

Information to Consider

- **Sensitive Timing: October 1 – April 30**
- Establish a 100 m radius buffer around a bat hibernaculum to avoid direct disturbance.
- Establish additional protection outside the buffer to avoid disturbances that may affect the functionality of the hibernaculum.
- Acceptable activities within the buffer or additional protection area vary with the potential impact level of the disturbance.
 - **Low impact disturbances** (Livestock attractants. Activities on foot. Small group, visual screening present e.g. layout, cruising reconnaissance): acceptable in the additional protection area all year, and within the buffer outside of sensitive timing windows, though extra caution should be used immediately adjacent to the hibernaculum.
 - **Medium impact disturbances** (Light mechanized activities. Larger group/duration, no visual screening e.g. fence building, spacing, planting): acceptable in the additional protection area outside of sensitive timing windows, not acceptable within the buffer during sensitive timing windows, but may be acceptable outside of sensitive timing window if the activity does not degrade the habitat.
 - **High impact disturbances** (Mechanized activities e.g. road construction, falling and yarding, landing sites): possibly acceptable within the additional protection area outside of sensitive timing windows with review from a bat biologist, not acceptable within the buffer at any time.

A BAT HIBERNACULUM

Definition

A site where one or more bats hibernate in the winter (hibernacula [plural]).

Location

- Typically in undisturbed areas with exposed rock or old mines close to foraging habitat

Features

- Most often caves, cliff crevices, or abandoned mines that provide cool, constant temperatures and protection from the elements and predators
- Bat droppings (guano) are often present at the entrance, and a strong smell of ammonia may be present (bat droppings are similar to mouse droppings, but are generally not as smoothly formed and have a shiny speckled appearance from the remains of insect wings)
- Entrances can be large and conspicuous or small and obscure
- Chambers are typically deep and quite large

Notes

- Several species of bats may use the same hibernaculum
- Hibernacula are used year after year
- Here are no BEC associations of hibernacula as they are more based on topography

Similar features to a Bat Hibernaculum

Bat nursery roost- how to distinguish:

- Nursery roosts are typically much smaller than a hibernaculum
- Nursery roosts are often in trees, not caves or old mines
- Nursery roosts are active during the spring and summer, whereas hibernacula are active during the winter



Photos left to right: Province of British Columbia, Anna Roberts, Paul Griffiths

Common Name	Scientific Name	Status (COSEWIC; BC)	Elevation Range	BEC Zone					Hibernacula structures
				PP	IDF	MS	ICH	ESSF	
Townsend's Big-eared Bat	<i>Corynorhinus townsendii</i>	No status; Blue	Sea level up to 3300 m (full range)	X	X		X		Mines, caves
Big Brown Bat	<i>Eptesicus fuscus</i>	No status; Yellow	unknown	X	X	X	X		Buildings, mines, rock crevices
Silver-haired Bat	<i>Lasionycteris noctivagans</i>	No status; Yellow	unknown	X	X	X	X	X	Dead/dying/live trees, mines, buildings; migrates
Hoary Bat	<i>Lasiurus cinereus</i>	No status; Yellow	Up to 2775 m	X	X	X	X	X	Migrates
Californian Myotis	<i>Myotis californicus</i>	No status; Yellow	500-3140 m	X	X	X	X	X	Buildings, mines, caves
Western Small-footed Myotis	<i>Myotis ciliolabrum</i>	No status; Blue	Up to 3300 m (full range)	X	X				Buildings, mines, caves
Long-eared Myotis	<i>Myotis evotis</i>	No status; Yellow	Sea level up to 2900 m	X	X	X	X	X	Mines, buildings
Little Brown Myotis	<i>Myotis lucifugus</i>	Endangered; Yellow	unknown	X	X	X	X	X	Mines, caves
Northern Myotis	<i>Myotis septentrionalis</i>	Endangered; Blue	unknown				X		Mines
Fringed Myotis	<i>Myotis thysanodes</i>	Endangered; Blue	300-854 m	X	X				Mines
Long-legged Myotis	<i>Myotis volans</i>	No status; Yellow	Most occurrences are between 1800-3000 m	X	X	X	X	X	Mines, caves
Yuma Myotis	<i>Myotis yumanensis</i>	No status; Yellow	unknown	X	X	X	X		Mines, caves
Pallid Bat	<i>Antrozous pallidus</i>	Threatened; Red	Unknown; Only potential in Boundary	X					Rock crevices
Spotted Bat	<i>Enderma maculatum</i>	Special Concern; Blue	300-900 m; Only potential in Boundary	X					Cliffs, mines