

# **EUROBATS**

## **Implementation of the Agreement on the Conservation of Bats in Europe**

### **Report of Belgium 2003**

**Consisting of the report of 3 regions:**

**Walloon Region  
Flemish Region  
Brussels Capital Region**

**Focal Point** for BELGIUM: Els Martens

Nature Division; Administration for Environment, Nature, Land and Water Management; Ministry of the Flemish Community; Koning Albert II-laan 20 bus 8; B - 1000 Brussel; BELGIUM

# Rapport de la Région Wallonne (Belgique) (2003)

## A Informations Générales

Nom du Pays partie : Belgique - Wallonie

Date du rapport : 20 mai 2003

Période couverte : 1995 - 2003

Autorités compétentes : Ministère de la Région wallonne, Direction Générale des Ressources Naturelles et de l'Environnement, Division de la Nature et des Forêts (B-5100 JAMBES - Avenue Prince de Liège, 15 - Belgique).

Membres du Comité du Conseil : P. De Wolf, J. Fairon

Membres d'autres comité/groupe de travail : J. Fairon, C. Debruyne

## B Statuts des chauves-souris dans la Région

### 1. Espèces

20 espèces sont signalées en Wallonie :

#### *Rhinolophus ferrumequinum*

Distribution restreinte principalement à la zone karstique. S'étend également aux zones où le milieu souterrain artificiel est significativement présent. Actuellement, le sillon Sambre-et-Meuse marque la limite nord de sa répartition, à quelques exceptions près. L'espèce hiverne en milieu souterrain naturel ou artificiel. La reproduction est connue dans moins de dix sites anthropiques. On compte moins de 250 individus en période d'hivernage. Un nombre important d'hivernant se reproduit en France (Ardennes et Lorraine).

#### *Rhinolophus hipposideros*

Populations actuellement insularisées et très peu nombreuses, également dans la zone karstique principalement et au sud du sillon Sambre-et-Meuse. L'espèce hiverne en milieu souterrain naturel ou artificiel. La reproduction est connue également dans moins de dix sites, tous en milieu anthropique. Moins de 100 individus sont encore observés annuellement.

#### *Myotis myotis*

La population connue est située principalement au sud du sillon Sambre-et-Meuse. L'espèce hiverne en milieu souterrain et moins de 200 individus sont comptés dans cette période. Elle se reproduit en milieu anthropique principalement. Moins de dix colonies de reproduction sont connues et concernent environ 700 individus adultes. À noter la disproportion entre les deux périodes.

#### *Myotis bechsteini*

Population non connue. Le nombre d'individus observés est toujours très faible, moins de vingt individus en période hivernale. Nous n'avons pas connaissance de colonies de reproduction.

#### *Myotis emarginatus*

La répartition de cette espèce concerne tout le territoire wallon à l'exception de la zone limoneuse ouest du territoire. En hiver on compte moins de 100 individus en milieu souterrain.

Moins de dix colonies de reproduction sont connues, toutes en milieu anthropique, et comptent moins de 500 individus.

#### *Myotis nattereri*

La population est répartie un peu partout en Wallonie. On compte cependant moins de 50 individus en période hivernale dans le milieu souterrain. Trois colonies de reproduction sont connues et comptent moins de 100 individus.

#### *Myotis mystacinus*

Population importante, présente presque partout mais liée aux zones forestières. Le nombre de gîtes de reproduction connu est assez faible (moins de dix) mais n'est pas représentatif de la réalité.

#### *Myotis brandti*

Vu la difficulté de détermination sans manipulation de l'espèce et de sa dissociation de la précédente, sa population reste mal connue. Une étude basée sur la collection nationale IRSNB (J.FAIRON 1980) montre que la proportion de l'espèce par rapport au complexe *mystacinus/brandti* est d'environ 14%.

#### *Myotis dasycneme*

L'espèce est observée en période hivernale, dans une dizaine de cavités. En période estivale, des observations acoustiques démontreraient sa présence notamment dans le bassin de la Meuse. Actuellement, aucune colonie n'a été trouvée en Wallonie.

#### *Myotis daubentoni*

Cette espèce est parmi les mieux représentées géographiquement en Wallonie. Elle est observée dans la plupart des cavités d'hivernage, parfois en très grand nombre (de plusieurs dizaines à plusieurs centaines) comme dans les anciennes marnières au nord du sillon Sambre-et-Meuse. Les colonies de reproduction connues sont rares (<10).

#### *Pipistrellus pipistrellus*

Depuis la description de l'espèce *pygmaeus*, il devient difficile de préciser la détermination de l'espèce dans les collections et par observations visuelles. Il convient donc d'être prudent et de parler du complexe *pipistrellus/pygmaeus*. Dans ce cas, ce complexe représente une population abondante et ubiquiste, été comme hiver.

#### *Pipistrellus pygmaeus*

Déjà de nombreuses observations acoustiques ont reconnu cette espèce en différents endroits. Il est cependant un peu tôt pour en connaître la répartition. Aucune recherche génétique n'a été réalisée actuellement.

