

A. PROPOSAL

Inclusion of the European populations of the families Rhinolophidae and Vespertilionidae in Appendix II.

B. PROPONENT

Federal Republic of Germany

C. SUPPORTING STATEMENT1. Taxonomy

## 1.1 Mammalia

## 1.2 Chiroptera

## 1.3 Rhinolophidae and Vespertilionidae

1.4 Genus *Rhinolophus* and Genera *Myotis*, *Pipistrellus*, *Nyctalus*, *Eptesicus*, *Vespertilio*, *Barbastella*, *Plecotus* and *Miniopterus* (30 species in total):

- a. *Rhinolophus ferrumequinum* (Schreber, 1774)
- b. *Rhinolophus hipposideros* (Bechstein, 1800)
- c. *Rhinolophus euryale* Blasius, 1853
- d. *Rhinolophus mehelyi* Matschie, 1901
- e. *Rhinolophus blasii* Peters, 1866
- f. *Myotis mystacinus* (Kuhl, 1819)
- g. *Myotis brandti* (Eversmann, 1845)
- h. *Myotis emarginatus* (Geoffroy, 1806)
- i. *Myotis nattereri* (Kuhl, 1818)
- k. *Myotis bechsteini* (Kuhl, 1818)
- l. *Myotis myotis* (Borkhausen, 1797)
- m. *Myotis blythi* (Tomes, 1857)
- n. *Myotis daubentoni* (Kuhl, 1819)
- o. *Myotis capaccinii* (Bonaparte, 1837)
- p. *Myotis dasycneme* (Boie, 1825)
- q. *Pipistrellus pipistrellus* (Schreber, 1774)
- r. *Pipistrellus nathusii* (Keyserling & Blasius, 1839)
- s. *Pipistrellus kuhli* (Kuhl, 1819)
- t. *Pipistrellus savii* (Bonaparte, 1837)
- u. *Nyctalus leisleri* (Kuhl, 1818)
- v. *Nyctalus noctula* (Schreber, 1774)
- w. *Nyctalus lasiopterus* (Schreber, 1780)
- x. *Eptesicus nilsoni* (Keyserling & Blasius, 1839)
- y. *Eptesicus serotinus* (Schreber, 1774)
- z. *Vespertilio murinus* Linnaeus, 1758
- za. *Barbastella barbastellus* (Schreber, 1774)
- zb. *Plecotus auritus* (Linnaeus, 1758)
- zc. *Plecotus austriacus* (Fischer, 1829)
- zd. *Miniopterus schreibersi* (Kuhl, 1819)

1.5 Common names for both families (A) Rhinolophidae and (B) Vespertilionidae:

- A. Horseshoe bats (English)  
Hufeisennasen (German)  
Rhinolophidés (French)
- B. Vespertilionid bats (English)  
Glattnasen (German)  
Vespertilionidés (French)

For single species:

- a. Greater horseshoe bat (English)  
Großhufeisennase (German)  
Grand Rhinolophe (French)
- b. Lesser horseshoe bat (English)  
Kleinhufeisennase (German)  
Petit Rhinolophe (French)
- c. Mediterranean horseshoe bat (English)  
Mittelmeer-Hufeisennase (German)  
Rhinolophe euryale (French)
- d. Mehely's horseshoe bat (English)  
Mehely-Hufeisennase (German)  
Rhinolophe de Mehely (French)
- e. Blasius' horseshoe bat (English)  
Blasius-Hufeisennase (German)  
Rhinolophe de Blasius (French)
- f. Whiskered bat (English)  
Kleine Bartfledermaus (German)  
Vespertilion à moustaches (French)
- g. Brandt's bat (English)  
Große Bartfledermaus (German)  
Vespertilion de Brandt (French)
- h. Geoffroy's bat (English)  
Wimperfledermaus (German)  
Vespertilion à oreilles échancrées (French)
- i. Natterer's bat (English)  
Fransenfledermaus (German)  
Vespertilion de Natterer (French)
- k. Bechstein's bat (English)  
Bechstein-Fledermaus (German)  
Vespertilion de Bechstein (French)
- l. Large mouse-eared bat (English)  
Großmausohr (German)  
Grand Murin (French)
- m. Lesser mouse-eared bat (English)  
Kleinmausohr (German)  
Petit Murin (French)
- n. Daubenton's bat (English)  
Wasserfledermaus (German)  
Vespertilion de Daubenton (French)

