
Noting Notable Features

Activity Overview

Students survey their schoolyard as the first step to learning about the characteristics and layout of the school property.

Objectives

Students will:

- Practice observation and investigative skills
- Survey and collect information about their school site
- Describe interactions and details about their school site

Subjects Covered

Science and Math

Grades

K through 12

Activity Time

1 hour on the school grounds, 3/4 hour discussion in the classroom

Season

Any

Materials

Clipboards, pencils (or colored pencils), Noting Notable Features handout, map of schoolyard showing property lines and building locations, and/or graph paper

State Standards

Math: Use reasoning abilities (A.4.1, A.8.1, A.12.1)

Communicate mathematical ideas (A.4.2), logical arguments (A.8.2, A.12.2)

Use vocabulary, symbols, notation (A.4.4)

Use reasoning abilities (A.8.1)

Analyze non-routine problems (A.8.3)

Use reason and logic (A.12.1)

Apply proportional thinking (B.8.5)

Use coordinate systems to find map locations (C.4.4)

Analyze properties and relationships

Background

Before students make any decisions about restoring a native ecosystem, planting wildlife habitat, or developing native gardens, they need to understand the characteristics of their schoolyard. This first introduction to learning about the school ground will begin to help students envision and plan all the possibilities their school grounds can offer as they transform their school ground into a healthy, sustainable, earth-friendly landscape.

Pre-activity Preparations

- Divide the schoolyard into sections. Study one section at a time during the activity.
- Make a copy of an existing map showing the location of buildings, drives, and property lines. Locate north, east, south, and west on the map. Create a transparency of the schoolyard map for focusing discussions after the activity. Using a map drawn to scale for the purpose of this activity is not necessary. Make enough copies of the map for each student or student groups.

Activity Description

This activity will help you to get acquainted with your schoolyard. It is the first step in understanding the natural and cultural make-up of your schoolyard environment and in planning your restoration projects. You will walk the school grounds to identify and locate human-related features, biological, and physical characteristics unique to the school. Locate and use symbols on your schoolyard map to identify the features listed in the "Noting Notable Features" hand out.

In the classroom draw the physical, human-related, and biological features on the overhead transparency. Locate and discuss the following:

- Identify patterns in water movement, foot traffic, and sun and shade.
- Locate hard surfaces (impervious), such as parking lots and sidewalks, where water runs off. Next locate porous surfaces (pervious) such as planted beds or lawn areas where water may soak in or infiltrate the ground.
- Predict the potentially coolest and warmest areas on the school grounds.
- Identify areas of high use and low use based on your observations.
- Begin to identify possible spaces for restorations. Identify areas that could not be restoration plots.
- Begin to consider what types of communities may be suitable for your school grounds.
- Considering the views, what areas you would enhance (direct atten-

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of figures (C.12.1)

Demonstrate understanding of measurement (D.4.2)

Select & use tools to determine measurements directly (D.12.2)

Science:

Find connections among living and non-living things (F.4.4)

Explain survival and population growth of species (F.8.9)

Investigate cooperation & competition (F.12.7)

Infer changes in ecosystems (F.12.8)

tion to) or what areas you might hide?

- Identify the wildlife you found and where you observed it on your school yard. Do any patterns emerge where you sighted wildlife?

Extensions

- Survey the school grounds for building a potential rain garden site. See Earth Partnership for Schools activity, "Noting Notable features for Rain Gardens."

Discuss the following questions:

- How do you feel when you are on school grounds?
- Do you feel comfortable, welcome/unwelcome, inspired/uninspired, protected/exposed, free/restricted?
- Where are your favorite/least favorite areas, and why?
- What would you like to change about your school grounds? What would you like to stay the same?
- How do you envision your school looking in five years or ten years?

Additional Resources

- Ripple, Karen, and Edgar W. Garbisch. (2000). POW! The planning of wetlands: Build a schoolyard wetland habitat with your students. St. Michaels, MD: Environmental Concern Inc.
- Wyzga, Marilyn. (1993). Homes for wildlife: A planning guide for habitat enhancement on school grounds. New Hampshire Fish and Game Department.

Assessments

- Describe the topography of your schoolyard and how it affects the flow of water during a heavy rainfall.
- Where did you see wildlife on your school ground? How was it interacting with its environment? Given your observations, how could you attract more wildlife to your school?
- Describe a cause and effect relationship on your school ground.

Noting Notable Features Handout

Directions: Use a map of your school site to note the following physical, human-related, and biological characteristics. Create a key and designate symbols to mark the various characteristics on your map.

Physical Characteristics

- **Topography:**
 - Find **high spots** in the schoolyard. Determine the highest spot.
 - Find **low spots**. Determine the lowest spot.
 - Locate **steep slopes**.
- **Water:**
 - Designate any areas that are obvious **drainage** or **waterways**.
 - Find any spots that seem to have **wet soil** now or at some time of the year.
 - Find spots that seem especially **dry**.
- **Prevailing wind:** Determine wind direction.
 - Winter winds** are from the northwest.
 - Summer winds** are from the southwest.
- **Sunny/Shady areas:**
 - Summer:**
 - Sun:** Designate areas that receive the most sun.
 - Shade:** Designate areas that receive the most shade from trees and the school.
 - Winter:**
 - Sun:** Designate areas that receive the most sun.
 - Shade:** Designate areas that receive the most shade.

Human-Related Features

- **Playground structures:** Define areas where students play on structures or in open areas.
- **Other structures:** Indicate locations of bike racks, signs, benches, picnic tables, and fences.
- **Athletic fields:** Identify the athletic fields.
- **Foot traffic:** Determine where people walk that is NOT a designated sidewalk.
- **Utility features:** Locate obvious utility lines above or below ground.
- **Views:**
 - Classroom views:** Take note of the views from the windows.
 - Poor views:** Look for views off the property that you would rather not see.
 - Good views:** Look for views that are important or pleasant to see. (note what views are)

Biological Characteristics

- **Trees and shrubs:** Identify and/or locate trees and shrubs.
 - Look for trees, shrubs, and plants that provide food (berries, nuts, or seeds) and cover for wildlife.
- **Wildlife:** Look for wildlife or signs of wildlife on the school grounds. Indicate what you see and where.
- **Groundcover:** Locate different groundcovers such as lawn grass, flowerbeds, unmowed areas (or old fields), woodland groundcovers, native plantings, garden areas, etc.

Note Other Important Observations
