# The Agreement on the Conservation of Bats in Europe

# National report on the implementation of the agreement in Norway

#### A. General information

Name of Party: Norway

Date of Report: August 2003

Period covered: Describes the situation from 2001 and onwards

Competent Authority: Directorate for Nature Management

Tungasletta 2,

NO-7485 Trondheim,

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

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#### 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 seven species are known or believed to have regularly reproducing populations, while the remaining are considered rare or irregular visitors, or even possibly extinct. Eight species were included in the most recent National Red List (Størkersen 1999).

The following brief description of status and trends for each species is an update of the review given in the last national report (July 2000), incorporating results of later field work.

# Myotis mystacinus

Whiskered bat/Skjeggflaggermus

Status and distributrion of species still poorly known. Recorded from most counties in southern Norway, north to approximately 63°N on the coast, 61°45'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

#### 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 ackowledged. Some colonies have been located in central 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 one verified record exist, from Oslo in 1961, cf. Isaksen *et al.* 1998. 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°20'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 at least to 61°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 all over 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 has 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 in 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 known from scattered localities 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 2003
M. mystacinus	Widespread	Negative?
M. brandtii	Local/Widespread	Negative?
M. nattereri	Accidental?	?
M. daubentonii	Widespread	Stable?
P. pygmaeus	Local/Widespread	Negative?
(P. pipistrellus	Occurrence unconfirmed)	-
P. nathusii	Accidental?	?
N. noctula	Local	Stable?
E. nilssonii	Widespread	Expanding?
V. murinus	Local/Widespread	?
B. barbastellus	Accidental	Extinct?
P. auritus	Local/Widespread	Expanding?

Table 1. Summary of distribution and status of all bat species in Norway in 2003. 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 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 houses of different types is beyond doubt the most important sites containing colonies of large groups of bats. Houses, 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, perhaps due to ease of access for researches.

#### 4. Causes of threat

- (a) The most well known threats in the summer time are against colonies
- (b) and in the winter time by disturbance inside mines or caves.
- (c) 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 and is not likely to happen.
- (d) 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.
- (e) 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.
- (f) The disturbance of caves (often unwittingly) can be a serious problem for bats. Closure of winter sites may alleviate the situation. Whether such disturbance have any serious effects on Norwegian populations is not known.
- (g) General lack of knowledge among the public may in some instances give cause for concern.

#### 5. Data collection

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 (preliminary publication date 2005). 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. Some permits to remove bats in houses were given in the 1980's, but have since ceased. However, a number of inquiries on this subject are still presented to the authorities. These problems are now solved through advice and conservation with parties concerned, cf. 24hrs alarm telephone for bat inquiries. Catching of bats for scientific purposes is not exempt from the Wildlife Act and special permits must be issued by the Directorate for Nature Management as the national wildlife authority. In 2001 one permit to catch bats for scientific purposes was issued, in 2002 three permits and in 2003 one permit. The purposes for the permits were: Collection of DNA samples (2002), for ID use (2001), for ID use in relation to ongoing mammal atlas work (one each year). An application for telemetry tagging of bats in 2002 was originally rejected, however, a new improved application is currently considered. Pending guidelines for issuance of permits for bat ringing activities etc. (cf. MoP Res. 3.9 rev 1), the Directorate has seeked the advice from the Secretariat when deemed necessary.

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 with sites for bats is the most concrete examples of actions in relation to bat protection. However so far this has been conducted 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 protected sites, other than being a contributing factor. However, as a follow up of EUs 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.

# 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:

- (a) A 24hrs alarm telephone for bat inquiries. In 2002 more than 150 calls were received, of which most were concerns about maternity colonies. These request 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.
- (b) The European bat night has now a nationwide coverage, with more than 20 places of activites in 2002.
- (c) A new information brochure (eight A4 pages) on "Bats in forests" was published in the spring 2003 by the Norwegian Zoological Society with financial support from the Ministry of Agriculture and the Directorate for Nature Management. The brochure ia gives information on bats in Norway, species, habitats and with a focus on forestry and how measures can be implemented to implement batfriendly forestry.
- (d) Pages on the net has been established with focus on bats.
- (e) Information has been distributed through numerous articles in newspapers and through radio-interviews. A TV-film on NZF and their activities in relation to bats was produced and showed on national TV twice in 2002.
- (f) A rescue center for injured or disabled bats was established in 2001 in Oslo with approval from both the Directorate for Nature Management and the National Veterinary Authorities.

The Norwegian Chiroptera Information Centre (NIFF) is the only society in Norway purely dedicated to bat research and conservation. The society also organizes five local bat-groups. The society have produced a number of information leaflets on different subjects like: Bats in churches, general information on bats and their identification, how to handle bats in relation to houses and towards construction companies etc. The Society also publishes a national journal and a Fennoscandian journal, both aimed at the general public.

#### 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), Roumania (2002) and Norway (2003).

The Directorate for Nature Management act 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, to be concluded by 2004, has been initatied. 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. In relation to this project development of computerized databases will be an essential tool, as will the planned further strengthening of the legal instruments in relation to protection of important sites for biodiversity and red listed species.

In relation to resolutions accepted by the Parties after MoP3 the Directorate for Nature Management expect 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 will still be on the general mapping of the distribution of the different species. As such 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 evalution of the resolutions in relation to national implementation and in particular Res. no. 4 from MoP2 on habitat proposals (published 1999).

#### 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, the use of wood preservatives may be a source of concern, and an overview should be initated and points of recommendation should be implemented in the next years. 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.

# D. Operation of the Agreement

# 14. International co-operation

The Norwegian Management Authority to the Agreement, the Directorate for Nature Management, acted as the host to the Advisory Committee meeting no. 8. The meeting was conducted in the town of Røros, 12 –15 of May 2003.

15. Measures to implement the Resolutions of the Meeting of the Parties

Comments on relevant resolutions:

15.1 MoP2 Resolution No. 2: Consistent Monitoring Methods No national initiative. Norwegian bat-researchers will normally adhere to international standards.

15.2 MoP2 Resolution No. 3: Transboundary Programme: Species Proposals An analysis of the situation in Norway in relation to the possible follow up of the resolution in Norway was conducted in 1999, cf. Gjerde & Edvardsen (1999). A project in relation to the relevant species for Norway was initiated in 2000, and is expected to continue in 2001.

15.3 MoP2 Resolution No. 4: Transboundary programme: Habitat Proposals Cf. 15.2 above.

15.4 MoP3 Resolution No. 7: Amendment of the Agreement.

No further action has been taken in relation to the agreed amendment. However, the management authority support the amendments and expect them to be ratified in due course.

- 15.5 MoP3 Resolution No. 8: Implementation of the Conservation and Management Plans (cf. MoP2 res. 8 and action plan for the period 2000-2003).
  - 1. Monitoring methods Eptesicus nilsonii and Nyctalus noctula: A monitoring programme has been funded for the next 10 years (2001-2010) regarding wintering sites, in addition the general mapping of maternity colonies continues (cf. new atlas to be published in 2004).
  - 2. Migratory distribution patterns: An application to survey possible migration of bats at some likely sites was not initiated in 2002.
  - 3. Underground sites: A list of Norwegian underground sites has been supplied to the Agreements working group on the subject.
  - 4. Conservation of bat habitats. Cf. new brochure on bats and forestry, and general national mapping of biological diversity. Approved national guidelines for management of critical sites not protected is still pending, cf. ongoing judicial evaluation of national legislation.

#### Literature:

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