How YOU too can help!

In Europe there is a surprisingly high number of local and also national organisations dealing with the conservation of bats and their habitats. Many of them try to increase public awareness of bats and their needs. Special emphasis is placed on people who host bat colonies in their houses, on dispelling misunderstandings and on close co-operation with the responsible nature conservation bodies.

You can get involved in bat conservation, too! You don't need to be a scientist, you just need to be concerned about bats' problems. If you are interested to learn more about these fascinating flying mammals and to become an active bat conservationist, contact your local, regional or national bat conservation group. You can find many relevant links on our website www.eurobats.org.

What you can do for bats in your daily life:

- Tolerate and maintain existing roosts in buildings, trees, and caves, and provide new ones (e.g. bat boxes);
- Do not disturb bats while roosting, especially not during hibernation and nursing;
- Avoid the use of pesticides in your garden and the use of remedial timber treatment agents in your roof. Both can lead to the poisoning of bats. If using them ist unavoidable choose only products which are not harmful to bats;
- Actively dispel misconceptions by telling other people some facts about the fascinating lifestyle of bats.

If you find a young, injured or dead bat, please contact a bat expert as soon as possible to get advice on how to proceed.

UNEP EUROBATS

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EUROBATS

The Agreement on the Conservation of Populations of European Bats (UNEP/EUROBATS)

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The Agreement on the Conservation of Populations of European Bats was set up in 1991 under the auspices of the Convention on the Conservation of Migratory Species of Wild Animals (UNEP/CMS) after recognising the unfavourable conservation status of bats in Europe. Its main aim is to provide a framework for the member countries and those that have not yet joined to co-operate towards a common goal: the conservation of bats throughout Europe.

The member states (Parties) prohibit the deliberate capture, keeping, or killing of bats except for research purposes, for which a special permit is required.
The strategic goals of the Agreement are the identification of important sites for bat conservation, surveys of the status and trends of bat populations and studies of their migratory patterns. Based on the results of these monitoring activities, the Agreement aims to develop and review recommendations and guidelines on diverse topics that shall be implemented by the Parties on national levels, e.g.:

- Bat monitoring methods;
- Important underground and overground sites and foraging habitats;
- Sustainable forest management for bats;
- Remedial timber treatment and anti-parasitic drugs for livestock;
- Capture and study of wild bats (incl. ringing and marking of bats);
- Wind turbines and bat populations;
- International co-operation between governments and non-governmental organisations;
- Bats and building insulation;
- Impact of roads and other traffic infrastructures.

The work programme of the Agreement is reviewed regularly, for example:

The Bat Conservation and Management Plan

This establishes priorities for bat conservation and a new edition ist developed at regular intervals.

The geographical scope of the Agreement

The Agreement area was extended in 2010 due the fact that populations of European bats occur in a larger region than previously defined. The extended Agreement area covers the Western Palaearctic region from the Svalbard Archipelago in the North, to the countries of the Mediterranean basin in the South including Northern Africa and the Middle East. The 50° line of longitude being the boundary in the East and the Azores along the 30° line of longitude being the boundary in the West.

The Annex to the Agreement

The Annex lists the bat species occurring in Europe to which the Agreement applies. After official approval of newly discovered species or after revision of species names the Annex is amended accordingly.

Additionally, the Agreement encourages public awareness initiatives for the conservation of European bat populations. The annual “International Bat Night” which takes place in the summer is one activity which EUROBATS supports. Bat conservationists all over Europe organise events to provide useful information about bats. These events receive a tremendous response from the public and the media.

Bodies of the Agreement:

The Meeting of the Parties (MoP):

- is the highest decision-making body of the Agreement, e.g. it adopts Resolutions;
- meets every four years.

The Standing Committee (StC):

- is the administrative body of the Agreement that meets once a year;
- reviews the financial situation and overall budget performance;
- provides guidance on other administrative issues, e.g. staffing of the Secretariat.

The Advisory Committee (AC):

- is the scientific body of the Agreement that also meets once a year;
- evaluates data and discusses scientific issues concerning bat research and conservation in order to set priorities for the Agreement’s future work;
- drafts Resolutions to be adopted by the next MoP, e.g. the forthcoming Bat Conservation and Management Plan.

The EUROBATS Secretariat:

The Secretariat is the executive body of the Agreement. It was established by the First Session of the Meeting of the Parties in 1995 and started its work in Bonn, Germany, in 1996.
Some of its main tasks are to co-ordinate and organise the activities of the Standing Committee and the Advisory Committee as well as to arrange the Meeting of the Parties. Additionally, the Secretariat undertakes initiatives for:

- implementing the aspired aims;
- attracting more member states;
- raising public awareness;
- exchanging information and co-ordinating international research and monitoring activities.

In 2001, the EUROBATS Agreement became part of the United Nations Environment Programme (UNEP) and serves as a successful model to promote similar agreements for bat conservation on other continents.

FASCINATING...

Bats have been populating the earth for the last 50 million years.
Their fluttering shades, darting silently and mysteriously through the night, have given rise to all sorts of prejudices and myths since ancient times.

But they are neither vampires in the character of Count Dracula nor do they live up to their creepy image in any other way.

