Learning Laguna Field or Classroom Activity: Mammal Box

Goal: Give the students an opportunity to observe differences and similarities in mammal fur, skulls, teeth and feet. Encourage them to draw conclusions from observable information. Reinforce concepts of camouflage, adaptation, carnivore, herbivore and omnivore.

The Mammal Box is a treasure trove of exciting things that always stirs up reactions—excitement, awe, fear, gross out. But in the end almost all are enthralled.

Before you open the box tell the students that there are precious things inside that must be treated with respect. Assure them that all will get the chance to see and touch but that these items are very old and we have to be very careful with them. Wait until they are calmed down before opening.

Reassure the students that all the animals in the box were accidentally killed, mostly on roads.

The mammal box contains these pelts:
2 Bobcat (1 old/1young), 1 coyote, 1 skunk, 1 mink, 1 fox

Discussion: Note: Questions are in order of difficulty.
Take out the **big bobcat and coyote** and lay them next to each other on the box or hold them on your lap. Don't tell the students what the animals are. Encourage the students to gently touch the pelts and begin by asking students to compare the different pelts.

- What are the differences between these two pelts? (texture, color, thickness of fur) Is one softer than the other? Which one? Are their colors the same? How are they different?
- How does the color of the fur help these animals remain hidden? (Hint: What habitat do they live in? (grasses) What time of day are they active? (early morning and evening) What is the word for this? (camouflage).
- Examine the feet. How are they different? How are their hunting strategies different? (coyote has pads, runs fast and grabs its prey with its teeth. Bobcat has retractable claws and grabs with the claws and then the teeth). Do these animals have similarities to pets you have at home?

Take out the **skunk pelt**. If they are scared get them excited by telling them that this is the one time in their life that they will get a chance to pet a skunk!

- How does the black coat help the skunk stay camouflaged? (Hint: What time of day is it active? (night) What is the word for this? (nocturnal)
- If the skunk has a black coat that keeps it from being seen at night, why does it have this big white stripe down its back that is more likely to announce its presence? (It is a warning to potential predators of its noxious spray?).
  What else has warning markings that alert potential predators? (The yellow and black stripes of the wasp).

Take out the **Mink** and compare textures with the skunk. These animals are in the same family but live in very different habitats (mink around water and skunk in upland) and they eat very different things. They both share a strong must gland in common, only the skunk's is extremely over developed.

Segue to bones:
Bones: Weasel skull, deer skull, deer antler, deer vertebrae, lower jaw with no teeth in front, fawn leg
Take out the **weasel and skunk skulls**. The weasel is also in the same family of the skunk and mink (Mustelid) and what else they all share in common are some very sharp teeth. What so you think these animals eat? (Weasel—mice, gophers, small birds, mink—crayfish, frogs, muskrat, ducks, Skunks—mice, earthworms, insect grubs).

Compare to **deer skull**.
How are the teeth of this skull different from the others shown? (flat teeth, no teeth in front)
Why do different animals have different types of teeth? (animals eat different things. Introduce **carnivore, herbivore, omnivore**)

Take out **deer antler**
What is the difference between a horn and antlers? (Deer shed their antlers every year and grow new ones, but horns do not come off).