

Issues, strategies and priorities for conservation and restoration in the Palouse prairie: applications of landscape ecology

Field Trip April 14, 2005

FOR 527: LANDSCAPE ECOLOGY OF FORESTS AND RANGELANDS

FIELD TRIP OBJECTIVES AND SCHEDULE

On our field trip, scheduled for Thursday, April 14, 2005 from 1:30-5:30 PM, we will explore the ecology of the Palouse. We'll talk about many of conservation issues in the Palouse, including soil erosion, wildlife habitat, water quality, open space, housing development on productive farmland, weeds, and loss and fragmentation of wetlands, remnant prairies and open ponderosa pine forests. We will also discuss a variety of conservation strategies in the Palouse. These include land use regulation, agricultural programs (CRP), agricultural practices, restoration efforts by organizations and individual landowners, conservation easements, establishment of parks and reserves, and others.

We will leave promptly at 1:30 PM from the gravel parking lot north and east of the intersection of Line and Sixth Streets. We will travel in UI vehicles. Come prepared to walk through fields and steep terrain, and dressed for wind as some of the sites are quite exposed. This required class field trip will take place whether it is sunny or rainy. We will return to campus by 5:30 pm.

DISCUSSION QUESTIONS:

1. What have been the major trends in vegetation, soils, and human population in the Palouse in the last century? To what degree have these been driven by changes in agricultural technology?
2. Strategies for conservation in the Palouse include land use regulation, agricultural programs (CRP), wildlife habitat and riparian or stream improvement programs, water quality regulations, agricultural practices, restoration efforts by organizations and individual landowners, conservation easements, establishment of parks and reserves, and others. What strategies do you think will be effective in the Palouse?
3. What can landscape ecology offer to strengthen and improve conservation strategies in the Palouse?

READINGS:

Black, A. E., E. Strand, R. G. Wright, J. M. Scott, P. Morgan and C. Watson. 1998. Land use history at multiple scales: implications for conservation planning. *Landscape and Urban Planning* 43:49-63.

Palouse Prairie Foundation. 2004. The Palouse Prairie. Available Online.

<http://palouseprairie.org/ppfdescription.html>

Idaho Fish and Game. 2003. Wetlands on the Palouse. Available Online

<http://fishandgame.idaho.gov/wildlife/wetlands/palouse.cfm>. April 11, 2005.

Please read the general description about Palouse wetlands, you may read further about camas meadows and other parts of the web site if you wish.

ADDITIONAL REFERENCES THAT MAY BE OF INTEREST:

- Black A.E., E. Strand, P. Morgan, J.M. Scott, R.G. Wright, and C. Watson. 1998. Biodiversity and land-use history of the Palouse bioregion: Pre-European to present. Pages 85-89 In: T.D. Sisk, editor, Perspectives on the land use history of North America: a context for understanding our changing environment. Biological Science Report USGS/BRD/BSR-1998-0003. Washington, D.C.:USDI, US Geological Survey, Biological Resources Division. Also available:
<http://biology.usgs.gov/luhna/chap10.html>
- Caldwell, H. H. 1961. The Palouse in diverse disciplines. Northwest Science 35:115-121
- Daubenmire, R. F. 1970. Steppe vegetation of Washington. Tech. Bull. 62. Wash. Agric. Exper. Sta., Wash. St. Univ., Pullman. 89 pp. + appendices.
- Environmental Protection Agency. 1996. The 1996 303(D) list for the state of Idaho, Clearwater Basin. U.S. Environmental Protection Agency, Region 10.
- Jennings, M.D., B.C. Miller, D.F. Bezdicek, and D. Granastein. 1990. Sustainability of dryland cropping in the Palouse: An historical view. Journal of Soil and Water Conservation 45: 75-80.
- Johnson, M.P. 1999. Estimating the pre-European settlement occurrence of ponderosa pine in Latah County, Idaho. M.S. Thesis, University of Idaho. 59 p.
- Kaiser, V. G. 1961. Historical land use and erosion in the Palouse—a reappraisal. Northwest Science 35:139-153.
- Lichthardt, J. and R.K. Moseley. 1997. Status and conservation of the Palouse grassland in Idaho. Boise, ID: Idaho Department of Fish and Game.
- Noss, R.G., E.T. LaRoe, and J.M. Scott. 1995. Endangered ecosystems of the United States: a preliminary assessment of loss and degradation. Biological Report 28. Washington, DC: USDI National Biological Service.
- Palouse Land Trust. <http://www.palouselandtrust.org/>. April 19, 2003.
- Palouse Prairie Foundation <http://www.palouseprairie.org/>, April 19, 2003.
- PRDC. 2003. Press Release. Paradise Ridge Defense Coalition. Available: http://www.paradise-ridge-defense.org/pr_2003_03_31.html, April 19, 2003.
- Ratti, J.T., and J.M. Scott. 1991. Agricultural impacts on wildlife: problem review and restoration needs. Environ. Prof. 13: 263-274.
- Servheen, G., P. Morgan, B. Weddell, P. Gessler, and P. McDaniel. 2002. Wetlands of the Palouse prairie: Historical extent and plant composition. Final Report, EPA Wetlands Grant No. CD-980545-01-0, June 30, 2002. Available Online:
<<http://www2.state.id.us/fishgame/info/programsinfo/wetlands/ProjectReport.pdf>>
- Tisdale, E.W. 1961. Ecologic changes in the Palouse. Northwest Sci. 35(4): 134-138.
- Victor, E. 1935. Some effects of cultivation on stream history and topography of the Palouse Region. Northwest Sci. 9(3):18-19.
- Weddell, B. 2002. Historical Vegetation of Seasonally Moist Depressions in the South Fork of the Palouse River Watershed. Unpublished report. Available Online:
http://www2.state.id.us/fishgame/info/programsinfo/wetlands/palouse_plants.pdf
- Weddell, B. 2002. The causes and consequences of loss of a culturally significant resource: seasonally moist meadows in the Palouse region . Available Online:
http://www2.state.id.us/fishgame/info/programsinfo/wetlands/palouse_camass.pdf
- U.S. Department of Agriculture. 1978. Palouse cooperative River Basin Study. USDA, Soil Conservation Service.