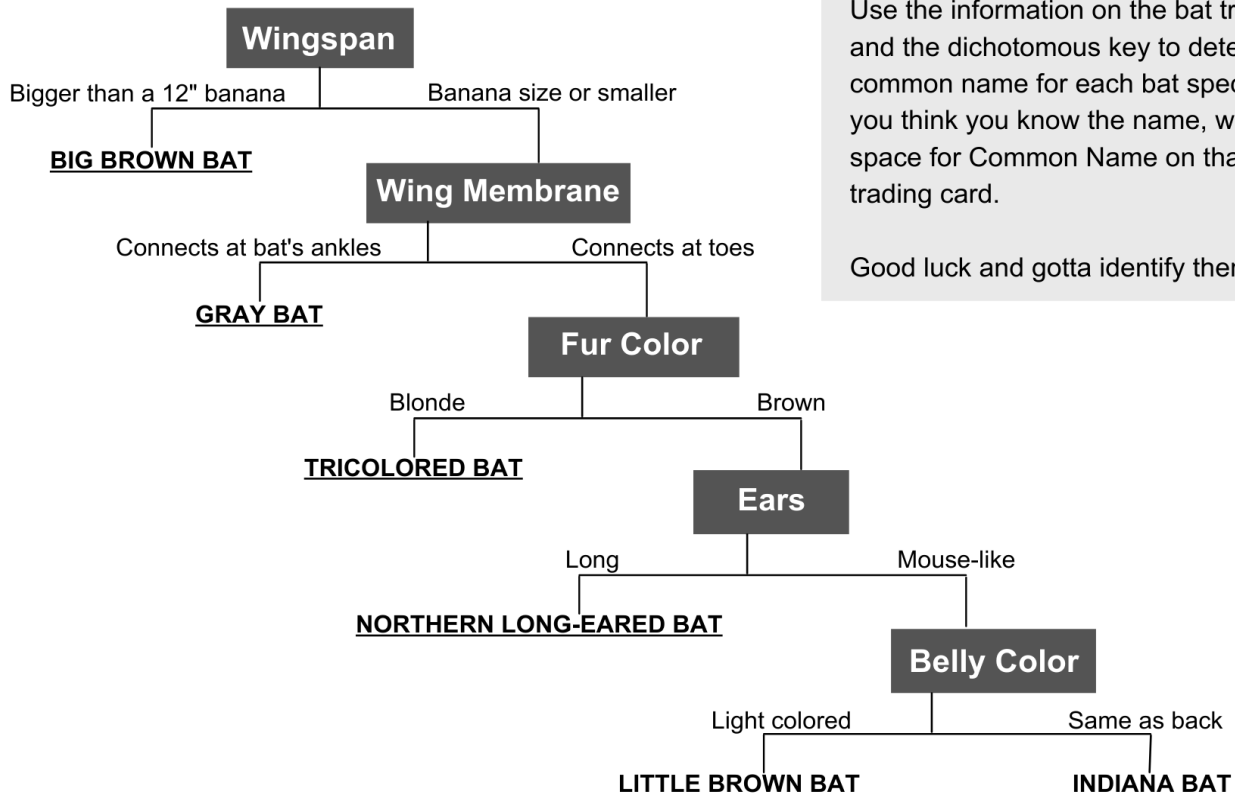


## Hoosier Cave Bat “Dichotomous Key” Activity

There are **6 cave bat species** that call Indiana home but they all look very similar. Sometimes to identify species that look similar we have to look at the tiny differences between them. Below we have included a dichotomous key for the cave dwelling bats of Indiana. A **dichotomous key** is a tool that we can use to identify similar living things or objects.

The key works by giving you a pair of statements about the features or characteristics of the living thing or object. It goes step by step asking paired statements to answer until you can sort through all of the living things or objects you are attempting to identify. You can try this with any group of similar things. For example, trees are often identified using a dichotomous key that compares their leaves, bark, and fruit, nuts or seeds.

### Dichotomous Key-



### How to Play!

Use the information on the bat trading cards and the dichotomous key to determine the common name for each bat species. When you think you know the name, write it on the space for Common Name on that bat's trading card.

Good luck and gotta identify them all!

