

Unit 1 Project: *Ecosystem Field Study*

Overview:

Using the activity outlined in section 2.10 (p.64) of the text, you will conduct a field study of an area of your choice. You will observe and collect data on both biotic and abiotic features and present your findings attractively on *Google Sites*.

Tasks:

1. Select a suitable area for your field study. It may be a local park, cottage property, backyard, or another ecosystem containing sufficient plant and animal species.
2. Visit your location and follow the steps listed on p. 64 and p. 65 under *Procedure (Part A and Part B)*. This will include collecting the following data:
 - a. *wind speed*
 - b. *temperature at ground level*
 - c. *temperature at 1.5 m*
 - d. *soil temperature*
 - e. *relative humidity*
 - f. *percent canopy cover estimate*
 - g. *description or photo of 15 species (plant or animal)*
3. Construct a food web containing all species identified in your field work. You should include at least 15 species of plants/animals.
4. Construct an energy pyramid containing all species identified in your field work. These species will be the same ones identified on your food web. Make sure to place each species in the appropriate trophic level.
5. Identify one likely human action that has caused a disruption to the ecosystem. Describe this disruption in terms of:
 - a. Which biotic features are affected
 - b. Which abiotic features are affected
 - c. How the food web relationships are affected

Final Product (each item is to be displayed on your *Google Site*)

1. Map of your area
2. Raw data on abiotic features (*wind speed, temperature at ground level, temperature at 1.5 m, temperature of soil, percent canopy cover, relative humidity*)
3. List of all identified plants and animals with either a description or photo (*be sure to include the proper scientific name of the organism in your description*).
4. Food Web
5. Energy Pyramid
6. Description of human-caused interference.