# The Agreement on the Conservation of Bats in Europe

# National report 2006 on the implementation of the agreement in Norway

## A. General information

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|---|---|
| Name of Party: | Norway |
| Date of Report: | June 2006 |
| Period covered: | Describes the situation from 2004 and onwards |
| Competent Authority: | Directorate for Nature Management<br>Tungasletta 2,<br>NO-7485 Trondheim,<br>Norway. |
| Advisory Committee Member: | Norwegian Zoological Society |
| Compiler of report: | Senior Adviser Øystein Størkersen (Directorate for Nature Management) with advice from the Norwegian Zoological Society (Mr. P.O. Syvertsen & Mr. Kjell Isaksen). |

## B. Status of bats in Norway

### *1. Summary of species occurring in Norway*

Eleven species of bats have been reliably recorded in Norway. At least eight species are known or believed to have regularly reproducing populations, while the remaining are considered rare or irregular visitors, or even possibly extinct. Nine species were included in the most recent National Red List (1999). A new and updated red list will be published at the end of 2006.

The following brief description of status and trends for each species is an update of the review given in the last national report (August 2003).

*Myotis mystacinus*
Whiskered bat/Skjeggflaggermus
Status and distribution of species still poorly known. Recorded from most counties in southern Norway, north to approximately 63°N on the coast, 62'N in the interior east. Only few colonies located. Wintering individuals found on a number of localities, largely in SE Norway where search for hibernating bats has been most thorough.
Norwegian Red List status 1999: DM - Declining, monitoring species. According to the new IUCN criteria it may be placed in the category: Near Threatened. #Er det lurt å foregripe begivenhetenes gang på kommende rødlisting? Kan skape forvirring seinere. Gjelder også de andre artene.#

*Myotis brandtii*
Brandt's bat/Brandtflaggermus
Records are much dispersed over eastern and central Norway, north to approximately 63°50'N. Recent surveys have shown the species to be more common than hitherto acknowledged. Some colonies have been located in central and SE Norway. Wintering individuals known from several localities in SE Norway.
Norwegian Red List status 1999: DM - Declining, monitoring species. According to the new IUCN criteria it may be placed in the category: Near Threatened.

*M. mystacinus/M. brandtii*
Available data on distribution of *M. mystacinus* and *M. brandtii* in Norway show overlap of the two species in eastern Norway, but with a tendency for *M. brandtii* to have a more northern (boreal) distribution than *M. mystacinus*. Field records of unidentified *Myotis*, probably largely this species pair, indicate that occurrence may be more frequent than currently acknowledged.

*Myotis nattereri*
Natterer's bat/Børsteflaggermus
Only a few old records exist, the last from Oslo in 1961. Current status in Norway uncertain.
Norwegian Red List status 1999: DM - Declining, monitoring species. According to the new IUCN criteria it may be placed in the category: Near Threatened

*Myotis daubentonii*
Daubenton's bat/Vannflaggermus

Since the previous report Daubenton's bat has been found to occur sparsely north to approximately 63°45'N in central Norway (i.e. near Trondheim). The species is widespread in sheltered localities along the coast southward from at least 62°30'N. In the interior east of the country it reaches right up to the foothills of the mountains at approximately 62°N. Search for colonies have been relatively limited, but roosts are known from, e.g., bridges and tree hollows. Winter distribution still poorly known, due to lack of investigations, and most records from SE Norway.
Norwegian Red List status 1999: Not listed.

*Pipistrellus pygmaeus*
Soprano or 55 kHz pipistrelle/Dvergflaggermus
Distributed over large parts of S Norway, including the interior east where now recorded north to approximately 61°30'N. On the west coast the species is found in sheltered localities north at least to about 62°30'N. It has recently also been encountered in central Norway, at approximately 63°N. Maternity colonies or indications of such are common in houses in S Norway. Hibernation of the species is as yet unknown from Norway.
Norwegian Red List status 1999: DM - Declining, monitoring species. According to the new IUCN criteria it may be placed in the category: Near Threatened.

