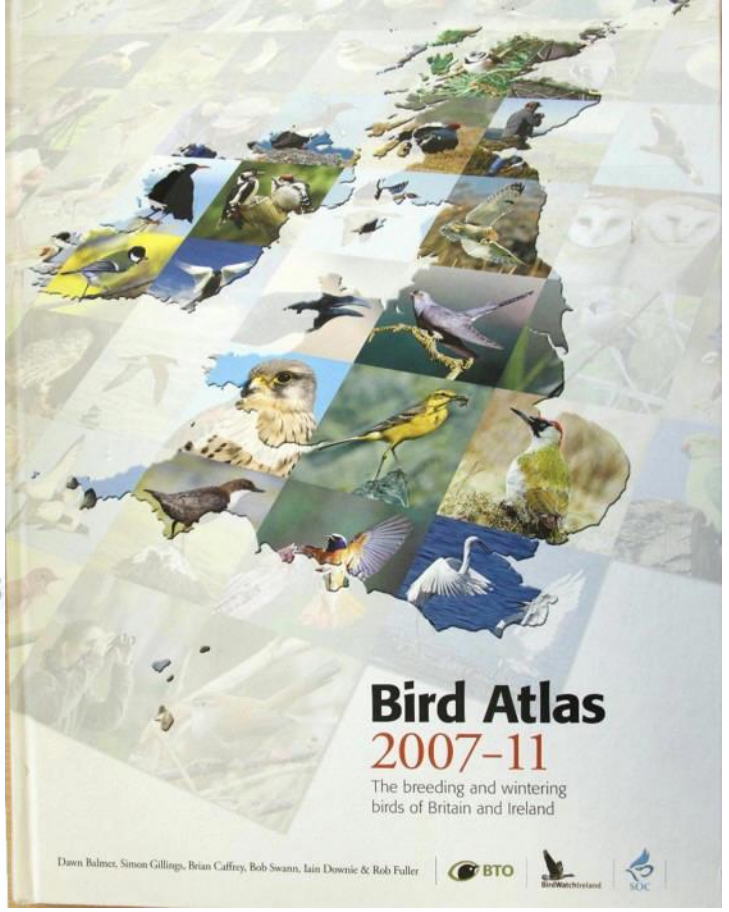
Habitat management

Further research

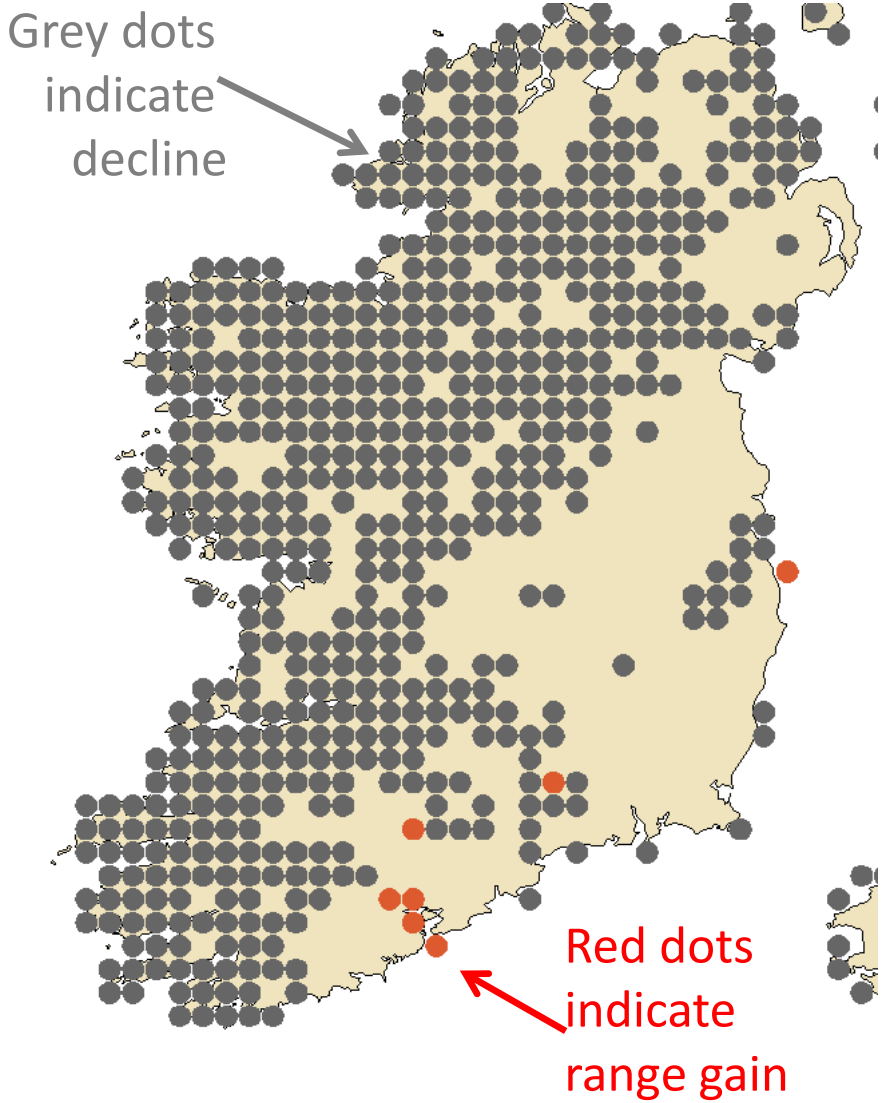


1968-72

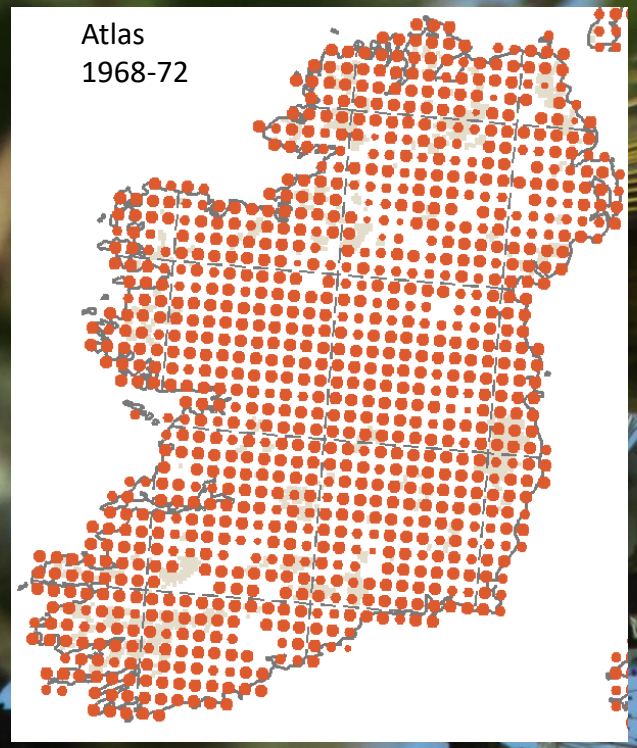
Atlas
Snapshots at 20-year intervals

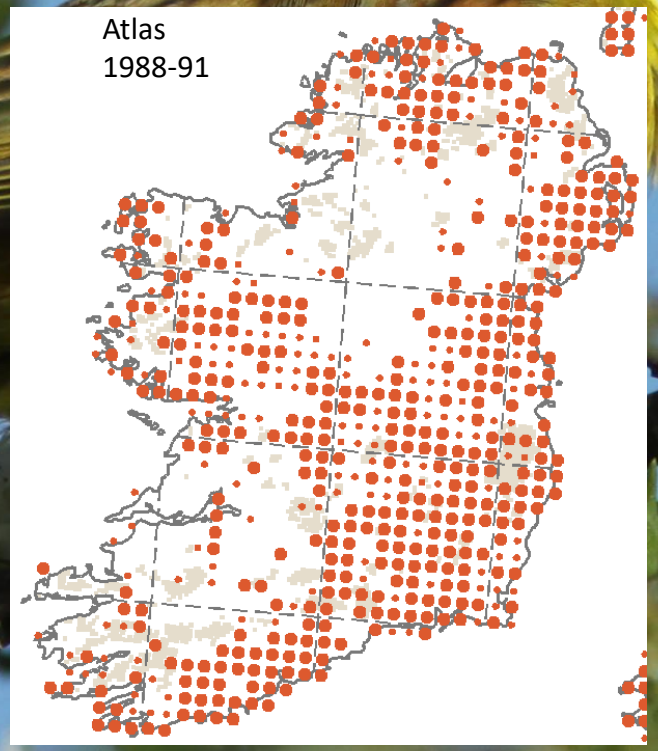


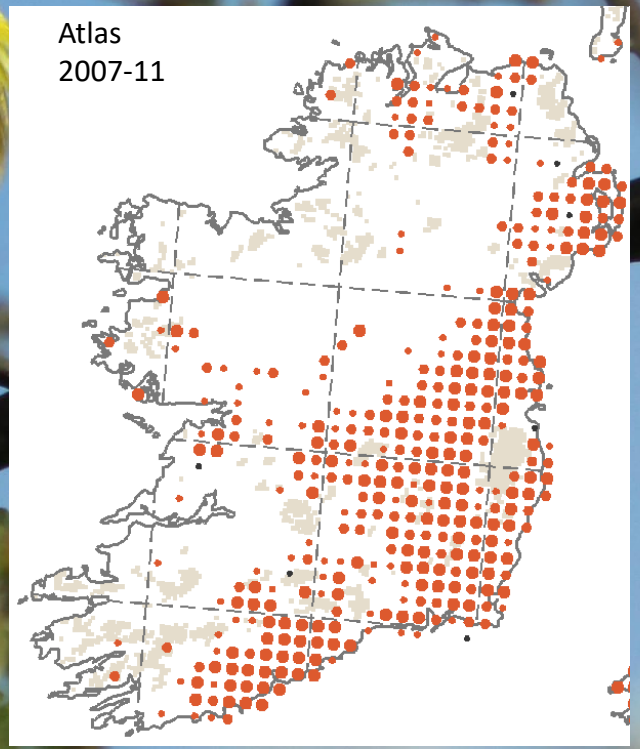
Large-scale declines, many species, especially since 1970s…



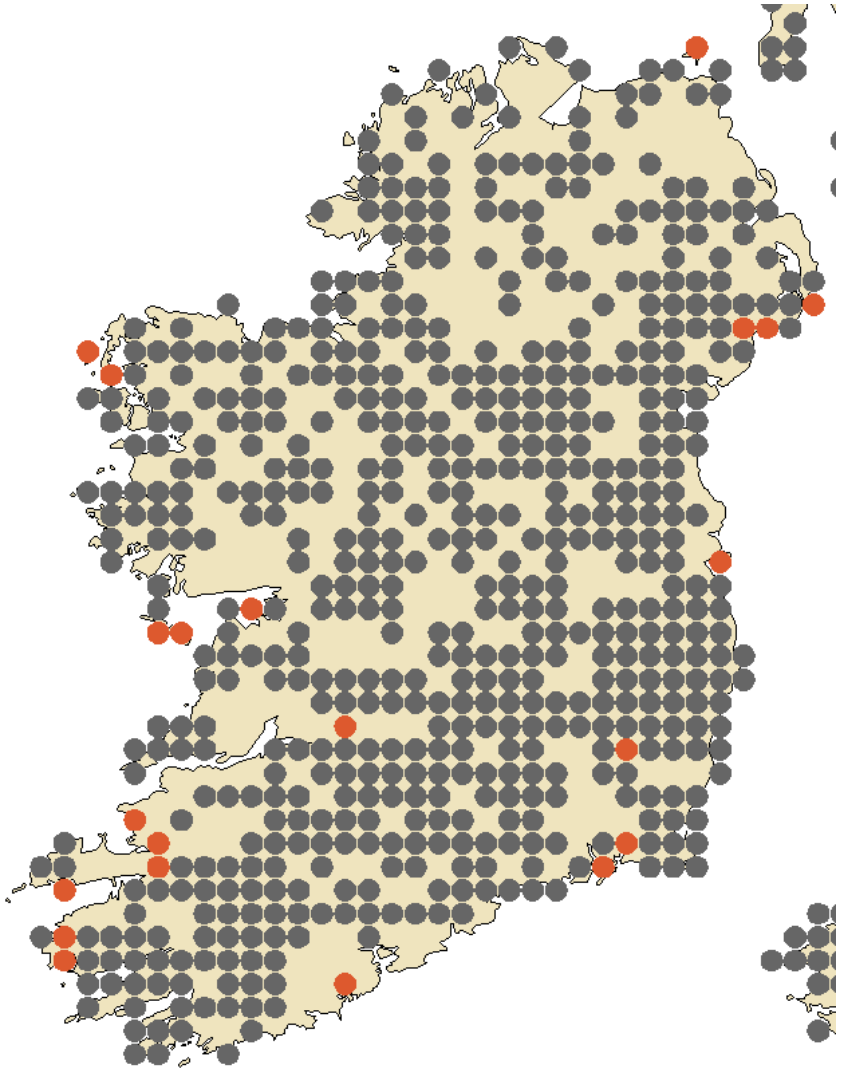
Range contraction



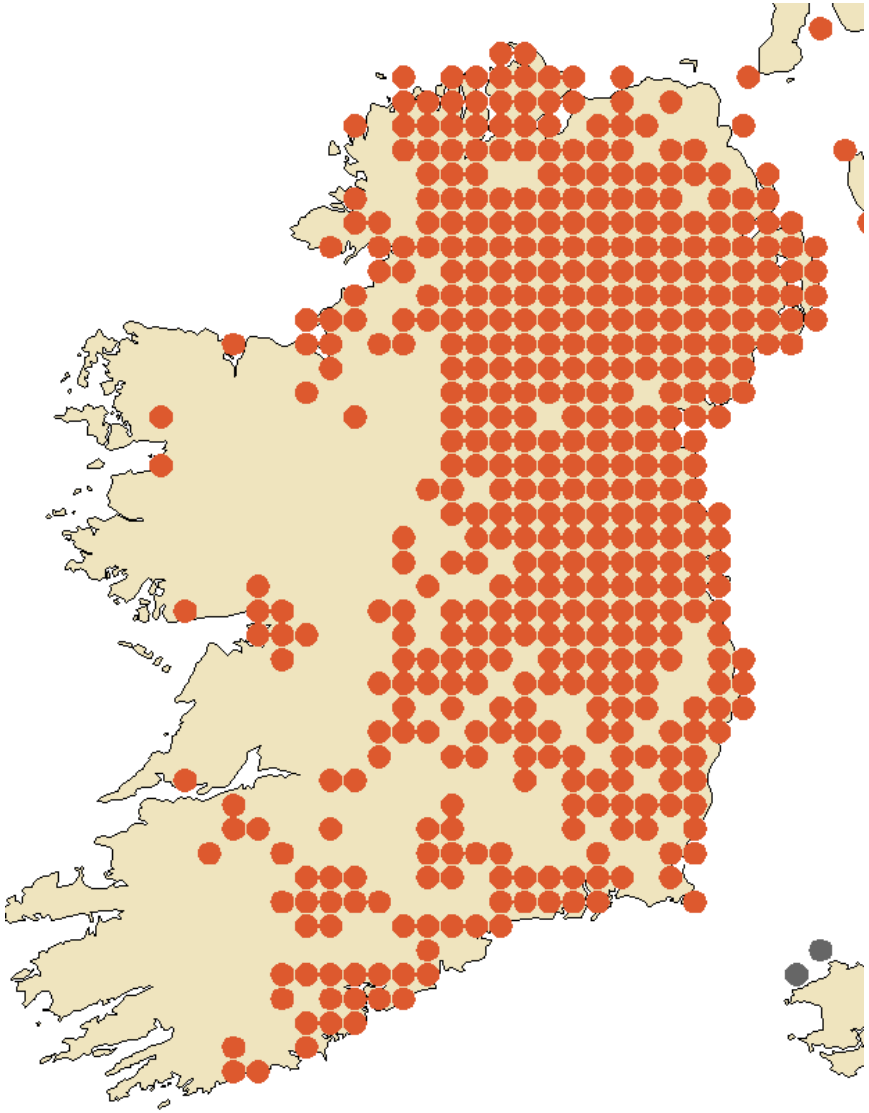




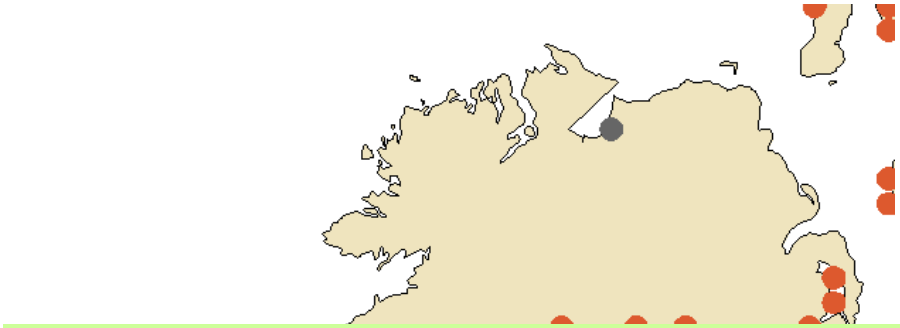
Curlew



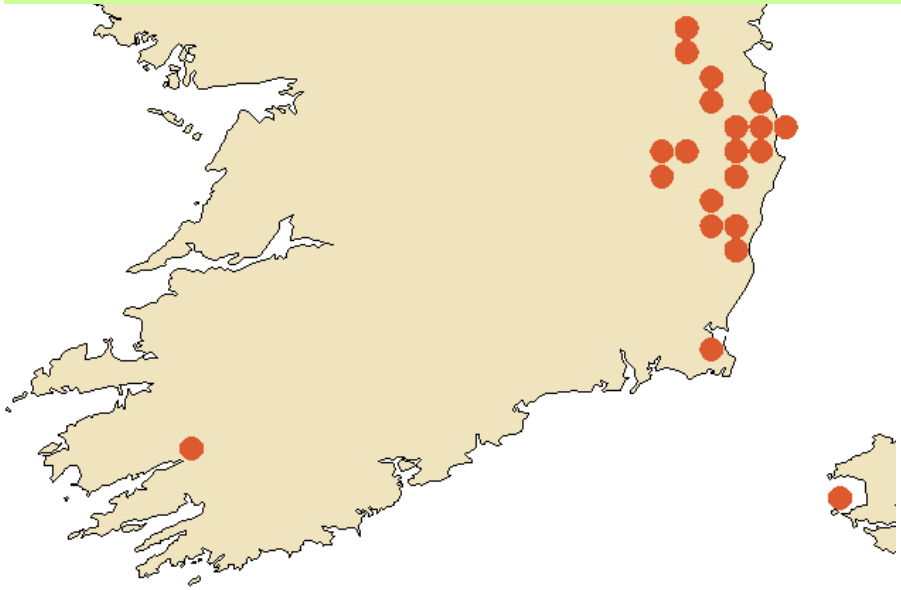
Common Buzzard

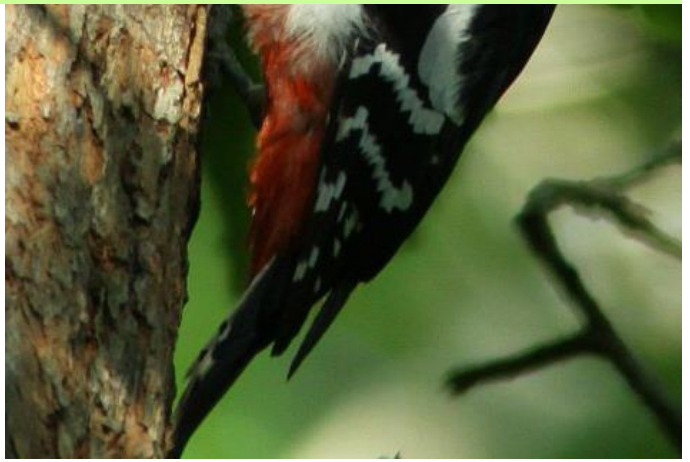


Great Spotted Woodpecker



All change – birds are constantly on the move...
Important that we keep up!