#### *Pipistrellus nathusii*

Connue principalement comme migratrice et donc généralement observée en période hivernale. Actuellement, moins de 5 observations sont à notre disposition. Il est donc impossible de pouvoir établir un statut géographique crédible. On peut cependant croire qu'elle peut se rencontrer dans tout le territoire Wallon.

#### *Eptesicus serotinus*

L'espèce est relativement bien répartie en Wallonie suivant les données acoustiques, et plus de quarante colonies estivales sont connues. Les données hivernales sont plus rares et toujours fortuites en milieu souterrain (moins de 20 cavités concernées).

#### *Vespertilio murinus*

L'espèce aurait été observée à deux reprises en Wallonie. Son statut n'est pas connu.

### *Nyctalus noctula*

Le statut géographique est très mal connu. L'observation acoustique, une des plus fiables, montre cependant une répartition plus large que les observations directes pourraient le faire croire.

### *Nyctalus leisleri*

Outre quelques données acoustiques, on dispose de peu de données. Une colonie de reproduction a été observée dans le sud.

### *Barbastella barbastellus*

Cette espèce est devenue rarissime depuis trente années. Sa présence, depuis dix ans a été notée dans moins de cinq sites.

### *Plecotus auritus*

L'oreillard roux occupe tout le territoire concerné bien qu'il ne soit jamais très commun en milieu souterrain. Une vingtaine de colonies de reproduction sont connues.

### *Plecotus austriacus*

L'espèce semble éviter la zone ardennaise. On connaît actuellement 7 colonies de reproduction. Les observations fiables en période hivernale sont rares.

## 2. Statuts et tendances

- a) estimation de la population - les chiffres de population qui suivent concernent les observations autres que acoustiques, ces dernières n'offrant pas encore toute la fiabilité scientifique souhaitée et sont encore fort dispersées et non publiées.
- b) gîtes connus : H = hivernage, E = estivage, R = reproduction.
- c) statuts : E = en danger, V - Vulnérable, R = rare ou répartition géographique restreinte, N = non en danger, ? = non connu.
- d) tendances : D = déclin, S = stable, ? = non connu.
- e) menaces : E = environnement - maillage écologique, GH = gîtes d'hivernage, GE = gîtes d'estivage et de reproduction, ? = non connu.

Espèces	population estimation	gîtes connus	Statut	Tendances	Menaces
<i>Rhinolophus ferrumequinum</i>	> 300	H, E, R	E	D	E, GH, GE
<i>Rhinolophus hipposideros</i>	> 100	H, E, R	E	D	E, GH, GE
<i>Myotis myotis</i>	< 1000	H, E, R	E	D	E, GH, GE
<i>Myotis bechsteini</i>	?	H	?	?	E
<i>Myotis emarginatus</i>	< 500	H, E, R	E	S	E, GH, GE
<i>Myotis nattereri</i>	?	H, E, R	V	D	E, GH, GE
<i>Myotis mystacinus</i>	< 1000	H, E, R	N	S	E, GH, GE
<i>Myotis brandti</i>	?	H	?	?	E
<i>Myotis dasycneme</i>	?	H	E	D	GH, GE
<i>Myotis daubentoni</i>	< 1000	H, E, R	V	S	E, GH, GE
<i>Pipistrellus pipistrellus</i>	< 5000	H, E, R	N	S	GH, GE
<i>Pipistrellus pygmaeus</i>	?	?	?	?	?
<i>Pipistrellus nathusii</i>	?	?	?	?	?
<i>Eptesicus serotinus</i>	< 500	H, E, R	E	D	E, GH, GE
<i>Vespertilio murinus</i>	?	?	R	?	?
<i>Nyctalus noctula</i>	?	?	?	?	?
<i>Nyctalus leisleri</i>	?	?	?	?	?
<i>Barbastella barbastellus</i>	> 20	H	R	D	?
<i>Plecotus auritus</i>	< 500	H, E, R	V	D	E, GH, GE
<i>Plecotus austriacus</i>	< 200	H, E, R	V	D	E, GH, GE

3. **Habitats et gîtes** : voir point 1.

4. **Menaces**

- La majorité des menaces concerne la perte de gîtes d'hivernage et de reproduction ainsi que la dégradation du maillage écologique.
- La conséquence de l'usage des pesticides et des produits de protection du bois est plus insidieuse.
- Le placement de plus en plus fréquent d'antennes GSM sur les bâtiments pourrait se révéler dangereux ; c'est un domaine où le principe de précaution reste ignoré.

5. **Collecte des données**

- Le "Centre de Recherche de la Nature, des Forêts et le Bois", du Ministère de la Région wallonne, récolte les données.
- L'Institut royal des Sciences Naturelles de Belgique (Bruxelles) possède des collections scientifiques officiellement enregistrées, ainsi que l'ensemble des données chiroptérologiques antérieures à 2001.