**Find printing instructions and coloring contest information on the next page!**

*\*The Dichotomous Key activity is suited for children 9+ (or younger with caregiver support) and the coloring contest is open for kids of all ages.*

## Joseph Moore Museum “Batty” Coloring Contest 🦇

Are you proud of your coloring? Do you want to win a batty prize from the JMM gift shop? Take a picture of your artwork and send submissions to [josephmooremuseum@gmail.com](mailto:josephmooremuseum@gmail.com) under the subject line “Bat Coloring Contest Submission.” Your submission should include the artist’s name and age.

A 1st and 2nd prize winner will be chosen for the following age groups: 5 years old and under, 6-8 years old, 9-12 years old, and 13 years old+. Submissions must be received by **Friday, December 31st, 2021** to be entered into the contest. Winners will be selected during the first week of January and contacted via email. All participants will have their art posted to the JMM’s Instagram and Facebook pages!

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### Printing/Cutting Instructions:

1. Print this PDF double sided “**Flip on long edge**” should be the default setting.
2. When you have printed, you should have three pieces of paper in front of you! The first is your **Dichotomous Key** which you will need to determine the **Common Name** for all of your Hoosier Bat cards. The other two will have six cards with a front and back ready to be cut out.
3. Carefully cut out each card (ask for help from an adult if needed), using the dark “**Hoosier Bats**” side as your cutting guide- cut right along the edge of those cards!
4. Once you have your six separate cards, you can get to work identifying them, and using your creativity to color them!
5. **(Optional)** You are invited to submit photos of your set of 6 cards to our **JMM “Batty” Coloring Contest!** You can win a bat themed prize and see your art featured on JMM’s Social media sites! Instructions on how to submit can be found above.

### This project is funded by:



Borman Family  
Foundation



## CAVE BATS OF INDIANA

Common Name:

Scientific Name: *Myotis septentrionalis*



**Wingspan:** 9-10 inches

**Coloration:** Backs are covered in medium to dark brown fur while their bellies are light brown

**Summer Roost:** Under tree bark or in crevices

**Winter Roost:** Caves

### Unique Features:

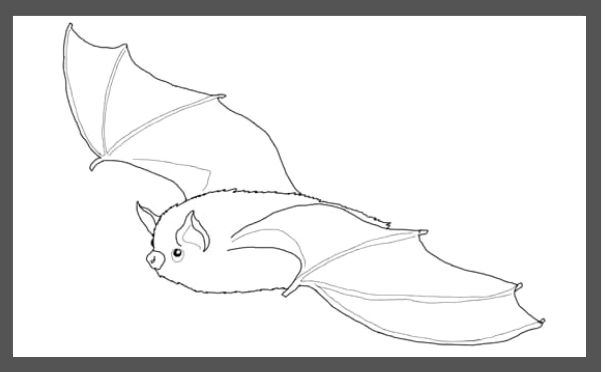
- Wings connect at the toes
- This bat has ears that look long compared to its body
- Recently recognized as a threatened species
- Live in the eastern parts of the US & Canada
- Females tend to be larger than males



## CAVE BATS OF INDIANA

Common Name:

Scientific Name: *Myotis sodalis*



**Wingspan:** 9-10 inches

**Coloration:** Brown fur, same shade on belly & back with pink nose

**Summer Roost:** Often dead trees near streams/rivers

**Winter Roost:** Caves and mines

### Unique Features:

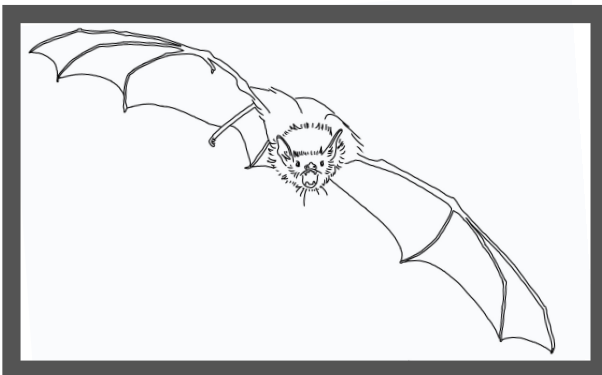
- Wings connect at the toes
- Recognized as an endangered species since 1967
- Mostly live in southern, midwestern, and eastern US
- Can eat up to 3000 insects in one night!
- Has mouse-like ears



