PROPOSAL FOR INCLUSION OF SPECIES ON THE APPENDICES OF THE CONVENTION ON THE CONSERVATION OF MIGRATORY SPECIES OF WILD ANIMALS

A. **PROPOSAL**: Inclusion of the African populations of Schreiber's bent-winged bat *Miniopterus schreibersii* on Appendix II.

B. **PROPONENTS**: Governments of Bulgaria, Kenya, Malta and Ukraine[1].

C. **SUPPORTING STATEMENT**:

1. Taxon

1.1.	**Class**:	Mammalia
1.2.	**Or**der:	Chiroptera
1.3.	**Family**:	Vespertilionidae
1.4.	**Genus/species/subspecies**:	*Miniopterus schreibersii* (Kuhl, 1817)
1.5.	**Common name**:	English: Natal clinging bat, Schreiber's bent-winged bat French: Minioptère de Schreibers Spanish: Murcielago troglodita

2. Biological data

2.1. Distribution

The most widely distributed bat species, occurring from southern Europe east to Japan, through the Old World tropics south to South Africa, Sri Lanka and through to southern Australia (Koopman, 1993, Simmons, in press). Distribution uneven (e.g in Afrotropical region only recorded across central, eastern and moister parts of southern Africa).

The extraordinarily wide range of this species has led to many attempts to separate it into a number of geographically separated species. None has been widely accepted so far. Recent attempts to identify DNA characteristics of the South African population offers another opportunity (Miller-Butterworth *et al.*, 2002).

The genus includes about 14 species, some with restricted distribution. Five other species of the genus occur in Africa.

Further current work on the systematics of the species could affect the taxonomy of the African species and needs to be assessed.

2.2. Population

Cave bat forming colonies of up to 300,000. Colonies of up to 200,000 are recorded in South Africa (Taylor, 2000).

[1] Proposals for the inclusion of *M. schreibersii* on Appendix II have been submitted independently by the Governments of Bulgaria, Democratic Republic of the Congo, Kenya, Malta and Ukraine. Contacted by the Secretariat, proponent governments agreed to consider the proposal of amendment as submitted jointly by them all. The present proposal originates from the merging of the proposals received from Bulgaria, Kenya, Malta and Ukraine, which were submitted in English and were based on a draft document discussed by the Scientific Council at its 12th meeting. The proposal submitted by the Democratic Republic of the Congo was submitted in French and includes information complementary to the one included in the proposal from the other proponents. The Secretariat decided to transmit it to the Parties as a separate document (II/1b).

Although the species is widespread major population declines are recorded in Europe, Australia and South Africa (those places at higher latitudes where the species has been most studied).

2.3. Habitat

Insectivorous species. Roosting in caves. Caves used for maternity colonies, for hibernation at higher latitudes and as stop-off points during migration. At least in the more temperate regions, it needs a range of cave sites at different times of its annual cycle. In Zimbabwe, also roosts in buildings and hollow trees (M.B.Fenton, pers.comm.).

In Africa the species appears to favour the cooler moister areas.

An account of the species can be found in Hutson et al. (2001).

2.4. Migration

Migrations to 1300 km (Australia), over 800 km (Europe), 250 km (South Africa) (Fleming & Eby, 2003). Movements to hibernation sites may be in almost any direction. Males often less migratory, but movements and summer behaviour poorly understood.

Van der Merwe (1975) examined migration in South Africa. He studied a number of sites with up to 4000 bats and found bats move from hibernation sites in the southern Transvaal highveld to maternity sites in northern Transvaal bushveld. Such movements recorded were up to 260 km (Taylor, 2000). Some animals remain in the highveld, moving less than 60 km to maternity roosts.

Working in Kenya at 704m (Kibwezi, Machakos Distr.), O'Shea &Vaughan (1980) found *M.natalensis* an annual resident but at very low density between May and October. *M.africanus* (n=2) was caught in February, M.*fraterculus* (n=8) between November and April, and only one *M.schreibersii* was trapped (month unknown).

The species is also believed to be migratory in Swaziland (A.Monajdem, pers.comm.).

