



# NCSR NEWS

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**NORTHWEST CENTER FOR  
SUSTAINABLE RESOURCES**



## Bald Eagle No longer Considered Threatened

by Lester W. Reed, Jr., Ph.D.

For over 30 years the American Bald Eagle – the treasured symbol of the U.S.A. – has been protected as either endangered, or most recently, as threatened under the Endangered Species Act. Its delisting this year has been hailed as proof that conservation efforts work. “The eagle has returned,” Secretary of the Interior, Dirk Kempthorne told government officials, wildlife conservationists and journalists at a ceremony held on the steps of the Jefferson Memorial in Washington. “Today is an opportunity to celebrate and draw inspiration,” Kempthorne added.



Not all agree. Conservation groups are concerned that the removal of Endangered Species protection afforded the eagle will lead to loss of habitat and a return to diminishing

populations, particularly in the lower 48 states. Although federal officials point out that the Bald Eagle remains protected under The Bald and Golden Eagle Protection Act, conservationists emphasize the lack of habitat protection is a major danger. The Act focus on prohibiting anyone without a permit from “taking” bald or golden eagles including their parts, nests and eggs. Its definition of “take” includes: pursuit, shooting, shooting at, poisoning, wounding, killing, capturing, trapping, collecting, molesting and disturbing but not removal of habitat often associated with land development.

Recovery of the bald eagle has been hailed as proof of the effectiveness of the Endangered Species Act, however scientists point out there is some question if the Act will have equal implications for the other 1300 listed species. A major factor in the decline of the eagle was the use of DDT, which entered the eagles’ food chain and dramatically increased egg mortality. The banning of DDT may be the main factor in the recovery although protection of eagle habitat certainly was a significant contribution to recovery.

Developing a report on the bald eagle issue can be a valuable teaching/learning strategy. As the report’s focus, faculty can have students review the causes of the bald eagle decline, the factors in their recovery, the implications of delisting, and how this information can be used to predict the future for species listed under the Endangered Species Act. The research for the report can also help students to identify the science behind the data and their conclusions, as well as identify biases that influence the viewpoints presented by various constituent groups.

## Sea Lions Go – Controversy Stays

By Lester W. Reed, Jr. Ph.D.



Although the 2007 crop of salmon-eating California Sea Lions is long gone from the Bonneville Dam, the controversy over how to control these “predatory sea lions munching on federally protected salmon and steelhead” continues. An 18-person panel is reviewing a request by three Northwest states to kill the protected sea lions on their return in 2008. The request for “lethal removal” is based on the estimate by federal biologists that the sea lions killed 3,500 fish or 4% of the spawning run during the spring season. Dennis Richey, a panel member representing sport fishing interests, stated that “Frankly, I expect the dissenting opinions to be few and far between because this is out in the public purview. There’s a whole lot of people out there who see the sea lions as needing some kind of control.” In an insight into the government language the panel’s official title is Pinniped-Fishery Interaction Task Force. (From the *Statesman Journal*, Salem, Oregon, Aug. 8, 2007.) Several teaching points are available from the latest sea lion – salmon issue: 1. The bias expressed by the *Statesman Journal* in referring to predatory sea lions munching on federally protected salmon; and 2. The assumption by a sport fishing panel member that the issue is already decided in favor of the salmon.

## Coming Soon

NCSR is developing five new instructional modules addressing aspects of wildfires from their ecological role to how they are reported in the media. These modules will be available this winter on the NCSR website and in hardcopy. Below are their titles and a brief description of each.

### An Evaluation of Media Coverage of Wildfire Issues:

This module is designed to provide students the skills to objectively evaluate articles published on wildfire-related issues such as salvage logging, wildfire impacts and the Healthy Forest Restoration Act.

### The Ecological Role of Wildfire:

A lecture-based module designed to introduce the ecological role of wildfire to students in a broad range of disciplines. Topics covered include the role of wildfire in reducing the fuels, nutrient input into soils, control of insect pests and tree pathogens and maintaining species diversity.

### Anatomy of a Wildfire:

This module presents a major case study designed to introduce the basics of wildfire behavior, fire regimes, and management strategies.