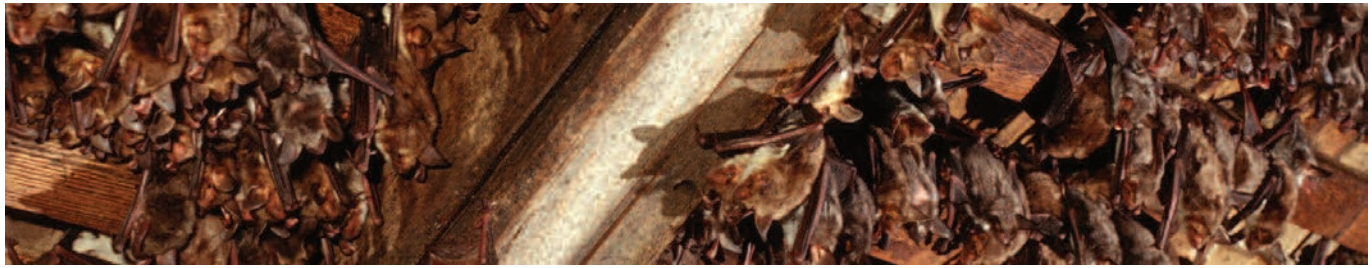
You will realise that they are exceptional individuals with remarkable and amazing characteristics once you get to know them.

Bats fly through the night

They are the only mammals that have a thin, elastic wing membrane between their fingers and legs which gives them acrobatic flight capability. In the darkness they orientate by means of a highly sophisticated system of echolocation, emitting high-frequency calls that are not audible to humans. These calls bounce off surrounding objects indication to the bats the position of obstacles or prey. This helps bats to avoid collisions while flying and helps them locate their prey. Certain bat groups (e.g. Horseshoe bats) are even able to distinguish between different insect species from their differing wing-beat frequencies.
Using a special device called a bat detector these ultrasonic calls can be made audible to humans. The night is full of sounds for an observer with a bat detector.

Bats are ecologically important

They are great nutritional specialists and excellent foragers. The entire airspace is taken up by the various bat species according to their abilities and hunting habits: from high up in the treetops to down close to the ground, above streams and lakes and in riverside woodlands.
In Europe bats hunt insects such as mosquitos and moths to satisfy their considerable nutritional requirement that totals 1/4 to 1/3 of their body weight per night. This explains why they are extremely important links in the ecological chain and help to prevent occasional plagues of insects. Beyond Europe there are well known carnivore bats, three species that feed on blood, and nectar- and frugivore bats. The latter have a key role as pollinators and seed-dispersers of many plants essential for humans.



Habitats and social life

Depending on the species, European bats are found in diverse climate zones and in different habitats such as forests, wetlands and open countryside as well as in human settlements. They roost in tree holes or behind the bark, in caves, cellars, attics and crevices of buildings to spend their days sleeping upside down.
Bats gather in colonies from a dozen up to several thousands of individuals. During the summer this behaviour benefits especially the young whose growth profits from the body temperature of their neighbours. In late summer bats often meet at their traditional hibernation sites to mate and to introduce potential winter roosts to the juveniles. After the first frost they settle down in these places and remain there during the cold season.

Real survivors

Bats can maintain their energy efficiently by reducing their body metabolism during cold periods and periods of food shortage. In order to hibernate their heart frequency slows down from more than 400 to about 10 beats per minute and their body temperature drops to 0-10 °C. In deep hibernation they can even stop breathing for more than one hour at a time.
Recent observations have shown that some bats can live to be 30–40 years old.

Migratory species

One of the lesser known facts about bats is that they migrate - not just over into the next field, forest or barn - but using regular migration routes. Some species travel for hundreds of kilometres across regional and national borders. Current surveys describe seasonal bat migrations from north-eastern to southern Europe. All bats migrate regularly between their summer roosts and the sites for hibernation.
For navigation purposes they use diverse landmarks, such as clumps of trees, rivers, rows of buildings, and avenues.

Bats and biodiversity

Different bat species have different needs concerning prey, rosts, climate and habitat. In places where all these factors are advantageous bat populations are characterised by high populations are characterised by high diversity and abundance. Nowadays unsustainable human activities result in the deterioration of the environmental conditions.
As a consequence the bat populations decline or even disappear, which could influence whole ecosystems. Therefore, sustainable land management is essential to biodiversity conservation. This is especially applicable to forest ecosystems: In natural forests or where sustainable forestry strategies are practised there is a huge number of insect and spider species which are an ideal food source for bats, and plenty of woodpeckers creating additional potential hideouts. Hence the main condition for stable or growing bat populations is a healthy and diverse environment.

Although the nearly 1,100 bat species existing worldwide – more than 40 of them in Europe - represent around a quarter of all mammals …

Although bats have hardly any natural enemies …

… nowadays bats are in danger of extinction in many areas. Some of them have already become extinct in certain countries.

Since the middle of the XXth century a drastic decline in the number of all European bat species has been observed mainly due to the:

- public's ill-informed prejudices against bats;
- transformation and fragmentation of their natural habitats;
- intensification of agricultural and forestry practices;
- use of pesticides in agriculture and timber treatment in buildings;

which in turn:

- increase human pressure on some bat species and their habitats;
- lead to the loss of traditional roosting sites;
- decrease the number of suitable habitats and feeding areas;
- harm the bats through the consumption of poisoned insects or by contact with treated surfaces.

… AND ENDANGERED

Despite the fact that some bat species have recovered from negative population trends during recent decades, a significant number of direct and non-direct threats to bats remain.
Bats have a low reproductive rate and along life expectancy. The decrease in population size and density due to negative human influence further diminishes their ability to respond flexibly to environmental changes. Consequently, every new mortality factor can have a long-lasting effect on bat populations. For example wind turbines endanger bats if they are built near important feeding areas or along known migration corridors. In-depth studies on their influence on bat mortality enable predictions about the long-term impact on bat populations.