





# Species Guide to Vermont Bats

- Vermont has nine species of bats, each relying on specific summer and winter habitats.
- Six species hibernate in caves and mines during the winter and are known as “**cave bats**”. 
  - During the summer, two species primarily roost in structures (**house bats**) 
  - And four roost in trees and rocky outcrops (**forest bats**). 
- Three species migrate south to warmer climates for the winter and roost in trees during the summer (**migratory bats**). 
- This guide is designed to help familiarize you with the physical characteristics of each species.
- For more information, contact a bat biologist at the Vermont Fish and Wildlife Department or go to [www.vtfishandwildlife.com](http://www.vtfishandwildlife.com)

# Vermont's 9 Species of Bats

## Cave Bats



Big brown bat



Small footed bat

**State Threatened**



Indiana bat



**Federally Endangered**



Northern long-eared bat

**State Endangered**



Tri-colored bat

**State Endangered**



Little brown bat

**State Endangered**

## Migratory Tree Bats

Silver-haired bat

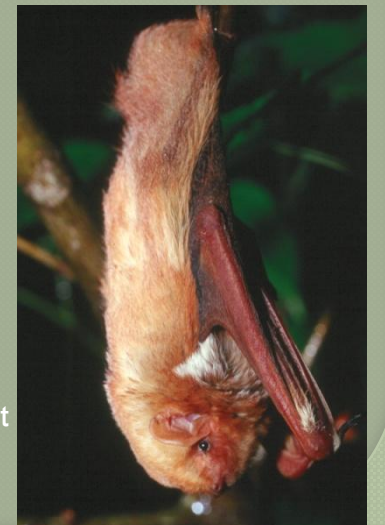


J Chenger



J Kiser

Hoary bat

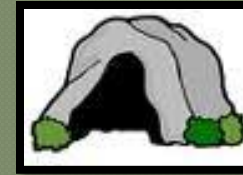


Red bat

J Kiser



# House Bats



Big brown bat

Little brown bat



These are the two bat species that are most commonly found in Vermont buildings.

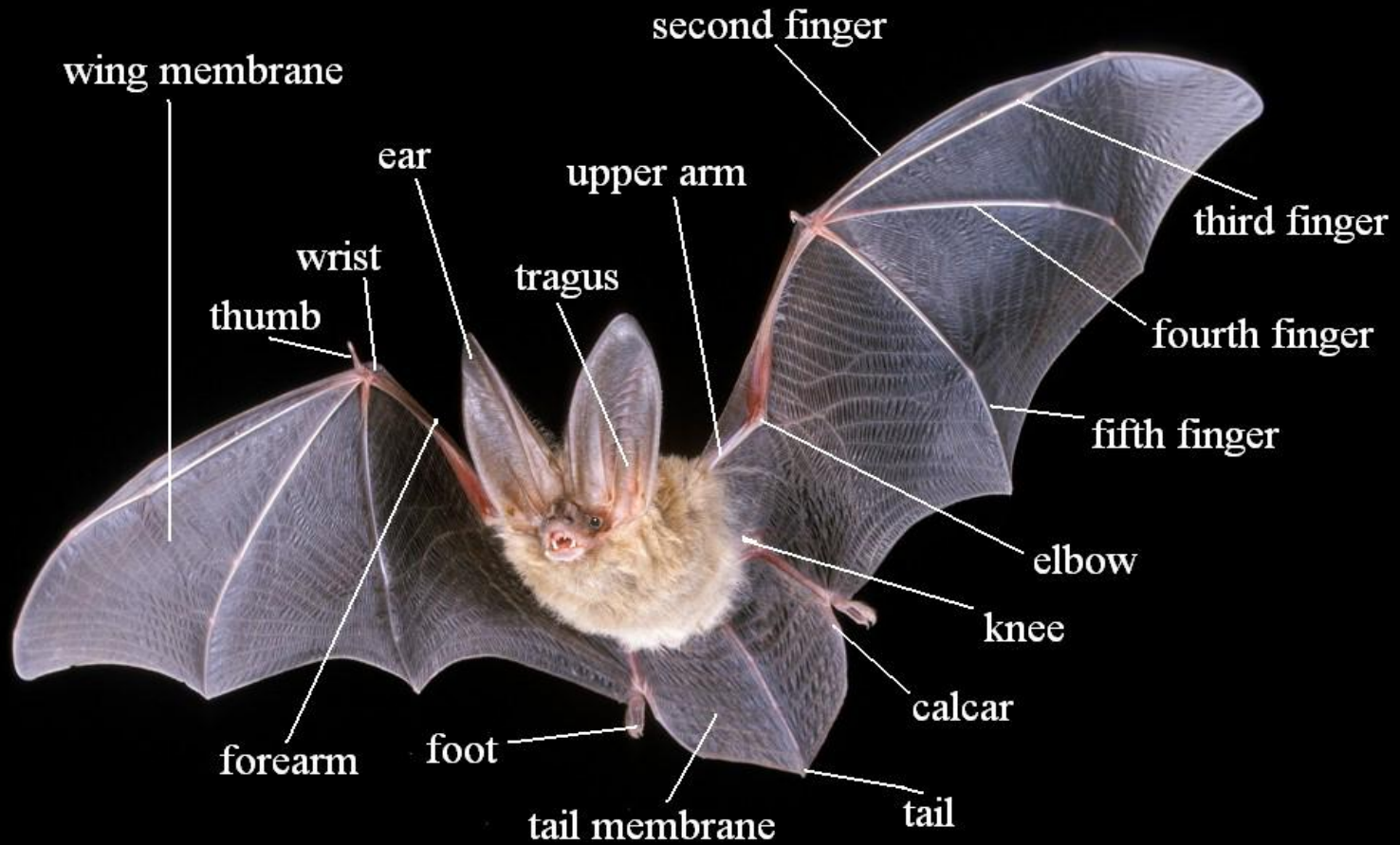
The little brown bat is state endangered, so care must be used to safely exclude unwanted bats from buildings.

