AGREEMENT FOR THE CONSERVATION OF BATS IN EUROPE (EUROBATS)

Report on the implementation of the Agreement in the United Kingdom

2006

This document reports on actions undertaken by the UK in 2006 to meet its obligations under the Agreement.

A. GENERAL INFORMATION

Party: United Kingdom

Date of Report: March 2007

Period Covered by Report: January – December 2006

Competent Authority: The Department for Environment, Food and Rural Affairs (DEFRA)

Changes Regarding:

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

A. Abbreviations

BAP	Biodiversity Action Plan
BCT	Bat Conservation Trust
CCW	Countryside Council for Wales
DEFRA	Department for Environment, Food and Rural Affairs
EA	Environment Agency
EBLV	European Bat Lyssa Virus
ED	Environment Division
ELS	Entry-level Stewardship
HLS	Higher Level Stewardship
GONHS	Gibraltar Ornithological & Natural History Society
JNCC	Joint Nature Conservation Committee
NBMP	National Bat Monitoring Programme
NE	Natural England
OELS	Organic Entry Level
OHLS	Higher Level Stewardship
SAC	Special Area of Conservation
SAPs	Species Action Plans
SEPA	Scottish Environment Protection Agency
SNH	Scottish National Heritage
SSSI	Sites of Special Scientific Interest
WIIS	Wildlife Incident Investigation Scheme
UK	United Kingdom
UK BAP	United Kingdom Biodiversity Action Plan

B. STATUS OF BATS WITHIN THE TERRITORY OF THE PARTY

1. Summary Details of Resident Species

UK: There are 17 species of bats resident and breeding in the United Kingdom (UK). Within the last national report, the UK reported that a female pond bat was captured during research at an underground Site of Special Scientific Interest (SSSI) in Suffolk. Subsequent radio tracking revealed that the female used a tree cavity as a day roost and later returned to hibernate underground in the SSSI where a second pond bat was also found. Bat workers in Kent also recovered a pond bat in late 2004. However, there is now doubt over the identification of pond bats in previous years and they have now been as classified as 'suspected' pond bats. It is still possible that they may be found resident in this country in the future.

Jersey: Monitoring of bat species continued in 2006 but the results are yet to be analysed. An initial assessment indicates no major changes from 2005.

Gibraltar: Recent work has identified the likely presence of both Pipistrelle bat species. Schreiber bats and European Free-tailed have been recorded and are present in small numbers. The status of other bat species needs further investigation.

2. Status and Trends

Trends in UK Biodiversity Action Plan species

Seven species are currently identified as priorities in the UK Biodiversity Action Plan (UK BAP), with six dedicated action plans that aim to maintain and increase populations. More information on these Species Action Plans (SAPs) can be found at www.ukbap.org.uk. Between 2005 and 2006, a review of the UK BAP, updated both the priority species list and the targets that individual action plans work towards. The National Bat Monitoring Programme (NBMP) trends were used in judging whether species met the criteria of the priority review and were central to devising the new targets for several species. The new priority list is expected early in 2007 and the new BAP targets can be viewed at www.ukbap-reporting.org.uk/. Table 1 in Annex A show the trends from 1998 to 2005 for four UK BAP species of bats.

Methodology

The NBMP has been run by Bat Conservation Trust (BCT) since 1996, funded by the Joint Nature Conservation Committee (JNCC) since 2001. It is the longest running multi-species monitoring programme for mammals in the UK, producing statistically robust population trends for 11 of the UK's 17 resident bat species. Three survey methods are employed to monitor the UK's bats, which are:

- Field surveys with bat detectors.
- Hibernation site surveys.
- Summer maternity colony counts.

The NBMP's datasets are unique in that some species are monitored using more than one of the survey methods and may have two trends described. However, the robustness of the data obtained may vary with survey methods. As a rule, trends from field surveys take priority, followed by the hibernation survey, and then by the colony counts unless otherwise stated.

Status of UK's bat species monitored by NBMP

Updated population estimates are given below for several of the UK's bat species and where no trend data are available; a short discussion is given on the reasons why. Table 2 in Annex A, sets out the UK's long-term population trends and short-term percentage changes.

Greater horseshoe

- **Hibernation Survey:** Although a steady downward trend is evident, this is not statistically significant.

- **Colony Counts**: There has been a statistically significant upward trend (39%) since 1998. This should be treated with some caution because there are a number of inconsistencies in the counting approach. At present, trends based on hibernation data are considered to have greater reliability than those of summer colonies.