*Pipistrellus pipistrellus*
Common or 45 kHz pipistrelle
There are as yet no confirmed records from Norway, but the species may occur and possible records from the west coast are currently under review (Michaelsen *et al*. 2003).

*Pipistrellus nathusii*
Nathusius' pipistrelle/Trollflaggermus
Known from a few records on the west coast in the 1990’s, based on sound recordings and netting (T.A. Stormark comm). Full details have not yet been published.
Norwegian Red List status 1999: DM - Declining, monitoring species. According to the new IUCN criteria it may be placed in the category: Near Threatened.

*Nyctalus noctula*
Noctule/Storflaggermus
First recorded in Rogaland county, SW Norway in 1987 (confirmed in 1995). Since 1992 recorded annually in SE Norway where the species has been encountered north to 61°45’ N. Assumed to be migratory.
Norwegian Red List status 1999: R - Rare. According to the new IUCN criteria it may be placed in the category: Near Threatened.

*Eptesicus nilssonii*
Northern bat/Nordflaggermus
The most common bat species in Norway, distributed over most of the country, frequently also in higher elevated regions and locally common even north of the Arctic Circle (although few records from Finnmark county and perhaps only vagrant north of 69°N). Colonies, often in houses, are widespread. Wintering localities mostly known from S Norway, particularly in the SE where most surveys have been carried out, but also in Nordland county in the north.

Norwegian Red List status 1999: Not listed.

*Vespertilio murinus*
Parti-coloured bat/Skimmelflaggermus
Scattered records along the coast from SE Norway to Trondheim in the north, with single vagrant even near Barents Sea coast. No colonies have as yet been conclusively identified. The first winter record were made in 1996.
Norwegian Red List status 1999: DM – Declining, monitoring species. According to the new IUCN criteria it may be placed in the category: Near Threatened.

*Barbastella barbastellus*
Barbastelle/Bredøreflaggermus
Only four records known, all from inner parts of the Oslo Fiord and last recorded in 1949. Records from October and April indicates local hibernation.
Norwegian Red List status 1999: DM - Declining, monitoring species. According to the new IUCN criteria it may be placed in the category: Near Threatened.

*Plecotus auritus*
Brown long-eared bat/Langøreflaggermus
Widely distributed in S Norway with a few scattered records also from Central – Norway (to about 64°N). Roosts have to a large extent been found in churches. Hibernating animals are mainly known from SE Norway with a few records also from the west coast .
Norwegian Red List status 1999: DM - Declining, monitoring species. According to the new IUCN criteria it may be placed in the category: Near Threatened.

## *2. General population status and population trends*

| Species | Distribution | Status 2006 |
|---|---|---|
| *M. mystacinus* | Widespread | Negative? |
| *M. brandtii* | Local/Widespread | Negative? |
| *M. nattereri* | ? | Extinct? |
| *M. daubentonii* | Widespread | Stable? |
| *P. pygmaeus* | Local/Widespread | Negative? |
| *P. nathusii* | Accidental/Local? | ? |
| *N. noctula* | Local | Stable? |
| *E. nilssonii* | Widespread | Stable? |
| *V. murinus* | Local ? | |
| *B. barbastellus* | ? | Extinct? |
| *P. auritus* | Widespread | Stable? |

*Table 1. Summary of distribution and status of all bat species in Norway in 2006. Scant information exist on the status of the species in Norway, the information in the table is thus only tentative.*

Most information on bat distribution in Norway result from surveys over the last 10–12 years, and monitoring data for a longer time span is missing. New data on occurrence is likely to be due to increased interest and effort as much as real changes in the populations. This is also reflected in the National Red List, where all listed bat species have been placed outside the group “threatened” (cf. extinct & vulnerable). This is due to the lack of information and uncertainty about their status. The lack of competent personell in bat research makes the scope for improvement in the knowledge of bats in Norway large. Increased interest and efforts in field surveys recent years have indeed demonstrated this.

