

BAT CONSERVATION IRELAND CLG

Annual Report

Summary of activities in 2018



BAT CONSERVATION
IRELAND

2018

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Bat Conservation Ireland, Ulex House, Drumheel, Lisduff, Virginia, Co. Cavan A82XW62

Bat Conservation Ireland CLG

Limited Company by Guarantee

CRO No: 494343

CHY No.: 13016 (Pre-2014)

CRA No.: 20039417

PPS No./Tax Reference No.: 9781345A

Irish Environmental Network and Environmental Pillar Member

Member of The Wheel

Affiliated with BatLife Europe

Bank Accounts

1. Bank of Ireland, Ashbourne, Co. Meath (Day-to-day running bank account)
2. Rabo Direct , Rabo Direct Internation Dublin Branch, Charlemont Place, Dublin 2 (Reserves bank Account)

Company Law Legal Advisors: Reddy Charlton, Solicitors, 12 Fitzwilliam Place, Dublin 2, D02 VN56, Ireland.

Auditors 2018: LHM Casey McGrath Ltd., Chartered Certified Accountants, Statutory Audit Firm, 6 Northbrook Road, Dublin 6, Ireland

Tax Clearance Certificate Notice (2019) Access No: 838778

The business is registered for EORI. The reference is IE9781345A.

Bat Conservation Ireland Company Directors in 2018

Mr Brian Keeley
Dr Chris Peppiatt
Dr Caroline Shiel

Insurance Policies

Bat Conservation Ireland has taken out the following insurances:

- a) Directors & Officers Liability Insurances
- b) Combined Liability Insurance

Our insurance broker is Burke Insurances Ltd., 6 St. Brendan's Road, Woodquay, Galway City.

Funding Acknowledgements

Bat Conservation Ireland would like to acknowledge the following bodies for funding/grants/contracts received in 2018. Table 1 provides further details on these funding / grants / contracts.

1. **NPWS, Department of Culture, Heritage and the Gaeltacht**
 - a. Car-based Bat Monitoring Scheme
 - b. All Ireland Daubenton's Bat Monitoring Scheme
 - c. Brown Long-eared Roost Monitoring Scheme
 - d. Lesser Horseshoe Bat Monitoring Scheme
 - e. BATLAS 2020
 - f. Training Courses
 - g. IEN Biodiversity Week
 - h. Lesser Horseshoe Bat SAC Conservation Objectives
2. **Department of Communications, Climate Action and Environment & IEN**
 - a. IEN Core Funding
 - b. IEN Biodiversity Week Projects
 - c. IEN Consultations
 - d. Capacity Building Fund
3. **Northern Ireland Environment Fund (NIEA)**
 - a. Car-based Bat Monitoring Scheme
 - b. All Ireland Daubenton's Bat Monitoring Scheme
4. **Republic of Ireland County Councils & Voluntary Groups**
 - a. Bat Walks & Talks
 - b. Biodiversity Week
 - c. All Ireland Daubenton's Training Courses
 - d. Heritage Week events
 - e. BATLAS 2020
5. **Northern Ireland County Councils & Voluntary Groups**
 - a. All Ireland Daubenton's Training Courses
 - b. BATLAS 2020

Donations received in 2018 by BC Ireland members, members of the public (through bat walks) and from Tayto Park as part of their Biodiversity fund.

2018 Action Plan

Governance
Review policies on an on-going basis

2018 Action Plan

Irish Bat Monitoring programme 2018-2022
Year 1

Recruit new volunteers
Provide Volunteer Support
Provide Volunteer Training
Provide Volunteer Feedback
Collate results, analysis and report
Prepare and submit climate change scientific manuscript

Targets met for IBM in 2018:
28 30km squares surveyed
>200 waterway sites surveyed
>40 brown long-eared roosts surveyed

BATLAS 2020
Year 4

Contact existing volunteers
Provide Support
Increase Online Support
Provide Feedback
Target field work to fill gaps in coverage
Collate results, analysis and report

EVALUATION OF SUCCESS OF 2018
Complete the following to determine the success of 2018

Attendee Feedback Surveys YES
New Followers of Facebook Accounts YES
No. of Attendees at training courses > 200
Volunteer participation >600
No. of new members 88 in 2018
Achieve targets for Irish Bat Monitoring Scheme YES
No. of media outlets – Radio interviews, Press releases, Social media call outs
Governance – Policy updates YES

Training Courses

Training for Irish Bat Monitoring Programme
Training for Bat Rehabilitators
Training in Basic Bat Identification using Detectors

Fundraise from County Councils - YES for BATLAS 2020
Liaise with Northern Ireland Bat Group and Wildlife Rehabilitation Ireland to provide training for rehab specialists - YES

Council Meetings
Hold at least 4 council meetings in 2018 - YES

Educational Programme

Newsletters (4 produced)
Social Media - Weekly Posts
Media - Press Releases
Bat Walks & Talks
Support Bat Groups
Training as shown above

Fundraise for Biodiversity Week - YES
Organise Bat Group Support Pack - YES
Organise County Representative Pack - YES

Be prepared to take on additional once-off projects in 2018

Table 1: Principal Income sources for 2018.

Funding Body	Name of Programme	Details	Duration
NPWS, Department of Culture, Heritage and the Gaeltacht CONTRACT won by public tender process	Irish Bat Monitoring Programme Reference Code: Contract SPU-CO10-2018 Elements operated in the Republic of Ireland are funded by this contract.	The IBM entails four survey schemes managed by Bat Conservation Ireland: a) Car-based Bat Monitoring Scheme b) All Ireland Daubenton's Bat Waterways Survey c) Brown Long-eared Roost Monitoring Scheme d) Lesser Horseshoe Bat Roost Monitoring Scheme	2018-2022 monitoring years Contract runs from May 2018 to April 2022
Northern Ireland Environment Fund awarded by NIEA, Department of Agriculture GRANT awarded by application	Irish Bat Monitoring Programme File Reference: NEF 2 Elements operated in the Northern Ireland are funded by this grant.	The IBM entails four survey schemes managed by Bat Conservation Ireland: a) Car-based Bat Monitoring Scheme b) All Ireland Daubenton's Bat Waterways Survey	2018 Annual application for grant
NPWS, Department of Culture, Heritage and the Gaeltacht CONTRACT won by public tender process	National Bat Distribution Project (aka BATLAS 2020) Reference code: SPU-C005-2016	BATLAS 2020 – survey of 10km squares across the Republic of Ireland.	2016-2018 survey years Contract runs from May 2016 to March 2019
Irish Environmental Network (IEN) Funding through activities from NPWS, Department of Culture, Heritage and the Gaeltacht and Department of Communications, Climate Action and Environment.	- Core Funding - Biodiversity Week - Expense Refund for specific activities	Core Funding Application for 2017 – paid in 2018 Biodiversity Week Funding for bat events Expense refund for the work completed by Donna Mullen, on behalf of Bat Conservation Ireland	Bat Conservation Ireland is a member of the IEN and applied for funding for projects in 2018. Annual funding
NPWS, Department of Culture, Heritage and the Gaeltacht CONTRACT won by public tender process	Lesser Horseshoe Bat Project Reference No. SPU C017-2017	Preparation of Conservation Objectives for Lesser Horseshoe Bat SACs	Once-off project, completed spring 2018

1. What is Bat Conservation Ireland?

Bat Conservation Ireland is a company limited by guarantee with charitable tax exemption status. It is an NGO dedicated to the conservation of bats, which officially came into existence in 2004 and now acts as the national umbrella group for all county bat groups. Bat Conservation Ireland is affiliated with BATLIFE Europe and works closely with many other environmental NGOs in Ireland and Europe, The Heritage Council, Local Authorities, NIEA (Northern Ireland Environment Agency), and NPWS (National Parks and Wildlife Service) Conservation Rangers. Bat Conservation Ireland manages the Irish Bat Monitoring Programme with funding and assistance of NPWS (Department of Culture, Heritage and the Gaeltacht) and NIEA (UK Department of Agriculture, Environment and Rural Affairs). We provide information on the conservation of bats and assist the general public in their needs in relation to bats. The group is also involved in providing training in the use of bat detectors, erection and management of bat box scheme, biometrics and bat handling through organising workshops. The erection of bat boxes, field surveys and the collection of data on bat distribution in the country are on-going group projects, particularly in association with other local bat groups and tidy town groups.

“The main object for which the company is established is the advancement of education and the promotion of the conservation and study of bats on the island of Ireland and elsewhere in the world.” as stated in the constitution of Bat Conservation Ireland.

1. disseminating education materials
2. giving talks and leading bat walks
3. carry out nationwide surveys and monitoring of bats
4. acting as an umbrella group for local bat groups
5. providing a central repository for bat records.

In 2018, these subsidiary objectives were achieved by the following (greater detail on all of these activities is provided in the main body of the report).

1.1 Disseminating education materials

Publishing scientific papers as part of our conservation policy and education:

One scientific paper was submitted in October 2018. We are currently waiting on a decision on the following manuscript which shows the results of an analysis of climate in relation to data collected by the car-based bat monitoring scheme:

Roche N., Langton S., Aughney, Lynn D. and Marnell F. (Submitted). Elucidating the consequences of a warming climate for common bat species in north-western Europe.

In addition, collaboration was also undertaken with university research and the following paper was accepted in April 2019 in relation to research completed in 2016-2018:

Carlier, J., Moran, J., Aughney, T., Roche, N., Effects of greenway development on functional connectivity for bats. *Global Ecology and Conservation* (2019).
doi: <https://doi.org/10.1016/j.gecco.2019.e00613>.

Producing newsletters to provide up to date information on BCireland news and news from bat groups and other bat organisations around the world.

In 2018, four newsletters were distributed to members and volunteers – January, February, March and December editions.

Training Courses are a vital and extremely important educational tool. BCireland provides training for members, volunteers and on request for particular topics by bat groups.

Training is provided through the Irish Bat Monitoring Scheme and bat group training in 2018. In addition, BCireland organised a Bat Detector Workshop and a Bat Rehabilitation training course. A total of 31 training courses were provided in 2018.

Bat Talks & Walks are another vital component to BCireland's education policy and is a great tool to reduce the negative image of bats as nocturnal mammals.

Annually, all BCireland committee members and local bat groups undertake an array of bat walks and bat talks across the island as part of our Education Programme. Bat walks and talks are very popular and provide a great source of introduction to the wonderful world of bats. Over 50 bat walks and talks were hosted in 2018.

Tidy Town Surveys provide BCireland an opportunity to encourage members of the public to join our monitoring schemes and to address bat conservation in their wildlife section of the TT application form.

BCireland liaised with Kildare BatGroup with surveys for local Tidy Town Groups. Our guidelines for Tidy Town groups were made available on our website and through email on request and a number of Tidy Town groups participated in the All Ireland Daubenton's bat Waterways Survey. Bat Box schemes set up by Tidy Town groups were registered on the BCireland database and BCireland checked a number of bat box schemes. Additional surveys was undertaken by Kildare Bat Group to facilitate bat conservation at a local level.

Providing bat talks on specific topics.

Niamh Roche presented results from 15+ years of the Irish Bat Monitoring Programme at the National Parks and Wildlife Staff Conference in Kilkenny in April.

As part of keeping our members informed of our research, Dr Emma Boston gave a presentation on Woodland Bats and a workshop on how to identify their calls to the Kildare Bat Group in spring 2018.

Social Media is an important source of education and a tool to disseminate information on Irish bat populations. Currently BCireland has three Facebook pages and one Twitter account.

BCireland has a continued online presence through the websites (www.batconservationireland.org, www.learnaboutbats.com), Facebook pages and Twitter account. In the lead up to Hallowe'en we

stepped up promotion of the Learn About Bats website and as a result the website was used by children's groups and schools from as far afield as Florida USA.

Media is another important source of education and a tool to disseminate information on Irish bat populations.

BCIreland undertook a 3 radio interviews and 1 magazine article in 2018 principally to advertise the training courses and to chat about bats, in general. We produced 2 press releases, produced 1 article for publication (NBDC Biodiversity Newsletter) and submitted two scientific papers.

Information Stands provide BCIreland an opportunity to engage with members of the public and to encourage members and volunteers to assist BCIreland with such information stands.

In 2018, BCIreland provided material for a stand undertaken by the Kildare Bat Group at the Natural History Museum while material was provided for displays in Ballycroy National Park and Glenveagh National Park.

Bat Group Surveys provides BCIreland an opportunity to work closely with bat groups to complete surveys in their local areas and to increase their skill level in relation to detecting and identifying bat usage in bat boxes.

As part of our support for bat groups, BCIreland provided guidance, equipment and fieldwork support for Kildare Bat Group, Galway Bat Group, Clare Bat Group, Cavan Bat Group, Dublin Bat Group, Waterford Bat Group, Meath Bat Group, Limerick Bat Group, Mayo Bat Group and Midland Bat Group in 2018. Northern Ireland Bat Group provided guidance in the relation to setting up the Donegal Bat Group.

1.2 Giving talks and leading bat walks

In 2018 BCIreland provided or facilitate a large number of bat walks and talks across the island while additional bat walks were provided by the individual bat groups (a list is given in the appendices).

- a) Belvedere House & Gardens
Annually, BCIreland provide 2 bat walks & talks for Belvedere House & Gardens in Mullingar, Co. Westmeath.
- b) Biodiversity Week
A series of bat walks was organised for Biodiversity week.
- c) Heritage Week
A series of bat walks was organised for Heritage week.
- d) Working with Local Authorities
BCIreland provided bat walks as part of wildlife educational plans for county councils.
- e) Working with local groups
BCIreland provided bat walks as part of wildlife educational plans for Tidy Towns, Scout and Cub groups, other NGOs, community events, festivals to name but a few.
- f) Bat Group walks and talks
All bat groups undertake additional bat talks and walks.

These bat walks and talks are events geared towards members of the public and are fun family orientated events to introduce people to the wonderful acoustic world of bats. They are evening/dusk events and offer a chance of people to use a bat detector and watch bats in flying in their natural habitats.

1.3 Carry out nationwide surveys and monitoring of bats

- a) All Ireland Daubenton's Bat Waterways Survey
- b) Car-based Bat Monitoring Scheme
- c) Brown long-eared Roost Monitoring Scheme
- d) Lesser horseshoe Roost Monitoring Scheme
- e) BATLAS 2020 – systematic survey of 10km squares across the island.
- f) Bat Box Monitoring Scheme – maintains, checks and registration of bat box scheme across the island.
- g) Training Courses – these events are held in areas where new bat distribution data is required.
- h) Tidy Town Surveys – support for Kildare Bat Group in their Tidy Town Surveys.
- i) Supporting research through the BC Ireland Grant Scheme 2018.

BC Ireland is currently resurveying the entire island in 2010-2019 to establish the distribution of our nine resident bat species. Under the six projects above, this data is annually collected and logged onto the BC Ireland Database in order to review the status of Irish bat populations every 10 years. These six schemes also provide a tiered system of training for those volunteers interested in working with bat conservation.

BATLAS 2020 is an all-island bat distributional survey. BC Ireland believes that in order to provide sound policy on the conservation of Irish bat populations we need to know their status and national distributions. BC Ireland undertook the first BATLAS in 2008 and 2009 (named BATLAS 2010) and combined with all of the data collated in 2000-2009 produced the book Irish Bats in the 21st Century to disseminate this important information. BC Ireland aims to repeat this process every 10 years.

In 2018, BC Ireland undertook the 3rd year of the BATLAS 2020. Training was a vital component of BATLAS 2020 in 2016 and 2017. In 2017 a total of 27 training courses were provided for FREE across the island. However, we found in 2017 that intensive training did not result in large numbers of squares being covered by volunteers. Therefore, in 2018 we stepped back from providing training courses for this scheme and concentrated our resources on filling in gaps in data coverage and covering the costs of paid surveyors.

1.4 Acting as an umbrella group for local bat groups

As part of BC Ireland Strategy Plan (2012-2015), it is the aim the group to establish one new bat group per year and support all bat groups with training, equipment, educational materials and funding. In 2018, the main focus of support was provided for all existing bat groups, where possible. Two new groups were established in 2018: Donegal in liaison with Northern Ireland Bat Group and Mayo in liaison with Bat Conservation Ireland. Additional work was laid in relation to the Wicklow Bat Group.

In 2016, this Strategy Plan was reviewed in preparation to undertake the 2017-2021 Plan. One of the principal actions for 2018 was to increase support for members and volunteers. In February 2018 we

hosted a Volunteer & Members Day to bring discuss with our members what is needed to bring BCireland forward. These actions will be incorporated into our Strategy Plan.

BCireland provides Public Liability Insurance for all bat groups affiliated with the organisation. This is undertaken to reduce bat group costs. Through the BCireland Grant Scheme 2018, funding was provided for bat groups to undertake bat related events. Bat groups are offered support in relation to event organisation, advertisement and profiling their work in the newsletter, The Natterer.

1.5 Providing a central repository for bat records.

The BCireland online database is the largest repository of bat data on the island. This database holds in excess of 50,000 bat records and provides baseline data to inform policies on bat conservation. BCireland works with the National Biodiversity Data Centre (NBDC, Waterford) in order to display the data and allow public querying of the data. Alternatively, people can query the data through BCireland.

This data also provided the foundation for the book “Irish Bats in the 21st Century” (on-sale in 2018) and the 2000-2009 dataset acts as a foundation for BATLAS 2020.

These data were shared in 2016 with NBDC in preparation for the Atlas of Mammals in Ireland 2010-2015 which was launched in 2017. In 2018, BCireland continued to collate data and provide access to such data for public and consultancy queries.

1.6 Bat Conservation Ireland Council

Bat Conservation Ireland is an active member of the Irish Environmental Network (IEN), which provides core-funding, training opportunities, Biodiversity Week funding and representation for BCIreland on the Environmental Pillar. Donna Mullen, BCIreland representative, was also a Director of the IEN (rotational director, now retired) and on the Environmental Law Group of the Environmental Pillar striving towards constitutional change to have the environment referenced.

In January 2011 Bat Conservation Ireland became a Company Limited by Guarantee. It has had charitable tax exemption since 2004. Company Directors are Dr Caroline Shiel, Dr Chris Peppiatt and Mr Brian Keeley. Mr Brian Keeley is the chairperson.

