

**AGREEMENT ON THE CONSERVATION OF BATS IN EUROPE
(EUROBATS)**

Report on the implementation of the Agreement in the United Kingdom

2000

This document reports on actions undertaken by the UK in 2000 to meet its obligations under the Agreement.

A. GENERAL INFORMATION

Party: United Kingdom

Date of Report: 9 March 2001

Period Covered by Report: January - December 2000

Competent Authority: The Department of the Environment, Transport and the Regions (DETR)

Changes Regarding:

Competent Authority -
Appointed member of the Advisory Committee -
Membership of other committees/working groups -

A. Abbreviations

BCT	Bat Conservation Trust
CCW	Countryside Council for Wales
CroW	The Countryside and Rights of Way Act 2000
DAFF	Department of Agriculture, Fisheries and Forestry (Isle of Man)
DETR	Department of the Environment, Transport and the Regions
EA	Environment Agency
EN	English Nature
EPS	European Protected Species
GONHS	Gibraltar Ornithological & Natural History Society
NBMP	National Bat Monitoring Programme
NERC	Natural Environmental Research Council
SNH	Scottish Natural Heritage

B. STATUS OF BATS WITHIN THE TERRITORY OF THE PARTY

1. Summary Details of Resident Species

A decision is still awaited from the International Commission on Zoological Nomenclature on the acceptance of two neotypes: *Pipistrellus pipistrellus* and *Pipistrellus pygmaeus*.

The position in respect of the United Kingdom's 16 resident species of bat, including the two species of Pipistrelle, remains the same.

2. Status and Trends

United Kingdom

Funding by the Department of the Environment, Transport and the Regions (DETR) of the National Bat Monitoring Programme (NBMP), conducted by The Bat Conservation Trust, ended on 31 December 2000. The results indicate that the Lesser horseshoe bat population has risen by approximately 4.8% per year (between 2.6% to 6.9%) over seven years (1993 to 1999) in the UK¹. This upward trend is mainly due to an 11% per year rise (between 5.3% and 17.8%) over the previous three years (1997-1999). Differences exist between the English and Welsh populations; an overall decline of around -3.2% per year (between -8.1% and +2.0%) is evident in the English population, in contrast to a 6.2% per year rise (between 3.8% and 8.5%) in the Welsh population from 1993 to 1999. A longer run of data is needed to establish whether these trends will be sustained.

Wales

A local bat group discovered the only known colony of Barbastelle bats in Wales. It was found in August during a bat detector workshop in a tree roost near Pengelli, on the borders of Ceredigion and Pembrokeshire.

Isle of Man

Population estimates cannot be produced at present owing to the lack of data, but some provisional distribution and status categories are provided here, based upon local knowledge. These may, however, be subject to change in the light of better information.

Common Name	Specific Name	Distribution/status
Common pipistrelle	<i>Pipistrellus pipistrellus</i>	Widespread/common
Brown long-eared bat	<i>Plecotus aureus</i>	Widespread/common
Daubenton's bat	<i>Myotis daubentoni</i>	Widespread/common
Soprano pipistrelle	<i>Pipistrellus pygmaeus</i>	Widespread/frequent
Leisler's bat	<i>Nyctalus leisleri</i>	Widespread/frequent
Natterer's bat	<i>Myotis nattereri</i>	Widespread/frequent
Whiskered bat	<i>Myotis mystacinus</i>	Restricted/rare

Gibraltar

No new surveys have been undertaken in Gibraltar although the best known roosts have been visited at least once with no changes to report.

3. Habitats and Roost Sites

No change.

4. Threats

¹ Walsh, A et al (2001). The UK's National Bat Monitoring Programme Final Report (in press).

In Gibraltar, the threat to *Pipistrellus pipistrellus* and *Tadarida teniotis* from re-roofing and the addition of storeys in the Old Town continues. An increase in archaeological activity is beginning to cause concern as new caves are being explored.