## *3. Habitats and roosts*

A national program for mapping of important sites for all biological diversity (flora and fauna) was initiated in 1998 and still continues all over the country. Identification of important bat sites, be it maternity or wintering sites, are part of the program. The ultimate aim is to serve this information to area planners and other sectors involved in the use of the sites. The mapping of important sites is regarded as one of the most important activities by bat researchers in Norway. Current status is far from representing a near-complete coverage of the country, although some effort has been directed to all 19 counties.

Concerning summer roosts buildings of different types is beyond doubt the most important sites containing colonies of large groups of bats. Buildings, including churches, seem to be favoured at least by Northern bats, Soprano pipistrelles and Brown long-eared bats. Winter hibernation sites are mostly known in abandoned mines, probably due to ease of access for researches.

## *4. Threats*

1. The most well known threats in the summer time are against colonies and in the winter time by disturbance inside mines or caves.
2. Restoration of old houses and closing of cavities and entrance holes are probably important negative factors in relation to private houses. Since removal of bats from houses by extermination companies were banned in 1981, this probably do not cause much of a problem today. No exception to the ban has been issued after 1990.
3. General deterioration of the cultural landscape by continued drainage, removal of "waste land" etc. in combination with intense cultivation and use of pesticides has probably contributed much to deterioration of foraging possibilities. Abandonment of grazing in the areas outside of the more intensively cultivated areas has changed the cultural landscape of Norway dramatically in the latter half of the last century. The effects on bat populations can today not be ascertained.
4. The use of chemical treatment on timber etc. has (?) been abandoned, while the use of preservatives on wood may still be a cause of concern if this wood is used in parts of houses where bats occur.
5. The disturbance in mines and caves (often unwittingly) can be a serious problem for bats. Closure of winter sites may alleviate the situation. Whether such disturbance has any serious effects on Norwegian populations is not known.

6. General lack of knowledge among the public may in some instances give cause for concern.

*5. Data collection, analysis, interpretation and dissemination*

The Norwegian Zoological Society (NZF) and the Norwegian Chiroptera Information Centre (NIFF) have been the main actors in collection of data on bats. In this relation the NZF keeps an extensive collection of records. NZF and NIFF administer nationwide collection of data and NZF is now in the final phase of concluding a national atlas on mammals (publication date 2007). Public museums all over Norway have the formal responsibility concerning collection of specimen and keeping of records.

## C. Measures to implement Article III of the Agreement

*6. Legal measures for the conservation of bats and their implementation*

The Wildlife Act of 1981 gives total protection to all species of bats. No intentional killing or removal of bats is thus allowed. Still annually a number of inquiries on this subject are presented to the authorities. These are solved through advice and consultation with parties concerned, cf. NZF's 24hrs alarm telephone for bat inquiries and national network of bat specialists. Catching of bats for scientific purposes is not exempt from the Wildlife Act as special permits must be issued by the Directorate for Nature Management (as the national wildlife authority). In 2004 one permit to catch bats for scientific purposes was issued, in 2005 none and in 2006 two permits. The purposes for the permits were: Identification of species and subsequent release, collection of DNA samples (2004) and radiotagging. Permits to catch bats for an identification has been given in relation to ongoing mapping of the distribution of mammals in Norway (NZF's mammal atlas). Permits to ring bats was given twice (in 2004 and 2006), including one for ringing of bats released after being handled at the national rescue centre. A manual for training and approving of persons ringing bats is expected to be published in 2007.

As part of the nationwide mapping of biological diversity and important sites, a program for protection and proper handling of important sites in relation to all area planning is implemented with the sectors. Guidelines in relation to this are continuously developed.

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

Grilling or locking of caves/mines used by bats is among the most concrete examples of actions in relation to bat protection. However so far this has been conducted only at one site, on a voluntary basis by Norwegian Zoological Society and school classes. In addition conservation measures have been implemented to protect and conserve important maternity colonies in some churches in Norway. These efforts

have been conducted in cooperation between involved parties like NGOs, church wardens and government institutions.

