

Lesson 4: Grassland Composition

Grassland Composition Survey

Objective: Determine the approximate plant composition of a grassland.

Materials and Equipment:

- Two plots (50 ft. x 50 ft.) of grassland
- Pencil and paper
- IML's *Crop and Grassland Plant Identification Manual*
or any other illustrated guide available
- Stick with pointed tip (for Procedure 2)

Procedure:

1. Identify two different plots of land that students can use to conduct a composition survey. If possible, the two plots should have different plant compositions for purposes of comparison.
2. Have half of the class do one plot and the other half do the other plot.

Procedure 1:

3. Demonstrate how to find the percentages of different plants in the grassland. Show students how to walk slowly in one direction for 50 steps. With each step, they should record names of the plants in front of their toes and keep a running tally of their number.
4. After the students have approximated the plant composition for their plot, have them answer key questions 1 and 2 on AS 1. Have students share these answers with the class.
5. In a class discussion, come up with an average for the plant compositions for each plot.
6. Have students answer key questions 3 and 4.

Procedure 2:

3. Explain to the students how to use a stick to find the percentages of different plants in the grassland. Have them take 10 steps in a random direction in the plot. They should then place the stick on the ground on end. Whatever plant the tip lands on should be recorded, and the total number of each of the plants the stick touches should be tallied in a systematic way. At least 10 to 20 determinations should be made.
4. After the students have approximated the plant composition for their plot, have them answer key questions 1 and 2 on AS 1. Have students share these answers with the class.
5. In a class discussion, come up with an average for the plant compositions for each plot.
6. Have students answer key questions 3 and 4.