Ongoing permanent monitoring…

I-WeBS

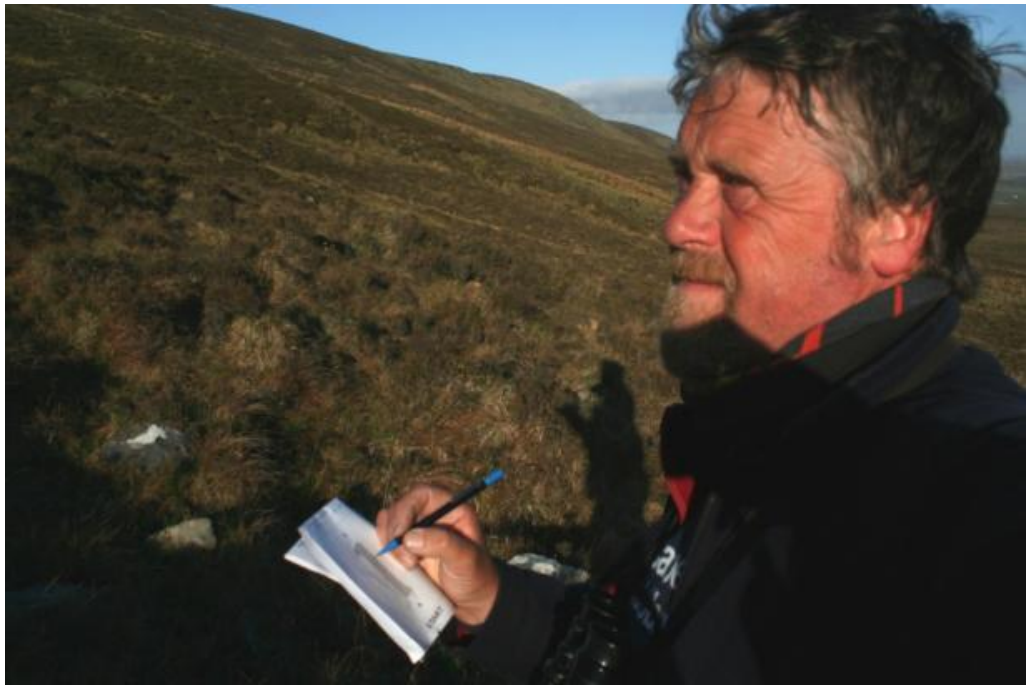
Countryside Bird Survey

Survey participants

Survey Coordinators

Niamh Fitzgerald

Dick Coombes



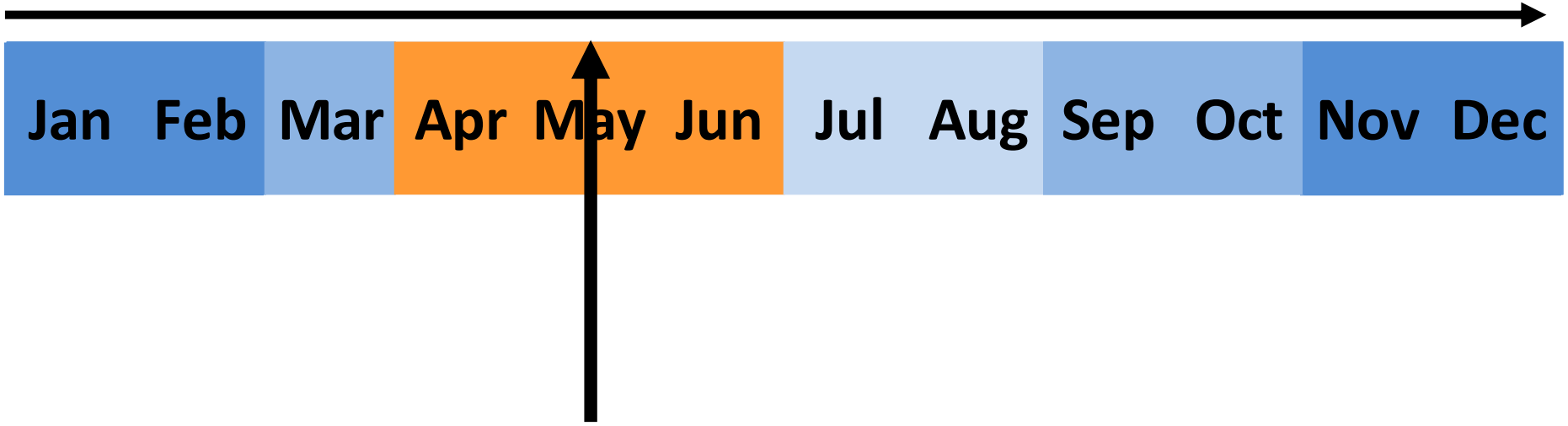
CBS and I-WeBS team

Lesley Lewis
Project Manager

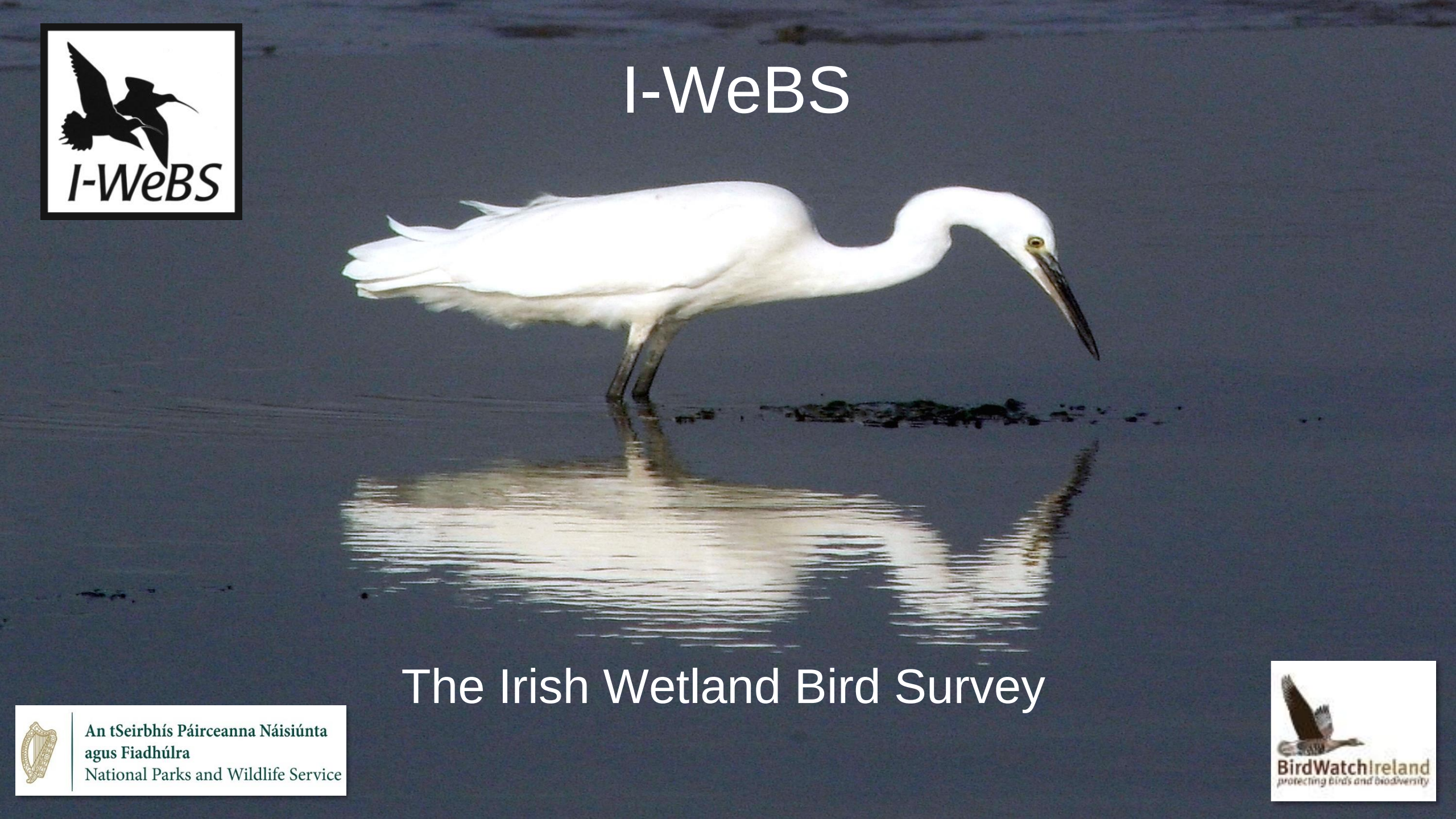
Brian Burke
Scientific Officer

John Kennedy
Scientific Officer

Timeline...



I-WeBS



The Irish Wetland Bird Survey

An tSeirbhís Páirceanna Náisiúnta agus Fiadhúlra
National Parks and Wildlife Service

BirdWatch Ireland
protecting birds and biodiversity

I-WeBS - Objectives

1. Determine the size of waterbird populations
2. Identify important sites for waterbirds
3. Assess trends in their numbers and distribution
4. Informed decision-making regarding developments near wetlands

I-WeBS - Objectives

1. Determine the size of **waterbird** populations

- **Wildfowl** - swans, geese, ducks
- **Wildfowl allies** - grebes, rails, cormorants, herons, divers
- **Waders**
- **Gulls**

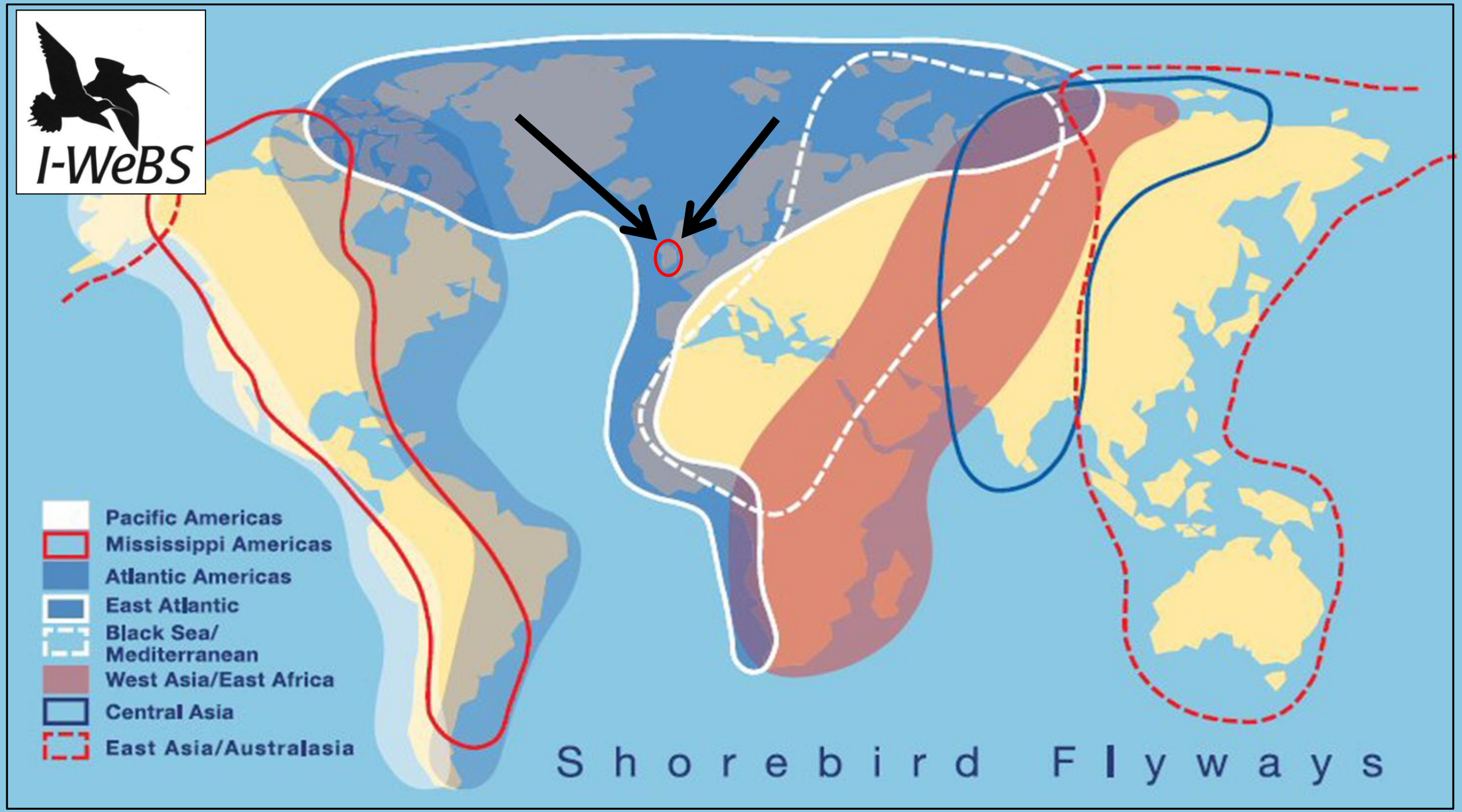
I-WeBS - Objectives

1. Determine the size of waterbird populations
2. Identify important sites for waterbirds
3. Assess trends in their numbers and distribution
4. Informed decision-making regarding developments near wetlands

Why is Ireland so important for waterbirds?

1. Location along flyway of arctic-nesting species
2. Mild climate, Ice-free feeding opportunities
3. Abundance of wetlands

Hundreds of thousands of waterbirds come to Ireland every winter!


I-WeBS
Pacific Americas
Mississippi Americas
Atlantic Americas
East Atlantic
Black Sea/
Mediterranean
West Asia/East Africa
Central Asia
East Asia/Australasia
Shorebird Flyways

Methods

- Look-see method within predefined boundaries
- Once per month, Sep – **Jan** – Mar
- Pre-selected dates – coordinated counts
- Teams to cover large sites
- Tidal sites at/near high tide (high end of rising)
- All counts within 3 hours (to minimise x2 counting)

I-WeBS Online

Wildfowl Species Counts

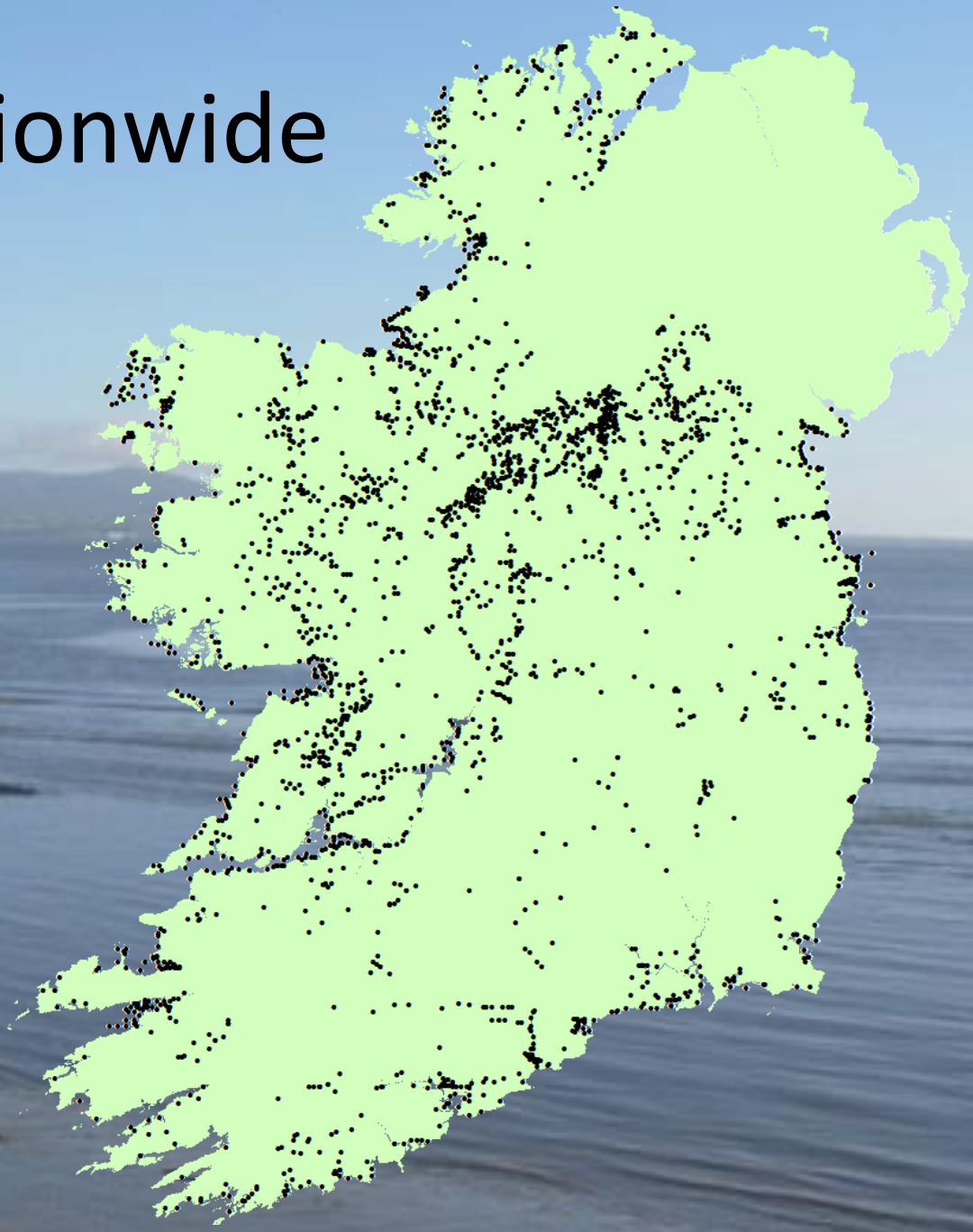
Swans, geese and ducks

Wildfowl

	Count	Count Quality
Mute Swan - MS	12	Okay
Bewick's Swan - BS		
Whooper Swan - WS	72	Estimate
Pink-footed Goose - PG		
Greenland White-fronted Goose - NW	40	Known underestimate
Greylag Goose - GJ		