Lesser horseshoe

- **Hibernation Survey:** There has been a statistically significant upward trend since the survey started with an annual increase estimated at 6.3%.
- **Colony Counts:** There has been a statistically significant upward trend and the average annual increase in colony size is now estimated at 5.6 %. The significant upward trend from both surveys is strongly indicative that the population is increasing. This result provides an independent measure of the success of actions under the SAP. Lesser horseshoe bats in the UK are at the northern limit of their distribution and the recent run of mild winters is likely to have contributed to the increase as over wintering survival is highest during mild winters.

Common pipistrelle

- **Field Survey:** The overall trend observed since 1998 has been positive with a period of rapid increase in the index during the first four years and an apparent plateau between 2002 and 2004. The 2005 point is high, lying approximately 58% above the 1999 baseline, with the positive trend equating to an average annual increase of 7.9%.
- **Colony Counts:** The 2005 count is high relative to previous years, but remains approximately 31% below the 1999 baseline (equivalent to an average annual decrease of 5.1%). There remains a clear discrepancy between the two surveys with the Field Survey showing a statistically significant increase and the Colony Counts survey showing a statistically significant decrease. Common pipistrelles are known to use multiple roosts throughout the summer and we assume this behaviour may result in an erroneous trend. For the present, we rely on population trends derived from the Field Survey to reflect what is occurring in the wider common pipistrelle population and therefore conclude there has been a statistically significant increase in the population.

Soprano pipistrelle

- **Field Survey:** Although there are indications of a decline since 1999, this is not statistically significant.
- **Colony Counts:** The estimated value of the index has fallen for the fourth consecutive year since the 2000-2001 peak, and the decline (which has averaged approximately 3.3% per annum) became statistically significant in 2005. The colony counts are significantly down so there are some suggestions of a decline. However, the colony counts are less reliable than the field survey so we consider this species has stable populations at present. This species forms more sedentary colonies than the common pipistrelle, so the effect of colony mobility on interpreting results is likely to be less.

Bechstein's

No trend data is currently available as this species is very difficult to monitor using our existing survey techniques. A protocol for baseline distribution surveys has been successfully developed and tested. BCT plans to coordinate the use of this protocol by volunteers to survey the entire anticipated range of the species in the UK.

Barbastelle

The NBMP has developed and piloted a survey protocol for woodland Special Area Conservation (SAC) sites to establish that barbastelle bats can be monitored using ultrasonic detectors. In 2005, the pilot was repeated, modified, and expanded to encompass twelve sites including several where the species was not known to occur. The survey identified the species in five new locations, making a positive contribution BAP implementation. The limiting step in expanding this survey appears to be ensuring that sonogram analyses are achievable within reasonable time frames and consistent between analysts, but the approach has great promise for wider rollout. Funding now needs to be secured for a larger scale, volunteer-based, monitoring project, which can be further developed into a Woodland Survey as part of the NBMP.

Daubenton's

- **Hibernation Survey:** The number of Daubenton's bats recorded at hibernation sites has shown a statistically significant increase during the survey period, at an average annual rate of 3.3%.
- **Waterway Survey:** There has been a statistically significant positive trend representing a 20% increase since 1998. The Hibernation Survey provides the most statistically robust trend at present. We can conclude that the population is increasing. The continuing improvement in water quality throughout the UK is likely to be one factor contributing to the present increase. The extent to which milder winters, which are known to increase over wintering survival, are contributing is unknown but is another likely factor.

Whiskered/Brandt's

- **Hibernation Survey:** Although there were indications of a 25% increase since 1998, no statistically significant trend was detected.

Natterer's

- **Hibernation Survey:** The analysis showed a statistically significant increase of 47%, representing an average upward trend of 6% annually.
- **Colony Counts:** No statistically significant trend was detected. The Hibernation Survey provides a statistically robust trend so we may conclude that the population is increasing.

Serotine

No significant trends were detected from either the Field Survey or the Colony Counts, suggesting that the population is stable.

Noctule

- **Field Survey:** Although there are indications of a 7% increase in this species since 1998, there is no statistically significant trend.

Brown long-eared

- **Hibernation Survey:** There has been an apparent decline of 21% since 1998, but no statistically significant trend detected.
- **Colony Counts:** No statistically significant trend was detected.

Jersey: The status of all recorded local species is as follows:

Species		**Status 2006**
Greater Horseshoe	*Rhinoloplus ferrumequinum*	One record in 2006
Natterers bat	*Myotis nattereri*	Uncommon resident
Grey long-eared	*Plecotus austriacus*	Relatively common resident
Brown long-eared	*Plecotus auritus*	one individual recorded 2006
Common pipistrelle	*Pipistellus pipistellus* *Pipistellus pygmaeus*	Very common resident Relatively common resident
Nathusius' pipistrelle	*Pipistellus nathusii*	Relatively common resident
Kuhl's pipistrelle	*Pipistellus kuhli*	Uncommon resident
Serotine	*Eptesicus serotinus*	Unknown, believed uncommon resident. one recorded in 2006

Scotland: There have been more summer records of Leisler's bats in northeast Scotland. Although no roost has been found, it now seems very likely that the species is resident in the area. A further survey is proposed in 2007.