In Europe the maximum recorded movement is 833 km (Rodrigues, 2002) and in Australia it is 1300 km (Dwyer, 1969) and it is considered likely that similar range movements occur in Africa. In Australia, Dwyer (1966) identified sites for transient colonies (mostly of juveniles) that are reused each year and are otherwise empty of the species; and transient colonies have been identified as an important feature of migration of the species in Europe. It is also considered that although migration may occur in any direction, particular routes are followed by the bats, with stop-over sites used temporarily and that key maternity sites draw bats from a very wide area. While Dwyer (1966) originally suggested that winter dispersal was possibly not along set routes, he later (Dwyer, 1969) suggested that most movements were within specific (or related) drainage areas; the same is thought to be true in Europe.

3. Threat data

3.1. Direct threats to the populations

Although effects on foraging habitats are likely to be a serious problem for the species, most conservation concern has been expressed about problems of conservation of cave roosts, as a result of damage, disturbance, change of use, mineral exploitation, etc.

Reliant on caves where subject to disturbance, blocking of entrances, direct killing, recreational caving and tourism, mineral extraction, changes to microclimate within cave.

Particularly sensitive during maternity and hibernation periods, but conservation of other used sites, including caves used as migratory stop-off points, also important.

Recent major mortality in summer maternity colonies of Western Europe from, as yet, unknown causes.

3.2. Habitat destruction
Foraging habitat threatened by intensive agriculture, development, forestry (including logging).

3.3. Indirect threats
No information.

3.4. Threats connected especially with migrations
The threats indicated in paragraph 3.1 apply also at caves used as stop-over roosts during migration. Vegetation corridors on migration routes are also likely to be important, but there is no data on that.

3.5. National and international utilization
No information.

4. Protection needs and status

4.1. National protection status
Protected in most European and former Soviet Union Range States and Australia. Protected status elsewhere uncertain.

4.2. International protection status
In Europe included in CMS Appendix II and the Agreement on the Conservation of Populations of European Bats, Annex II of the EU Habitats Directive (92/43/EEC), Appendix II of the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention). Some international collaborative programmes exist in Europe.

IUCN status: Near Threatened.

4.3. Additional protection needs

5. Range States[2]

Afghanistan, ALBANIA, Algeria, Angola, AUSTRALIA, AUSTRIA, Azerbaijan, Bosnia & Herzegovina, Botswana, BULGARIA, CAMEROON, Central African Republic, China, CROATIA, DEMOCRATIC REPUBLIC OF THE CONGO, Ethiopia, FRANCE, GAMBIA (?), GERMANY, GHANA, GREECE, GUINEA, HUNGARY, INDIA, Indonesia, Iran, Iraq, ISRAEL, ITALY, Japan, JORDAN, KENYA, Lebanon, Madagascar, Malawi, Malaysia, MALTA, MOROCCO, Mozambique, Myanmar, Namibia, Nepal, Papua New Guinea, PHILIPPINES, PORTUGAL, ROMANIA, RWANDA (?), SAUDI ARABIA, Sierra Leone, SLOVAKIA, SLOVENIA, Solomon Islands, SOMALIA (?), SOUTH AFRICA, SPAIN, SRI LANKA, Sudan, SWITZERLAND, SYRIA, Taiwan, TAJIKISTAN, THE FORMER YUGOSLAV REPUBLIC OF MACEDONIA, Thailand, TUNISIA, Turkey, Turkmenistan, UGANDA, UKRAINE, UNITED KINGDOM (Gibraltar), UNITED REPUBLIC OF TANZANIA, UZBEKISTAN, Viet Nam, Yemen, Yugoslavia, , Zambia, Zimbabwe.

6. Comments from Range States

Support for listing in Appendix II from Kenya

A proposal for listing of this species has already been submitted by other range states. The Kenya government supports the listing of the entire African population of this species.

[2] CMS Parties in capitals

The species occurs in a wide range of habitats in Kenya from forests, savannah to scrublands and caves. But no detailed population data exists. But in recent years, vandalism of caves and direct killing and poisoning of this species has been reported and population is probably declining within its range in the country. In addition, its habitats are under threats from human activities.

There are few published data on national protection status in Africa. In Kenya, the species is like all other wildlife, which is protected under Wildlife Act. The species has no special protection status. It is presumed that this species is likely to be given general protection by some countries of Africa within its distribution range.

The listing in Appendix II will provide a better opportunity for more detailed conservation action plans. The listing will also open avenues for closer co-operation in monitoring the African populations for this species.

7 Additional remarks

8. References

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