*8. Consideration given to habitats which are important to bats*

The knowledge of bat distribution and status is still too scanty to play an important role in the establishment of nature protection sites, other than being a contributing factor. However, as a follow up of EU's Natura 2000 and the Emerald Network of the Bern Convention, it is expected that important sites for bats may become the focus of conservation measures in Norway in the future.

Initiatives for developing a new national action plan for all species of bats started in 2006. The plan will be finalized in 2007 and will contain a systematic plan for mapping, monitoring and protecting bats in Norway. The plan will be issued by the Directorate for Nature management in collaboration with the Norwegian Zoological Society. #Sjekk opp status på dette med Løfaldli. Vi har ikke kapasitet til å få gjort dette i år, slik han/dere hadde ønsket. Det er også være en fordel om Pattedyratlas (dataoppsummering) blir sluttført før en slik handlingsplan blir laget. Men vi ser selvsagt behovet for og verdien av en slik plan, så dette bør tas opp på nytt om et år eller to.#

*9. Measures to raise public awareness and bat conservation*

The Directorate for Nature Management has given financial support for numerous annual activities in Norway on public awareness and in relation to bat conservation in general. In particular these activities include:

1. A 24hrs alarm telephone for bat inquiries operated by NZF. Many calls have been handled in the report period, of which most were concerns about maternity colonies. These requests also give an opportunity to map colonies and species, and importantly to give best advice on maintenance. Most people react positively to the advice given.
2. The European bat night has become a regular event.
3. Bat-pages on the Internet are continuously updated, www.zoologi.no.
4. Information has been distributed through numerous articles in newspapers and through radio- and TV-interviews.
5. A national rescue centre for injured or disabled bats was established in 2001 in Oslo (operated by NZF) and has frequently been utilised by the media.
6. The Norwegian Chiroptera Information centre (NIFF) also disseminates information.

*10. Advisory Committee established under Article III.5 of the Agreement*

The Norwegian Zoological Society (NZF) was appointed in 2001 as the Norwegian member of the Advisory Committee. The society will appoint a representative to the meetings and to conduct intersessional work. Mr. Per Ole Syvertsen has been

appointed as such and still acts as the Norwegian representative to the AC. He commenced his work in 2000 and has participated in the AC meetings in Portugal (2001), Romania (2002), Norway (2003), Slovakia (2005) and Luxembourg (2006). Jeroen van der Kooij was the Norwegian representative at the meeting in Lithuania in 2004.

The Directorate for Nature Management acts as the national management authority coordinator and in relation to issues handled by the Advisory Committee and delegates from Norway.

*11. Additional measures for bat conservation*

With regard to the national mapping since 1980 of the distribution of vertebrate species (cf. national mammals atlas and mapping of biodiversity project by the municipalities) and evaluation of their important sites, emphasis has been put on dissemination of information to relevant authorities in relation to activities by the local municipalities and the sectors in general. As a further follow up of the Convention on Biodiversity a national mapping programme in each municipality was concluded in 2004. Known important sites for bats, be it maternity sites, roosts or feeding areas will be included. Particular emphasis will be put on the protection of sites with red listed species. A national threatened species unit was established in January 2006. This unit will focus on collection and maintaining databases and serve as a focus point for information on distribution and populations. In 2005 a draft new nature protection act was sent on public hearing. If accepted by the parliament, this will be an important new legal instrument, i.e. strengthening the protection of sites for threatened species.

In relation to resolutions accepted by the Parties after MoP4 the Directorate for Nature Management expects further cooperation in relevant fields with important sectors like the agricultural sector.

*12. Existing and planned programmes for bat conservation*

Main initiatives have been:

Due to a lack of knowledge of bat distribution and their status in Norway, the emphasis has so far been on the general mapping of the distribution of the different species. A number of County Governors and Municipalities have in recent years funded such mapping activities. As a consequence of the decisions made by the Parties to the MoP2 the Directorate for Nature Management has funded an evaluation of the resolutions in relation to national implementation and in particular Res. no. 4 from MoP2 on habitat proposals (published 1999).

