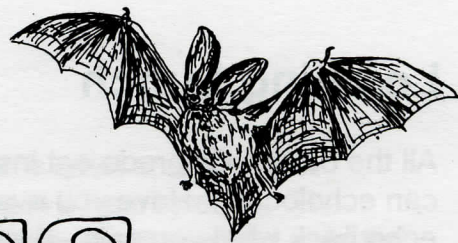


NATURE DETECTIVES

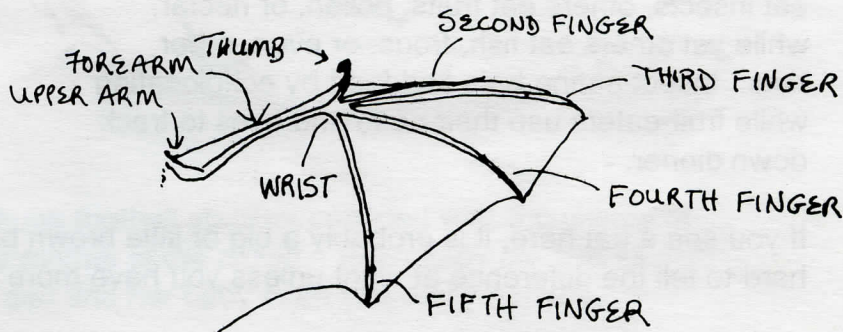


Summer 1999

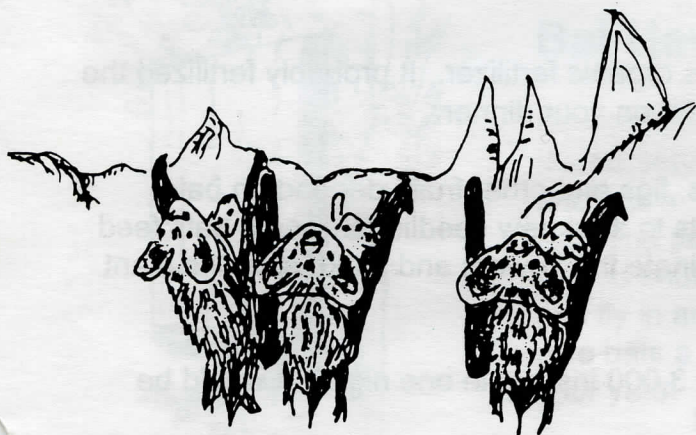
Fluttering Shadows in the Night

Hiking along a creek or pond at dusk in the summer, you see a small, dark animal flapping its wings furiously. It skims the surface of the water for a drink, then flies away. A large insect, you wonder? An owl? Or, a small duck? How about a mammal -- a BAT!

Like us, they have hair, bear live young, and nurse them on milk. Yet, unlike us, they can fly using their "hand wings". Their wings are transparent layers of skin that stretch between their very long fingers. The wings look delicate, but they are as tough as rubber gloves!



Their thumbs are hooked claws which they use to climb trees or cave walls. Bats usually use their feet to hang upside down. But when it is time for mom to have her babies, she hangs right side up holding on with her thumb-claws. She makes a pouch of her tail membrane, and voila the baby falls into a safe place.

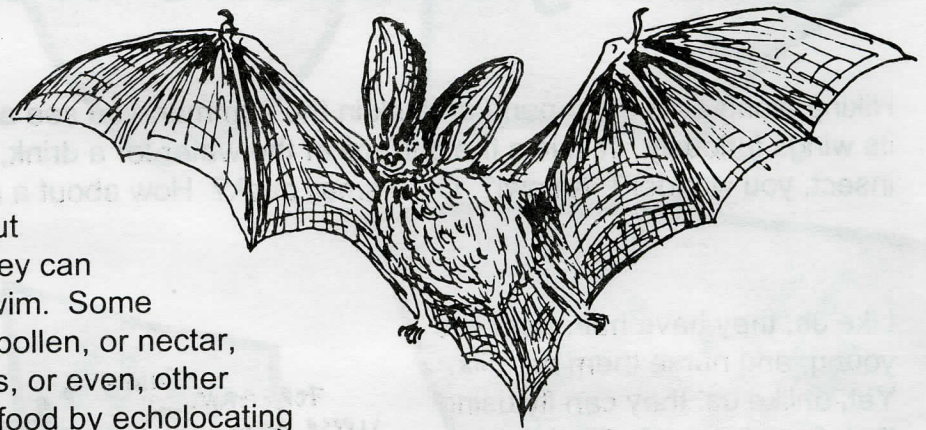


Locating Lunch

All the bats in Colorado eat insects which they hunt at night. This is hard to do unless you can echolocate. Have you ever said something in a large empty room? The walls seem to echo back what you said. If you were blindfolded in that room, could you use the echo alone to tell you where the walls of the room were? Well, that is what a bat does -- it sends out a signal which echoes back when it hits something. By carefully hearing the echo, the bat can tell whether it hit a yummy insect or a blah rock and act accordingly. If it is an insect, the bat may grab it in its open mouth or scoop it in its wing or tail membrane. Then, CHOMP, one less bug to ruin your evening outdoors.

Incredible Variety

Bats live everywhere except at the two poles. The smallest are the size of a walnut while the largest have a wingspan about the length of a surfboard. They can crawl, hop, walk, and even swim. Some eat insects, others eat fruits, pollen, or nectar, while yet others eat fish, frogs, or even, other bats. Insect-eating bats find food by echolocating while fruit-eaters use their nose and eyes to track down dinner.



