

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

# Accessing NPWS Ecological Data

National Appropriate Assessment Forum

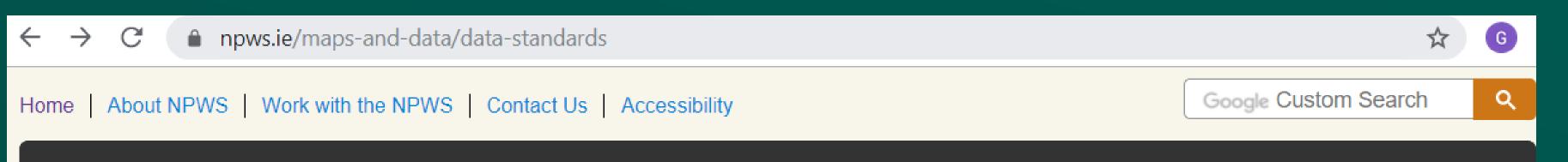
Gemma Weir, Ecological Data Manager, NPWS, 16/10/2019

gemma.weir@chg.gov.ie

## Outline

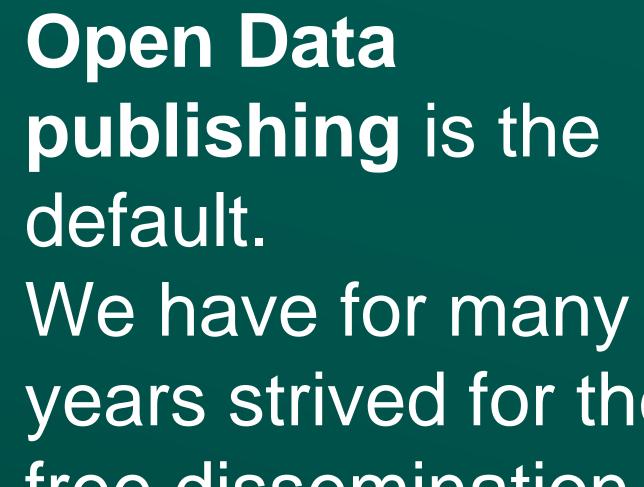


- 1. Policy
- 2. Discovery
- 3. Protected Sites Data
- 4. Habitats and Species Data
- 5. Data integration issues
- 6. Data downloads
- 7. Viewers
- 8. Collaborations
- 9. Survey planned





publishing is the default. We have for many years strived for the free dissemination of NPWS data





#### National Parks & Wildlife Service

**National Parks** 

**Protected Sites** 

**Nature Reserves** 

**Publications** 

Licences

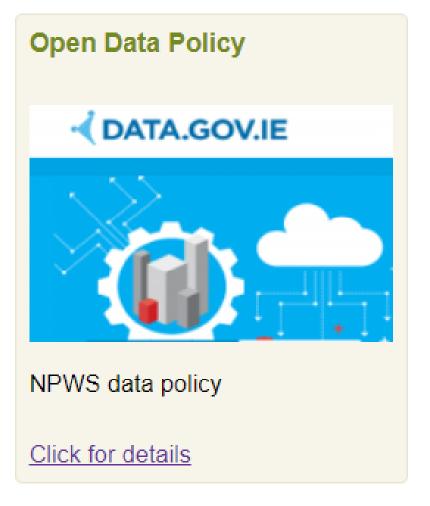
Maps and Data

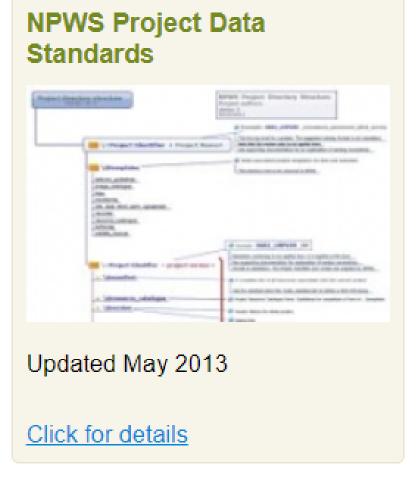
**Planning** 

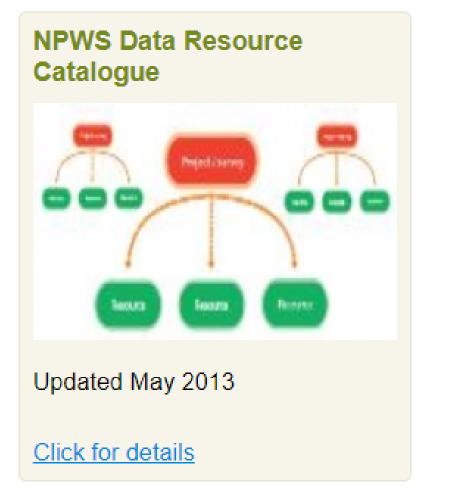
Home > Maps and Data > NPWS Data Standards and Guidelines

- **Data Usage and Limitations**
- **Habitat and Species data**
- **Open Data Policy**
- **Sensitive Data Access**
- Protected site data
- Data Standards
- NPWS Research Project Data Standards Template
- FPO Map Viewer -**Bryophytes**
- Other relevant data sources
- **Submit records**

#### NPWS Data Standards and Guidelines

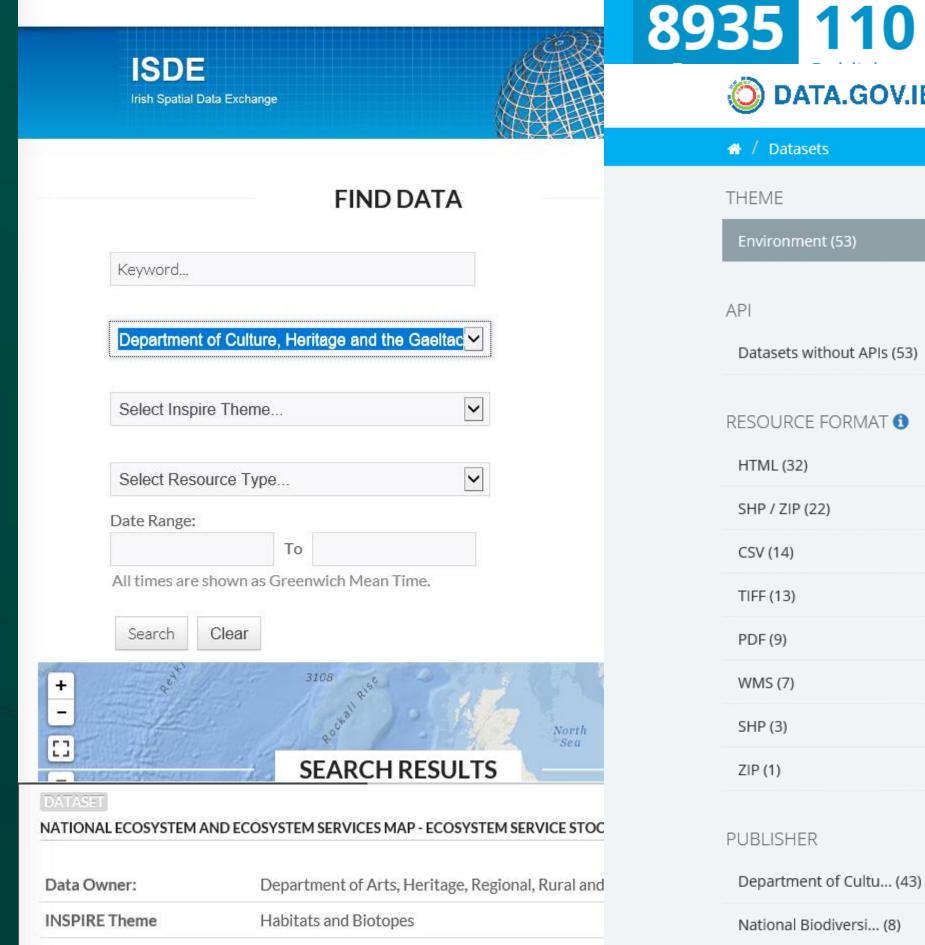


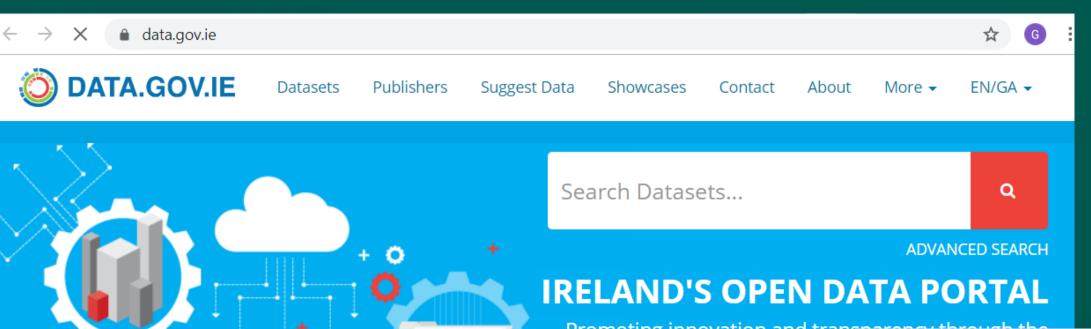




# Data discovery

ISDE





O DATA.GOV.IE



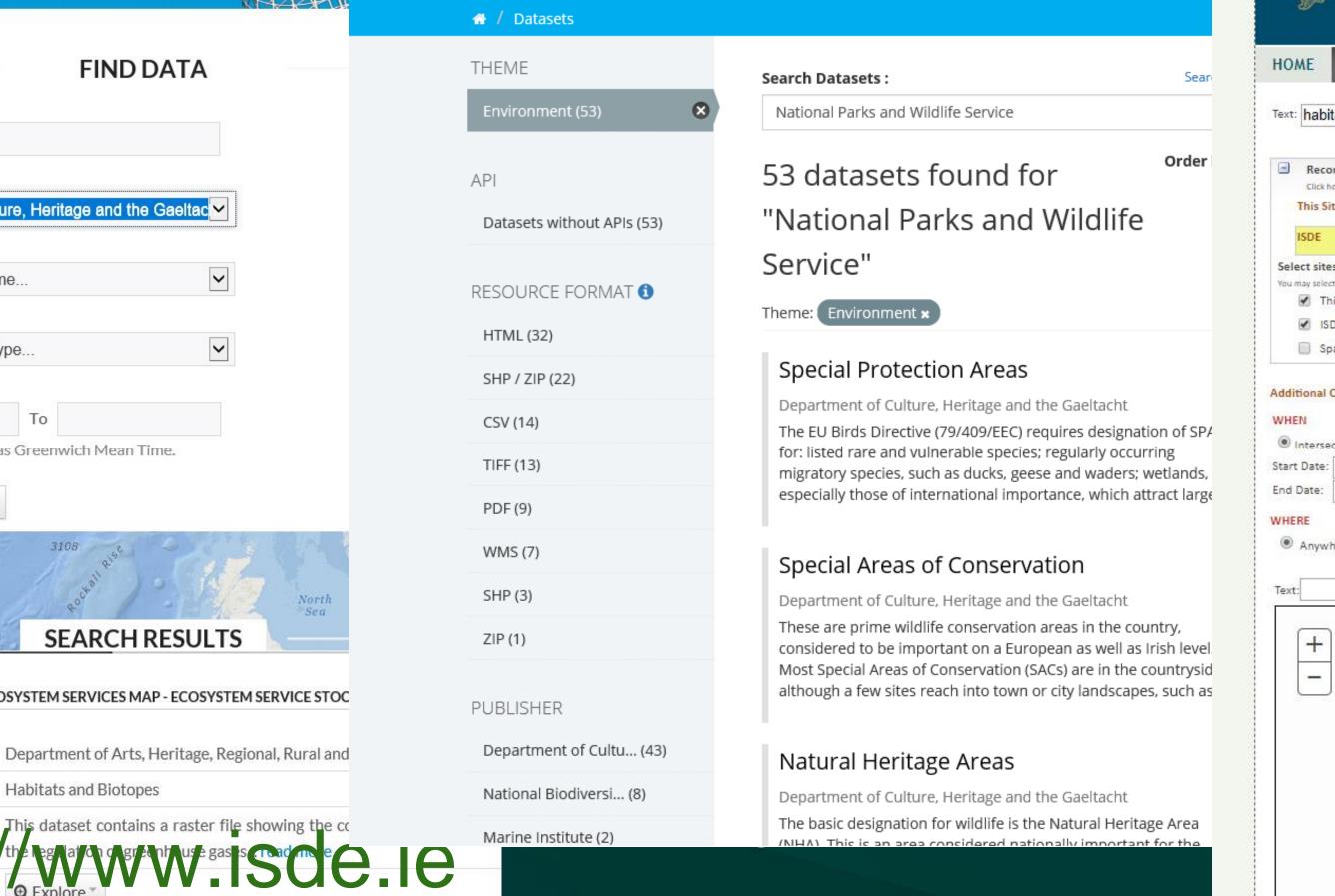
Login Help About Feedback

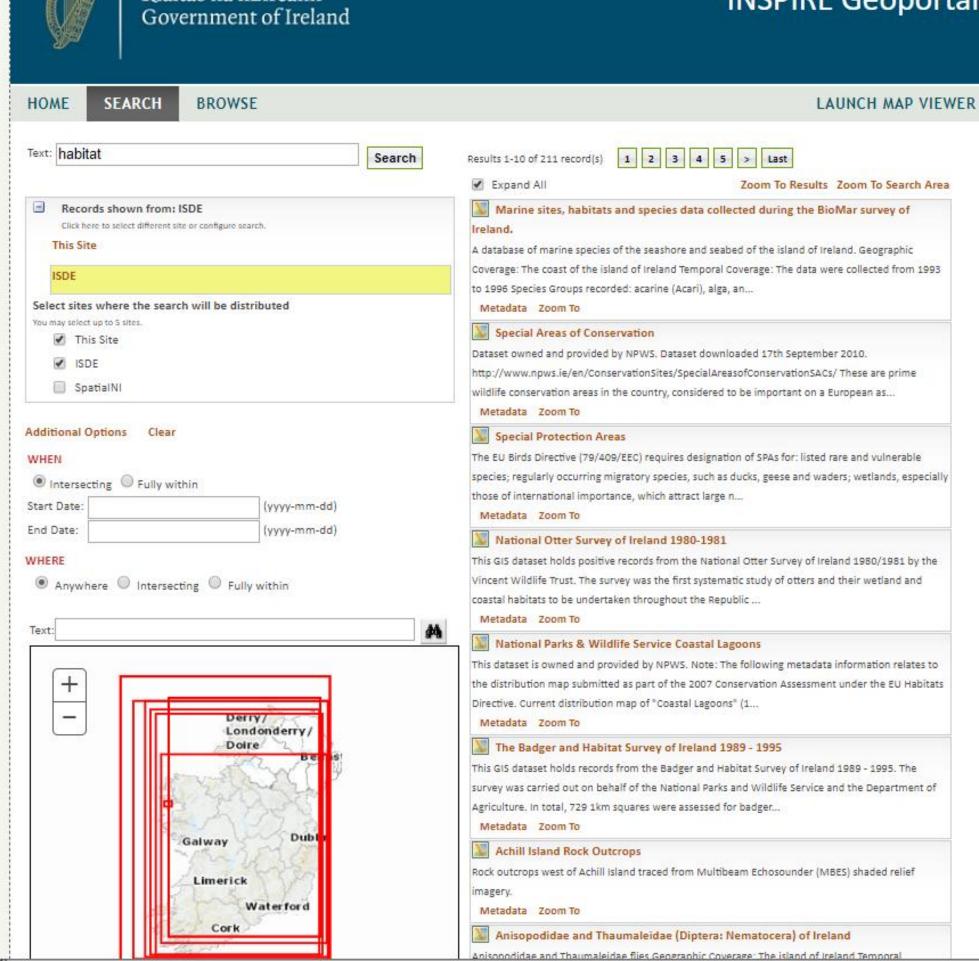
Promoting innovation and trans

Showcases Contact

publication of Irish Public Sector cinspire.geohive.ie/geoportal/catalog/main/home.page

