

## Spotted Bat Video

### *Educator Resource Sheet*



**Caption:** An illustration of a spotted bat with large ears and spots on its back

**Image credit:** Michael Hames, reprinted from the RBCM handbook *Bats of British Columbia* (1993)

### *Background*

Have you seen a bat flying in the dark? Spotted bats (*Euderma maculatum*) are nocturnal mammals that forage at night using echolocation. They are species at risk in BC, known for their large pink ears and three white spots on their fur. In Canada, they only live in south-central British Columbia. Watch the video to learn more about the adaptations that spotted bats have to navigate and hunt in the dark.

**Tip:** Click on the CC button on the bottom right corner of the video to turn the closed captions on.

### BC Curriculum Connections

Kindergarten	Grade 1
<p><b>Big idea:</b> Plants and animals have observable features</p> <p><b>Content:</b> Basic needs of plants and animals; Adaptations of local plants and animals; Local First Peoples' uses of plants and animals</p> <p><b>Competencies:</b> Demonstrate curiosity and a sense of wonder about the world; Discuss observations</p>	<p><b>Big idea:</b> Living things have features and behaviours that help them survive in their environment</p> <p><b>Content:</b> Names of local plants and animals; Structural features of living things in the local environment; Behavioural adaptations of animals in the local environment; Local First Peoples' knowledge of the local landscape, plants and animals</p> <p><b>Competencies:</b> Demonstrate curiosity and a sense of wonder about the world; Make and record observations; Identify simple patterns and connections</p>

### Connections with First Peoples

- One of the [First Peoples Principles of Learning](#) is that learning is holistic, reflexive, reflective, experiential and relational (focused on connectedness, reciprocal relationships and a sense of place).

- Learn how to say “bat” using the Indigenous language of the Syilx Okanagan people. There are two Syilx words for *bats*: *t’əntanwiya* (referring to the way that bats fly) and *sap’yaʔn* (meaning skin/hide and wing). Check out the BC Bat Edu-Kit [activity guide](#) and the lesson on “Bats in the Okanagan Culture” (pages 79–81).
- Learn more about how to integrate BC First Peoples content through the Ministry of Education’s [Shared Learnings](#) or the First Nations Education Steering Committee’s [learning resources](#).

## Vocabulary Words

Here are some words that you can teach your students before showing the video.

<b>Echolocation:</b> when animals make sounds and listen for their returning echoes to navigate and locate prey.	<b>Moth:</b> a night-flying insect that is less colourful and has smaller wings compared with butterflies
<b>Flutter:</b> to move wings quickly	<b>Territory:</b> an area of land

## Teaching Tips!

- Make sure to discuss the term **adaptation** with your class before showing the video. An adaptation is something a plant or animal has or does that helps them to survive. Spotted bats have wings to fly and big ears to navigate and hunt in the dark using echolocation.
- Bat and Moth Game: Simulate echolocation in the class! Find two student volunteers, one to be a spotted bat and another to be a moth. First, the bat will be blindfolded, and the moth will move to any place in the classroom. The bat will produce a clicking sound with their mouth, and the moth will respond with a click (like an echo). Over time, the bat will find its way towards the moth as the sound will be heard louder to the bat the closer it is to the moth. There are many ways to play this fun learning game. (See page 51 of the BC Bat Edu-Kit [activity guide](#) for another version.)
- What other animals use echolocation? Some examples include dolphins, killer whales, porpoises and narwhals. In the waters of BC, there are resident killer whales and Bigg’s (transient) killer whales. Learn more about them through the [Orcas pathway on the Learning Portal](#).
- Are bats insects, birds or mammals? Even though bats have wings, they evolved separately from insects and birds and are not closely related to insects or birds. Bats are mammals like us—they are warm-blooded, feed milk to their young and have fur on their skin. Compare the bone structure of a human arm to a bat wing. Although the length and function of the bones are different, the physical structures are similar, indicating a close evolutionary relationship between humans and bats.

## Additional Resources

- Visit [bcbats.ca](http://bcbats.ca) to learn more about bats and how to create [bat-friendly communities](#).
- Celebrate [Bat Week](#) with your students in the last week of October!
- Read the Royal BC Museum’s updated handbook on [Bats of British Columbia](#).
- Listen to Dr. Cori Lausen, bat biologist at the Wildlife Conservation Society Canada, [talk about echolocation and bats](#).
- Watch Batty Bat by Count Dracula on [Sesame Street](#).
- Read *Stellaluna*, Janell Cannons’s children’s book about a young fruit bat.
- Make coffee-filter bats! Use washable markers to draw a pattern on a coffee filter, and then spray water on the filter. This will become the bat wings. Then attach a wooden clothespin in the centre for the body. There are many versions of this DIY activity online, like [this](#).