Wales: At Buckland House SSSI, near Brecon the pre-parturition count of lesser horseshoe bats was 603 compared to 607 in 2005.

3. Habitats and Roost Sites

England and Wales: The Environment Agency (EA) is continuing to drive the improvement of water quality and the conservation and enhancement of wetland habitats in England and Wales. Their work in this area is likely to be highly beneficial to UK bat populations.

In East Anglia EA have converted a disused, covered reservoir at Brampton and several world war two pillboxes along the Stour valley into a potential bat hibernation/roost sites.

At Paston Barn in Norfolk, monitoring has continued through 2006 on the barbastelle bat colony.

Jersey: The States of Jersey Environment Division (ED), Planning and Environment, is responsible for administering the Conservation of Wildlife (Jersey) Law 2000, which applies protection to all species of bats and their roosts. The ED scrutinises development applications and identifies existing or new roost sites through surveys at the application stage.

4. Threats

Main threats to bat conservation within the UK are:

- Building demolition,
- Building maintenance and alterations,
- Tree work,
- Barn Conversions
- Loss of habitat due to planning proposals,
- Loss of traditional farmland landscape
- Work on underground sites

Jersey: Bat activity has been shown to be strongly associated with linear landscape elements such as hedgerow and streams. To some degree, the small parcel size and network of hedgerows can favour the small species of bats found locally. However, there is concern in some areas, with the lack of hedgerow connections due to woodland patch fragmentation. Intensive agricultural practices and water quality issues are likely to have negative effects on bat populations and therefore the threat to local populations must not be underestimated. The loss of roost sites is considered the most significant threat since there have been many planning applications for the refurbishment of old buildings, particularly granite barn and farmhouse conversions for new housing developments.

Gibraltar: Re-roofing is still a potential threat. Some disturbance of fissures, due to works to stabilise cliffs may have some impact. Mesjing of areas of cliff could also have an impact. These require investigation.

Isle of Man: Small wind turbines for home use are becoming popular on the Isle of Man due to the high-energy prices on the island, the new availability of small, affordable, ready-made systems and the positive feeling of contributing towards the replacement of fossil fuels with renewable energy sources. The Eurobats guidelines for the planning process and impact assessments are welcome though surveys of the impacts of different kinds of wind turbines and sites are necessary.

Ultrasound deterrents against young people congregating in streets and parks are available and being adopted. There is the potential that this deterrent may effect bats, but the effect is thought to be very local and not penetrate the building fabric. We are not aware of any tests on bats but the frequencies used lie at about 16-18 KHz. These may therefore only form a threat if sited close to a roost entrance. However, planning permission is not required for such a small apparatus, so the onus must be on the operator to avoid disturbing bats at a roost.

5. Data collection, analysis, interpretation and dissemination

UK: The latest report of the NBMP published 2006 is available to download from http://www.bats.org.uk/nbmp/nbmp_news_reports.asp. A summary report called *State of the UK's Bats* is also available.

The second report on the Bats and Roadside Mammals Project (published 2006) is available to download from http://www.bats.org.uk/nbmp/nbmp_news_reports.asp.

A great deal of progress has been made in surveying for the elusive Bechstein's bat in southeast England's woods by researchers David Hill (University of Sussex) and Frank Greenaway. Their project, funded by Mammals Trust UK, has developed a model of the ideal woodland for Bechstein's bat, which has been tested by surveying for the species in target woods in 10 km squares across a whole English county using the Sussex Autobat ultrasound lure. Hill and Greenaway are keen to roll their method out over the whole of Bechstein's bat range in the UK and BCT is keen to facilitate this by training bat workers in the methodology, loaning equipment and handling the resulting data.

JNCC has been leading and coordinating the process for reporting on conservation status of all species listed on the Annexes to the Habitats Directive, for the Article 17 report to the European Commission, due in 2007. All UK resident bat species are listed on Annex IV of the Directive and four are listed on Annex II. This work has involved collating information on range, population trends and habitat requirements for each species. The results may play a role in decisions on future management actions for European protected bat species.

A research project was undertaken by P. Racey and B. Nicholls (School of Biological sciences, Aberdeen University), to investigate whether radio frequency (RF) radiation associated with radar installations had an adverse behavioural response in foraging bats, such as reducing the number of bats in the vicinity of radar installations. If this was the case then the information could be used to design mitigation methods to discourage bats approaching wind turbine installations. The report is due to be published early in 2007.

