

# Batty for Bats!

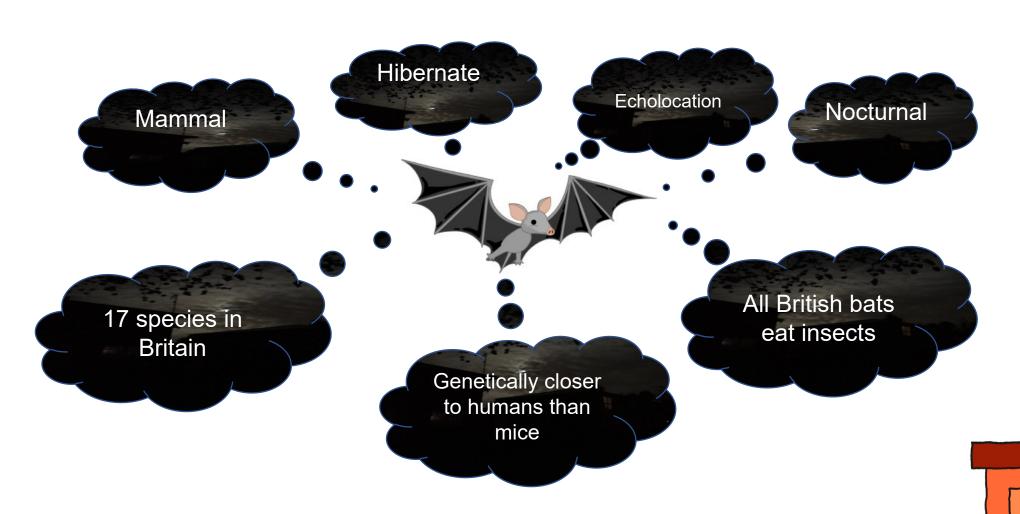
Find out more about our amazing British bats



# What should you know about bats?



Worcestershire
Wildlife Trust



# Common bat species in Worcestershire



Worcestershire
Wildlife Trust

#### **Daubentons**



- One of the most common species of bat.
- Will land then crawl into the roost
- Weigh less than a 10p coin.
- Can eat 3000 mosquitoes a night!
- Catches prey on the wing
- Lifespan 6 years



- Often seen flying over water
- Catches insects with it's feet, sometimes from the surface of the water.
- Summer roosts are near water
- Can be noisy during the day

#### Lesser Horseshoe



- Cave dwellers
- These guys check out the area before taking off.
- Low flier; over trees & shrubs
- Will pick prey off branches
- Will find a temporary roost to eat large prey e.g. moths.
- Lifespan 4 years
- Rare & declining in Britain but is found in several sites in Worcestershire.

# A year in the life of a British bat



**Wildlife Trust** 

Bats hibernate over winter. This means they go into a long winter sleep.

However, if it does get warm, bats may wake up and pop out for a drink and a quick snack on some insects before returning to sleep once again.

From August through to September bats will be mating or breeding. Female bats that are pregnant come together in a maternity roost.



Baby bats are known as pups!

# Why do bats hang upside down?

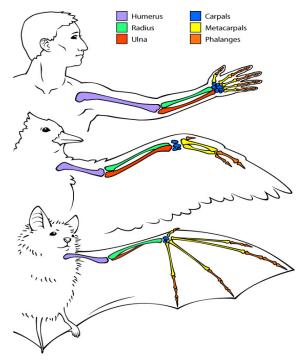


### Worcestershire Wildlife Trust

# We all know that bats hang upside down, but why do they do this?

One of the reasons is so that they can drop off the roost and fly away. Their wings don't generate enough 'lift' downward force, to allow for take off in the way a bird's wing does.

A bat's wing has the same bones as our arm & hand. They can control their flight just by moving their fingers slightly. The skin between is incredibly strong.



@ https://aabiologist.asu.edu/humanbird-and-bat-bone-comparison



An important part of the survey conducted by a licenced handler is measuring the wings.

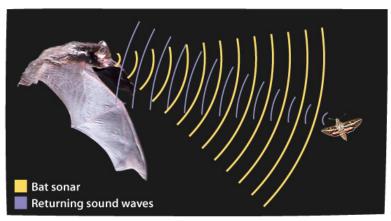
## How do bats find their way around?



