
Team Flight: Fall Ecology Study Visit

Summary: Students will visit two of four habitat stations at Bayer Pittsburgh, or another Corporate Lands for Learning or suitable outdoor area, to investigate the habitat and birds that may live there. Students will work in teams using the Fall Visit Field Journals, generate questions, and prepare reports or presentations to the other teams so that each station's investigations are shared.

Objective: Students will learn what a habitat is through field investigation, classify the habitat according to the vegetation present, and observe birds that are using the habitat. Students will then infer why certain species prefer particular habitats.

Grades: Middle School

Subject: Science, botany, language, art

Skills: Research, communication, plant identification, team work

Materials: Fall field journals, binoculars, pencils, clipboards, stop watch, plant field guides, bird field guides (Golden Guides)

Time: September

Stations: meadow, forest, wetland, edge

Background

Habitat dictates what species of animals will be able to live within it. One of the major components of a habitat are the plant species, from trees and shrubs to grasses and flowers. In order to find a particular type of bird, biologists will look for the proper habitat for that species. Birds may fly away and hide, but the plants are always there. Knowing where to look is the most important first step. In this activity, teams will investigate the many diverse species of plants that grow within two of four stations. The name of the plant is not as important as the description and the value it may or may not have to wildlife. Students will also observe the birds present in each habitat. In spring, the teams will return to check changes to the habitat and vegetation as the birds return from migration and become active for the breeding season.

Activity

1. Each team will work together to characterize the dominant plant species in two of four habitat stations (forest, meadow, wetland, and edge) through observation. Teams should be assigned to their two stations, so that the entire class covers all four



stations. Teams should have their fall field journals for this note taking, as well as Golden Guides to Birds, Trees, and Plants, or similar field guides.

2. Upon quietly arriving at each station, listen and look for birds in the habitat study area for 15 minutes, while taking notes in the journal. Remember to look carefully and all around, as different birds prefer different areas. Note where they were seen, and their behavior in the journals.
3. In step 2, students will have 15-20 minutes to look at the habitat, identify plants and trees within it, find signs of wildlife, and predict what sorts of birds may call it home. Remember that the name of the plant is not as important as its characteristics such as ability to provide food or shelter. Describe and/or draw the plants under each section.
4. Lastly you will have 30 minutes total for discussion of findings, including changes to the habitat over the seasons and time, and it's affect on birds and other wildlife. What general type of habitat do they think this is (this may or may not be obvious)? Does it provide any sources of food for wildlife (berries, insects, rodents)? Does it provide shelter? For what? At the end of the discussion, students will generate "I wonder" questions about the habitat for possible further investigations.
5. Repeat the bird observation, habitat observation, and discussion period for the second station.
6. Back in the classroom, each team will be asked to prepare a report or a presentation to the entire class on one of their stations, with investigations into their "I wonder" questions and some of the interesting or important plant and animal species found within it. In this way, all students will learn about the four major habitats visited, even if their team did not personally visit the station.
7. In spring, the class may choose to return to the same stations to compare the effects of seasons on wildlife, as well as conduct any investigations generated by the initial visit.