



An tSeirbhís Páirceanna Náisiúnta
agus Fiadhúlra
National Parks and Wildlife Service



Greenland White-fronted Goose Monitoring in Ireland

Alyn Walsh

Copenhagen

22nd November 2023



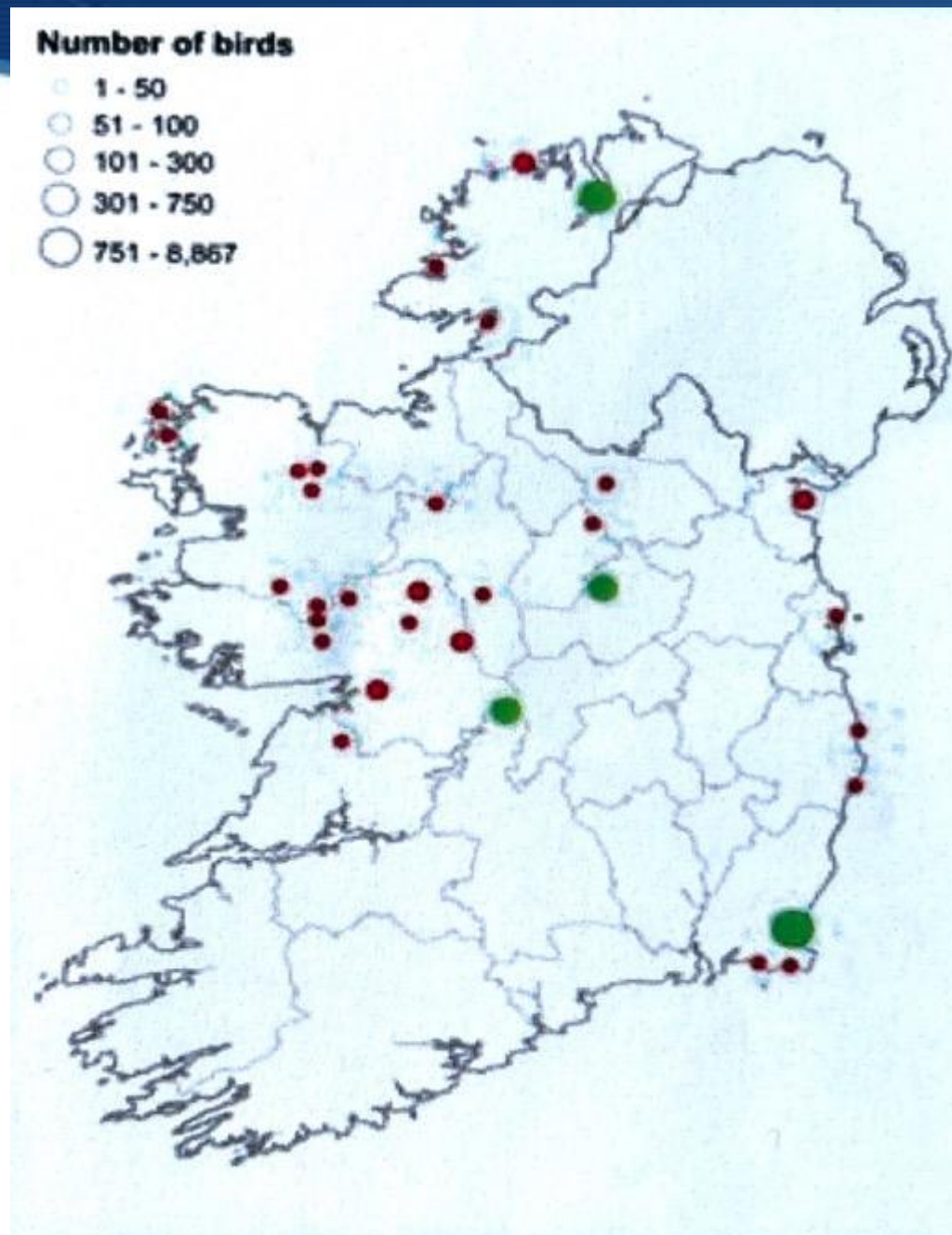
The NPWS has responsibility for the protection & conservation of Ireland's natural heritage and biodiversity at national government level. Responsibilities include:
Protection of habitats and species through designation of sites SPA, SAC & NHA.

