



Comhshaol, Oidhreachta agus Rialtas Áitiúil
Environment, Heritage and Local Government

THE AGREEMENT ON THE CONSERVATION OF POPULATIONS OF EUROPEAN BATS [EUROBATS]

NATIONAL REPORT TO AC 14

Ireland

2009

A. General Information

Name of party - Ireland

Date of Report - 26 March 2009

Period Covered - April 2007 – March 2009

Competent Authority - National Parks and Wildlife Service
Department of Environment, Heritage and Local
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the Advisory Committee - Dr Ferdia Marnell

Abbreviations

BCIreland	Bat Conservation Ireland
CIBR	Centre for Irish Bat Research
IWG	Intersessional Working Group
NPWS	National Parks and Wildlife Service
NIEA	Northern Ireland Environment Agency (formerly EHS)
SAP	Species Action Plan
TRP	Threat Response Plan

B Status of Bats Within the Territory of the Party

1 Summary Details of Resident Species

Two individual specimens of Brandt's bat have been confirmed through genetic sampling, one in the east of the country, the other in the south-west. A number of other records of this species from several other locations, remain to be confirmed.

2 Status and Trends

Population trend data is being collected on an annual basis for six of Ireland's bat species as part of the Irish Bat Monitoring Programme. In 2008 a new Centre for Irish Bat Research was established to develop monitoring methods for three further species (see details at v) below).

i) *Annual monitoring of Rhinolophus hipposideros at maternity and hibernation sites.*

NPWS staff monitor 100 core hibernation roosts in January - February annually. A further 17 marginal sites are monitored every 3 years. 142 core summer roosts are monitored annually, with a further 16 marginal sites monitored every three years. Analysis of the 2008-09 data is ongoing.

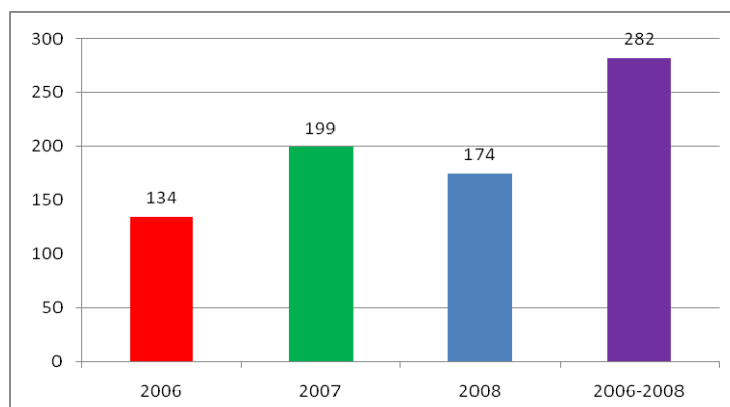
ii) *Car-based transects.*

The car transect programme, which is run jointly with the Northern Ireland Environment Agency (NIEA), continues to collect robust data for 3 widespread species - *Pipistrellus pipistrellus*, *P. pygmaeus* and *Nyctalus leisleri*. The data gathered from 2005-2007 showed *P. nathusii* rapidly expanding its range across Ireland, although data from 2008 suggests that the species has become less widespread again. Certainly it is not present in sufficient numbers to allow for robust monitoring. Bat Conservation Ireland [BCIreland] manages this project for NPWS.

iii) *Waterways survey*

This survey, run jointly with the NIEA, has continued to expand since its inception in 2006. In 2007 199 sites were surveyed. Inclement weather reduced survey opportunities in 2008, but still 174 sites were surveyed, with all 32 counties represented.

Fig. 1 Number of sites surveyed during the waterways monitoring scheme (Source: BCI).



Over 250 volunteers have been trained to date, making this one of the most successful volunteer based wildlife surveys ever undertaken in Ireland. This survey

is producing robust data for *Myotis daubentonii* and showing the species to be extremely widespread throughout the country; 91% of sites were positive in 2006; 86% of sites were positive in 2007 (analysis of 2008 data is ongoing). BC Ireland manages this project for NPWS.

iv) *Brown long-eared roost counts*

Reliance on emergence counts alone to determine colony size for *Plecotus auritus* has proven unreliable. The relative merits of three different count methods (Interior daytime counts; Exterior dusk emergence counts; and Interior, post-emergence counts) were explored in a pilot project funded by NPWS in 2007. 35 volunteers completed 30 individual surveys of 18 roosts. Of the 18 sites surveyed, 12 (67%) were deemed suitable for inclusion in the national monitoring programme. Arising from this pilot project, it was discovered that certain sites would be best monitored by using internal counts while emergence counts could be used at other sites. It was also determined that 50 roosts would need to be monitored on an annual basis to provide robust population trend data.