Sites nationwide

- 300 sites, including all key wetlands (e.g. SPAs)
- Split into 800 subsites
- **Wetlands of all types, shapes and sizes** (shallow coast to wet grasslands)
- c. 485 observers annually



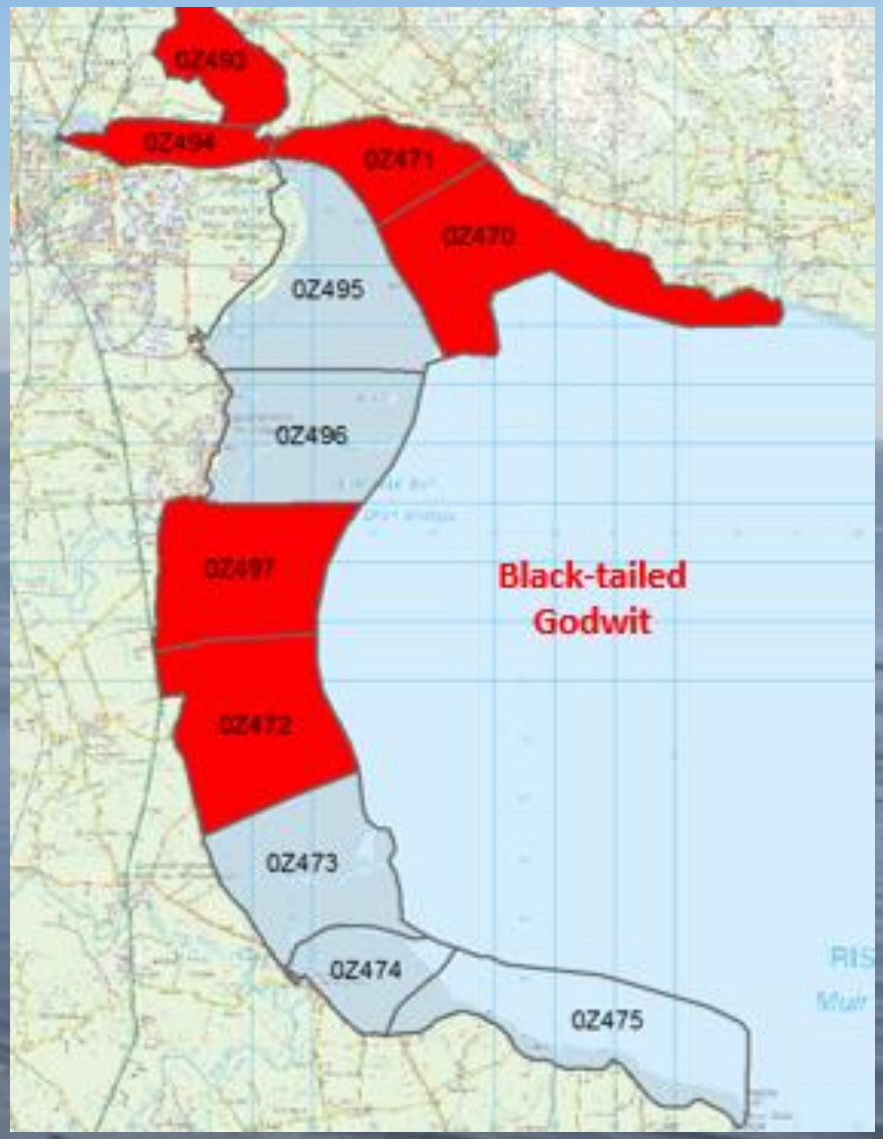

I-WeBS Counters
NPWS/BirdWatch staff: 55
Skilled volunteers: 430

Sites to Subsites: e.g. Dungarvan Harbour

Subsites = fine-scale data within sites

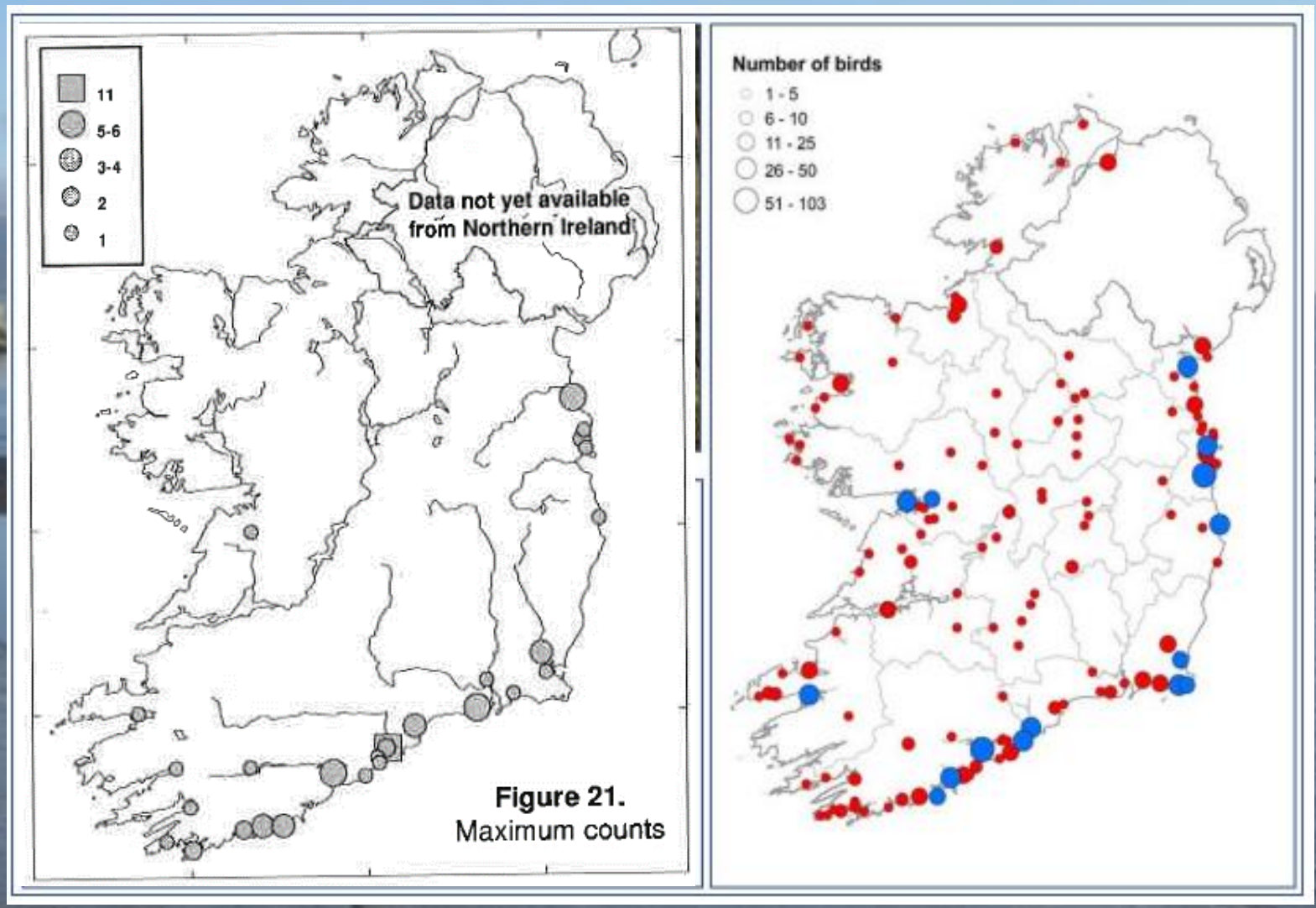
Benefits

- Subsite boundaries easily recognised
- Easier to do co-ordinated counts
- Finer-scale data e.g. most important areas for different species within a site



Small-scale and Large-scale change

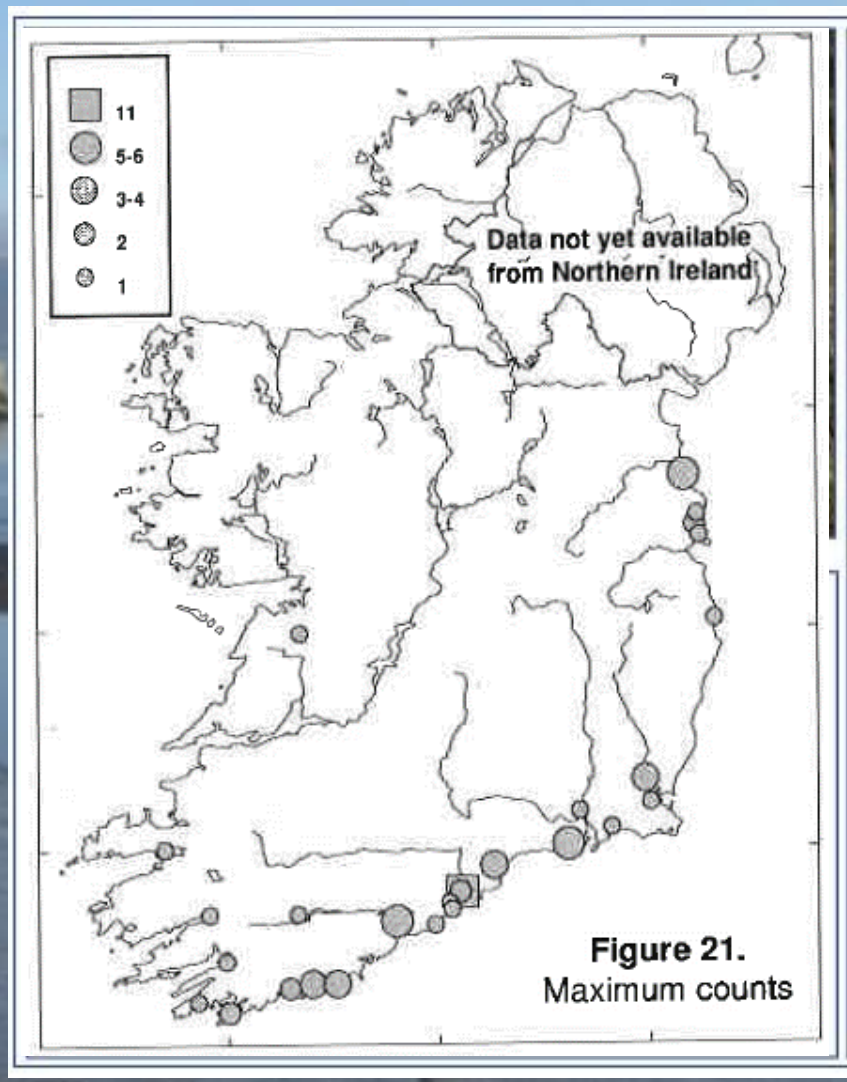
1995/96



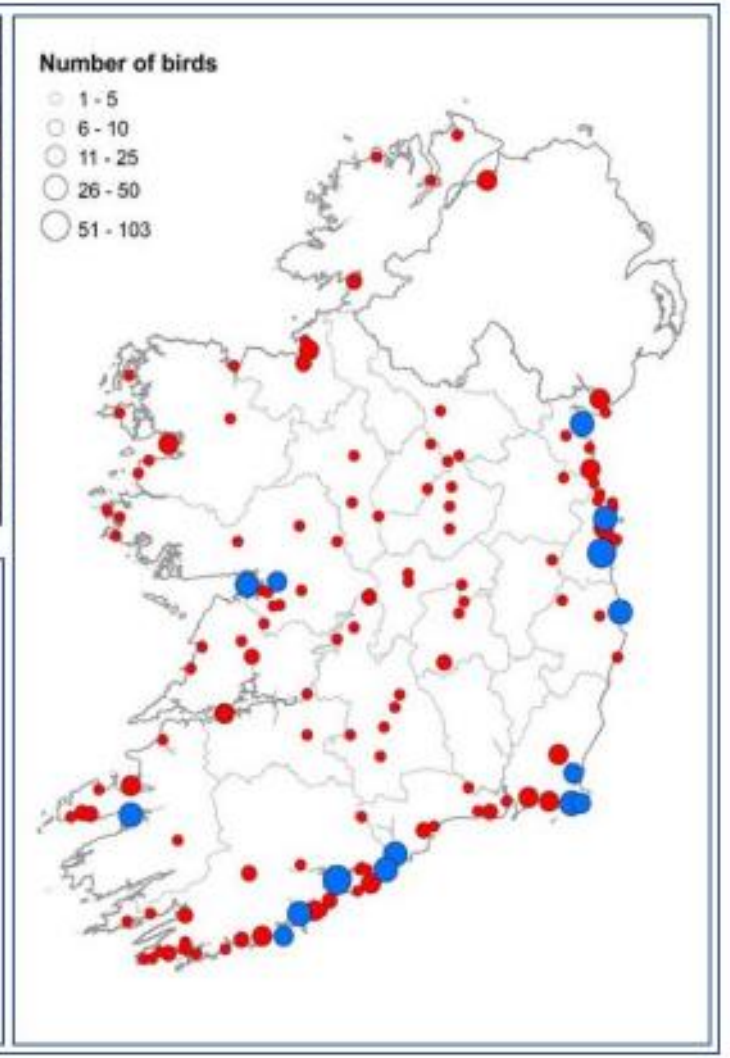
2015/16

Can you guess the species?

1995/96



2015/16



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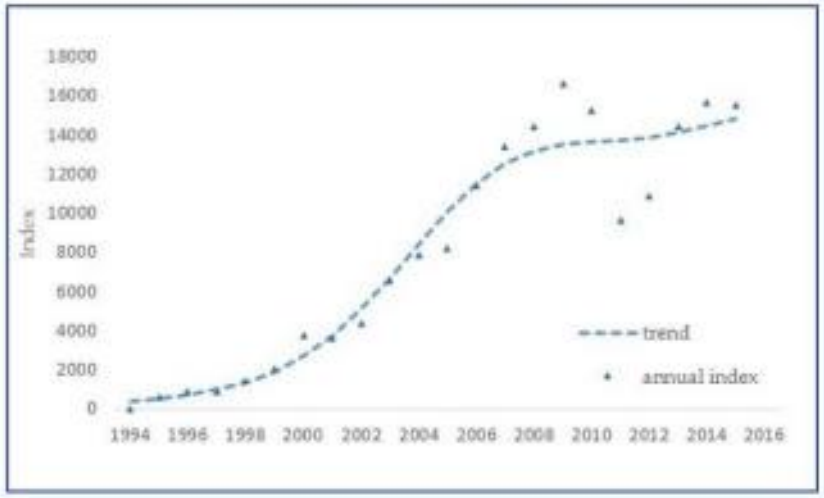
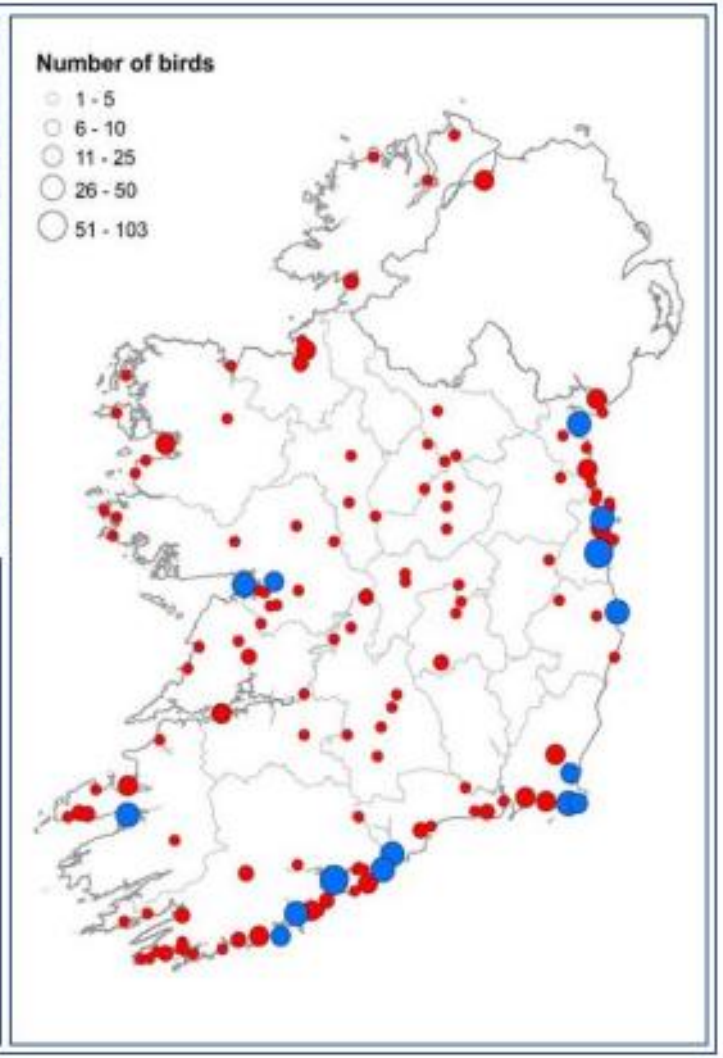