Undertake scientific surveys and research, compile monitoring data, provide specialist advice in management of wildlife habitats and species, To regulate and control activities that impact species and habitats. Implementation of National and EU legislation and policies for nature conservation including EU habitats and Birds Directives.



Professional counters from the National Parks and Wildlife Service (NPWS) in partnership with Birdwatch Ireland (BWI), Royal Society for the Protection of Birds (RSPB) Greenland White-fronted Goose Study Group (GWGS) and volunteers survey approx. 30 widely distributed flocks in Ireland.

Monthly counts from Nov-Mar with coordinated National and International census periods during December and March.



- Five day census windows are provided for each counter - due to the remoteness of access to some flocks in the Midlands and West of Ireland.
- In general, day time counts are more practical for search effort and provide greatest degree of accuracy.
- If annual coverage gaps occur, the previous years data is supplemented for that flock.



GREENLAND WHITEFRONT SITE VISIT CARD OFFICE USE ONLY

1. OBSERVER(S) *Hazel Doyle* 2. SITE NO. *2*

3. DATE *11/01/23* 4. TIME from *1250* to *1310*
(24 hours) *54.087227 - 9.303278*

5. LOCATION *Alan Woods Farm* 6. GRID REF. *[] [] [] [] [] [] [] [] [] []*

7. SITE DESCRIPTION
Roost (A to H) / feeding (I to S) habitat used:
 M Other.....

A river J marsh
B lake/pool K wet pasture
C lake margin L flood meadow
D island M dry pasture
E blanket/raised bog N reseeded pasture
F sand bank O stubbles
G saltmarsh/mud flats P root crops
H other (specify) R salt march
I blanket bog S other (specify)

8. DISTURBANCE
Duration geese present (mins.) *17*
Number of disturbance flights: *1 due to my van*

due to agriculture
shooting
aircraft
other (specify)

Feeding Site Flooded (Yes/No)

Did geese leave area because of disturbance (Yes/No)
Just for 2-3 mins and flooded again

