WORDS

- **cave** = a natural hole in a hill or mountain
- **claw** = sharp curved nail of an animal or a bird
- **compete** = to fight for
- **connect** = fix to, tie to
- **creature** = living thing
- **crops** = plants like wheat or rice that farmers produce to make food
- **damage** = destroy
- **destroy** =to damage so badly that you cannot use something any more
- **disperse** = to spread in different directions
- **enemy** = someone or something that is not your friend
- **especially** =above all, mainly
- **except** =apart from , not including
- **feed** = give food to
- **fur** = the thick soft hair of an animal
- **harm** = damage , hurt
- **hollow** = empty inside
- **however** = but
- **mammal** = type of animal that drinks milk from its mother when it is young
- **membrane** = a very thin piece of skin that covers or connects parts of your body
- **pointed** = very sharp at the end
- **pollen** = the fine powder that a flower produces. It is carried away by the wind or by insects to other flowers which then produce seeds
- **pollinate** = to give a flower or a plant pollen so that it can produce seeds
- **roost**= to rest or sleep somewhere
- **similar** = like
- **surface** = the top layer of an object
- **upside down** = the top is at the bottom and the bottom at the top
- **wingspan** = the distance from one end of the wing to the other

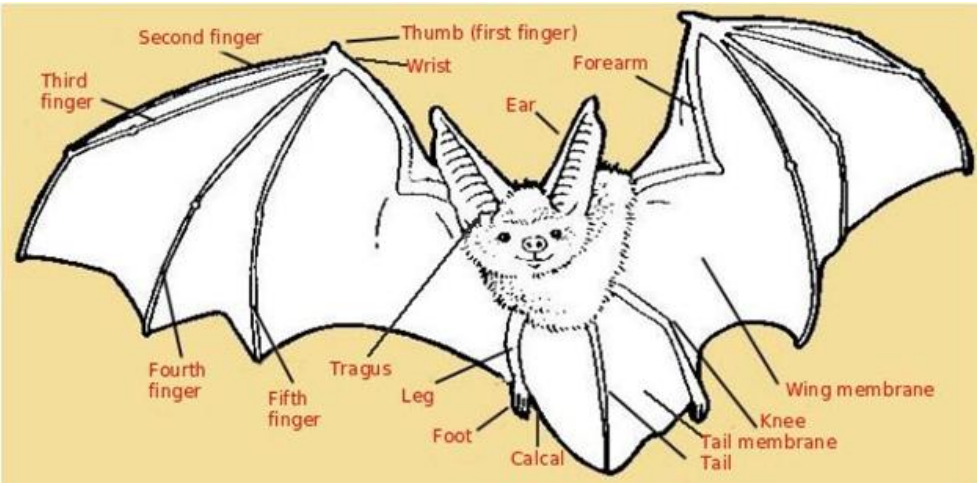
Bats are the only **mammals** that can fly. Like all mammals they **feed** their young ones milk. We don't see bats very often because they usually fly around only at night. During the daytime they hang in dark rooms of buildings, **caves**, **hollow** trees and other dark places.
There are about 900 types of bats. They live all over the world **except** in colder regions. You can often find them in groups, called colonies. If you see one bat flying around there are probably others nearby.

PHYSICAL FEATURES

Bats can grow to be big or small. The largest ones have a **wingspan** of up to 1.5 metres; others are only 15 cm wide. The mouth of a bat is **similar** to the one of a rat or fox. They have large, **pointed** ears and grey or brown **fur**.
Bats have long arms and hands with **especially** long fingers. These are **connected** to the legs with **membranes,** which form their wings. The muscles in them make it easy for a bat to fly. When taking a rest a bat usually hangs **upside down** with its **claws connected** to a hard **surface**.

HOW BATS LIVE

Bats are **creatures** that are only active at night. They sleep during the daytime and come out at night in search of food. Flying around at night means meeting fewer **enemies** and being able to catch more insects than during the day because they don't have to **compete** with birds for food. Some bats eat insects, fruit and **pollen**; others are meat eaters that **feed on** birds and smaller bats.
In some regions bats are very important. They eat away insects that **damage crops** and they also **pollinate** plants, **especially** in tropical regions. By flying around they help plants **disperse** their seeds. **However**, people often **harm** bats by **destroying** their caves and **roosting** places.



Words

- **although** = while
- **amount** =how much of something
- **blood loss** = if you lose a lot of blood
- **bounce off** = to jump back from an object
- **cave** = a natural hole in a hill or mountain
- **claw** = sharp curved nail of an animal or a bird
- **depend on** = here: the different species carry babies for a different length of time
- **evolve** = to change slowly over a longer period of time
- **female** =relating to a woman
- **flight path** = the course that a bat or a bird is flying
- **fur** = the thick soft hair of an animal
- **layer** =here: material between two parts
- **limb** = an arm or a leg
- **locate** = find
- **pregnant** = to have an unborn baby in your body
- **rabies** = a very dangerous animal disease . You can catch it if you get bitten by an infected animal
- **radar** = a machine that uses radio waves to find out where things are
- **roost**= to rest or sleep somewhere
- **scientist** = someone who works or is trained in science
- **similar** = like
- **size** = how big something is
- **sonar** = a machine that uses sound waves to find out where things are
- **spread** =to move from one place to another
- **store** = to keep so that you can use later on
- **submarine** = a ship that can stay and travel under water
- **suck** = to pull out with your mouth
- **surroundings** = the world or place around you
- **survive** = to stay alive
- **ultrasonic** = sound that is too high for a human to hear
- **victim** =here: the people or animals that they bite

Depending on the type, **female** bats are **pregnant** for up to five or six months and have their babies one at a time. They are usually born in late spring or early summer. Babies hang on to their mother's **fur** with their own sharp teeth and **claws**. Baby bats grow to their full **size** after about a month. Bats can live up to 30 years, but many of them die shortly after birth.

Bats have been around for about 50 million years. During this time they have not changed that much. **Scientists** think that bats may have **evolved** from **mammals** that could climb trees and then jump to catch insects. Over the years wings may have **evolved** from their **limbs**.

The most famous bats are the vampires of South and Central America. The legends and stories about them are mostly wrong. **Although** they do bite other animals and maybe even humans, they **suck** only a small **amount** of blood and then fly away. These bats are dangerous, not because their **victims** die of **blood loss** but because they **spread** infections like **rabies**.
Bats cannot live in extremely cold **surroundings**. Some fly to warmer climates while others spend the winter months **roosting** in dark **caves**. Bats can hang with their heads down for many weeks. They have a **layer** of fat that **stores** food so that they can **survive** during the cold period.

HOW BATS SEE

For a long time people have been wondering about how bats can fly in the dark. Today we know that bats **depend on** a technique called echolocation. In 1920 a Cambridge university professor found out that bats send out **ultrasonic** signals that humans cannot hear. These signals **bounce off** anything that is in a bat's **flight path**. Bats use these echoes to **locate** objects in the dark. It is **similar** to the **radar** that planes and the **sonar** that **submarines** use.