



KYC

KNOW YOUR CAMPUS
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An Initiative by IFS, 2019 Batch

The New Forest - an area which houses the Indira Gandhi National Forest Academy (IGNFA), the FRI and its sister institutions, is also home to a rich heritage of biodiversity. These flora and fauna become a part of our neighbourhood while we are at the campus. The campus is also adorned with heritage buildings, museums, nurseries and a beautiful landscape.

BATS OF IGNFA



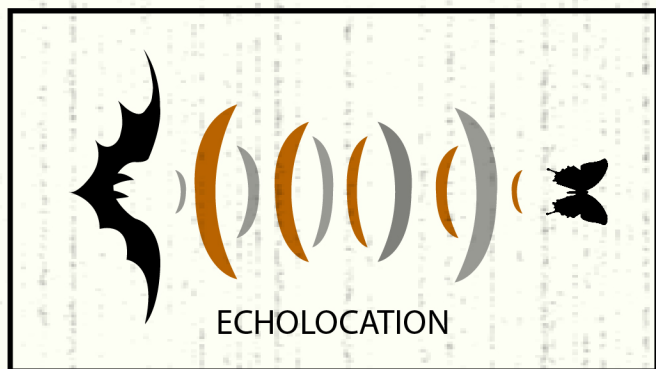
(c) Rajesh Puttaswamiah www.bcit.org.in/

Fulvous Fruit Bat (*Rousettus leschenaulti*)



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Indian Flying Fox (*Pteropus giganteus*)

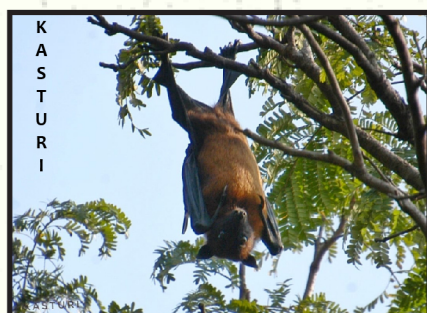


EARS THAT CAN SEE!

Echolocation is a technique used by bats, dolphins and other animals (including humans) to determine the location of objects using reflected sound. This allows the animals to move around in pitch darkness, so they can navigate, hunt, identify friends and enemies, and avoid obstacles.

RAZOR SHARP VISION

Bats can detect and work out the size and hardness an insect up to **70 MICRONS,** the thickness of a human hair!
5 METRES AWAY.



22%
of Mammals
are **BATS!**



DID YOU KNOW?

1. To avoid being deafened by its own calls, a bat turns off its middle ear just before calling, restoring its hearing a split second later to listen for echoes.
2. Some bats can scream at up to 140 decibels, as loud as a jet engine 30m away!
3. The Fruit Bat is said to have the best overall vision of all bat species.



MEGABATS

(Old World fruit bats)

Indian Flying Fox

India's largest bat

Reddish-brown head and blackish snout

Ventrally yellowish brown

Roosts during the day on trees, often in towns and villages

Being creatures of habit, they usually leave the roost within half an hour after sunset.

Fulvous Fruit Bat

Medium sized bat

Uniformly light brown, occasionally yellowish

Elongated muzzle, large dark eyes

Roosts in caves and man-made structures viz. tunnels, wells etc.

Colony is distinguished from that of insectivorous bats by large, brilliant eyes.

BOTH THESE BATS SWALLOW ONLY FRUIT JUICES



THE PAVILION GROUNDS AT IGFA, A GOOD PLACE TO SIGHT BATS. THEY OFTEN ACCOMPANY US DURING OUR



THROUGH THE OFFICERS' LENS -
INDIAN FLYING FOX



A COLONY OF MEGABATS



DID YOU KNOW?

Megabats are primarily eat fruits (frugivorous). They are prodigious eaters and can consume up to 2.5 times their own body weight in fruit per night.

They also feed on nectar, leaves, shoots, buds, pollen, seed pods, sap, cones, bark, and twigs.

BATS ARE BLIND

No bat is blind. However, many microbats have underdeveloped eyes as they mainly use echolocation.

Bats are very capable nocturnal navigators. They are adapted to flying in cluttered environments.

BUSTING MISCONCEPTIONS

BATS GET CAUGHT IN YOUR HAIR

MOST BATS ARE VAMPIRES

Only three species of Bats use blood as a source of food. All 3 are found in the Americas.

BATS CAN BE BENEFICIAL

PEST EXTERMINATORS

Many bats eat LOTS of bugs! By doing this, bats reduce the amount of pesticides farmers need to use and they reduce the amount of produce damaged by pests.

FOOD SECURITY

Nectar-eating bats do this by pollinating flowers, just like bees. Bats pollinate over 700 plants, some of which we use for food and medicine.

GARDNERS OF THE RAINFOREST

Being frugivorous, they disperse seeds in different locations via their feces. By moving seeds away from the parent plant, bats allow these seeds to grow in an area where they'll be more likely to grow without competition from the parent plant.

SOIL FERTILITY

Guano (bat dropping) contains nitrogen, potassium, and phosphate. It helps the health and growth of roots flowers. Many people buy and use bat guano in their gardens!

DESIGN

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BATS CAN BE DEADLY

HOST SPECIES

Bats host over 60 zoonotic viruses. This is rivaled only by rodents that carry a wide range of bacteria, viruses, protozoa, and helminths (worms). Bats carry the pathogens of SARS, Ebola etc.

BAT COLONIES

Bats prefer to live close to one another, giving plenty of opportunities for pathogens to spread between the bats. On average, each species of bat hosts 1.8 zoonotic viruses, while rodents host 1.48 viruses per species.

IMMUNE SYSTEM

The pathogens can replicate faster in a bat host without damaging the bat. Bats have one of the most robust immune systems. This means that bat cells have effectively walled themselves off from viruses.

ZOONOSES

Pathogens exist within the bat for its entire life (20-30 years) — and replicate very fast. When these bat-hardened strains spill over into human populations, they often wreak more harm on our bodies than those from other sources.

For feedback, collaboration and contribution to this initiative in the form of ideas, photographs, design, information etc. do write to us at:

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