

GIRL SCOUTS: Sensational Senses

Activity Snapshot

Activity	Time allotment	Intent	Method	Example questions and phrases
Night Hikes – Silent walk nocturnal/crepuscular animals	60-75 minutes	Explore how animals engage senses in low light environments or with limited visibility	Silent walk - identify 10 unique sounds Exhibit interpretation Night vision binoculars	What do you notice about your surroundings as your eyes adjust? Are there any sounds or smells you didn't notice before?
Ambassador Animals	20 minutes 10 min. buffer	Connect with animals by experiencing them up-close (possible touching) Identify each of the animal's primary senses and compare them to how we utilize ours	Meet & Greet Observation	Tell me what you know/notice about this animal. How does this animal use its senses (i.e. get its food)? What do you think this animal's primary sense is? How do you know?
Wetland Band Activity	30-45 minutes	Brainstorm reasons that animals make noises and explore how species communicate. Conservation connection: citizen science frog tracking	Interactive game Discussion Sensory engagement with amphibian calls	What are some reasons that animals make noise/vocalize? How do you think scientists use frog and toad calls to monitor population health?
Baby Bat Game	15-20 minutes	Discover how mother Mexican free-tailed bats can identify their young in caves full of millions of bats	Interactive game Role play of mother and baby bat	Tell me what you know about bat senses. Which senses might a mother bat use to find her baby? Which way did it seem easier to find the babies? Why?
Nightsong story	10-15 minutes	Wind group down at the end of the night for bed.	Storytime with snack	
Senses Scavenger Hunt & Nature Play (AM)	15-20 minutes	Practice engaging multiple senses to explore a new space	Free play, sensory exploration	Can you find something spiky, something sweet smelling, something colorful? Extension: nature art

Baby Bat How to Play:

Background: Many mother mammals use sight, sound, taste, and smell to recognize their young. In a dark cave mother bats cannot use sight to find their babies. It is thought that mother bats use smell and sound to identify their young. Mexican free-tailed bats find and nurse their own young, even in huge colonies where many millions of baby bats cluster at up to 500 individuals per square foot. Mothers and pups recognize each other's unique voices at least three feet away and move toward one other despite the incredible confusion of calls emanating from countless thousands of other bats. Multiple landings are typically required to find a pup, each bracketing its location in a manner suggesting that a mother is triangulating her pup's voice. Finding her young can take as little as 12 seconds to nearly 10 minutes.

- Pair up participants in your group, including parents. Each pair will consist of one baby bat and one mother bat.
- Each pair will receive one unique scent in a small container (for the baby bat) and will also need to create their own unique call for communicating with each other.
- Once each participant acting as a mother bat has learned their baby's scent and the pair have decided on their call, separate the two groups.
- Mother bats will start on one end of the space and babies on the other. Mother bats are tasked with finding their babies in all the chaos! Pairs may utilize both their call and scent canister to be reunited.

After all pairs have found each other debrief with the following questions:

Was it easy to find the baby using the sense of smell?

Which way did it seem easier to find the babies? Why?

How important is it to know the placement...smell...sound of baby?

When we lose something, which of our senses helps us the most in finding the lost item?

Is it the same for the bat?

Wetland Band How to Play:

Background: Frogs and toads find each other by calling, and each species makes a unique call. They use these calls during the breeding season to find a mate. Most frogs and toads call at night when they can hide from predators and are protected from the sun. Scientists listen to the calls to collect information on how frog and toad populations are doing. Scouts can practice their citizen science skills as they learn to identify calls of Texas native species and estimate population numbers in this interactive game.

- **Brainstorm:** Why do animals make noises?
Examples: warning others, defending territory, finding a mate, communicating with offspring or parent, keeping track of social groups.
- **Listen:** split participants into groups of 3 and provide them with frog and toad ID photos. Play the calls of the frogs and toads found in the Texas area and have groups practice identifying which calls belong to each of the species. Have each group hold up the ID card for the species they think matches the call.
- **Create:** assign each group one of the species and have them recreate the frog or toads call using everyday household items provided. The goal is for each group to have a distinct sound from the others.
- **Play:** Bring the whole group together and have them spread out around the room with their frog and toad call instruments. Have everyone play their instruments at the same time with their eyes closed and see if they can find their same species of frog or toad. Can the same species find each other? Was it hard to find each other? Discuss how they think scientists might use species calls to help animal populations?
- **Citizen Scientist Challenge:** Ask for two volunteers to be the citizen scientists. Have them leave the room with your volunteer or adult chaperone. Rest of the group will select the number and types of frogs or toads that will be calling. Invite the citizen scientists back. Have them close their eyes and play the chosen frog and toad calls. Can the citizen scientists identify the species and number of individuals calling?