Rialtas na hÉireann **INSPIRE** Geoportal







#### National Parks & Wildlife Service

National Parks

**Protected Sites** 

Nature Reserves

**Publications** 

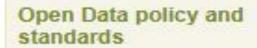
Licences Maps and Data

Planning

Home > Maps and Data

- Data Usage and Limitations
- Habitat and Species data
- > Open Data Policy
- Sensitive Data Access
- > Protected site data
- > Data Standards
- FPO Map Viewer -Bryophytes
- > Other relevant data sources
- > Submit records

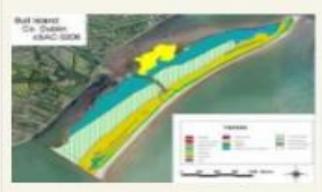
#### Maps and Data





Click for details

Habitat and Species datasets



Click for details

Protected Sites data



Click for details

#### National Parks & Reserves Mapping Resources



Click for details

NPWS Map Viewer



Access the map viewer

Request data from NPWS



Click for details

#### Flora Protection Order Map Viewer - Bryophytes



Click for details

Other relevant data sources



Click for details

#### Places to submit biodiversity data



Click for details

# www.npws.ie Maps and Data

Home | About NPWS | Work with the NPWS | Contact Us | Accessibility



#### National Parks & Wildlife Service

National Parks

**Protected Sites** 

Nature Reserves

**Publications** 

Maps and Data

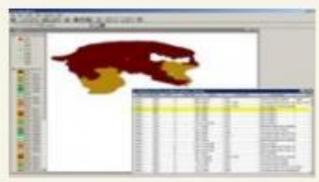
Planning

Home > Maps and Data

- > Data Usage and Limitations
- > Habitat and Species data
- > Open Data Policy
- > Sensitive Data Access
- > Protected site data
- > Data Standards
- FPO Map Viewer -Bryophytes
- > Other relevant data sources
- > Submit records

#### Maps and Data

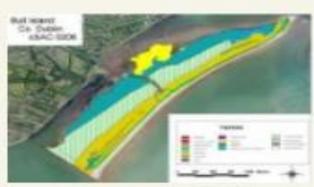




Click for details

Habitat and Species datasets

Licences



Click for details

Protected Sites data



Click for details

#### National Parks & Reserves Mapping Resources



Click for details

NPWS Map Viewer



Access the map viewer

Request data from NPWS



Click for details

#### Flora Protection Order Map Viewer - Bryophytes



Click for details

Other relevant data sources



Click for details

#### Places to submit biodiversity data



Click for details

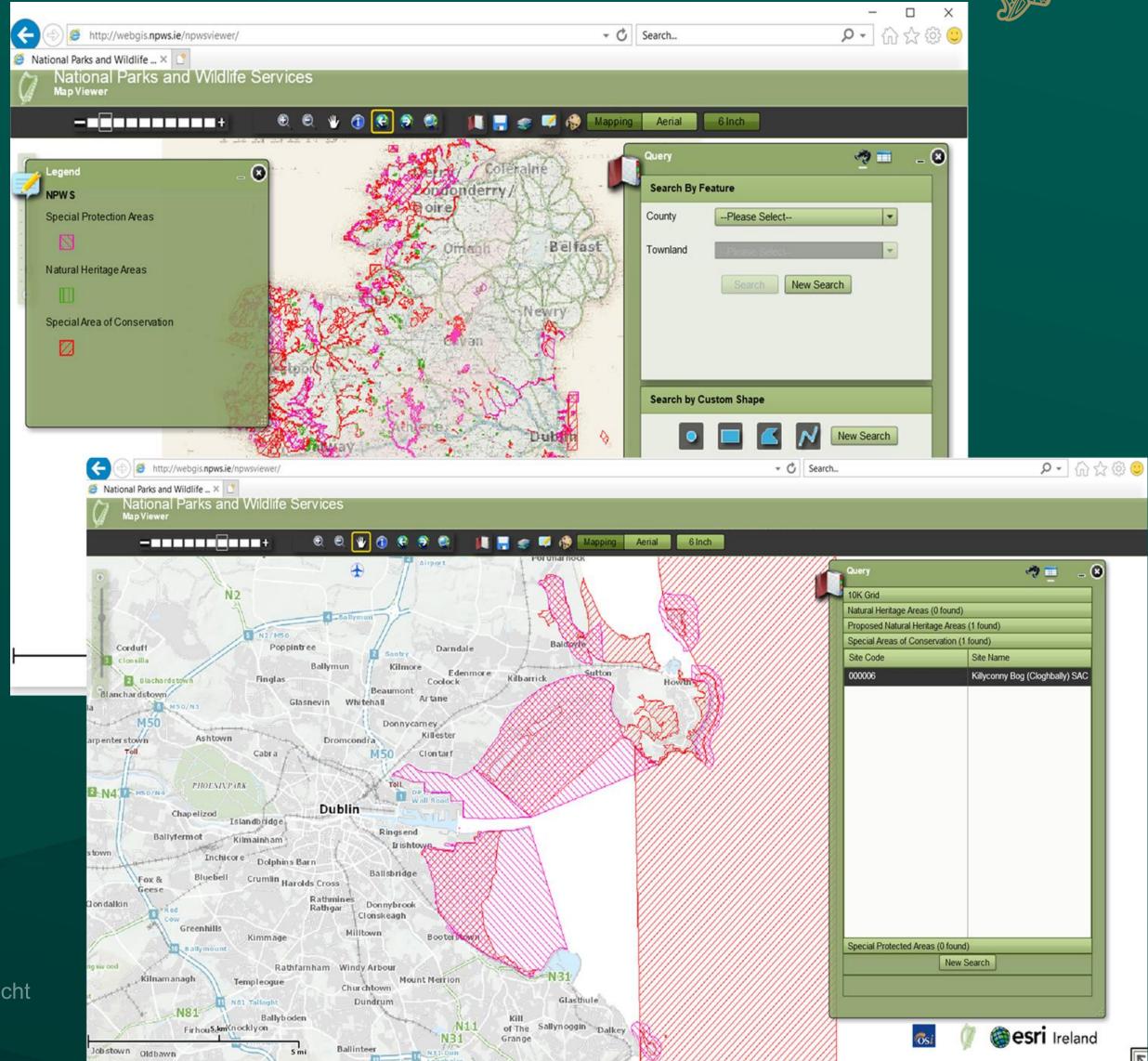


# Protected Sites Data & Viewers

# Protected Sites

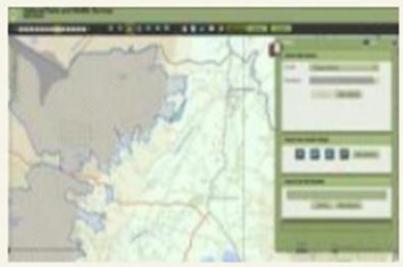
- 431 Special Areas of Conservation (SAC)
- 154 Special Protection Areas (SPA)
- 155 Natural Heritage Areas (NHAs)
- 6 National Parks
- 73 Nature Reserves
- 68 Wildfowl Sanctuaries
- 7 Refuges for Local Fauna
- .... and nature conservation in the wider countryside.

www.npws.ie



#### Designated site data



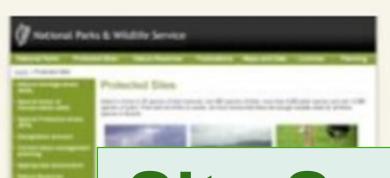


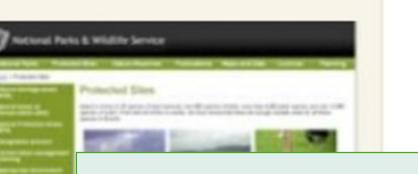
#### **Download SAC datasheets**



#### Search for site documents







Features of Interest Degraded raised bogs still capable of natural regeneration [7120] Site Documents Download Conservation Objectives

Killyconny Bog (Cloghbally) SAC

#### NATURA 2000 - STANDARD DATA FORM

Killyconny Bog (Cloghbally) SAC

#### TABLE OF CONTENTS

- 2. SITE LOCATION
- 3. ECOLOGICAL INFORMATION
   4. SITE DESCRIPTION

**National Parks and Wildlife Service** 

1.5 Update date

Service, Department of Arts, Heritage and the Gaeltacht

No data

Back to top

Site Specific documents

Download boundary data

Special Areas of Conservation (SAC) datasheets

SITE CODE

SITE NAME

HAB CODE

HABITAT NAME

CONSERVATION

GLOBAL

DATE

The following spreadsheet worksheets list data from the NATURA 2000 Database for Ireland (January 2018 Submission)

### SAC Data Sheets - Qls for all SAC sites

19 Habitats spreadsheet

selected as Qualifying Interests for each site selected as Qualifying Interests for each site

note that the first three characters are removed (IEO) in national references to

SITE NAME EU Sitename for the Site. Please note that the designation type (e.g SAC) is appended in national references to DATE Compilation date for the information recorded, in the form of the year (four digits) followed by the month in

numeric form (two digits) AREA The surface area of a site in hectares

AREA UPDATE DATE Date on which the site area information was last updated.

EU Sitename for the Site. Please note that the designation type (e.g SAC) is appended in national references to

EU Sitecode for the Site. Please note that the first three characters are removed (IE0) in national references to

Code of the habitat types of Annex I of directive 92/43/EEC, and used in the NATURA 2000 database system. Description of the habitat types. Please refer to the 'The Interpretation Manual of European Union Habitats'

(http://ec.europa.eu/environment/nature/legislation/habitatsdirective/docs/Int\_Manual\_EU28.pdf).

REPRESENTATIVITY Degree of representativity of the natural habitat type on the site. A: excellent representativity; B: good representativity; C: significant representativity.

RELATIVE SURFACE Area of the site covered by the natural habitat type in relation to the total area covered by that natural habitat type within the national territory, expressed as a percentage. A: 100-15%; B: 15-2%; C: 2-0%.

Degree of conservation of the structure and functions of the natural habitat type concerned and restoration possibilities. A: excellent conservation; B: good conservation; C: average or reduced conservation. Global assessment of the value of the site for conservation of the natural habitat type concerned. A: excellent value; B: good value; C: significant value.

1

Date on which this worksheet was last updated.