9. COUNT DATA FLOCK SIZE *55* FIELD SIGNS ONLY *NA - bird*
NUMBER ADULTS AGED *45* NUMBER JUVENILES AGED *2*

COMPLETE BROODS IDENTIFIED: -
Brood Size Number of Broods

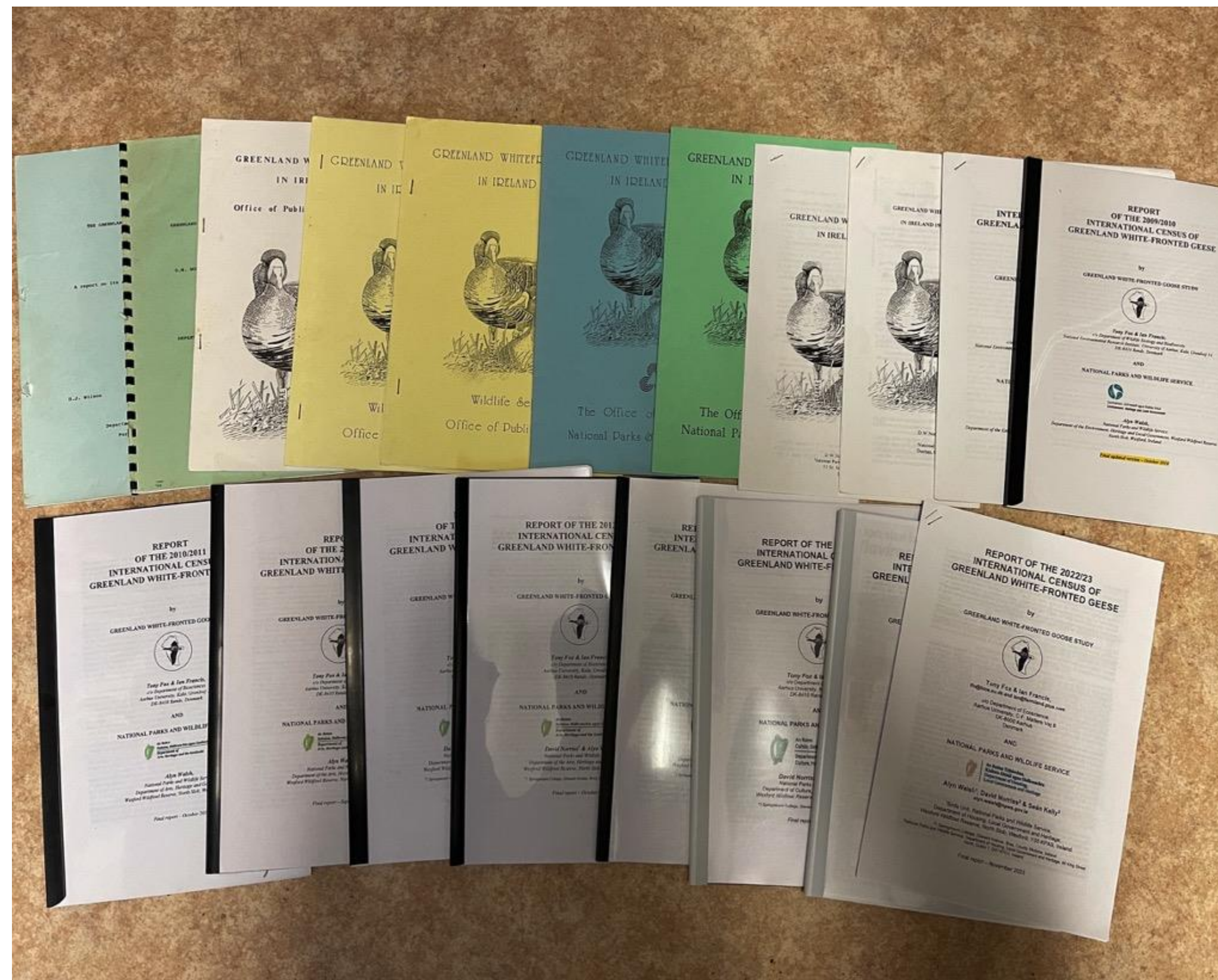
1	2	3	4	5	6	7
		<i>1</i>				

10. COMMENTS
Check photo location screenshot
Bird sitting on ground could not see all but think all with 3 juv

PLEASE RETURN TO : ALYN WALSH, WILDFOWL RESERVE, NORTH SLOBLAND, WEXFORD

Additional data collected during census includes: age-ratios, brood size, field signs, (most useful where geese appear to be absent) associating spp, site description, disturbance, time of visit and grid reference.

40th year of collaboration with GWGS* reporting on this species and as many scientific papers published covering:



- Status and Distribution
- Feeding Ecology and Roosting Sites
- Population Dynamics & Movement
- Conflict with Agriculture
- Annual Reporting to all teams
- Database held internally by NPWS
- Available to stakeholders etc.



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The NPWS in collaboration with Nature Scot Scotland, BWI and a host of dedicated observers census the total Irish overwintering population from the East Greenland flyway.

These surveys contribute to the work of the East Greenland & Iceland Barnacle Goose International Working Group and associated task force under the AEWA European Goose Management Platform.



Cessna 172 Reims Rocket



Tacnam 2006T

A total of 113-144 sites are surveyed by c.30 observers (20 professional and 10 volunteers) over a two day window. Up to 64% of geese are counted by ground observers and 36% by aerial observers. These surveys were traditionally done on a 5 year cycle, but more recently over a 3 year cycle or less.

In total, there have been 14 aerial/ground surveys in Ireland which commenced 1959/60 (Cabot & Boyd) and repeated in the years: 1988, 1993, 1994, 1999, 2003, 2008, 2011, 2012, 2013, 2014, 2018, 2020 and most recently in March 2023.