Wildlife Trust

Bats fly at night, so how do they avoid bumping into things, and find their way back to the roost? How do they find their food, the insects that are also flying about?

#### Echolocation



@ https://askabiologist.asu.edu/echolocation

High pitch calls from the bat travel through the air as sound waves. When they hit something, they bounce back to the bat, who is able to work out where and what is there.

#### Polarised light

Recent research has shown that bats also use the pattern of polarised light at sunset to help set their internal compass.

Polarised light: Light waves normally wiggle all around, but when they are scattered by gases in the atmosphere, this causes the wiggles to all line up. These straight lines help the bat know where it is going.

# How to spot bats

# wildlife TRUSTS Worcestershire

Wildlife Trust

#### How can we hear bats?

#### **Bat Detectors**

The sounds bats make are too high for humans to hear, although children sometimes can.

We need to use a bat detector to hear the sounds. This is a box that picks up the calls of bats. All species have their own frequency range, so we can identify the species of bat.



#### **Bat Boxes**

You may have seen bat boxes whilst out for a walk in the woods. There are two main types:



Schwegler box: Very robust. Front & rear entrances. Sometimes small birds will move in too



@www.nhbs.com/

Crevice bat box: good for crevice roosting bats e.g. pipestrelles

Could you put a bat box in your garden? Check out the Stars of the Night leaflet on our website for instructions.

# Why do bats matter?



Wildlife Trust

#### There are lots of reasons. Can you think of some?

#### 1. Indicator Species for biodiversity

An indicator species is an animal that shows us how well an environment and all the things that live in it are doing. As bats are a top predator and are at the end of a food chain, they can tell us lots about what is going on.

For example, if bat populations are doing well, then we can guess that insects are doing well too because there must be enough insects to feed the bats. Specially trained people have been keeping records of bat numbers & health for many years.

#### 2. All UK bats are insectivores

Bats eat insects, and as we learnt in a previous slide pipistrelles can eat 3000 mosquitoes a night! They can help reduce pesky insects that might attack crops, food plants that we eat.

#### 3. Pollinators & seed dispersers

In other countries, where some species of bat eat fruit, bats play an important role in pollinating plants! They also poo out the seeds from the fruit, with a dose of nutrients and chemicals (food for the seed) that it needs to grow.

### Bats in trouble



Bats are under threat and some are dying out.

Worcestershire

#### Landscape change

Lots of places where bats may roost have disappeared like old trees in woodlands and on farms. Lots of ponds, where bats find a lot of their food, have gone too.

#### Development

Development is all the things we build to make our human life better, like houses, places to work and transport to get there. In the process places where bats feed and shelter have disappeared. Often we forget to replace what is lost or don't check whether we should keep a wild place. This can affect all animals as well as a bats.

#### Agricultural intensification

This is the process farmers were asked to do, in order to grow lots more food. They started to use chemicals on the fields, some of which can affect insect populations, which bats need to feed on. Ponds, trees and old barns have also gone from farms to make way for more crops and new buildings.

#### **Habitat fragmentation**

Imagine a jigsaw, with some parts, completed and others not, the pieces scattered across the board. This is like habitat fragmentation, when a habitat (home) where animals live, gets broken into small bits.

This may be due to house building, road building or farming. This makes it difficult for animals including bats to find shelter and food when travelling around, without using up too much energy, which can put them at risk.

## How can we all help bats?



Worcestershire
Wildlife Trust

#### 1. Garden for wildlife!

Grow lots of night scented flowers that will attract moths, one of the main food sources for bats. You could even dig a pond, this will provide a home for the small flying insects that bats feed on.

#### 2. Go on a Bat Walk to learn more.

You can buy a bat detector online. Head out at twilight to stand in your garden, driveway or street to see what bats sounds you can pick up.

#### 3. Consider putting up a bat box.

This will provide bats somewhere to roost, but remember that once up, only a licenced bat handler can check it.

#### 4. Bats on the ground

If you find a bat on the floor, call your local wildlife hospital or vet for advice. A bat in a log pile or a loft is fine, just leave it alone. Remember bats are protected by law.

#### 5. Bust some bat myths!

Bats won't damage buildings (they will leave traces of their poo) and we have no blood sucking bats in this country.





# Thanks for watching

For more bat activities visit: www.worcswildlifetrust.co.uk