8 An Roinn Cultúir, Oidl

Readme Sites Habitats Species

Related Publications

National Parks & Wildlife

Killyconny Bog (Cloghbally) SAC (site code 000006)

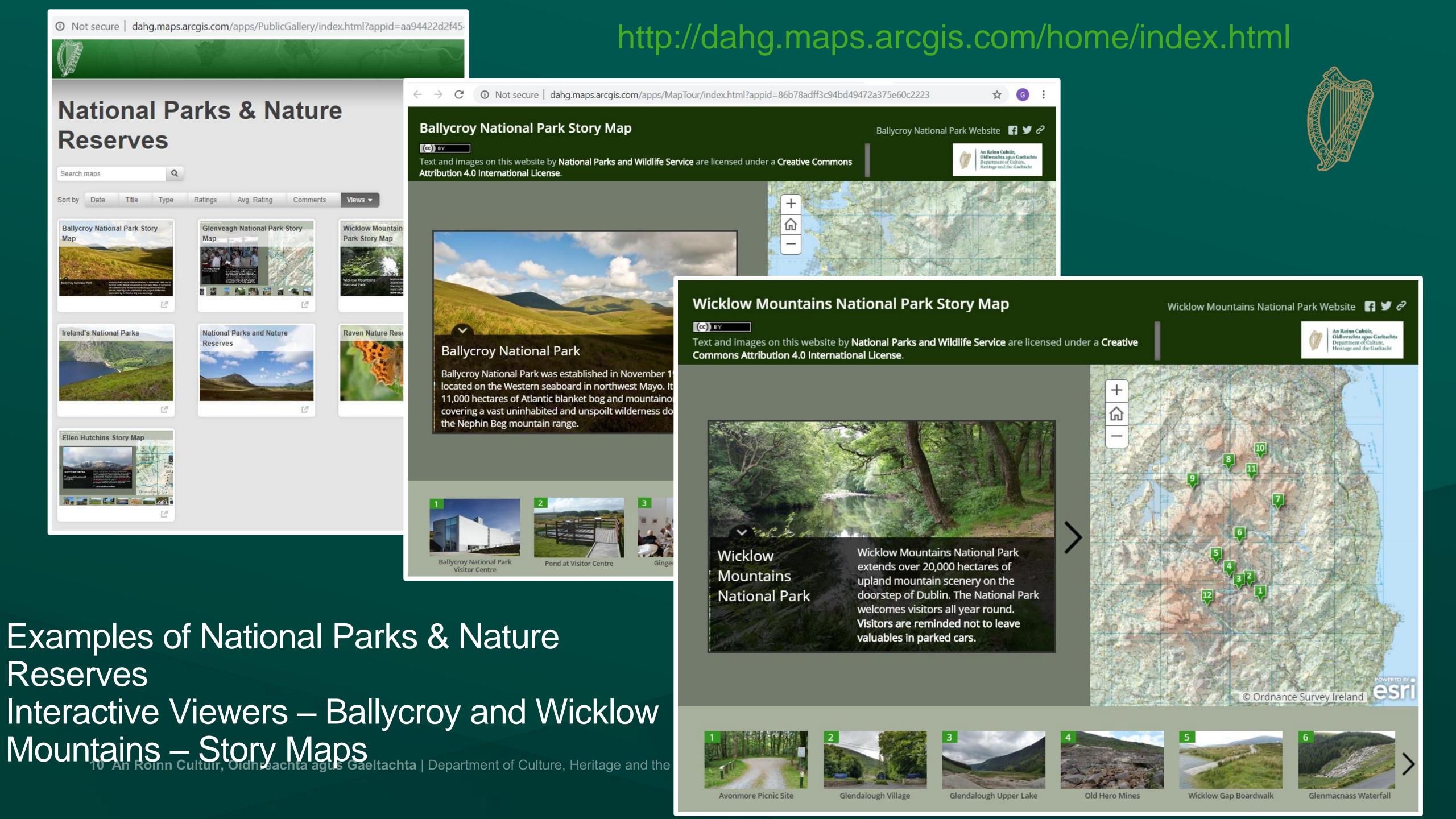
Conservation objectives supporting document raised bog habitats

Version 1

on model and drainage patterns at Killyconny Bog (Cloghbally)







Home | About NPWS | Work with the NPWS | Contact Us | Accessibility | Google Custom Search



#### National Parks & Wildlife Service

National Parks

**Protected Sites** 

Nature Reserves

Publications Licences

Maps and Data

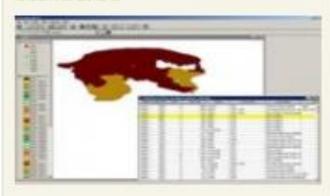
Planning

Home > Maps and Data

- Data Usage and Limitations
- Habitat and Species data
- > Open Data Policy
- Sensitive Data Access
- > Protected site data
- > Data Standards
- FPO Map Viewer -Bryophytes
- > Other relevant data sources
- Submit records

#### Maps and Data

#### Open Data policy and standards



Click for details

#### Habitat and Species datasets



Click for details

#### Protected Sites data



Click for details

#### National Parks & Reserves Mapping Resources



Click for details

#### NPWS Map Viewer



Access the map viewer

#### Request data from NPWS



Click for details

#### Flora Protection Order Map Viewer - Bryophytes



Click for details

Other relevant data sources



Click for details

#### Places to submit biodiversity data

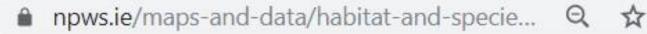


Click for details



# Habitats & Species Data & Viewers









#### Data Usage and Limitation

- Habitat and Species data

- Open Data Policy
- Data Standards
- **FPO Map Viewer**

#### Habitat and Species data

Below are some of the NPWS national datasets for download. Please also refer to the Publications section for

Birds Directive - Article 12

2012 GIS and Metadata

#### Habitats Directive - Article 17 2012 GIS and Metadata



Article 17 2012 reporting data

Click for details...



Article 12 2012 reporting data

Inventory of Coastal





Shapefiles updated August 2011

#### Saltmarsh Monitoring Project 2006-2008



Download (8.80 MB)



Download (1.09 MB)

National Seacliff Survey



Download (2.47 MB)

#### National Survey of Native



Updated June 2012

Ancient and Long-



Updated June 2012

#### Coastal Monitoring Project



Margaritifera sensitive areas

Updated June 2012

#### National Juniper Survey



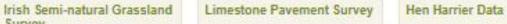
Irish Semi-natural Grassland

Commonage areas dataset

#### Updated February 2013



Limestone Pavement Survey





Jpdated August 2017

Hen Harrier Habitat map and data resources

### Habitats & Species Data



Location for publication of Monitoring, Reporting, Management, Sensitivity Mapping & Data downloads

Publications in dedicated section of website (but relevant reports usually included in download file from this location also)



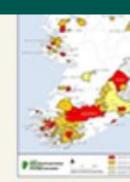
Uploaded August 2012

Download (7.78 MB)



Updated February 2013

Download (14.69 MB)



Updated August 201

Download (2.22 MB)

#### Irish Semi-natural Grassland imesto



Irish Semi-natural Grassland Survey

Download (35.92 MB)

Sand Dune Monitoring Project 2011

#### imestone Pavement Survey

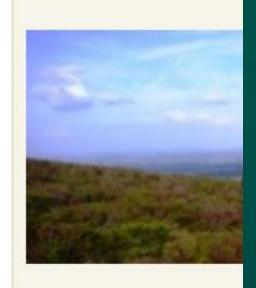


imestone Pavement Survey

ownload (7.31 MB)

National Ecosystem and Ecosystem Services Pilot

#### Hen Harrier Data



Hen Harrier Habitat resources

Click for details...

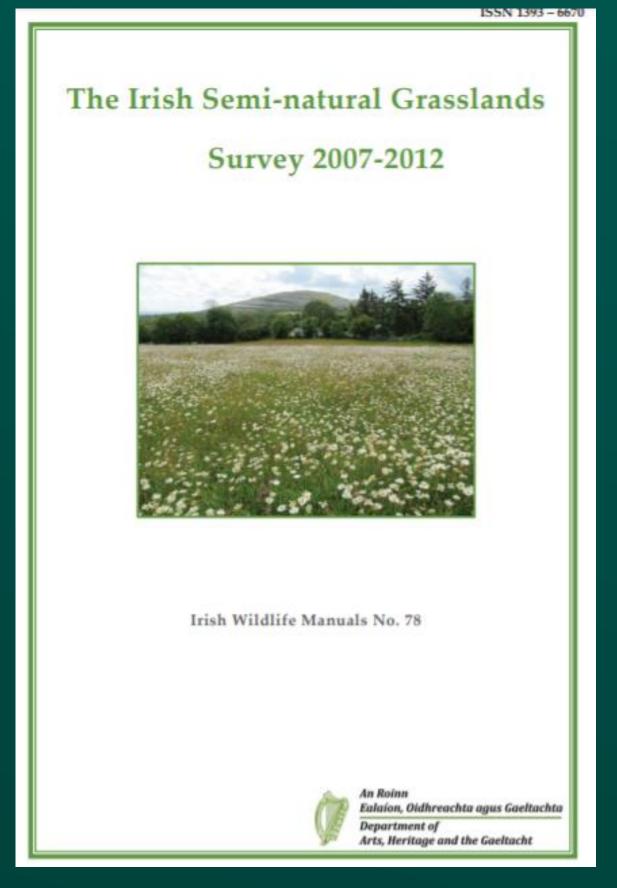
Lesser Horsesho

# Habitats & Species Data

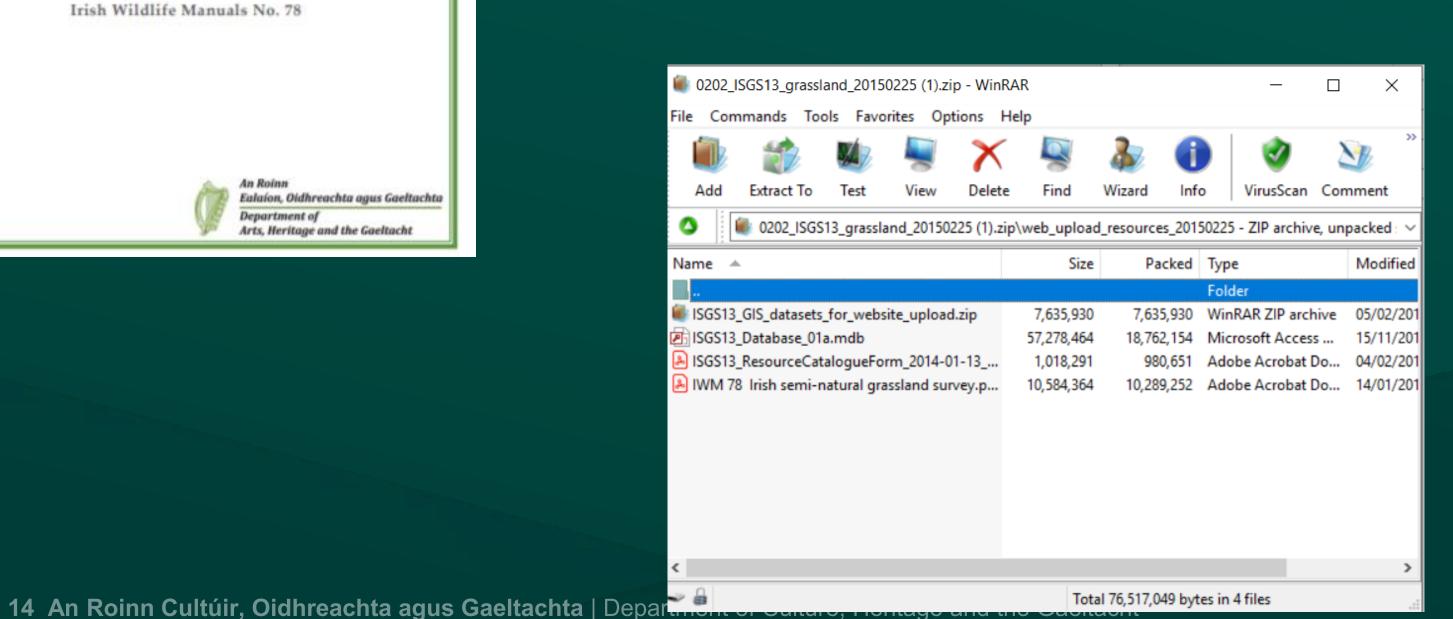
### Irish Semi-natural Grassland Survey

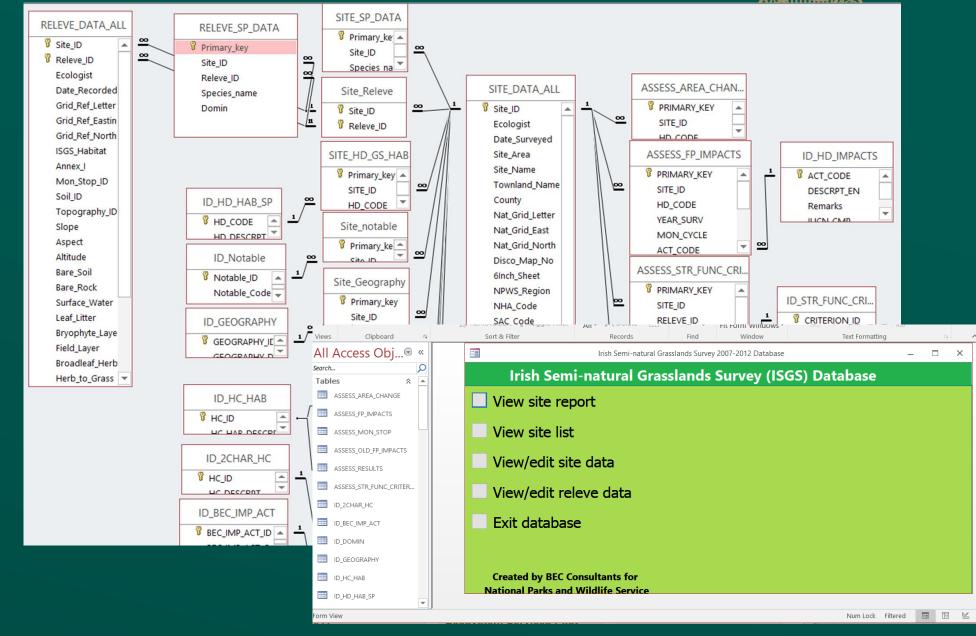
What's inside?