Follow the best management practices found at [www.vtfishandwildlife.com/wildlife\\_bats.cfm](http://www.vtfishandwildlife.com/wildlife_bats.cfm)



**ENDANGERED**

# Bat Anatomy



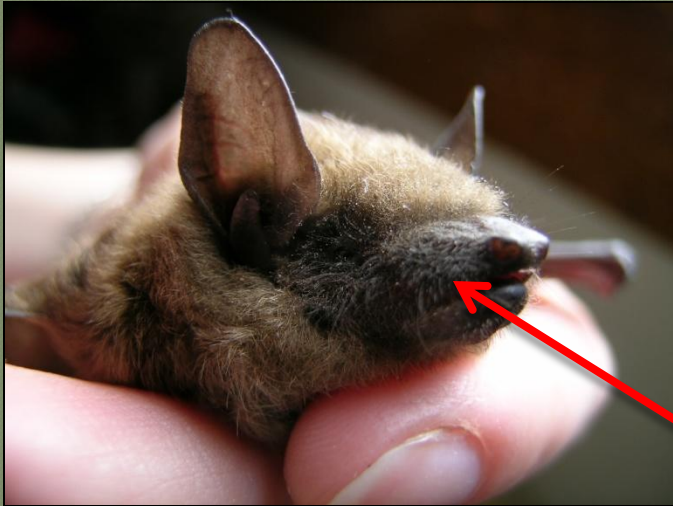
*Dr. J. Scott Altenbach*

<http://jhupressblog.com>

# House Bats

## Big brown bat

Commonly found in houses during the summer and winter



Big thick muzzle



Long silky fur

Weight	1/2 - 5/8 oz. (13-18 g)
Body Length	4 – 5 1/8 in. (103 – 130 mm)
Wingspan	13 – 16 in. (32 – 40 cm)
Forearm	1 3/4 - 1 7/8 in. (45 – 48 mm)
Description	Long, glossy brown fur. Belly paler than back. Black wings Big thick muzzle Keeled calcar
Similar Species	Little brown bat much smaller & lacks keeled calcar