In 2008 a three year contract to implement and expand a national brown long-eared bat roost monitoring scheme was awarded to BC Ireland. 50 potential monitoring roosts were assessed in 2008 with 21 of these surveyed at least twice. Of the 54 roosts assessed to date (2007-2008), 25 have been deemed suitable for inclusion in the national monitoring programme and these will be monitored again in 2009 and 2010. The brown long-eared bat roost monitoring scheme will grow year on year so that by 2010 50 roosts across the country will be included in the annual monitoring programme.

v) *Woodlands surveys*

Monitoring Myotis bats, particularly the elusive and even cryptic woodland species (*Myotis nattereri*, *M. brandtii*, *M. mystacinus*), is notoriously difficult and has been the subject of much discussion at EUROBATs. Initial trials in Ireland, funded by NPWS in 2006 and 2007, proved inconclusive and consequently it was decided that a dedicated team of bat biologists was required to examine the issues with a view to developing an effective monitoring tool which would allow Ireland to meet its requirements under the Habitats Directive.



Fig. 2 CIBR field team harp-trapping at a *Myotis* roost (Photo: D. Buckley)

In May 2008 NPWS awarded a three year contract worth €700,000 to a joint team from University College Dublin and Queens University Belfast to set up a new centre of excellence for bat research in Ireland. This Centre for Irish Bat Research (CIBR) will investigate the feeding ecology and population biology of our three woodland species - *Myotis nattereri*, *M. brandtii* and *M. mystacinus* – and examine novel ways of monitoring these species with a view to developing and informing best international practise in this field. The research team consists of four principal investigators: Dr Emma Teeling and Professor Tom Hayden of UCD and Professor Ian Montgomery and Dr Paulo Prodohl of Queens University Belfast together with two post-doctoral researchers and two PhD students. The first field season (2008) concentrated on surveying maternity roosts from historical records but has also produced some exciting discoveries about bat swarming activity. Genetic samples from all roosts have also been collected to help answer taxonomic and phylogeographical questions. The project will take a holistic approach to studying these species by using radio-telemetry to look at home ranges and habitat usage, genetics to look at population structure in Ireland and phylogeography, and GIS to develop a predictive distribution model for these species. An effective monitoring methodology will be one of the main contract deliverables from this three year project.

vi) *Batlas 2010 project*

Despite a number of previous distribution surveys, data gaps are still evident for all Irish bat species, and even for our more common species - the soprano and common pipistrelles - the percentage of 10km squares that held records in 2007 was only 26% and 24% respectively.

To address these shortcomings an extensive survey programme was initiated in 2008. The aim of this project, which is being managed by BC Ireland with three-year funding from NPWS, is to systematically map the current distribution of Ireland's nine species of vesper bats by 2010. Survey work began in earnest in mid-summer 2008, and despite the poor weather 259 10 km squares were surveyed. This work will continue in 2009.

3 Habitats and Roost Sites

No developments since August 2006.

4 Threats

A substantial Threat Response Plan (TRP) for vesper bats has been developed by NPWS as part of Ireland's response to the judgement of the European Court of Justice in case C-183/05, and the requirement to establish a system of strict protection for bats, as species listed in Annex IV(a) of the Habitats Directive.

This plan recognises that despite significant progress in recent years Irish bats continue to face significant threats. In particular, roost loss and disturbance, unsympathetic management of foraging and commuting habitats, water pollution, and windfarms have been identified as significant concerns. While measures are already in place to address aspects of these threats, further action is required in certain areas. The Bat TRP sets out those actions, identifies who is responsible for implementing them and provides a time frame for delivery. Continuation of the current monitoring and education programmes, together with implementation of the additional actions identified in the TRP document, should ensure the long term favourable conservation status of bats in Ireland.

We hope to be in a position to publish the Bat TRP shortly on the NPWS website.