## CAVE BATS OF INDIANA

Common Name:

Scientific Name: *Myotis lucifugus*



**Wingspan:** 8-10 inches

**Coloration:** Light brown colored belly fur with dark brown nose

**Summer Roost:** Buildings, bridges, tree cavities, under bark, or in crevices

**Winter Roost:** Caves or buildings

### Unique Features:

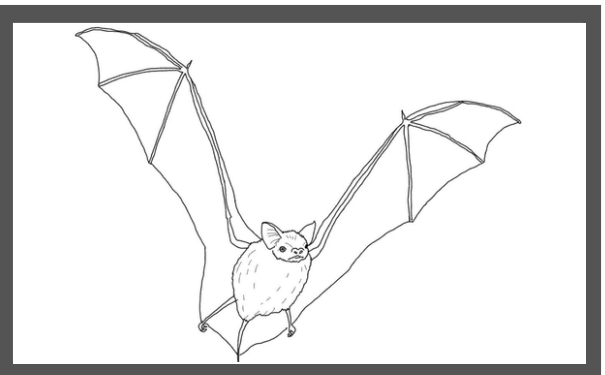
- Has been found to hibernate in groups of 180,000 or more!
- Eats primarily aquatic flying insects like midges and mosquitoes
- Inhabits wooded areas near bodies of water
- Wings connect at the toes.
- Has mouse-like ears



## CAVE BATS OF INDIANA

Common Name:

