Quick & Easy Habitat Education Activities
Monitoring Inspiration
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Description: Students consider how to determine if a habitat area is healthy, or if a restoration project is successful, and how this information might be gathered and shared with others. Students review suggested monitoring activities and develop a plan to set up monitoring activities for their plots. Students decide how they will share this information with others in the form of a report or presentation.

Objectives:
- Students understand that monitoring is a scientific technique intended to assess the success of a restoration project.
- Students develop a plan to implement monitoring activities for their plots.

Print Materials:
- Master: ‘Monitoring Activities Overview’, ‘Plot Monitoring Inspiration’

Teacher Supplied:
- Copy of ‘Monitoring Activities Overview’, ‘Plot Monitoring Inspiration’: 1 per plot team
- Drawing board/ marker (to record answers)
- Plot journals and pencil: 1 per student

Activity:
- Review, “What do we know about our habitat area, and the plots? (history, plant communities, successional stage, etc.)
- Ask students the following questions:
  - “What are signs that a restoration project is successful, or that a habitat area is healthy?” (plants are growing, wildlife have habitat, lots of butterflies and other insects, soil is healthy, people are appreciating it). List student’s answers on drawing board.
  - “What are signs that the restoration project is failing, or that a habitat area is unhealthy?” (plants aren’t thriving or die, not much wildlife, lots of invasive plants or animals, soil is unhealthy, people are not appreciating it (or causing harm).
- “How can we know this information about our plots?” (visit site and make careful observations over time).
- “How can we gather information to prove to others that the restoration is successful or failing, or that the habitat area is healthy or unhealthy?” (take ‘before and after’ pictures, look for evidence of wildlife, evaluate plants to show how well they are growing, identify plants that are non-native, test the soil, interview park visitors, etc). “How can we share this information with other people, such as a city council, or newspaper?” (write reports, make presentations, etc). List answers.
- State that, “Many of the things you are describing are called ‘monitoring activities’. Define ‘monitoring’ (see vocabulary). Taking ‘before and after’ photos is called ‘photographic monitoring’, looking for evidence of wildlife is called ‘wildlife monitoring’, measuring plant growth and evaluating plant species (native and non-native), is called ‘plant growth monitoring’.
- Ask students to consider different types of monitoring activities that they could implement in their plots and/or within the habitat area, and how they could use this data to share information about the habitat area. Break students into their plot teams and pass out the ‘Monitoring Activities Overview’, and ‘Plot Monitoring Inspiration’ form. Ask students to brainstorm how they might setup different monitoring activities for their plots and then fill out their ‘Plant Monitoring Inspiration’ form.
- As a group, review monitoring plans and determine which monitoring activities are realistic to implement. Ask students to plan how they will acquire the materials, set up the monitoring stations, develop a monitoring schedule, etc.
- Ask students to decide the method they would like to use to prove the success of restoration in their plots (i.e., a written report, presentation, newsletter/paper article, report to local community group, etc).
- Review as a group, and make decisions about how to proceed, create a schedule, assign responsibilities, etc.

Vocabulary
Monitor: to watch, keep track of, or check usually for a special purpose

Washington State EALRs
Science 2.1.1 Ask questions about organisms and events based on observations of the natural world. Develop a new question that can be investigated with the same materials and/or data as a given investigation. Recognize the question being answered in an investigation. 2.1.2 Understand how to plan and conduct simple field investigations. Make observations about characteristics or properties. Make predictions and give reasons for the predictions. Plan and conduct an observational investigation that collects information about characteristics or properties. Collect data using simple equipment and tools that extend the senses.
Communication 2: The student communicates ideas clearly and effectively. 2.1 Communicate clearly to a range of audiences for different purposes. 2.2 Develop content and ideas. 2.3 Use effective delivery.