

# Agreement on the conservation of bats in Europe

## Report on implementation of the agreement in Denmark

### -1999-

#### A. General Information

Party: Denmark

Date of Report: November 1999

Period covered by report: 1994-1999

Competent Authority: The Danish Forest and Nature Agency

#### B. Status of Bats within the Territory of the Party

##### 1. Summary details of Resident Species

13-14 species of bats occurs in Denmark. 10 species are described as vulnerable or rare in the Red Data Book of Denmark.

##### 2. Status and Trends

Table 1 shows the status and the apparent population trends of the species known in Denmark.

Table 1. Status and apparent population trends of the species known in Denmark. Status: E (endangered), V (vulnerable), R (rare), A (international responsibility). Asbirk, S. & S. Sogaard (1991), Baagøe, H. in Muus, B. (1991).

Species	Population estimate	Distribution/status	Estimated trends in the last 10 years <sup>1</sup>
<i>Nyctalus noctula</i>		widespread/V	
<i>Eptesicus serotinus</i>		widespread	
<i>Vespertilio murinus</i>		widespread	
<i>Plecotus auritus</i>		widespread/V	
<i>Barbastella barbastellus</i>		rare/R	
<i>Pipistrellus pipistrellus</i> <sup>2</sup>		widespread	
<i>Pipistrellus nathusii</i>		widespread/V	
<i>Myotis natterii</i>		widespread/V	
<i>Myotis bechsteini</i>		restricted/R	
<i>Myotis brandtii</i>		restricted/V	
<i>Myotis mystacinus</i>		restricted/V	
<i>Myotis daubentoni</i>		widespread/V	
<i>Myotis dasycneme</i>		restricted/V (AY)	

<sup>1</sup> It is not possible to give a shorttime trend.

<sup>2</sup> This species can possibly be divided in two distinct species, a 45 kHz phonic form and a 55 kHz phonic form.

### 3. Habitats and roost sites

Table 2. Habitat of the species known in Denmark. B (buildings), O (commons), Op (parks), S (woodland), Sb (gallery forests, glades), Sg (old woodland), Vo (oligotrophe ponds or lakes), Ve (eutrophe ponds or lakes), Vv (streams). Asbirk, S. & S. Sogaard (1991), Baagøe, H. in Muus, B. (1991), Baagøe (2000, manus).

Species	Habitat	Hibernating sites	Summer roost sites
<i>Nyctalus noctula</i>	S,Sb	Hollow trees	Hollow trees
<i>Eptesicus serotinus</i>	Sb,B	Buildings	Buildings
<i>Vespertilio murinus</i>	B	Buildings	Buildings
<i>Plecotus auritus</i>	S,Sb,B	Buildings, cellars, mines, hollow trees	Buildings, hollow trees
<i>Barbastella barbastellus</i>	S,Sb,B	Buildings, mines	Buildings, hollow trees
<i>Pipistrellus pipistrellus</i>	S,Sb,B	Buildings, hollow trees	Buildings, hollow trees
<i>Pipistrellus nathusii</i>	S,Sb,B	Buildings, hollow trees	Buildings, hollow trees
<i>Myotis natterii</i>	S,Sb,B	Cellars, mines	Buildings, hollow trees
<i>Myotis bechsteini</i>	S,Sb,Sg	Hollow trees, cellars, mines	Hollow trees
<i>Myotis brandti</i>	S,Sb,B	Cellars, mines, hollow trees	Buildings, hollow trees
<i>Myotis mystacinus</i>	S,Sb,B	Cellars, mines, hollow trees	Buildings, hollow trees
<i>Myotis daubentoni</i>	Vo,Ve,Vv,S,B	Cellars, mines	Hollow trees, old bridges
<i>Myotis dasycneme</i>	Vo,Ve,Vv,S,B	Cellars, mines	Buildings, hollow trees

### 4. Threats

The most serious threats to the bats are habitat-destruction, especially the wetlands. The highly effective way to manage forests, especially with monocultures and low age diversity, diminish the food, roost and nursing sites and hibernating sites. Human disturbance at hibernating sites is a threat too.

Table 3. Threats of the species known in Denmark. F (disturbance), V (change in wetland habitats), O (others). Asbirk, S. & S. Sogaard (1991)

Species	Threats
<i>Nyctalus noctula</i>	O, F
<i>Eptesicus serotinus</i>	
<i>Vespertilio murinus</i>	
<i>Plecotus auritus</i>	O, F
<i>Barbastella barbastellus</i>	O, F

<i>Pipistrellus pipistrellus</i>	
<i>Pipistrellus nathusii</i>	O, F
<i>Myotis nattereri</i>	O, F
<i>Myotis bechsteini</i>	O, F
<i>Myotis brandti</i>	O, F
<i>Myotis mystacinus</i>	O, F
<i>Myotis daubentoni</i>	O, F, V
<i>Myotis dasycneme</i>	O, F, V

## 5. Data collection

The source of data is The Zoological Museum, Universitetsparken 15, DK-2100 København Ø.