# House Bats



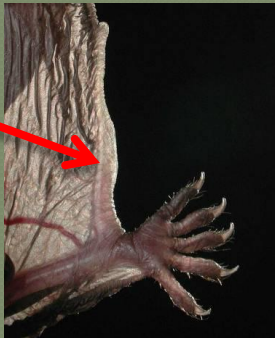
Little brown bat

**ENDANGERED**

Commonly found in houses during the summer

Weight	1/8 – 3/8 oz. (4-9 g)
Body Length	3 1/8 – 3 7/8 in. (80 – 98 mm)
Wingspan	9 – 11 in. (22 – 27 cm)
Forearm	1 3/8 - 1 5/8 in. (35 – 42 mm)
Description	Long, glossy brown fur. Belly paler than back. Face, ears, and wings are dark brown Long hairs on feet extend beyond toes No keel on calcar
Similar Species	Indiana Bat has short toe hair and a keeled calcar. Northern Long-eared Bat has long ears that extend beyond the muzzle if bent forward. Small-footed Bat is much smaller and has a smaller foot and black mask.

Keeled calcar



Indiana Bat

No keel



Little Brown Bat

# Forest Bats

## Indiana bat

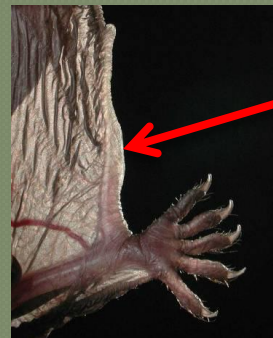


**ENDANGERED**

Short nose,  
more pinkish  
in color



Weight	1/8 – 1/4 oz. (5-8 g)
Body Length	3 – 3 5/8 in. (77 – 91 mm)
Wingspan	9 – 11 in. (24 – 28 cm)
Forearm	1 3/8 - 1 5/8 in. (36 – 41 mm)
Description	Dull, wooly fur uniform grey/brown. Pinkish nose. Short hairs on feet do not extend beyond toes. Keeled calcar .
Similar Species	Little brown has long toe hair and a no keel on the calcar. Northern long-eared bat has long ears that extend beyond the muzzle if bent forward. Small-footed bat is much smaller and has a smaller foot and black mask.



Keeled  
calcar

Indiana bat



No keel

Little brown bat

# Forest Bats

Small-footed bat

**THREATENED**



Weight	1/10 – 1/5 oz. (3-5 g)
Body Length	2 7/8 – 3 1/4 in. (73 – 82 mm)
Wingspan	8 – 10 in. (21 – 25 cm)
Forearm	1 1/4 - 1 3/8 in. (31 – 34 mm)
Description	Black face mask and ears Dark wings Small feet 1/4 - 3/8 in (7-8 mm) Keeled calcar .
Similar Species	Little Brown lacks the black mask, has bigger feet and a no keel on the calcar.