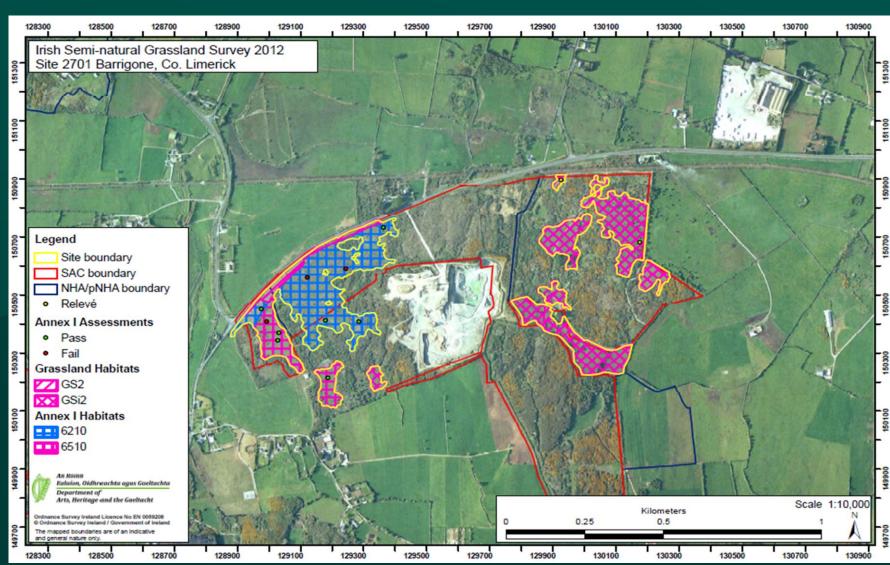
### ISGS Download package: Database, GIS, Report & Metadata

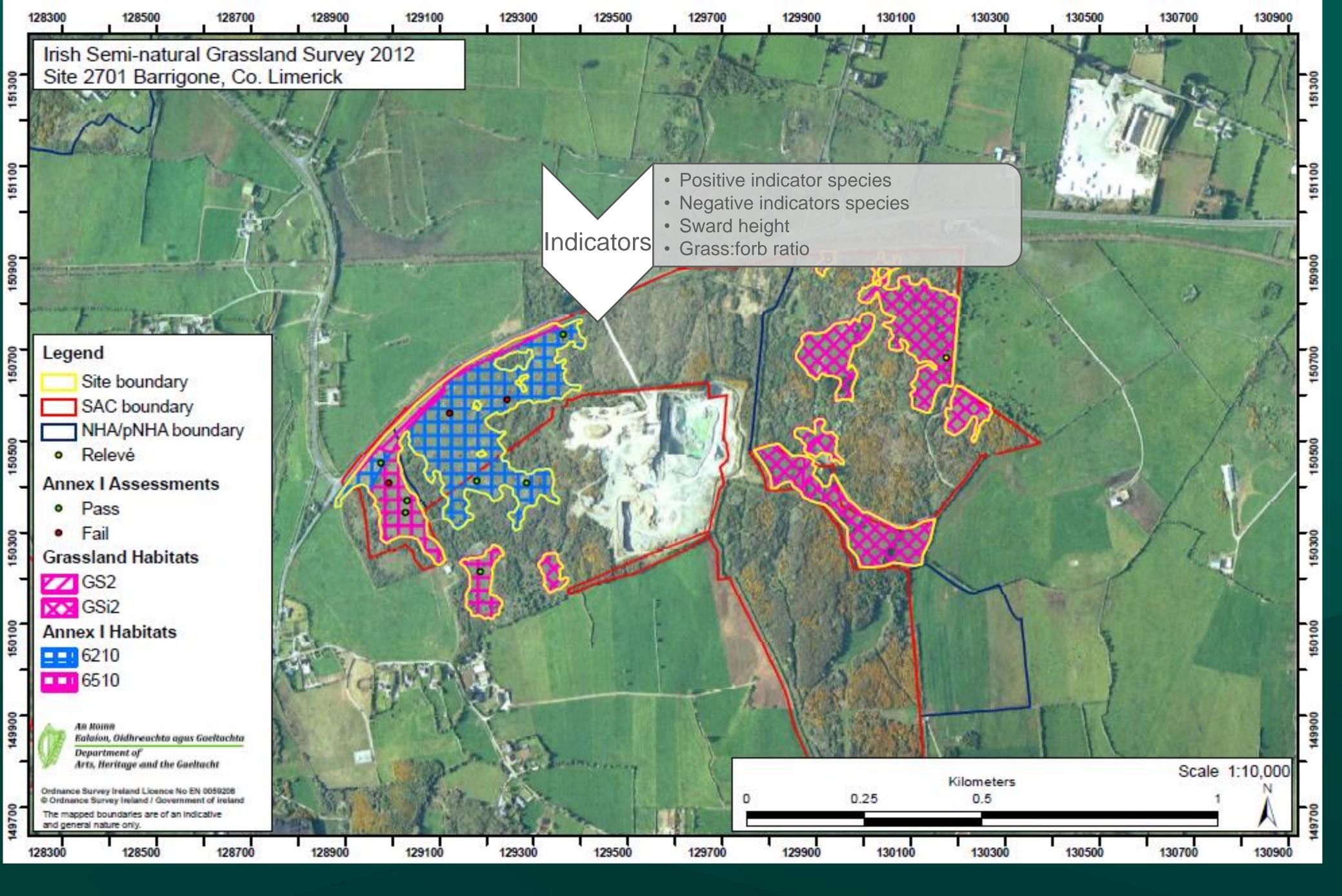












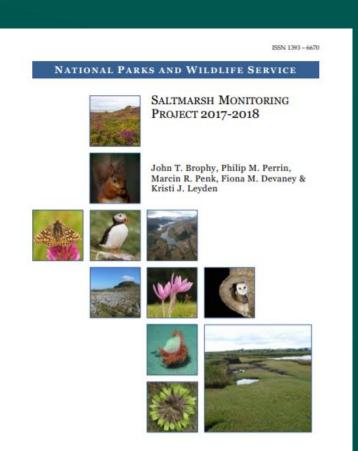


### ISGS mapping

- Habitat extent mapping (HD & Fossitt)
- Relevés & Condition Assessment

# Data Request process

National Parks & Wildlife Service – Scientific Unit Oidhreachta agus Gaeltachta Information/Data Request form for scientific data Project Name/Ref. No.: I confirm that the requested data is not available on either the NPWS (www.npws.ie) or the National Biodiversity Data Centre (www.biodiversityireland.ie) websites Organisation: Address: Eircode: Telephone E-mail: Scientific data requested All rare/protected species records Commonage areas Rare protected plant data only Habitat maps - Heritage Council Classification Habitat maps - Habitats Directive Classification Please include data considered sensitive Publications requested (please provide, author, year and title where possible) Draft Management Plans requested (please provide sitecode & sitename) Purpose for which data will be used: Conservation NPWS funded project Research Biodiversity Plan Land Management Planning Application Environmental Impact Assessment List of the national grid 10km squares covered by area (these can be read from an OSI discovery map) List of counties covered by area Please attach maps of the study area Preferably: one area map (min scale 1:15000); one location map (min scale 1:5000); GIS shapefile (.shp or .dxf).

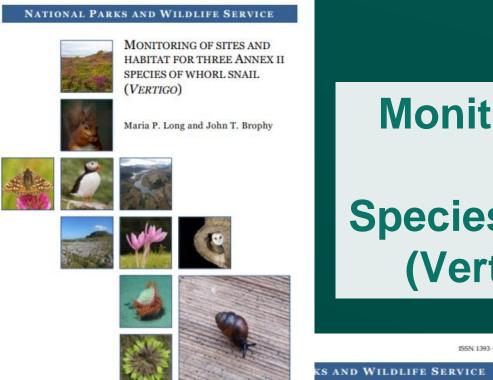


IRISH WILDLIF

Latest Irish Wildlife Manual (IWM) Publications..data to follow soon(ish)

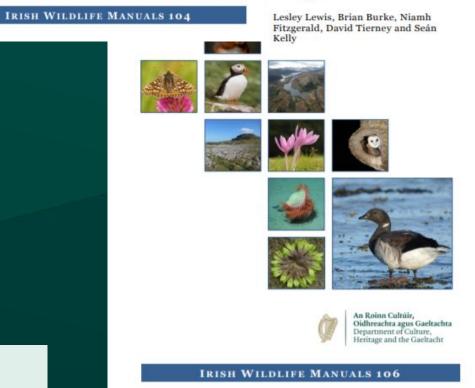


Saltmarsh Monitoring 2017 -2018 IWM108



**Monitoring of Three** Annex II **Species of Whorl Snail** (Vertigo) IWM104

ISSN 1393 - 6670



IRISH WETLAND BIRD SURVEY: WATERBIRD STATUS

AND DISTRIBUTION 2009/10

**Irish Wetland Bird Survey 2009/10 –** 2015/16 IWM 106

https://www.npws.ie/maps-and-data/open-data-policy https://www.npws.ie/sites/default/files/general/data-request-form.docx

### Data challenges

Coverage: National monitoring surveys may cover most or all of resource or may be a small sample of resource



 owing to a variety of factors; vulnerability, available data, pressures and threats, budget ...

#### Synchronicity:

• 6 yearly reporting programmes under Nature Directives(Art12 Birds & Art17 Habitats), but rolling programmes for monitoring surveys. Also a rolling site by site schedule for setting site specific conservation objectives (SSCOs).

**Sampling strategy:** Survey samples typically representative, across the natural range and distributed both inside and outside protected sites

- Hence although a protected site may be included in a survey, the targeted resource may only be sampled/ partially surveyed within the site.
- Condition may be assessed at a subsample level.

### ....Consequently there may be challenges when

17 An Roinn Cultúir, Oidhreachta agus Gaeltachta | Department of Culture, Heritage and the Gaeltacht Integration Color Cata



#### National Parks & Wildlife Service

**National Parks** 

**Protected Sites** 

Nature Reserves

**Publications** 

Licences

Maps and Data

**Planning** 

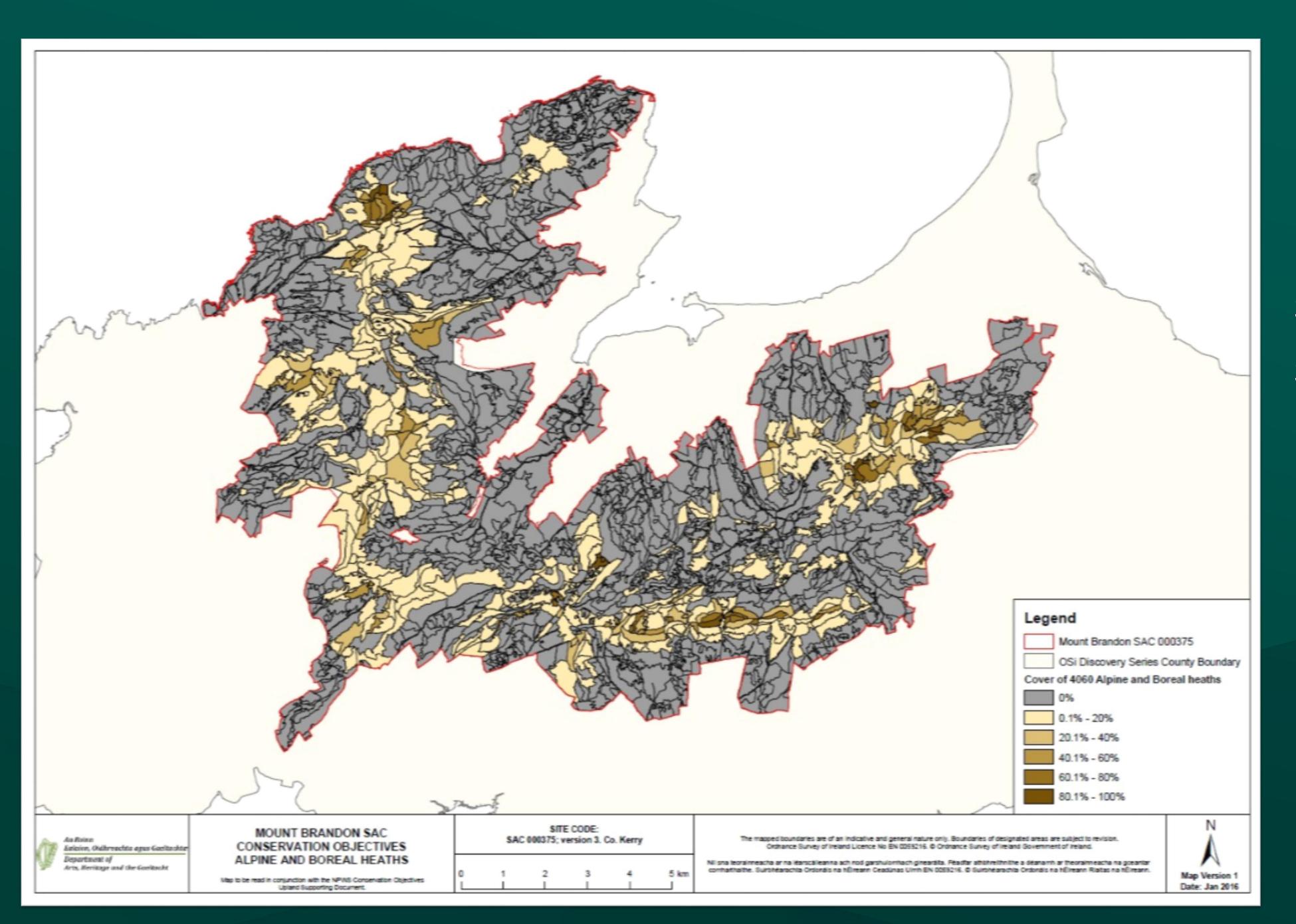
Home > Maps and Data > Data Usage and Limitations

- Data Usage and Limitations
- Habitat and Species data
- **Open Data Policy**
- Sensitive Data Access
- Protected site data
- **Data Standards**
- FPO Map Viewer -Bryophytes
- Other relevant data sources
- Submit records

#### Data Usage and Limitations

Users of NPWS data available on this website must be aware of the following advisory notes and limitations:

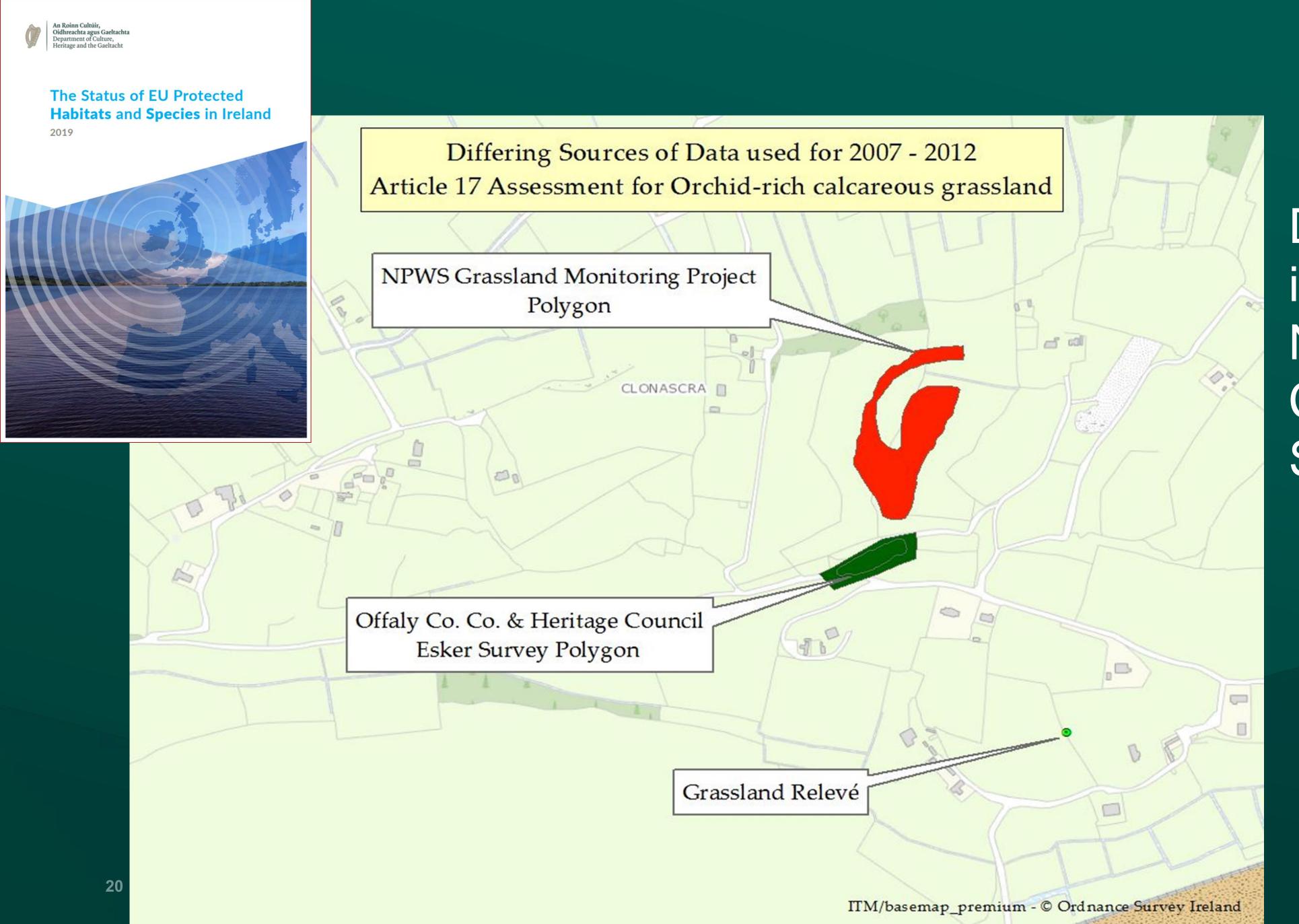
- The data listed for download are from records from key datasets and reports held by NPWS. They do not comprise the complete archive of biodiversity data held by NPWS.
- Species records are accurate to 1 km square level, after that there may be errors due to different map scales being used to calculate the grid references. Many were calculated before the widespread use of GPS.
- Habitat maps are indicative in nature only, and site boundaries may have been revised since the habitat maps. were produced.
- Any biological record is specific to the date of recording and does not necessarily imply the continuance of the species at that site. Users should verify that the data were collected at a time of the day and year appropriate to the species.
- Any absence of information in the NPWS dataset does not necessarily indicate an absence of records for a given area or species, the area or species may simply be unrecorded.
- Similarly, any absence of information in the NPWS dataset for an area, does not necessarily imply a low. biodiversity value for that area.
- NPWS data are not published here as legal definitions of the current actuality with regard to conservation regulations or their geographic extent. NPWS do not guarantee that the digital data is free of minor errors not materially affecting performance.
- NPWS does not guarantee the accuracy, timeliness, completeness, performance or fitness for a particular prupose of the data. It is the users' responsiblity to ensure that the data are fit for any intended use.
- Data are provided on the understanding that users will not use the information to the detriment of individual. species or habitats, biodiversity or the environment in general.