Bat Conservation Ireland “Council of Management” in 2018

Mr. Brian Keeley	Chairperson	Director
Dr Chris Peppiatt	Treasurer	Director
Dr Caroline Shiel		Director
Mr. Paul Scott (Dublin Bat Group)		Council Member
Ms. Faith Wilson		Council Member (retired in Dec 2018)
Ms. Anna Collins (Kildare Bat Group)		Council Member
Mr. Andrew Fenner (Midlands Bat Group)		Council Member
Mr. John Hynes		Council Member (retired in Dec 2018)
Mr. John Curtin (Galway Bat Group)		Council Member
Dr Emma Boston (Northern Ireland Bat Group)		Council Member (new in Dec 2018)

Principal Contractors

Dr Tina Aughney	Temporary Company Secretary & Administration / Monitoring
Dr Niamh Roche	Administration / Monitoring
Ms. Donna Mullen	IEN Representative, BATLIFE Europe Trustee
Dr Simon Pickett	BATLAS 2020 All Ireland Co-ordinator

Bat Groups and Principal person of contact:

Galway Bat Group	Mr. Raymond Stephens
Kildare Bat Group	Ms. Anna Collins
Dublin Bat Group	Mr. Paul Scott
Cork County Bat Group	Mr. Conor Kelleher
Midland Bat Group	Áine & Andrew Fenner
Waterford Bat Group	Mr. Andrew Harrington
Meath Bat Group	Ms. Donna Mullen
Cavan Bat Group	Dr Tina Aughney
Northern Ireland Bat Group	Ms Karen Healy

Clare Bat Group	Dr Sinead Biggane
Wicklow Bat Group	Justin Ivory
Limerick Bat Group	Tanya Slattery
Donegal Bat Group	Ms Karen Healy
Mayo Bat Group	Mary Roberts

BCIreland held 4 Council Meetings (and numerous additional meetings in relation to proposed hiring of an administrator) and one AGM and one EGM in 2018. The principal meetings were held on the following dates:

EGM February 3rd 2018

Annebrook House Hotel, Austin Friar's Street, Mullingar, County Westmeath for the purpose of considering and, if thought fit, passing the following resolution as a special resolution.

"That, in compliance with section 1187 of the Companies Act 2014 and Part 18 of the said Act, the constitution in the form circulated to the members with the Notice of EGM be and is hereby adopted as the constitution of the Company in substitution for and to the exclusion of the existing constitution of the Company."

Attended by: Brian Keeley, John Curtin, John Hynes, Harm Deenen, Richella Duggan, Ben Quinn, Caroline Shiel, Niamh Roche, Chris Peppiatt, Paul Scott, Andrew Fenner, Faith Wilson, Mary Roberts, Tanya Slattery, Anna Collins, Shane Brien, Karen Healy, Simon Pickett and Emma Boston. (19 persons)

Proxy Votes from: Kate McAney, Ruth Hannify, James L. O'Connell, Denies O'Meara, Andrew Harrington, Peter O'Connor and Malachy Mangan.

Apologies from: Aine Lynch, Kevin Delahunty, Barry Walls, Claire Walsh, Sonja Moore and Caroline MacDonald.

Council Meeting February 3rd 2018

Annebrook House Hotel, Austin Friar's Street, Mullingar, County Westmeath

AGM 15th December 2018

Athlone Springs Hotel, Monksland, Athlone, Co. Roscommon.

Attended by: Anna Collins, Andrew Fenner, Aine Fenner, Niamh Roche, Mary Roberts, Emma Boston, Ruth Hannify, Faith Wilson, Tina Aughney, Brian Keeley, Donna Mullen, Chris Peppiatt and John Curtin.

Apologies from: Caroline Shiel, Kate McAney, Denise O' Meara, Sean Meehan, Ben Quinn, Maeve Riley, Simon Pickett, Ger O' Donohoe, Paddy Sleeman, Jay Cornish, Sonya , Harm Deenen, Enda Mullen, Barbara McInerney, Peter O'Connor, Tanya Slattery,

Proxy forms from: Denise O' Meara, Sean Meehan, Ben Quinn, Maeve Riley, Simon Pickett, Ger O' Donohoe and Paddy Sleeman.

Council Meeting 15th December 2018

Athlone Springs Hotel, Monksland, Athlone, Co. Roscommon.

1.7 Ireland's Bat Populations

Bats constitute a large proportion of the mammalian biodiversity in Ireland. Nine species of bat are known to be resident in Ireland and form almost one third of Ireland's land mammal fauna. Bats are a species rich group widely distributed throughout the range of habitat types in the Irish landscape.

Irish bats are protected under domestic and EU legislation. Under the Republic of Ireland's Wildlife Act (1976) and Wildlife (Amendment) Act (2000) it is an offence to intentionally harm a bat or disturb its resting place. Bats in Northern Ireland are similarly protected under the Conservation (Natural Habitats, etc.) Regulations (Northern Ireland) 1995 (as amended). The EU Habitats Directive (92/43/EEC) lists all Irish bat species in Annex IV and one Irish species, the lesser horseshoe bat (*Rhinolophus hipposideros*), in Annex II. Annex II includes animal species of community interest whose conservation requires the designation of Special Areas of Conservation (SACs) because they are, for example, endangered, rare, vulnerable or endemic. Annex IV lists various species that require strict protection. Article 11 of the Habitats Directive requires member states to monitor all species listed in the Habitats Directive and Article 17 requires States to report to the EU on the findings of monitoring schemes. Ireland and the UK are also signatories to a number of conservation agreements pertaining to bats such as the Bern and Bonn Conventions. The Agreement on the Conservation of Populations of European Bats (EUROBATS) is an agreement under the Bonn Convention and Republic of Ireland and the UK are two of the 32 signatories. The Agreement has an Action Plan with priorities for implementation. One of the current priorities is to produce guidelines on standardised bat monitoring methods across Europe. Battersby (2010), in a recent EUROBATS publication outlines various methods for surveillance and monitoring of bats.

The Red Data List for Mammals in Ireland (Marnell *et al.*, 2009) lists most of the bat species, including common pipistrelle (*Pipistrellus pipistrellus*), soprano pipistrelle (*P. pygmaeus*), Daubenton's bat (*Myotis daubentonii*) and brown long-eared bat (*Plecotus auritus*) as Least Concern. The Leisler's bat (*Nyctalus leisleri*), is, however, considered Near Threatened. It has been assigned this threat status because Ireland is considered a world stronghold for the species (Mitchell-Jones *et al.*, 1999). The status of the European Leisler's bat population is Least Concern (Temple and Terry 2007). This species is still, however, infrequent in the rest of Europe compared with Ireland where it is quite common.

2. BC Ireland Council, Members & Volunteers – 2018 Activity Summary

Bat Conservation Ireland strives to meet the five objectives of the organisation on an annual basis. This is only possible because of the voluntary council, members and volunteer surveyors. This report is, in essence, to celebrate the achievements of all of the people that make a contribution to the running of this organisation.

On 3rd February 2018 at Annebrook House Hotel, Austin Friar's Street, Mullingar, County Westmeath, council members, members and volunteers met for an afternoon of discussion to the steps forward to increase the profile of the organisation, the support for members, bat groups and volunteers and to collate ideas on how increase the conservation scope of Ireland's bats. BC Ireland would like to build on the success of previous years, including 2017, and keep striving forward.



Plate 2.1 The Members and Volunteers meeting in February 2019, Mullingar

In 2018, there were **268 paid members of Bat Conservation Ireland. This was an increase of 47 members from 2017.** The online payments system was set up to allow payments for workshops and events which vastly increases the ease with which bookings can be made.

The remainder of Section 2 will summarise all of the activities of Bat Conservation Ireland in 2018. These activities will be further discussed, where necessary, under the remaining sections of the report.

2.1 Training Courses in 2018

There is a lot to learn about bats and we have lots of knowledge to share. Training courses are an essential element to achieve the five objectives of the organisation. In 2018 31 training courses were organised by Bat Conservation Ireland and these are presented in Table 2.1.

Table 2.1: Training Courses organised by Bat Conservation Ireland in 2017

No.	Type	Location	Date	Trainer
1	Daubenton's Bat	Belvoir, Belfast, Northern Ireland	In House	Lagan Valley Volunteers
2	Daubenton's Bat	Ballinderry Rivers Trust, Northern Ireland	25/7/18	Tina Aughney
3	Daubenton's Bat	Fullerton Park, Antrim, Northern Ireland	24/7/18	Tina Aughney
4	Daubenton's Bat	Doohamlet, Monaghan	23/7/18	Tina Aughney
5	Daubenton's Bat	Cong, Co. Mayo	20/7/18	Tina Aughney
6	Daubenton's Bat	Ballinasloe, Co. Galway	19/7/18	Tina Aughney
7	Daubenton's Bat	Mucklagh, Co. Offaly	15/7/18	Tina Aughney
8	Daubenton's Bat	Askeaton, Co. Limerick	11/7/18	Tina Aughney
9	Daubenton's Bat	South Pole Inn, Co. Kerry	10/7/18	Tina Aughney
10	Daubenton's Bat	Balbriggan, Co. Dublin	5/7/18	Tina Aughney
11	Daubenton's Bat	Newtonards, Northern Ireland	22/6/18	Tina Aughney
12	Car-based	Killarney, Co. Kerry	Jul-18	Niamh Roche
13	Car-based	Cork City	Jul-18	Niamh Roche
14	Car-based	Cabra Wetlands, Tipperary	Jul-18	Niamh Roche
15	Car-based	Tullamore Co Offaly	Jul-18	Niamh Roche
16	Car-based	Santry, Co. Dublin	Jul-18	Niamh Roche
17	Car-based	Navan, Co. Meath	Jul-18	Niamh Roche
18	Car-based	King St North, Dublin	Jul-18	Niamh Roche
19	Car-based	Wexford Wildfowl Reserve	Jul-18	Niamh Roche
20	Bat Detector Workshop Bat Rehabilitation Training	Fancroft Mill, Roscrea, Tipperary	30/6 to 1/7/18	Tina Aughney, Anna Collins, Niamh Roche Northern Ireland Bat Group, Wildlife Rehabilitation
21	Course	Hodson Bay Hotel, Athlone	21/4/18	Ireland
22	BATLAS Training	Limerick Library, Limerick	8/5/18	Tanya Slattery
23	BATLAS Training	Arranmore Island, Co. Donegal	25/8/18	Simon Pickett
24	BLE Training	Wicklow Team 1	28/5/18	Tina Aughney
25	BLE Training	Wicklow Team 2	28/5/18	Tina Aughney
26	BLE Training	Wicklow Team 3	4/7/18	Tina Aughney
27	BLE Training	Galway Team 1	11/6/18	Tina Aughney
28	BLE Training	Galway Team 1	27/8/18	Tina Aughney
29	BLE Training	Clare Team	11/8/18	Tina Aughney
30	BLE Training	Roscommon Team	22/5/18	Tina Aughney
31	Bat ID & Tree Roost Course	Kildare Bat Group	24/2/18	Tina Aughney

Training was provided in 18 counties across the island. The majority of the courses organised were to train citizen scientists for the Irish Bat Monitoring Programme. These will be discussed further in Section 3. In 2018, BCIreland ran a Bat Detector Workshop on June 30th and July 1st, as requested by members. This was held in the beautiful environs of Fancroft Mill, Roscrea, Co. Tipperary. We would like to thank the owners Irene and Marcus Sweeney for their incredible hospitality and support in the running of this workshop.

The course objectives were:

- To provide an overview of techniques used in identification of bats in flight
- Field identification of bats using tuneable detectors
- Introduce the full spectrum detector models and sonogram analysis software

This was an intensive field-based course and comprised of a day of talks followed by overnight field work in the grounds of the mill. A total of 20 people attended the course.

In April 2018, BCIreland organised a one day bat rehabilitation workshop in conjunction with Northern Ireland Bat Group and Wildlife Rehabilitation Ireland. This workshop was aimed at individuals who care for grounded and injured bats such as wildlife rehabilitators and those working in veterinary services. The course was presented by Karen Healy of Northern Ireland Bat Group, who has considerable experience in this field from her work with the Northern Ireland Bat Ambulance Service.

All of our monitoring training courses were free to attend. The number of free courses was due to funding through the Irish Bat Monitoring Programme.



Plate 2.2: A selection of photos from BCIreland workshops and training courses held across Ireland in 2018



Plate 2.3 Selection of photographs from the Kildare Bat Group Training Day (24th February 2018).

2.2. Volunteer Participation in 2018

Over 600 volunteers participated in Bat Conservation Ireland’s activities in 2018. These volunteers surveyed 10km squares for BATLAS 2020, surveyed rivers and canals for Daubenton’s bats, drove around logging bats as part of the Car-based bat monitoring scheme, counted brown long-eared bats emerging from roosts, organised bat walks and talks in their local area, inspected bat boxes, assisted tidy town groups with bat surveys and manned information stands at biodiversity events. Our volunteers are located in every county on the island and, as a result of their dedication, Bat Conservation Ireland can map the distribution of Ireland’s bats, monitor the island’s bat populations and continue to spread the message of conservation for Ireland’s bats.

In 2018 144 individuals signed up for Temporary Volunteer Membership in order to ensure they are covered for their activities under BCireland’s insurance policy.

2.3 Volunteer Support in 2018

In addition to training courses Bat Conservation Ireland also loans bat detectors to surveyors. In 2018 Bat Conservation Ireland purchased heterodyne bat detectors for volunteers.

Volunteers setting up bat groups or acting as county representatives are also provided with a “Starter Pack” which consists of heterodyne bat detectors, literature, hi-vis vest and power point presentation of “Bats in Ireland” talk. In 2018, volunteers were set up as the County Mayo Representative while the Limerick Bat Group also got up and running. The Northern Ireland Bat Group started the Donegal Bat Group with a series of talks and group support.



Plate 2.4: A selection of photos from our surveyors in action in 2018.

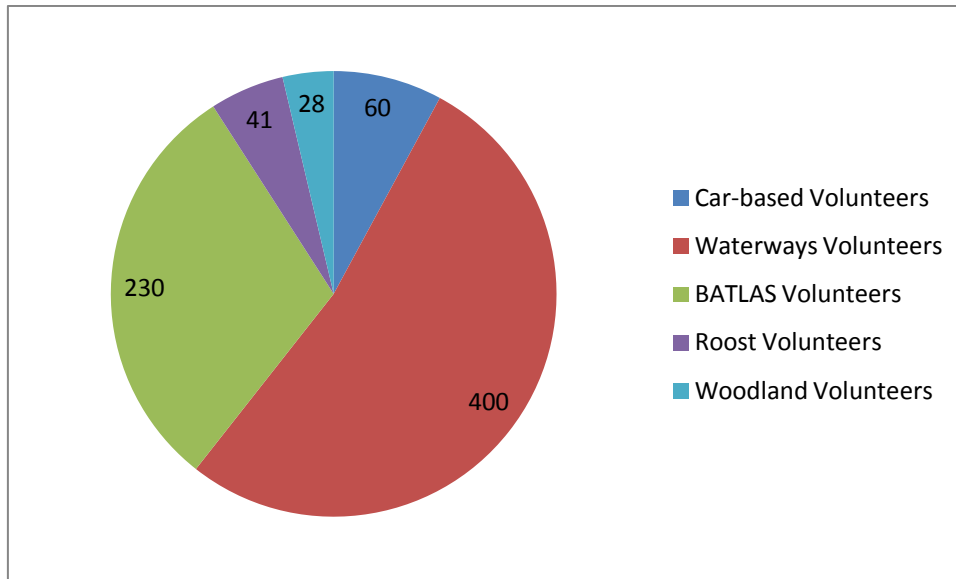


Figure 2.2: Number of volunteers that participated in bat monitoring and BATLAS 2020 in 2018. Note: many volunteers participate in more than one scheme.

2.4 *Bat Events in 2018*

In 2018 Bat Conservation Ireland organised, funded or hosted an array of bat related events across the island. A total of 83 events were undertaken and these comprised of bat walks & talks, bat box inspections, media interviews, research projects, bat surveys for tidy town groups, house visits, conferences and exhibitions to name but a few. These are in addition to all of the training courses listed in Section 2.1. A list of all of our events is presented in Appendix 3.

2.5 *Additional Bat Conservation Ireland Activities in 2018*

In 2018, Bat Conservation Ireland Council Members and Contractors undertook additional activities to those listed in Section 2.1 and Section 2.4. These comprised of attending meetings, workshops organised by other environmental NGOs, IEN meetings, conferences, training events, information days and council meetings to name but a few. These are important for the running of the organisation, up skilling, furthering the conservation needs of bats in Ireland and abroad, and networking. A list of events is provided in the appendices.

2.6 *BATLINE & Websites*

In 2018 Bat Conservation Ireland continued to provide a BATLINE services through email, telephone and social media with in excess of 500 queries dealt with along with a number of house visits. In addition, the two websites provide extensive information for members of the public on bats:

www.batconservationireland.org

www.learnaboutbats.com

There is also a facility for members of the public to log their “Bat Sightings” through the main website and in 2018 over 100 sightings were received

3 Monitoring & Mapping Ireland's Bat Populations in 2018



Dr Niamh Roche

Dr Tina Aughney

Dr Simon Pickett

3.1 Introduction

The Irish Bat Monitoring Programme entails four monitoring schemes. In 2018 BATLAS 2020 was into Year 3 of the programme to map the distribution of the target species across the island.

Despite high levels of legal protection for all species, until 2003 there was no systematic monitoring of any species apart from the lesser horseshoe bat in Ireland. To redress this imbalance The Car-based Bat Monitoring Scheme was first piloted in 2003 and targets the two most abundant pipistrelle species (common and soprano pipistrelles) and Leisler's bat. These species are relatively easy to detect and distinguish from each other on the basis of echolocation calls. The car based survey makes use of a broadband bat detector which picks up a range of ultrasound which can be recorded in the field and analysed post-survey. This method therefore allows survey work to be carried out by individuals with little or no experience in bat identification since identification is completed post survey work. Nonetheless, all surveyors are fully trained in carrying out the survey method, which can be tricky to implement initially, and are provided with a full set of equipment in order to complete the survey. In this way, results are standardised across the island. We are currently undergoing an equipment upgrade to a new detector. This means that many surveyors in the past couple of years have been using two sets of equipment simultaneously so that we can ensure the datasets from the old and new equipment are fully compatible.

The Car-based Bat Monitoring Scheme (managed by Dr Niamh Roche) was followed in 2006 by the All Ireland Daubenton's Bat Waterways Monitoring Scheme (managed by Dr Tina Aughney). This scheme follows a survey methodology devised by the Bat Conservation Trust (BCT UK). Narrow band, heterodyne detectors are used so volunteers who conduct the survey are trained in the identification of Daubenton's bat prior to field work. Surveyors count the number 'bat passes' of this bat species for 4 minutes at each of the ten fixed points on linear waterways. The onset of this scheme was a very significant development in bat monitoring here since it represented the first large-scale recruitment of members of the Irish public to bat conservation-related work.

More recently, in 2007, the Brown Long-eared Bat Roost Monitoring Scheme (Managed by Dr Tina Aughney) was piloted and established. This project concentrates on counts of brown long-eared bats at their roosts and is conducted by individuals with a greater level of experience in bat identification than is necessary for the waterway surveys or car-based surveys. The roost survey protocol involves at least two counts per annum (mid-May to August) using three potential survey methods depending on the structure, access and location of bats within, and emerging from, the roost.