5. Data collection, analysis, interpretation and dissemination

In addition to the existing sources of data, the Bat Conservation Trust (BCT) and Royal Society for the Protection of Birds (RSPB) have set up a Species Protection Database. Data is collected for the prevention and detection of crime and the apprehension and prosecution of offenders.

The Environment Agency (EA) continued to support the NBMP by supplying river habitat survey and water quality data for the Daubenton's bat survey (for more information about the NBMP, please see Section 12). The Agency was also involved in data analysis for the Daubenton's survey for the purpose of associating habitat variables with bat activity.

An update of English Nature's (EN) 'Batsites' database was undertaken. This has improved knowledge of sites for Annex II (of the Convention on the Conservation of European Wildlife and Natural Habitats) species in particular by collecting records from a wide range of sources.

C: MEASURES TAKEN IN ACCORDANCE WITH ARTICLE III TO THE AGREEMENT

6. Legal measures taken to protect bats, including enforcement action

United Kingdom

The first conviction in the UK under the Conservation (Natural Habitats etc) Regulations 1994 in respect of bats was obtained in March 2000 against a contractor working for Leicestershire County Council. The contractor was found guilty of damaging a bat roost without consulting the proper authority, and was fined and ordered to pay costs.

Great Britain

The Conservation (Natural Habitats, & c.) Regulations 1994 implement EC Directive 92/43/EEC ('the Habitats Directive') for the protection of certain European Protected Species (EPS), including all native British bats. In March 2000, the procedures for issuing licences for development activities that adversely affect EPS changed in order to better reflect the provisions of the Directive.

Developments affecting EPS require a licence to derogate from the provisions of the Habitats Directive. From 17 March 2000, all licence applications arising from development proposals in England have been considered by the DETR in place of English Nature. Similar provisions have been put in place for Wales and Scotland.

England and Wales

The Countryside and Rights of Way (CroW) Act 2000, which applies to England and Wales, received Royal Assent on 30 November 2000.

Since 1981 it has been an offence, through the Wildlife & Countryside Act, to intentionally damage, destroy or obstruct the access to any structure or place which bats use for shelter or protection, or to intentionally disturb a bat while it is occupying such a structure or place. The CroW Act 2000, however, extends the legislative protection to include 'reckless' damage or disturbance.

The new Act also introduces a statutory duty on all Ministers and Government departments to have regard to the conservation of biological diversity in the course of their functions. The Act requires the Secretary of State in England and the National Assembly for Wales to publish lists of priority species and habitats and to take steps, or promote the taking of steps

by others, to further the conservation of the listed species and habitats. These duties came into force on 1 February 2001.

DETR's review of 'Planning Policy Guidance 9: Nature Conservation' (PPG9) commenced. This PPG9 Note sets out the Government's policies in England on different aspects of planning, including conserving the diversity of British wildlife and its habitats. It contributes towards the UK's implementation of the Habitats Directive. One of the aims of the Guidance is to minimise the adverse effects on wildlife where a conflict of interests is unavoidable. Local planning authorities must take PPG contents into account in preparing their development plans. The protection of species, including bats, is addressed in paragraphs 44 to 48 of PPG9 and will be considered as part of the review.

Isle of Man

The Department of Agriculture, Fisheries and Forestry (DAFF) received 10 enquiries from members of the public who had found bats, and the Manx Bat Group, approximately another 15. In addition, the bat group was asked for three site reports from developers. A DAFF officer made a number of site checks with respect to building developments and improvements.

Northern Ireland

511 enquiries about bats in dwelling houses were received by the Environment and Heritage Service in Northern Ireland during the reporting period. In 28 cases, guidance on means of exclusion after natural dispersal has been provided. No prosecutions for bat-related offences were taken.

7. Sites identified and protected which are important to the conservation of bats

No Manx sites have been notified as Areas of Special Scientific Interest (ASSIs) for their bat interest, but all roosts are protected under the Wildlife Act 1990.