# Upland survey sampling strategy

- Whole SAC sampling approach
- Fuzzy
   classification

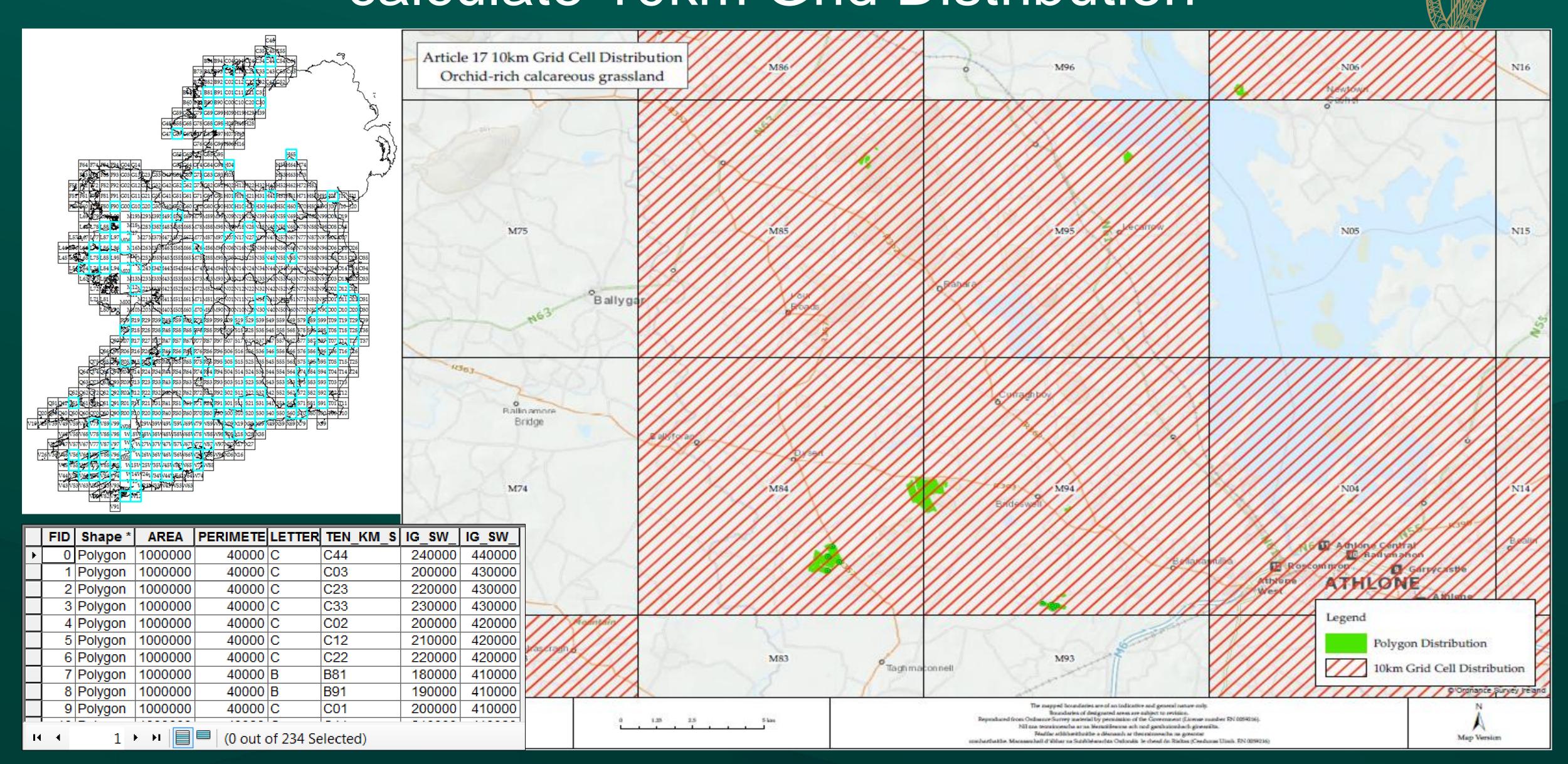




# Data collation and integration for National Conservation Status Assessment



# Art17 NCA Distributions from multiple sources used to calculate 10km Grid Distribution

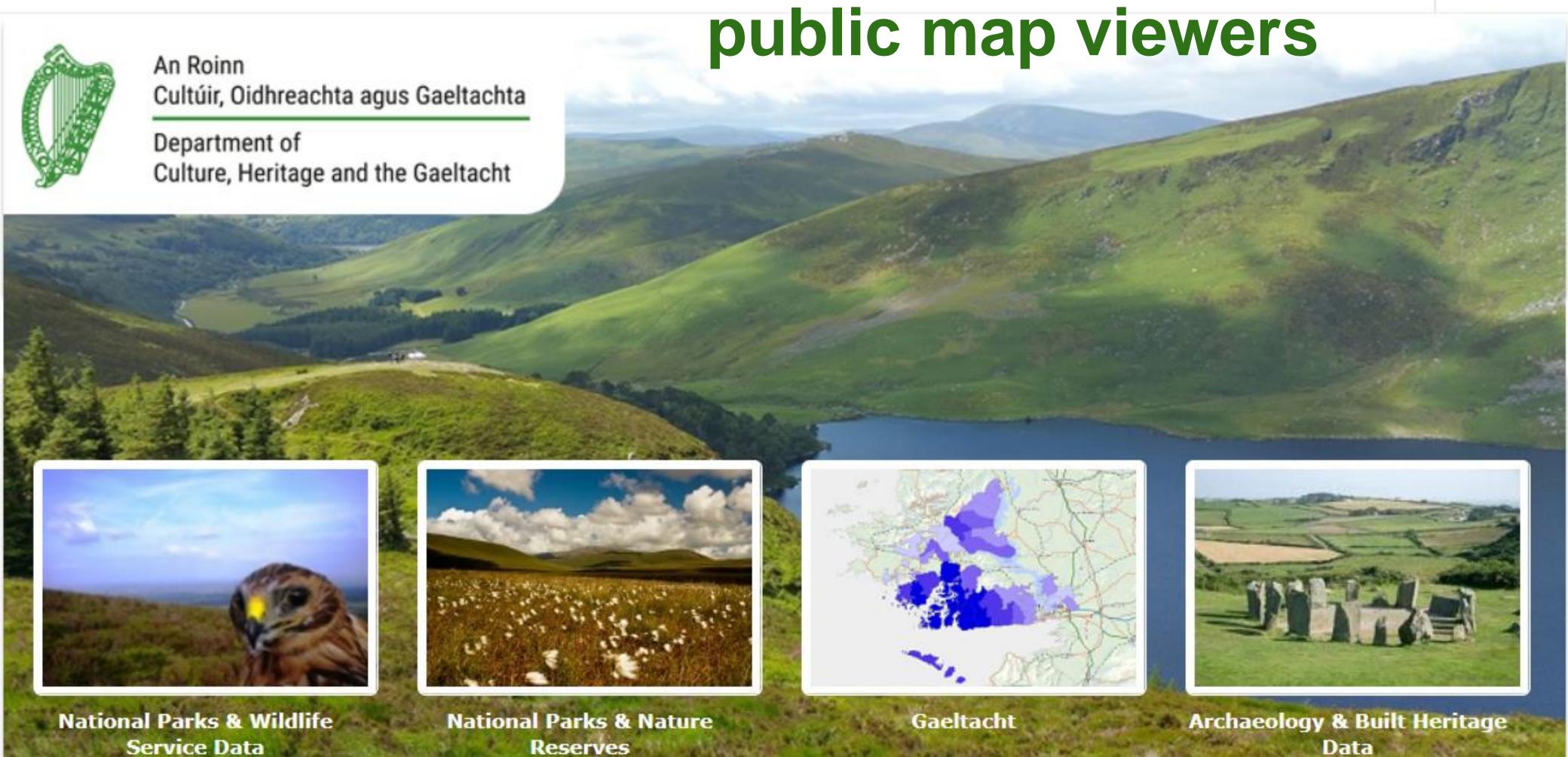




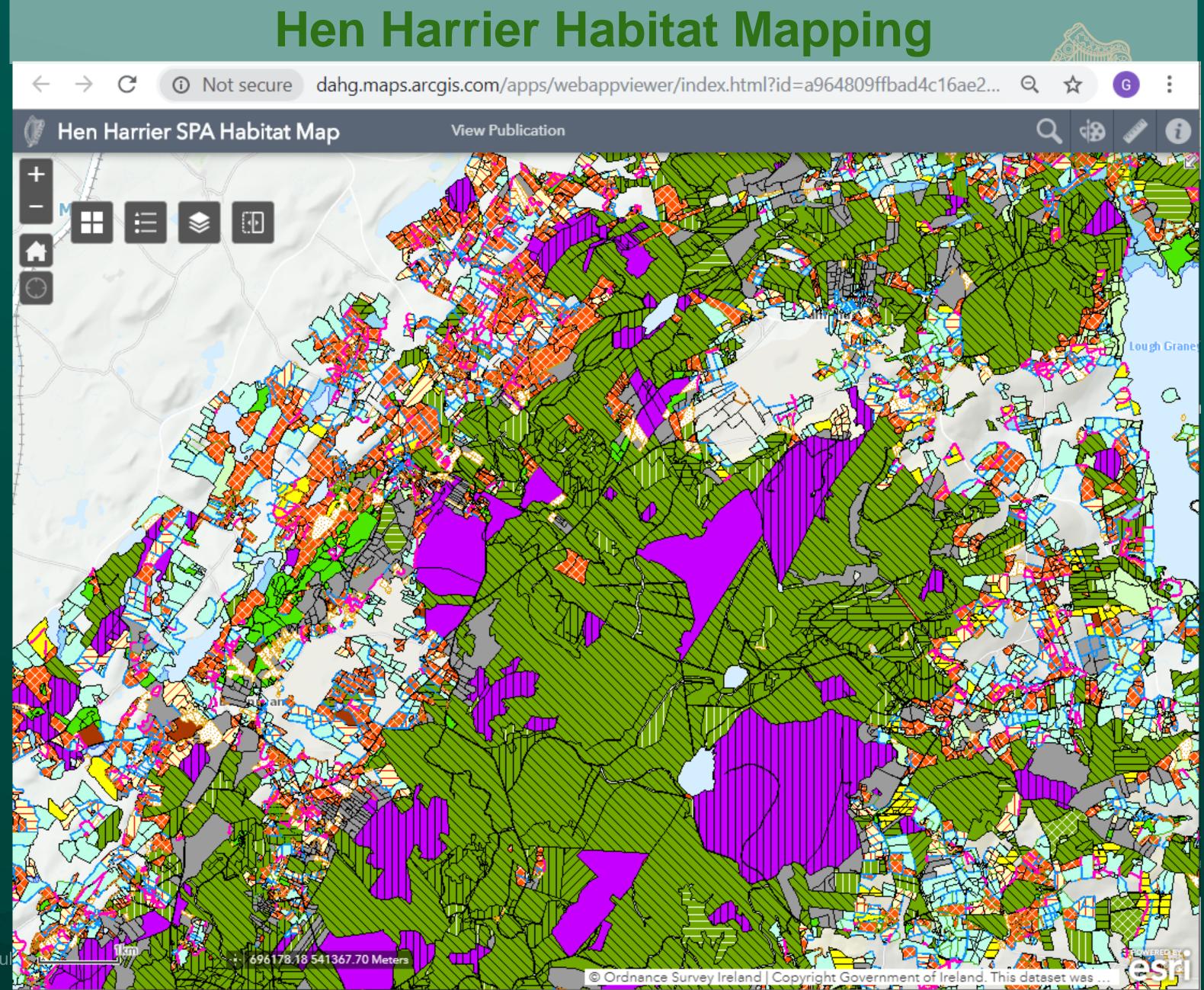


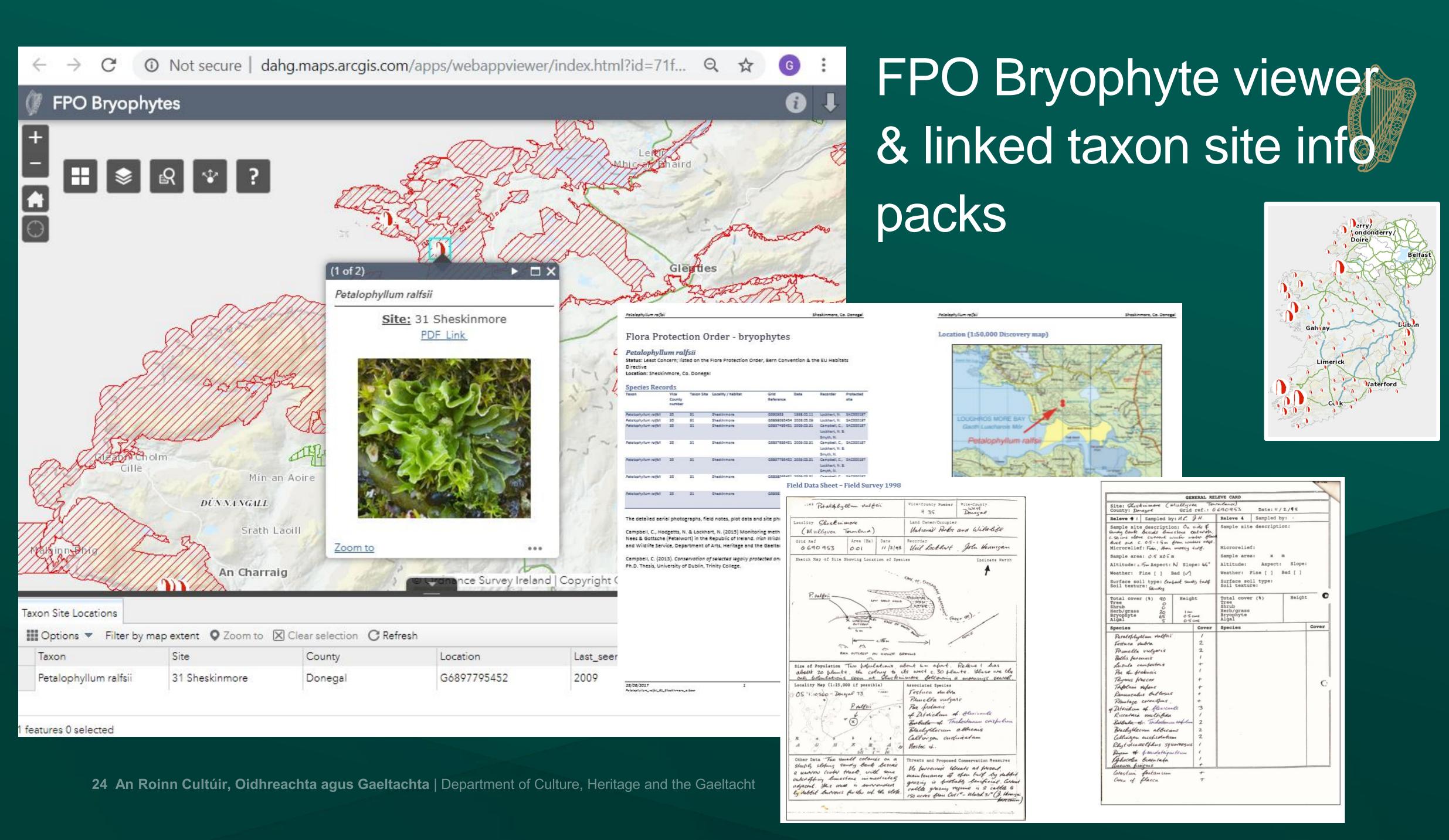


# Selected habitats and species public map viewers

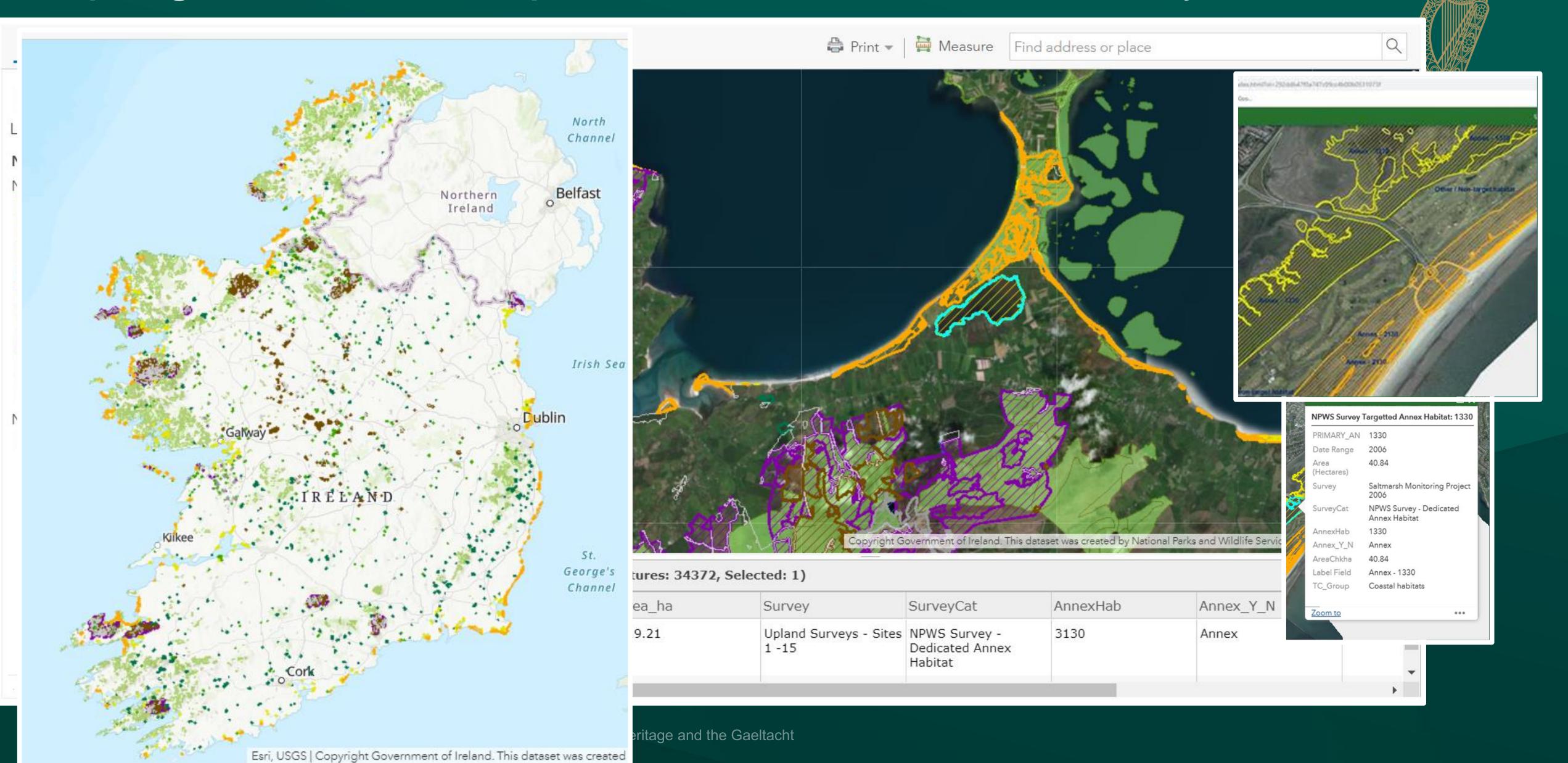


# Hen Harrier Special Protection Area (SPA) Habitat Mapping Project 2014 Irish Wildlife Manuals No. 83 alaíon, Oidhreachta agus Gaeltachta





