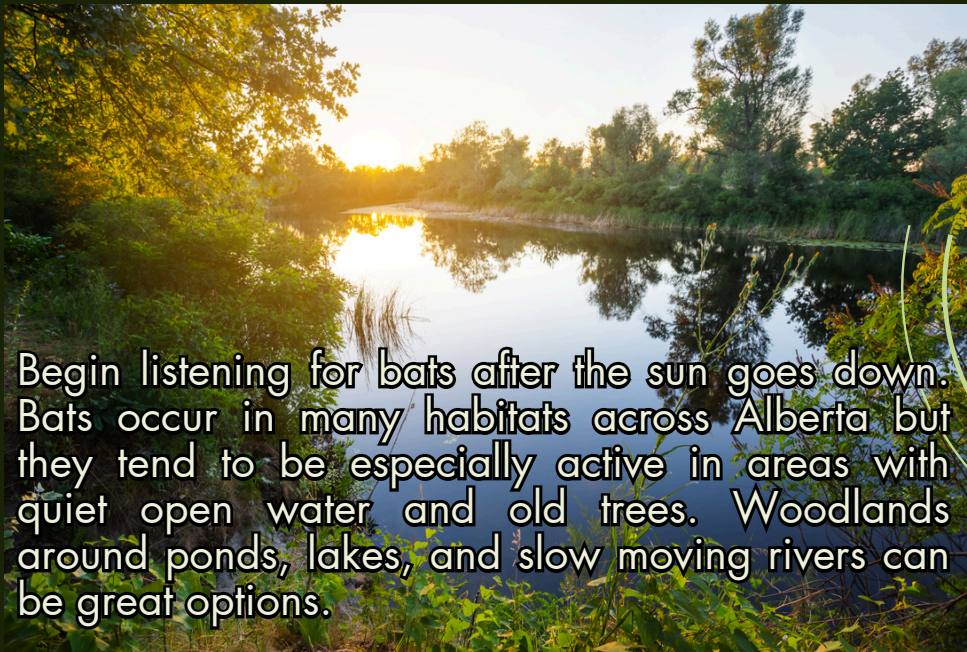


# BAT BASICS GUIDE

## Where are the best places to listen for bats?



Begin listening for bats after the sun goes down. Bats occur in many habitats across Alberta but they tend to be especially active in areas with quiet open water and old trees. Woodlands around ponds, lakes, and slow moving rivers can be great options.



© Charles Francis

Bats echolocate using high frequency sound that is well above the human hearing range. We can't hear bats (but dogs and cats can).



## What time do bats emerge?

Bats **"locate"** objects in space by listening for the returning **"echoes"** from their extremely **loud calls**. Bats are as loud as the siren of an ambulance (but we can't hear them with our ears). Simply put, they yell a lot and they **"see"** things with sound.

Bats can sense different **textures** of insects and predict how fast a bug is moving while at the same time navigating to **avoid colliding** with trees or other objects.



Bats usually emerge from their roosts 30 minutes past sunset time (when temperatures are above 10C, wind is less than 16km/hr and there is no rain).

# BAT BASICS GUIDE



## Which bats species occur near me?

Bat Common Name	Bat Scientific Name	Status in Alberta	Status in Canada <sup>1</sup>	Municipality								Alberta Natural Region				
				Fort McMurray	Grande Prairie	Edmonton	Red Deer	Calgary	Lethbridge	Medicine Hat	Crows Nest Pass	Boreal	Canadian Shield	Foothills	Grasslands	Parkland
Long-legged Myotis	<i>Myotis volans</i>	Un-determined			X			X	X	X	X	X	X	X	X	X
Northern Myotis	<i>Myotis septentrionalis</i>	May be at risk	Endangered	X	X	X	X					X	X	X		X
Western Small-footed Myotis	<i>Myotis ciliolabrum</i>	Sensitive							X	X				X	X	
Long-eared Myotis	<i>Myotis evotis</i>	Secure			X		X	X	X	X	X	X		X	X	X
Little Brown Myotis	<i>Myotis lucifugus</i>	May be at risk	Endangered	X	X	X	X	X	X	X	X	X	X	X	X	X
Big Brown Bat	<i>Eptesicus fuscus</i>	Secure		?	X	X	X	X	X	X	X	X	X	X	X	X
Hoary Bat	<i>Lasiurus cinereus</i>	Secure*		X	X	X	X	X	X	X	X	X	X	X	X	X
Silver-haired Bat	<i>Lasionycteris noctivagans</i>	Sensitive		X	X	X	X	X	X	X	X	X	X	X	X	X
Red Bat	<i>Lasiurus borealis</i>	Sensitive		X	X	X	X	X	X	X	X	X	X	X	X	X

## Common Building & Bat House Using Species



Little Brown Myotis are common in buildings and bat houses throughout Alberta. They like to feed over wetlands. This species hibernates in caves, mines and other underground features.