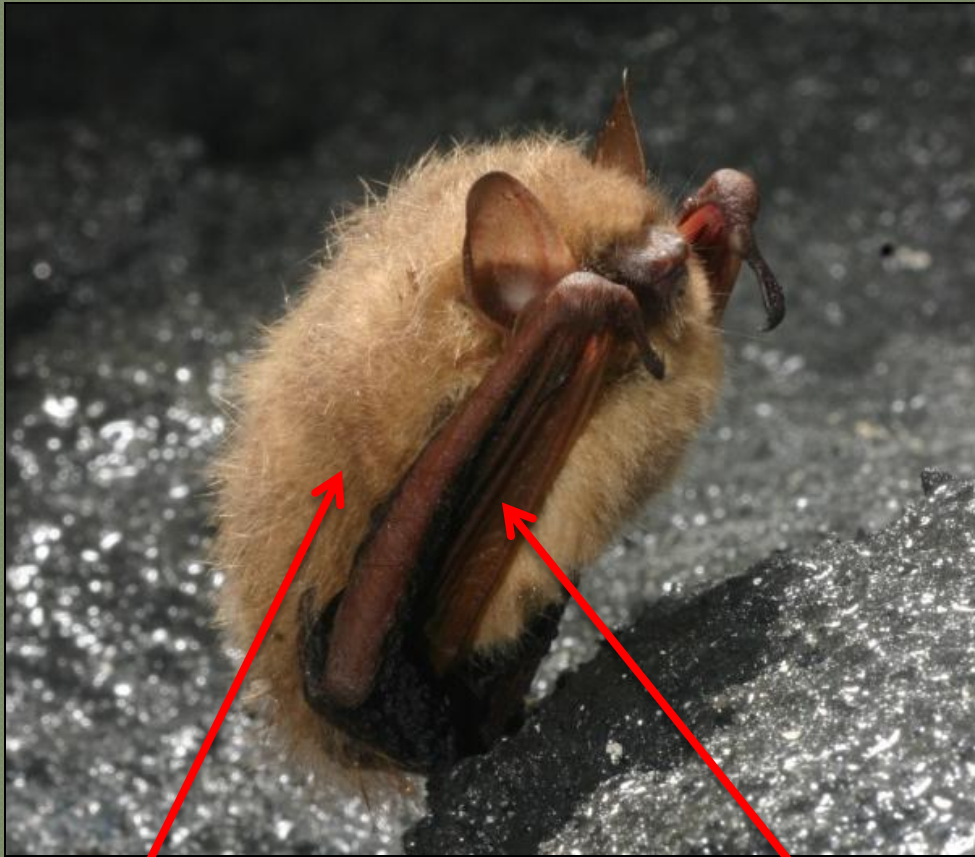
Black face mask



# Forest Bats

Tri-colored bat

**ENDANGERED**



Tri-colored fur

Pinkish forearms

Weight	1/5 oz. (6 g)
Body Length	2 3/4 – 3 3/4 in. (71 – 95 mm)
Wingspan	8 – 10 in. (21 – 26 cm)
Forearm	1 1/4 - 1 3/8 in. (33 – 36 mm)
Description	Yellowish fur is tri-colored, dark at the base. pale in the middle and dark tips. Pinkish forearms. Face/ears are pale brown.
Similar Species	Other VT bats have bi-colored fur.