England: At the Mottisfont Bats SAC, in Hampshire, EA have continued working with partners including the National Trust to carry out a study investigating the range and feeding preferences of Barbastelle bats.

Wales: The Countryside Council for Wales (CCW) has been testing and continuing to develop stand-alone automated bat counters for monitoring the condition of lesser horseshoe bat SACs and other sites where access is restricted. A poster on the project was presented at the Welsh Bat Workers Event and the national Bat Conference.

Jersey: In 2006, a monitoring programme was implemented as part of an Environmental Monitoring Strategy. The results from this programme will be analysed and collated in due course.

Gibraltar: Protection of bats has been included in the analysis and recommendations contained in the Gibraltar BAP published in 2006 (Perez, C. E 2006. Planning for Nature, Biodiversity Action Plan, Gibraltar. The Gibraltar Ornithological & Natural History Society. Gibraltar).

Isle of Man: The Manx Bat Group took part in the Mammals Trust/BCT Roadside Mammals Survey 2006, covering 10 routes and more than 250 miles of road (half of the Manx public roads). It is hoped that this survey will continue, providing transect information on bat activity through the years. The Bat Group is also hoping to survey those roads not yet covered (using the same methods), in order to provide an overall picture of important sections of road on the island for bat activity. This information could be used to inform the planning of road modification projects. It should also develop bat records in a systematic manner.

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

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

UK: BCT's Investigations Project continued to operate two days a week during 2006. This project aims to assist bat workers and the public in reporting incidents of bat crime and in helping and encouraging the police to follow up cases where appropriate. It is clear that around two thirds of all offences involving bats are still committed by the construction industry highlighting the need for education of workers in this sector as well as tough enforcement where necessary. The police have enforcement of bat legislation as a national priority and continue to implement 'Operation Bat'; however, this requires reinvigoration and BCT is delighted that the NWCU has employed an Operation Bat officer for the duration of 2007 to assist in updating Operation Bat by the police. A report of the last three years (2003-2006) of the BCT Investigations Project will be available in spring 2007.

A summary of incidents reported to the Investigations Project and action taken during 2006 follows below:

- **January – March 2006:** A case concerning sonic pest deterrent use in a barn in Essex was due to be heard in court in February, but had to be discontinued because of long-term illness of a key police witness. Two incidents were reported of UK bat species being sold on e-bay and are being investigated by the NWCU. Internet auction sites will continue to be monitored in the future.

- **April – June 2006:** Eight incidents involving damage/destruction of a roost were received. Two involved damage/destruction to tree roosts that were already known about. BCT and local bat workers have worked with the bodies concerned to improve recording and reporting procedures to try to prevent this re-occurring. A number of other incidents have been recorded but following further investigation, there was insufficient evidence to say that the law had definitely been broken.

- **July – September 2006:** Sadly, it was a busy summer for bat related incidents and sixteen offences against bats were report and investigated.

- **October – December 2006:** 15 bat related incidents were reported to BCT in this period, and all but two had police involvement. Eight incidents have insufficient evidence to process them as offences at the time of writing, but all these have had, or still have, police involvement.

Wales: In 2006, the Police received 34 reports relating to bats. Seventeen of the incidents when investigated revealed no evidence of offences having been committed. Seven of the reported incidents revealed some evidence of offences having been committed but were insufficient to prosecute. One case was referred to the Crown Prosecution Service who declined to instigate proceedings. One warning was issued and four investigations are ongoing. One of these is likely to result in a caution or advice and another may be referred for prosecution. Advice was offered to developers or householders in all cases.

Jersey: Procedures are in place for the enforcement of the Conservation of Wildlife (Jersey) Law 2000. Locations of known roosts are held on a register in the Geographical Information System for cross-referencing planning applications and a process for identifying potential roosts has been developed. Once a roost is identified, the Department assesses the extent of the threat to the population concerned and either provides recommendation for a refusal or provides statutory mitigation advice. These screening processes combined with the undertaking of appropriate statutory mitigation measures and follow up with architects, builders and contractors has led to the protection of a total of 67 known roost sites in 2006.

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

England: Work is ongoing to safeguard Bentley Barn in Suffolk, a traditional farm building which is home to several species of bat. A feasibility study is being conducted to help determine the best way to proceed.

Wales: No further SSSIs have been designated for their bat interest during 2006.

Jersey: No sites important for bats were designated in 2006.

8. Consideration given to habitats which are important to bats

England: In 2006, England's new agri-environment scheme (Environmental Stewardship) made significant contributions to habitats important to bats. Contributions were divided between Higher-level stewardship (HLS), which protected the best sites/habitats, Entry-level Stewardship (ELS), which made contributions to habitats in the wider countryside, and Organic Entry Level/Higher Level Stewardship (OELS/OHLS), which specified organic practices in addition to standard ELS/HLS prescriptions.