In 2013 Bat Conservation Ireland won a contract with NPWS to manage and administer the Lesser Horseshoe Bat Monitoring database (managed by Dr Niamh Roche). This involves liaising with local NPWS and Vincent Wildlife Trust (VWT) staff who conduct counts at lesser horseshoe bat sites in the west of Ireland in summer and in winter. BCIreland gathers the data, ensures it is entered into the database and carries out trend and other analysis on it. This monitoring scheme was originally

established (by the NPWS) in the late 1980s for some winter sites while counts at summer sites started in the early 1990s.

The Car-Based Bat Monitoring Scheme and All Ireland Daubenton's Bat Waterway surveys are all-Ireland schemes. The Brown Long-eared Bat Roost Monitoring has, so far, been based in the Republic of Ireland only and lesser horseshoe bat only occurs in the Republic of Ireland. Regular monitoring under BC Ireland management is, therefore, in process for six of the Annex IV bat species for the Republic of Ireland, and for four species in Northern Ireland.

In 2018 Bat Conservation Ireland was successful in their tender bid for the operation of the Irish Bat Monitoring Scheme 2018-2022. As a consequence the organisation currently manages all four monitoring schemes (Car-Based Bat Monitoring Scheme, All Ireland Daubenton's Bat Waterways Scheme, Brown Long-eared Roost Monitoring Scheme and Lesser Horseshoe Bat Database) in the Republic of Ireland, and the first two schemes in Northern Ireland.

In 2016 BC Ireland was successful in its tender for BATLAS 2020 (2016-2018) in the Republic of Ireland (managed by Dr Simon Pickett).

The methodology for BATLAS 2020 was piloted and fine-tuned in 2015. The new methodology was introduced for the 2016 survey season along with the development of the survey as an online survey where volunteers register their interest, choose their 10km squares and report their results all through the BC Ireland website. This was developed by Dr Simon Pickett and continued to be in operation in 2018. This is a link to the BATLAS 2020 section on the website:

<https://www.batconservationireland.org/what-we-do/monitoring-distribution-projects/batlas>

3.2 Citizen Scientist Bat Surveyors 2018

The schemes described above primarily rely on volunteers to complete surveys, thus providing BC Ireland with the opportunity to train over 400 volunteers annually. Without volunteers, BC Ireland could not monitor Ireland's bat populations or map their distribution and therefore BC Ireland is greatly in debt to Irish citizen scientists who gladly give up their time to complete surveys. In any given summer season there are over 600 volunteers participating in the numerous schemes managed by BC Ireland.

Training is provided for volunteers in a tiered manner, allowing volunteers to participate in schemes according to their level of expertise. Participation in the All Ireland Daubenton's Bat Waterways Survey is the first step for novice volunteers whereby, once completed, each surveyor can identify one species of bat, Daubenton's bat, in flight over waterways. Training consists of an evening lecture followed by field work after dusk.

Once surveyors have expressed an interest in further developing their skills they can participate in training and workshops for other monitoring schemes and BATLAS 2020. Volunteers are also encouraged to join their local bat group to gain further experience. In 2018, a total of 29 training courses were organised across the island, the majority of these were for Irish Bat Monitoring Programme surveys (n=27).

3.2.1 Training Courses & Support Material for Volunteers in 2018

A total of 27 courses were organised for volunteers participating in the Irish Bat Monitoring Programme in 2018: Car-based Bat Monitoring Scheme (n=8 courses); All Ireland Daubenton's Bat Waterways

Survey (n=12 courses); Brown Long-eared Roost Monitoring (n=7 training surveys) – See Figure 3.1. Two training courses for BATLAS 2020 were organised in 2018. Training for the All Ireland Daubenton’s Bat Waterways Survey was organised in locations to attract new volunteers. These courses were advertised on the Bat Conservation Ireland website, Facebook pages and emails to members and volunteers. Where possible, advertisements were also run in local newspapers. Local communities or groups that co-hosted the training events also advertised events in their local area. Posters were produced for each training courses (an example of which is shown below: Figure 3.2). All other training courses for monitoring were organised for specific volunteer teams.

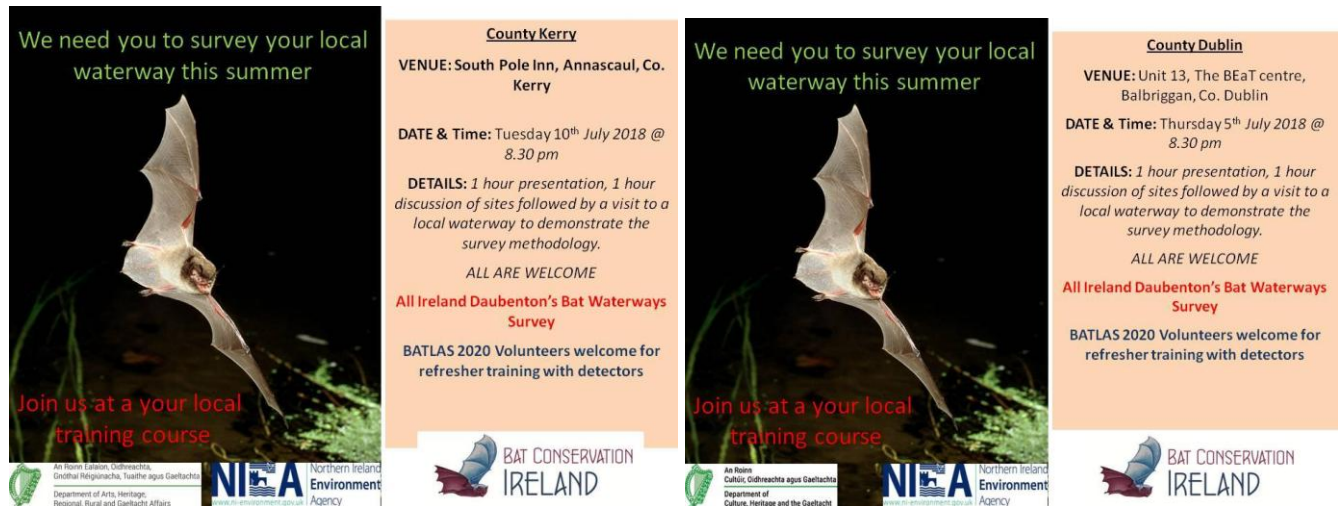


Figure 3.2: Examples of advertisement posters for training courses in 2018.

Support Material

As part of on-going support for volunteers, a bat call library was set up on the Bat Conservation Ireland website:

<https://www.batconservationireland.org/what-we-do/monitoring-distribution-projects/batlas/batlas-training-materials>

The BatConservation Ireland YouTube Channel (name BatConservation Ireland – please note that there is no space between Bat and Conservation) which was set up five years ago, continues to host training videos for volunteers.

YouTube

BatConservation Ireland Videos Play

Uploads

Daubenton's Bat Training Video
144 views • 6 months ago

Brown Long-eared Bat Roost Survey
274 views • 10 months ago

Bat Conservation Ireland BATLAS 2020 - instructional video for ...
107 views • 10 months ago

Car Bat Training 2 Part 2
72 views • 4 years ago

Car Bat Training 2 Part 1
85 views • 4 years ago

Car Bat Training 1
139 views • 4 years ago

Figure 3.3. Screen shot of the Bat Conservation Ireland Youtube Channel depicting all six training videos.

3.3 Irish Bat Monitoring Programme in 2018



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



Department of
**Agriculture, Environment
and Rural Affairs**
www.daera-ni.gov.uk

3.3.1 Car-based Bat Monitoring Scheme

This scheme has been running 15 years and the 28x 30km squares are fixed and surveyed annually by volunteer teams. Each 30km square has 15 x 1.6km transects which are shown in Figure 3.4.

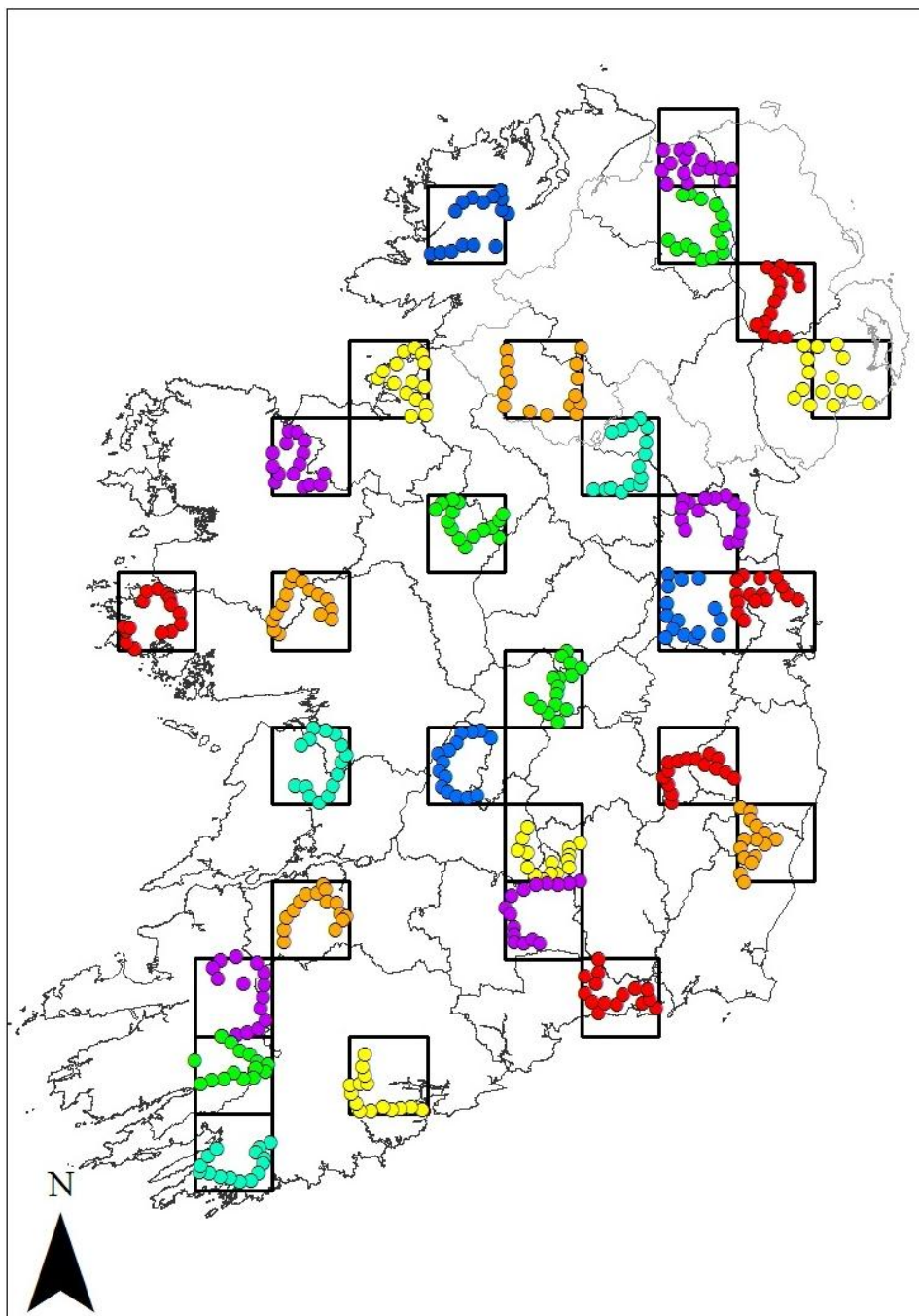


Figure 3.4: Location of 30km Survey Squares across the island.

For the Car-Based Bat Monitoring Scheme 60 individuals participated in surveys of 28 squares around the island (Figure 3.6). Training for a new bat detector system for the survey – Batlogger M was provided in 2018 for six teams in different localities of the island. This extended the trial of this detector to 17 teams in conjunction with the traditional detector and smart phone system. Data from 52 surveys was available to contribute to bat species trend modelling. Over 3,980 bats were recorded, of which over 46% were common pipistrelles. The soprano pipistrelle was second most frequently recorded and Leisler's the third most common.

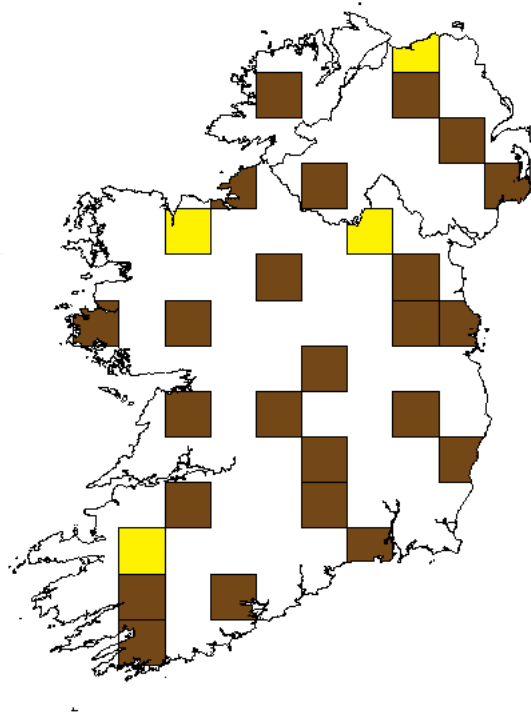


Figure 3.5: Location of 30km Survey Squares. Brown squares were surveyed twice in 2018, yellow squares were surveyed once.

Leisler's bats and soprano pipistrelles accounted for 15% and 25% of the total bat encounters, respectively, in 2018. Twelve percent of all encounters were 'Pipistrelles unknown' that could be either soprano or common. Nathusius' pipistrelles, *Myotis* species and brown long-eared bats were encountered, as in previous years, in very low numbers.

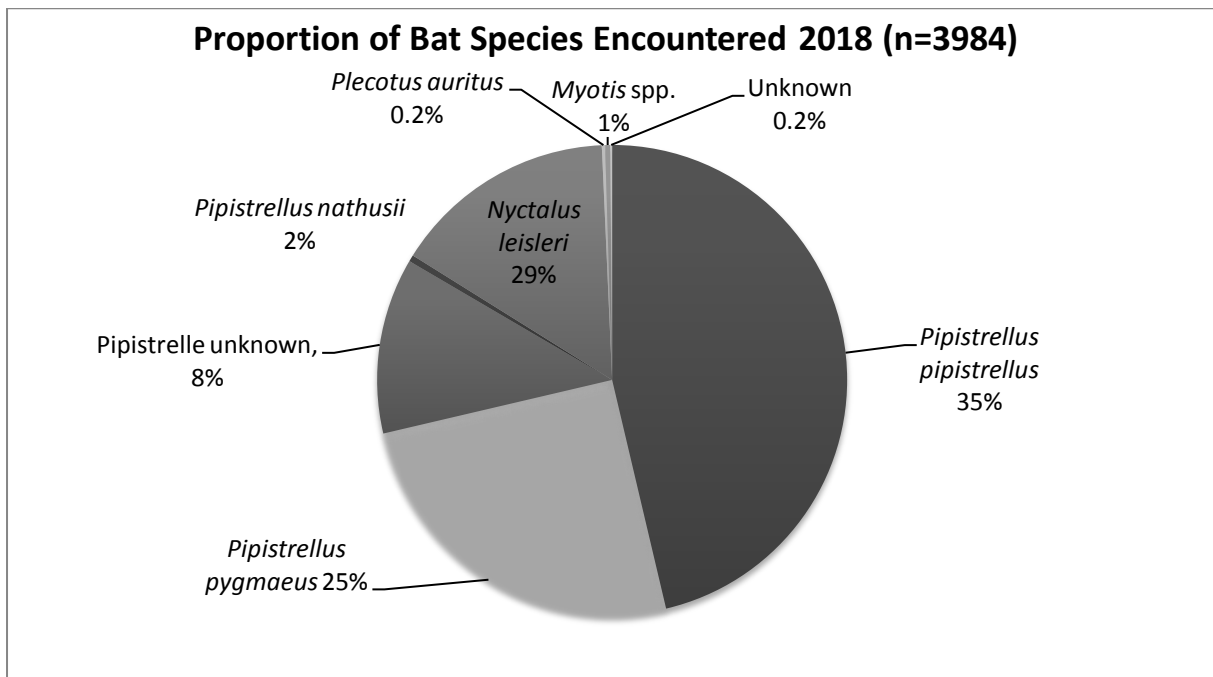


Figure 3.6: Species encountered during the car-based bat monitoring scheme in 2018.

In 2018 common pipistrelle and soprano pipistrelle showed their first signs of stabilising following a prolonged upward trend. Leisler's bat yearly estimates, which in 2017 showed the first signs of a downward trend, continued in the same vein with a slight decrease. Numbers of observations of Nathusius' pipistrelle and brown long-eared were extremely low, as in other years of the survey.

Additional data for roadside vertebrates other than bats is also collected by surveyors during the scheme. In 2018, as in other years cats were the most prevalent roadside vertebrate accounting for over 50% of the records.

Research from this monitoring work in relation to climate change predictions was carried out using data collected during this survey and using weather data provided by Met Éireann and the climate projections for Ireland. This work was submitted to a peer reviewed journal in October 2018 but no decision has yet been received on whether it has been accepted.

3.3.2 All Ireland Daubenton's Bat Waterways Monitoring Scheme

In 2018, over 200 people attended 12 training courses in counties Belfast, Counties Down, Tyrone, Antrim, Dublin, Kerry, Limerick, Offaly, Roscommon, Monaghan, Galway and Mayo. These training courses were completed in June and July 2018. A total of 43 new teams signed up during training courses and received survey packs prior to August then completed surveys in 2018. In excess of 300 survey packs were issued to volunteers prior to August 2018.

A total of 239 waterway sites were surveyed by 184 survey teams in 2018; this included 44 new survey teams who surveyed 15 new waterway sites and 29 previously surveyed waterway sites. Twenty teams surveyed two or more waterway sites. A total of 239 waterway sites were surveyed in 2018. Fifteen waterways sites surveyed in 2018 were new waterway sites. Thirty-six waterways sites were located in Northern Ireland and 203 waterway sites in the Republic of Ireland. Fifteen (2.4%) of the waterway sites surveyed in 2018 have been surveyed each year since 2006 while 143 (23.3%) of the waterway sites surveyed in 2018 have been surveyed for at least eight of the thirteen years of the scheme. Overall, 614

waterway sites across the island have been surveyed at least once over the thirteen years of the monitoring scheme.

