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:	July 2000
Period covered:	Describes the situation until year 2000
Competent Authority:	Directorate for Nature Management Tungasletta 2, N-7485 Trondheim, Norway.
Advisory Committee Member:	Not yet appointed
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 occuring in Norway

Eleven species of bats have been recorded in Norway. When the recently proposed split of *Pipistrellus pipistrellus* into two species, *Pipistrellus pipistrellus* and *Pipistrellus pygmaeus* is accepted, another species will be considered for the list. 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 have been included on the most recent National Red List (Størkersen 1999).
The following brief description of status and trends for each species is based on the following literature on bats: Olsen (ed.) 1996 and Isaksen *et al*. (eds.) 1998.

Myotis mystacinus
Whiskered bat/Skjeggflaggermus
Occurs regularly in the Southeastern and Southwestern parts of the country. Considered difficult to separate from *Myotis brandtii* and may well be more widespread than acknowleged at present. No colonies yet found, however indications exist from five localities. Wintering individuals found on a number of localities. Note: Confirmed in Hordaland county on the Western coast in 1999.
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 from the Southeastern parts north to Central Parts of Norway. No colonies known. Wintering males found on a number of localities.

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
This species-pair have been recorded over large parts of South-Norway. A colony has been found near Oslo, and indications are present from a number of widespread localities. Wintering individuals have been recorded from a number of localities in the Southeastern parts of Norway.

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. However, some possible registrations have been made in recent years.
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
Widely distributed in South-, Southeastern and Western parts of Norway. Despite search in suitable habitat the species have not yet been recorded in Central-Norway. Colonies have been recorded in four localities in South- and Southeastern Norway, in addition indications are present from a wider part of South-Norway. in addition indications are present from a wider part of South-Norway. Winter records are all but one from Southeastern Norway, presumably due to lack of investigations. One record exists from Bergen on the Western coast.
Norwegian Red List status 1999: Not listed

Pipistrellus pipistrellus
Common pipistrelle/Dvergflaggermus
Distributed over large parts of South Norway, including the interior of Southeastern Norway, and along the coast north to Møre & Romsdal County on the Western coast. Maternity colonies or indications of such found in a number of localities in the same geographical area. No wintering roosts are known 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

Soprano pipistrelle/Pygmeflaggermus
The proposed new species *Pipistrellus pygmaeus* (if accepted) is the form present in Norway. *P. pipistrellus* possibly occurs (single unconfirmed record from Rogaland county in 1998).

Pipistrellus nathusii
Nathusius' pipistrelle/Trollflaggermus
Known from a few records on the Western coast in the 1990ies, 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 bat/Storflaggermus

First recorded in Rogaland county in 1987 (confirmed in 1995), since recorded annually in Southeast Norway from 1992 and now known from all counties in this region. Not found wintering in Norway, while late October records have been made.
Norwegian Red List status 1999: R - Rare. According to the new IUCN criteria it may be placed in the category: Near Threatened

Eptesicus nilsonii
Northern bat/Nordflaggermus
The most common species in Norway, distributed all over the country, even in higher elevated regions and north of the Arctic Circle (although few records from Finnmark county). Colonies known from a number of localities, and the highest locality recorded was 900 m.a.s.l. Wintering localities mostly known from the Southern and Southeastern parts of Norway, 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 Southeastern-Norway to Trondheim in the North. No colonies known, however indications exist from two counties. 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 bat/Bredøreflaggermus
Only four records known, all from inner parts of the Oslofjord and last recorded in 1949. Records from October and in April indicates wintering records.
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
Common long-eared bat/Langøreflaggermus
Widely distributed in South-Norway north to Central-Norway. A number of localities known in the same area. Wintering localities mainly known from Southeastern Norway and along the coast to the Western-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 2000
M. mystacinus	Widespread	Negative?
M. brandtii	Local/Widespread	Negative?
M. nattereri	Accidental?	?
M. daubentonii	Widespread	Stable?
P. pipistrellus (s.l.)	Local/Widespread	Negative?
P. nathusii	Accidental?	?
N. noctula	Local	Stable?

E. nilssonii	Widespread	Expanding?
V. murinus	Local/Widespread	?
B. barbastellus	Accidental	?
P. auritus	*Local/Widespread*	*Expanding?*

Table 1. Summary of distribution and status of all bat species in Norway in 2000. Scant information exist on the status of the species in Norway, the information in the table is thus only tentative.