I-WeBS

498,418 waterbirds lost

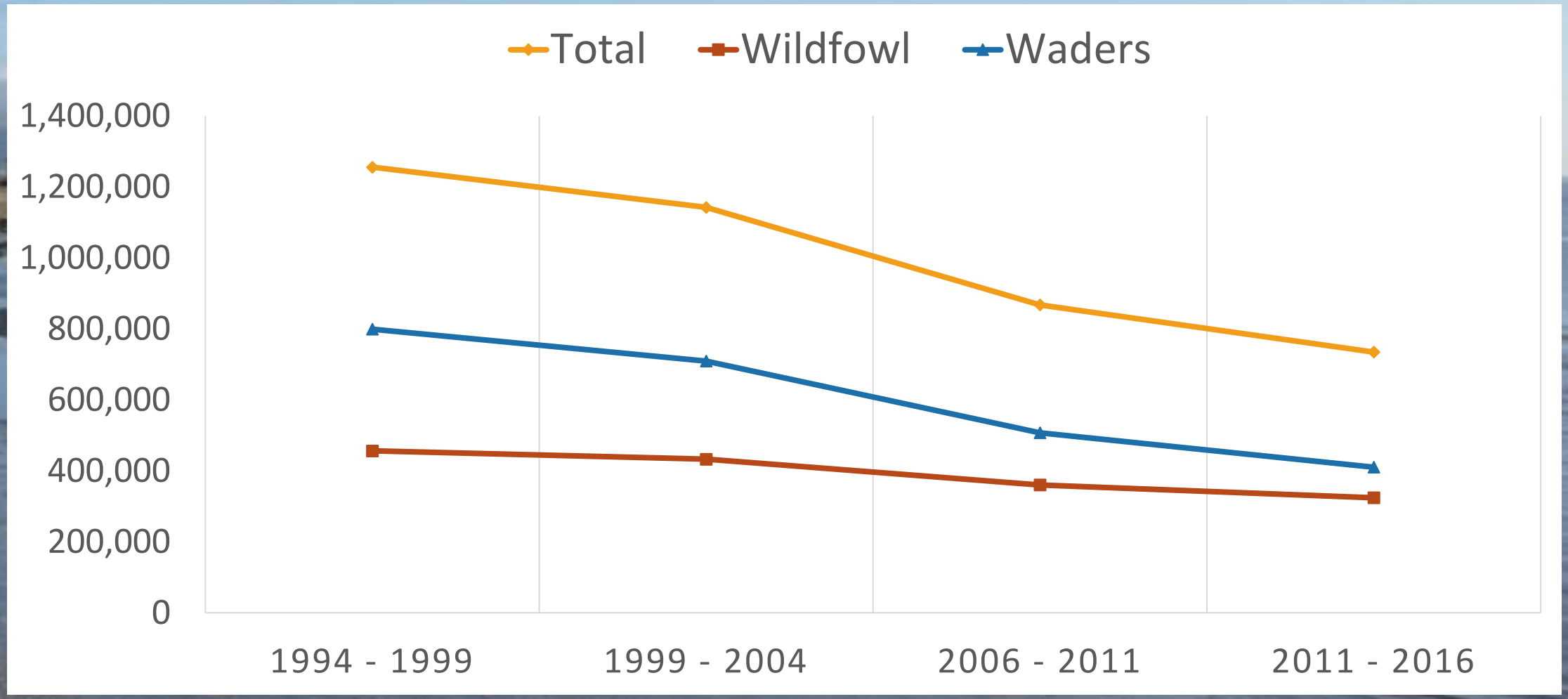
40% total decline

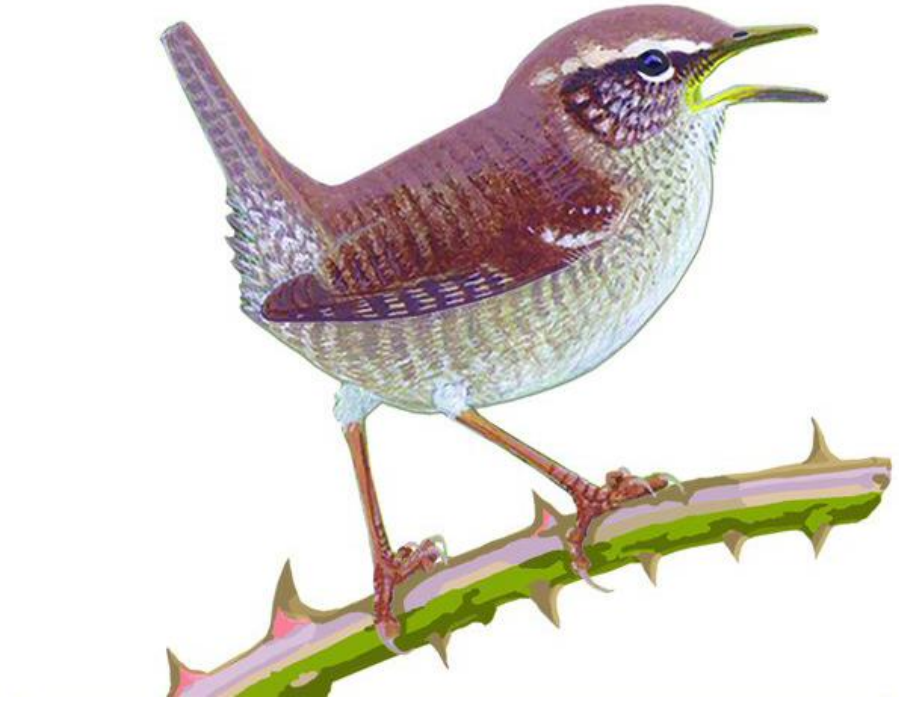
… in Ireland since 1994/95!

Some Key Findings

- Total numbers have declined by **139,223** (15.5%) in 5 years
- **Waders** experiencing the largest declines (19.1%) (-100,000)
- Sites supporting 20,000 birds have fallen **from 15**, in 2004/5 **to 5** in the current period
- Increases in: Sanderling (**13.2%**), Greenshank (**16.8%**), Black-tailed Godwit (4.2%) and Bar-tailed Godwit (**8.5%**) over last 5 years

