



The long night of the bats

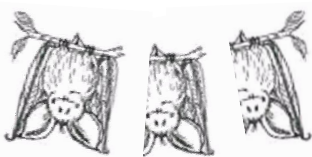
Have you ever spotted a bat?

It is not that easy, because these skilful flight artists only become active at dusk and silently hunt insects at night. The whole day however, they spend sleeping in their hiding place, where they hang upside down on a wall or in a tree hollow. Now in spring these hibernating animals are back from their winter habitats. With a little luck you can discover them in the evening sky, also in your quarter!

Become a bat-investigator!

The following tips can help you:

- When the sun goes down, look out into the open evening sky.
- With exception of the common pipistrelle, which is a small type of bat, bats are afraid of light. Therefore keep your torches/electric lights switched off! Your eyes will get used to the dark.
- Where there are many insects (= prey), the chance of being able to observe bats is greater.
- Particularly suitable spots are near water, on the edge of damp forests or on meadows.
- Bats also hunt in settlements, near street lighting (common pipistrelle) and in the vicinity of barns and animal stables.



(c) Biologische Station Zwillbrock



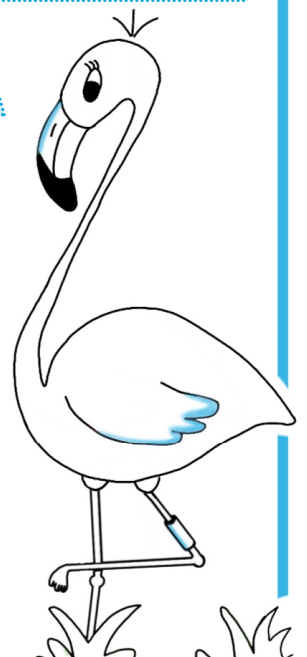
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Hi, I am Frida Flamingo!
Nice that you are
researching too.

This is what you need:

- Possibly a torch
- Courage and patience

Tip: Bats don't like rain, because then hardly any insects are flying about. It's best to choose a cloud-free evening!



Do you have any questions?
Write to Flamingo Frida at:
flamingo-frida@bszwillbrock.de

Tip: When experimenting follow general safety instructions



The anatomy of bats



Match the terms with the picture, connect with lines.

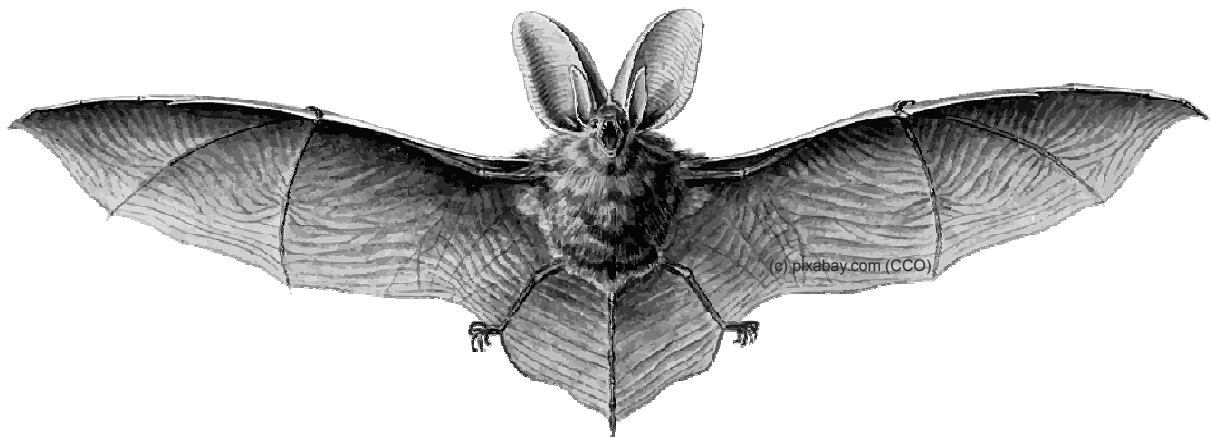
finger

forearm

upper arm

ear

tragus (front part of ear)