5 Data collection, analysis, interpretation and dissemination

Data collection is ongoing. All data from the monitoring programmes detailed at 2 above are collated by BC Ireland into a centralised database for bat distribution information. These data can be viewed at www.batconservationireland.org. The dataset is forwarded annually to NPWS and to the National Biodiversity Data Centre who also make it available through their map viewer software: <http://www.biodiversityireland.ie/>

C Measures Taken to Implement Article III of the Agreement

6 Legal Measures

All bats in Ireland are protected under the Wildlife Acts [1976 and 2000] which make it an offence to deliberately kill or injure any bat species or to damage its roosts. Conservation Rangers from the NPWS of the Department of Environment, Heritage and Local Government police this act throughout the country. Approximately 12 - 15 licences are issued each year under the Wildlife Acts to facilitate bat research and bat surveys e.g. to undertake mist netting or radio-tagging studies. Further information is provided here: <http://www.npws.ie/en/WildlifePlanningtheLaw/>

As provided for under the EU Habitats Directive, derogations for the disturbance or destruction of bat roosts are issued, subject to strict criteria, under Article 25 of *European Communities (Natural Habitats) Regulations, 1997*.

7 Sites identified and protected

Grilles and gates continue to be installed at important and vulnerable underground sites as required.

8 Consideration given to important bat habitats

No recent developments.

9 Activities carried out to promote the awareness of the importance of the conservation of bats

Bat Conservation Ireland is continuing to grow and develop and is working on a number of projects with NPWS [see their website: www.batconservationireland.org].

A DVD on Irish bats is being developed by Conor Kelleher with funding from NPWS. This product will be ready later in 2009 and is aimed at a wide audience with elements suitable for children, students, conservation staff and wildlife consultants.

10 Responsible bodies nominated for the provision of advice on bat conservation and management.

NPWS is the body responsible for the provision of advice on bat conservation and management. NPWS has recently published “*Bat mitigation guidelines for Ireland*”, a guidance document (adapted from English Nature’s *Bat mitigation guidelines*) for local authorities, developers and their consultants. This report has been widely circulated in Ireland and can be downloaded here: <http://www.npws.ie/en/PublicationsLiterature/IrishWildlifeManuals/2006-2007/>

The National Roads Authority have also published guidance documents for the treatment of bats before, during and after the development of national road schemes. These documents can be downloaded here: www.nra.ie

11 Additional action undertaken to safeguard populations of bats.

See D 14 below.

12 Recent and ongoing programmes relating to conservation and management of bats.

See B. 2 above.

13 Consideration being given to effects of pesticides on bats.

No further developments in this area.

D ***Functioning of Agreement***

14 Co-operation with other Range States

There is close cooperation between NPWS and NIEA in Northern Ireland; a number of bat monitoring schemes are now being conducted on an all-Ireland level (see 2 above). NPWS and NIEA have also produced a joint species action plan (SAP) for bats. This SAP covers the nine species of vesper bat found in Ireland. The SAP was published in April 2008 and implementation of the identified actions is underway. The SAP can be downloaded from <http://www.npws.ie/en/PublicationsLiterature/SpeciesActionPlans/>.

NPWS and NIEA are also working to update the Red List of Mammals for Ireland. A publication on this should be ready before the end of 2009.

15 Measures taken to implement MoP Resolutions

Resolution 2.2 - Consistent Monitoring Methodologies and Resolution 5.4 – Monitoring bats across Europe

See 2 above. Ireland has played an active role in the IWG on monitoring and, through its new Centre for Irish Bat Research, hopes to inform international best practice for the monitoring of woodland Myotis bats. Ireland has also participated and provided funding towards the Pan-European Monitoring Scheme for Underground Sites

Resolution 2.4 – Transboundary Programme: Habitat Proposals and Resolution 4.3 – Guidelines for the Protection and Management of Important Underground Habitats

Details of the most important underground roosts have been forwarded to the relevant IWG.

Resolution 4.9 and Resolution 5.7 Protection of overground roosts

Dr Ferdia Marnell convened the IWG set up at AC9 to address this resolution. This working group has now completed its report and at MoP 5 a further resolution was adopted encouraging Parties and non-party range states to adopt listed measures to improve the protection of bats in buildings of cultural heritage importance and to enhance cooperation between built heritage and natural heritage authorities. A manuscript of the findings and recommendations of this working group has been prepared for publication in the EUROBATS series.