C **Mesures prises pour la mise en œuvre de l' Article III de l'Accord** :

6. **Mesures légales prises pour la protection des chauves-souris**

- La loi sur la conservation de la nature du 12 juillet 1973.
- Arrêté de l'Exécutif Régional Wallon relatif à la protection de certaines espèces d'animaux vertébrés indigènes vivant à l'état sauvage du 30 mars 1983 [concerne toutes les espèces de chauves-souris].
- Convention de Berne du 1<sup>er</sup> septembre 1982 (Annexes II et III) relative à la vie sauvage et aux habitats naturels européens, signée à Bern le 19 septembre 1979 et approuvée par la loi du 20 avril 1989.
- Convention de Bonn du 23 juin 1979 (Annexe II) relative à la conservation des espèces animales sauvages migratrices et approuvée par la loi du 27 avril 1990.
- La Directive Européenne "Faune - Flore - Habitats (92/43/CEE)" du 21 mai 1992 (Annexes II et IV) organisant la protection des espèces et de leurs habitats.
- Accord de Londres "Bat Agreement" (EUROBATS) relatif à la conservation des chauves-souris en Europe, ratifié par la Région Wallonne le 17 mars 1995 et par la Belgique le 14 mai 2003.
- Arrêté du Gouvernement wallon organisant la protection des cavités souterraines d'intérêt scientifique du 26 janvier 1995.

7. **Sites identifiés et protégés pour la conservation des chauves-souris** :

a) Milieu souterrain d'hivernage

Les premières Réserves chiroptérologiques ont été créés par l'IRSNB en 1973 et transmises ensuite à la Région wallonne. Actuellement, la Wallonie compte 136 cavités souterraines protégées, soit 67 comme Réserves Naturelles Domaniales et 69 comme Cavités Souterraines d'Intérêt Scientifique.

b) Milieu anthropique d'estivage et de reproduction

Depuis 1995 (Année Européenne de la Conservation de la Nature), des conventions sont passées entre les Communes et le Ministère de la Région Wallonne pour affecter les combles et les clochers des églises et autres bâtiments publics à la conservation d'espèces sauvages en danger et tout particulièrement des chauves-souris.

Actuellement, sur les 262 communes wallonnes, 106 ont signé cet accord. Le nombre de bâtiments concernés s'élève à plus de 825 (plus de 500 ont déjà été aménagés).

Toute affectation concerne aussi bien les gîtes effectifs que potentiels.

**8. Considérations relatives aux habitats importants pour les chauves-souris :**

- Pour les gîtes, voir point 7.
  - Pour les lieux de nourrissage, hormis quelques études ponctuelles relatives à des colonies ciblées (*Rhinolophus hipposideros*, *Eptesicus serotinus* et *Myotis emarginatus*), il faut considérer que peu a été fait à ce jour.
- La gestion des sites Natura 2000 envisagera cet aspect de manière généralisée, principalement sur le maintien et la restauration du maillage écologique.

**9. Actions de promotion et de sensibilisation sur l'importance de la conservation des chauves-souris :**

a) Publicité, Sensibilisation

- Un dépliant toutes-boîtes est édité en plusieurs milliers d'exemplaires depuis 1995 ; il vient d'être remis à jour et est en cours d'impression.
- Un document technique "Guide pour l'aménagement des combles et clochers des églises et d'autres bâtiments" a été édité en 1995 et distribué en plus de 10.000 exemplaires. Ce même document vient d'être revu et largement augmenté ; il est en cours de publication. Une version en langue allemande est également en cours de réalisation.
- Le Ministère de la Région wallonne a créé un site relatif à la conservation des chauves-souris (<http://mrw.wallonie.be/dgrne/sibw/especes/ecologie/mammiferes/chauvessouris/home.html>), ainsi qu'un site plus particulièrement orienté vers l'opération "Combles et Clochers" (<http://mrw.wallonie.be/dgrne/dnf/comblesetclochers>)
- Des conventions sont établies en vue de mettre en place des actions de sensibilisations en faveur des chiroptères auprès du grand public

b) Éducation

- Participation à l'information au public via le centre touristiques de Comblain-au-Pont "Les Découvertes Mystères de Comblain-au-Pont".

c) Nuit Européenne de la Chauve-souris

- La "Nuit Européenne de la Chauve-souris" se déroule en Wallonie depuis 5 ans. En août 2002, elle a eu lieu dans 26 points différents de la Région et a concerné plus de 1500 participants.

**10. Institution responsable concernant l' Article III.5 de l'Accord**

- L'autorité responsable pour la conservation de la nature en Région wallonne est le Ministère de la Région wallonne, Direction Générale des Ressources Naturelles et de l'Environnement, Division de la Nature et des Forêts (B-5100 JAMBES - Avenue Prince de Liège, 15 - Belgique).

**11. Autres actions pour la conservation des populations de chauves-souris : néant.**

**12. Programmes récents relatifs à la conservation et à la gestion des chauves-souris.**

- Suivi des populations de chiroptères en Région wallonne, notamment dans le cadre de la Surveillance de l'État de l'Environnement wallon par bioindicateurs.
- Poursuite de la protection de gîtes souterrains favorables aux chauves-souris et gestion technique et scientifique de ceux-ci.
- Poursuite de la création de gîtes anthropiques protégés, aménagements et gestion technique et scientifique de ceux-ci.
- Contacts avec les architectes des "Monuments Sites et Fouilles" - Direction de la Restauration du Ministère de la Région wallonne, Direction de l'Aménagement du Territoire, Logement et Patrimoine.
- Contact avec la Cellule Mines et Exploitation du Ministère de la Région wallonne, Direction Générale des Ressources Naturelles, Division de la Prévention et des Autorisations.