Big Brown Bats also commonly use buildings and bat houses but are tolerant of drier conditions and may overwinter in buildings. They are found throughout Alberta.



© Jared Hobbs

# BAT BASICS GUIDE



## Migratory Bats



*Hoary Bat (left), Silver-haired Bat (top right) and Eastern Red Bat (bottom right) are found throughout Alberta, although Red bats are uncommon.*

## Myotis Bats



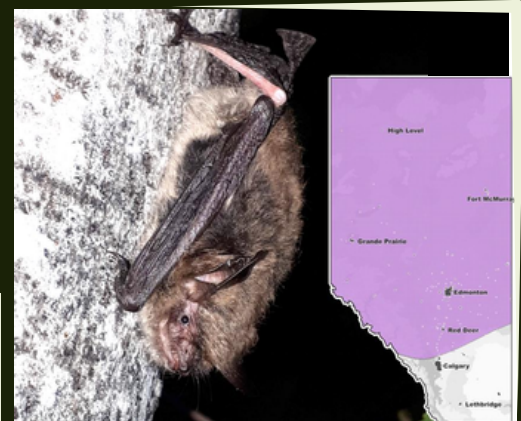
Long-eared Myotis are found along the foothills, Rocky Mountains and southern prairies.

Western Small-footed Myotis are concentrated along the rivers of the prairie region. They like rocky cliff habitats for roosting.



Long-legged Myotis are found along the foothills, Rocky Mountains and south-western prairies. This species is not well understood.

Northern Myotis are associated with the boreal forest region. They really are a "northern" bat.

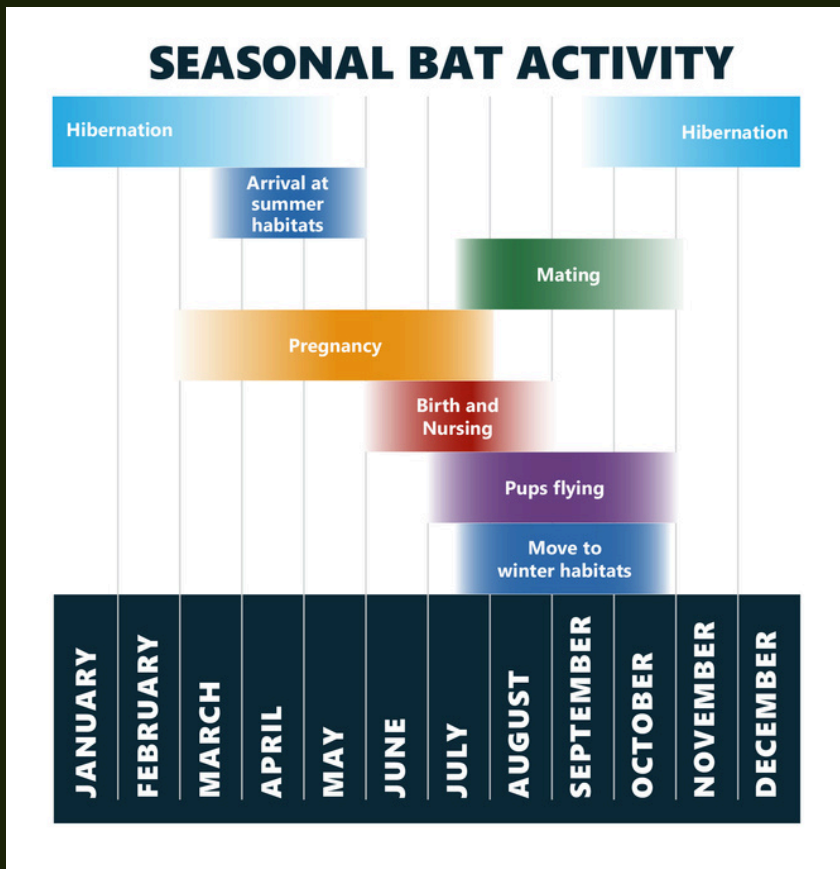


Myotis bats all have similar echolocation calls in the 40 kHz range. The shapes of their search phase calls and call structure vary enough that they can sometimes be identified. You may find the bat detector has trouble discriminating between these species.

# BAT BASICS GUIDE



## Best Time of Year to Hear Bats?



Generally, bats are “active” from about April to the end of October. But warm weather can bring them out early and bats appear to come out during hibernation periodically as well (we aren’t sure what they are doing). But your best chances of hearing bats are June through September, on warm nights, with low wind and no rain.

## Migratory Bats

Hoary and Eastern Red Bats are solitary during the summer months but form “flocks” when they begin their southward migration around mid-August. Late summer, you might hear large numbers of Hoary Bats (if you are lucky) which could indicate a group migrating south!

PLEASE PROVIDE FEEDBACK ABOUT YOUR EXPERIENCE USING THE BAT KIT!

[www.albertabats.ca/batkits](http://www.albertabats.ca/batkits)



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BAT PROGRAM



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