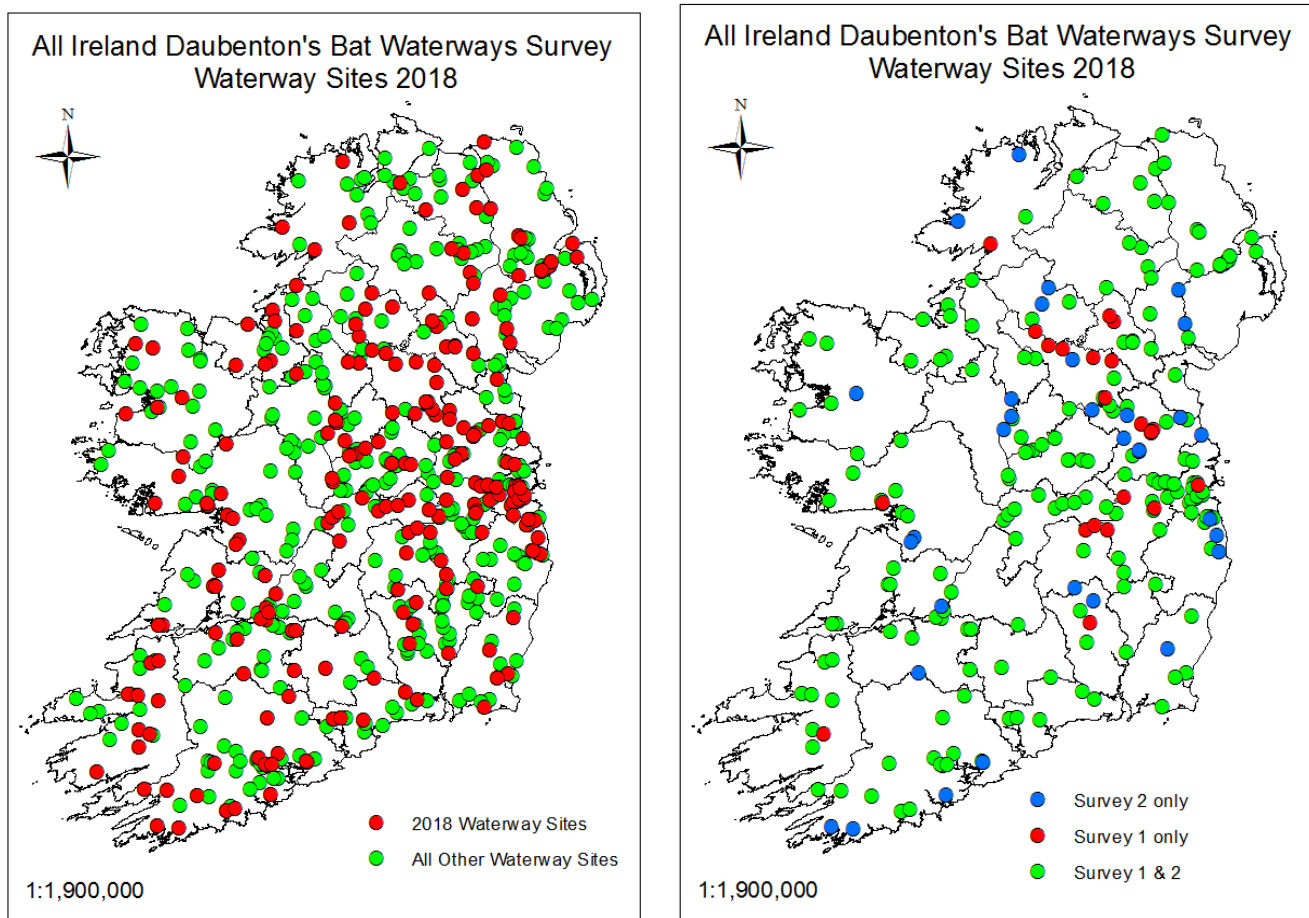


Figure 3.7: Total number of waterway sites surveyed in 2018 (n=239) across the island of Ireland.

Figure 3.8: Total number of surveys completed at each waterway sites surveyed in 2018.

Of the four provinces, the highest number of waterway sites surveyed in 2018 were surveyed in Leinster (n=97, Figure 4.4) and County Cork had the highest number of waterway sites surveyed per county (n=19) (See Figure 3.9).

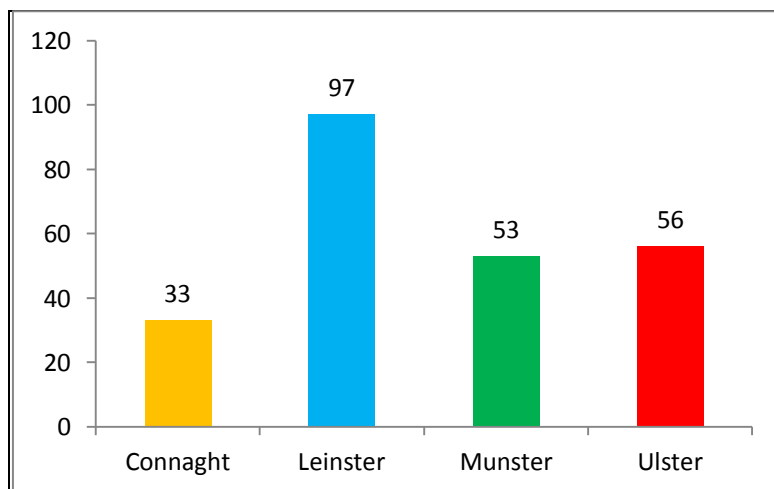


Figure 3.9: Total number of waterway sites surveyed in 2018 in each province of the island of Ireland.

A total of 422 completed surveys from 239 waterway sites were returned to BCIreland in 2018. Two hundred and eight surveys were completed in the first survey period in 2018 (Survey 1: 1st – 15th August) while 214 surveys were completed in the second survey period (Survey 2: 16th – 30th August).

Waterway sites with repeated surveys (i.e. surveys completed in both sampling periods S1 and S2) provide more robust data for monitoring. In 2018, a total of 183 repeated surveys (77% of waterway sites) were completed while 56 single surveys were completed. This was a lower number of repeat surveys than in previous years. The years 2007 and 2010 had the highest rates of repeat surveys of all thirteen years to-date (95% and 93% respectively).

In 2018 'Sure' Daubenton's bat passes were recorded on 203 waterway sites (85%).

At each of the 10 survey spots of each completed survey volunteers recorded Daubenton's bat activity for four minutes generating 40 minutes of data per completed survey. In total, 19,223 'Sure' Daubenton's bat passes and 2,808 'Unsure' Daubenton's bat passes were recorded during 281 hours and 40 minutes of surveying.

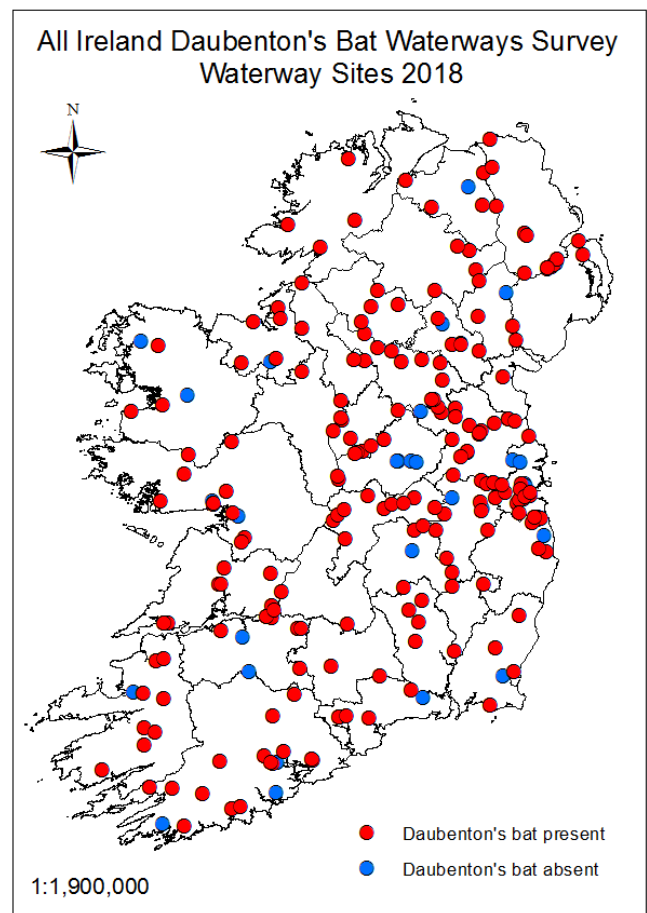
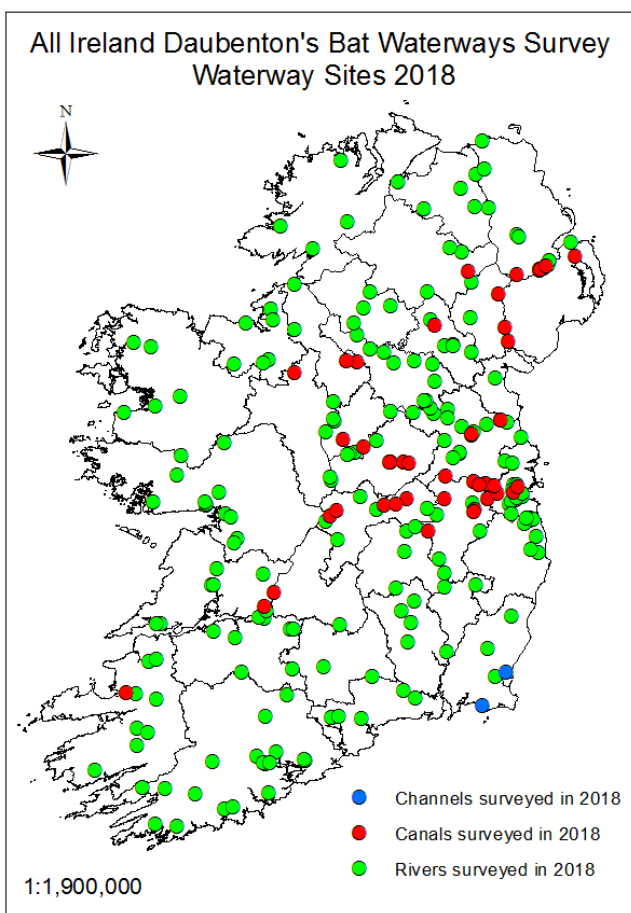


Figure 3.10: Type of waterway sites surveyed in 2018 (n=239) across the island of Ireland.
 Figure 3.11: Total number of waterway sites with Daubenton's bat recorded (n=203) in 2018.

3.3.3 Brown long-eared Roost Monitoring Scheme in 2018

Forty five building roosts were surveyed in 2018, 33 of which were monitored by volunteer teams and/or roost owners. Two teams were new in 2018, with both teams receiving survey assistance by the co-ordinator for one survey. The co-ordinator also assisted surveying of three additional roosts. In total, 44 volunteers and four roost owners participated in the monitoring scheme in 2018 (Figure 3.12).

Kildare Bat Group was allocated three buildings to monitor. Clare Bat Group, Cork County Bat Group, Wicklow Bat Group and Galway Bat Group monitored one roost each while County Waterford group monitored three roosts. Four roost owners participated in the scheme in 2018.

Brown long-eared roosts monitored in 2018 were distributed in 19 counties, the highest number of roosts was located in Counties Cavan (n=6) and Wicklow (n=5 each). One roost, verified as suitable for inclusion in 2017, was monitored again in 2018 (County Clare). A new roost was recorded in 2018 (County Monaghan) and it will be included in the 2019 monitoring schedule. Another structure was surveyed in 2018 but was deemed unsuitable for inclusion (Co. Mayo).

The majority of roosts were surveyed by external Dusk Emergence Counts (n=37) while eight roosts were surveyed by Internal Counts (Figure 5.2 & Table A3.6, Appendix 3). A total of 93 external surveys and 17 internal counts were undertaken in 2018.

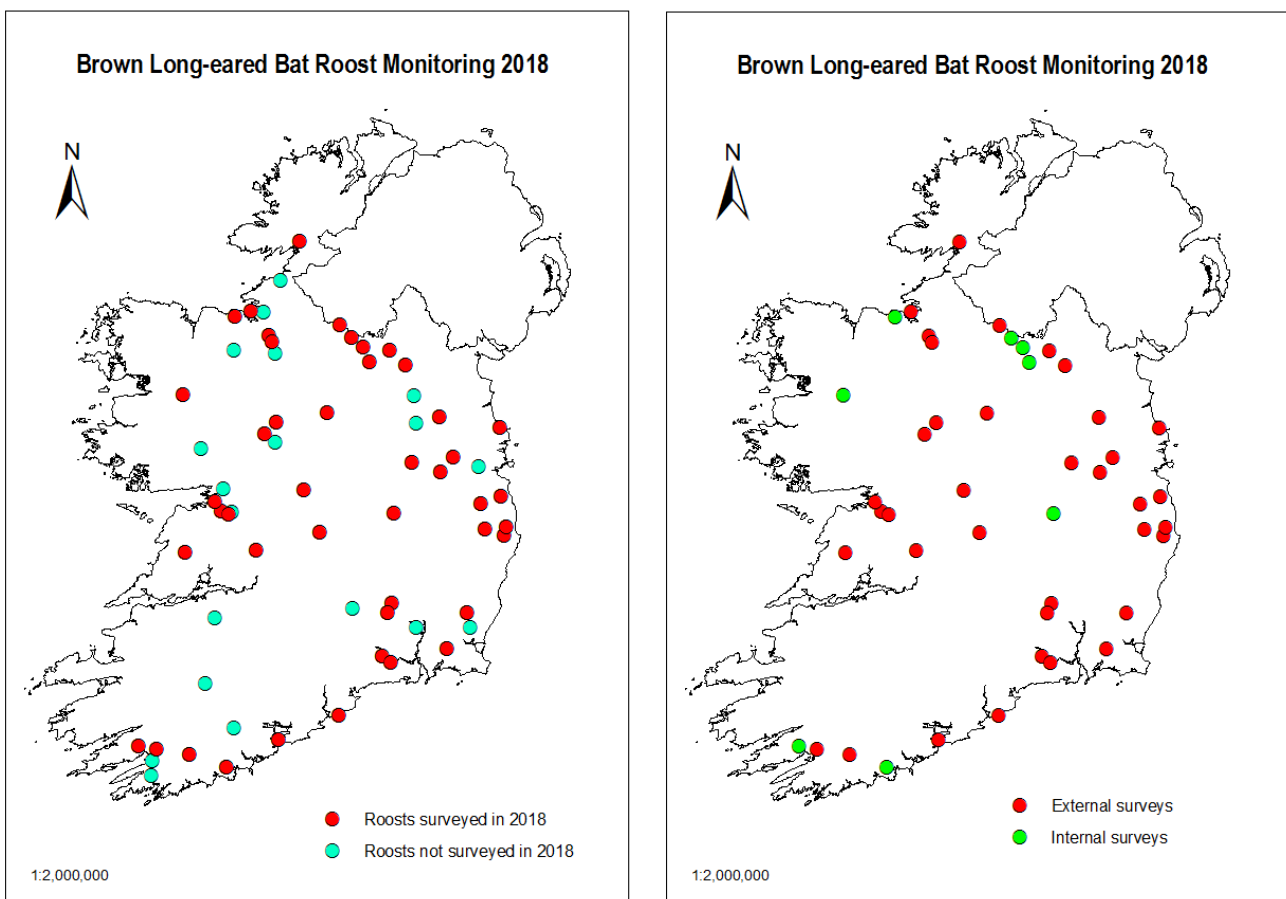


Figure 3.12: Brown long-eared roosts surveyed in 2018 as part of the Brown Long-eared Bat Roost Monitoring Scheme. Red circles = Roosts surveyed in 2018; Blue circles = Roosts not surveyed in 2018.

Figure 3.13: Type of Brown long-eared roosts surveys in 2018. Green circles = Internal surveys only; Red circles = External surveys only.

The buildings surveyed included churches, houses, agricultural barns, large buildings/mansions and a category named “other” to represent a medieval tower and 12th century stone structure. The majority of the buildings surveyed were churches (Figures 5.3 & 5.4).

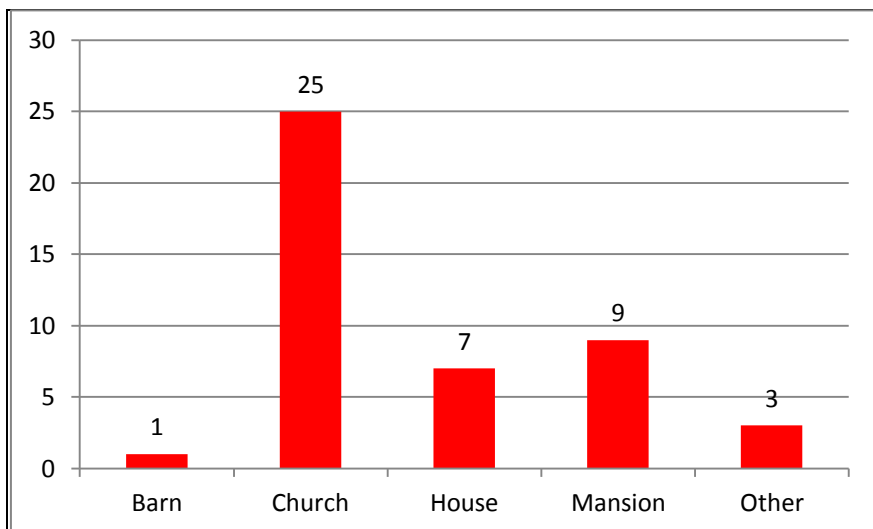


Figure 3.14: Type of buildings monitored in 2018.

In 2018, a total of 1,768 individual bats were counted in the 45 roosts monitored. This is the third highest total over the twelve years of the scheme (Highest = 1,823, n=47 roosts, 2017). The mean number of bats per roost in 2018 was 37.62 individuals and the median count was 29 individuals.

Citation: Aughney, T., Roche, N., & Langton, S. (2019) Irish Bat Monitoring Schemes: Annual Report for 2018. www.batconservationireland.org.

Citation: Aughney, T., Roche, N. & Langton, S. (2019) Irish Bat Monitoring Schemes: Daubenton's Bat Waterway Survey & Car-based Bat Monitoring in Northern Ireland. Annual Report for 2018. www.batconservationireland.org.

3.3.4 Lesser Horseshoe Bat Monitoring Scheme in 2018

The lesser horseshoe bat monitoring scheme is also managed by Bat Conservation Ireland. As part of this we co-ordinate roost and hibernacula counts carried out in the west of Ireland, where the species is found. These are mainly done by National Parks and Wildlife Service (NPWS) Conservation Rangers with additional counts submitted by the Vincent Wildlife Trust. Each year surveyors complete counts of specific sites within their district. Surveys take place in summer from dusk and are carried out using bat detectors. Some sites are counted internally during daylight hours. The dates for surveying in summer are May 23rd to July 7th, although counts outside these dates are included in the overall trend series. Winter surveys are carried out in January and February each year. Records are sent to BCIreland for processing and the data is inputted to a MS Access database that was supplied by the NPWS.

Bat Conservation Ireland carries out analysis of yearly trends. Although this species has increased considerably since the onset of monitoring in the late 1980s there are serious issues associated with roost deterioration across its range. This issue, combined with low genetic diversity and mixing between areas of the Irish population, means that the species is threatened by population isolation within its current range.