Four new Sites of Special Scientific Interest (SSSIs) for bats were notified in Wales in 2000: Beech Cottage in Waterwynch and Orielson Stable Block and Cellars in Pembrokeshire (Lesser horseshoes); Ciliau in Powys (Lesser horseshoes); Felin Llyngwair; and Felin Llyngwair in Pembrokeshire (Greater horseshoes).

A new site, which is a breeding site for the Lesser horseshoe bat, was notified as a SSSI in England: Hestercombe House, Somerset.

8. Consideration given to habitats which are important to bats

England

In November 2000 the BCT reported on a project conducted on behalf of English Nature into the use of Paston Great Barn in Norfolk by a breeding colony of Barbastelle bats. Paston hosts the only known Barbastelle bat maternity roost in a building in the UK. The work included use of an infra-red camera to videotape bat activities in the barn which indicated a reduction in the numbers of adults and young from 43 to 29 between 1998 and 2000. Paston Great Barn has been included in a list of proposed Special Areas of Conservation (SACs) published on 24 August 2000.

The project, 'Managing landscapes for the Greater horseshoe bat' is ongoing. This uses agricultural support funding to improve the management of land around Greater horseshoe bat maternity and hibernation sites. A new leaflet on this has been produced. The project officer is employed by English Nature. To date, English Nature have provided advice to 82 holdings (farms) totalling 7,168 hectares. This has resulted directly in:

- Pasture management with specialised grazing regimes: 116 ha
- Hedgerow renovation: 25.66 km
- Hedgerow planting: 7.11 km
- Orchard renovation: 6 ha

6 m arable field margins: 20.58 km

Total area in Countryside Stewardship: 1159 ha.

A similar contribution has been made by partner organisations, based on English Nature's advice.

Northern Ireland

In Northern Ireland there are five distinct areas that have, since 1993, been designated as Environmentally Sensitive Areas (ESAs). The five designated areas total 221,000 hectares of agricultural land, representing 20% of Northern Ireland's total land area. By the end of 2000, over 4,500 farmers had entered into 10-year management agreements with the Department of Agriculture and Rural Development, representing 143,000 hectares of land under agreement, or 64% of eligible land.

Wales

The agri-environmental scheme, Tir Gofal, which was set up in 1999 made progress with 430 farms signing up, covering about 43,000ha. A further 600 applications are being processed.

Scotland

The Scottish Executive, with the aid of Scottish Natural Heritage (SNH), have set up a new agri-environment scheme called the Rural Stewardship Scheme. This provides a variety of opportunities for the creation and management of farmland habitats in Scotland. In particular the management of insect rich feeding grounds and flyways will be of benefit to bats. Suitable prescriptions under the scheme include the management of wet grassland and wetland features including water-margins and floodplains; management of field margins and boundaries including grass margins and hedgerows; management of woodland and scrub and the creation or restoration of farm ponds.

Gibraltar

Consideration is being given to the future clearing of dense scrub to increase feeding habitat within the Upper Rock Nature Reserve.

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

Great Britain

The BCT completed a bat exhibition at Woodchester Mansion which provides the unique opportunity for the public to view some of the UK's rarest bats. The exhibition utilises two manoeuvrable close circuit cameras inside the roost with remote control and projector screens in a public viewing area. The display, which was part-funded by the Peoples' Trust for Endangered Species, also includes a 'Bat Listening Post' and information boards.

The BCT produced and distributed a new 'Bats in Trees' leaflet aimed at people working with trees. In addition, a bats and trees display was produced which was exhibited at various events during the year including the Games Fair, County Shows and training courses for those working with trees. This project was part-funded by the People's Trust for Endangered Species.