- o. Long-fingered bat (English)  
Langfußfledermaus (German)  
Vespertilion de Capaccini (French)
- p. Rough-legged water bat (English)  
Teichfledermaus (German)  
Vespertilion des marais (French)
- q. Common pipistrelle (English)  
Zwergfledermaus (German)  
Pipistrelle commune (French)
- r. Nathusius' pipistrelle (English)  
Rauhhaufledermaus (German)  
Pipistrelle de Nathusius (French)
- s. Kuhl's pipistrelle (English)  
Weißbrandfledermaus (German)  
Pipistrelle de Kuhl (French)
- t. Savi's pipistrelle (English)  
Alpenfledermaus (German)  
Pipistrelle de Savi (French)
- u. Leisler's bat (English)  
Kleinabendselger (German)  
Noctule de Leisler (French)
- v. Noctule (English)  
Abendselger (German)  
Noctule (French)
- w. Giant noctule (English)  
Großabendsegler (German)  
Noctule grande (French)
- x. Northern bat (English)  
Nordfledermaus (German)  
Sérotine boréale (French)
- y. Serotine (English)  
Breitflügelfledermaus (German)  
Sérotine commune (French)
- z. Parti-coloured bat (English)  
Zweifarbflieger (German)  
Sérotine bicolore (French)
- za. Barbastelle (English)  
Mopsfledermaus (German)  
Barbastelle (French)
- zb. Common long-eared bat (English)  
Braunes Langohr (German)  
Oreillard (French)
- zc. Grey long-eared bat (English)  
Graues Langohr (German)  
Oreillard gris (French)
- zd. Schreiber's bat (English)  
Langflügelfledermaus (German)  
Minioptère (French)



2. Biological data

2.1 Distribution: The distribution areas of the 30 bat species listed under 1.4 extend all over Europe, sometimes also comprising non-European regions:

- a. Europe (without NE), NW Africa, S Asia as far as E China and Japan;
- b. Europe (without NE), NW Africa, the Near East, extending from there to Central Asia;
- c. S Europe, N Africa, the Near East, extending from there to Turkmenistan;
- d. Locally in S Europe, NW Africa and the Near East;
- e. S Europe, Africa and S Asia;
- f. Europe (without S Spain, N Norway, Finland, Greece), NW Africa, in Asia (disjunctly) as far as Japan and the Himalayas;
- g. Europe (it has not yet been found out in which areas);
- h. Europe (without N and E), locally in NW Africa, Caucasia and E Iran;
- i. Europe (without N, Yugoslavia, parts of E Europe), locally in NW Africa and Asia);
- k. Europe (without N and E), Caucasia;
- l. Europe (without N and E); the Near East;
- m. Mediterranean area, Crimea, Caucasia, the Near and the Middle East (? E Asia);
- n. Europe, S Siberia, extending from there to Corea and Japan;
- o. Mediterranean area, the Near East and parts of the Middle East;
- p. Central and E Europe, W and Central Asia, in E Asia only locally;
- q. Europe (without NE), NW Africa, the Near and the Middle East (? Corea);
- r. Europe (without N and E), Caucasia (? Turkey);
- s. S Europe (incl. Crimea), Africa, the Near and the Middle East;
- t. Central and S Europe (incl. Crimea and parts of E Europe), NW Africa, S Asia as far as Corea and Japan;
- u. Europe (without N), Caucasia, locally in S Asia (Himalayas, Afghanistan);
- v. Europe (without NE), NW Africa, the Near East, Central, partly also S and SE Asia;
- w. Locally in Europe (without N), Caucasia, the Near East as far as W Kazakhstan;