Barnacle Geese *Branta leucopsis* in Ireland: a report on the 2013 census, and long-term trends

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Keywords: Barnacle Goose, *Branta leucopsis*, census, numbers, trends



A complete aerial and ground census of Barnacle Geese *Branta leucopsis* was carried out in Ireland in spring 2013. The census was part of periodic monitoring of the entire Greenland-breeding population which overwinters almost exclusively in Scotland and Ireland, with a very small flock in Wales. A total of 144 island and mainland sites was surveyed along the west and northwest coasts of Ireland. Most sites were surveyed from the air, although several ground-based counts were undertaken. The aerial census was carried out on two days, 26 and 27 March. All sites in a south to north direction from the Blasket Islands, Co. Kerry to Inishrahull, Co. Donegal were surveyed. A total of 31 sites held 17,500 geese, representing 22% of the flyway population, and an increase of 43% compared with the most recent census in 2008. The combined Scottish, Welsh and Irish total of 80,670 Barnacle Geese is the highest ever recorded. A portion of the range, namely that north of Galway Bay to Inishrahull was surveyed by aerial census in 2011, 2012 and 2014 in an attempt to monitor annual changes in numbers wintering in Ireland. Totals varied widely and it is suspected this variation was caused by the different times of season in which the surveys were undertaken. Further study of intra-seasonal movements of birds at key sites is necessary.

Introduction

The Greenland-breeding population of Barnacle Geese *Branta leucopsis* winters in Ireland and in western and northern Scotland, with a small outlying flock in Wales (Ogilvie *et al.* 1999). Censusing of this population on the wintering grounds commenced in 1959/60 and has since been undertaken at approximately five-year intervals. Over this period, the population has increased, from 8,277 to 70,501

geese in 2008 (Mitchell *et al.* 2009). Numbers in Ireland increased from 2,771 to 12,232 over the same period. Here they occur predominantly on islands off the west and northwest coasts between Counties Donegal and Galway, with more isolated flocks occurring at fewer scattered locations south to the Magharee Islands in Co. Kerry.

Plate 4. Barnacle Goose (Clive Timmons).

Barnacle Geese *Branta leucopsis* in Ireland: results of the 2018 census

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Keywords: census, Irish birds, population trends, wildfowl



A complete aerial and ground census of Barnacle Geese *Branta leucopsis* was conducted in Ireland in spring 2018 as part of the international Greenland Barnacle Goose census. This population winters exclusively in north-western Ireland and Scotland, where regular censusing is ongoing since 1959. A total of 16,237 Barnacle Geese was recorded in Ireland in March 2018, primarily on the north-west coast and offshore islands. The abundance of Barnacle Geese in Ireland has been on a general upward trend since the 1950s. However, the 2018 census represents a decrease of 7% compared to the 2013 estimate, in accordance with a flyway population decline in recent years. Internationally significant flocks were recorded at Ballintemple, Dunfanaghy New Lake, Trawbreaga Bay, the Inishkea Islands, Cross Lough and Termoncarragh. A further 11 sites held nationally important numbers and a high proportion of the population was associated with the European Union Birds Directive Special Protection Area network. There was no notable reduction in the range of this species in Ireland, nor a reduction in the proportion of the flyway population wintering here when compared with the last census in 2013. The five-yearly census continues to provide useful data for long-term monitoring.