foot

calcar

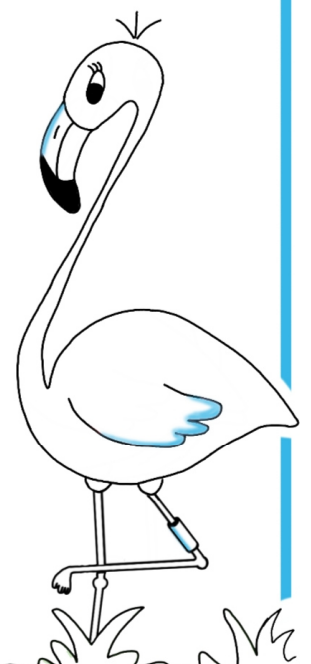
tail

wing membrane

Bats are exciting animals! They ...

- ... have wing membranes and are the only mammals that can actively fly.
- ... are nocturnal and eat insects.
- ... make sounds that they use for orientation. The tones are so high (ultrasound) that people hardly can hear them. Each type of bat emits typical tones (frequencies).

Tip: There are detectors that can make the sounds audible to humans.



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Echolocation of bats



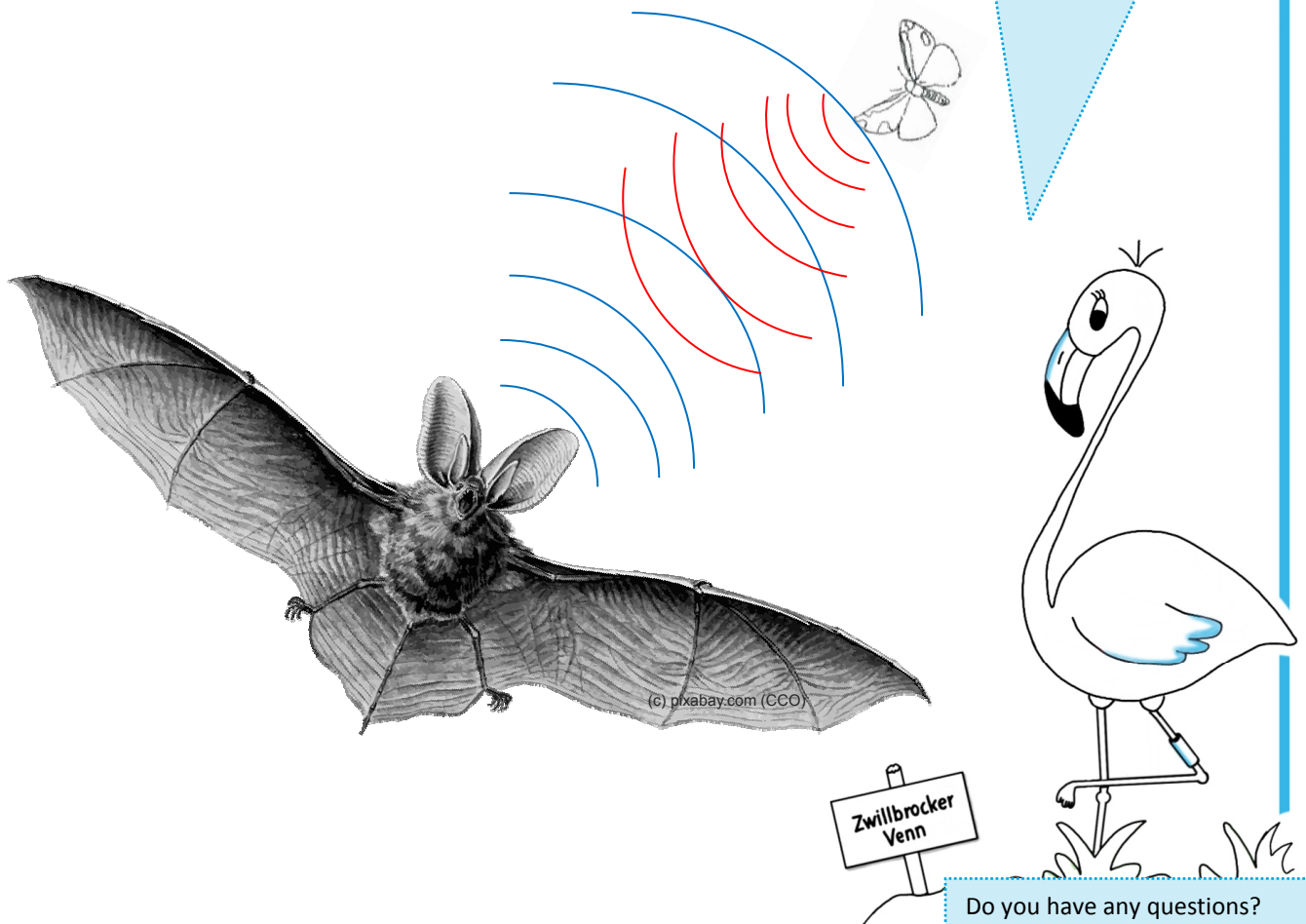
Bats orient themselves by emitting ultrasound

