### **Plot Study Data Collection Activity**

Grade: 4th



#### Location(s):

Any Outdoor Site

#### **General Materials:**

- Thermometers (for soil and air)
- Mapping a Study Site Lesson and Worksheets
- Plot Study Data Collection Charts
- Pencils, Clipboards
- Moisture meters (optional)
- Group Plot Study Data Collection Chart

#### Mapping a Study Site Materials:

- 1 compass
- 1 data board or large drawing pad
- 1 Black marking pen
- Flagging
- For each team of two to four:
  - o 1 map key on a large index card (5x8")
  - 1 set of marking pens or crayons or 1 bag of construction paper or contact paper symbols
  - o 1 section of the outline map
  - Glue stick or clear tape (for sticking construction paper symbols to maps)

#### **Activity:**

- Assign groups to plots.
- Have each group map their plot using Mapping a Study Site lesson.
- Next have students identify air temperature, soil temperature, types of plants, amount of moisture, types of animals using the "Plot Study Data Collection Chart". Students should look for examples of food chains and evidence of producers, consumers, and decomposers.
- After collecting data, gather as a group and record data on the Group Plot Study Data Collection Chart.
- Discuss questions:
  - 1. Which plot had the greatest number of plants on it? Which had the fewest?
  - 2. Which plot had the greatest number of animals on it? Which had the fewest?
  - 3. Which plot had the greatest variety of animals? Why?
  - 4. In what part of each plot were most animals found? Why?
  - 5. What similarities or differences are there among the plots where the least/most amount of organisms were found? Why might there be more of one organism in one plot than in another?
  - 6. What dominant species were found in all or most of the plots? Discuss possible reasons.
  - 7. Did any of the plots contain an "edge" where two or more different habitats meet (e.g. grass and shrub)? Did the plot contain more animals? Why or why not?
  - 8. Based on all the data collected, which plot seems to be the best wildlife habitat? Why?

Compiled by FRJUSD teachers and Spring Rivers Foundation.



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## Plot Study Data Collection Chart

Plot Number:						
Number of different types of plants:	Total number of plants except grasses:					
Number of different types of animals: Total number of animals:						
Soil moisture: Soil temperature:_	Air temperature:					
Evidence of food chain:						
Evidence of producer:						
Evidence of consumer(herbivore):						
Evidence of consumer (carnivore):						
Evidence of decomposer:						



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### **Group Plot Study Data Collection Chart**

Plot	Number	Total	Number	Total	Air	Soil	Soil
Number	of	number	of	number	temperature	temperature	moisture
	different	of plants	different	of			
	types of	(except	types of	animals			
	plants	grasses)	animals				
1							
1							
2							
3							
3							
4							
5							
6							