- x. From Scandinavia, Central Europe and Iraq as far as E Asia (does not occur in S Asia);
- y. Europe (without N), N Africa, the Near East, extending from there to NE China;
- z. From S Scandinavia, Central Europe and the Balkans to E Asia.
- za. Europe (without N and E), NW Africa, Caucasia;
- zb. Central Europe, Caucasia, extending from there to Asia as far as Sahalin, Japan and the Himalayas;
- zc. Europe (without N and E), N Africa, the Near East, extending from there to the Himalayas and Mongolia);
- zd. S Europe, Africa, the Near East, S Asia as far as Japan, Australia;

2.2 Population: Bats belong to the few species-rich animal groups in Europe which are affected by a strong decline in number caused by human agency. Some species (such as *Barbastella barbastella*, *Myotis emarginatus*, *Rhinolophus ferrumequinum* and *R. hipposideros*) had to give up large proportions of their original range and now only occur in small residual populations; others (like *Myotis daubentoni*) still occur in larger numbers, which, however, are found only locally and form a wide network of single colonies.

2.3 Habitat: In the summer the occurrence of bats is concentrated on human buildings, hence on towns and villages or on natural caves (e.g. *Rhinolophus hipposideros*, *Myotis myotis*, *Myotis blythi*) as well as on tree stands, i.e. primarily on forests (e.g. *Pipistrellus nathusii*, *Nyctalus leisleri*). A rich supply of food (insects) in the immediate surroundings of such habitats is the basic precondition for the occurrence of bats.

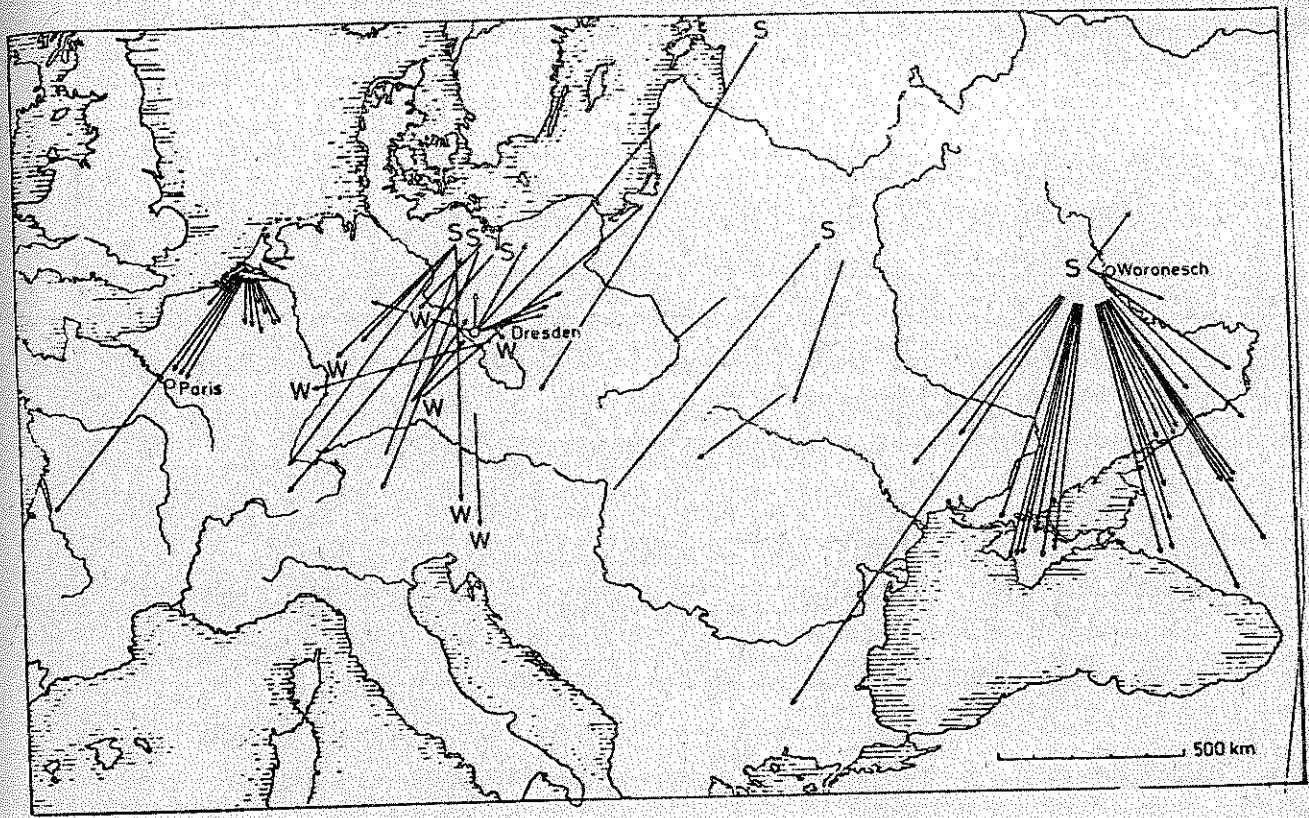
For the winter period all bat species need frost-free hiding places with relatively constant and cool temperatures, high air humidity and little incidence of light, i.e. rock-caves and tunnels, crevices in rocks and walls, deep cellars, old bunkers and other human buildings as well as holes and crevices in trees of old tree stands. The favourable summer and winter quarters of the various species mostly lie far away from each other, in some cases, the distance may even be some hundred kilometres.