As table 1 indicates the current knowledge of bat distribution and their status in Norway is still not well understood. This is also reflected in the National Red List, where all listed bat species have been given the category Not Threatened (NT) 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. For some species new records of new geographical sites are still made, and as recent as in 1987 a new species was detected (*Nyctalus noctula).* A growing interest in bats and mammals alike is likely to give a continued improvement in the knowledge of bats. It is also likely that some of the species will be established as more common than is hitherto acknowledged.
Regarding short term trends (eg last 10 years) sufficient information is at present not available to give details on the situation other than tentative indication as given in table 1. The scant information on changes in population status may equally reflect the lack of or increased activity by bat researchers in certain geographical regions as well as real changes.

3. Habitats and roosts

The 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. Important bat sites, be it maternity or wintering sites, will also be covered. 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. The situation still reflects only a partial coverage of the country. Olsen (1996) lists all known sites up to the end of 1995 for each species. New sites are also added following in the progress of the continued efforts to map the distribution of the species.
Concerning summer roosts houses of different types is beyond doubt the most important sites concerning colonies or large groups of bats. Houses etc. in the summer such as churches and wooden houses seem to be favoured. Winter hibernation sites are mostly known in old mines or natural caves. However, we do not yet know how representative this is. The use of houses as winter sites are neither well studied.

4. Causes of threat

- The most well known threats in the summer time are against colonies and in the winter time by disturbance inside mines or caves.

- 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.
- 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.
- The use of chemical treatment on timber etc. has probably been abandoned, while the use of preservatives on wood may be a cause of concern if this wood is used in parts of houses where bats occur.
- The disturbance of caves (often unwittingly) can be a serious problem for bats. The closure of known winter sites have alleviated the situation. Whether such disturbance have any serious effects on Norwegian populations is not known.
- General lack of knowledge among the public may in some instances give cause for concern.

5. Data collection

The Norwegian Zoological Society (NZF) and in the recent years 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 plan a national atlas on mammals. 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 give 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 1980ies, but have since ceased. However, a number of inquiries on this subject still is presented to the authorities. These problems are now solved through advice and conservation with parties concerned. Catching of bats for scientific purposes is not exempt from the Wildlife Act and special permits must be issued in these cases. No such permits have been issued.
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. New regulations in relation to this is currently under preparation.

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 only example of concrete actions in relation to bat protection. However so far this has been conducted on a voluntary basis.

8. Consideration give 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. With the rise of EUs Natura 2000 and the Emerald Network of the Bern Convention it is however expected that important sites for bats may become the focus of conservation measures in Norway too.

9. Measures to raise public awareness and bat conservation

Information have been distributed through articles in newspapers and through radio-interviews.
An information leaflet on bats in Norway have been published by the Norwegian Zoological Society (NZF) with support from the Directorate for Nature Management. In relation to the ongoing national mammal-atlas project (10 x 10 km2 squares) a number of workshops have been arranged by NZF, and information on the project has been widely distrubuted in naturalists magazines, as well as in the media.
The Norwegian Chiroptera Information Centre (NIFF) is the only society in Norway purely dedicated to bat research and conservation. The society currently holds approx. 100 members, be it personal or institutional. 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. The society at present prepares a book on bats as a hobby.

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

No institution have as yet been appointed officially as advisory body towards the national management authority to the agreement. However, close cooperation between the Norwegian management authority to the Eurobats agreement and towards the two most active societies in bat research and conservation have been initiated, cf. para 9 above.
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 vertebrae species 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 that is to be concluded by 2003 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 redlisted 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 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). A project in relation to this was started in 2000 and is expected to continue in 2001.
Cooperation with the Ministry of Agriculture is expected to result in the initiation of new programmes in relation to this.

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.

D. Operation of the Agreement

14. International co-operation

None at present.

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

15.1 MoP2 Resolution No. 2: Consistent Monitoring Methods
No national initiative. Norwegian bat-researchers will normally adhere to international standards.
MoP2 Resolution No. 3: Transboundary Programme: Species Proposals

15.2 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.

Literature:
Gjerde, L. 1999. Red Data List of threatened bat species (Chiroptera) in Norway. Comments and suggestions to NZFs proposed Red Data List of threatened mammals in Norway, submitted to the Directorate for Nature Management. Norwegian Chiroptera Information Center, NIFF-Notat 2:1-23.
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