HLS made specific contributions to bats on 84 agreements in England in 2006. On each agreement, the ecological requirements of the species present were taken into consideration when deciding upon land management, which ranged from restoration of woodland to maintenance of species-rich grassland. In most cases Pipistrelle and Brown Long-eared Bat were the only bat species recorded, however, the management proposed was thought to offer benefits to other bat species (which were often under recorded). Specialist species (see Table 3 Annex A) occurred less frequently. Where they did occur, specifically tailored management was employed using HLS management prescriptions to achieve desired habitat conditions.

In addition to specific contributions made by HLS, ELS made significant contributions to bat habitats in the wider countryside (principally through hedgerow, ditch and woodland edge management). In 2006 ELS delivered: 846.96 ha of Woodland edge management (1,216 agreements); 64 000 kilometres of hedgerow management (17,155 agreements) and 35 000 kilometres of ditch management/combined ditch and hedge management (17,313 agreements). OELS whilst less popular delivered a further 12,125ha of organic grassland and 267ha of organic margins in 2006.

Some of the HLS Agreements under this scheme were stimulated by proactive work by project officers, part funded by NE. This work focused on areas around important greater horseshoe bat roosts, with the intention of getting as much farmland as possible into sympathetic management.

Northern Ireland: By 31 December 2006, the Department of Agriculture and Rural Development (Northern Ireland) had over 13,000 participants in agri-environment schemes (the Countryside Management Scheme and Environmentally Sensitive Areas Scheme). Both schemes are closely aligned with biodiversity targets and contribute to the BAP targets for bats.

Jersey: Hedgerow planting and woodland management initiatives, which take account of the needs of bats, are included in a Countryside Regeneration strategy, which is now in its third year.

Gibraltar: The Government of Gibraltar is studying the upper Rock Management Plans, which made recommendations for habitat management that would benefit bats.

Scotland: Scottish Natural Heritage (SNH) continues to provide advice to a range of schemes that may effect bats such as proposed developments. Emphasis is on maintaining connectivity between habitats and minimising the effects of fragmentation. SNH is also working with the Scottish Executive Environment & Rural Affairs Department to develop appropriate habitat management prescriptions that will benefit bats, in the forthcoming Scottish agri-environment incentive scheme (Land Management Contracts).

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

UK: BCT continues to promote awareness of the importance of the conservation of bats through a range of publications, events, projects and communication activities. Members of the BCT receive *Bat News* and *Young Batworker* whereas callers to the helpline are sent leaflets such as *Encouraging Bats* and *Living with Bats.* BCT also sends out an email bulletin to interested bat workers.

The National Bat Helpline was set up to provide information for all of those who come across bats. It receives more than 9,000 enquiries each year, from a diverse range of people including householders, builders, teachers and those who have found injured or grounded bats.

BCT initiatives for the European Bat Weekend included training for staff and bat workers in coping with media interviews, funded by Defra. This helped when giving radio and television interviews and when compiling press releases. Local bat groups, wildlife trusts, countryside rangers and museums carried out hundreds of walks and talks across the UK.

A new BCT initiative, Count Bat, funded by the Heritage Lottery Fund, ran pilot projects in three areas of England throughout 2006. The Count Bat project aims to make bat conservation more accessible to a wider spectrum of people by providing volunteer opportunities that are varied and adaptable.

BCT staff helped to survey the Houses of Parliament, also known as the Palace of Westminster in London for bats in August 2006, which generated some press coverage and increased awareness among Members of Parliament.

BCT held its annual conference in Reading in September 2006. The get-together proved more popular than ever with around 300 attendees who spent the weekend listening to talks about bats and taking part in workshops. BCT was also proud to announce the organisation's new president, wildlife television presenter and photographer Chris Packham.

BCT continued to run a comprehensive range of training courses throughout 2006 including courses on *Introduction to Bats, Arboriculture and Bats, Surveying Barns* and *Running Bat Walks.* A wide range of professionals including builders and arborists, ecological consultants and land use planners, in addition to volunteers, attend the courses.

Scotland: SNH continues to provide the majority of the funding for the BCT's Scottish Bat Officer. This officer is responsible for promoting bat conservation in Scotland, increasing public awareness of bats, providing training and supporting Scottish bat groups.

SNH sponsored two major BCT events for Scottish bat workers in 2006, a 'Spring into Action' day in May 2006 and the Scottish Bat Workers' Conference in November 2006.