Introduction

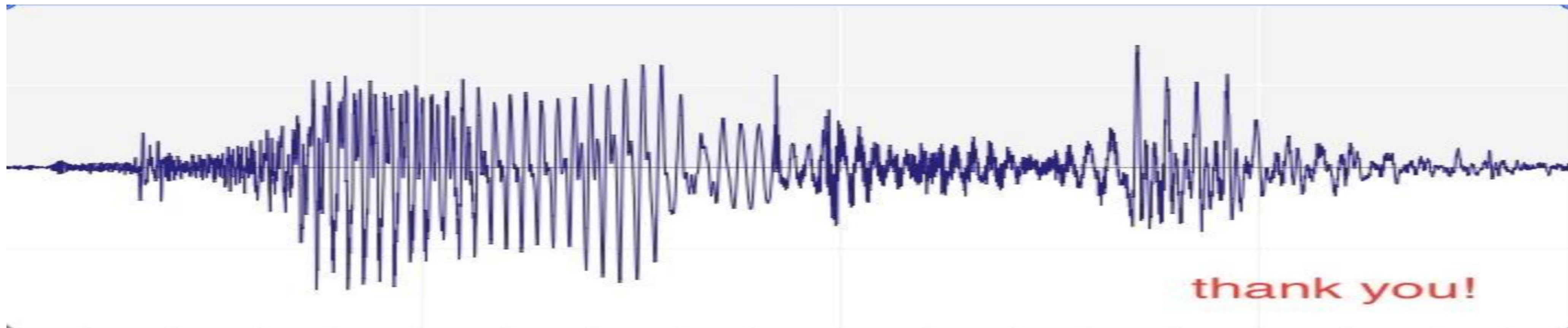
The Greenland Barnacle Goose *Branta leucopsis* winters exclusively in north-western Ireland and Scotland. The entire population migrates to north-east Greenland for the breeding season, staging in north-west Iceland on the spring journey and in south-east Iceland in autumn. In the 1950s, this population was considered threatened due to its declining trend. Protective legislation was introduced, and several winter censuses were conducted to monitor the recovery (Boyd 1968). A regular international census of Greenland Barnacle

Geese in Ireland and Scotland began in 1959 and continues to the present day (Boyd 1961, Mitchell & Hall 2015).

Barnacle Geese in Ireland principally occur on offshore islands and along the coasts of counties Donegal, Sligo, Mayo and Galway (Crowe *et al.* 2014). Smaller numbers can be found in counties Clare (e.g. Mutton Island), Kerry (e.g. the Magharee Islands) and Wexford (e.g. the Slob) (Meme &

Plate 9. Barnacle Goose at Ballyconnell in County Sligo (Ulrike Schwier).

Census results are published in *Irish Birds* and data is held internally by the NPWS and available to stakeholders and data requesters.



thank you!



Rialtas na hÉireann
Government of Ireland



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Goose monitoring via I-WeBS (the Irish Wetland Bird Survey)

Niamh Fitzgerald
BirdWatch Ireland

Greylag Goose (Icelandic)

Anser Anser



- Monitored through the **Irish Wetland Bird Survey (I-WeBS)**
- In line with **Icelandic Goose Census (BTO)**
- Organised by the I-WeBS Office
- Carried out by **volunteers (c. 10)** and **National Parks & Wildlife (NPWS) Staff**