In 2006 the Directorate for Nature Management has initiated work on a new national action plan for bats and is expected to be concluded in 2007.

*13. Activities regarding the effects on bats of pesticides and wood preservatives*

No specific instances of harm towards bats due to the use of pesticides or the effects of wood preservatives have been registered in Norway. The impact of these chemicals is today probably low, due to a ban on the use of the most dangerous chemicals. However, if the use of wood preservatives is a source of concern, points of recommendation should be implemented. More strict regulations on wood preservatives were implemented as of 2003. A separate report on the use of different substances in Norway has been forwarded to a Eurobats working group. Norway now adheres to the EU directive on chemicals.

The Directorate for Nature Management has contacted the national veterinary authorities relating to the use of chemicals on husbandry. Apparently the levels of use is low (if any at all) and investigation on the scale of use has to be finalised before a response can be given.

## D. Functioning of the Agreement

*14. Cooperation with other Range States*

In relation to an application to radio-tag bats information has been sought from Sweden and the Netherlands regarding experiences with radio-tagging. The information was helpful in handling the application (which was declined).

*15. Measures taken to implement Resolutions adopted by Meeting of Parties*

Comments on current and relevant resolutions:

MoP2 Resolution No. 2.2: Consistent Monitoring Methods
No national initiative. Norwegian bat-researchers will normally adhere to international standards.

MoP3 Resolution 3.4: Guidelines for the issue of permits for bat ringing
The Norwegian Zoological Society is working on a draft manual, which will form the basis for training and licensing of personell. The work is expected to be finalized in 2007.

MoP4 Resolution 4.4: Bat conservation and sustainable forest management
The sustainable management of forests is a prerequisite for all planning in the agricultural sector. To aid the sector a brochure on forests and bats has been issued in cooperation with the Ministry for Agriculture.

MoP4 Resolution 4: Guidelines for the use of remedial timber treatment
Norway implements the EU directive on the use of chemical components.

MoP4 Resolution 4.6: Guidelines for the issue of permits for the capture of wild bats
The guidelines have been the basis for handling of application for exemption from the ban of catching bats for scientific studies.

MoP4 Resolution 4.9: Conservation and management plan 2003-2006

1. Legal requirements: All bats are protected. A new national act on protection of biodiversity will improve the situation regarding protection of sites. The act is pending approval by the Parliament (2007?).
2. Population survey and monitoring: General mapping of the distribution of bats has continued in the period, and will be a priority in the years to come. A proposal to focus on migratory routes has been evaluated and will be a part of the new national action plan for bats (from 2007).
3. Roosts, cf point 2 above.
4. Foraging habitats, cf point 2 above.
5. Promoting public awareness: Much efforts have been in put into public awareness. Mainly through the use of web-pages and interviews with the media (TV, radio and newspapers). The annual bat night has been arranged several places each year. A national alarm telephone has been operative throughout the period as has a national rescue center for temporarily disabled bats. Both acts as effective channels for public awareness.
6. Pesticides: No information has been received from the national animal health authority on this issue. The use of such chemicals is apparently low (if occurring at all), and will in any case have to follow relevant EU directives.

MoP4 Resolution 4.11: Recognizing the role of NGOs: The national management authority relies on close cooperation with the Norwegian Zoological Society (NZF) regarding bat issues. The NZF acts as the Norwegian representative to the Advisory Committee.

Literature:

Isaksen, K. 2005. Distribution of bats in Oppland county (Southeast Norway). *Fylkesmannen i Oppland, Miljøvernavdelingen (Oppland County Governor, Department of the Environment), report 6/2005.* 86 pp. (In Norwegian with English summary). http://www.miljostatus.no/fylker/MVAOP/dokumenter/6-05.pdf

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