

Name _____ Period _____

Observe an Ecosystem



This is an ecosystem observation journal. Observe an ecosystem at least 10 different times, at least 15 minutes each time.

Write the date, time, and location of each observation. Write and draw what you notice. You can also include photos (optional).

If you observe the same location every time, you can look for changes over time. If you observe different locations, you can look for similarities and differences between them.

Observation 1 Date: _____ Time: _____
Location: _____

Describe and draw a sketch of your ecosystem. Label the different things in your drawing.

Obs. 1 (continued):

Obs. 10 Date: _____ Time: _____ Location: _____

Draw and make observations about your ecosystem today.

On the following pages, draw a large food web of the organisms in the ecosystem you are observing. Use arrows that are two different colors to show the flow of energy vs. the cycling of matter in your system.

Obs. 9 Continued:

What was the most surprising thing you learned from your observations?

What could you do to help this ecosystem become healthy?
Or healthier?

Obs. 2 Date: _____ Time: _____ Location: _____

Start a list of abiotic (non-living) factors of your ecosystem. You can add to this list as you continue your observations on future observations. If you observe in more than one location, you could make different lists for the different locations to compare.

Obs. 2 Continued

Draw and describe anything that you notice today. How do you think the abiotic factors you have listed affect the organisms in your ecosystem?

Obs. 9 Date: _____ Time: _____ Location: _____

Draw and make observations about your ecosystem today.

List 3 big questions you have about your ecosystem(s) now that you have spent a lot of time observing.

Obs. 8 Continued

Describe the biodiversity of your ecosystem. How many species did you observe in your ecosystem? Would you say your ecosystem is rich in biodiversity, or lacking? Why?

Obs. 3 Date: _____ Time: _____ Location: _____

Start a list of organisms (biotic factors) you observe. You can add to this list as you continue your observations on future observations. If you observe in more than one location, you could make different lists for the different locations to compare.

Obs. 3 Continued

Draw and describe anything that you notice today. Do you notice any of the organisms interacting with one another? Describe how they interact.

Obs. 8 Date: _____ Time: _____ Location: _____

Notice any changes, or things you didn't notice before. Draw and describe these new observations.

Obs. 4 Date: _____ Time: _____ Location: _____

Identify the following in your ecosystem. For each one, draw and describe the organisms in the category.

☐ Producers

☐ Consumers - Herbivores

☐ Consumers - Carnivores

☐ Decomposers

Obs. 4 (Continued)

Make drawings and observations about your ecosystem today.

Obs. 7 Date: _____ Time: _____ Location: _____

Think about the food chains that exist in your ecosystem. How do they fit together to make a food web? Draw a large food web of the organisms in your ecosystem. Your observations from day 4 might be helpful in thinking about this.

Obs. 6 Continued

Is your system in balance? What are the ways in which your system is in balance, and what are the ways it is out of balance? Is it missing any important components (decomposers, predators, etc)?

Obs. 5 Date: _____ Time: _____ Location: _____

Are there any biotic interactions from these categories that you have observed in your ecosystem? Or that you see evidence of in your ecosystem? As you see examples of each one, draw and describe it. Make a note of any that you think fall into more than one category.

☐ Pollinator-flower

☐ Mutualism

☐ Competition

☐ Parasite-host

☐ Predator-prey

☐ Other (anything that does not fit the above categories)

Obs. 5 Continued

Make drawings and observations about your ecosystem today.

Obs. 6 Date: _____ Time: _____ Location: _____

Describe and draw any changes to your ecosystem. Which are natural changes, and which were caused by humans? What are the human disturbances in your ecosystem?