Additional work carried out as part of this scheme includes site meetings, in December 2018 Niamh Roche met with Conservation Ranger Jay Cornish to investigate a sites in north Kerry that had not been surveyed in a number of years. Consultation was also carried out between Niamh Roche and Kate McAney (Vincent Wildlife Trust) on a conservation strategy for Moorehall, Co. Mayo.



Plate 3.4: View from the inside and outside, a cave near Tralee Co. Kerry investigated for the presence of lesser horseshoe bats as part of the Lesser Horseshoe Bat Roost Monitoring Scheme.

3.3.5 BATLAS 2020 in 2018

BATLAS 2010 was undertaken in 2008-2009 to survey as many 10km squares across the island to determine the distribution of the four most common bat species: Leisler's bat, common pipistrelle, soprano pipistrelle and Daubenton's bat. Additional data on other Irish bat species were accepted from experienced bat surveyors. This was the first field-based study that used a standardised survey protocol developed by Bat Conservation Ireland. Surveying of the target species was conducted in each 10x10 km square using bat detectors. A species identification card was designed for the survey. BATLAS 2010 resulted in 71.6% of the island land mass being surveyed for bats and greatly added to the knowledge of bat distribution on the island.

This survey has now been repeated with BATLAS 2020 (2016-2018). We carried out over 35 training courses for BATLAS volunteers from 2016 to 2018 and found that these courses were often attended by beginner surveyors. Possibly as a result this, there was not as high an uptake of survey squares as we were hoping for since the BATLAS 2020 survey is quite intensive. While 237 individuals signed up to the scheme, 121 individuals actually submitted results. This level of citizen scientist participation was almost double that of BATLAS 2010. However, by early 2018 it was clear that we were falling short of target coverage so for 2018 it was decided that more emphasis needed to be placed on ensuring the necessary number of squares would be covered. Therefore, just two training courses were carried out in early 2018 and for the remainder of the season available funds were instead diverted into surveying of areas with gaps in coverage with the help of paid surveyors.



Plate 3.5: BATLAS 2020 volunteers from Limerick Bat Group.

The BATLAS Coordinator for the island, Dr Simon Pickett, was appointed in 2016. In addition, a Regional Trainer & Surveyor Panel was set up in 2016 and four of this panel participated in surveying in 2018.

Training materials and manuals for existing volunteers were retained online:

<http://www.batconservationireland.org/what-we-do/monitoring-distribution-projects/batlas/batlas-training-materials>

Also, maps, instruction manuals and online volunteer registration and data submission forms were all retained for 2018.

The principal activity for 2018 was to carry out survey work and provide support for all existing volunteers. In 2018 two BATLAS training courses were carried out.

Thirty two volunteers availed of the opportunity to borrow a bat detector for their BATLAS 2020 surveys.

BATLAS 2020 Results

Citation: Pickett, S., Aughney, T., Roche, N., & Langton, S. (2019) BATLAS 2020 – A Bat Distribution Survey: Final Report 2016-2018. www.batconservationireland.org.

At the end of 2018 a total of 786/1014 (77%) 10km squares had been surveyed (i.e. 764 10km squares have at least one survey site while 22 were deemed 'inaccessible' or 'unsafe' for survey). However a further 54 squares are 'live' registered squares (i.e. assigned to volunteers who confirmed they were still actively surveying in 2018) but the results have not been submitted to-date.

A total of 3,373 unique survey sites were visited as part of BATLAS 2020. This represents a 136% increase in the number of sites covered during BATLAS 2010 (n = 1426). Forty-three percent (n=614) of the 1,693 sites surveyed for BATLAS 2010 were also surveyed for BATLAS 2020, the remaining 2,759 sites surveyed in BATLAS 2020 were selected by volunteers as new BATLAS 2020 sites.

At the 10km square level, a total of 506 survey squares were surveyed in both the BATLAS 2010 and BATLAS 2020 projects while the remaining 222 were new squares only surveyed for BATLAS 2020. One hundred and fifty squares surveyed for BATLAS 2010 were not surveyed by BATLAS 2020 and 136 squares remain un-surveyed through both projects, most of these are in relatively inaccessible areas (22 squares in total were classed as 'completely inaccessible' either by the volunteers during surveying or by the Coordinator upon analysis of the OS maps).

Table 3.2 lists BATLAS 2020 coverage by county and also summarised by country (counting all squares >1 survey point as 'surveyed'). Ninety-three percent coverage was achieved in Northern Ireland and 71% coverage was achieved in the Republic of Ireland.

Table 3.2 Survey square coverage by county and country. Percentages relate to squares that were surveyed at one site or more.

County/Country	Squares	Uptake	Surveyed	%
Cavan	20	20	20	100
Derry	22	22	22	100
Donegal	70	70	70	100
Dublin	18	18	18	100
Kildare	22	22	22	100
Leitrim	16	16	16	100
Louth	9	9	9	100
Meath	21	21	21	100
Monaghan	11	11	11	100
Antrim	33	32	32	97
Tyrone	31	31	30	97
Westmeath	22	22	21	95
Mayo	78	73	73	94
Longford	13	12	12	92
Sligo	13	13	12	92
Offaly	29	27	26	90
Down	33	29	29	88
Fermanagh	26	24	23	88
Roscommon	13	12	11	85
Armagh	19	15	15	79
Kilkenny	19	19	15	79
Laois	30	21	21	70
Galway	91	72	61	67
Wicklow	26	18	17	65
Clare	46	30	29	63
Tipperary	20	13	12	60
Waterford	38	19	19	50
Wexford	32	17	15	47
Cork	90	41	35	39
Kerry	81	42	31	38
Limerick	21	9	7	33
Carlow	1	0	0	0
Northern Ireland	164	153	151	92
Republic Of Ireland	850	647	604	71

Current uptake = 786/1014

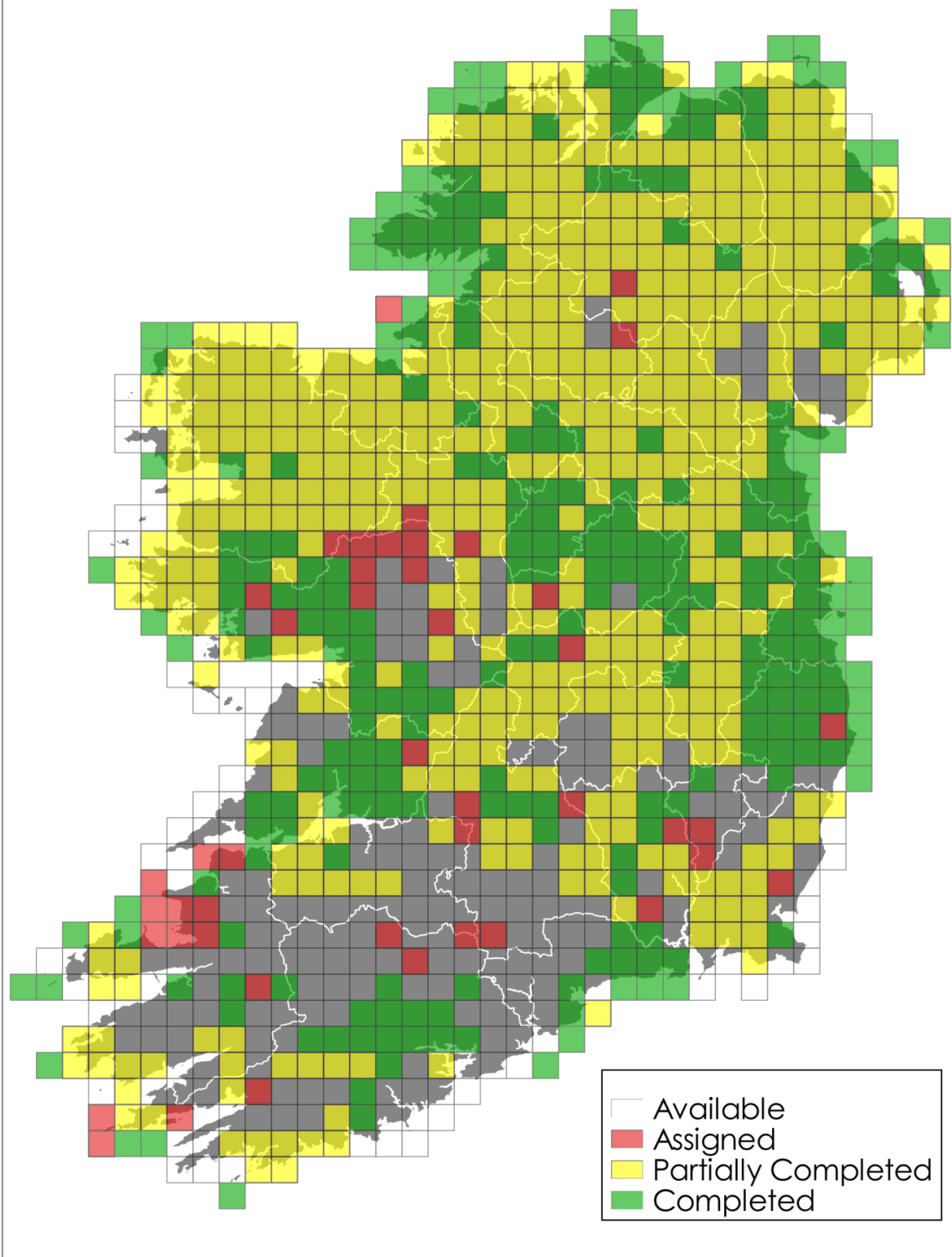


Figure 3.15 – Final BATLAS 2020 coverage at the end of 2018 season. Colour codes relate to square completion status in accordance with original BATLAS 2020 targets, i.e. 'Completed' squares are those with all 4 quadrants completed (i.e. either 2 sites surveyed within each quadrant, all four target species recorded, or the quadrant was inaccessible/unsafe to survey). "Partially completed" applied to squares with at least 1 survey site but that was not completed, "Assigned" relates to registered squares with no results.

Three of the four target bat species were detected at higher rates during BATLAS 2020 compared to the 2010 study at the 10km square level. Higher detectability also translated to the individual site level (soprano pipistrelle increased from 63.7% to 68.0%; common pipistrelle from 40.7% to 53.9%; Leisler's bat from 32.1% to 36.1%). The fourth target species, Daubenton's bat, was present at 29.8% of sites during BATLAS 2010 compared with 30.74% of sites during BATLAS 2020 which may represent a slight increase or a stable trend.

Of interest, and perhaps some concern, is the fact that unidentified *Myotis* bats were present in 17.1% of surveyed sites during the BATLAS 2010 survey but the same species grouping was present at only 5.96% of sites during BATLAS 2020. This species group, which is likely to be mainly composed of Natterer's and whiskered bats, was not specifically targeted by the BATLAS methodology due to difficulties distinguishing between them. However, the 11% decrease cannot be attributed to a corresponding increase in *Myotis* bats categorised to species level since Natterer's were present in 4% of sites during BATLAS 2010 and 2.2% of sites during BATLAS 2020 and whiskered bats stayed roughly similar, 1.2% during BATLAS 2010 compared with 0.86% during BATLAS 2020. There may be a number of potential explanations for the apparent decrease, one of which is the fact that survey square distribution had a slightly northern bias for BATLAS 2020 and a southern bias for BATLAS 2010; both species are more abundant in the south of the island. In addition, the greater number of novice surveyors who participated in BATLAS 2020 may have had difficulty identifying this species group. Neither of these species are currently monitored under the Irish Bat Monitoring Programme.

Table 3.3: Detection rates of all bat species summarized for the BATLAS 2010 and BATLAS 2020 schemes, at the 10km grid square (2010 n = 648; 2020 n = 728) level and at the site level (2010 n = 1694; 2020 n = 3373), target species are highlighted in bold.

Species	No. of 10km Squares Present		% of 10km Squares Present		No. of Survey Sites Present		% of Survey Sites Present	
	BATLAS 2010	BATLAS 2020	BATLAS 2010	BATLAS 2020	BATLAS 2010	BATLAS 2020	BATLAS 2010	BATLAS 2020
Soprano pipistrelle	551	677	85.1	92.99	1,079	2292	63.7	67.95
Common pipistrelle	453	624	70	85.71	689	1819	40.7	53.93
Leisler's bat	404	523	62.4	71.84	543	1218	32.1	36.11
Daubenton's bat	397	510	61.4	70.05	505	1037	29.8	30.74
Unidentified <i>Pipistrellus</i> spp.	81	119	12.5	16.35	95	228	5.6	6.76
<i>Myotis</i> spp.	212	126	32.7	17.31	290	201	17.1	5.96
Brown long-eared bat	132	98	20.4	13.46	148	121	8.7	3.59
Natterer's bat	62	68	9.6	9.34	68	75	4	2.22
Whiskered bat	20	23	3.1	3.16	20	29	1.2	0.86
Lesser	15	11	2.3	1.51	18	13	1.1	0.39

horseshoe bat								
Nathusius' pipistrelle	7	45	1.1	6.18	7	55	0.4	1.63
Unidentified bat	110	80	17	10.99	129	150	7.6	4.45

BATLAS 2020 has been hugely successful in many respects. We saw almost a 100% increase in uptake by volunteer surveyors compared with BATLAS 2010; 121 volunteers contributed valuable information to the survey, which was a considerable achievement. Also, 2.4 x the number of sites were surveyed during BATLAS 2020 compared with BATLAS 2010.

For future distributional surveys we may rethink our approach to training and opportunities for citizen science surveyors. The considerable effort and resources allotted to training in 2016 and 2017 were not repaid in terms of recruitment of citizen scientists to the scheme. While we specified prior to all training courses that this survey required some skill and experience, we found that many attendees on the courses were complete novices and were therefore unable to carry out the survey on their own.

For BATLAS 2030 we may consider trialling the use of passive detectors that are left in situ recording overnight and which can then be analysed using automated bat call software.

4. Bat Groups in Ireland

Bat Groups offer essential local support both for BC Ireland monitoring schemes, educational programmes and to people interested in increasing their bat survey experience. There are a number of very active bat groups that undertake a phenomenal amount of bat work. In 2018 the bat groups participated in all of the monitoring schemes and BATLAS 2020. They manage their own bat box schemes, liaise with local wildlife organisations; hosts bat talks, walks and training events for Heritage Week, Biodiversity Week and monitoring schemes and rescue grounded bats. The location of bat groups across the island (as of December 2018) is illustrated in Figure 4.1.

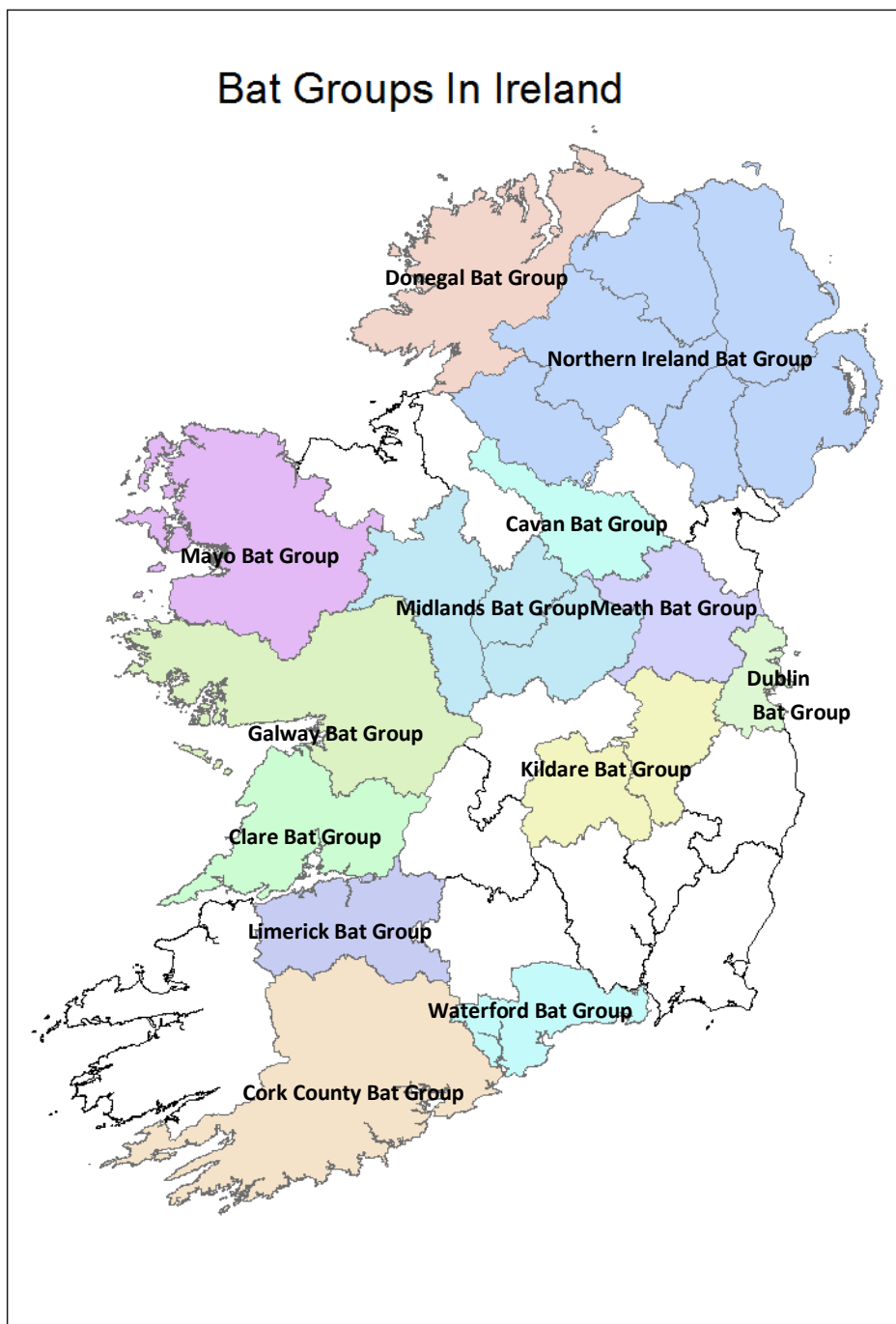


Figure 4.1: Location of Bat Groups on the Island of Ireland.

Table 4.1: Activities undertaken by the Bat Groups on the Island of Ireland in 2018.

Bat Group	Bat Walks & Talks	Car-based Surveys	Waterways Survey	BLE Roost Counts	BATLAS 2020
Kildare	√		√	√	√
Cavan	√		√	√	√
Meath	√	√	√		√
Midland	√	√	√	√	√
Galway	√	√	√	√	√
Waterford	√		√	√	
Cork	√		√	√	√
Dublin	√		√		√
Clare	√	√	√	√	√
NIBG *	√	√	√		√
Limerick	√	√	√		√
Mayo	√			√	√
Donegal	√				

* NIBG events are reported separately by the group in a separate Annual Report.