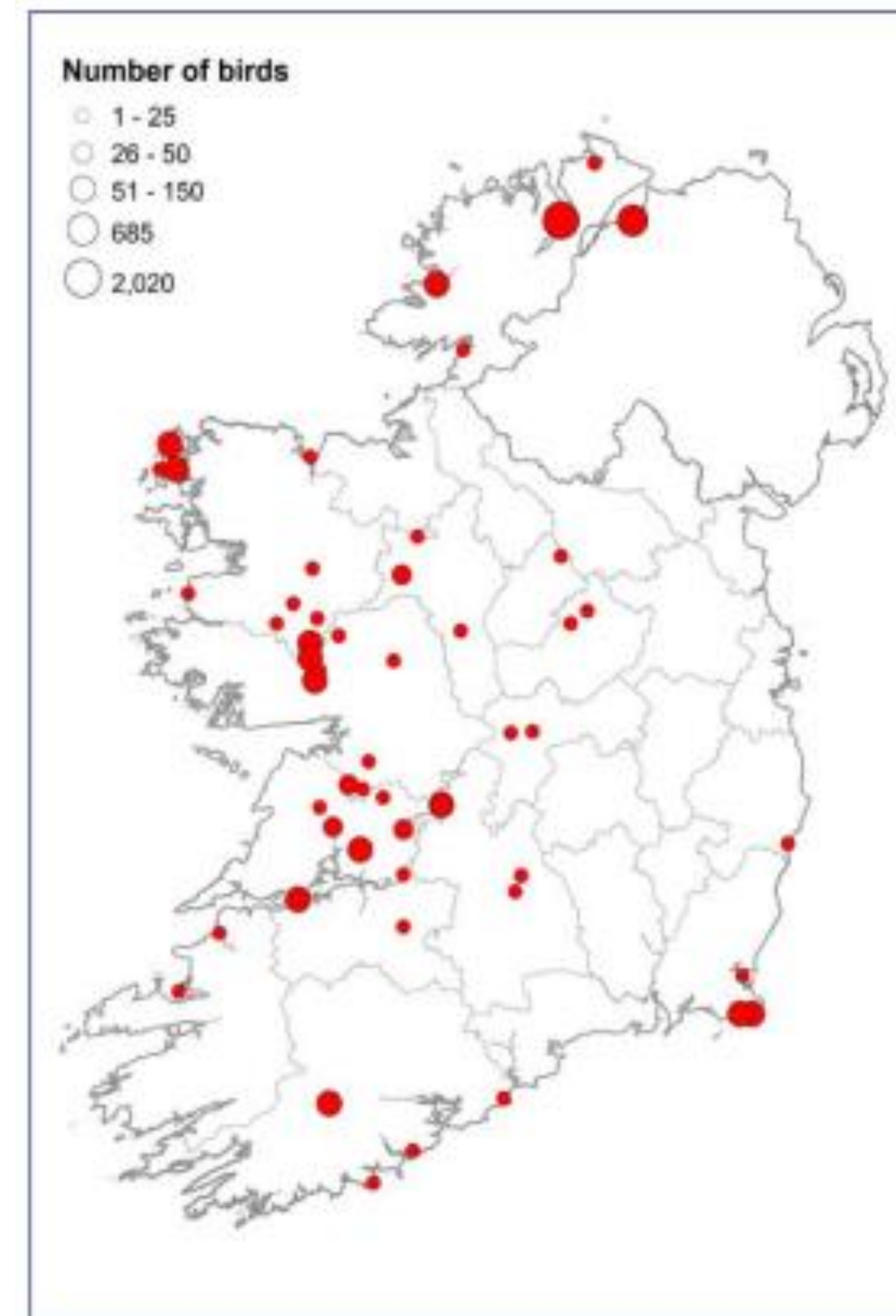
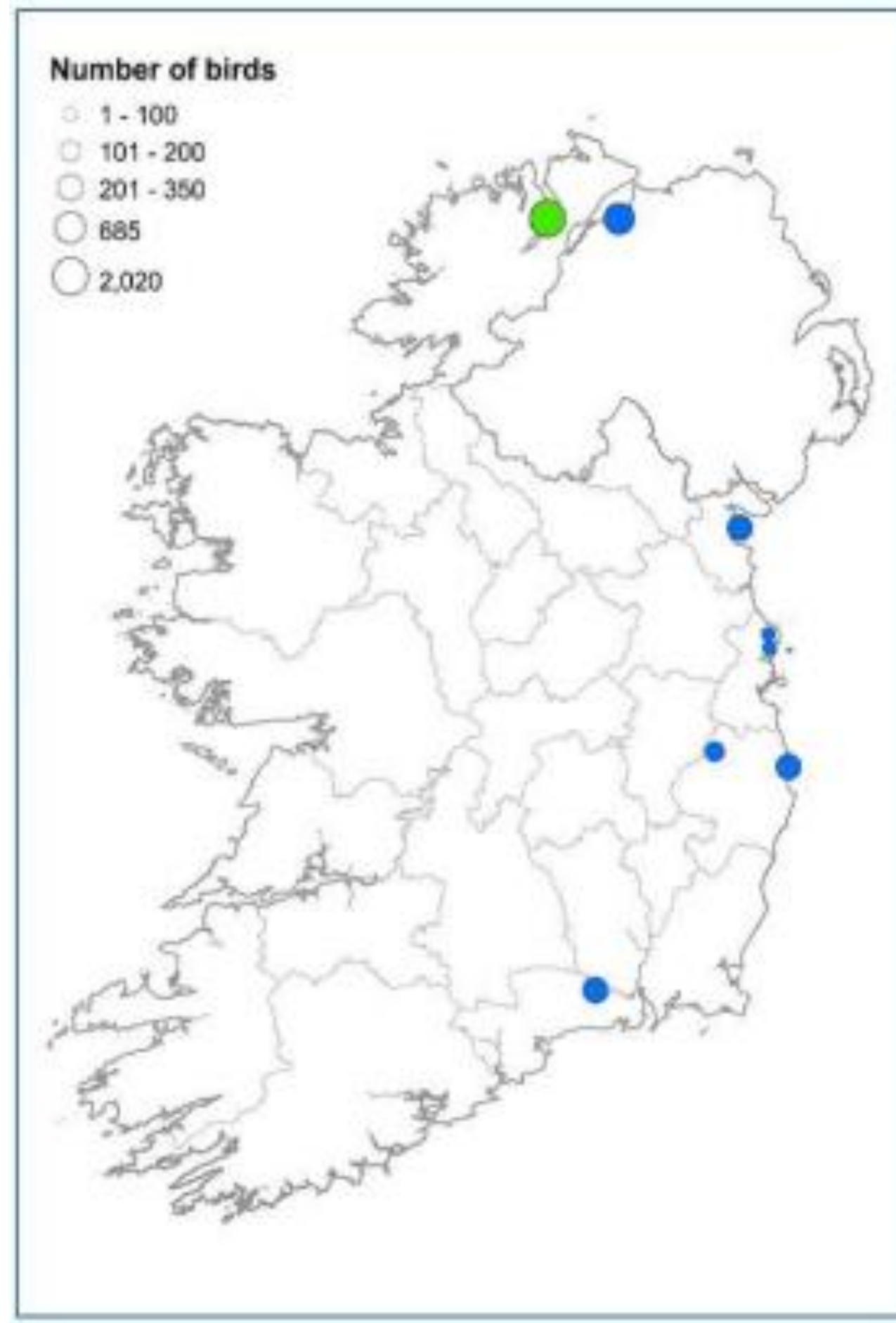
Greylag Goose (Icelandic)