If you see a bat here, it is probably a big or little brown bat or a long-legged myotis. It is hard to tell the difference at night unless you have more specialized equipment.

What do Bats Give Us?

Fertilizer: Bat poop or guano makes a nutritious organic fertilizer. It probably fertilized the plant that produced the black pepper you sprinkled on your dinner.

Tropical Fruits and Trees: Bananas, avocados, figs and other fruits depend on bats. They eat these fruits and then poop out the seeds to start new seedlings. Some bats feed on nectar of the African "Tree of Life". They pollinate the flowers and make sure the plant does not vanish.

Bug Free Summer Evenings: One bat can eat 3,000 insects in one night. It would be like you having 150 PBJ sandwiches in one day!

The Roost

As dusk falls on the rolling Texas countryside, the evening seems quiet and peaceful. Suddenly, a huge column of black smoke rises from an opening in a nearby cave. The column rises and twists through the air like a giant ribbon. It continues to rise and swirl for hours. It stretches for miles across the darkening countryside.

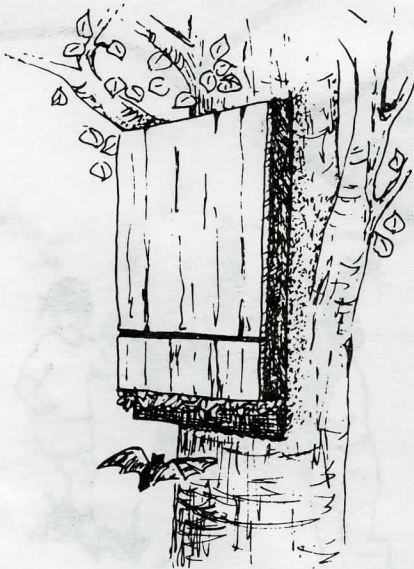
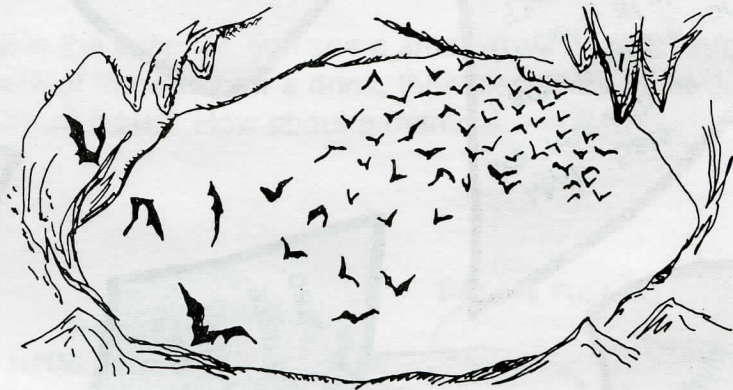
But this column is not made of smoke. It is 20 million bats leaving their home in Bracken Cave for a night of insect hunting! When bats live together in large groups like this it is called a colony. Bracken Cave is the largest colony in the USA. Large colonies of bats can also be found in caves and mines in Colorado.

Not all bats like such crowded quarters. Some roost alone in sheltered overhangs, hollow trees, or in uncrowded corners of caves.

The Nursery

In large bat colonies, all the mothers have their babies at the same time. When the mothers leave the cave at night, the babies stay together in a large group to keep warm. When the mother returns to the cave, she has to find her baby among all the others.

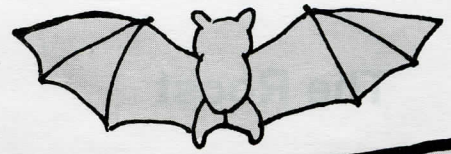
Imagine standing in the middle of a huge football stadium crowded with thousands of spectators. How would you find your mother in the crowd? Each baby bat has its own special call and smell so the mother can find her baby even in a noisy nursery.



Bat Haven

Sometimes people go exploring in caves where bats live. If a nursery is disturbed, the mothers may get frightened and leave. Then the babies will starve. To protect both bats and people, many old mines in Colorado have been sealed shut with a gate that has small openings so bats can fly in and out but people can't get in. Another way to give bats a safe place to roost is to put a bat house in your yard.

Cut out these pieces and put them together to make a bat.



Bat Myths and Facts

Myth: Bats carry rabies.
Fact: Bats are no more
likely to have rabies
than any other
wild animal.

Myth: Bats will fly
into your hair.
Fact: Bats have no interest
in your hair. With their
echolocation, they can
easily avoid you and your hair!

Myth: Bats
are "rats with wings."
Fact: Bats are not
rodents at all.
They are
Chiroptera.

Myth:
Bats are blind.

Fact:
Bats can see
quite well -
even in the
dark!

Myth: Bats will suck
your blood.
Fact: A few bats in South
America will lick drops of blood
from chickens or cows, but there
are NO bats that suck blood
from people!

Myth: Bats are dirty.
Fact: Bats spend at least
an hour each day cleaning
themselves.

Myth: Bats are evil,
that help us in many ways.
Fact: Bats are shy, gentle animals

An Echolocation Game

A blindfolded child plays the bat while the others are moths. Every time the bat calls "Bat", the moths must reply "Moth". The bat uses his/her ears to find and tag moths.

For more information write to Bat Conservation International, P.O. Box 162604, Austin, TX 78716 or look on the internet at www.batcon.org.