Plate 4.1: Kildare Bat Group Biodiversity Week Walk



Plate 4.2 Dublin Bat Group Re-launch Meeting 2018

5. Significant Events in 2018 for Bat Conservation Ireland

The final report for the Irish Bat Monitoring Programme (2015-2017) was compiled in spring 2018 and has now been published as an Irish Wildlife Manual. Following submission of this report to the NPWS a Request for Tender was uploaded to the e-Tenders website for the next four years (2018-2022) of the Irish Bat Monitoring Programme. We then spent several weeks compiling the necessary information for this tender. Bat Conservation Ireland was notified of its success in the tendering process by the National Parks and Wildlife Service in May 2018.

In 2018 Bat Conservation Ireland was invited to participate in a European COST Action application (Climbats) spearheaded by Prof Danilo Russo (Italy) and Hugo Rebelo (Portugal). This multi-national network aimed to investigate the current distribution, diets and climate sensitivity of a number of European bat species and to predict likely impacts of climate change on their distributions and ecosystem service provision. The COST Action was successful and Niamh Roche is now on the Management Committee for the Action.

Considerable Bat Conservation Ireland Council time was spent on the proposal to change working arrangements in the organisation to PAYE and to employ an administrator. PAYE was implemented in January 2019 and interviews for an administrator was undertaken in March 2019.

A record amount of money was issued in grants by Bat Conservation Ireland in 2018. A total of 15 projects were funded to a total of €14,565.

5.1 Biodiversity Week & Heritage Week

Bat walks and talks have become cornerstone events of Biodiversity Week and Heritage Week. It is great opportunity for members of the public to experience the nocturnal and auditory world of bats. A large number of events were organised across the country for Biodiversity Week. Bat Conservation Ireland would like to thank all of the bat groups and leaders that organised and hosted such events. We would also like to thank the IEN through which we received funding for these events. In addition, numerous events were also hosted during Heritage Week with thanks to local county councils for funding. Of the 24 bat walks and talks hosted in 2018, most were organised for Biodiversity Week and Heritage Week.



Plate 5.1: Dublin Bat Group bat walk at the Dodder.



Plate 5.2: Galway Bat Group bat walk during 2018.



Plate 5.3: Attendees at a Biodiversity Week Bat Walk 2018



Plate 5.4: Photographs of the Mayo Bat Group events during Biodiversity Week.

5.2 Bat Conservation Ireland Grants 2018

Bat Conservation Ireland has been running for 14 years and in 2018 was in a financial position to fund bat conservation projects. In 2016, the organization introduced the Bat Conservation Ireland Grant Scheme which is comprised of four categories:

- Bat Group Funding (maximum of €400 per group)
- Conservation Projects (maximum of €3,000 in total for projects)
- Public Events (maximum of €250 per event)
- Third Level Research Grants (maximum of €3,000 in total for projects)

The scheme was open for the first time in May 2016. In 2018 applications were assessed by three assessors.

In 2018, 15 grant applications were successfully awarded funding. This included funding for two bat groups, four “Large Public Events”, four “Conservation Projects” and five “Research Projects”. A total of €14,565 was awarded, which was greater than the 2018 budget allocation. However, as the 2017 budget was not fully spent, the surplus was allocated to the 2018 budget.

Bat Groups

1. Limerick Bat Group
2. Dublin Bat Group

Large Public Events

1. Shrute Village (Mayo) Heritage Week Bat Walk.
2. The Bredagh (Donegal) Heritage Week Bat Talk & Walk.
3. Rediscovery Centre (Ballymun, Dublin) Bat Walk.
4. Rediscovery Centre (Ballymun, Dublin) Bat Box Building Day.

Conservation Projects

1. Lissadell Church, Co. Sligo - Natterer's bat roost survey.
2. Bat box and bird hide bat panel bat survey.
3. Investigation of Brown Long-eared bats swarming or roosting at the Carrowkeel Caves, Co. Sligo.
4. Provision of bat incubator for injured and orphaned bats.

Research Projects

1. Identifying bats from using an inexpensive Raspberry Pi Bat Detector & PCR.
2. NUI Galway Students' Bat Box Initiative
3. Development of novel DNA strategies to analyse the diet of the lesser horseshoe bats.
4. Updating the distribution and status of the *Nathusius pipistrelle* in Ireland: Phase 2.
5. Effectiveness of Bird and Bat Corpse Searches at Irish Wind Farm sites.

5.2.1 Bat Group Funding

Dublin Bat Group availed of €400 funding to develop their online presence and new logo. They also carried out a number of bat walks in St. Enda's Park, along the Dodder and the Phoenix Park.



Figure 5.1. Dublin Bat Group's new logo

Limerick Bat Group were also awarded €400 to carry out public engagement activities.

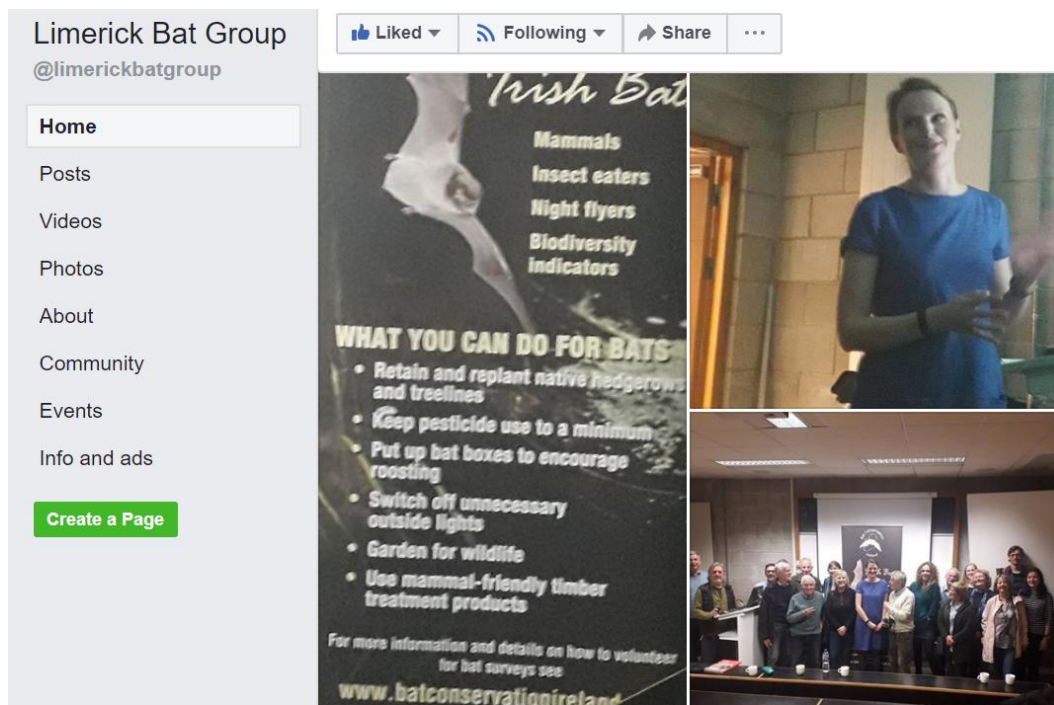


Figure 5.2 An example of one of Limerick Bat Group's many activities in 2018, a talk given by Tanya Sweeney (nee Slattery).



Plate 5.1 An example of Limerick Bat Group liaising with a local Limerick Men's Shed to build bat boxes.

5.2.2 Public Event Funding

Shrule Village Heritage Week Bat Walk

Shrule Village Enhancement Group was awarded €250 by Bat Conservation Ireland to hold a bat event. The walk was held on Friday 26th August, starting at Shrule Community Centre. It consisted of an informative introduction on Irish bat species along with general facts on their behaviour. This was followed by a walk which encompassed the Village Green and the riverbank of the Black River. In previous years bat boxes were erected by the village enhancement group on suitable trees in the village. The purpose and how the bat boxes are used were explained to the group. Soprano pipistrelles were identified along the river, with a strong presence of insects encouraging their activity.

Approximately 20-25 members of the public came along to support the walk which was followed by tea and scones in the community centre.



Plate 5.2: Bat Walk in Shrule Village.

The Bredagh (Donegal) Heritage Week Bat Talk & Walk

Biodiversity Week 2018
May 19th - May 27th

Sunday May 20th @ 4am
Dawn Chorus - led by Mark Daly
 Meet at The Green car park, Moville.
 Wrap up warm and bring a hot drink.

Wednesday May 23rd @ 8.30pm
Bat Talk & Walk
 with Aengus Kennedy of NatureNorthWest
 Talk in Glencrow Hall followed by a walk on the Bredagh River to locate bat species. Wrap up warm, bring a torch. Kindly funded by Bat Conservation Ireland.

Friday May 25th @ 11am
Biodiversity of Lough Foyle - Moville Pier
 A guided walk along the Green shore path, followed by an exhibition launch in Moville Library. Refreshments served. Kindly funded by Irish Environmental Network in collaboration with Coastwatch.

Open to all. Children must be supervised. Free events
 For more information please call 087 647 8183 or [f/CelebrateWater](https://www.facebook.com/CelebrateWater)

Logos: IEN, Celebrate Water, Coastwatch, Bat Conservation Ireland

Biodiversity WEEK
May 19th - May 27th 2018

Spring & Summer are here!
 Learn more about nature and join in on some of the fun events taking place in Moville during Biodiversity Week

Saturday May 19th @ 10am-12 pm - Invasive Alien Species
 Free practical workshop on Bredagh River, Moville.
 Followed by lunch
 Meet at Moville Boutique Hostel
 More details on Eventbrite.ie - Search for Inishowen Rivers Trust
 Kindly supported by LA 21 Environmental Partnership Fund

Sunday May 20th @ 4am - Dawn Chorus - led by Mark Daly.
 Meet at The Green car park, Moville.
 Wrap up warm and bring a hot drink.

Wednesday May 23rd @ 8.30pm -
 Bat Talk & Walk with Aengus Kennedy.
 Glencrow Hall and Bredagh River.
 Wrap up warm, Bring a torch.
 Kindly funded by Bat Conservation Ireland

Friday May 25th @ 11am - Biodiversity of Lough Foyle
 Moville Pier. A guided walk along the Green shore path, followed by an exhibition launch in Moville Library.
 Kindly funded by Irish Environmental Network in collaboration with Coastwatch

Logos: IEN, Celebrate Water, Coastwatch, Bat Conservation Ireland

8 NEWS Irish Times
Wednesday 23 May 2018

Batman in Inishowen for Biodiversity Week

Foyle exhibition in Moville Library

Catherine McGivty
 Editor for Biodiversity Week

Biodiversity Week continues apace in Inishowen with Aengus Kennedy of Nature North West giving a hot talk in Moville's Glencrow Hall.

The event, funded by Bat Conservation Ireland, takes place tonight (Wednesday) at 8.30pm and is titled "This and Their Signatures."

The talk will be followed by a bat walk along the River Bredagh, during which walkers will be encouraged to locate bat species using bat detectors. Children are welcome on the bat walk but they must be accompanied by a warden. Participants are also advised to bring a torch and wear strong shoes.

On Friday at 11.00am, a short, guided walk on the biodiversity of Lough Foyle will leave Moville Pier.

The walkers will make their way along the shore path, up to Moville Library, for the launch of an exhibition on the Foyle ecosystem, funded by the Irish Environmental Network in collaboration with Coastwatch. Refreshments will be provided.

According to Irish Murphy, one of the organisers of Biodiversity Week, Lough Foyle hosts an amazing array of species.

She said: "Lough Foyle is home to water, fish and mammals but it faces increasingly real challenges for the future. Biodiversity Week is a great opportunity for people to get outside and learn more and explore our local ecosystem."

"This year Biodiversity Week runs from May 25 to 27. On Saturday past, the Inishowen Rivers Trust ran a workshop on invasive alien plant species, to help people to identify invasive plants, including Japanese Knotweed, Himalayan Balsam and Water Hyacinth. It also provided advice on control and management."

"Invasive species are one of the biggest threats to biodiversity. Japanese knotweed, in particular, impacts significantly in Donegal and Derry. This event was funded through a Local Agenda 21 grant."

"On Sunday past, Inishowen environmental group Celebrate Water led a Dawn Chorus around Moville and recorded a total of 35 species of birds. On Thursday evening, Aengus Kennedy guided walkers from a local beach into the village, observing activities along the way," said Trish.

For further information on Biodiversity Week events in Inishowen, check out www.inishowenriverstrust.ie.

Group gathered on the Green in Moville to listen to the early bird chorus.

Trish and Aengus have something to say.

The group walks across the Green in Moville.

Figure 5.3 Bredagh 2018 bat event, advertising materials and subsequent local newspaper coverage.

Environmental and community group Celebrate Water invited Nature North West's Aengus Kennedy to Moville to present a general talk on bats before taking participants on a walk along the Bredagh River which runs through the centre of the town. Aengus provided an engaging 40 minute presentation on bats, what they do for us and why we should care about them. After the talk Celebrate Water member Trish provided information to participants on the work of the BCIreland and also provided some leaflets

and ID guides. All participants then made their way to the nearby Bredagh River Trail where a number of bat species were detected - Common pipistrelle, Soprano pipistrelle and Daubenton's Bat using heterodyne bat detectors. Aengus demonstrated how to use a bat detector, what the different sounds mean and discussed general bat behaviour. All participants were given the opportunity to use the detectors. As this event was held during Biodiversity Week, Celebrate Water also provided information on bats through a biodiversity exhibition in the local library. This project was managed by: Dr. Trish Murphy & Mark Daly.

Rediscovery Centre – Two Bat Events

The Rediscovery Centre in Ballymun Dublin was awarded two grants of €250 each to carry out a family bat fun event and a family bat box building workshop.

The bat box making workshop aimed to get members of the public involved with bat conservation in a fun and educational way was delivered on 10th August 2018 and 16 participants of all ages attended. Engagement and enjoyment of children was great and parents got involved in the activities. Overall we consider the event as very successful, creating an opportunity to get more people interested and involved in promoting and protecting our bat populations.

The 'Batty about Bats' event was a family-friendly workshop aiming to increase public understanding of bats and raise awareness of having healthy bat populations. The workshop engaged a wide variety of participants from 2years old to 50+ through a range of hands-on activities, games and discussions. The workshop educated participants on bats species in Ireland, their natural history, ecology and ecosystem role, as well as tips for aiding conservation. The event was free of charge and open to member of the general public, families and children of all ages.



Plate 5.3 Rediscovery Centre, Ballymun. Bat box workshop and 'Batty About Bats' fun day

5.2.3 Conservation Projects

Lissadell Church, Co. Sligo - Natterer's bat roost survey

Lissadell church, built c 1860 is constructed of limestone with a slate roof and is in regular use by the local community. In 2016 Barbara McInerney discovered the presence of a Natterer's bat maternity roost at the church.

Having discussed this discovery with some locals associated with the church, it was clear that the congregation knew of the existence of the bats and were constantly having issues with cleaning the church prior to service and other uses due to bat faeces and urine over the surfaces of the interior.

The aims of this conservation project are to determine

- a) The number of bats using the church.
- b) The extent of which the bats were using the interior of the church.
- c) Where the bats were present within the church, i.e. roost points.



Figure 5.4 Lissadell Church, interior and examples of areas with urine stains and fouling by bats

Counts were carried out to determine the number of bats using the church, and at peak in 2018 this was 58. Various roost points were identified. An extensive area behind wooded architraves is used on either end of the church with the possibility of access to an area beside the bell tower. The use by bats of architrave beside the altar and pulpit results in fouling on areas used during services. However the church committee are tolerant and have started to cover the altar between services and to remove all books from the seats to reduce fouling. A meeting between the church committee and the local heritage officer also took place and agreed that at some future point some repairs of lime mortar should take place behind the wooden architrave especially over the pulpit and alter area which would reduce fouling. This would be done under licence. This community conservation project was beneficial to all concerned, including the bats.

Bat Box and Bird Hide Bat Panel Bat Survey

In 2017 BC Ireland awarded a grant to put up bat boxes and a purpose built panel on the side of the bird hide at Ballygilgan Nature Reserve, Sligo. In 2018 we funded a follow up study to determine whether there was usage of the bat boxes and panel. One of the bat boxes was found to be occupied by a soprano pipistrelle. On inspection of the panel droppings were found on the base board. Based on the amount of droppings, usage is not high yet but it proves the panel has been discovered by bats.



Plate 5.4 Bat panel (left of the door) on the bird hide at Ballygilgan Nature Reserve.

5.2.4 Research Projects

Updating the distribution and status of the *Nathusius pipistrelle* in Ireland: Phase 2

There were two objectives to the 2018 phase of this project. One was to test the use of the BAT AT100 ultrasonic transmitter during catching surveys at sites where *Nathusius' pipistrelle* bats have been recorded. The second was to establish bat ringing skills within the All Ireland *Nathusius Pipistrelle* Group, by means of receiving training from an experienced professional.

The BAT AT100 lure was loaned to the Group by Bat Conservation Ireland for testing in the field. It was tested at Lough Key Forest Park (G 84781 04044) (under licence ref 026/2016 held by Paul Scott) on 28th July 2018. Weather conditions were dry and warm. One Soprano pipistrelle bat was captured within 30s of turning the lure, but this was the only bat caught that evening. It was released immediately.

It was next tested at the Town Lough, Killeshandra, Co. Cavan (H 31047 07734) on 2nd September 2018 by Paul Scott, Emma Boston and Conor Kelleher (under licence 02/2018- Amended). On this occasion, a BAT AT100 lure and Austbat harp trap (Trap 1) and a Sussex Autobat lure and Austbat harp trap (Trap 2) were used. 24 bats were caught in total including Natterer's bat, Whiskered bat, Soprano pipistrelle bat and *Nathusius Pipistrelle* bats.



Plate 5.5 BAT AT100 lure in action at Killeshandra, Co Cavan

500 no. 2.9mm anodized aluminum rings were purchased from Porzana (UK) with the unique identifier codes stamped on them. Dr Conor Kelleher carried out training of Emma Boston and Paul Scott on the 2nd September. The training comprised the demonstration of safe ring fitting, adjustment and removal and then coaching through the ringing of the six bats. Practice of ring fitting also took place using matchsticks as forearms.



Plate 5.5 One of the first Nathusius' pipistrelles ever caught in the Republic of Ireland with its newly attached bat ring.

Reports for the remaining projects will be reported in The Natterer when they are finalised.

5.3 *BATLIFE Europe*

Ms. Donna Mullen, representing Bat Conservation Ireland is a Trustee on the BATLIFE Europe committee. In 2018, the following campaigns were worked on a number of campaigns including:

- a) Look at the law and how it affects bats.

Donna compiled a list of all ECJ bat cases to date as part of this campaign.

- b) Review of EU Derogation Licences from Member States

Donna reviewed EU Derogation Licences submitted by Member States to the EU in relation to bats.

She worked closely with the law groups within the IEN to assist her with these two campaigns.

