## Threats to bats

#### HUMANS ARE BATS BIGGEST THREAT!

We destroy their habitats: roosts and feeding areas are lost as forests are cut down and caves are blasted, disturbed and closed.

**PESTICIDES POISON BATS** as well as insects. They also reduce bat food supply.

**BATS ARE HUNTED** for food and traditional medicine, even though there is no scientific evidence that bat potions work. Hunting has caused the extinction of several species of fruit-eating bats.



# How to help our bats!

**BE NICE TO BATS!** Do not kill bats! They will not harm you. Do not eat bats or use traditional bat medicines. Do not disturb roosts. Once disturbed, bats usually do not return.

**TRY ALTERNATIVES TO PESTICIDES.** Spray pounded or cooked garlic, onion or chili on your plants and vegetables. This can act as a pest deterrent.

**SPREAD THE WORD ABOUT BATS!** Tell your friends the benefits of bats. Tell them how they can help too.

**LEARN MORE ABOUT BATS.** Bats are amazing creatures. Contact the Malaysian Bat Conservation Research Unit to find out more about their bat research, conservation or to receive bat education materials (including a copy of our activity and information book).

## Want to know more?

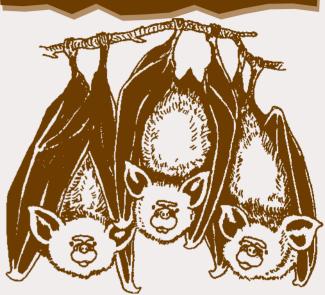


Contact the Malaysian Bat Conservation Research Unit (MBCRU)

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Illustrated by Zam

# BATS



Bats are **MAMMALS** like humans; they give birth to live young and nurse them with milk.

There are 1111 species of bats in the world and in Malaysia we have 118 species. That's about 10% of all bat species and 40% of all Malaysian mammals!

Unfortunately 34 species of Malaysian bats are at risk of extinction.

#### Bat myths

**BATS ARE NOT BLIND** – they have eyes and can see.

**ONLY 3 SPECIES DRINK BLOOD** – they are only found in Central and South America, *not in Asia!* 

**BATS ARE NOT DIRTY** – they spend a lot of their time grooming.



## Where bats live

**BATS LIVE IN MANY DIFFERENT PLACES.** These are called roosts.

**ROOSTS NEED TO BE SAFE**, cool and not too far from food. Caves, buildings and hollow trees are used as roosts, but some bats just hang out under leaves or branches.

**BATS LIVE IN VARIOUS SIZED GROUPS**, from a single bat under a leaf to a colony of millions in a cave!

### What and how bats eat

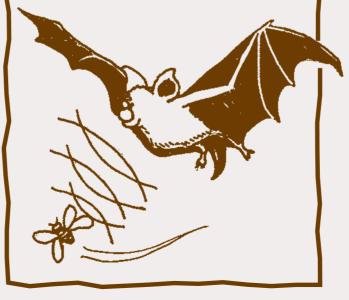
DIFFERENT BAT SPECIES EAT DIFFERENT

**FOODS**. Generally in Malaysia some eat fruit, some nectar, but most eat insects!

**PLANT-VISITING BATS** of Malaysia use vision and smell to find ripe fruit and flowers.

**INSECT-EATING BATS** detect food by echolocation.

Insect-eating bats produce sounds and then listen for the returning echo. This is called echolocation, a technique they use to find their way around and to find food.



#### Why we need bats

#### DISEASE AND PEST CONTROL

Insect-eating bats can eat up to 600 mosquito-sized insects in 1 hour! So they can make a major contribution to pest and disease control.

#### POLLINATION OF ECONOMICALLY IMPORTANT PLANTS

In Malaysia around 31 plants rely on bats for pollination. In particular, we should look after the Lesser Dawn Bat. This plant-visiting species pollinates both durian and petai. The durian trade alone is worth 120 million dollars a year!

31 Malaysian plant species rely on bat pollination

#### FOREST REGENERATION

Fruit bats play a major role in forest regeneration by dispersing seeds. Ripe fruit is taken from the tree, and the seeds are spat out or spread through droppings.