13. **Problème des pesticides en général et du traitement des charpentes en particulier avec produits chimiques toxiques pour les chauves-souris :**

- Il existe diverses réglementation sur l'usage des pesticides.
- Informations et conseils données dans le Document Technique "Combles et Clochers".

D **Fonctionnement de l'Accord**

14. **Coopération avec d'autres États**

- Coopération transfrontalière sur la conservation des chauves-souris en Europe du centre-ouest avec l'Allemagne, la France et le Luxembourg.
- Informations techniques et scientifiques transfrontalières relatives à l'opération "Combles & Clochers" au Grand Duché de Luxembourg et en France.

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**Report of the Flemish Region (Belgium)  
2003**

**A. General information**

Name of the party: Belgium – Flemish Region

Date of report: June 2003

Period: 1995 - 2003

Competent authority: Nature Division; Administration for Environment, Nature, Land and Water Management; Ministry of the Flemish Community; Koning Albert II-laan 20 bus 8; B - 1000 Brussel; BELGIUM

Members of the Advisory Committee: Els Martens

Members of other committees / working groups: Nico Verwimp, Alex Lefèvre

**B. Status of bats in the Region**

**1. Species**

18 bats species were found in the Flemish Region:

*Myotis myotis*

The Mouse-eared bat *Myotis myotis* is in Flanders threatened with extinction. There are no reproductive roosts known. The species hibernates underground in anthropic shelters. Every year a few individuals are found hibernating in an underground shelter in the Flemish part of the Zoniën forest (South of Brussels) and in limestone caves in the province of Limburg. Presumably, this species was discovered hunting in the Voerstreek during the summer of 1999, but further research has to confirm this.

*Myotis bechsteini*

The Bechstein's bat *Myotis bechsteini* is a typical tree-roosting species, especially in humid woods. In Flanders it's a very rare species. There are no reproductive roosts known. In the winter 2001-2002, the species was found hibernating underground in the Flemish part of the Zoniën forest and in the limestone caves of Zussen (province of Limburg). Yearly a lot of swarming individuals are found near these same limestone caves of the province of Limbourg.

### *Myotis emarginatus*

The Notch-eared bat *Myotis emarginatus* is a very rare species in the Flemish Region, where it reaches its most northern distribution area. Different summer colonies were discovered. One of them is situated in an area around Bruges which is rich of parks and also called the forest belt around Bruges. This region is situated at only 25 km from the North sea coast. An other colony is located in the north of the province Antwerp and is for the moment the most northern found maternity roost in the world and only 2 km from the Netherlands. In the same province a large colony was recently discovered in the south of Antwerp. A small colony is found around Ypres and two big maternity roosts are known in the Voerstreek (province of Limburg) and 2 in the province of Vlaams-Brabant. And at least a very small aggregation of this species was found in East-Flanders. The species is known hibernating in the fortresses around Antwerp and in the limestone caves of the province of Limburg.

### *Myotis nattereri*

Several observations with the bat-detector were made in the different forests over the whole Flemish region. It appears that this tree-dwelling species is quite abundant during the summer in the Flemish region. Hibernating animals are found in different places, like limestone caves, fortresses, ice-cellars and even bunkers. This species is the fourth most common hibernating species in Flanders.

### *Myotis mystacinus / brandtii*

The sibling species *Myotis mystacinus* and *M. brandtii* are hard to differentiate. In 2002 one individual was found of *Myotis brandtii* in the Flemish Region under a colony of *Myotis mystacinus / brandtii*. Maybe it consists of the first maternity roost of this species in the Flemish Region. Further research need to be done.

The species complex seems also to be relatively common in the forests. A large quantity of acoustic observations have been made in different forests all over Flanders. There are 3 reproductive roosts known, of which 1 in a tree and 2 in buildings.

The species complex is the second most numerous one in the known hibernacula in the Flemish Region. It was found hibernating in hibernacula located all over Flanders, but mostly in small ice-cellars.

### *Myotis dasycneme*

During the summer, hunting pond bats were observed around Flanders, especially above lakes and large ponds. The presence of this species, was confirmed by sound analysis during the field campaigns. In 2000 one reproductive roost was located around Ypres. Different individuals are found in some large fortresses around Antwerp and in the Limestone caves of Limburg. In 2002 some hibernating animals were recorded in an ice-cellar near the Brussels Region. Despite the dispersed observations, this species is nowhere really numerous.

### *Myotis daubentonii*

The Daubenton's bat is well-represented in the Flemish Region. It forages in extremely large numbers above the ponds, along canals and other watercourses. Different reproductive roosts are known in trees all over the Flemish Region and in fortresses around Antwerp. The species is probably tree-dwelling in summer.

The species is the most common species found in the different hibernacula.

### *Pipistrellus pipistrellus*

The Pipistrelle is the most common species in Flanders. During the summer most of them have been found in buildings. Some species were found hibernating in bat boxes and in fortresses and limestone caves.

### *Pipistrellus nathusii*

The Nathusius' pipistrelle is regularly observed in the Flemish Region. It is generally observed in forests or in wet areas. Till now there are no reproductive roosts or hibernacula known.