2.4 Migrations: At the moment there are only preliminary data available. They prove that the migrations of these animal species have parallels with bird migration. Thus the two maps attached (pict. 1 and 2) show clearly that at least some of the bat species leave their summer quarters during the cold winter period in order to spend this time in warmer areas in the south. A Europe-wide characterization of the migrations of all bat species has not yet been made; according to a provisional classification, the European species can, however, be sub-divided into three groups: long-distance migrants, medium-distance migrants and short-distance migrants (see Blab 1980, p. 12). Future research into the migrations of European bats will be more thorough and will show which species of the third group do not (or only seldom) cross national boundaries in the course of migration (and may therefore not become the subject of regional agreements).

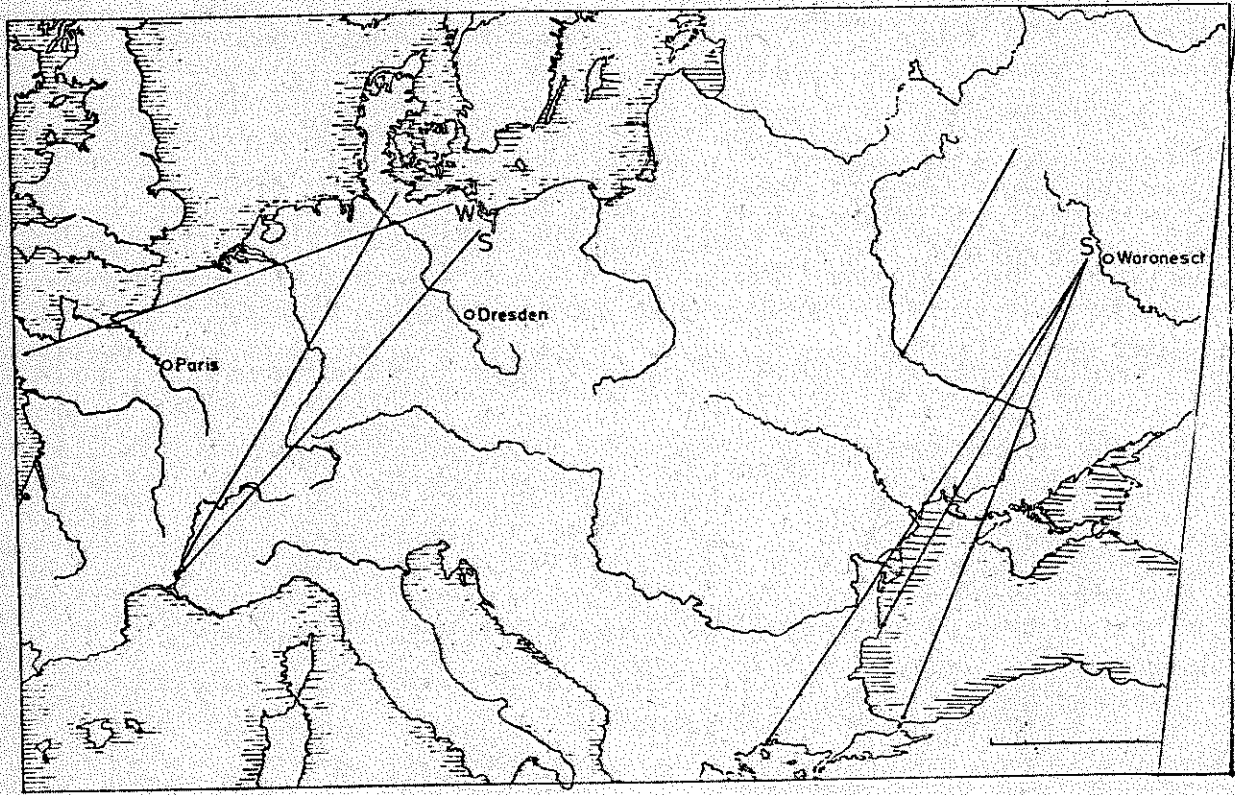
### 3. Threat data

- 3.1 Direct threat to the population: Local bat populations are often destroyed when church towers, old roofs, etc. are re-built. In many cases, bats are poisoned by the use of toxic timber-impregnating agents. Thanks to the new nature conservation legislation in most European countries, persecution of the animals has diminished.
- 3.2 Habitat destruction: Modern styles of building, particularly in rural areas, as well as intensive silviculture are increasingly leading to the destruction of summer quarters of all bat species. Structural alterations carried out on rock caves and tunnels for reasons of safety hamper the access to their traditional winter quarters.
- 3.3 Indirect threat: Decline in the number of insects (main food of bats) as well as (possible) accumulation of toxic chemicals from the food chain in the organs of the bats.
- 3.4 Threat especially connected with migration: Studies made so far show that migratory bats from certain summer quarters very conservatively stick to the same winter quarters; the result is that, e.g., blocking the entrances to larger winter quarters in the south may have lasting detrimental impacts on larger populations of migratory species in the north.





Pict. 1: Migratory routes of noctules (*Nyctalus noctula*) between summer (S) and winter (W) quarters, proved by reported ring recoveries.