Bats scream almost continuously while hunting. But because the tones are in the ultrasound range, we can hardly or not at all hear them.

The sounds spread by means of sound waves through the air. If they come across an object, they are echoed back. If the echo hits the bat's ears, it can "see" its surroundings with its ears.

Bats emit ultrasonic sounds for orientation and hunting that are not audible to the human ear. If they communicate with each other, they use lower frequencies. You can even hear these so-called social calls.

Technical devices such as a "bat detector" make the bat calls audible to us. They convert the ultrasonic calls to lower notes.



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Familieforscht

What can you do for bats?



If you are interested in the topic, then surf the Internet. You can find information and more for example here:

- <https://naturdetektive.bfn.de/lexikon/tiere/saeugetiere/fledermaeuse.htm>
- <https://www.nabu.de/tiere-und-pflanzen/saeugetiere/fledermaeuse>

✓ Checklist for a bat-friendly home:

- insect-friendly garden that is rich in species
- areas with water in the garden
- gardening without poisons (e.g. pesticides)
- access to the attic via entrance holes
- sloped ceilings and crevices in the attic
- alternatively: bat boxes
- as few nightly light sources as possible around the house and in the garden
- cats stay in the house



There are approximately 1000 different bat species worldwide. 25 of these live in Germany. All bats are protected in Germany; they are threatened with extinction.

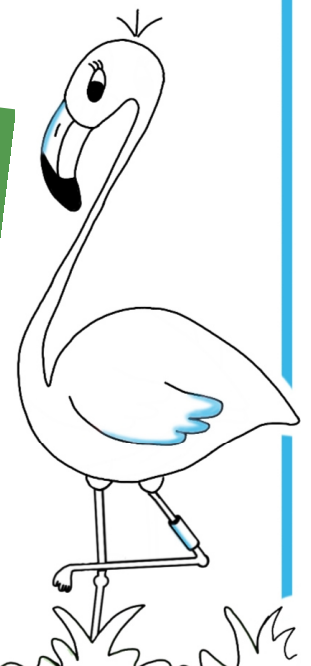
Bats need:

- diverse landscapes as their habitat
- Insects as their food
- frost-proof winter and summer hideaways in which they are not disturbed

Tip: Make your home a bat-friendly place!

By doing so you're not just helping the bats! A species-rich garden is also good for other animals, such as insects and birds.