Population Changes Over Time



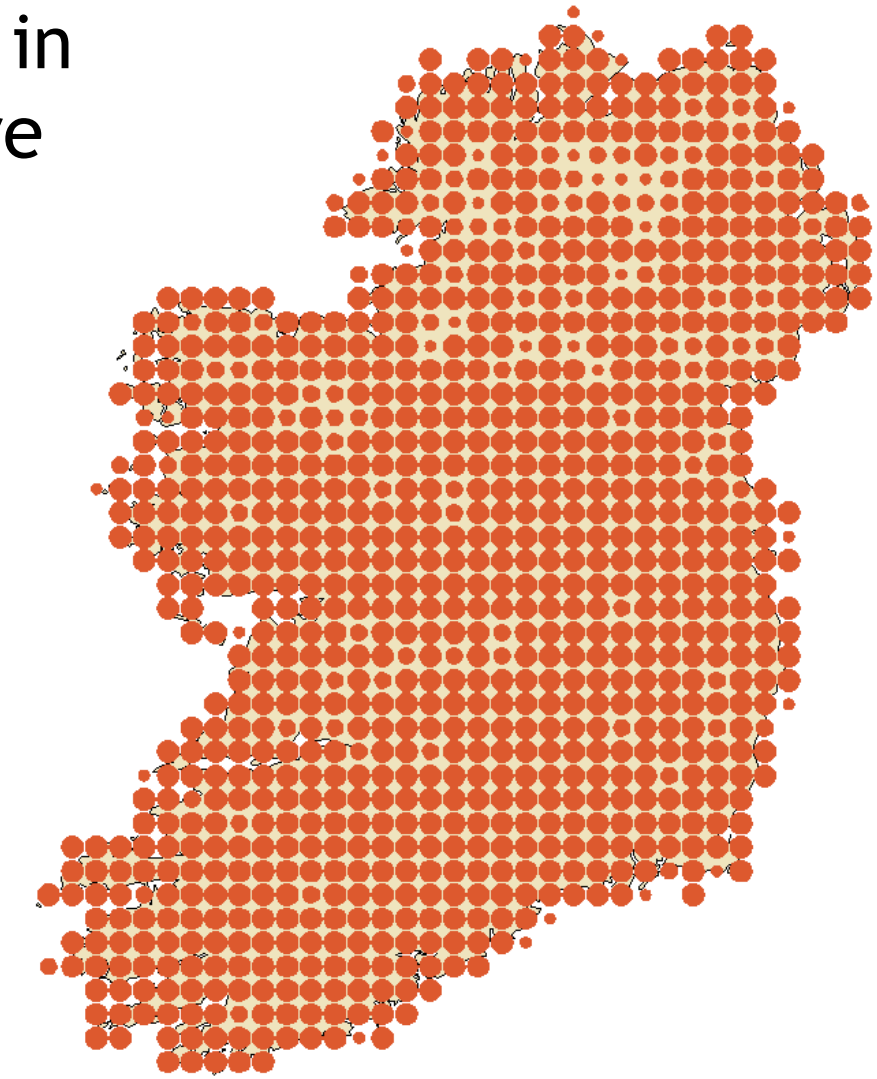


Countryside Bird Survey

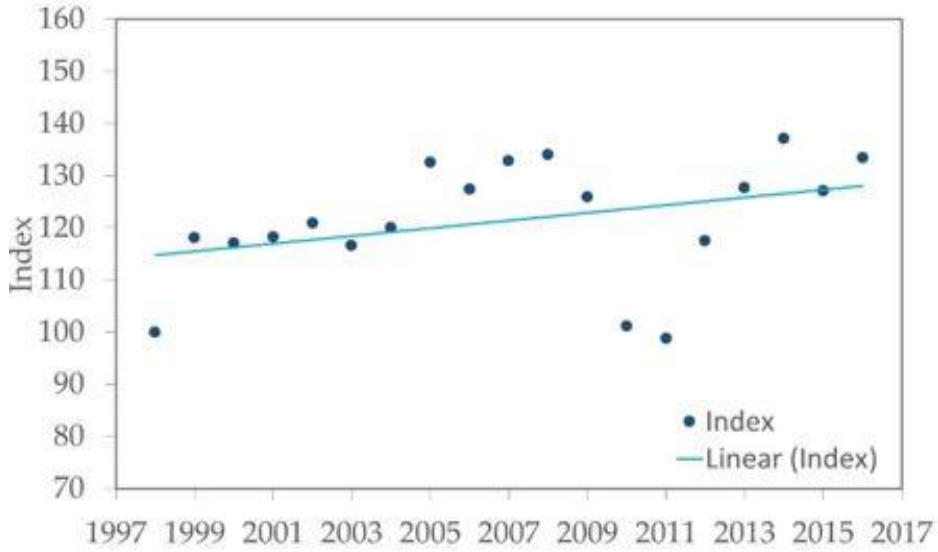
Wren

Resident present in
Every 1-km square
In Ireland

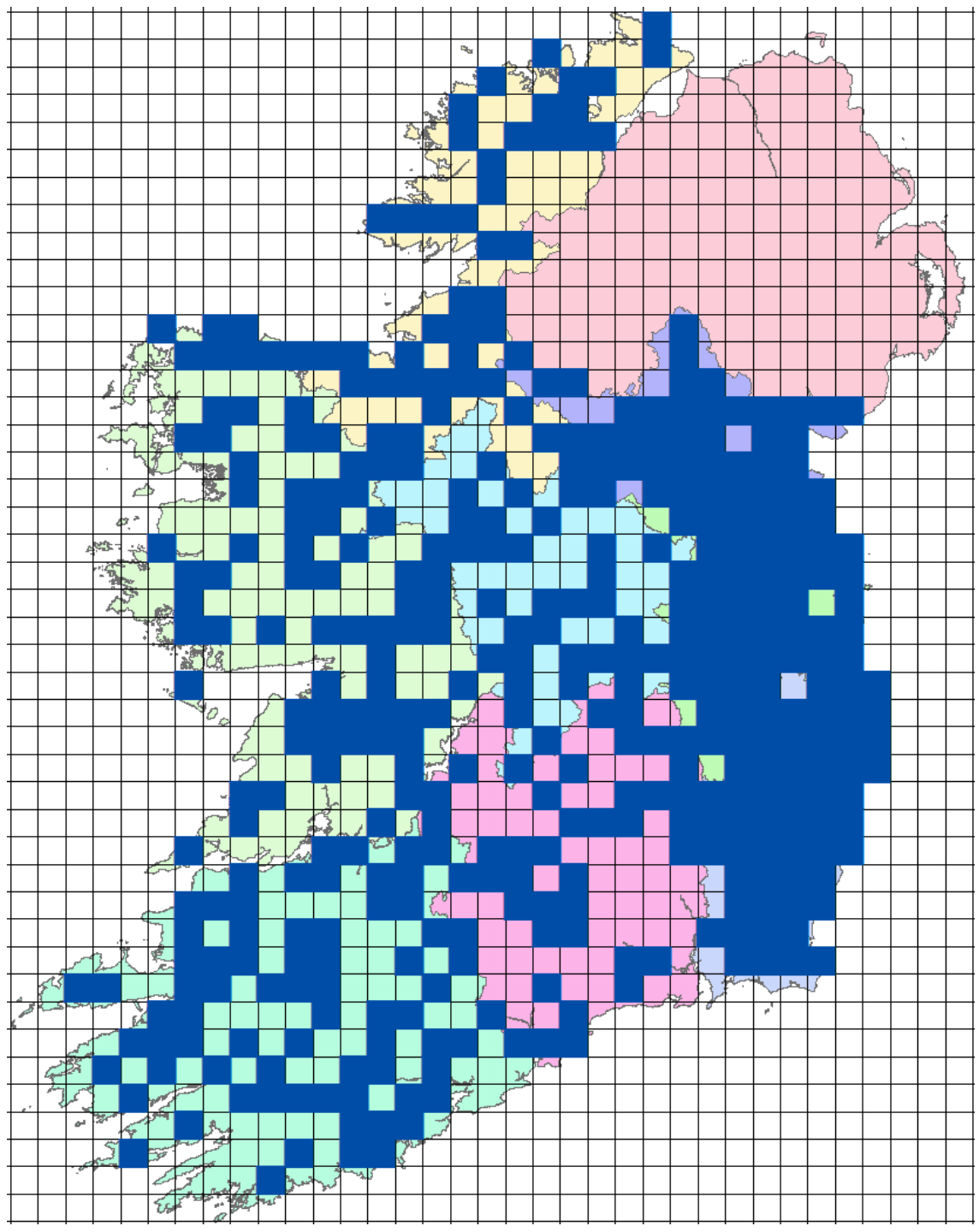
Bird Atlas



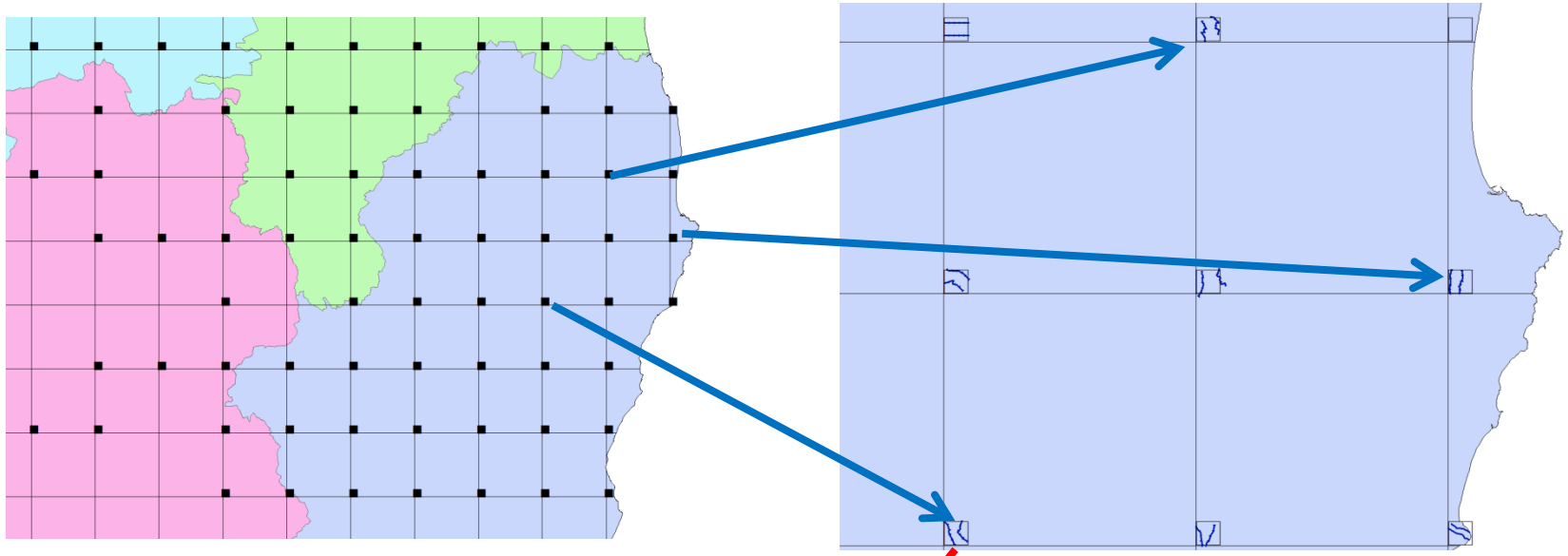
CBS

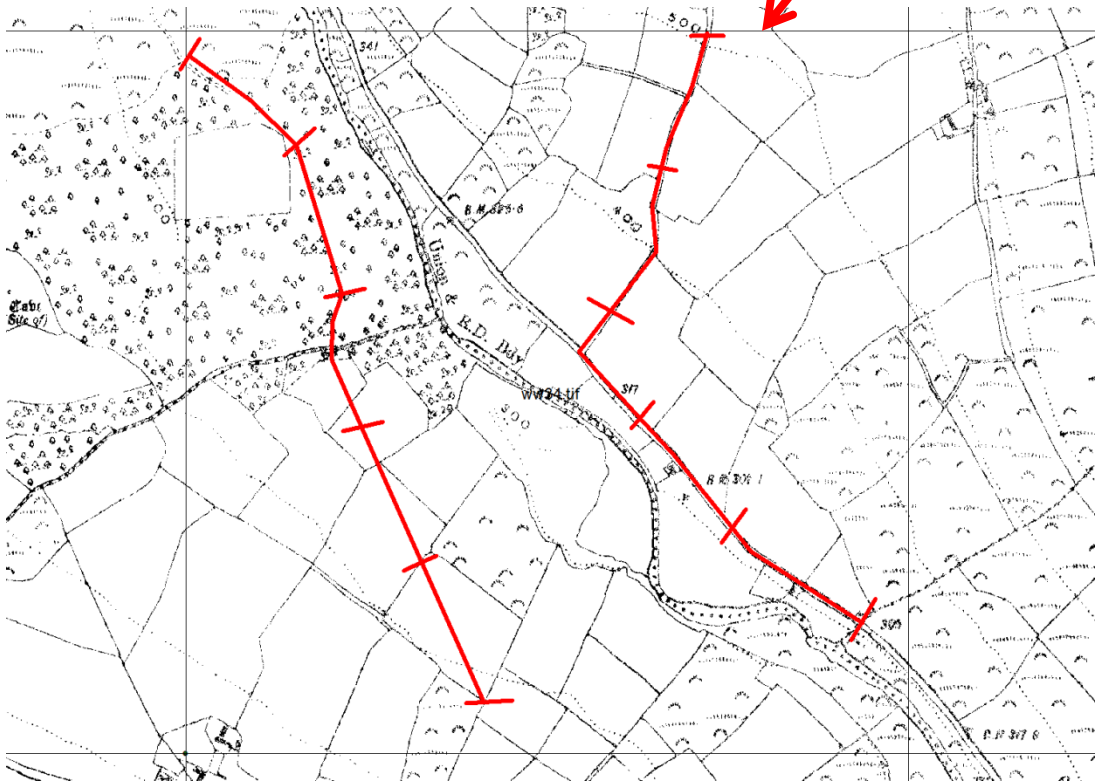


Countryside
Bird Survey

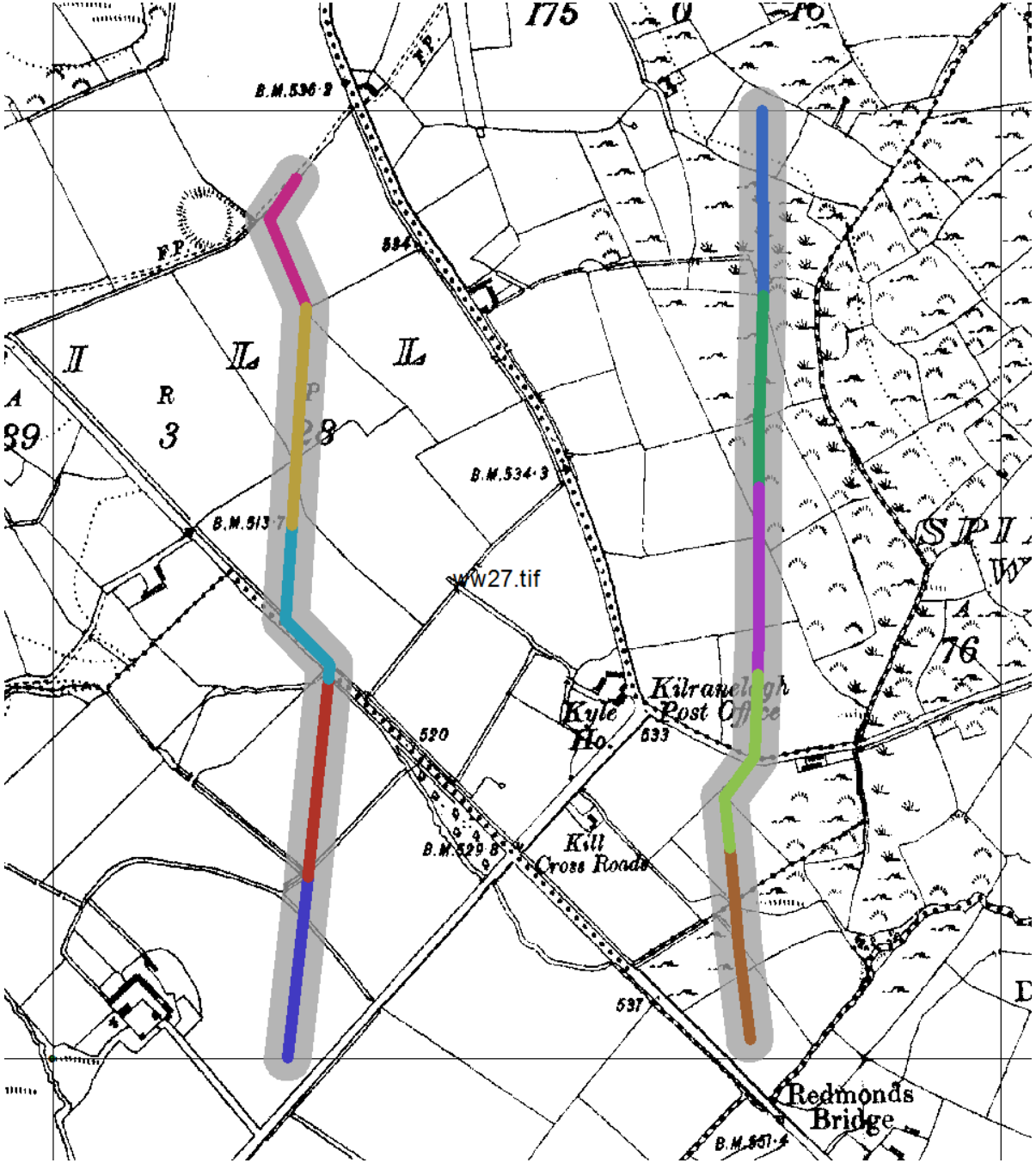


Countryside Bird Survey

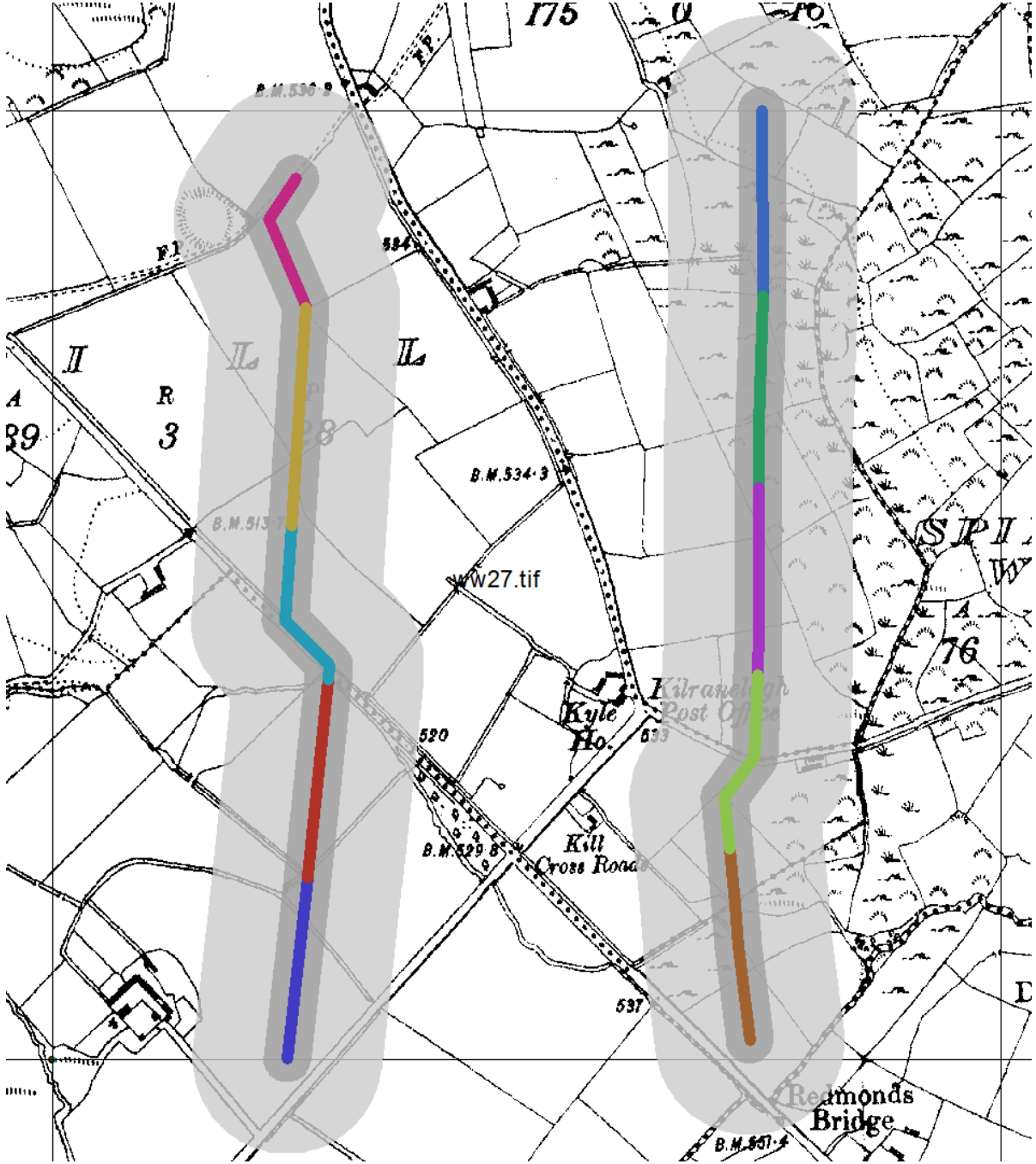




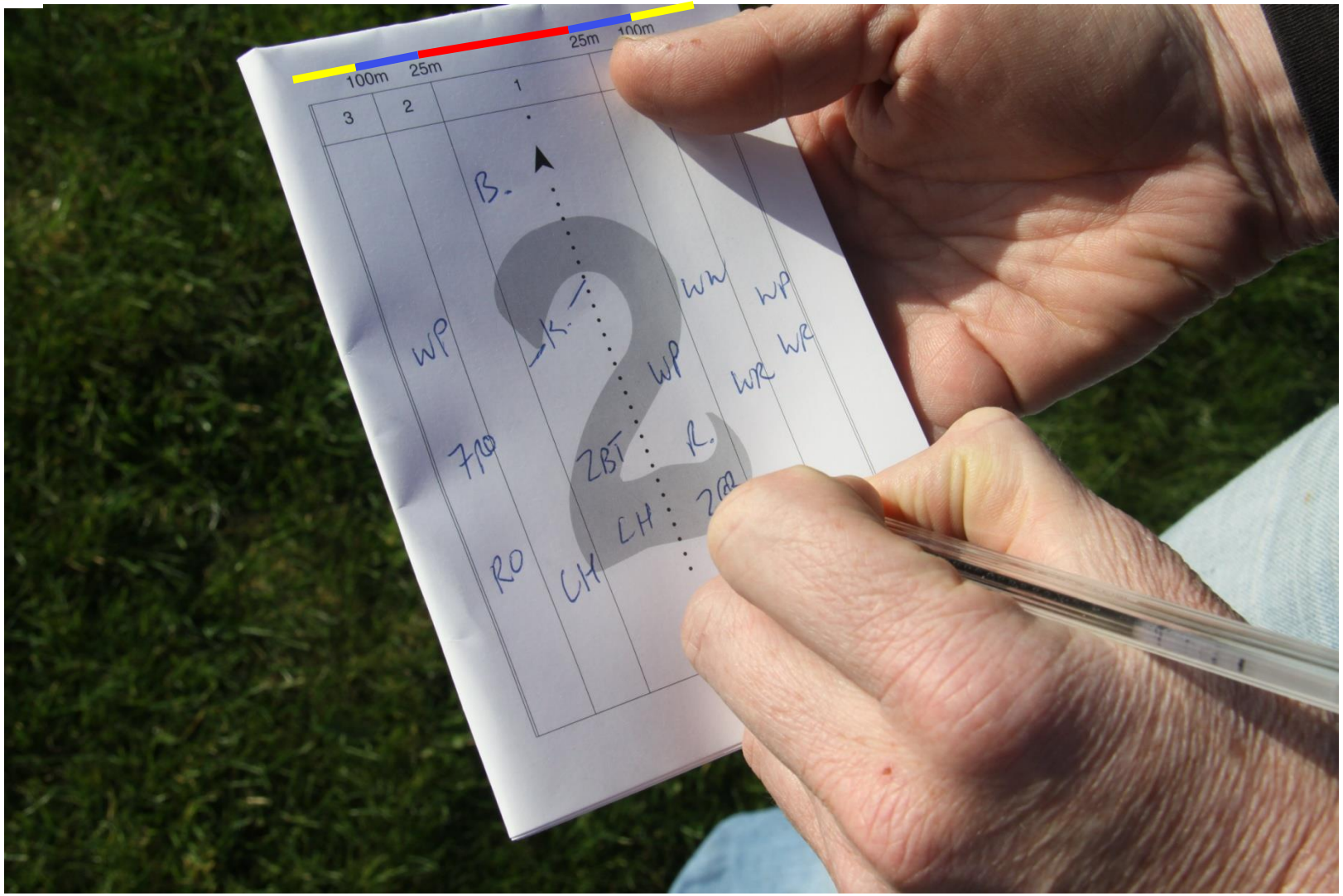
Countryside Bird Survey



Countryside
Bird Survey



Countryside Bird Survey



CBS Online


Countryside Bird Survey
BirdWatchIreland
protecting birds and biodiversity
An Roinn Tithíochta, Rialtais Áitiúil agus Oidhreachta
Department of Housing, Local Government and Heritage
Countryside Bird Survey
Online Submission Form to record a CBS Visit
A-
A+
Welcome to the online CBS submission form.
Please note that this form
can be filled out using a computer, tablet or phone
can be used to upload a photo or scan of the map (this is optional)
accepts the relevant data on the Habitat Recording Form (green paper form) and the Field Recording Sheet (white paper form)

Countryside Bird Survey

- April / May / June
- Two early morning counts

- 300 squares (1km)
- 220 participants
- 55 species

Carried out in a range of habitats…

Countryside
Bird Survey

Countryside Bird Survey

Happy Habitat recording!

BTO HABITAT CODING SCHEME

LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4*
A WOODLAND	1 Broadleaved 2 Coniferous 3 Mixed (10% of each) 4 Broadleaved (water-logged) 5 Coniferous (water-logged) 6 Mixed (water-logged)	1 Mixed-aged or semi-natural 2 Coppice with standards 3 Coppice without standards 4 Mature plantation, (taller than 10m, with closed canopy) 5 Young plantation (5-10m, open canopy) 6 Parkland (scattered trees and grassy areas) 7 High-medium disturbance from people 8 Low disturbance 9 Near road (within 50m)	1 Dense shrub layer 2 Moderate shrub layer 3 Sparse shrub layer 4 Dense field layer 5 Moderate field layer 6 Sparse field layer 7 Grazed (moderate to heavy) 8 Lightly grazed 9 Dead wood present 10 Dead wood absent
B SCRUBLAND (or young woodland <5m tall)	1 Regenerating natural or semi-natural woodland 2 Downland** (chalk) 3 Heath scrub 4 Young coppice 5 New plantation 6 Clear-felled woodland with or without new saplings 7 Other	1 Broadleaved 2 Coniferous 3 Mixed (10% of each) 4 Broadleaved swamp scrub 5 Coniferous swamp scrub 6 Mixed swamp scrub 7 High-medium disturbance from people 8 Low disturbance 9 Near road (within 50m)	1 Predominantly tall (3-5m) 2 Predominantly low (1-3m) 3 Dense shrub layer 4 Moderate shrub layer 5 Sparse shrub layer 6 Extensive bracken 7 Dense field layer 8 Moderate field layer 9 Sparse field layer 10 Grazed (moderate to heavy)
C SEMI-NATURAL GRASSLAND /MARSH	1 Chalk downland** 2 Grass moor (unenclosed) 3 Grass moor mixed with heather (unenclosed) 4 Machair 5 Other dry grassland 6 Water-meadow/ grazing marsh 7 Reed swamp 8 Other open marsh 9 Saltmarsh	1 Hedgerow with trees 2 Hedgerow without trees 3 Tree-line without hedge 4 Other field boundary (wall, ditch, etc.) 5 Isolated group of 1-10 trees 6 No field boundary 7 Montane 8 High-medium disturbance from people 9 Low disturbance 10 Near road (within 50m)	1 Ungrazed 2 Cattle 3 Sheep 4 Horses 5 Rabbits 6 Deer 7 Other grazers 8 Extensive bracken 9 Hay
D HEATHLAND AND BOGS	1 Dry heath 2 Wet heath 3 Mixed heath 4 Bog 5 Breckland** 6 Drained bog 7 Bare peat	1 Montane 2 Raised bog 3 Valley/ basin bog 4 Blanket bog 5 Heath mixed with rough grass 6 Heath without grass 7 Heath with extensive bracken 8 Undetermined bog 9 Isolated group of 1-10 trees 10 High-medium disturbance from people 11 Low disturbance 12 Near road (within 50m)	1 Ungrazed 2 Cattle 3 Sheep 4 Horses 5 Rabbits 6 Deer 7 Other grazers 8 Ploughed 9 Burned 10 Planted with saplings less than 0.5m tall

LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4
E FARMLAND	1 Improved grassland 2 Unimproved grassland 3 Mixed grass/ tilled land 4 Tilled land 5 Orchard 6 Other farming	1 Hedgerow with trees 2 Hedgerow without trees 3 Tree-line without hedges 4 Other field boundary (wall, ditch, etc.) 5 Isolated group of trees 6 Farmyard (active) 7 Near road (within 50m) 8 No field boundary	1 Ungrazed 2 Cattle 3 Sheep 4 Horses 5 Other stock 6 Bare earth/plough 7 Autumn cereal 8 Spring cereal 9 Root crops (specify) 10 Other crops (specify) 11 Oil-seed rape 12 Other brassicas (specify) 13 Stubble (clean) 14 Stubble (weedy) 15 Unsown (fallow) 16 Recently-cut grass
F HUMAN SITES	1 Urban 2 Suburban 3 Rural	1 Building 2 Gardens 3 Municipal parks/ mown grass/ golf courses/ recreational areas 4 Sewage works "urban" 5 Near road (within 50m) 6 Near active railway line (within 50m) 7 Other 8 Rubbish tip	1 Industrial 2 Residential 3 Well-wooded 4 Not well-wooded 5 Area of large gardens 6 Area of medium gardens 7 Area of small gardens 8 Many shrubs 9 Few shrubs 10 Disused
G WATER BODIES (freshwater)	1 Pond (less than 50m²) 2 Small water-body (50-450m²) 3 Lake/unlined reservoir 4 Lined reservoir 5 Gravel pit, sand pit, etc. 6 Stream (less than 3m wide) 7 River (more than 3m wide) 8 Ditch with water (less than 2m wide) 9 Small canal (2-5m wide) 10 Large canal (more than 5m wide)	1 Undisturbed/ disused 2 Water sports (sailing, etc.) 3 Angling (coarse or game) 4 Coarse angling 5 Game fishing 6 Industrial activity 7 Sewage processing "rural" 8 Other 9 Small island	1 Eutrophic (green water) 2 Oligotrophic (clear water, few weeds) 3 Dystrophic (black water) 4 Marl (clear water, large water-weeds) 5 Slow-medium running 6 Fast-running 7 Dredged 8 Undredged 9 Banks cleared 10 Banks vegetated
H COASTAL	1 Marine - open shore 2 Marine shore - inlet/cove/loch 3 Estuarine 4 Brackish lagoon 5 Open sea	1 Mud or silt 2 Sand 3 Shingle 4 Rocky 5 Fully vegetated 6 Sparse/medium vegetation 7 Inter-tidal 8 Below low-water mark	1 Cliff vertical/ steeply sloping 2 Dune 3 Flat/gently sloping 4 Small island 5 Spit 6 Dune slack 7 Sloping ground 8 Undisturbed 9 Disturbed
I INLAND ROCK	1 Cliff 2 Scree/boulder slope 3 Limestone pavement 4 Other rock 5 Quarry 6 Mine/spoil/ slag heap 7 Cave	1 Active 2 Disused 3 Montane 4 Non-montane 5 High disturbance from climbers 6 Medium disturbance 7 Low disturbance	1 Bare rock 2 Low vegetation present (mosses, liverworts, etc.) 3 Grassland present 4 Scrub present
J MISCELLANEOUS			

* *Shrub layer* comprises woody plants less than 5m tall; *Field layer* comprises herbaceous, non-woody plants.
** Habitats not found in Ireland.