Scientific Name: *Eptesicus fuscus*



**Wingspan:** 12-13 inches

**Coloration:** Wings, nose, and ears are black/hairless, dark brown back fur and light brown belly fur

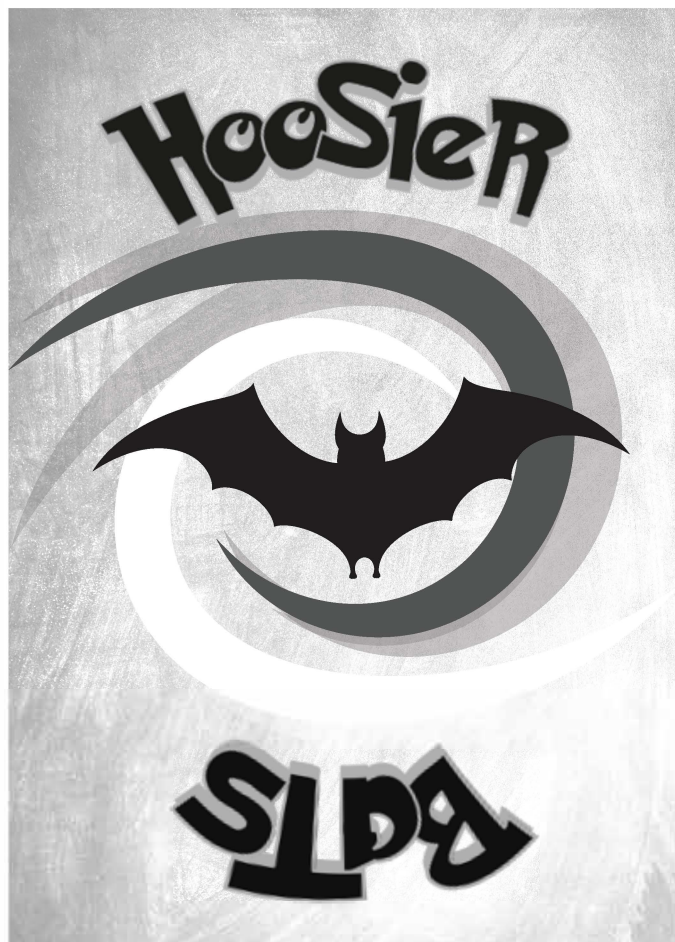
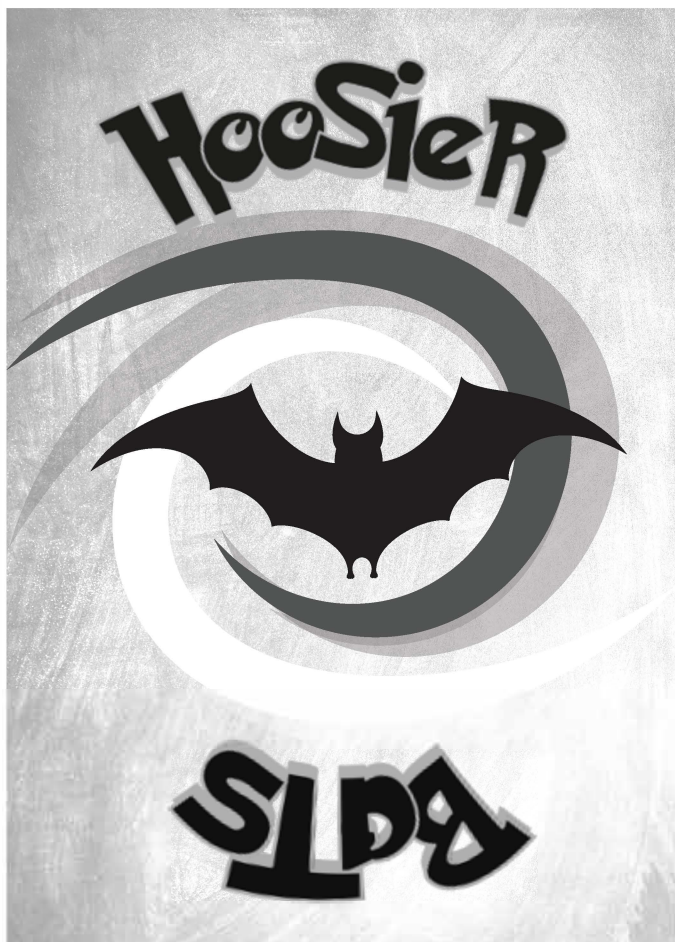
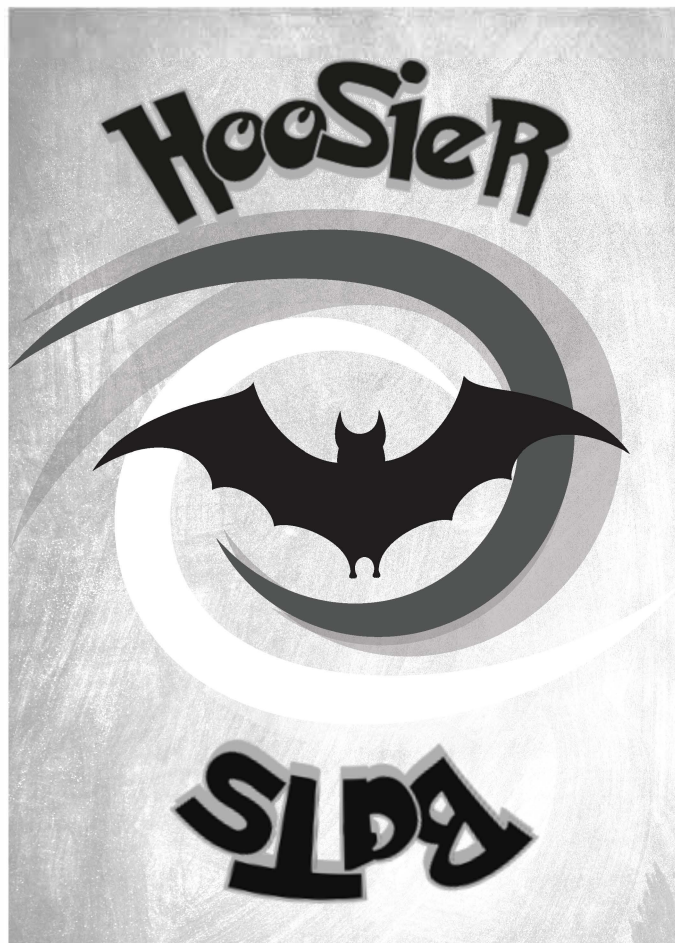
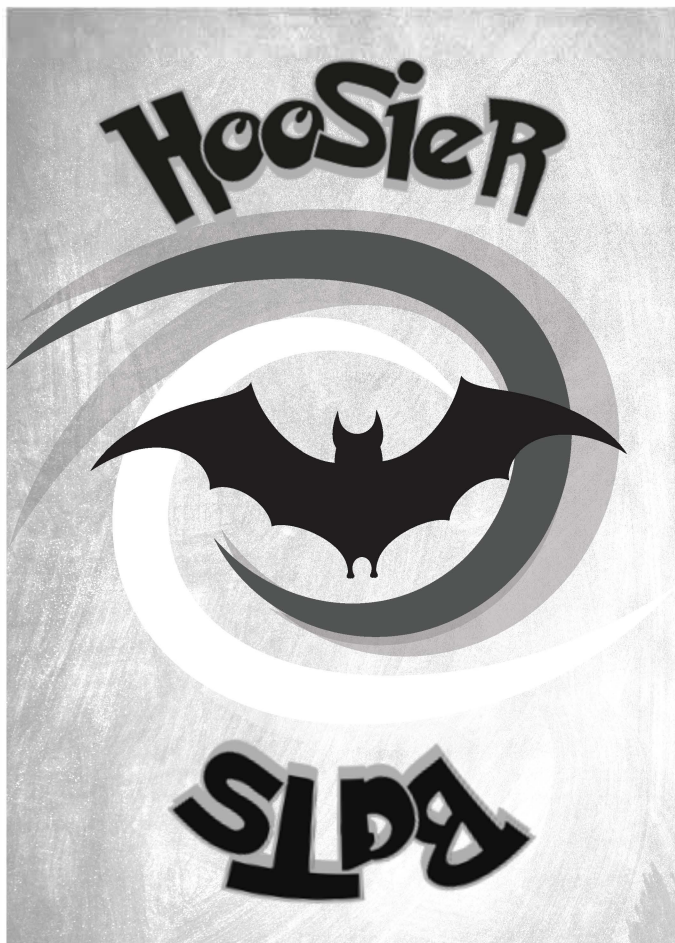
**Summer Roost:** Buildings, wood piles, under bark, storm drains, or in crevices