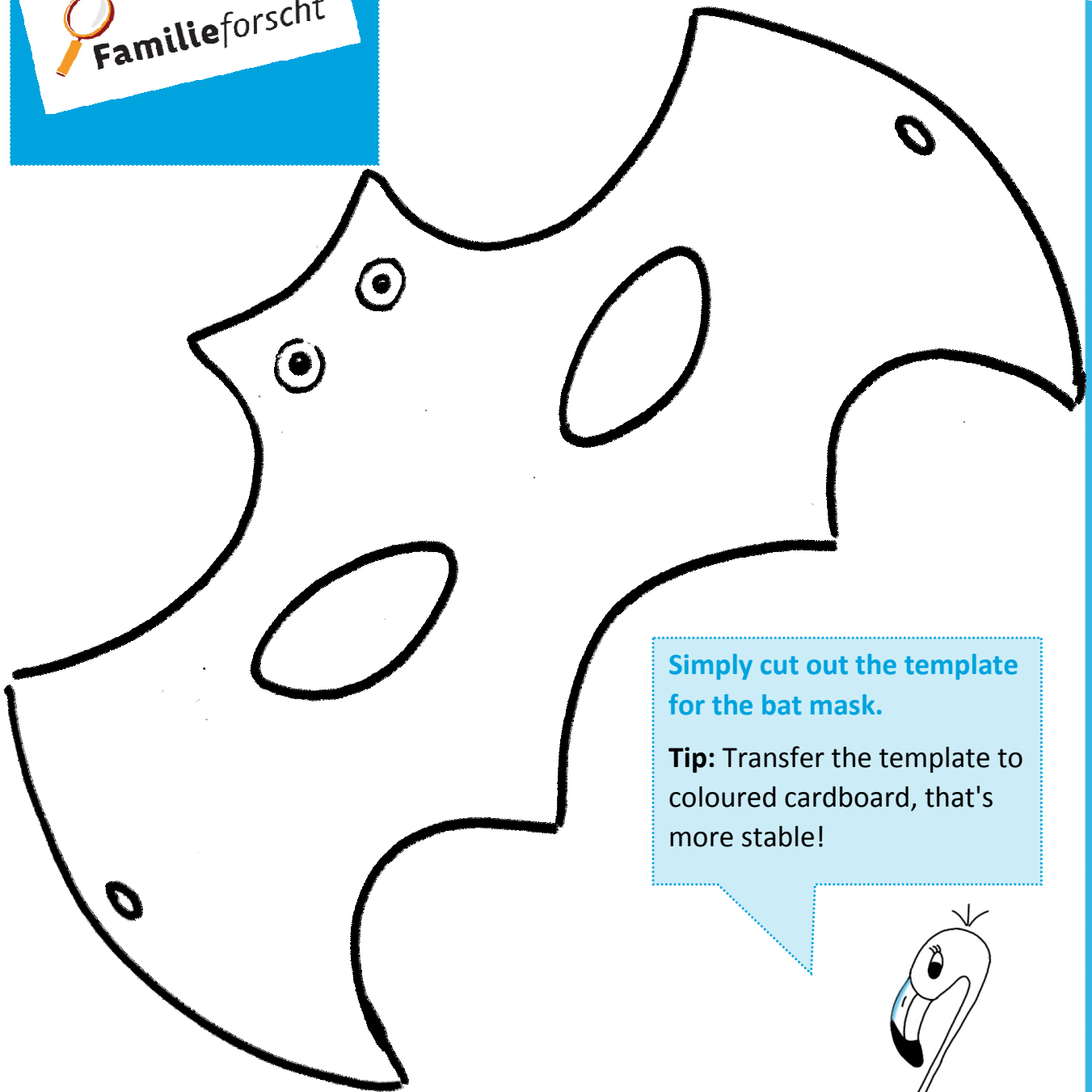
Tip: Wherever there is buzzing and humming, flying and fluttering, there is also a lot for you to discover! And a garden without poisons also protects you and the groundwater!



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Simply cut out the template for the bat mask.

Tip: Transfer the template to coloured cardboard, that's more stable!

Tip: When experimenting follow general safety instructions



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More information under:

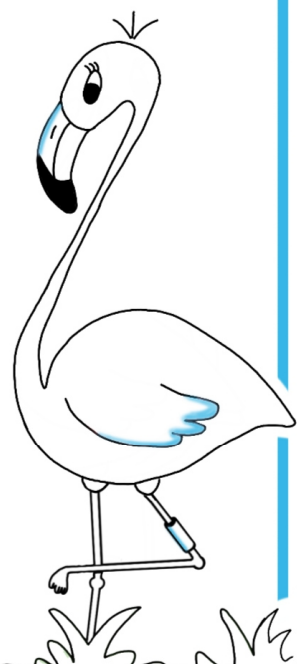
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