### *Pipistrellus pygmeus*



The “Soprano” pipistrelle has been recorded for the first time in Belgium in 1999 around Ypres (confirmed by acoustic analysis, by British researchers). In 2000 some hunting animals were recorded in the neighbourhood of Bruges. No summer colonies of hibernacula are known for this species.

#### *Eptesicus serotinus*

The Serotine bat is relatively largely distributed in the Flemish Region. And frequently observed in semi-agricultural landscapes, also forests seem to be a favoured hunting area. There are around 50 reproductive roosts of this species known. From time to time a hibernating individual is found in a fortress or marl cave.

#### *Vespertilio murinus*

Only a few observations of this species have been made, in most cases it consisted of individuals who were found during the autumn. Except in July 1999 a small group of this species was found in a building at the coast (Knokke-Heist).

#### *Nyctalus noctula*

The Noctule is essentially forest dwelling. It is found in different forests. It seems that the species is rarer than we first thought.

There are around 10 reproductive roosts known, all of them situated in trees. One bat box and some trees contained some hibernating individuals.

#### *Nyctalus leisleri*

The Leisler's bat is also forest dwelling and is relatively common in the Zoniën and Meerdaal forest. There are no reproductive roosts or hibernacula known in the Flemish Region.

#### *Rhinolophus ferrumequinum*

The greater horseshoe bat is a Mediterranean species, which lives in Flanders at the margin of its distribution range. The only known colony was found during the summer of 1995 in the Voerstreek (province of Limburg). Due to building renovation by the owner, this colony has disappeared by now. Despite the fact that every year hibernating individuals are found in the limestone caves of Caestert (Sint-Pietersberg), this species can be considered extinct in Flanders.

#### *Barbastella barbastellus*

The Barbastelle is extremely rare in the Flemish Region. A small group of the species was found during recent field campaigns in a ruin. Only 3 hibernating roosts are known, one around Antwerp in a fortress and 2 around Bruges in cellars.

#### *Plecotus auritus / austriacus*

The sibling species *Plecotus auritus* and *P. austriacus* are hard to differentiate.

The species complex is found all over the Flemish Region. Around 50 summer roosts of the *Plecotus auritus* have been found, and around 5 of *Plecotus austriacus*.

The species complex is regularly found in the different known hibernacula of the Flemish Region.

## 2. Status and evolutions

- a) population estimate
- b) known roosts : H = hibernaculum, S = summer roost, R = reproductive roost
- c) status: E = endangered, V = vulnerable, R = rare or limited geographic distribution, ? = unknown
- d) tendencies: D = decline, S = stable, ? = unknown
- e) threats: E = environment – ecological network, H = hibernacula, S = summer roosts or reproductive roosts, ? unknown

Species	Population estimation	Known roosts	Status	Tendencies	Threats
<i>Myotis myotis</i>	5 - 10	H	E	D	E, ?
<i>Myotis bechsteini</i>	5 - 25	H	E	D	E,S, ?
<i>Myotis emarginatus</i>	500	H,S,R	E	S	E, ?
<i>Myotis nattereri</i>	1500	H,S,R	?	S	?
<i>Myotis mystacinus</i> / <i>brandtii</i>	2000/100	H,S,R/H,S	?	D	E, ?
<i>Myotis dasycneme</i>	250	H,S,R	E	S	E, ?
<i>Myotis daubentonii</i>	5000	H,S,R	?	S	E
<i>Pipistrellus pipistrellus</i>	>10.000	H,S,R	?	S	E
<i>Pipistrellus pygmaeus</i>	?	?	?	?	?
<i>Pipistrellus nathusii</i>	?	?	?	?	?
<i>Eptesicus serotinus</i>	1000	S,R	?	S	E
<i>Nyctalus noctula</i>	500	S,R	V	D	E,S
<i>Nyctalus leisleri</i>	150	?	V	D	E,S
<i>Vespertilio murinus</i>	25	S	?	?	?
<i>Rhinolophus ferrumequinum</i>	?	?	E	D	E,S,?
<i>Barbastella barbastellus</i>	25	H,S	E	D	E,S,?
<i>Plecotus auritus</i> / <i>austriacus</i>	1000	H,S,R	?	S	

3. **Habitat and roosts:** see paragraph 1.

## 4. Threats

- The most important threats concerns: the loss of summer roosts, mating places and hibernacula.
- The consequences of the removal of landscape structures and the degradation of the ecological network are maybe even more important.

## **5. Data collection**

- Data were collected by the Flemish Bat Group of the NGO Natuurpunt.

## **C. Measures taken to implement Article III of the Agreement**

### **6. Legal measures taken for the protection of bats**

- The regional law on the conservation of nature of September 22<sup>th</sup> 1980.
- Act for the protection of species of 1980, that includes all bat species in the Flemish Region
- The Bern Convention of September 1<sup>st</sup>, 1982 (Annex I and II), signed at Bern on September 19<sup>th</sup>, 1979 and approved by the law of 2nd April 1989
- The Bonn Convention of June 23<sup>th</sup>, 1979 (Annex II), approved by the law of 27<sup>th</sup> April 1990
- The European "Habitat" directive (92/43/CEE) of May 21<sup>st</sup>, 1992 (Annex II and IV), transposed in the regional law in the Decree for Nature Conservation 1997 as changed on 19 July 2002
- The Bat Agreement (Eurobats), ratified by the Flemish Region in 2003 and by the Kingdom of Belgium on May, 14<sup>th</sup> 2003.