### Post-wildfire (Salvage) Logging – the Controversy:

This module examines the contentious issue of whether or not to remove trees after a wildfire and presents our current state of knowledge on salvage logging.

### To Thin, or Not To Thin:

Using a case study format, this module provides an introduction to the issue thinning of over-stocked forests as a potentially useful tool that provides logs for the timber economy while reducing the probability of catastrophic wildfire.

# The Millennium Ecosystem Assessment as a Resource

by Wynn W. Cudmore, PhD

Instructors in environmental science and natural resource courses often seek an unbiased, science-based source of information that accurately portrays ecosystem conditions on a global scale. The Millennium Ecosystem Assessment (MA), requested by the United Nations Secretary-General in 2000 and released in March 2005, is just such a resource. Much like the recently released report on global climate change by the International Panel on Climate Change, the MA synthesizes the findings of existing research, rather than conducting original research. The results were compiled by 1300 scientists in 95 countries representing a consensus view of the condition and trends of the world's ecosystems and the goods and services they provide such as forest products, clean water, flood control and food. The MA identifies where broad agreement exists on their findings as well as those areas where additional research is needed.

The Millennium Ecosystem Assessment findings are published as five technical volumes and six synthesis reports each with a different focus.



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These reports may be downloaded from the MA web site ([www.millenniumassessment.org](http://www.millenniumassessment.org)) or print copies can be ordered. There is also a “popularized version” of the report ([www.greenfacts.org/en/ecosystems](http://www.greenfacts.org/en/ecosystems)) that presents major MA findings for a general audience using non-technical language. In addition to the reports themselves, slide presentations that illustrate ecosystem conditions and trends may be downloaded for use in classroom presentations, as long as the MA is credited.

Among the major findings of the MA are that in recent history, humans have changed ecosystems more rapidly and extensively than for any comparable period of time in history. Ecosystem degradation has been driven primarily by growing demands for food, water, timber, fiber and fuel resulting in a substantial loss of biodiversity. The assessment suggests that these trends can be reversed, but only with significant changes in policy and practice.

The reports generated by the MA provide instructors with a rich source of information on environmental trends that can be mined for classroom use. Graphs and other figures that illustrate changes in ecosystem characteristics over time should be particularly useful. One graph, for example, documents the decline of Atlantic cod populations in the nearshore marine ecosystems off of Newfoundland. Another figure summarizes biome conditions, drivers and trajectories of change of those drivers providing a useful supplement to the coverage of major terrestrial and aquatic biomes on Earth. The MA would also be a useful supplement to NCSR's *Human Impacts* module, which illustrates environmental change using comparative satellite imagery.

The primary goal of the MA was to inform decision-makers as environmental policies are established across the globe. An informed public, including our students, would seem to be a prerequisite for guiding changes that improve the condition of the Earth's ecosystems.



## Fire Ecology Institute a Success

Twelve faculty from nine states and Canada attended this year's professional development institute focused on the role of fire in forest ecosystems. The institute, led by NCSR's Principal Investigator Wynn Cudmore, featured presentations by Forest Service scientists. The institute included a day-long field visit guided by Oregon State University and Forest Service scientists of the 2003 B&B complex fire which burned over 94,000 acres in Central Oregon. The tour allowed participants to observe first-hand the impact of a variety of fire regimes and regeneration strategies. As one participant summed up the institute experience:

*Wow! A lot of info. I need to go home and look at in detail to see what I can incorporate into my class. This presentation will make me rethink/change a large portion of my course on fire ecology.*

NCSR's next faculty development institute is planned for summer 2008 and will focus on adaptation strategies for the Center's curriculum products.



## 2008 Summer Faculty Institute

NCSR will conduct a one week faculty professional development institute July 14 to 18, 2007. The Institute will be held at Chemeketa Community College's campus in Salem, Oregon and focus on adaptation of new NCSR natural resource curriculum materials. The Institute will be limited to 20 participants. Participants will receive a stipend for attending as well as logistical support. Mark your calendar to check our website [www.ncsr.org](http://www.ncsr.org) in February 2008 for details and the application procedure for this stellar professional development opportunity.

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