Anser Anser



- Annual – Late November
- Spring census every 3 years
- Additional records from Irishbirding and other I-WeBS counts
- Primarily daytime counts on feeding sites
- Age ratios not collected
- Results submitted to coordinator by email or via I-WeBS online portal
- Data collected by spring
- Only 6 sites where Icelandic greylags regularly occur

Icelandic Greylag vs Feral Greylag



Greylag Goose (Feral)

Anser Anser



- Resident, naturalised, population
- Monitored through **I-WeBS**
- New paper outlines their status
- Report based on intensive effort over three years



Greylag Goose (Feral)

Anser Anser



- Some feral geese come from released birds
- Some flocks seemingly a result of expansion of those early flocks
- There are flocks in some parts of the country for which we don't know the origin
- Possibility of expansion from Scotland, if not elsewhere

Pink-footed Goose

Anser brachyrhyncus



- Monitored in the same way as Icelandic greylags
- There were very few in Ireland
- Typically, same locations as Icelandic Greylags
- Numbers increasing recently
- More of a focus on surveying them now



Light-bellied Brent Goose

Branta bernicla hrota



- Monitoring is coordinated by the Irish Brent Goose Research Group (IBGRG)
- Carried out by IBGRG members and volunteers as well as I-WeBS volunteers



Light-bellied Brent Goose

Branta bernicla hrota



- Annual – early October
- Primarily daytime counts on feeding sites
- Productivity estimated using age-ratios
- Results submitted to IBGRG coordinator by email, either directly or via the I-WeBS coordinator
- Data circulated the following year



Thank you for
listening