MORE PERMANENT HABITAT CHARACTERISTICS

- A WOODLAND
- B SCRUBLAND (or young woodland <5m tall)
- C SEMI-NATURAL GRASSLAND/MARSH
- D HEATHLAND AND BOGS
- E FARMLAND
- F HUMAN SITES
- G WATER BODIES (freshwater)
- H COASTAL
- I INLAND ROCK

BTO HABITAT CODING SCHEME (MODIFIED)

LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4
A WOODLAND (dominated by trees >5m tall)	1 Broadleaved 2 Coniferous 3 Mixed[α] 4 Broadleaved (water-logged) 5 Coniferous (water-logged) 6 Mixed (water-logged)	1 Mixed-aged or semi-natural 4 Mature plantation, (taller than 10m, with closed canopy) 5 Young plantation (5-10m, open canopy) 6 Parkland (scattered trees and grassy areas) 7 High-medium disturbance from people 8 Low disturbance 9 Near road (within 50m)	1 Dense shrub layer * 3 Sparse shrub layer * 4 Dense field layer** 6 Sparse field layer** 7 Grazed (moderate to heavy) 8 Lightly grazed 9 Dead wood present 10 Dead wood absent
[α] >10% conifer in predominantly broad-leaf or vice versa			
B SCRUBLAND (or young woodland <5m tall)	1 Regenerating natural or semi-natural woodland 3 Heath scrub[μ] 5 New plantation 6 Clear-felled woodland with or without new saplings 7 Other[μ]	1 Broadleaved 2 Coniferous 3 Mixed (10% of each) 4 Broadleaved swamp scrub 5 Coniferous swamp scrub 6 Mixed swamp scrub 7 High-medium disturbance from people 8 Low disturbance 9 Near road (within 50m)	1 Predominantly tall (3-5m) 2 Predominantly low (1-3m) 3 Dense shrub layer* 5 Sparse shrub layer * 6 Extensive bracken 7 Dense field layer** 9 Sparse field layer** 10 Grazed (moderate to heavy)
[μ] Use to indicate gorse habitats			
C SEMI-NATURAL GRASSLAND /MARSH[β]	2 Upland grass moor (unenclosed) 3 Upland grass moor mixed with heather (unenclosed) 4 Machair 6 Water-meadow/ grazing marsh 7 Reed swamp 8 Other open marsh[γ] 9 Saltmarsh	1 Hedgerow with trees 2 Hedgerow without trees 3 Tree-line without hedge 4 Other field boundary (wall, ditch, etc.) 5 Isolated group of 1-10 trees 6 No field boundary 7 Montane*** 8 High-medium disturbance from people 9 Low disturbance 0 Near road (within 50m)	1 Ungrazed 2 Cattle 3 Sheep 4 Horses 5 Rabbits 6 Deer 7 Other grazers 8 Extensive bracken 9 Hay
[β] Not apparently managed, probably no herbicides or fertilisers, dominated by grasses, rushes, sedges, reeds [γ] Other open marsh: water-logged marsh/ fen, not grazed			
D HEATHLAND AND BOGS	1 Heath (shallow peat depth <50cm) 4 Bog 7 Bare peat (harvested)	1 Montane*** 2 Raised bog 3 Valley/ basin bog 4 Blanket bog 5 Heath mixed with rough grass 6 Heath without grass 7 Heath with extensive bracken 8 Undetermined bog 9 Isolated group of 1-10 trees 10 High-medium disturbance from people 11 Low disturbance 12 Near road (within 50m)	1 Ungrazed 2 Cattle 3 Sheep 4 Horses 5 Rabbits 6 Deer 7 Other grazers 8 Ploughed 9 Burned 10 Planted with saplings less than 0.5m tall

LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4
E FARMLAND (fields that are enclosed by hedges, walls, fences etc.)	1 Improved grassland[δ] 2 Unimproved grassland (unfertilised, regularly mown/ grazed) 3 Mixed grass/ tilled land[ε] 4 Tilled land 5 Orchard 6 Other farming	1 Hedgerow with trees 2 Hedgerow without trees 3 Tree-line without hedges 4 Other field boundary (wall, ditch, etc.) 5 Isolated group of trees 6 Farmyard (active) 7 Near road (within 50m) 8 No field boundary	1 Ungrazed 2 Cattle 3 Sheep 4 Horses 5 Other stock 6 Bare earth/plough 7 Autumn cereal[λ] 8 Spring cereal[λ] 9 Root crops (specify) 10 Other crops (specify) 11 Oil-seed rape 12 Other brassicas (specify) 13 Stubble 15 Unsown (fallow) 16 Recently-cut grass
[δ] Treated regularly with fertiliser, distinguished by bright colour, lush growth [ε] Adjoining fields of tilled/ grassland [λ] By April, *autumn* cereals tall, bushy, dark green, *spring* cereals begin emerging, may be at single leaf stage			
F HUMAN SITES (areas of human habitation)	1 Urban 2 Suburban 3 Rural	1 Building 2 Gardens 3 Municipal parks/ mown grass/ golf courses/ recreational areas 4 Sewage works "urban" 5 Near road (within 50m) 6 Near active railway line (within 50m) 7 Other 8 Rubbish tip	1 Industrial 2 Residential 3 Well-wooded 4 Not well-wooded 5 Area of large gardens 6 Area of medium gardens 7 Area of small gardens 8 Many shrubs 9 Few shrubs 10 Disused
G WATER BODIES (freshwater)	1 Pond (less than 50m²) 2 Small water-body (50-450m²) 3 Lake/unlined reservoir 4 Lined reservoir 5 Gravel pit, sand pit, etc. 6 Stream (less than 3m wide) 7 River (more than 3m wide) 8 Ditch with water (less than 2m wide) 9 Small canal (2-5m wide) 10 Large canal (more than 5m wide)	1 Undisturbed/ disused 2 Water sports (sailing, etc.) 3 Angling (coarse or game) 4 Coarse angling 5 Game fishing 6 Industrial activity 7 Sewage processing "rural" 8 Other 9 Small island	1 Eutrophic (green water) 2 Oligotrophic (clear water, few weeds) 3 Dystrophic (black water) 4 Marl (clear water, large water-weeds) 5 Slow-medium running 6 Fast-running 7 Dredged 8 Undredged 9 Banks cleared 10 Banks vegetated
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I INLAND ROCK	1 Cliff 2 Scree/boulder slope 3 Limestone pavement 4 Other rock 5 Quarry 6 Mine/spoil/ slag heap 7 Cave	1 Active 2 Disused 3 Montane *** 4 Non-montane 5 High disturbance from climbers 6 Medium disturbance 7 Low disturbance	1 Bare rock 2 Low vegetation present (mosses, liverworts, etc.) 3 Grassland present 4 Scrub present

* *Shrub layer* comprises woody plants less than 5m tall
** *Field layer* comprises herbaceous, non-woody plants including grass, forbs, herbs, nettles, Bramble
*** *Montane* where vegetation consists of ground-hugging plants, with substantial proportions of mosses & lichens, above altitude at which woody scrub can grow

HABITAT CHARACTERISTICS THAT ARE LIKELY TO CHANGE

- Grassland management
- Disturbance
- Activities

BTO HABITAT CODING SCHEME (MODIFIED)

LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4
A WOODLAND (dominated by trees >5m tall)	1 Broadleaved 2 Coniferous 3 Mixed[α] 4 Broadleaved (water-logged) 5 Coniferous (water-logged) 6 Mixed (water-logged)	1 Mixed-aged or semi-natural 4 Mature plantation, (taller than 10m, with closed canopy) 5 Young plantation (5-10m, open canopy) 6 Parkland (scattered trees and grassy areas) 7 High-medium disturbance from people 8 Low disturbance 9 Near road (within 50m)	1 Dense shrub layer * 3 Sparse shrub layer * 4 Dense field layer** 6 Sparse field layer** 7 Grazed (moderate to heavy) 8 Lightly grazed 9 Dead wood present 10 Dead wood absent
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[α] >10% conifer in predominantly broadleaf or vice versa

[μ] Use to indicate gorse habitats

[β] Not apparently managed, probably no herbicides or fertilisers, dominated by grasses, rushes, sedges, reeds

[γ] Other open marsh: water-logged marsh/ fen, not grazed

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[δ] Treated regularly with fertiliser, distinguished by bright colour, lush growth

[ε] Adjoining fields of tilled/ grassland

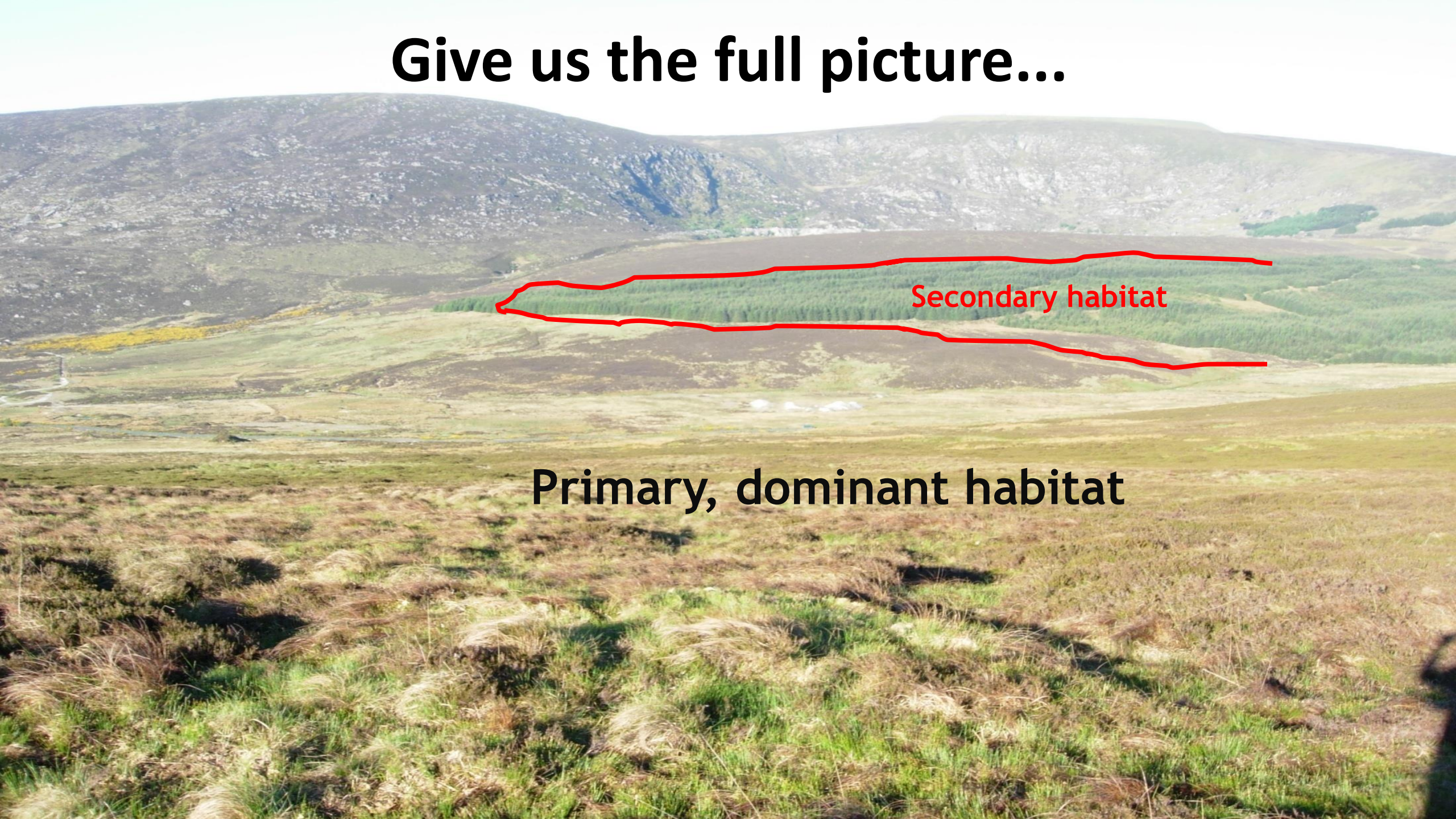
[λ] By April, *autumn* cereals tall, bushy, dark green, *spring* cereals begin emerging, may be at single leaf stage

* *Shrub layer* comprises woody plants less than 5m tall

** *Field layer* comprises herbaceous, non-woody plants including grass, forbs, herbs, nettles, Bramble

*** *Montane* where vegetation consists of ground-hugging plants, with substantial proportions of mosses & lichens, above altitude at which woody scrub can grow

Give us the full picture...



Data Outputs & Uses

The I-WeBS Database

- Site and subsite data for **c.300 sites** per winter season.
- 1994/95 – current. **28 seasons of data**.
- Over **170 waterbird species** (77 other species).
- Count data with associated quality (good/poor).
- Accessory data – date, site type (broad habitat), tidal state, survey conditions, disturbance levels….

Complementary datasets – post-breeding terns, Greylag & Pink-foot geese, International Swan Census.

I-WeBS data & importance at local, site, national and international level

I-WeBS

Estimates of waterbird numbers wintering in Ireland, 2011/12 – 2015/16

Brian Burke[1], Lesley J. Lewis[1], Niamh Fitzgerald[1], Teresa Frost[2], Graham Austin[2], and T. David Tierney[3]

[1] *BirdWatch Ireland, Unit 20, Block D, Bullford Business Campus, Kilcoole, Co. Wicklow.*

[2] *British Trust for Ornithology, The Nunnery, Thetford, Norfolk, IP24 2PU, UK.*

[3] *National Parks & Wildlife Service, Department of Culture, Heritage, and the Gaeltacht, 90 King Street North, Dublin 7.*

Corresponding author: ljlewis@birdwatchireland.ie

Keywords: Waterbirds, monitoring, population estimates, 1% thresholds

Annual monitoring of wintering waterbirds is carried out under the I-WeBS and WeBS schemes in the Republic and Northern Ireland respectively. These surveys are carried out from September to March each year, largely by a dedicated volunteer network, and are the principal tools used in the conservation of Ireland's wintering waterbirds and their wetland habitats. This study presents population estimates and 1% thresholds for wintering waterbirds in Ireland for the period 2011/12 to 2015/16 inclusive. Estimates were generated based on annual peak counts with imputation and include the results of more targeted surveys (i.e. goose and swan species censuses, non-estuarine surveys) where these improve the accuracy of estimates for the species in question. Estimates were generated for a total of 44 waterbird species, using data from 684 wetland sites across the Republic of Ireland and Northern Ireland. The total number of waterbirds estimated was 757,910, comprising 38% wildfowl (21 species), 6% wildfowl allies (8 species) and 57% waders (15 species). Total numbers have declined by 138,160 (15%) since the 2006/07-2010/11 period, with waders experiencing the largest declines; the combined totals of 15 wader species having declined by over 19%. Golden Plover *Pluvialis apricaria* and Lapwing *Vanellus vanellus* were the most numerous wader species recorded and Wigeon *Mareca penelope* and Teal *Anas crecca* were the most numerous wildfowl. Eight of the 44 species have increased by more than 5% since the previous estimates for 2006/07 – 2010/11, whereas 29 species declined by 5% over the same period. Many species are undergoing similar declines at flyway level, although the impact of local pressures and threats at Irish wetland sites should not be overlooked. Ireland continues to hold internationally important numbers of several waterbird populations, most notably Icelandic Whooper Swan *Cygnus cygnus*, Greenland White-fronted Goose *Anser albifrons flavirostris*, Greenland Barnacle Goose *Branta leucopsis*, East Canadian High-Arctic Light-bellied Brent Goose *Branta bernicla hrota*, Europe-wintering Great Northern Diver *Gavia immer*, North European Ringed Plover *Charadrius hiaticula*, Icelandic Black-tailed Godwit *Limosa limosa islandica* and North European/North Russian Bar-tailed Godwit *Limosa lapponica*.

Introduction

Waterbirds provide a number of important ecosystem services by acting as predators, herbivores, and as vectors of seeds, invertebrates and nutrients. In these roles they help maintain the diversity of other organisms, control pests and serve as effective bioindicators of the ecological condition of the wetlands they inhabit (Green & Elmberg 2013). These wetlands in turn provide hugely valuable services including

Plate 1. Black-tailed Godwit (Richard T. Mills).

ISSN 1393 – 6670

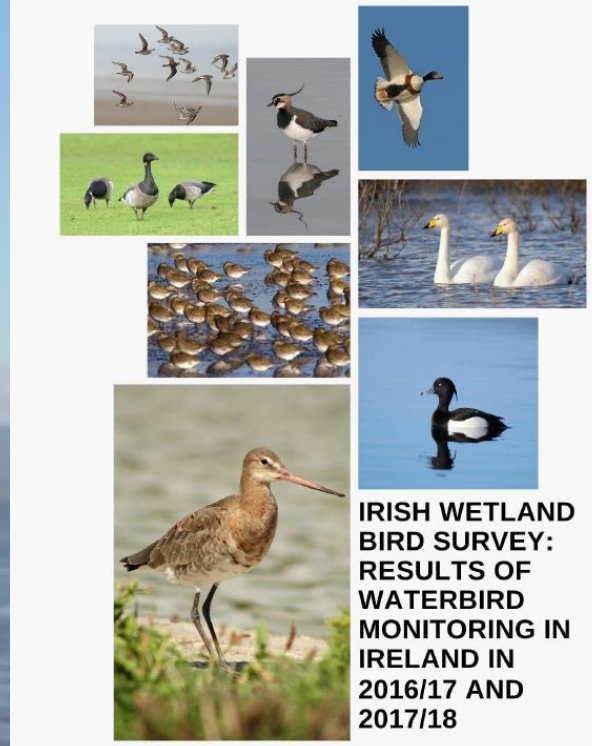
NATIONAL PARKS AND WILDLIFE SERVICE

Irish Wetland Bird Survey: Waterbird status and Distribution 2009/10 – 2015/16

Lesley Lewis, Brian Burke, Niamh Fitzgerald, David Tierney and Seán Kelly

An Roinn Cultúir, Oidhreachta agus Gaeltachta
Department of Culture, Heritage and the Gaeltacht

IRISH WILDLIFE MANUALS 106



IRISH WETLAND BIRD SURVEY: RESULTS OF WATERBIRD MONITORING IN IRELAND IN 2016/17 AND 2017/18

BirdWatchIreland I-WeBS

An Roinn Tithíochta, Rialtais Áitiúil agus Oidhreachta
Department of Housing, Local Government and Heritage

Irish Wetland Bird Survey: Waterbird Status and Distribution 2001/02 – 2008/09

Helen Boland & Olivia Crowe

I-WeBS

Nationally Important Sites

National population estimates and site monitoring

- A site is **Nationally Important** if it regularly supports **1%** or more of the all-Ireland population of a species

- E.g. If there were an estimated **1,500** Grey Heron wintering in Ireland…
- Any site that regularly holds **15 of more** (1%) is Nationally important for Grey Heron

I-WeBS

Birds of Conservation Concern in Ireland 4: 2020–2026

Gillian Gilbert[1], Andrew Stanbury[2] & Lesley Lewis[3]

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[3] *BirdWatch Ireland, Unit 20, Block D, Bullford Business Campus, Kilcoole, Greystones, Co. Wicklow, A63 RW83, Ireland*

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Keywords: Priority, population, decline, Red list, breeding, wintering

This is the fourth review of the status of birds in Ireland. Two hundred and eleven species were assessed and assigned to the Red, Amber or Green list of conservation concern. The criteria mainly follow previous assessments of conservation status at global and European levels: and within Ireland, include historical decline, trends in population and range, rarity, localised distribution and international importance. The availability of more data has allowed us to move closer towards the ideal time windows of existing criteria. Results show 23 species moving onto the Red list and only six leaving it. Twelve species are newly Red-listed due to changed European or global status. Three are Red-listed due to declines within the expanded short-term breeding time period. There is no doubt that having 54 (25.6%) of Ireland's regularly occurring bird species now on the Red list is alarming, with some species having shown dramatic declines and losses on this island. Existing conservation concerns are reinforced, such as the further catastrophic decline of waders with six more wading bird species joining the Red list: and generalist birds of farmland, like Kestrel *Falco tinnunculus* now Red-listed. When grouped by habitat, upland (50%) and farmland (35%) have the highest proportions of Red-listed species. Snipe *Gallinago gallinago* is now Red-listed with severe declines in its breeding and wintering populations and Swift *Apus apus* is Red-listed due to a decline in its breeding population. Good news comes from some recovery in the populations of species such as Black-headed Gull *Larus ridibundus* and European Herring Gull *Larus argentatus* which move from Red to Amber.