### **7. Sites identified and protected for the conservation of bats**

- Different fortresses that were designated as pSCI sites of Natura 2000 network have been managed and protected in the meanwhile: Steendorp, Bornem, Liezele, Brasschaat, Edegem (Fort VII), Borsbeek (Fort III) and the Schans of Smoutakker.
- 67 bunkers were managed as hibernacula.
- 3 Limestone caves were protected: Zussen, Pietjesberg and Coolen
- 97 ice-cellars were protected and closed especially as hibernacula.

### **8. Promotion and sensibilisation actions for the conservation of bats**

#### **8.1. Sensibilisation**

- A folder about Bats and the Habitats Directive in Flanders was published in 2001 (5000 folders).
- A brochure about the summer roosts of bats in Flanders was worked in collaboration with the WWF Belgium in 2001.
- A technical document about 'Bats and houses' was published in 1996 (10.000 folders).
- A folder about 'Bats: the need your help' was made in 1998.
- 10 "bat education" boxes were prepared for education/awareness programmes - they include educational material like a bat-detector, a slide set about bats, books, lessons, photographs, drawings and games. These bat boxes can be rented for free by schools.
- A video about the life of bats was made in 2002.

#### **8.2. European bat night**

- The European bat Night is organised in Flanders by the Bat Group of the NGO Natuurpunt in cooperation and with financial support of the Nature Division since 5 years. A yearly report on the event and the attendances for each activity has been compiled. In August 2002, 44 excursions were held in the Flemish Region, with around 8000 attendants.

## **9. Institution responsible concerning Article III.5 of the Agreement**

Competent authority for nature conservation and management:

Nature Division; Administration for Environment, Nature, Land and Water Management; Ministry of the Flemish Community; Koning Albert II-laan 20 bus 8; B - 1000 Brussel; BELGIUM

## **10. Other actions for the conservation of bat populations**

- Cooperation with the Division for Monuments and Landscape Protection for the protection and/or rehabilitation of roosting and hibernation sites, caves and cellars or buildings
- Promotion of the use of bat boxes
- Cooperation with local authorities for follow up of complaints about bats in houses or buildings
- Development of species protection plans for the bat species in Flanders (2001)
- Monitoring of bat populations

## **11. Recent programmes concerning the conservation and management of bats**

- Development of actions for the implementation of the species protection plans
- Development of awareness programme on bat protection for local authorities
- Management of the Natura 2000 sites designated for bats: acquisition of some sites, development of management plans of the sites
- Set up of an overall monitoring programme of the bat species

## **12. Pesticide problem in general en wood conservation treatments in particular with products toxic to bats**

No specific action taken yet

### D. Functioning of the Agreement

## **13. Cooperation with other states**

- The Flemish Region has mainly established contacts with the competent authorities of the neighbouring regions and countries.

# Report of the Brussels Capital Region (Belgium)

## A. General information

Name of the party: Belgium – Brussels Capital Region

Date of report: June 18<sup>th</sup> 2003

Period: 1996 - 2003

Competent authority: Brussels Institute for Management of the Environment (BIME) – Gulledele 100 – B-1200 Brussels – Belgium

Members of the Advisory Committee: none for the Brussels Capital Region

Members of other committees / working groups: none for the Brussels Capital Region

## B. Status of bats in the Region

### **1. Species**

17 bats species were found in the Brussels Capital Region:

#### *Myotis myotis*

The Mouse-eared bat *Myotis myotis* is rare in the Brussels Capital Region. Several probable acoustic observations of this species were made in the greens spaces of the Brussels Capital Region. There are no reproductive roosts known. The species hibernates underground in anthropic shelters. Certain winter observations include historical data for the Walckiers park and recent data (2002) for an underground shelter in the Flemish part of the Zoniën forest. Numbers are estimated around 5 to 25 individuals.

#### *Myotis bechsteini*

The Bechstein's bat *Myotis bechsteini* is also very rare in the Brussels Capital Region. Several probable acoustic observations were made in the Zoniën forest. There are no reproductive roosts known. The species is probably tree-dwelling in summer. In the winter 2001-2002, the species was found hibernating underground in the Flemish part of the Zoniën forest. Numbers are estimated around 5 to 25 individuals.

#### *Myotis emarginatus*

The Geoffroy's bat *Myotis emarginatus* is very rare in the Brussels Capital Region. Several probable acoustic observations were made in the Zoniën forest and parks in the Woluwe-valley. A summer roost was identified in summer 2002 at the Red Cloister (Zoniën forest). There are no recent winter data for the species. Historical data (anterior to 1960) are known for a now disappeared hibernaculum at the 'Bois de la Cambre'. Numbers are estimated around 5 to 25 individuals.

#### *Myotis nattereri*

Several probable acoustic observations were made in the Zoniën forest, the Woluwe-valley and some parks and forest fragments in the northern part of the region. There are no reproductive roosts known. The species is probably tree-dwelling in summer. There are no winter data available for the species.