Pict. 2: Migrations of Nathusius' pipistrelles (*Pipistrellus nathusii*) (S = summer quarters, W = winter quarters), proved by ring recoveries reported from far-away places.

#### 4. Protection status and needs

- 4.1 National protection status: Bats are protected by law in most European countries (partial survey to be found in Nowak 1981, p. 49-56 and 89-96); in most cases, however, there is no special legislation on the protection of the most important habitats (summer and winter quarters).
- 4.2 International protection status: Appendix I of the Berne Convention (Convention on the Conservation of European Wildlife and Natural Habitats) lists "all species except *Pipistrellus pipistrellus*", Appendix II "*Pipistrellus pipistrellus*".
- 4.3 Additional protection needs: It is necessary to take practical and legal measures for the protection of the summer and winter quarters of all European species of bats. In order to develop a practicable conservation programme it is necessary to intensify the research both into the migrations of bats and into their habitat requirements.

#### 5. Range states

In view of the fact that the knowledge about the summer and winter quarters of the various bat species as well as about the distance between these quarters to be covered by the animals during migration is insufficient, the Range States for the species listed under 1.4 cannot be specified. Bats which might become the subject of a European Regional Agreement occur in all European states (except Iceland): Albania, Austria, Belgium, Bulgaria, Czechoslovakia, Denmark, Finland, France, German Dem. Rep., Germany, Fed. Rep., Greece, Hungary, Ireland, Italy, Luxembourg, Netherlands, Norway, Poland, Portugal, Romania, Spain, Sweden, Switzerland, Turkey, United Kingdom, USSR, Yugoslavia.

#### 6. Comments from range states

None

#### 7. Additional remarks

Selected bat species as well as all species of bats that occur in individual regions are listed as endangered in nature conservation literature, e.g. in the "Red Data Book of the Federal Republic of Germany" (22 species), in the "Red Data Book of the Russian Federation" (8 species), in the "Red Data Book of USSR" (*Miniopterus schreibersi*, *Nyctalus lasiopterus*, *Tadarida teniotis*) and in the "List of Endangered European Mammals" (*Rhinolophus ferrumequinum*).



## 8. References

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