European Bat Week was held from 26th August until 3rd September 2000. A number of events were held across the country, which included: the Welsh Bat Bonanza run by Radio Wales in conjunction with BCT (this involved walks, talks and bat box making workshops); the Old Moor Wetland Centre's Batty Arts & Crafts; and the UK Bat Conference in Belfast. In addition, BCT staff were interviewed by a number of radio stations.

BCT's helpline continues to deal with over 6,000 enquiries about bats from members of the public (particularly roost owners) and professionals and provides educational resources to bat groups. Their website, which can be found at www.bats.org.uk is regularly updated, providing information about bats and their conservation.

In August 2000 BCT conducted a 2-day course to train 30 new licensed bat workers on behalf of EN's North Thames and Chiltern Region. BCT and EN jointly ran a 2-day training course for new bat worker trainers in September and ran a bats and trees course for tree wardens for the British Trust for Conservation Volunteers in London in December.

In September 2000 the BCT conducted a two-day course entitled "An Introduction to Bats and Bat Surveys" for ecological consultants and other environmental professionals. This included bat biology and behaviour, legislation, when a survey is required, survey planning and methods, impact assessment, mitigation and monitoring and recognising when to bring in more experienced bat workers. A pilot accreditation scheme was also tested. The BCT continues to develop this and other aspects of the course.

The BCT's newsletter, Bat News, was shortlisted for the BBC Wildlife Magazine's award for the Best Environmental Newsletter.

BCT launched a campaign in 2000 to improve law enforcement. BCT staff addressed the Police Wildlife Liaison Officer (PWLO) National Conference in Bristol in October calling for a clamp down on those who break the laws protecting bats and outlining ways in which BCT, and the network of voluntary bat workers, can help the police to do this eg by gathering evidence and providing expert advice. "Bats and the Law", a booklet produced by BCT and RSPB, was distributed to all PWLOs at this event and made freely available at several others. BCT has made forms available to bat groups to report suspected offences and, with help from the RSPB, has set up the first UK database of crimes against bats to monitor levels of suspected offences and prosecutions (also see Section 5).

EN provided funding to the BCT with the aim of helping to support local bat groups and continuing work to promote awareness of bats. (See Section 12)

In 2000, Forest Enterprise conducted at least 53 walks, 9 talks and 8 bat days/visits, promoting bat conservation. 36 or more bat hibernation sites are known to be present on Forest Enterprise-owned land.

Scotland

In June a group of experienced Scottish bat workers ran a bat work training weekend at Kindrogan Field Centre, with assistance from the BCT and grant support from SNH, to train and update 30 professional and volunteer bat workers.

SNH continued to provide grant aid to local bat groups for the purchase of equipment and to contribute towards travel costs for appointed voluntary bat workers when undertaking bat roost visits at SNH's request. An annual SNH grant was also paid to the BCT to support their work. Discussions with the Trust are ongoing with respect to future funding arrangements.

Wales

CCW grant-aided the Millennium Welsh Bat Conference at Plas Tan y Bwlch, in addition to supplying speakers. CCW continued to support the work of BCT in Wales.

Northern Ireland

The Department of the Environment in Northern Ireland continue to provide grant-aid to the Northern Ireland Bat Group (£2,217 for the period of the report), and fund an advisor post at the Ulster Museum who spends 75% of their time dealing with bat issues (£31,500 for the period of this report).

Gibraltar

Press releases, television interviews and educational activities with school children took place at the Gibraltar Ornithological & Natural History Society (GONHS) Conservation Park in the Botanic Gardens. Here some captive Egyptian Fruit bats provided by Jerez Zoo were used to show visitors that bats are not the creatures that horror movies portray them as.

10. Responsible bodies, in accordance with Article III.5 of the Agreement, nominated for the provision of advice on bat conservation and management

No change.

11. Additional action undertaken to safeguard populations of bats

The Government of Gibraltar's Housing Authorities were approached to stop a programme of replacement window shutters behind which Pipistrelles roost. This approach is believed to have been successful. The Planning Commission is also being urged to ensure that re-roofing plans include the provision of alternative bat roosts.