#### *Myotis mystacinus / brandtii*

The sibling species *Myotis mystacinus* and *M. brandtii* are hard to differentiate. There are therefore no specific data available on *Myotis brandtii* in the Brussels Capital Region. The species complex seems to be relatively common in the green spaces at the periphery of the Brussels Capital Region. A large quantity of possible and certain (confirmed by sound analysis) acoustic observations have been made (amongst others) in the Zoniën forest, the green spaces in the Woluwe-Valley, the Laarbeek forest and Poelbos forest. There are no reproductive roosts known. The species is probably tree-dwelling in summer.

The species complex is the second most numerous one in the known hibernacula in the Brussels Capital Region. It was found hibernating in hibernacula located in the Zoniën forest and adjacent green spaces, in the Poelbos forest, in the Royal Park of Laeken and other green spaces in the Brussels Capital Region.

#### *Myotis dasycneme*

There are few possible acoustic observations of the Pond bat *Myotis dasycneme*, especially above large water bodies in the Woluwe valley and in the months March and September. The presence of this species, however, was not confirmed by sound analysis during the 2001 and 2002 field campaigns. There are no reproductive roosts known.

There is one historical winter observation from an underground shelter in the Royal Park of Laeken. The presence of the species was not confirmed during the 2001 or 2002 winter visit to the Palace.

#### *Myotis daubentonii*

The Daubenton's bat is well-represented in the Brussels Capital Region. It forages in extremely large numbers above the ponds of the Woluwe-valley. It is also found above other water-bodies elsewhere in the Region.

There are no reproductive roosts known. The species is probably tree-dwelling in summer.

The species was found in hibernation in the hibernacula adjacent to the Zoniën forest and in the Royal Park of Laeken.

#### *Pipistrellus pipistrellus*

The Pipistrelle *Pipistrellus pipistrellus* is extremely common in the highly urbanised Brussels Capital Region.

One tree used by overwintering pipistrelles is known.

#### *Pipistrellus pygmaeus*

The "Soprano" pipistrelle *Pipistrellus pygmaeus* was discovered in the Brussels Capital Region in 2002. There are two certain observations (confirmed by acoustic analysis) near ponds adjacent to the Zoniën forest.

There are neither reproductive roosts, nor hibernacula known yet.

#### *Pipistrellus nathusii*

The Nathusius' pipistrelle *Pipistrellus nathusii* is relatively common in the Brussels Capital Region. It is generally observed near ponds or in wet areas, in the periphery of the Zoniën forest, the Woluwe valley and in the northern part of the Region.

There are no reproductive roosts or hibernacula known.

#### *Eptesicus serotinus*

The Serotine bat *Eptesicus serotinus* is relatively largely distributed in the Brussels Capital Region. It is frequently observed near ponds or lakes, or in more urbanised areas and parklands. There are, however, no reproductive roosts or hibernacula known in the Brussels Capital Region.

#### *Nyctalus noctula*

The Noctule *Nyctalus noctula* is essentially forest dwelling. It is found in the Zoniën forest, the woods in the northern part of the region and above ponds and lakes. It seems relatively rarer than the Leisler's bat in the Brussels Capital Region.

There are no reproductive roosts or hibernacula known in the Brussels Capital Region.

#### *Nyctalus leisleri*

The Leisler's bat *Nyctalus leisleri* is also forest dwelling and is relatively common in the Zoniën forest and adjacent green spaces in the southeastern part of Brussels. It seems, however, to be confined to this part of the Region.

There are no reproductive roosts or hibernacula known in the Brussels Capital Region.

### *Barbastella barbastellus*

The Barbastelle *Barbastella barbastellus* is extremely rare in the Brussels Capital Region. There were several possible acoustic observations made in or around the Zoniën forest. The species was, however, not confirmed during the recent field campaigns. There are no reproductive roost known in the region. Historical winter data include one Barbastelle at the Red Cloister, which was last seen in 1989.

### *Plecotus auritus / austriacus*

The sibling species *Plecotus auritus* and *P. austriacus* are hard to differentiate. There are therefore no specific data available on *P. austriacus* in the Brussels Capital Region.

The species complex is probably common in the green spaces at the periphery of the Brussels Capital Region, but is hard to detect acoustically. Few possible and certain (confirmed by sound analysis) acoustic observations have been made (amongst others) in the Zoniën forest, the green spaces in the Woluwe-Valley, the Laarbeek forest and Poelbos forest.

There are no reproductive roosts known.

The species complex is sporadically found in the known hibernacula in the Brussels Capital Region. It was found hibernating in hibernacula located in the Zoniën forest and adjacent green spaces, in the Poelbos forest, Walckiers park and other green spaces in the Brussels Capital Region.

