

Introduction to Ecology Week 2 Class Overview & Assignments

Friday, September 2, 2016, 1:45-3:15 PM

And God gave Solomon wisdom and understanding beyond measure, and breadth of mind like the sand on the seashore, so that Solomon's wisdom surpassed the wisdom of all the people of the east and all the wisdom of Egypt. For he was wiser than all other men, wiser than Ethan the Ezrahite, and Heman, Calcol, and Darda, the sons of Mahol, and his fame was in all the surrounding nations. He also spoke 3,000 proverbs, and his songs were 1,005. He spoke of trees, from the cedar that is in Lebanon to the hyssop that grows out of the wall. He spoke also of beasts, and of birds, and of reptiles, and of fish. And people of all nations came to hear the wisdom of Solomon, and from all the kings of the earth, who had heard of his wisdom. - 1 Kings 4:33

Class:

- Prayer
- Review birds
- Continue burrowing mammal discussion (fossorial)
- Hand out CE, pocket gopher map (pg. 7-9)
- Outside – continue mammal discussion, check traps

Mammal Resources:

- <http://imnh.isu.edu/digitalatlas/bio/mammal/mamfram.htm>
 - <http://www.cals.uidaho.edu/edComm/pdf/PNW/PNW0627.pdf>
 - Who could it be?
 - Ground squirrel or mole; show pics; could it be these? The holes are not big enough. We have no moles in this area. We have one ground squirrel – Columbian -
 - How about vole or pocket gopher? We have 7 native voles and 3 pocket gophers.
- Fossorial mammal journal entry:
 - Draw burrow/colony, habitat, individual if possible
 - Review trees from last week

Assignments:

- Continue to learn bird list: <https://www.allaboutbirds.org/guide>
 - Vocabulary words: memorize these words and their definitions (underline portions)
- Palouse prairie** - The region of southeastern Washington and adjacent Idaho that has rolling hills on deep soils is known as the Palouse. On its eastern border, this region is bounded by the forests of northern Idaho, and the Snake River forms its southern boundary. To the north and west, the Palouse is bounded by areas of flat terrain and shallow soils, places where the deep soils were scoured away by ice or water during past glaciations or floods. Some scientists use a more inclusive definition of the Palouse; they consider areas to the west and south and even parts of northwestern Montana to be part of the Palouse. One hundred fifty years ago the typical vegetation throughout the Palouse consisted of perennial bunchgrasses, which grew in tufts or clumps, accompanied by many different kinds of "wildflowers." Together, the grasses and

flowers gave the appearance (in spring and early summer at least) of a lush meadow, or Palouse Prairie. This type of vegetation occurs in relatively moist environments, where the climate is almost wet enough to support the growth of trees. The principal bunchgrasses of Palouse meadows were Idaho fescue, bluebunch wheatgrass, and prairie junegrass. Short shrubs, especially snowberry and wild rose, were common. Mosses and lichens were an important but inconspicuous feature

- b. **Latah County** – Established May 14, 1888 with its county seat at Moscow. This area was first formed as Lah-Toh County in 1864 with Coeur d'Alene as the county seat, in 1867 the name Lah-Toh was dropped when the area was placed in Nez Perce County. In 1888 the U. S. Congress created the county as we know it, the 16th Idaho county and the only Idaho county created by Congress. Named for Latah Creek, which drains the northwest corner. The name is Nez Perce and means "the place of pine trees and pestle," because the Indians found stones here suitable for pulverizing camas roots and shade under the pine trees in which to work; <http://imnh.isu.edu/digitalatlas/counties/latah/latah.htm>
- c. **Ecology** – "The word ecology is derived from the Greek oikos, meaning household, and logos meaning study. Thus the study of the environmental house includes all the organisms in it and all the functional processes that make the house habitable. Literally, then, ecology is the study of life at home with emphasis on 'the totality or pattern of relations between organisms and their environment.' "
- From Odum, Fundamentals of Ecology, 5th edition; inset quote from the Merriam Webster Collegiate Dictionary, 10th edition
 -
- d. **Biotic/abiotic** – abiotic = non-living; biotic = living; both are components of ecosystems
- e. **Niche** - The ecological niche of an organism depends not only on where it lives but also on what it does. By analogy, it may be said that the habitat is the organism's "address", and the niche is its "profession", biologically speaking. From - Odum – Fundamentals of Ecology – W B Saunders 1959. More on niches: http://purchon.com/ecology/?page_id=27
- f. **Community** - In ecology, a community is an assemblage or association of populations of two or more different species occupying the same geographical area and in a particular time.
- Begin learning trees/shrubs list: <https://www.arborday.org/trees/whatTree/>

Trees/shrubs:

- Quaking aspen
- Hawthorne
- Snowberry
- Red-osier dogwood

- Ponderosa pine
- Nine-bark
- Oceanspray
- Nootka rose
- Willow species
- Serviceberry
- Douglas fir
- Mountain ash
- Elderberry

Forbs

- Yarrow
- Mullein
- Goldenrod
- Western mountain aster
- Teasel
- Lupine
- Prairie smoke
- Indian paintbrush
- Pussytoes
- Douglas' Spirea
- Lomatium
- Sticky purple geranium
- Curly dock
- Camas