

Introduction: The biological ideas that you have been learning do not exist only in your textbook. There are entire communities of organisms living unnoticed all around us. Sometimes all you have to do is take time to look closely to understand them.

All organisms have similar needs and fit into the principles that you are learning. You will use your observation skills and try to explain the presence or absence of organisms in a study site. You will get a chance to see how biotic and abiotic factors affect the distribution and abundance of organisms.

Note: In this investigation you will be doing the work of a field biologist. Therefore it is important that you will follow the rules of field biology and do not harm, handle, or disturb any part of your study site. This could be harmful to the organism or to you.

Purpose: This investigation will sharpen your observation skills. You will learn about the job of a field biologist as you look for examples of biological principals in the field.

Day 1:

Procedure

1) Take **a few minutes while walking out** to observe the **general area along the sides of the asphalt path** and write your observations about the following [and more].

a. What season is it?

b. What time of day is it?

Day 1: Date _____

c. What is the weather like (wind, temp, light, moisture)?

d. What areas have a lot of green plants? Where do you see the dry, brown/tan plants?

e. Do you see any animals in the area (birds, insects, reptiles, humans)? What are they doing (perching, running, flying in a circle, obtaining food)?

2) Return to your **fall study area** (note: this will be your study area for the two days).

3) Now take **the remaining period** to observe your **original, fall study area** and write your observations "**field notes**" and a **map for two days outside (include the date)**:

Chaparral Laboratory – two days in *Spring*

Animals:

What animals are in your site? What type are they? Make a drawing or include photos of each kind of animal (**include common names**). Include those flying over your site.

- **Add all of these animals to your map.** Make a key or draw and label each one so that one can tell what each animal is.

What biotic and abiotic factors might explain the presence of these **animals**? Describe at least **four** factors.

1. 2.

3. 4.

The Rough Draft Map:

Make a map of the layout and the major landmarks in your study site. Include **ALL** physical features, plants, and animals. **Label or make a key** for the plants and animals. Show a compass.

Chaparral Laboratory – two days in *Spring*

Field Notes:

During the day, record notes on your observations in your study site.

- Include both **qualitative** and **quantitative** observations.
- Describe **interactions** between plants, between animals, and between plants and animals, or any organism and their environment.
- Make **comparisons and contrasts** between **your study site in the Fall and your study site now** (i.e., what is the same and what is different about the two seasons?).
- Discuss what you observe with your lab partners.

This will be stamped at the end of the day. **No stamp = no credit!

DAY 1 Date: _____

DAY 2 Date: _____