12. Recent and ongoing programmes (including research and policy initiatives) relating to the conservation and management of bats. In the case of research, summaries of completed projects should be provided, giving references where possible and acknowledging the sources of funding.

The Environment Agency continued to run a bat box monitoring project at Shifford Lock on the River Thames. This has seen a long-term increase in bats using the boxes. The creation of roosts included the conversion of a large Second World War pill box into a bat hibernaculum, near Wallingford on the River Thames. Also on the Upper Thames, water gauging stations have been modified for bat use. Nationally, other roosts have been created by developers as a condition of consents required from the Agency whilst building bridges, for example. Bat boxes continue to be put up at various locations.

The Agency also continued its support of a long-term monitoring programme for bats on the rivers Usk and Wye run by the Brecknock Bat Group. The main focus is recording data from monitoring stations (bat boxes) within the catchments and mapping movements of ringed Daubenton's bats.

A PhD on genetic structure of Greater horseshoe bat populations in England and Wales was completed at the University of Bristol². The study identified the genetic contribution of males and genetic differences between English and Welsh populations of this species. The study was funded by the Natural Environment Research Council (NERC), and continues as a NERC-funded research grant. Two papers relevant to the management of this species were published^{3,4}. A PhD on the importance of autumnal swarming sites for bat conservation continues at the University of Bristol (Miss K.N. Parsons).

SNH continued to promote the conservation of bats roosts and several particularly important ones were the subject of specific management measures, such as the installation of custom-built in-situ bat boxes. In such cases, financial support is provided through grant-aid or through a management agreement with the roost owner.

A PhD thesis on the use of landscape elements by bats in north east Scotland was completed at the University of Aberdeen⁵. The importance of tree-lines to bats was investigated primarily by placing automatic bat recording stations next to tree-lines, and others in adjacent open spaces. Most Pipistrelle (*Pipistrellus pipistrellus* & *P. pygmaeus*) bat activity was found next to tree-lines and very little over open spaces. They used tree-lines for both commuting

² Rossiter, SJ. The causes and consequences of genetic structure in the greater horseshoe bat (*Rhinolophus ferrumequinum*) - unpublished.

³ Rossiter, SJ, Jones, G, Ransome, RD & Barratt (2000a). Parentage, reproductive success and breeding behaviour in the greater horseshoe bat (*Rhinolophus ferrumequinum*). Proceedings of the Royal Society, London, 267B: 545-551.

⁴ Rossiter, SJ, Jones, G, Ransome, RD & Barratt (2000b). Genetic variation and population structure in the endangered greater horseshoe bat *Rhinolophus ferrumequinum*. Molecular Ecology 9: 1131-1135.

⁵ Downs, NC (2000). The use of landscape elements by bats in N E Scotland. PhD thesis, University of Aberdeen.

and foraging. More insects were caught using Johnson-Taylor suction traps close to tree-lines than further away, and more Pipistrelle feeding attempts were recorded next to tree-lines. Bats flew an average of 6m lower when over open space than when adjacent to a tree-line. In addition, recording stations were used to investigate which variables affected bat activity over and around ponds and to determine the use bats made of river corridors.

‘Winter feeding studies on greater horseshoe bats’ were carried out. The research involved the dietary analysis of Greater horseshoe bats from droppings collected at winter sites. The work was contracted out by English Nature to Prof R D Ransome.

A MSc thesis analysing the diet of the Pipistrelle bat in Wareham Forest in Dorset was completed at the University of Reading⁶. It found that a variety of prey was consumed by *Pipistrellus pipistrellus* with a total of 10 orders of insect being identified by faecal analysis. Of these, the sub-order Nematocera (order Diptera) was the most abundant.

Work started on English Nature's project entitled, ‘Installation of automated bat counters’. A counter is being built for installation at Woodchester Mansion, a Greater horseshoe bat maternity site. This will monitor the activity of the bats and provide monitoring data on numbers. Contractor: P Andrews.