England and Wales: The EA routinely regulates or influences works close to rivers in England and Wales. As bats roost in bridges, culverts, trees and other structures close to rivers, the EA have published, "Guidance for Works Affecting Watercourses, Protection and Enhancement for Bats". This is available as a PDF file at: http://publications.environmentagency.gov.uk/epages/eapublications.storefront/45b9f28900bf6f62273fc0a8029606e7/Product/View/GEAN1205BJZP-E-E

Wales: The Welsh Project Officer continued to promote bat conservation in Wales by attending the Royal Welsh Agricultural Show, producing four bi-lingual information leaflets, providing weekly updates for bat workers in Wales and providing support for bat groups.

The annual liaison meeting between CCW and the Bat Groups of Wales was held in April 2006. A one-day Wales Batworkers Event was held in October 2006 in Llandrindod Wells with over 80 delegates.

A Wildlife and Environmental Crime Conference was organised by the CCW and the Police in November 2006.

Gwynedd Council organised a training session for Local Authority Planners on bats and the planning system.

CCW staff and volunteers assisted with the filming of greater horseshoe and lesser horseshoe bats for a number of wildlife television programmes.

Jersey: In 2006, SAPs for all bat species known in Jersey were launched. As a result, the Jersey Bat Group has been revitalised and now has an active membership of 10 people.

Targeted information on the Wildlife Law continues to be provided to the building trade on their statutory obligations in relation to bats. Routes of communication and training for authorised officers have been established with the States of Jersey Police. Training needs for the relevant planning staff (e.g. historic building officers) has been addressed. Procedures and guidelines remain in place to cope with the extremely unlikely event of contact with a diseased bat. Those involved with rehabilitating sick bats or rescuing grounded bats have been consulted, appraised of best practice guidelines and advised that a pre-exposure vaccine is available.

Gibraltar: Bat evenings for the public and youth groups were organised by GONHS in 2006.

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

Bat Conservation Trust (BCT).
Environment Department of the States of Guernsey.
La Societe Guernesiaise.
Nature Conservancy Councils (Gibraltar).
Gibraltar Ornithological and Natural History Society.

11. Additional action undertaken to safeguard populations of bats

Scotland: The Water Environment (Controlled Activities) Regulations 2005 provide a regulatory regime in Scotland, which increases the protection of Scotland's water environment. The Scottish Environment Protection Agency (SEPA) is identified as the competent authority for the regulations. As was the case with previous regulatory regimes, polluting activities are regulated. The major change is that the new regime also covers activities such as abstraction, impoundment and engineering works on rivers, lochs and wetlands. The regulations have been brought in to aid in the protection of the ecological status of Scotland's water environment, which should benefit habitats and species associated with rivers, lochs and wetlands in Scotland and this benefits a number of bat species.

SNH continues to provide statutory advice to members of the public particularly in relation to issues concerning bat roosts and houses. SNH have also contributed to the forthcoming SEPA publication on bats and river works.

England: Natural England (NE) have continued to work closely with bat volunteers to ensure that householders with bat problems can be offered a personal visit by a trained bat-worker to provide advice and support.

Several species of bats have individual Action Plans. NE has continued to support the BCT, which is coordinating the delivery of four action plans.

Wales: CCW continued to fund a project investigating the use of landscape features and habitats by the lesser horseshoe bat. NE, Forestry Commission and Mammals Trust UK also contributed funding for this project.

Welsh bat groups continue to take part in the annual Lesser horseshoe bat roost count using non-intrusive standardised methods. Results are fed into the NBMP.

The Species Challenge Fund funded by CCW included a project to create an artificial hibernation site for a colony of lesser horseshoe bats in an area of north Wales where there are few underground hibernacula available. Another project in Snowdonia National Park will train new volunteers and brush up skills of the more experienced people in bat detecting and recording, survey methodology and bat sound analysis to contribute to a mammal Atlas for the Park. A project in Pembrokeshire will replace and update bat boxes for pipistrelle bats and carry out improvement works to cellars to benefit greater and lesser horseshoe bats.

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.

Scotland: SNH has continued its monitoring programme of European Bat Lyssa Virus (EBLV) seroprevalence in Daubenton's bats. This work builds on monitoring undertaken from 2003 to 2005. Although this monitoring has provided evidence of exposure to the virus in Daubenton's bats in various locations across Scotland, none of the mouth swabs examined to date have been found to have live EBLV-2 virus.

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SNH published the following technical report:

- Bat Conservation Trust (2006). *A review of the success of bat boxes in houses.* Scottish Natural Heritage Commissioned Report No. 160 (ROAME No. F01AC310).

Wales: A pilot landscape scale project "Landscapes for lesser" commenced in 2006 and proposes a holistic approach to lesser horseshoe bat conservation focussing on maintenance, creation and improvements to roost sites, flight lines and foraging habitats. The project will consider how to provide additional incentives and novel solutions.