**Winter/Hibernation Roost:** Caves or Buildings

### Unique Features:

- Found throughout US, Canada, Central America, & parts of South America
- Helpful to humans—they eat a lot of common agricultural pests
- Commonly seen in cities and towns, but also present in farmland and wooded areas.
- Tip of their tail extends beyond their wing membrane
- Eat flying insects but primarily beetles/moths



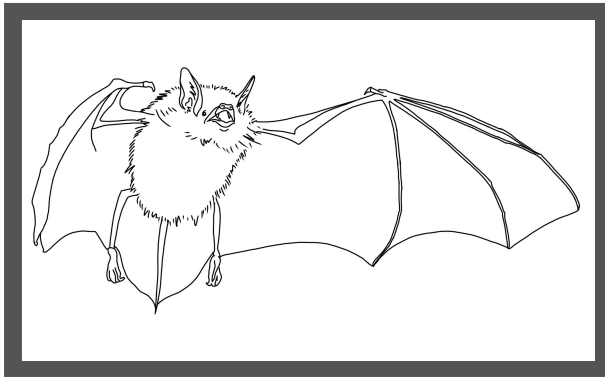




## CAVE BATS OF INDIANA

Common Name:

Scientific Name: *Myotis grisescens*



**Wingspan:** 9-11 inches

**Coloration:** Dark gray fur on back and belly

**Summer Roost:** Caves, bridges, and tunnels/culverts

**Winter/Hibernation Roost:** Caves

### Unique Features:

- Tends to hunt for aquatic insects at night over bodies of water
- Usually migrate south during cold months to hibernate in large groups
- Up to 95% of this bat species hibernate in only 11 caves in the eastern United States
- Wings connect at the ankle and have large feet
- Has mouse-like ears
- Federally endangered



## CAVE BATS OF INDIANA

Common Name:

Scientific Name: *Pipistrellus subflavus*



**Wingspan:** 8-10 inches

**Coloration:** Blonde/yellowish fur

**Summer Roost:** Live tree foliage, caves, and rarely buildings

**Winter/Hibernation Roost:** Caves and mines

### Unique Features:

- (Like most bats) Females are larger than males
- Often mistaken for large moths because of their flight patterns
- Has mouse-like ears
- Eat many varieties of flying insects
- Wings connect at their toes