### In progress – WMS spatial index of NPWS surveyed areas



# NPWS Mobile data collection tools

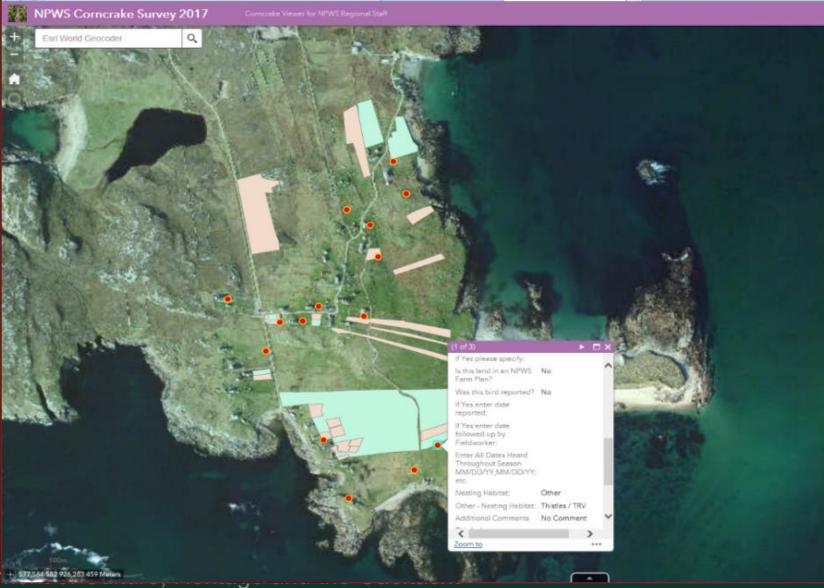
National
Corncrake
Census app





Site Inspection
Reporting (SIR)
app

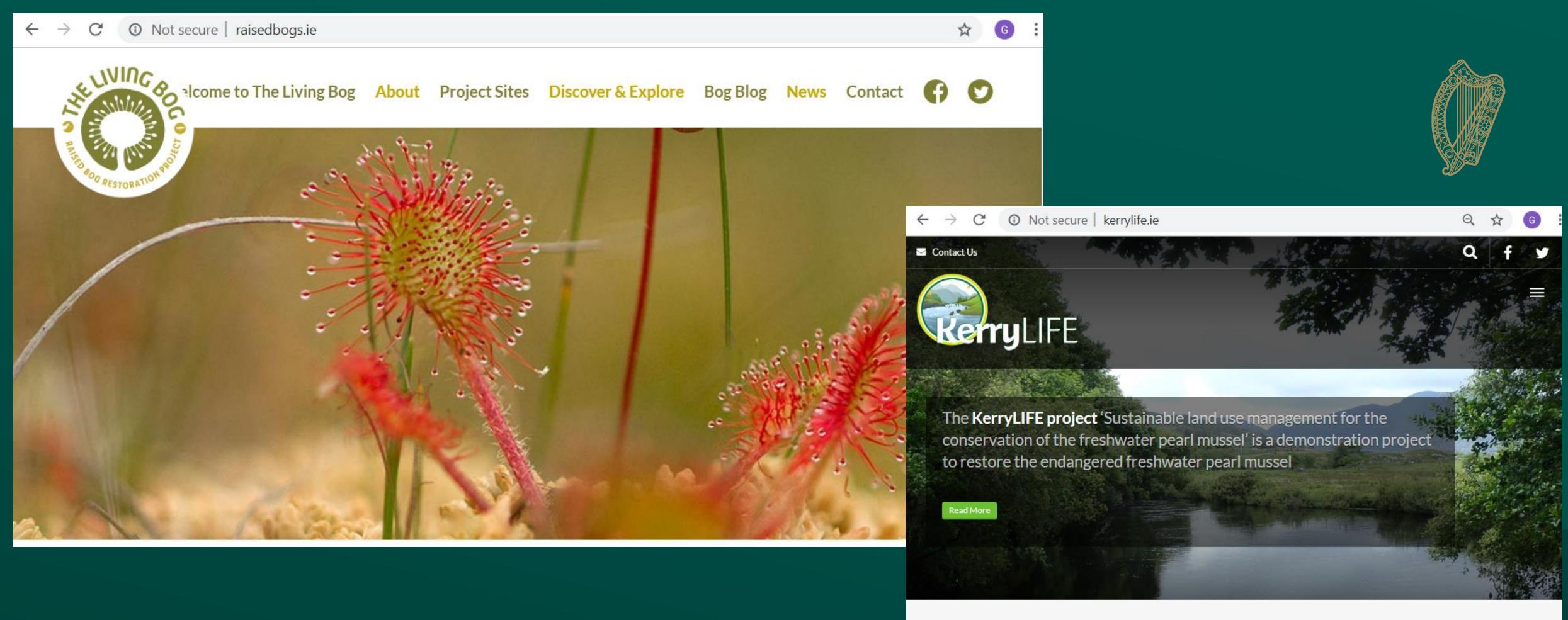




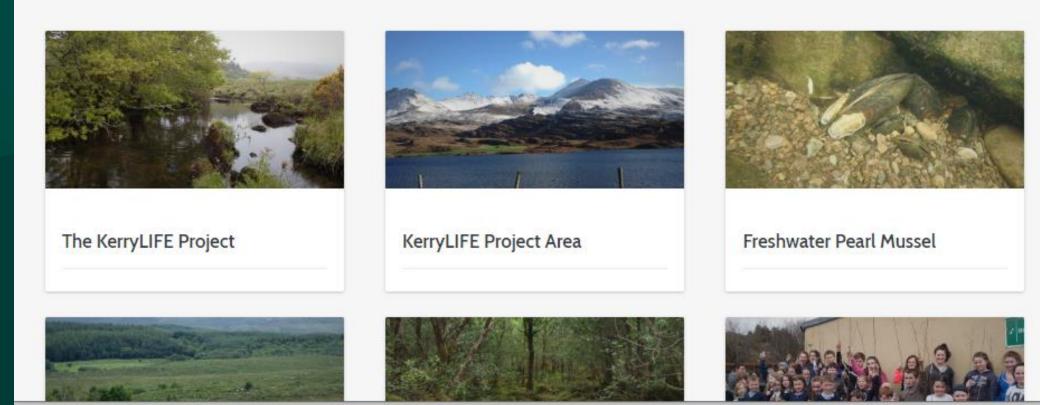


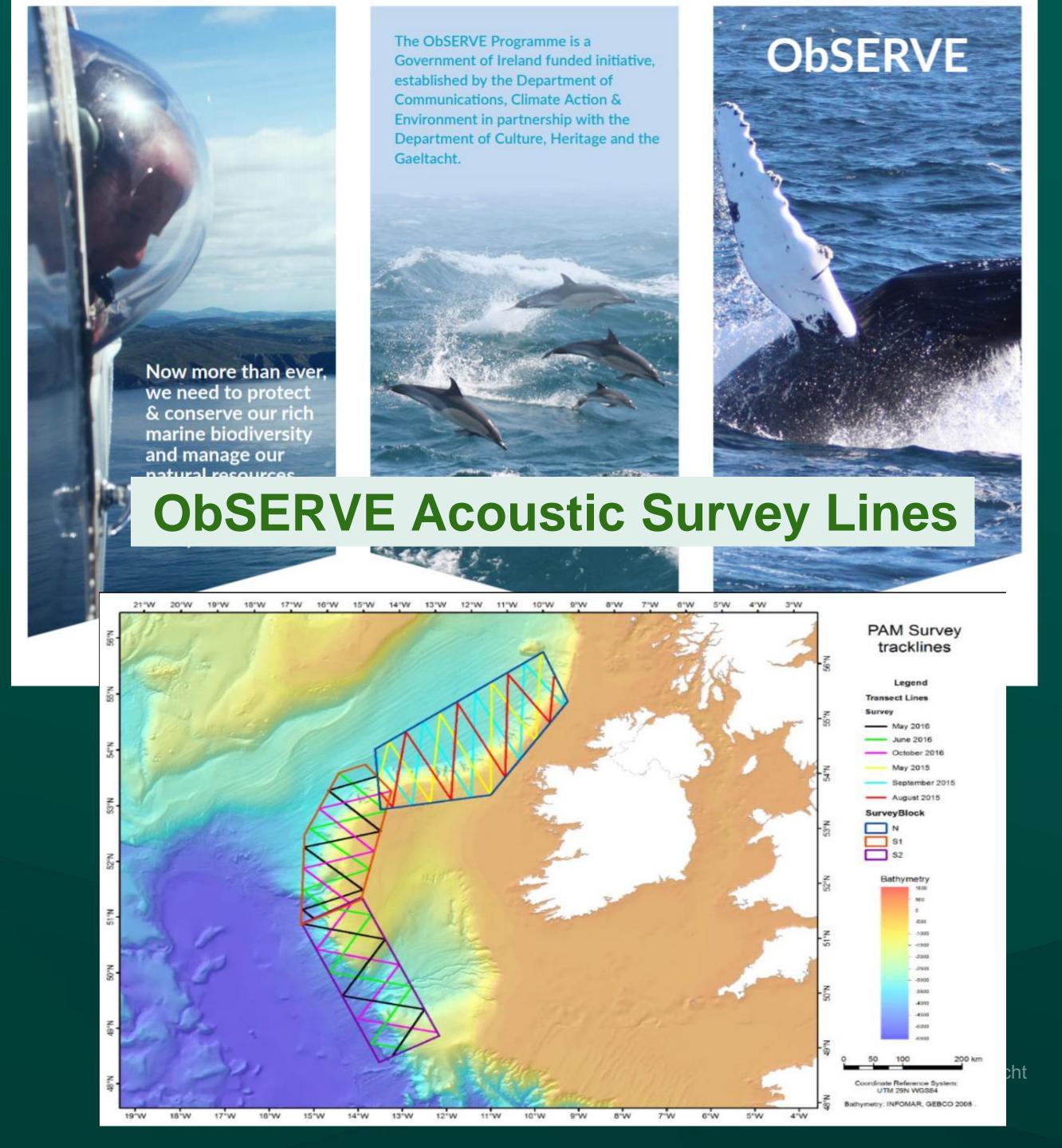


# Collaboration in data collection and analysis... Some selected examples



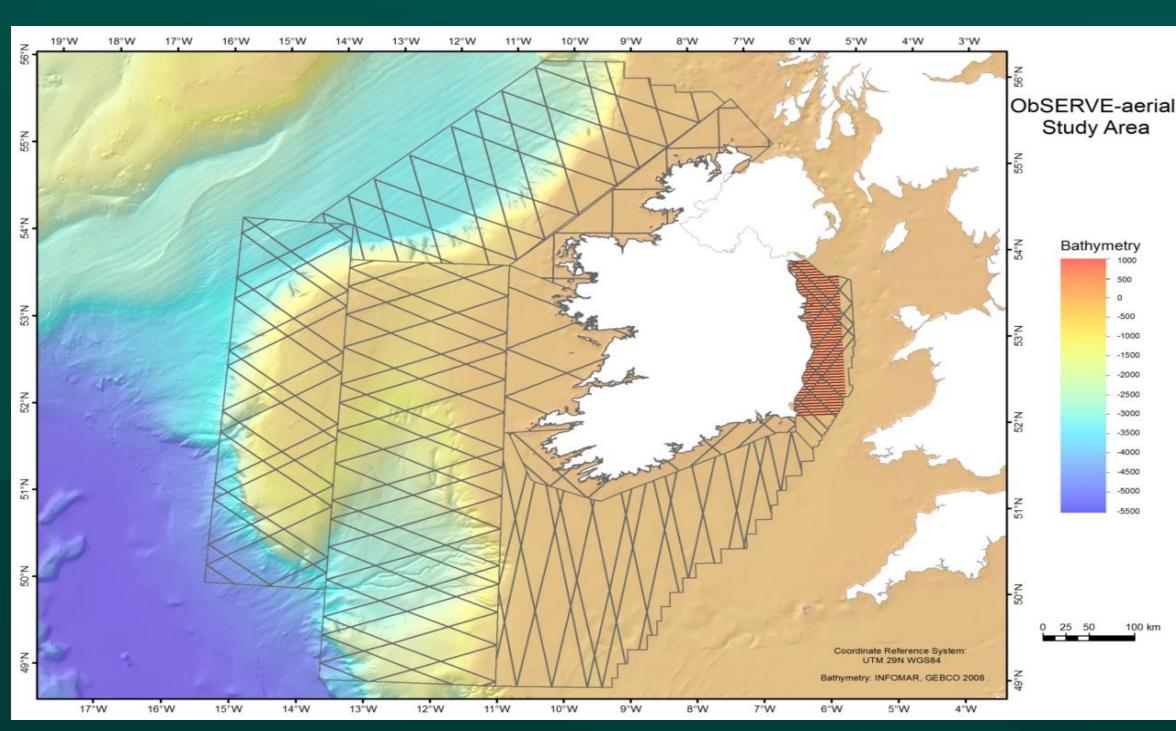
### EU part funded LIFE Projects - examples Living Bog and Kerry Life





Department of
Communications, Climate
Action and Environment
PAD -

### **ObSERVE Aerial Survey Lines**



National Land Cover and Habitat Mapping Working Group





### National Vegetation Database & Vegetation Classification Tool

d the Gaeltacht

#### National vegetation database

The National Vegetation Database aims to collate all of Ireland's vegetation data onto a single digital database & to make maximum use of this valuable resource.

Click below to navigate to main sections of this project





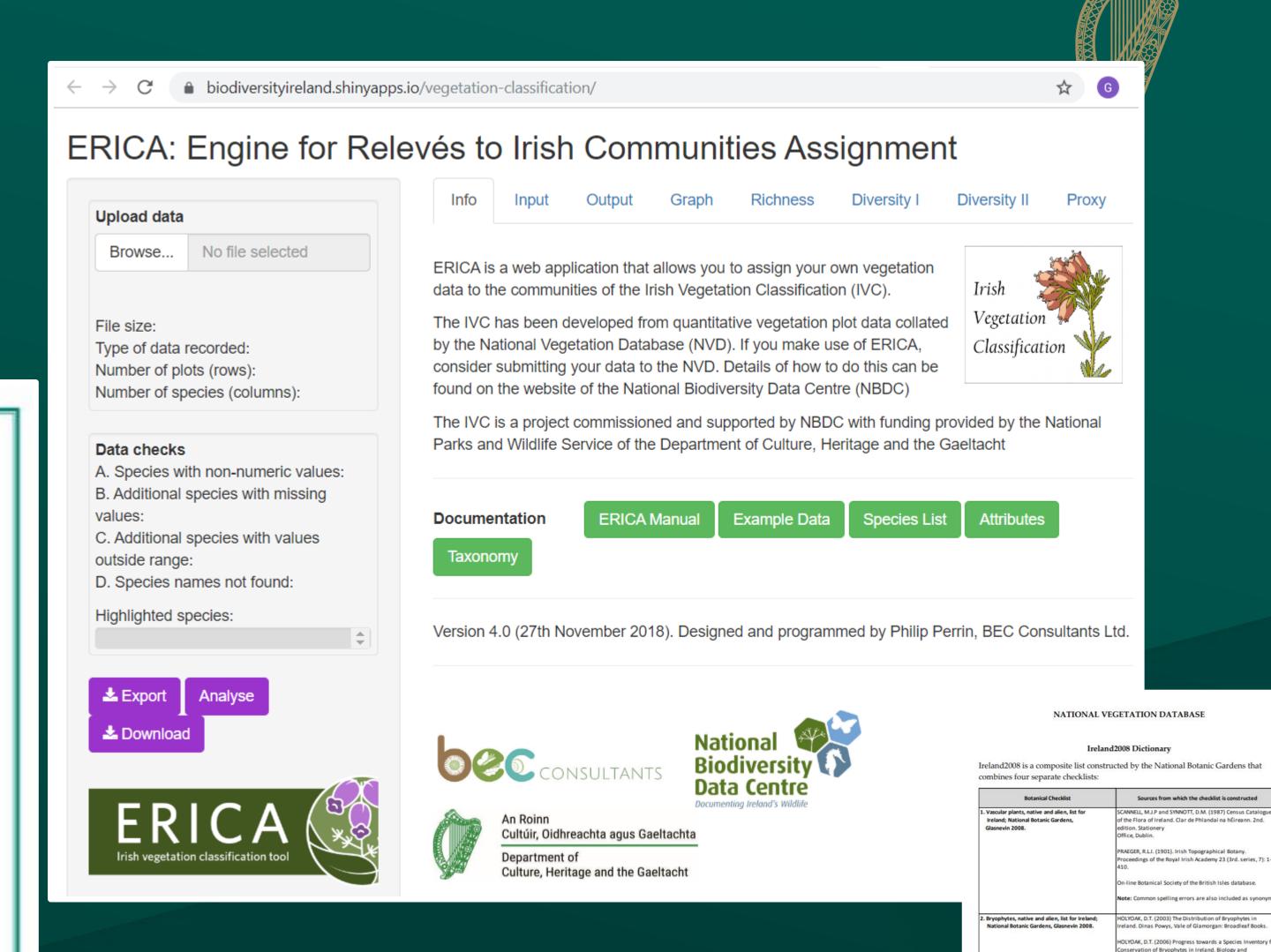


31 An Roinn Cu

The National Vegetation Database:
Guidelines and Standards for the Collection
and Storage of Vegetation Data in Ireland
Version 1.0



Irish Wildlife Manuals No. 49



ronment: Proceedings of the Royal Irish Academy, VOL

The Irish checklists are available on the National Botanic Gardens website: http://www.botanicgardens.ie/herb/census/resource.htm

 Checklist of Lichens of Great Britain and Ireland London: British Lichen Society 2002