6 Policy & Promotion of Bat Conservation Ireland

6.1 Social Media

BCIreland has a very popular Facebook page which currently has 5,750 Followers (14th March 2019, an increase of 1,603 followers since 3rd March 2017). This Facebook page has gained on average 2.2 extra followers per day over the past two years. This social media outlet is used to post bat related news both Irish and International, to promote training courses and events, advertise BCIreland reports and guidelines, answer bat related questions and lobby for policy support.

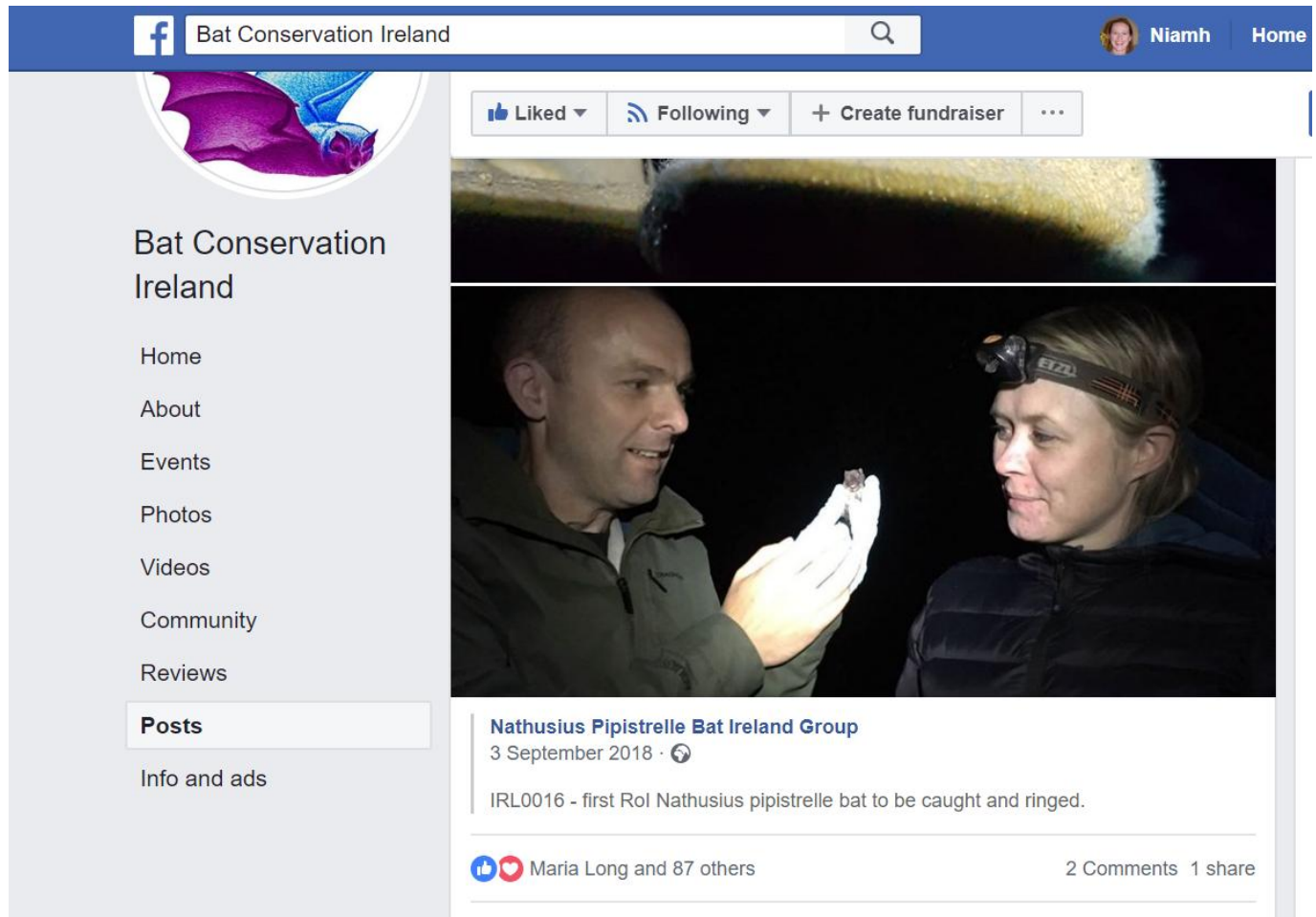


Figure 6.1: Screen grab from the Bat Conservation Ireland Facebook page sharing information about the first Nathusius' pipistrelle to be caught and ringed in the Republic of Ireland.

The BATLAS 2020 Facebook page currently has 718 followers, mid-March 2019 (compared with 670 followers on 15th February 2018). This social media outlet is used to post BATLAS 2020 news, to promote training courses and events, advertise reports and guidelines.

Irish Car Bat Monitoring Facebook page has 188 followers, mid-March 2019 (an increase from 149 on 15th February 2018). This page is used to primarily promote this scheme and keep volunteer surveyors in touch with its progress.

BCIreland also has a Twitter account which is used regularly. It proved to be a very suitable medium to prompt discussion during the year. @BatConservIre

Bat Conservation Ire
 @BatConservIre

Bat Conservation Ireland is a Charity dedicated to the conservation of Ireland's bats.

Ireland

batconservationireland.org

Joined January 2011

41 Photos and videos

TWEETS **TWEETS & REPLIES** **MEDIA**

Bat Conservation Ire Retweeted

Kate Flood @irishboglife · Feb 21

Phenomenal bat-loving citizen scientists in Ireland highlighting the 1000s of hours conservation volunteers are willing to spend helping these lovely creatures @BatConservIre #biodcon19

Figure 6.2: Screen grab from the Bat Conservation Ireland Twitter page, retweeting a photo of Tina Aughney in action at the National Biodiversity Conference in Dublin Castle (2019).

- audience size is 2,388.
- we gain around 1 extra follower per day
- Whilst each tweet reaches our followers directly, through retweets and mentions we have reached over 4000 users on occasion. This is a very powerful way of getting batty messages out there.

6.2 Bat Conservation Ireland Newsletters, Publications and Guidelines

In 2018, BCIreland produced four 'The Natterer' Newsletters.

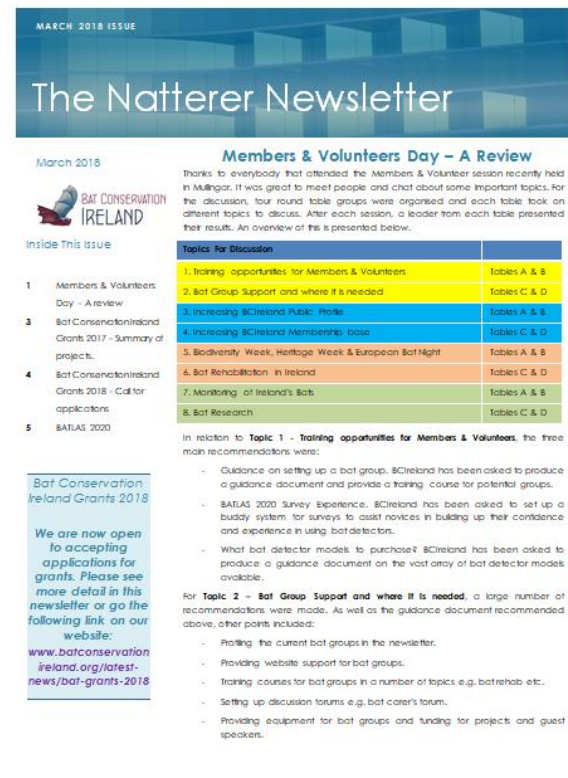


Figure 6.3: Screen grabs from two of Bat Conservation Ireland's 2018 newsletters.

BCIreland submits annual reports to funding bodies in relation to monitoring schemes. These reports are available on the website for downloading or contact info@batconservationireland.org. A final report was submitted to the National Parks and Wildlife Service at the end of the three years monitoring contract in spring 2018, this report covered the previous three years of the Irish Bat Monitoring Programme. It has since been published as an Irish Wildlife Manual.

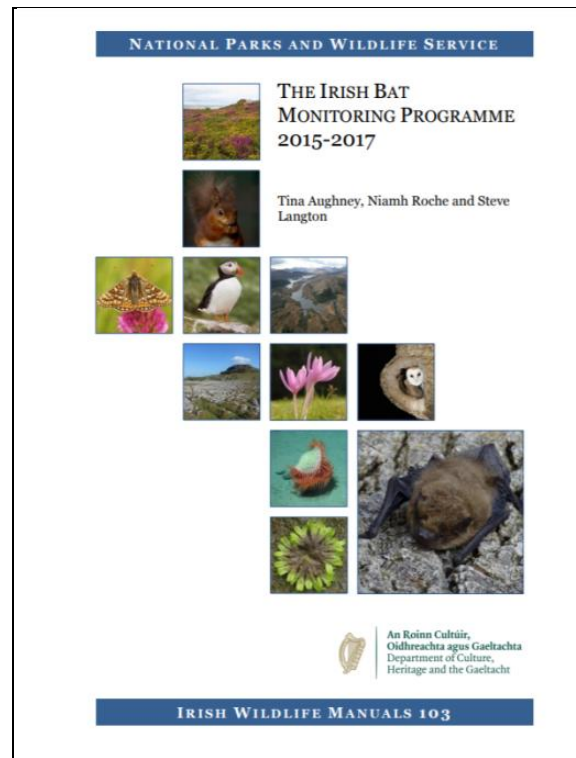


Figure 6.4: Screen grab from the 2018 Irish Wildlife Manual summarising the results of the previous three years of monitoring.

6.2 *Bat Conservation Ireland Policy*

Donna Mullen, Bat Conservation Ireland member, represents Bat Conservation Ireland on the Environmental pillar. Tina Aughney occasionally attends meetings on behalf of BCIreland.

Letters of consultation/data requests were sent out in relation to potential impacts of various development projects submitted to Bat Conservation Ireland for review including the following:

- Consultation on Greenways
- University Research projects (Greenway in Co. Sligo, Leitrim and Fermanagh)
- Organic Centre, Rossinver, Co. Leitrim – Bat Boxes in polytunnels campaign
- Numerous data consultations
- Numerous public queries in relation to proposed developments

6.2.1 Working with IEN Groups

Donna Mullen, our IEN representative, committee member and member of the Meath Bat Group undertook an array of work with the IEN in 2018.

- 3 IEN Pillar Steering Committee Meeting
- Attended the UCC Law Conference
- Voted on behalf of Bat Conservation Ireland

Donna also worked on the following campaigns on behalf of BCIreland:

- Including bat data in the SDIs (January 2018)
- EEB Nature Score Card (February 2018)
- Derogation Licensing Reporting to Europe (June 2018) with BATLIFE Europe
- Bat Boxes in Polytunnels Project – Rossinver Organic Centre (2018)
- Citizens in Science for Pesticide Regulation (October 2018)

Bat Conservation Ireland works with a number of IEN members. In 2018 training and batty related events with numerous groups e.g. Irish Wildlife Trust (IWT) Laois branch and Abbeyleix Bog Project. BCIreland and the local bat groups team up with local group to host training courses, bat walks and bat talks regularly (Please see appendices for list of events held).

Bat Conservation Ireland has a close working relationship with the Vincent Wildlife Trust (VWT). We have promoted their work on our social media and in our newsletters.

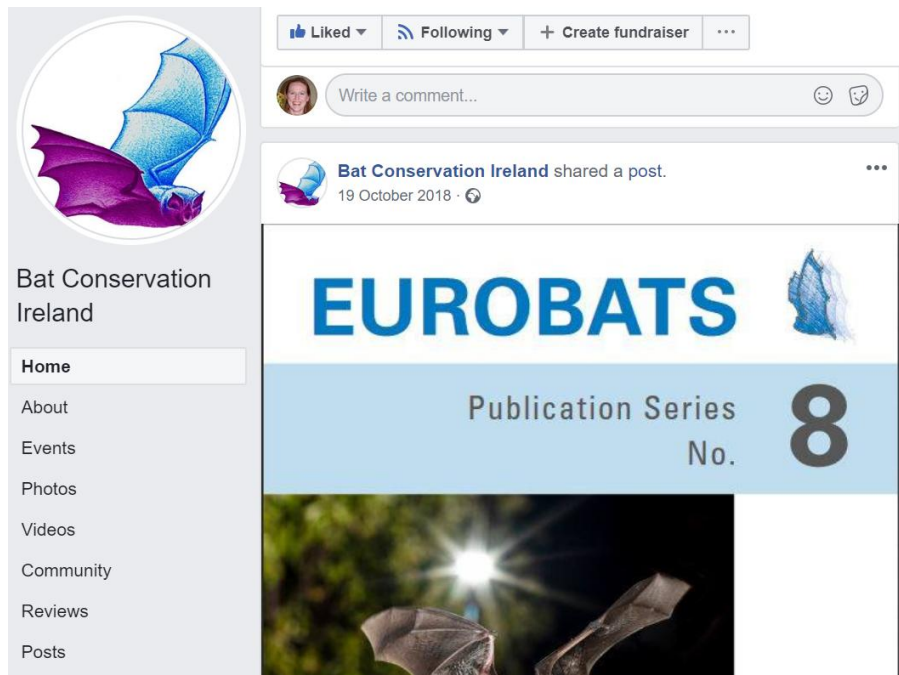


Figure 6.5: Example of using Social Media to promote other organisations' publications.

6.2.2 Working with Non-IEN Groups

Bat Conservation Ireland works closely with the National Biodiversity Database Centre (NBDC) based in Waterford in relation to the Bat Database.

All Irish Bat Monitoring Programme records collated by the car-based and the waterways survey was submitted to BCT, UK, CeDAR and NIEA, Northern Ireland.

Records were also submitted to NPWS and CeDAR as part of Article 17 processes.

Bat Conservation Ireland is an affiliated member of BatLife Europe. BatLife Europe is an international non-governmental conservation organisation built from a partnership of national bat conservation organisations that are committed to promoting the conservation of all bat species and their habitats throughout Europe. Ms. Donna Mullen was voted in as a Trustee in August 2017 and in 2018 attended 9 meetings on behalf of BCIreland.

Bat Conservation Ireland worked with the following groups in 2018:

- County Councils across the island (Cavan, Leitrim, Sligo, Donegal, Galway, Clare, Tipperary, Wexford, Dublin City, Fingal, Kildare, Laois, Offaly, Kilkenny, Ards & North Down Borough Council, Belfast City Council, Antrim & Newtownabbey Borough Council and Lisburn & Castlereagh City Council.
- Northern Ireland Bat Group
- Bat Conservation Trust, UK
- National Parks & Wildlife Service (NPWS)
- The Heritage Council
- Northern Ireland Environment Agency
- CEDaR, NI
- Teagasc
- Northern Ireland Environment Agency
- The Bat Lab, UCD
- EUROBATS
- Dark Skies Ireland & Friends of Mayo Dark Skies
- Tidy Town Groups
- Scouts & Cub groups across the country
- Offaly Naturalists' Field Club
- Community Groups e.g. Ballyhoura Community and Doohamlet DDCDA
- Wild Postcard Project
- River Trusts in Northern Ireland and Ireland
- EPA Web Sciences
- Letters of support for WIT Bat Research Projects

Foxford Riverfest 2018

**Bat walk and talk on 31st August 8:30pm
at St. Mary's Old Music School
(opposite Hope House)**

**Come and learn about these unique,
elusive and fascinating creatures and then
walk by the River Moy with bat detectors.**

**Please wear appropriate footwear and clothing
All children must be accompanied by an adult.**



Figure 6.6: Working with a local community group in Mayo.

ARTWORK COMPETITION FOR KIDS & TEENS (AGES 5-18)

PRESENTED BY:

DEADLINE
30TH JUNE



WE'D LIKE YOU TO MAKE AN ARTWORK SHOWCASING
IRISH BIODIVERSITY*



*BIODIVERSITY MEANS ALL LIVING THINGS (LIKE ANIMALS, PLANTS, AND MORE!)

TEN ARTWORKS WILL BE SELECTED AS WINNERS & CONVERTED
INTO POSTCARDS. THAT WILL BE AVAILABLE IN OUR ONLINE STORE.
ALL SALES DIRECTLY FUND OUR FUTURE PROJECTS.



connect with us!

FOR DETAILS, PLEASE VISIT

WWW.WILDPOSTCARDPROJECT.COM



Figure 6.7: Wild Postcard Project 2018.

6.2.3 Sustainable Development Goals

While the primary goals of Bat Conservation Ireland relate to bat conservation, the organisation is committed to achieving Sustainable Development Goals as defined by the document “Transforming Our World – The 2030 Agenda for Sustainable Development”. The following Sustainable Development Goals are the goals that BC Ireland, through our day-to-day running, can target. However, there are elements of the individual targets that Bat Conservation Ireland are unable to realistically achieve.

SDG 2 End hunger, achieve food security and improved nutrition and promote sustainable agriculture.

Bat Conservation Ireland promotes bats as a natural predator of agricultural pests and have partner with a number of Irish universities in relation to defining bats “Ecosystem Services”. Dr Niamh Roche is on a European working group working towards this.

Bat Conservation Ireland has worked with the Department of Agricultural in order to have bat box schemes as part of agri-environmental programmes and has provided training with Teagasc on the such.

SDG 3 Ensure healthy lives and promote well-being for all ages.

Bat Conservation Ireland, through volunteer activities, promotes well-being and encourages all age groups to become involved in bat conservation. Volunteering and participating in volunteer programmes, particularly, those that provide access to nature, is a promoter of well-being.

SDG 4 Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.

Bat Conservation Ireland, through volunteer activities, promotes inclusiveness and aims to provide skills in order to undertaken wildlife monitoring. Participation in our monitoring programmes is often seen as a stepping stone to a career in wildlife and ecological professions and it is our aim to provide as many free training courses to aid such career development.

SDG 5 Achieve gender equality and empower all women and girls

Bat Conservation Ireland is an equal opportunities organisation.

SDG 6 Ensure availability and sustainable management of water and sanitation for all.

Bat Conservation Ireland promotes the use of bats as an environmental indicator of water quality, specially the Daubenton’s bat through the All Ireland Daubenton’s Bat Waterways Survey.

SDG 9 Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.

Bat Conservation Ireland promotes and educates in the use of technology in relation to bat monitoring and surveying. We are keen to keep our members and volunteers astride with advances in bat surveying technology.

SDG 10 Reduce inequality within and among countries.

Bat Conservation Ireland promotes all members of the public to join out bat events and monitoring programmes.

SDG 11 Make cities and human settlements inclusive, safe, resilient and sustainable.

Bat Conservation Ireland promotes the protection and safeguard of cultural and natural heritage and works with groups across the island in relation to bats roosts in historic buildings while promoting the bats safeguard. One of the organisations primary goals is the protection and conservation of bats, an important mammal group that represents ¼ of Ireland's terrestrial mammal species.

SDG 12 Ensure sustainable consumption and production patterns.

