

Osborn 5th Grade Field Day Summary—Winter 2009-10

Winter Weather in Washington—December 16 & 17

- Climatograms of Washington cities—east and west of the Cascade Mountains (inside 1/2 class)

Students studied a climatogram of Leavenworth, showing yearly averages for precipitation and temperature. Each student located his/her assigned “eastside” or “westside” city on a Washington road map and precipitation map, used real climate data to construct a climatogram for the city, and partnered with another student to compare “eastside” to “westside” climate and weather.

- Snowshoe nature walk along the river & characteristics of snow (outside 1/2 class)

Students took a 35-minute snowshoe walk to look for animal signs and discuss winter survival strategies. They returned to the Barn deck to melt snow to determine the amount of liquid water in 1000 mL of snow.

What’s Out There in Winter?—January 5 & 7

- Dichotomous key review (inside whole class)—30 minutes

Students discussed similarities and differences among a bird and seven mammals common to the West to construct a dichotomous key—a skill that they first learned at BBR as 4th graders.

- Snow pits & evergreen keys (outside ½ class)—45 minutes

Students dug snow pits to discover snow layers, examine the crystal structure of snowflakes, determine temperature variations, and study how animals survive winter below the snowpack. Students also used a dichotomous key to identify six species of evergreen trees at Barn Beach Reserve.

- Planet Earth (inside ½ class)—45 minutes

Students gathered around a globe in a darkened room to study longitude, latitude, rotation, tilt, and Earth’s orbit around the sun, in order to learn about day/night, time zones, and seasons. Pairs of students did a mini-lab titled “Gases in Earth’s Atmosphere and Global Warming.”

Living and Nonliving Factors in Ecosystems—January 19 & 21

- **Earth’s major land ecosystems—biomes— (inside 1/3 class)**

Small teacher-selected groups of students did a guided and leveled reading about deserts, grasslands, temperate forests, and tropical rain forests from “Amazing Plants and Animals” and studied climatograms from cities on six different continents.

- **Constructing food webs of Washington’s shrub-steppe ecosystem (inside 1/3 class)**

Small groups of students used a colorful poster of the shrub-steppe ecosystem to review its characteristics. Using a unique set of shrub-steppe animal cards and a description about who eats what, they constructed a food web and drew a rough draft (for later classroom revision and discussion) on poster paper.

- **Scavenger hunt with digital cameras (outside 1/3 class)**

In small groups, students compared dog, cat, and coyote tracks, and photographed leaf buds, pine cones, maple seeds, wolf and pipe lichen, deer scat and tracks, and any live animals that they could find, including Stellar’s jays, chickadees, and crows.

Investigating and Experiencing Ecosystems—February 2 & 4

- **Energy flows and matter cycles (inside whole class)—40 minutes**

Students viewed an old-fashioned slide show to review food webs and learn how energy moves through ecosystems.

- **The carbon cycle (inside ½ class)—45 minutes**

Students learned about the cycling of carbon dioxide in photosynthesis and respiration. They identified variables and made predictions, observations, and conclusions about an experimental set-up using a water plant (*Elodea*), aquatic snails, and the pH indicator, bromthymol blue.

- **Navigating with map and compass (outside ½ class)—45 minutes**

Students predicted where Ski Hill and the Hatchery are and then used a map and compass to check for accuracy. They also used compasses and metric tapes to navigate in three different directions to find “buried treasure” in the snow.