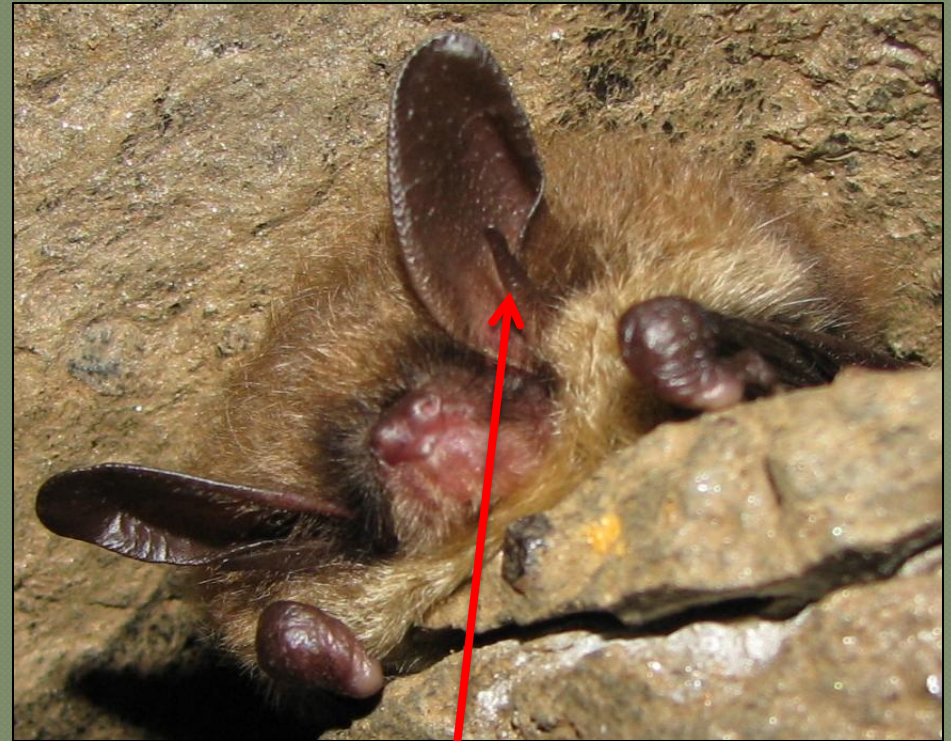
# Forest Bats

## Northern long-eared bat

**ENDANGERED**



Weight	1/8 – 1/4 oz. (5 – 7 g)
Body Length	3 – 3 7/8 in. (75 – 100 mm)
Wingspan	9 – 11 in. (23 – 27 cm)
Forearm	1 3/8 - 1 1/2 in. (35 – 39 mm)
Description	Dull brown fur on back, belly pale. Large ears that extend beyond the muzzle if laid forward. Long pointed tragus
Similar Species	Little Brown Bat has glossy fur and small ears and tragus.

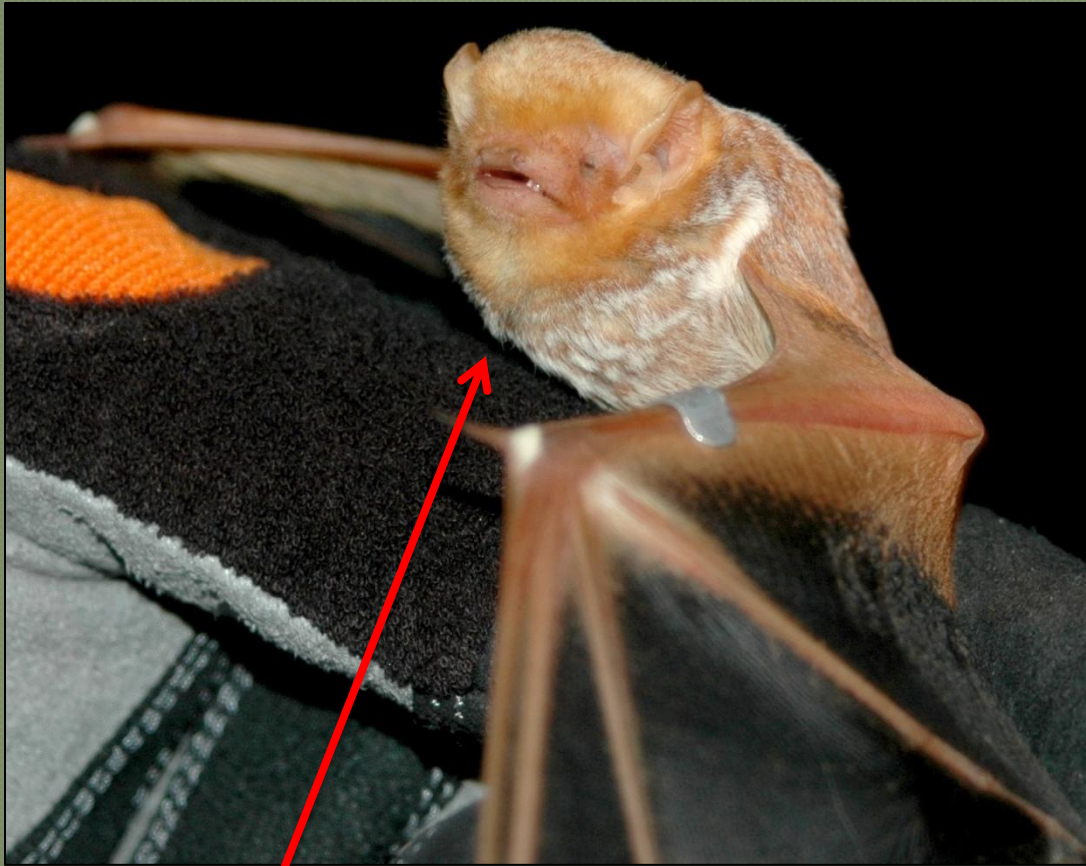


Long ears and pointy tragus

# Migratory Bats



## Red bat



Overall orange/reddish color

Weight	1/4 – 1/2 oz. (9 – 15 g)
Body Length	3 5/8 – 4 5/8 in. (93 – 115 mm)
Wingspan	11 – 13 in. (28 – 33 cm)
Forearm	1 3/8 - 1 3/4 in. (35 – 45 mm)
Description	Bright orange to reddish brown color. Frosted appearance.  Furred interfemoral tail membrane.
Similar Species	None