Introduction

This is the fourth assessment of Birds of Conservation Concern in Ireland (BoCCI4) based on an existing prioritisation procedure (e.g. Eaton *et al.* 2015). This assessment covers the island of Ireland, both the Republic of Ireland (RoI) and Northern Ireland (NI). Our objective is to update the list of priority birds, so that limited resources for their recovery can be targeted in the most effective way. The first such list in Ireland (BoCCI1) (Newton *et al.* 1999) was based on the then relatively new UK system (Avery *et al.* 1995, Gibbons *et al.*

Plate 1. Balearic Shearwater (Niall Keogh).

Birds of Conservation Concern in Ireland 2020-2026

Red-list species (high conservation concern)

Breeding
Quail
Grey Partridge
Red Grouse
Black-necked Grebe
Stock Dove
Nightjar
Swift
Corncrake
Leach's Storm-petrel
Woodcock
Red-necked Phalarope
Kittiwake
Puffin
Razorbill
Barn Owl
Golden Eagle
White-tailed Eagle
Red Kite
Kestrel
Wood Warbler

Breeding continued
Ring Ouzel
Common Redstart
Whinchat
Meadow Pipit
Grey Wagtail
Twite
Yellowhammer

Passage
Turtle Dove
Balearic Shearwater
Curlew Sandpiper

Wintering
Bewick's Swan
Long-tailed Duck
Velvet Scoter
Goldeneye
Scaup
Slavonian Grebe

Wintering continued
Grey Plover
Bar-tailed Godwit
Black-tailed Godwit
Knot
Purple Sandpiper
Snowy Owl
Redwing

Breeding and Wintering
Eider
Common Scoter
Pochard
Shoveler
Oystercatcher
Golden Plover
Lapwing
Curlew
Dunlin
Snipe
Redshank

rspb giving nature a home

BirdWatchIreland protecting birds and biodiversity

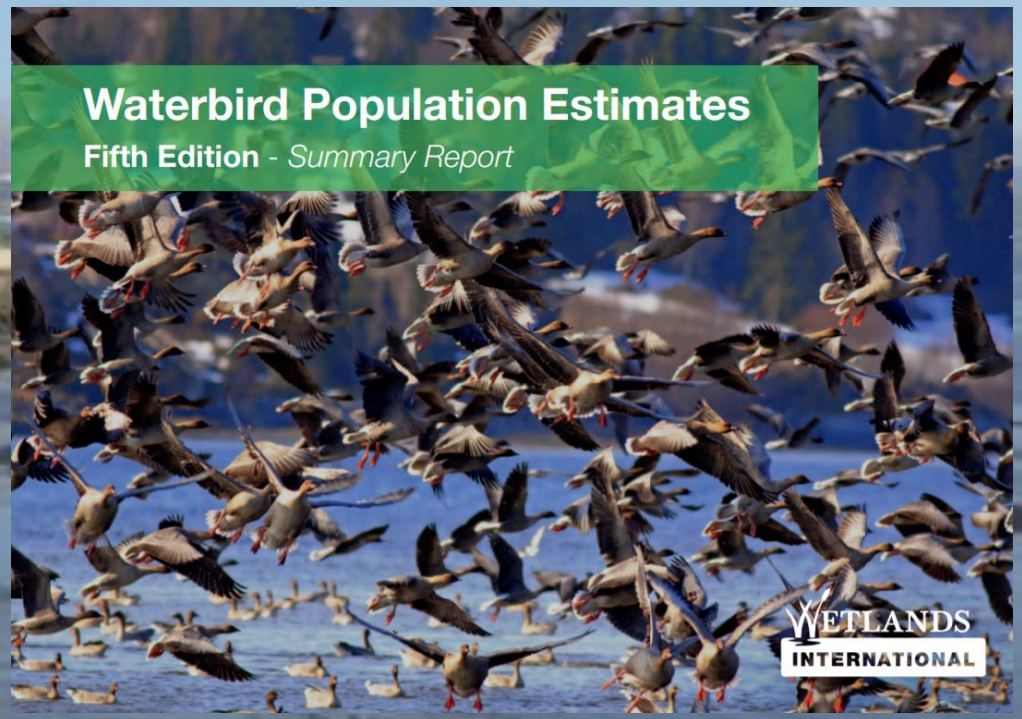
For more information, please see Gilbert G, Stanbury A and Lewis L (2021), "Birds of Conservation Concern in Ireland 2020 –2026". Irish Birds 43: 1–22

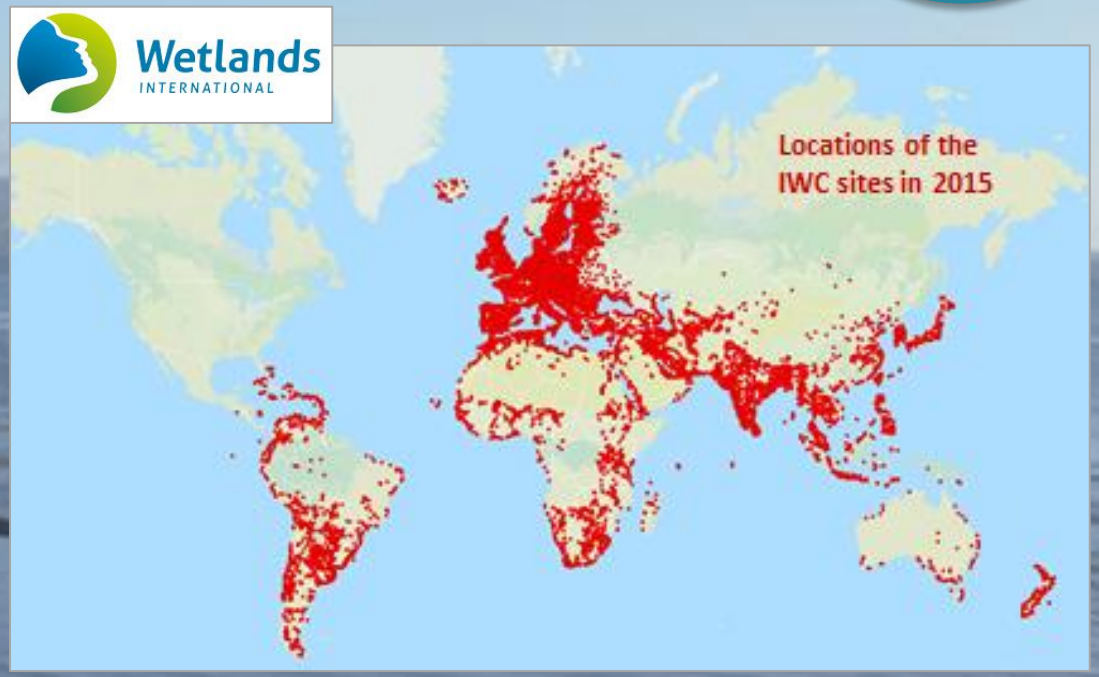
The categorisation of species as breeding, wintering etc. refers to the populations against which BoCCI criteria were applied

International Waterbirds Census (IWC)

I-WeBS

Wetlands International





Our trends and estimates also contribute to **conservation policy at an international level**

e.g. Flyway population estimates, International Red lists..

International Waterbirds Census (IWC)

I-WeBS

Wetlands International

I-WeBS data, along with data from other countries, are used for some important analyses as follows:

- Regular AEWA 'Conservation Status Reports' (CSR analysis) and Ramsar 'Waterbird Population Estimates' (WPE) editions.
- IWC population trend analyses.
- EU multispecies indices.
- Critical Site Network tool, which uses combined IWC and IBA (Important Bird Area) data to identify critical waterbird sites in the African-Eurasian flyway.

Wetlands INTERNATIONAL

Data uses

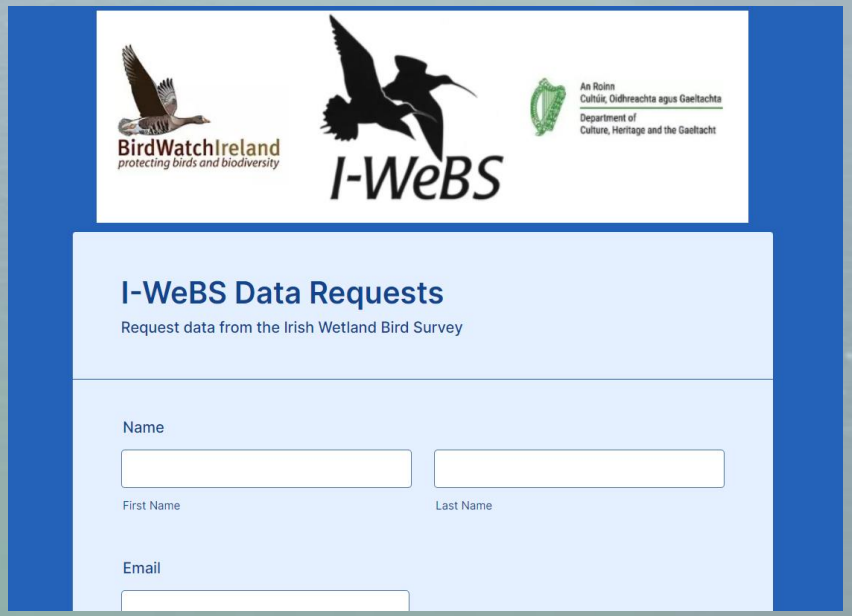
National

- Feed into Appropriate Assessment (AA), Environmental Impact Assessment (EIA)..
- Planning and policy (e.g. county dev plans),
- Local led studies/biodiversity studies,
- Government departments
  (e.g. DAFM – avian influenza)

2 types of request (the data is *free*!)

(i) Academic, and

(ii) (ii) General/commercial



National academic research

- University studies - recent examples include:

(i) Impact of wastewater treatment on waterbirds.
(ii) Waterbird site trends in light of intertidal aquaculture.
(iii) Trends in distribution and abundance of the Bewick's Swan.
(iv) Waterbirds of Lough Gur, Co. Limerick.
(v) Ducks of inland waterbodies and climate change.

- Marine Institute – Assessments of the interactions between waterbirds and aquaculture (on-going).

International Research

- Gaget, E. et al. (2021). **Benefits of protected areas for nonbreeding waterbirds adjusting their distributions under climate warming.** *Conservation Biology* 35(3), 834-845

- Pavon-Jordan, D. et al. (2020**). Positive impacts of important bird and biodiversity areas on wintering waterbirds under changing temperatures throughout Europe and North Africa.** *Biological Conservation* 246, 1085-1089.

- Marchowski, D. et al. (2020) **Effectiveness of the European Natura 2000 network to sustain a specialist wintering waterbird population in the face of climate change.** *Scientific Reports* 10(1), 1-12.

- Pavon-Jordán, D. et al. (2018) **Habitat- and species-mediated short- and long-term distributional changes in waterbird abundance linked to variation in European winter weather.** *Diversity & Distributions* 2(2), 225-239.

- Gaget, E. et al. (2018) **Waterbird communities adjust to climate warming according to conservation policy and species protection status.** *Biological Conservation* 227, 205-212.

- Amano, T. et al. (2018) **Successful conservation of global waterbird populations depends on effective governance.** *Nature* 553, 199–202.

- Guillemain, M, & Hearn, R (2017) **Ready for climate change? Geographic trends in the protection status of critical sites for Western Palearctic ducks.** *Biodiversity and Conservation* 26(10), 2347-2360.

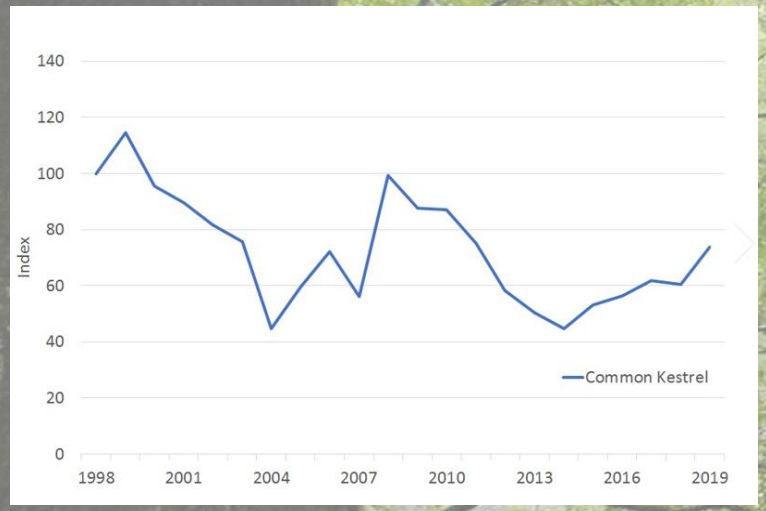
Countryside Bird Survey – Data Outputs & Uses

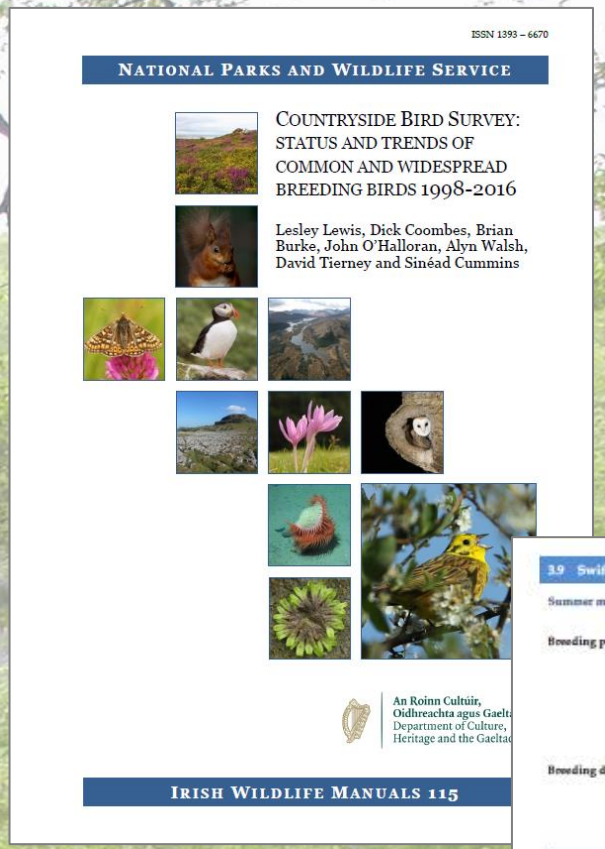
Countryside Bird Survey

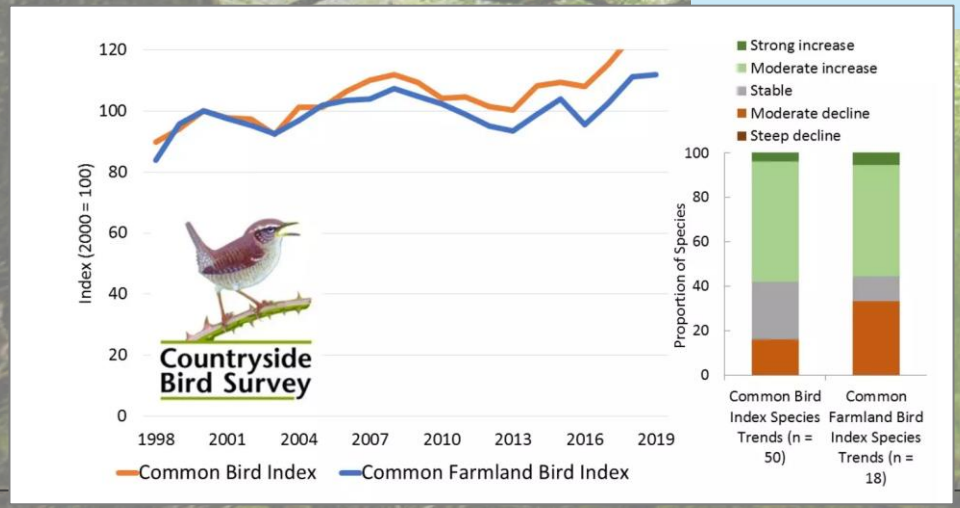
The CBS Database

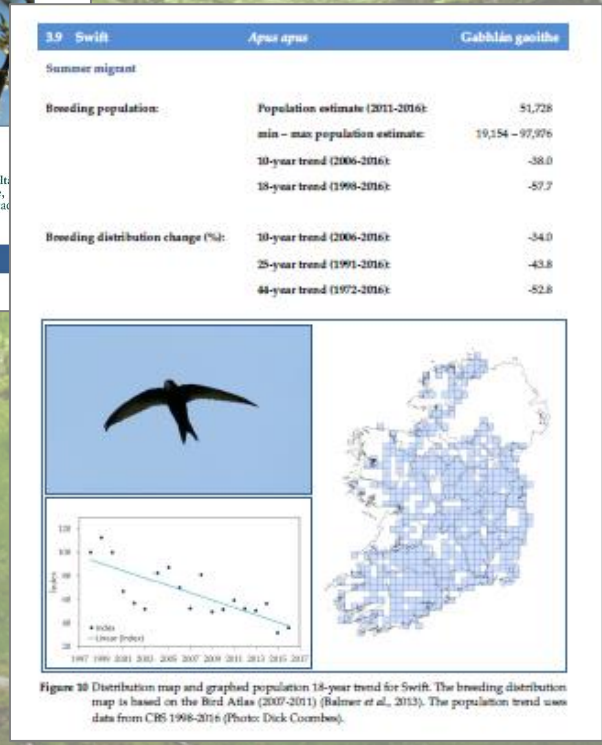
- Breeding season count data for **c.300 squares** per year **1998 to current**.
- Detailed count data, 4 distance bands, ten transect sections within each 1km square.
- Two replicate visits per year.
- Data for **172 species**.
- Accessory data – date, survey conditions.
- **Detailed habitat data**.