CCW published the following poster and report:

- Lloyd, D.1, Matthews, J. 1, Payne, C.1 'Batsnatcher' poster, The Development of a new bat counter. Countryside Council for Wales, Bangor, Gwynedd.

- Hall, C. (2006) Monitoring selected colonies of lesser horseshoe bats *(Rhinolophus hipposideros)* and bat feeding habitat within Coedydd Derw a Safloedd Ystlumod Meirion – Meirionydd Oak Woods and Bat Sites SAC. CCW Environmental Monitoring Report 33. CCW, Bangor, Gwynedd.

Jersey: A roost and habitat-monitoring programme has been developed and will be implemented with volunteer involvement as part of a wider programme of State of the Environment Monitoring Programme in 2006.

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

UK: The Wildlife Incident Investigation Scheme (WIIS) is operated by the four UK agriculture departments and is co-ordinated by the Pesticides Safety Directorate, an executive agency of DEFRA. 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 wildlife has been affected by pesticides. Post mortem examinations of casualties are undertaken and samples analysed for pesticide residues. The results are used in reviews of the conditions of approval of the pesticides concerned. 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 2006, no cases involving bats were reported to the scheme.

Scotland: SNH continues to advise the use of only those compounds that have been approved for use as such, i.e. permethrin/cypermethrin or boron-based compounds. A list of approved products is available and periodically updated.

Jersey: Standard advice continues to be issued on the use of approved timber treatment pesticides for use in bat roosts. This work is ongoing and forms part of the standard statutory advice in relation to bats.

D. FUNCTIONING OF THE AGREEMENT

14. Co-operation with other Range States

UK: BCT is a partner in a Darwin Initiative-funded project to monitor bat biodiversity in Bulgaria and Romania (http://www.darwin.gov.uk/projects/details/15033.html).

BCT assisted Bat Conservation Ireland in developing bat monitoring in the Republic of Ireland. Their survey, based on the National Bat Monitoring Programmes' Daubenton's Waterway Survey greatly increased the number of sites sampled in the Republic and in Northern Ireland, the results of which contribute to UK population trends for the species.

Scotland: SNH was represented within the UK delegation at the 5th Eurobats Meeting of the Parties in Ljubljana, Slovenia in September 2006.

Jersey: To ensure that practices and advice on bats is up to date Jersey continues to collaborate with acknowledged experts and relevant organisations (such as the BCT) within the UK. Help and advice is also provided to the other Channel Islands.

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

Resolution 5.2 bats and rabies in Europe: All dead bats found in Jersey are sent to the Veterinary Laboratories Agency for testing under a passive surveillance programme. Permits for bat workers require a certificate of vaccination.

Pan European Monitoring workshop: BCT hosted a two-day Defra funded workshop in April 2006 in southeast England to take forward work of the Monitoring Guidelines Intersessional Working Group of Eurobats and to further develop plans for a project to monitor underground sites across Europe. Thirty-one participants attended the workshop from fifteen European countries. The workshop was reported on verbally at the 11th Advisory Committee meeting in Luxembourg in May 2006.

Following the workshop, BCT presented a proposal for a feasibility study for the pan-European monitoring project at the 5th Meeting of the Parties in Slovenia in September 2006. BCT have secured financial support from Defra and other Parties to the agreement to take this feasibility study forward (further financial support is still required as there is a shortfall in funding for this study). BCT hopes to employ a European project officer soon.

Annex A

Table 1: Trends in UK BAP species.