# Migratory Bats



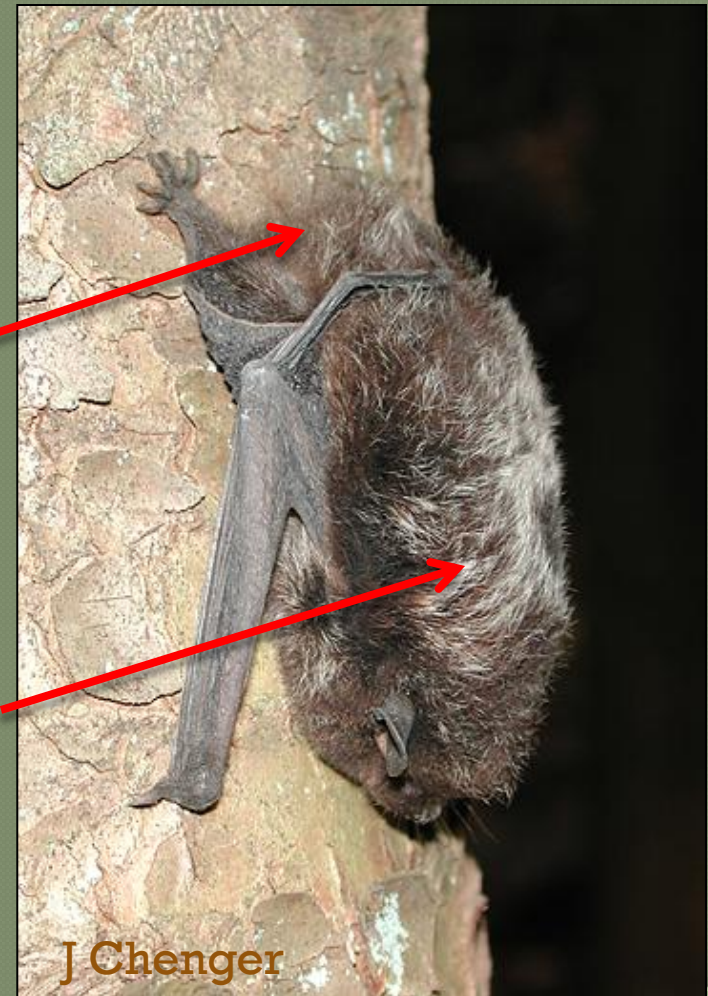
## Silver-haired bat

Weight	1/4 – 3/8 oz. (8 – 11 g)
Body Length	3 3/4 – 4 5/8 in. (96 – 116 mm)
Wingspan	11 – 13 in. (27 – 32 cm)
Forearm	1 5/8 - 1 3/4 in. (40 – 45 mm)
Description	Blackish/brown fur tipped with silver color. Ears and tragus short, blunt and naked. Face, ears, feet and wings dark brown. Lightly furred interfemoral tail membrane.
Similar Species	Horary bat is larger with densely furred interfemoral membrane, and yellow fur around its face.



Furred tail membrane

Silver tipped fur



# Migratory Bats



## Hoary Bat

Furred tail membrane

Weight	5/8 – 1 oz. (19 – 28 g)
Body Length	4 7/8 – 5 5/8 in. (123 – 142 mm)
Wingspan	13 – 16 in. (34 – 41 cm)
Forearm	2- 2 1/8 in. (52 – 54 mm)
Description	Largest bat in VT. Tail membrane heavily furred. Fur has banded coloring. Black, tan, brown, and silver. Fur around face is yellowish.
Similar Species	None

Banded fur, yellowish around face



Kiser