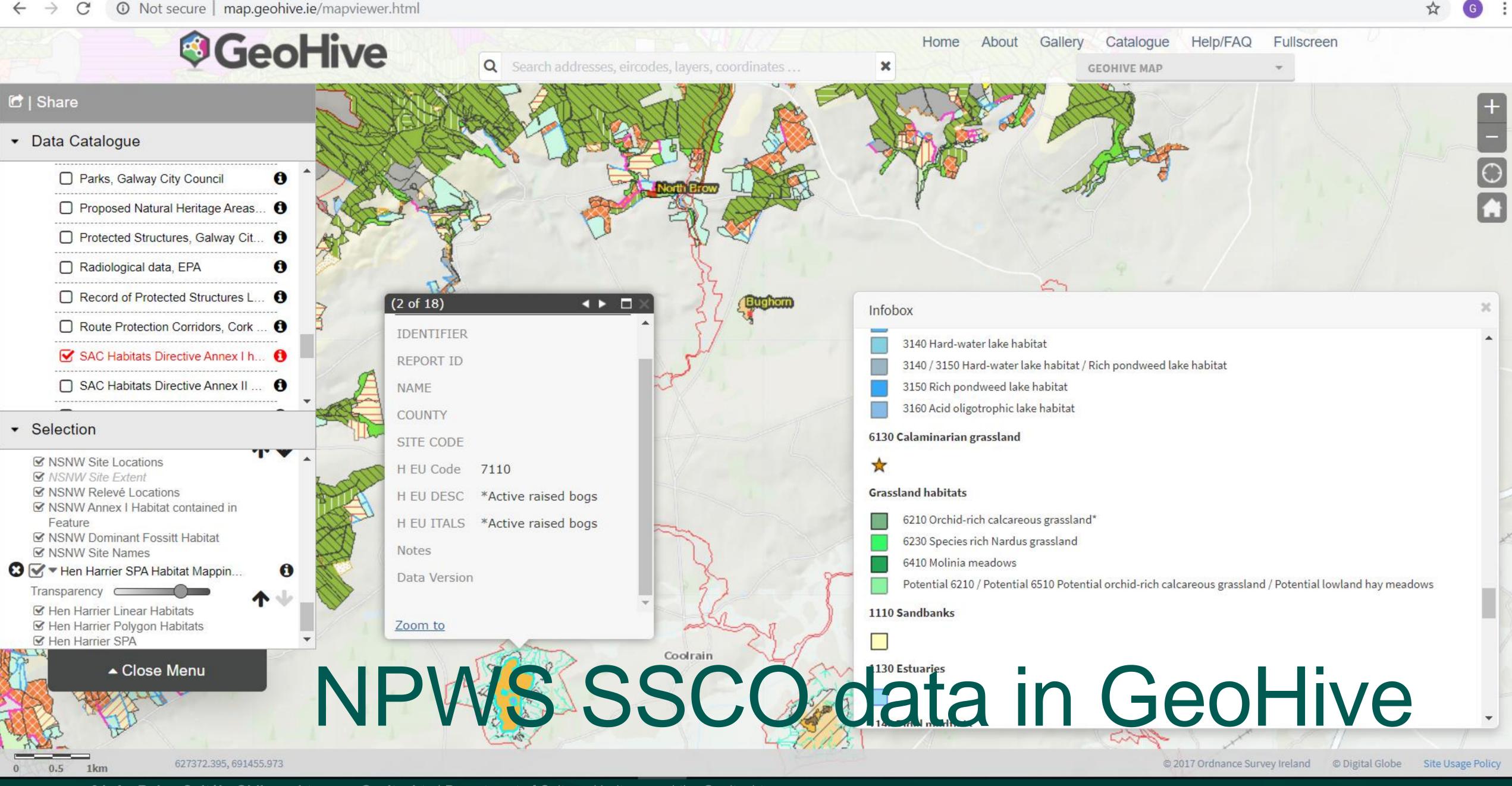
## Citizen Science

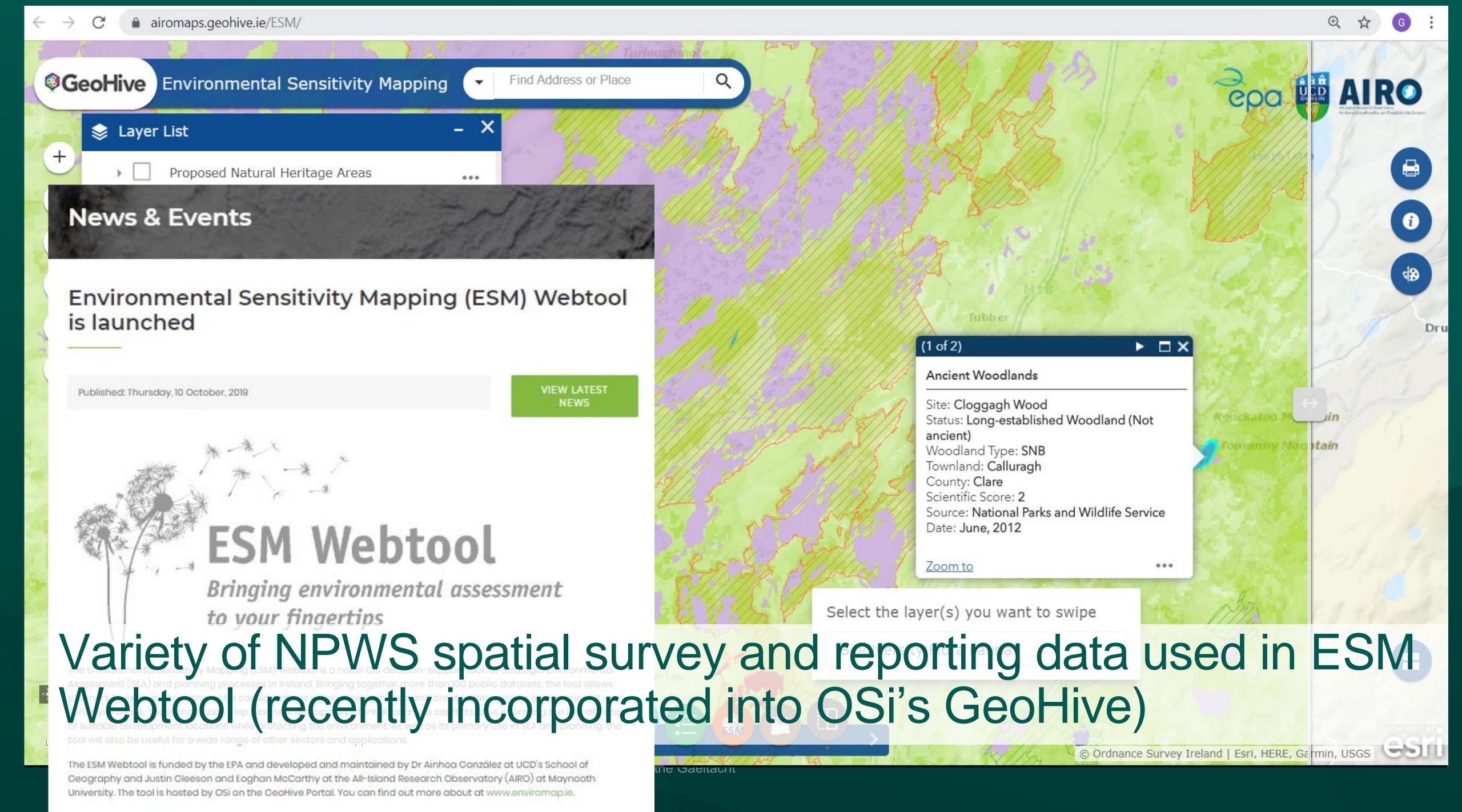


#### Section B: Bird Data Species: Select from this dropdown list - you may type the first few letters of your target species. If your species of interest is not available (e.g. scarce species) then type the name of the species in the box below HOME Other species recorded Date (Of Sighting):\* Please select the date the bird yyyy-mm-dd Bird Sighting Location\* Please Enter Point Location of Bird Sighting. Click the map tile in the top right corner to toggle between basemaps. Find address or place IRELAND St. George's Cardigan Esri, HERE, Garmin, NGA, USGS Powered by Esri Lat: 53.31718 Lon: -7.68755



# Integration in other web toos & technologies





Congratulations Ainhoa!

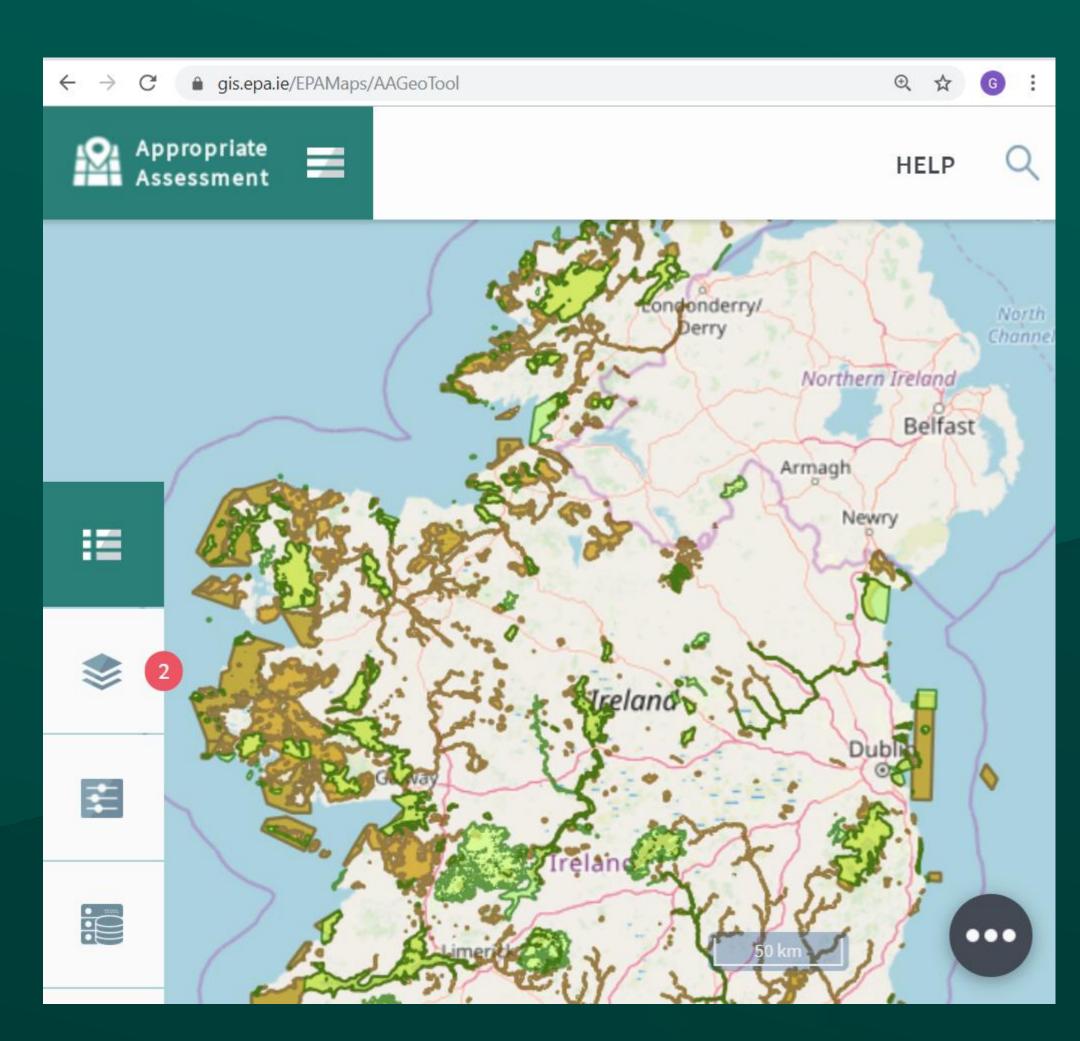
# NPWS Ecological Data – EPA AA Geotool



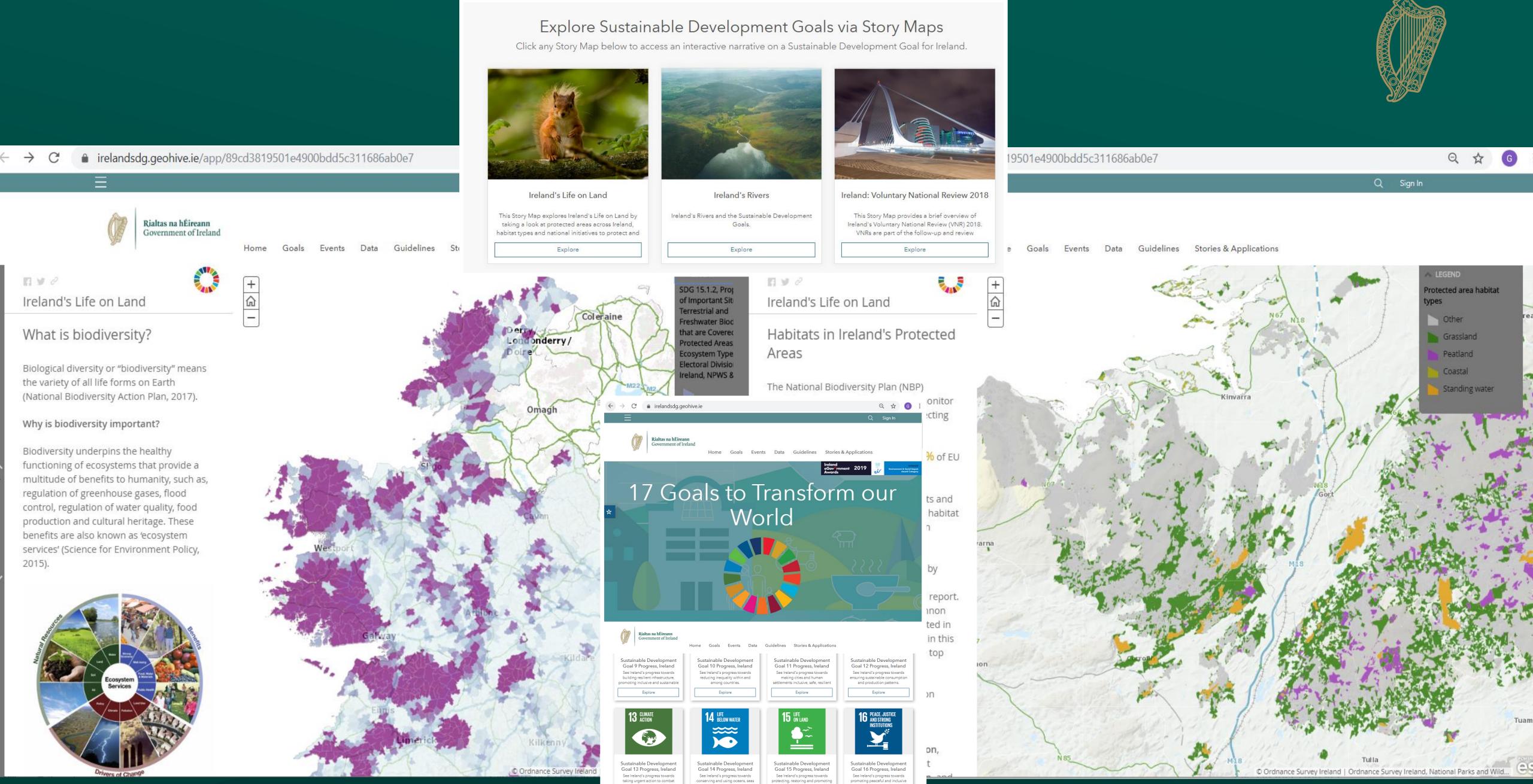
Aims to help with the data gathering process of Stage 1 and Stage 2 Appropriate Assessment.

Uses NPWS web service with information including list of qualifying interests for each site and Url link to the conservation objectives for each site.

The AA GeoTool allows the user to select a point on the map and then search for SACs and SPAs within a defined distance/ upstream/ downstream of the point.



### NPWS ecosystem services data used in SDG indicators





# Your views-We will be undertaking a survey looking for feedback from NPWS data users – interested?



# Thank you!