Bat Conservation Ireland aims for zero waste in it's operation. For example, reduce, reuse and recycle is operated in the BC Ireland office and minimum printing is undertaken for training courses etc. A much digital resources are provided and promoted to reduce paper usage.

SDG 13 Take urgent action to combat climate change and its impacts.

Bat Conservation Ireland recognises that bat monitoring requires volunteers to drive to survey sites. However, we encourage volunteers survey close to their home address in order to reduce travel and thereby fossil fuel consumption.

Bat Conservation Ireland are researching the potential impact of climate change on Ireland's bat populations. A scientific paper is currently under review.

SDG 14 Conserve and sustainably use the oceans, seas and marine resources for sustainable development.

Bat Conservation Ireland recognises that all life is intertwined and the protection / conservation is required of both terrestrial and marine life forms.

SDG 15 Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.

One of the organisations primary goals is the protection and conservation of bats, an important mammal group that represents ¼ of Ireland's terrestrial mammal species. A healthy and varied ecosystem is required for the protection and conservation of Ireland's bat populations. Bats are a suitable environmental indicator of the state of our environment as it relies on many connected habitats within a diverse landscape.

Bat Conservation Ireland promotes the sustainable management of structures and buildings in order to protect known bats roosts and to provide bat roosts in the future.

Across Europe, the decline of bat species has been well documented. BC Ireland is dedicated to protecting and conserving Ireland bat populations and undertakes extensive monitoring and conservation work in order to achieve this. The organisation works closely with government and non-government bodies to promote bat biodiversity loss and engages members of the public to be aware of bat conservation.

SDG 16 Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels.

Bat Conservation Ireland is an effective, accountable and transparent organisation.

SDG 17 Strengthen the means of implementation and revitalise the global partnership for sustainable development.

Bat Conservation Ireland works with many partners for sustainable development.

7. Governance Code

Bat Conservation Ireland signed up to The Wheel's BootCamp to assist BCireland in meeting its good Governance Code.

Bat Conservation Ireland is also a member of The Wheel.

Good Governance Actions Completed in 2018:

- GDPR Policy email (please see appendices)
- 2017 Audited Accounts
- Review of policies and policies updated, where required and hosting such policies on www.batconservationireland.org. The policies listed below have been updated in 2018.

Policy Documents 1 Bat Walks

Policy Document 2 At Work Policy

Policy Document 3 Health & Safety for Volunteers and Surveyors

Policy Document 3a General Health & Safety policy

Policy Document 4 Risk Assessment for Bat Surveys

Policy Document 10 Reserves Policy

- Engaging of legal advisors to ensure Company Secretary role is completed and that MOU meets requirements under the 2014 Companies Act
- Registering of Bat Conservation Ireland on Boardmatch to seek a Company Secretary
- Stronger protocols put in place in relation to roles
- Third Director registered.
- Restructuring of website to increase transparency
- Restructuring of Annual Report to increase transparency
- Engaging auditors to undertake a "Health Check" of Bat Conservation Ireland finances
- Engaging auditors to prepare the organisation for SORP
- Compliant with CRO
- Compliant with CRA
- 6 Council Meetings & AGM in 2018
- Ensure that there is adequate insurance policies in place
- Clearer 2018 budget plans

Good Governance Actions Completed in 2017:

- Financial Health Check – February 2018
- Review of remaining Policy Documents – March/April 2018

8. Evaluation of 2018 Action Plan

Bat Conservation Ireland undertook an evaluation of its 2018 activities to determine whether it met the goals of the 2018 Action Plan as presented at the start of this report.

Using a Traffic Light System of ● Decrease ● No Change ● Increase we assessed basic goals or commitments and, where possible, compared to 2018 activities while a √ indicates that action was completed.

Action	Details	Increase or Decrease	Evaluation
Irish Bat Monitoring Programme a) Car-based Bat Monitoring	60 volunteers 28 squares surveyed 24 repeat surveys Phasing in of new equipment	Contract Commitment of surveying 28 squares achieved. Successful completion of 31 surveys with both old and new equipment. Plan is to phase out old equipment in next two years.	● √
Irish Bat Monitoring Programme b) Waterways Survey	400 volunteers 239 water ways sites surveyed 181 repeat surveys	Number of volunteers similar to 2017 but the number of waterways sites surveyed is greater than 2017. However, contract commitment of surveying at least 180 waterways was achieved.	● √
Irish Bat Monitoring Programme c) Brown long-eared Roost Counts	44 volunteers 45 roosts surveyed 110 surveys	70% of surveys completed with assistance of volunteers. Contract Commitment of surveying >40 roosts surveyed completed. Similar statistics to 2017.	● √
Irish Bat Monitoring Programme d) Lesser Horseshoe Bat Database	Winter Survey Counts Summer Survey Counts	Bat Conservation Ireland collates the data – this contract commitment was completed in 2018.	● √
BATLAS 2020	2 training courses Similar support for volunteers available online and in the form of equipment as in 2017. Target specific survey squares.	Big increase in coverage of survey squares using targeted paid survey work. However, volunteer recruitment failed to achieve survey square coverage.	● √ in relation to survey coverage ● in relation to recruitment.
Increase profile of Bat Conservation Ireland	Training courses Newsletters Social Media Media Increase in Facebook followers on all accounts.	2018 was a slightly lower profile year in the media for Bat Conservation Ireland compared to 2017 because greater effort was deployed to BATLAS survey work, reporting and retendering for the monitoring programme. However, indirect media	● In relation to media ● In relation to Facebook √

		attention via grant recipients and activities of new bat groups means that general bat conservation-related media coverage was still high in 2018. Facebook followers were increased for all three accounts.	
Education Programme	31 training courses >50 Bat Walks & Talks Worked on three national guidelines. Bat Conservation Ireland Grants Training courses – Bat Detector Workshop Bat Rehabilitation Workshop	Fewer training courses in 2018 because greater effort was deployed to BATLAS survey work Bat Detector Workshop and Rehabilitation Workshop were new events.	● √
Membership	268 paid members Increase of 47 members compared to 2017	PayPal system set up on the website in 2018 continues to function well. We have seen a year on year increase in membership.	● √
Bat Groups	Two new bat groups set up in 2018 – Donegal and Mayo.	Bat Conservation Ireland continues to support members and volunteers in setting up local bat groups.	● √
Fundraising / Winning of Tenders	Irish Bat Monitoring Plan 2018-2022. NI Environment Fund for Bat Monitoring successful. IEN Core Funding – highest amount awarded to-date. Additional funding from three county councils for BATLAS 2020	2018 was a successful fund raising year for Bat Conservation Ireland.	● √
Seeking Feedback and Providing Feedback	Members and Volunteers day in Mullingar in February to discuss volunteer and member's needs and how best to improve BCireland. Feedback was emailed to volunteers for all surveys under the IBM and BATLAS 2020.	Greater engagement of volunteers was undertaken in 2018.	● √
Governance	6 Council Meetings / AGM / EGM Polices reviewed Further steps undertaken to meet Good Governance e.g. Revenue Commissioners review of Constitution. 1 new Council Member	2018 continues Bat Conservation Ireland meeting Good Governance.	● ● √

Appendix 1 – Conference Presentations

“15+ Years of Monitoring Irish Bats” at National Parks and Wildlife Service Staff Conference, Kilkenny. Presented by Niamh Roche.

Appendix 2 – Reports

Aughney T., Roche N. & Langton S. (2018). The Irish Bat Monitoring Programme 2015-2017. Irish Wildlife Manuals, No. 103. National Parks and Wildlife Service, Dublin

Aughney T., Roche N. & Langton S. (2018). Irish Bat Monitoring Schemes: Daubenton’s Bat Waterway Survey & Car-based Bat Monitoring, Northern Ireland. Report submitted to the Northern Ireland Environment Agency.

Appendix 3 – Bat Events

No.	Type	Person(s) representing BC Ireland	Date	Topic	Location
1	Bat Walk	Kildare Bat Group	22/8/18	Education	Culture Night, Naas, Co. Kildare
2	Bat Walk	Kildare Bat Group	25/8/18	Education	Heritage Week, Newbridge, Co. Kildare
3	Bat Walk	Barbara McInerney	23/8/18	Education	Heritage Week, Sligo Town, Co. Sligo
4	Bat Walk	Kildare Bat Group	22/8/18	Education	Heritage Week, Carton House, Co. Kildare
5	Bat Walk	Kildare Bat Group	21/8/18	Education	Heritage Week, Larchill Gardens, Kilcock
6	Bat Walk	Kildare Bat Group	18/8/18	Education	Heritage Week, Timahoe, Co. Laois
7	Bat Walk	Kildare Bat Group and Irish Peatland Conservation Council	28/7/18	Education	Bog of Allen Nature Centre, Lullymore, Co. Kildare
8	Bat Walk	Dublin Bat Group	27/5/18	Education	Biodiversity Week, Dropping Well, Dodder River, Dublin
9	Bat Talk and Walk	Kildare Bat Group	26/5/18	Education	Biodiversity Week, Cabragh Wetlands, Tipperary
10	Bat Walk	Clare Bat Group	25/5/18	Education	Biodiversity Week, O'Brien's Bridge, Co. Clare
11	Bat Walk	Bat Conservation Ireland	25/5/18	Education	Biodiversity Week, Virginia, Co. Cavan
12	Bat Walk	Irish Wildlife Trust and National Botanic Gardens of Ireland	24/5/18	Education	National Botanic Gardens, Glasnevin, Dublin
13	Bat Walk	Limerick Bat Group	23/5/18	Education	Biodiversity Week, Westfield Wetlands, Limerick
14	Bat Walk	Kildare Bat Group	23/5/18	Education	Biodiversity Week, Naas, Co. Kildare
15	Bat Walk	Clare Bat Group	23/5/18	Education	Biodiversity Week, Vandaleur Gardens, Kilrush, Co. Clare
16	Bat Walk	Waterford Bat Group	23/5/18	Education	Newtown Woods, Tramore, Co. Waterford
17	Bat Talk & Walk	Celebrate Water and Bat Conservation Ireland	23/5/18	Education	Biodiversity Week, Merville, Co. Donegal
18	Bat Walk	Limerick Bat Group	22/5/18	Education	Biodiversity Week, Rearcross, Co. Tipperary
19	Bat Talk & Walk	Bat Conservation Ireland	22/5/18	Education	Biodiversity Week, Ballinamore, Co. Leitrim
20	Bat Walk	Bat Conservation Ireland	20/5/18	Education	Biodiversity Week, Annascaul, Co. Kerry
21	Bat Walk	Limerick Bat Group	20/5/18	Education	Biodiversity Week, Lough Gur, Co. Limerick
22	Bat Walk	Kildare Bat Group	19/5/18	Education	Biodiversity Week, Portarlinton, Co. Kildare
23	Bat Walk	Bat Conservation Ireland	19/5/18	Education	Biodiversity Week, Belcarra, Co. Mayo
24	Bat Walk	Bat Conservation Ireland	19/5/18	Education	Biodiversity Week, Slane, Co. Meath
25	Conference Presentation	15+ Years of Irish Bat Monitoring	17/5/18	Education	NPWS Staff Conference, Kilkenny
26	Bat Open Day	Kildare Bat Group	16/6/18	Education	National History Museum, Dublin
27	Bat Walk	Galway Bat Group	20/8/18	Education	Heritage Week - Merlin Park Woods, Galway
28	Bat Walk	Galway Bat Group	24/8/18	Education	Heritage Week - Aughnanure Castle, Co. Galway
29	Bat Walk	Galway Bat Group	7/6/18	Education	Glenamaddy, Co. Galway
30	Bat Walk	Galway Bat Group	22/5/18	Education	Biodiversity Week - Merlin Park Woods, Galway
31	Information Day	Galway Bat Group	26/5/18	Education	Go Wild in Galway
32	Bat Box Inspection	Limerick Bat Group	30/12/18	Conservation	Mulcair, Co. Limerick
33	Training Events	Limerick Bat Group – In House Training / Monthly meet-ups	Numerous dates	Education	Various locations, Co. Limerick
34	Bat Talk	Limerick Bat Group	24/10/18	Education	Birdwatch Ireland, Limerick Branch
35	Bat Walk & Moth Night	Limerick Bat Group – Living Limerick	20/8/18	Education	Heritage Week - Curraghchase Forest Park
36	Bat Walk	Limerick Bat Group	4/8/18	Education	Limerick
37	Training	Limerick Bat Group	3/8/18	Education	Curraghchase Forest Park
38	Training	Limerick Bat Group	19/7/18	Education	Hospital, Co. Limerick
39	Bat Walk	Bat Conservation Ireland	24/8/18	Education	Rossmore Park, Co. Monaghan
40	Bat Talks & Walk	Bat Conservation Ireland	April 2018	Education	Belvedere Hs & Gardens, Mullingar, Co. Westmeath
41	Bat Talks & Walk	Bat Conservation Ireland	September 2018	Education	Belvedere Hs & Gardens, Mullingar, Co. Westmeath
42	Bat Talk & Walk	Mayo Bat Group	24/8/18	Education	Foxford River Festival, Co. Mayo

43	Training Day – Bat ID & Trees	Kildare Bat Group (Guest lecturer – Dr Tina Aughney)	24/2/18	Education	Clane, Co. Kildare
44	Training – Sound Analysis	Kildare Bat Group (Guest lecturer – Dr Emma Boston)	10/3/18	Education	Clane, Co. Kildare
45	Bat Walk & Talk	Kildare Bat Group with IPCC – Midsummer’s Night	21/6/18	Education	Rathangan, Co. Kildare
46	Bat Survey / Roosts	Kildare Bat Group with Naas Tidy Towns	9/7/18	Conservation	Naas, Co. Kildare
47	Bat Survey	Kildare Bat Group with Rathcoffey Community Group	30/7/18	Conservation	Rathcoffey, Co. Kildare
49	Bat Box Scheme	Kildare Bat Group with Maynooth Tidy Towns	29/9/18	Conservation	Maynooth, Co. Kildare
50	Bat Box Scheme	Kildare Bat Group with Emo Community Group	12/8/18	Conservation	Emo, Co. Laois
51	Bat Talk & Walk	Kildare Bat Group	27/10/18	Education	K Club, Co. Kildare
52	Nathusius’ pipistrelle training and surveying	Nathusius’ Pipistrelle Working Group	Various dates in September 2018	Conservation	Various locations in Co. Cavan
53	Bat Box Inspection	BCIreland	Various dates in 2018	Conservation	Various locations in Co. Cavan

Appendix 4 – Additional Events

No.	Date	Topic	Location	Person(s) representing BCireland
1	31/1/18	Skype meeting between Bat Conservation Trust (UK), NPWS, BCireland re: Woodland Monitoring	International	Niamh Roche and Tina Aughney
2	24/5/18	Meeting with Prof Emma Teeling, UCD, regarding progressing Irish research into Bats & Ecosystem Services	University College Dublin	Niamh Roche
3	3/7/18	Meeting with Louth wildlife ranger to carry out informal detector training	Slane, Co. Meath	Niamh Roche
4	21/6/18	Meeting with Ferdia Marnell re: Irish Bat Monitoring Scheme	North King St., Dublin	Niamh Roche
5	13/7/18	Meeting with Kate McAney re: car monitoring scheme	Headford, Co. Galway	Niamh Roche
6	5/7/18	Meeting with Karen Healy re: car monitoring scheme	Derry, Northern Ireland	Niamh Roche
7	6/7/18	Meeting with Andrew Dick re: car monitoring scheme	Portstewart, Co. Antrim	Niamh Roche
8	6/7/18	Meeting with Colleen Crawford re: car monitoring scheme	Belfast, Co. Antrim	Niamh Roche
9	6/7/18	Meeting with Cadogan Enright re: car monitoring scheme	Downpatrick, Co. Down	Niamh Roche
10	13/8/18	Meeting with Justin Ivory re: car monitoring scheme	Kilcoole, Co. Wicklow	Niamh Roche
11	13/12/18	Meeting and field work with Jay Cornish NPWS re: Lesser Horseshoe Bat Monitoring scheme	Castleisland/Tralee, Co. Kerry	Niamh Roche
12	14/12/18	Meeting with Kathryn Freeman NPWS re: Lesser Horseshoe Bat Monitoring scheme	Killarney, Co. Kerry	Niamh Roche
13	February 2018	Invitation to participate in a European COST Action submission on Bats, Climate Change and Ecosystem Services (Climbats)	International	Niamh Roche
14	November 2018	COST Action submission approved for funding, BCireland staff member nominated to the Management Committee	International	Niamh Roche
15	Various dates in 2018	BATLAS 2020 Meeting – Google Hangouts x 3 meetings	Google Hangouts	Simon Pickett, Tina Aughney
16	January 2018	Bat Mitigation Guidance Document - NPWS	Online	BCireland Council
17	January 2018	Complaint to European Court of Justice	BATLIFE Europe	Donna Mullen
18	June 2018	Meeting with Julien Carlier, Sligo IT (Research Project – Greenways)	Sligo IT	Tina Aughney

GDPR & Data Protection Law EU 2018 25th May 2018

Bat Conservation Ireland www.batconservationireland.org

The General Data Protection Regulation (GDPR) comes into effect on the 25th of May 2018. The aim is to give individuals more rights, control & understanding of how their personal data is processed and the purpose of the data held within our system.

It is Bat Conservation Ireland's policy to:

Work hard to ensure that your data is secure at all times.

Enable you to make informed decisions about how your data is used.

Never to share your data with third-parties.

OUR VOLUNTEER & MEMBERS DATABASE

Our database is made up of lists of people who have signed up as Bat Conservation Ireland members, attended training courses, participated in the Irish Bat Monitoring Programme and BATLAS 2020, attended the Irish Bat Conference, used our PayPal system to purchase merchandise, contact BCIreland through the website in relation to bat queries and also includes email addresses collated from received emails over the last 7 years. None of our data is ever shared nor will it be in the future.

OUR MEMBERS & CUSTOMERS

The information we collect through transactions (membership subscriptions, training courses, conference attendance and merchandise) is solely for the purposes of all manner of conducting the professional processing of customer and members transactions, the data is retained only for accounting purposes.

POTENTIAL & EXISTING VOLUNTEERS

Information is held for the purpose of engaging with potential volunteers and existing volunteers mainly in relation to Bat Conservation Ireland correspondence and training courses for the Irish Bat Monitoring Programme and BATLAS 2020.

POTENTIAL MEMBERS & CUSTOMERS

Information is held for the purpose of engaging with potential customers mainly in relation to Bat Conservation Ireland correspondence (e.g. newsletters) and training courses

We can assure you that the purpose of your contact details retained are purely for normal business transactions & for sharing with you information that relates to your business with Bat Conservation Ireland.

Should you have any question to help clarify any reservation in relation to data that we have, or should you wish to have any or all data removed from our system, please contact us immediately at info@batconservationireland.org.

Bat Conservation Ireland is on the road to GDPR compliance.

With regards,

Bat Conservation Ireland