## 2. Status and evolutions

f) population estimate

g) known roosts : H = hibernaculum, S = summer roost, R = reproductive roost

h) status: E = endangered, V = vulnerable, R = rare or limited geographic distribution, ? = unknown

i) tendencies: D = decline, S = stable, ? = unknown

j) threats: E = environment – ecological network, H = hibernacula, S = summer roosts or reproductive roosts, ? unknown

Species	Population estimation	Known roosts	Status	Tendencies	Threats
<i>Myotis myotis</i>	5 – 25 (125?)	(H)	E	?	?
<i>Myotis bechsteini</i>	5-25 (125 ?)	(H)	E	?	?
<i>Myotis emarginatus</i>	5-25 (125 ?)	S	E	?	?
<i>Myotis nattereri</i>	?	?	?	?	?
<i>Myotis mystacinus / brandtii</i>	?	H	?	?	?
<i>Myotis dasycneme</i>	25-125	H	E	?	?
<i>Myotis daubentonii</i>		H	?	?	?
<i>Pipistrellus pipistrellus</i>	?	H	?	?	?
<i>Pipistrellus pygmaeus</i>	?	?	?	?	?
<i>Pipistrellus nathusii</i>	?	?	?	?	?
<i>Eptesicus serotinus</i>	?	?	?	?	?
<i>Nyctalus noctula</i>	?	?	?	?	?
<i>Nyctalus leisleri</i>	?	?	?	?	?

<i>Barbastella barbastellus</i>	5-25	H	E	?	?
<i>Plecotus auritus</i> / <i>austriacus</i>	?	?	?	?	

**3. Habitat and roosts:** see paragraph 1

#### **4. Threats**

- The most important threats concern the loss of winter and reproductive roosts and the degradation of the ecological network
- The consequences of the illegal use of pesticides and wood protection products are less conspicuous
- The placement of cellular phone antennas on churches and other potential bat roosts is a potential danger

#### **5. Data collection**

- Data were collected by the Royal Institute of Natural Sciences, the Flemish bat group and the 'Groupe chauves-souris' of 'Réserves naturelles'
- From 1998 to February 2003, data collection was supervised and centralised by the BIME in the framework of the Brussels Life project LIFENAT/B/5167

### C. Measures taken to implement Article III of the Agreement

#### **6. Legal measures taken for the protection of bats**

- The federal law on the conservation of nature of July 12<sup>th</sup>, 1973
- The regional law of August 29<sup>th</sup>, 1991 concerning the protection of wildlife and hunting, which protects all wild animals in the Brussels Capital Region.
- The regional law of April 27<sup>th</sup>, 1995 concerning the conservation and the protection of nature.
- The Bern Convention of September 1<sup>st</sup>, 1982 (Annex I and II), signed at Bern on September 19<sup>th</sup>, 1979 and approved by the law of April 20<sup>th</sup>, 1989
- The Bonn Convention of June 23<sup>th</sup>, 1997 (Annex II), approved by the law of April 27<sup>th</sup>, 1990
- The European "Habitat" directive (92/43/CEE) of May 21<sup>st</sup>, 1992 (Annex II and IV), transposed in the regional law (October 26<sup>th</sup>, 2000 and November 11<sup>th</sup>, 2002)
- The Bat Agreement (Eurobats), ratified by the Brussels Capital Region on April 25<sup>th</sup>, 1996 and by the Kingdom of Belgium on May, 14<sup>th</sup> 2003.

#### **7. Sites identified and protected for the conservation of bats**

- Three Special Areas of Conservation were proposed and adopted as Natura 2000 sites, based on the presence of – amongst others - 4 bat species.
- The management of the SAC's was researched and optimised in the course of Life-Nature project LIFENAT /B/5167



- In the course of the same project, potential tree roosts, potential roosts in buildings and potential hibernacula were inventoried, where necessary adapted and protected.

## **8. Promotion and sensibilisation actions for the conservation of bats**

### **8.1. Sensibilisation**

- A folder about the Life project, the Natura 2000 network and the protection of bats was published in 1998 and distributed (10.000 folders)
- A booklet about bat ecology and protection was published in 2001 A first run of 5000 booklets was exhausted in 6 months time and reprinted recently.
- A technical document was published about 'Management for bats' (10.000 booklets)
- A Natura 2000 folder was also published, mentioning the importance of bats.

### **8.2. European bat night**

- The European bat Night is organised in Brussels since 5 years. In August 2002, 4 excursions were held in the Brussels Capital Region

## **9. Institution responsible concerning Article III.5 of the Agreement**

Brussels Institute for Management of the Environment (BIME) – Gulledelle 100 – B-1200 Brussels – Belgium

## **10. Other actions for the conservation of bat populations**

none

## **11. Recent programmes concerning the conservation and management of bats**

- Life-project LIFENAT/B/5167 (1998-2003)
- Follow up of the project and management of the sites as stated in the SAC's management plans, which are now submitted to the E.C.

## **12. Pesticide problem in general en wood conservation treatments in particular with products toxic to bats**

- The use of pesticides in parks, forests and green spaces managed by the Brussels Capital Region is prohibited by the regional law on the use of pesticides (May 5<sup>th</sup>, 1991)
- Information concerning treatments against woodboring insects is discussed in the 'Management for bats' – manual diffused by the BIME.

## D. Functioning of the Agreement

### **13. Cooperation with other states**

- The Brussels Capital Region, which is enclosed by the Flemish and Walloon part of the country, has mainly established contacts with the competent authorities of the neighbouring regions
- During the Life-project, frequent contacts took place with scientific institutions or colleagues, especially in France and Germany.