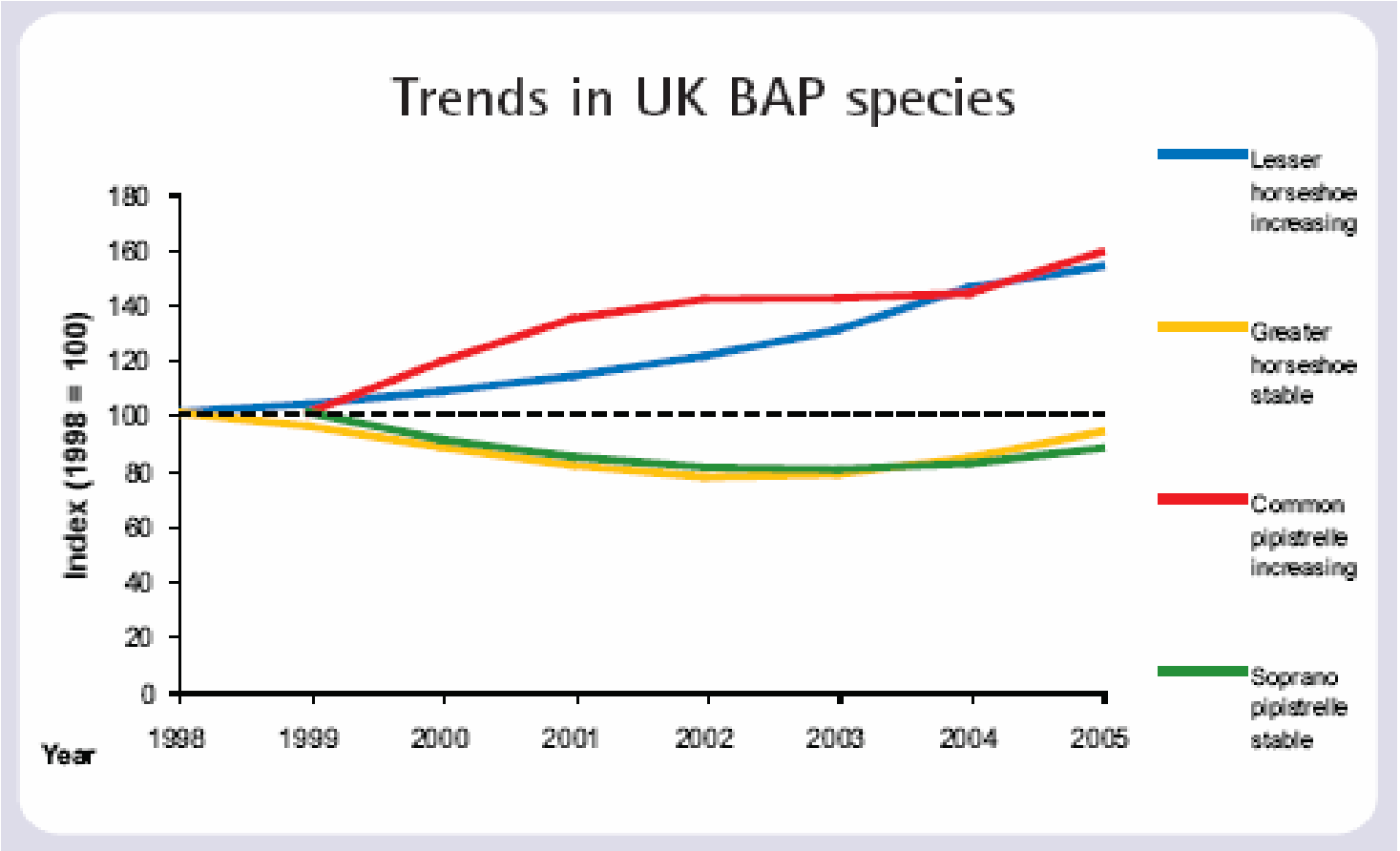

Table 2: UK long-term population trends and average annual percentage change.

	Field Surveys		Hibernation Survey		Colony Counts	
	Average annual change %	Long-term trend %	Average annual change %	Long-term trend %	Average annual change %	Long-term trend %
Greater Horseshoe#			-1.00[2]		4.85	**39.3**[2]
Lesser Horseshoe#			**6.26**[2]*	53	**5.59**	46.3[1]
Daubenton's	2.85[2]	**20**	**3.27**[2]*	25.3		
Brandt's						
Whiskered						
Whiskered / Brandt's			3.27[2]	25.3		
Natterer's			**5.61**[2]	**46.5**	3.52	18.9[4]
Bechstein's#						
Greater mouse-eared#						
Common pipistrelle#	7.94[1]*	**58.2**			-5.10	**-30.7**[1]
Saprano pipistrelle#	-2.24[1]	-12.7			**-3.31**†	-21.1†
Nathusius' pipistrelle						
Serotine	2.65[1]	17.0			-0.11	
Noctule	0.96[1]	6.9				
Leisler's						
Barbastelle#						
Brown long-eared			-3.31[2]	-21	6.01	26.3[3]
Grey long-eared						

Species: # = UK BAP priority species
Long-term trends and average annual change: Results from General Additive Modelling (GAM) analysis with 95% confidence limits. 1=1999-2005; 2=1998-2005; 3=2001-2005; 4=2000-2005.
* indicates most statistically robust trend.
† indicates becoming marginally significant in 2005.
Significant trends are shown in bold.

Table 3: Specialist Species for Higher Level Stewardship schemes.

Specialist Species	Total number of contributory agreements	Total area under beneficial management	
		pasture/margins/ woodland management (ha)	hedgerow management/restoration (m)
Brandts Bat *(Myotis brandtii)*	2	38	8,096
Greater Horseshoe Bat *(Rhinolophus ferrumequinum)*	12	843	33,957
Lesser Horseshoe Bat *(Rhinolophus hipposideros)*	11	661	3,0459
Natterer's Bat *(Myotis nattereri)*	2	31	11,545
Serotine *(Eptesicus serotinus)*	2	623	3,000