

Visual Encounter Surveys

Ecologists use visual encounter surveys to estimate the diversity (number of different species) and abundance (number of different individuals) of lizards at a particular location. This is a timed survey, so be sure to mark the start and end times. Surveys need to be 15 minutes long from start to finish during which time you should walk slowly around your survey area, either your yard at home, school yard, or a local park. Look for lizards everywhere! Look on the ground, on tree trunks, on branches, in the leaves, on fences, and on your house!

Use the provided **Field Identification Guide** to help you identify lizard species. We strongly encourage you to practice identifying lizards a few days before you start your surveys. Estimate their size as the snout-to-vent length using the provided scale (you do not need to catch or touch the lizards). During your surveys, record the size and species of each new individual lizard that you see on the provided data sheets. When doing your surveys, make sure not to count the same lizards twice!

Lizard activity varies with the time of day, weather conditions, and season. When you survey the same location multiple times, you may see different species or numbers of individuals. Conduct one survey in the morning (7am-9am), one in the midday (11am-2pm) and one in the evening (4pm-6pm). Surveys do not need to all be on the same day, but should be conducted in the same survey area.

Please, also provide the requested information about the survey area (it will be the same information for all three surveys so can be collected just once).

(Remember – to get credit, all of the original data sheets must be turned in and returned to Fairchild!).



10-step protocol for lizard surveys

1. Record **start time** of your survey
2. Begin survey at starting point by standing still and looking in your immediate surroundings.
3. Be careful not to walk too fast, this survey should be done *slowly*! You can stop briefly to look around between steps.
4. When you see a lizard, refer to your **Field Identification Guide** if needed, and identify the species of lizard.
5. Record the size of the lizard as you see it, before moving on to the next one. Use the data sheet provided to record how many individual lizards of each species and the sizes of these lizards.
6. After you have made sure that you have recorded all the lizards that you can see, take a few more steps.
7. After each step, pause and make sure you look around all over – on the ground, on tree trunks, on buildings and up high in the trees! Be sure not to count the same lizards twice!
8. Continue this process until either you cover all of the survey area (your yard, school grounds, or park), or the time reaches 15 minutes. Make sure you record the **end time** your survey.
9. After you have completed all surveys (morning, midday and evening) record all habitat data that you can find on the final page of this booklet. It is important that you do this *after* you look for lizards – if you do it *before* you may scare off the lizards!
10. CONGRATULATIONS – you have just contributed to our scientific research! Thank you very much for your time and effort. You are now a junior scientist.

Lizard Length Guide