Countryside Bird Survey







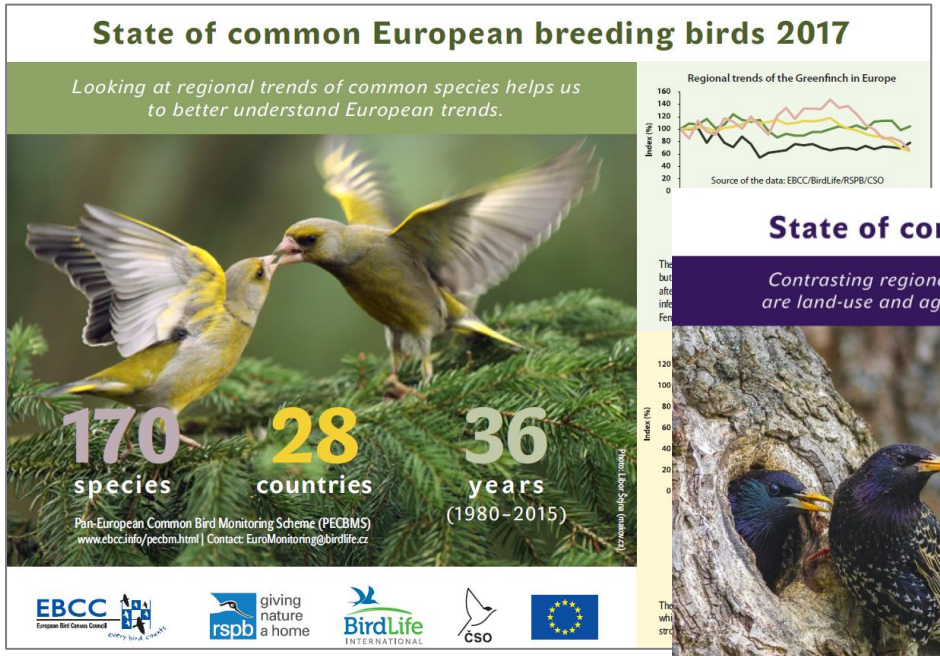


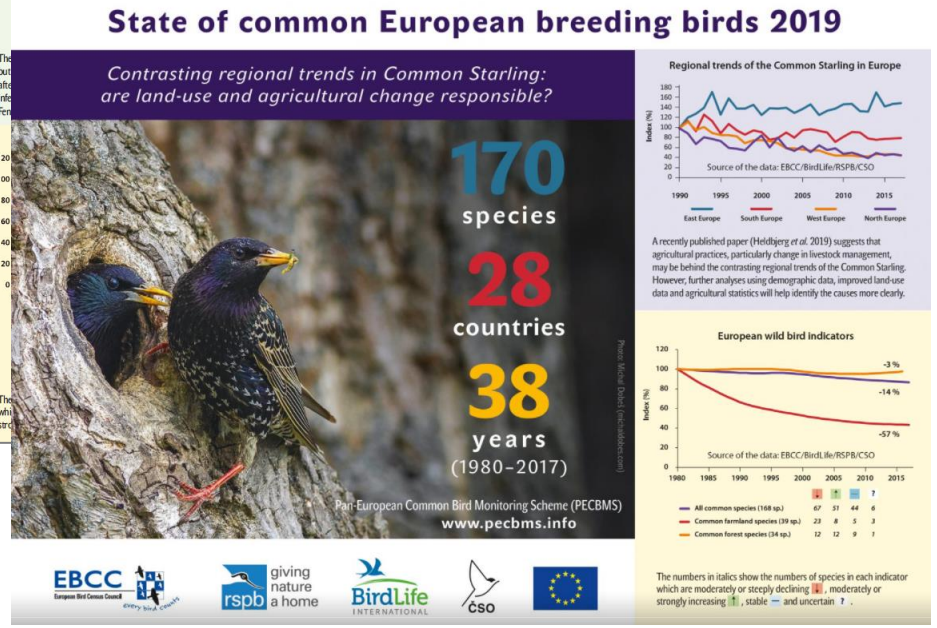
https://birdwatchireland.ie/our-work/surveys-research/research-surveys/countryside-bird-survey/countryside-bird-population-indicators/

The CBS in Europe...

Pan-European Common Bird Monitoring Survey (PECBMS)

'PECBMS main goal is to use common birds as indicators of the general state of nature using large-scale and long-term monitoring data on changes in breeding populations across Europe'





Data uses – National research

- **University studies - recent examples include:**

(i) An Exploration of Yellowhammer Data Distribution, Presence, Relative Abundance and Associated Factors in Ireland (John Kennedy MSc).
(ii) Drivers of declines in the Kestrel (Kez Armstrong PhD).
(iii) Crowe, O. et al. (2014) Generating population estimates for common and widespread breeding birds in Ireland. *Bird Study 61(1),* 1-9.
(iv) Crowe, O. et al. (2010) Population trends of widespread breeding birds in the Republic of Ireland 1998-2008. *Bird Study* 57, 267 -280.

- **Other research - recent examples include:**

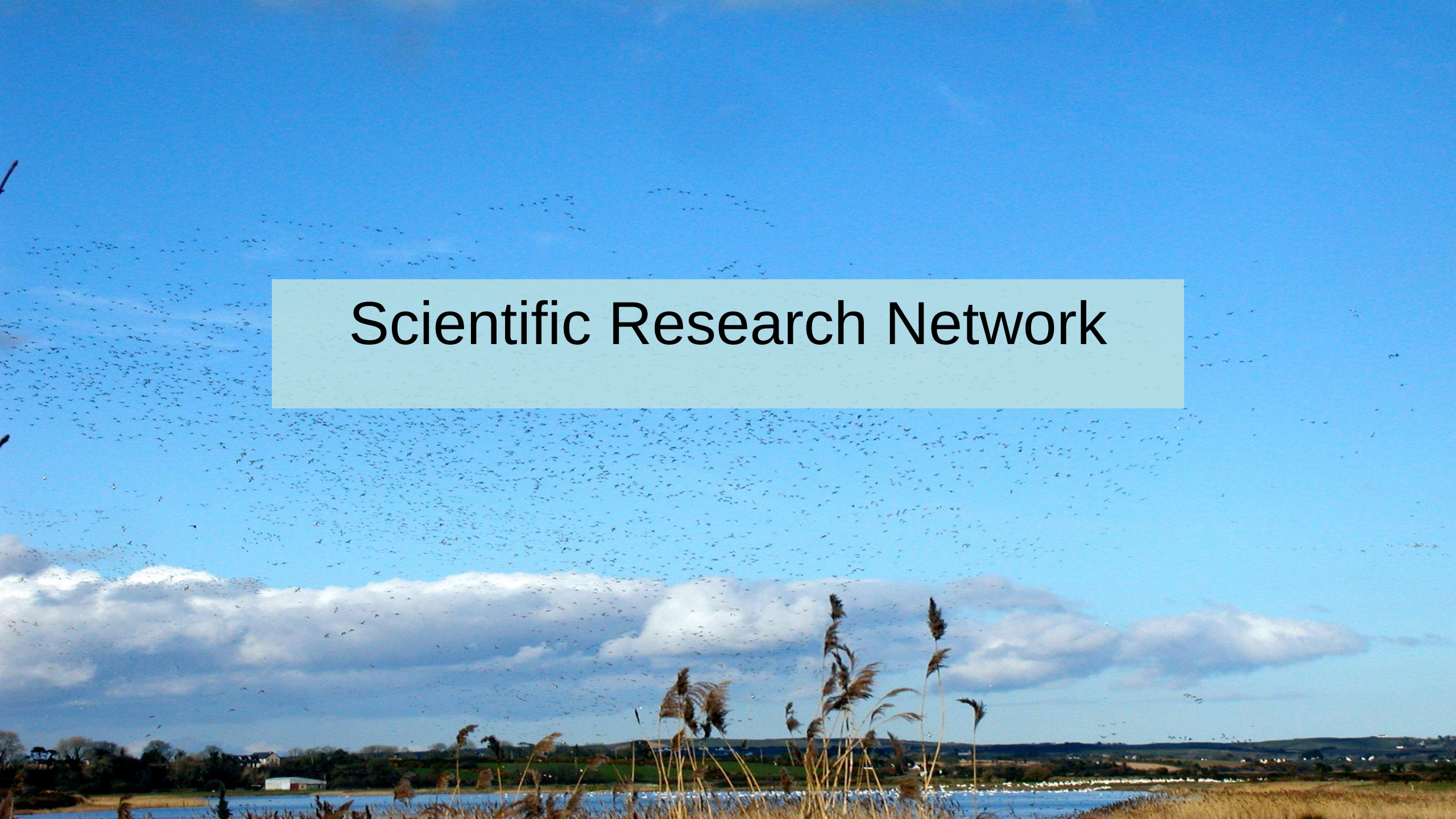
(i) Farmland Bird Hotspot Mapping (Birdwatch Ireland, funded by the Heritage Council + DAFM).
(ii) Upland bird project - MacGillycuddy Reeks area (Kerry Biosphere funded by National Biodiversity Action Plan/Kerry County Council).

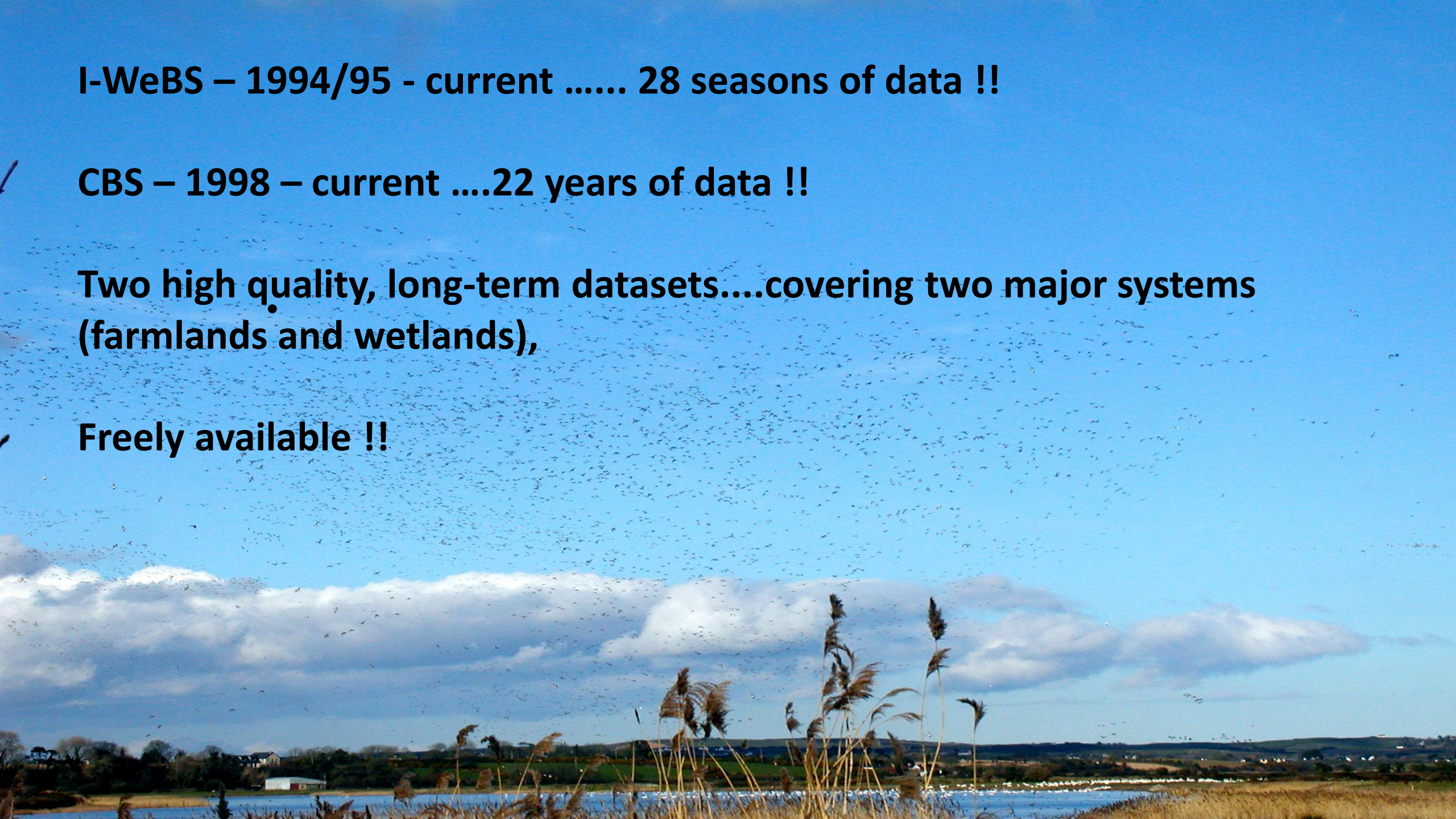
Data uses – International research

- Brlík, V. et al. (2021) **Long-term and large-scale multispecies dataset tracking population changes of common European breeding birds.** *Sci Data* **8,** 21 (2021).
- Heldbjerg, H. et al. (2019) **Contrasting population trends of Common Starlings across Europe.** *Ornis Fennica* **96,** 153-168.

In progress, examples:

- **Breeding bird data for multi-species modelling of complex communities and their response to multiple simultaneous stressors** (University of Sheffield)
- **What drives abundance of House Sparrow (*Passer domesticus*) and Common Starling (*Sturnus vulgaris*) across their native and invaded ranges?** Kristin Davis, Ph.D. student, Graduate Degree Program in Ecology, Department of Fish, Wildlife, and Conservation Biology, Colorado State University, USA.


Scientific Research Network

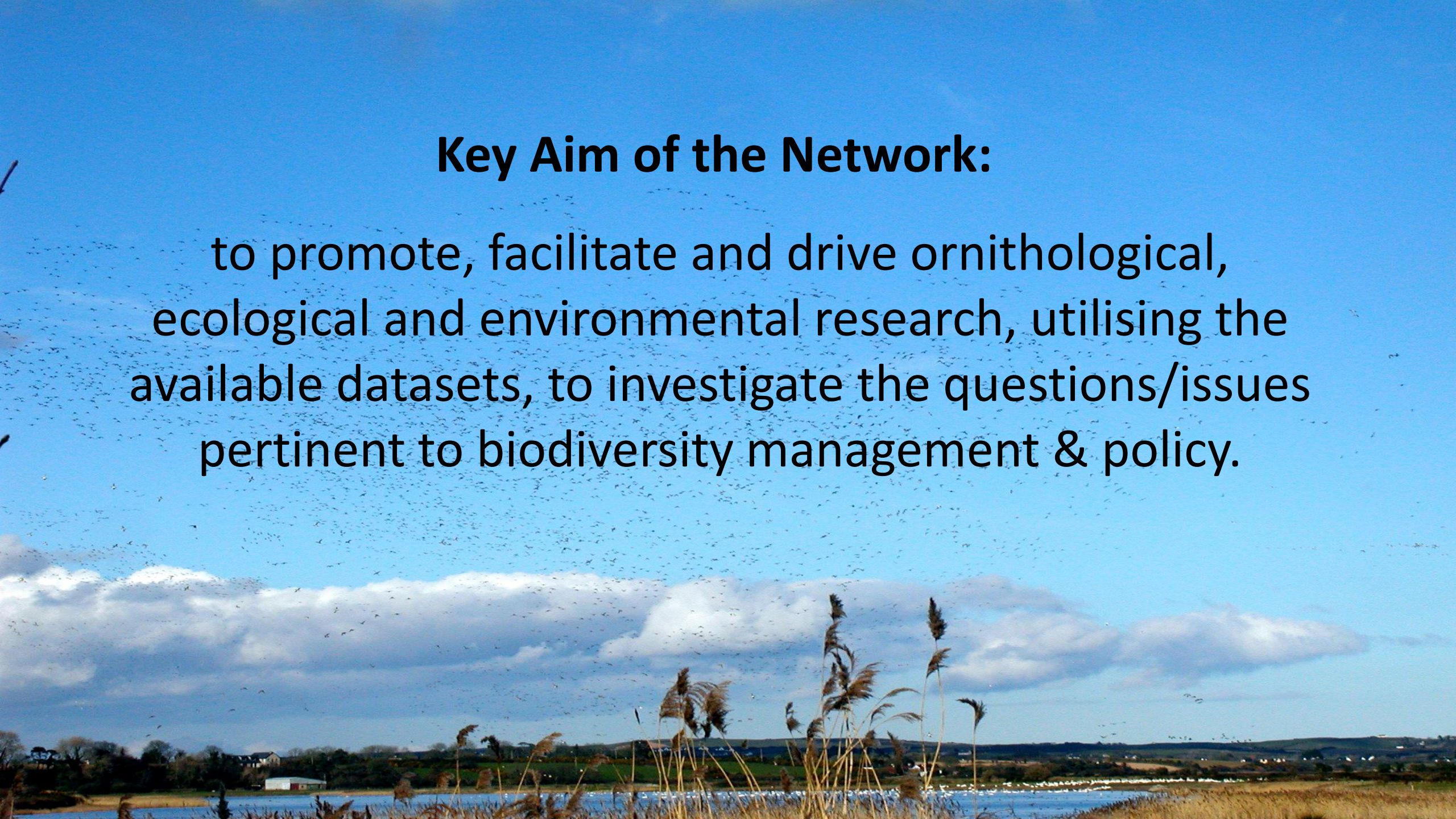


I-WeBS – 1994/95 - current …… 28 seasons of data !!

CBS – 1998 – current ….22 years of data !!

Two high quality, long-term datasets….covering two major systems (farmlands and wetlands),

Freely available !!



Key Aim of the Network:

to promote, facilitate and drive ornithological, ecological and environmental research, utilising the available datasets, to investigate the questions/issues pertinent to biodiversity management & policy.

- A network, facilitating collaboration of research teams/individuals.
- Scientists, researchers, ecologists, policy makers and practitioners.
- Specialist input, guidance and support from the I-WeBS and CBS projects team.

- The I-WeBS and CBS team will host and support the Network, and assist/support funding applications.
- Discuss, identify and drive collaborative research projects.
- Identify what are the key research questions/areas where research is most needed.
- The Network can then propagate research projects (input and guidance from the I-WeBS or CBS teams).
- Explore new ideas, investigate improvements in methodologies, data capture/use.
- The Network will provide updates on relevant research, including outputs using I-WeBS/CBS data – regular meetings.
- Annual meeting will provide opportunity for networking, building collaborations, researcher/student presentations, etc.

Current priority research questions

Waterbirds

- effects/impacts of aquaculture
- climate change
- recreational/other disturbance

Countryside birds

- effects of change in land-use / intensification
- climate change
- relationship with landscape features

CBS is over…
but I-WeBS is around the corner

Next Steps… Get in touch!

- Season starts **September** 10th
- Workshops in Kerry, Cavan and Athlone
- Late September and early October

nfitzgerald@birdwatchireland.ie

- Stay tuned until next season
- Workshops in March

rcoombes@birdwatchireland.ie

Thank you for listening

Niamh Fitzgerald
nfitzgerald@birdwatchireland.ie

Photographs courtesy of:
John Fox, Alyn Walsh, Dick Coombes, Helen Boland, Kendrew Colhoun, Colum Clarke, Billy Clarke, Ken Kinsella, Jerry Cassidy, Clive Timmons, Cormac Byrne, Graham Catley, Niall Keogh, Michael Finn, Valerie O'Sullivan, Eric Doggett, Ronnie Martin, Gyorgy Szimuly, Tim Edelston, Ralph Sheppard, Brian Burke, Valerie O'Sullivan, David Stroud, Eddie Dunne, Peader O'Connell, Colum Clarke, Niall Keogh, Colm Fitzpatrick, Brian Burke, Michael Finn, Alyn Walsh, Kendrew Colhoun, Colum Clarke, Billy Clarke, Ken Kinsella, Jerry Cassidy, Clive Timmons, Cormac Byrne, Wetlands International, Michael Finn, Eric Doggett, Ronnie Martin, Breffni Martin, Lesley Lewis.