

## Lesson 4: Candid Critters Cast of Characters

### Objectives:

- Identify and classify animals through photo uploads

**Timing and Implementation:** 60 minutes, but may take longer if there are many photos on the camera trap. Indoors, after 3 week camera deployment period. You may wish to retrieve the camera trap with students. That is not included in this lesson, but the camera trap will need to be retrieved for this lesson as this lesson uses the camera trap data. Note that this lesson takes some preparation on behalf of the teacher. eMammal software will need to be downloaded on computers and we recommend teachers to scan photos ahead of time.

### Materials:

- Computer(s) with Internet access and the eMammal software already downloaded
- Folder of photos from SD card from camera trap deployment copied on to each computer students are using
- Filled out [Data Sheet](#) from camera trap deployment
- Blank note cards
- Dot Plot from Lesson 2
- Candid critters [Field Guide](#)

### Introduction and Background:

Students will upload photos that they capture on their camera trap using the eMammal software. If you need to refresh your memory on how to upload photos, you can view the [training materials here](#). As it is difficult for 30+ students to work on one set of photos, we have developed at least three ways that students can upload photos in the classroom. Choose the option that works best in your class or you are welcome to try a method of your own:

- 1. Identify animals and upload photos together as a class on one computer:** Teacher uploads photos on a computer and displays the photos through eMammal software for the entire class using a projector. As a class, students agree on the species identification of the animal in each sequence.
- 2. Students identify animals and upload photos in small groups with many computers:** The same folder from one deployment can be copied to the desktop of multiple computers. Students work in groups of 2-3 on their own computers and identify the species and upload the same photos at the same time. The eMammal software will only keep one copy of student identifications, which is from the last deployment uploaded.
- 3. Students identify animals on one computer, taking turns:** Photos can be imported into eMammal on a single computer and students can be responsible for identifying a few sequences at a time (in a rotating format). An alternative approach is that students from subsequent groups confirm the identifications and made by previous students. Species that are difficult to ID can be projected and decided as a class. Note: species identifications are not always easy! Animals can be blurry or difficult to see. Having careful observations of each sequence is important.

## Procedure:

1. Retrieve camera trap and SD card (with or without students). Reset camera trap if you are continuing with future deployments (which we recommend!).
2. Before class (we recommend at least several days in case of problems with technology), download eMammal software from the [eMammal website](#) (you must be logged in to download). Imports photos into eMammal software and scan human photos for inappropriate activity. If inappropriate activity is found, go to the original photo folder and delete the entire sequence of photos.
3. Copy the entire folder of photos to the desktop of each students' computer and write the GPS coordinates, detection distance and camera trap number on the board if students are on their own computers.
4. Have students identify the animals in the photos using one of the methods listed above using the Candid Critters field guides to help them. While students are identifying animals, have them write down each unique species they identify on a separate card. Have students upload the species when finished (hit "upload" button in top right corner).
5. When all students are finished, as a class, revisit the dot plot you created. Compare the species identified to those predicted. You may choose to post this list in the classroom next to the dot plot. If NO species are captured (this sometimes happens), you can also discuss this. See prompts below:
  - *Which species did you expect to find, but did not? Why do you think this is? Do you think we will still be able to find them? Why or why not? **Note that some species may not have been captured because they are not picked up well by camera traps (e.g. cold-blooded animals, animals that are too small)***
  - *Which species did we find that you didn't expect to find? Why do you think we captured this species?*
  - *Did we capture more species than expected or less?*
  - *If no species are captured – Why do you think this is? Chance? Bad camera trap set up (too high or too low)? High traffic area (lots of people)? Temperature (too warm or very cold)? **Remind the students that no data are still data! Finding out where animals aren't is just as important as finding out where they are.***