The monitoring of Lesser horseshoe bat roosts by Welsh bat groups using non-intrusive standardised methods was ongoing in 2000. Results were fed into the National Bat Monitoring Programme. CCW continue to fund the automatic bat counters in Greater and Lesser horseshoe roosts as well as research on juvenile greater horseshoes. 2000 was the final year of a NERC-CASE/CCW funded PhD on the ecology of Daubentons bats. Grant-aid was given to local bat groups and for the holding of bat detector workshops.

The Manx Bat Group in the Isle of Man have further extended their survey of bridges for bats and, as a result of surveys over recent years, they have checked most of the accessible caves.

The National Bat Monitoring Programme (NBMP) has now completed its first five-year phase with funding from the DETR. The next phase of the Programme will be funded by the Joint Nature Conservation Committee and will continue to be carried out by BCT.

The NBMP has devised standard techniques to provide baseline data for 8 species of bat in the UK. Six key annual national monitoring schemes have been implemented representing a strong collaboration between experts, bat workers and the general public. To date, over 1,500 people have been added to the database of potential volunteers and over 850 people have participated in monitoring schemes and contributed data. The volunteer recruitment rate continues to rise annually and over 60 workshops have provided hands-on training in field identification techniques.

Maternity colony monitoring for the Lesser horseshoe was undertaken between 1993 and 2000 in Wales and 1995-2000 in England. Data collected at 157 sites has enabled reliable detection of national population trends for the first time. Serotine and Pipistrelle colony counts took place from 1997-2000. A total of 54 Serotine roosts were monitored, and the Pipistrelle count was the most popular survey with 585 sites included in the network. Daubenton's bats were the focus of a heavily subscribed volunteer field survey that looks at 715 waterway sites. This features a unique collaboration, with the Environment Agency providing additional data on habitat and water quality associated with the sites. An innovative protocol has been developed for a mixed species field survey for Noctule, Serotine and two Pipistrelle bats. Between 1998 and 2000 the network of sites surveyed has grown to 367 and the focus now is on ensuring that these are repeated annually. Between 1997 and 2000, all species present have also been counted at 255 hibernation sites across the UK.

⁶ Penman, M (2000). Analysis of the diet of the Pipistrelle bat (*Pipistrellus Pipistrellus*) in Wareham Forest. MSc thesis, University of Reading.

A Bat Chamber Design and Monitoring project was set up by BCT in 2000 to develop and test a practical alternative roost for a colony of Pipistrelle bats to inhabit where they are being excluded from a building. The project, part funded by the People's Trust for Endangered Species, aims to test a model which could be used for future mitigation of roost exclusion.

13. Consideration being given to the potential effects of pesticides on bats, and their food sources and efforts to replace timber treatment chemicals which are highly toxic to bats

The Wildlife Incident Investigation Scheme is operated by the four UK agriculture departments and is co-ordinated by the Pesticides Safety Directorate. Although there are some local differences in detail, the basic operation of the Scheme is the same throughout the UK. Field investigations are carried out into cases where it is suspected that wildlife has been affected by pesticides, *post mortem* examinations of casualties are undertaken and samples analysed for pesticide residues. The results of these enquires are used in reviews of the conditions of approval of the pesticides concerned, and evidence of illegal use (whether a deliberate attempt to poison wildlife or an unapproved method of use against the proper target species) may lead to prosecution or other enforcement action. During 2000, no cases involving bats were investigated under the Scheme.

D. FUNCTIONING OF THE AGREEMENT

14. Co-operation with other Range States

No change.

15. Measures taken to implement Resolutions adopted by Meetings of Parties

Resolution 2, MoP 2: See Section 12 of this report on the National Bat Monitoring Programme.

Resolution 3.7, MoP 3: The UK is in the process of ratifying the Amendment to the Agreement.