## C. Measures Taken to Implement Article III of the Agreement

### 6. Legal measures taken to prevent the deliberate capture, keeping or killing bats, including details of enforcement actions used to support such measures.

All bats in Denmark have been protected by law since 1931 (Game Act of 1931). Since the Game Act of 1967 and the Hunting and Game Act of 1993, all mammals and birds which are not mentioned as having an open season are fully protected and must not be hunted or killed. Furthermore it is forbidden to ring or mark bats without a license. The Hunting and Game act makes it possible to protect trees used for roost of bats against felling.

The habitats of bats are protected by the Nature Act of 1992. This act prohibits altering state of natural lakes of more than 100 m<sup>2</sup> and of watercourses. Moors, bogs, marshes, swamps, coastal meadows, humid permanent grasslands and uncultivated, dry meadows are covered by the same prohibition when the habitat types more than 2,500 m<sup>2</sup> either separately, jointly or in connection with the before mentioned lakes.

In amendment to the Danish Forest Act revision of 1989 it was made statutory that not only forestry production should be taken into consideration but also nature conservation and protection of environmental values (good and multiple-use forest management). Furthermore provisions for preservation of deciduous forest edges, oak coppices, lakes, streams, marshes, moors, salt meadows and foreshores of the forest reserves were established. The financial provision for this strategy is the allocation of a total of about DKK 10 millions annually during the next 50 years.

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

**Area:** area in ha, **code:** Code of the species in Natura 2000 database

Site	area	code	Species
Lille Vildmose, Tofte Skov og Høstemark Skov	7824	1318	Myotis dasycneme
Rold Skov, Lindborg Ådal og Madum Sø	8127	1318	Myotis dasycneme

Site	area	code	Species
Lovns Bredning, Hjarbæk Fjord og Skals Ådal	19446	1318	Myotis dasycneme
Mønsted og Daugbjerg Kalkgruber	318	1318	Myotis dasycneme
Gudenå og Gjærn Bakker	815	1318	Myotis dasycneme
Salten Å, Salten Langsø, Mossø og søer syd for Salten Langsø og dele af Gudenå	4470	1318	Myotis dasycneme
Sepstrup Sande, Vrads Sande, Velling Skov og Palsgård Skov	5570	1318	Myotis dasycneme
Maribosøerne	3806	1308	Barbastella barbastellus
Almindingen, Ølene og Paradisbakkerne	6086	1318	Myotis dasycneme
Almindingen, Ølene og Paradisbakkerne	6086	1323	Myotis bechsteini

## 8. Considerations given to habitats which are important to bats

Designated in the Habitat Directive as mentioned as above.

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

Information about bats is disseminated through articles in magazines, newspapers, radio and television programmes.

In 1998 the Forest and Nature Agency, the Zoological Museum of Copenhagen and the Animal Welfare Society of Denmark published a free booklet (author: Hans Baagøe). The booklet is printed in 10.000 ex.

It informs about the biology of bats and advice how to handle bats living in your house if they cause problems. The purpose of the booklet is to help bats and people in the best way.

In connection with the bat-related rabies virus, which first was discovered in Denmark in 1985 it has been possible to broadcast, balanced information concerning the virus and the fact that bats are threatened species that need protection.

Some NGO's arrange bat excursions and make by this the public aware of the bats and their problems.

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

The Forest and Nature Agency.

## 11. Additional action undertaken to safeguard populations of bats

Gamekeepers from the 25 State Forest Districts in Denmark are instructed to give advice on how bats inhabiting houses can be managed in the best way to avoid problems.

Zoological Museum is used as an consultant for advise in special cases.

**12. Recent ongoing programmes (including research) relating to the conservation and management of bats**

Hans Baagoe has in the period 1973-1994 registred the occurrence of Danish bat species. The registration has been carried out with bat detectors in 10 x 10 km UTM squares and as an active search for "specimen localities". To observe seasonal differences and movements the records is presented as detector localities, summer (June-August), specimen localities, summer (June-August) and specimen localities, rest of the year (September-May) on separate maps.

The results of this investigation will be published next year (Baagoe, H.J. Zoological Museum, University of Copenhagen, Univeristetsparken 15, 2100 Copenhagen O, Denmark: "Danish Bats: Atlas and Analysis of Distribution, Occurrence and Abundance").

**13. Considerations being given to the potential effects of pesticides on bats, and efforts to replace timber treatment chemicals which are highly toxic to bats**

None

**D. Functioning of the Agreement**

**Co-operation with other Range States**

None at the moment.