

Pacific Northwest CESU and Rocky Mountains CESU Joint Managers Committee Meeting & Symposium Notes

**Host: Washington State University
Pullman, WA
June 9 & 10, 2003**

Monday, June 9, 2003

Cooperative Ecosystem Studies Units Overview

Cooperative Ecosystem Studies Units (CESUs) provide research, technical assistance and education to federal land management, environmental and research agencies and their partners. Their broad scope includes the biological, physical, social, and cultural sciences needed to address natural and cultural resource management issues at multiple scales and in an ecosystem context. Each CESU is composed of federal agencies, a host university, and partner institutions. Cooperative and Joint Venture agreements allow each of the participating federal agencies to efficiently transfer funds and duty-station employees at university partners while maintaining responsibility for agency-sponsored activities within CESUs. CESUs are organized around biogeographic areas ([a map is available on the CESU website](#)), and linked together in the CESU Network.

The CESU Network has the following objectives:

- provide resource managers with high-quality scientific research, technical assistance and education,
- deliver research and technical assistance that is timely, relevant to resource managers, and needed to develop and implement sound adaptive management approaches,
- ensure the independence and objectivity of research,
- create and maintain effective partnerships among the federal agencies and universities to share resources and expertise,
- take full advantage of university resources while benefiting faculty and students,
- encourage professional development of federal scientists, and
- manage federal resources effectively.

Federal agencies participate in the CESU Network through a Memorandum of Understanding (MOU) and by joining individual CESUs. Some federal agencies have duty-stationed employees at CESUs. The CESU Network is coordinated by a CESU Council that includes representatives of the federal agency partners. The CESU Council meets regularly.

Current Status

Thirteen federal agencies participate in the CESU Network, including the Bureau of Land Management, Bureau of Reclamation, US Fish and Wildlife Service, US Geological Survey, National Park Service, Agricultural Research Service, USDA Forest Service, Natural Resources

Conservation Service, National Marine Fisheries Service, Department of Defense, Department of Energy, Environmental Protection Agency, and National Aeronautics and Space Administration.

Since 1999, twelve CESUs have been competitively established in the following biogeographic areas: Chesapeake Watershed, Colorado Plateau, Desert Southwest, Great Basin, Great Lakes-Northern Forest, Great Plains, Gulf Coast, North Atlantic Coast, Pacific Northwest (including Southeast Alaska), Rocky Mountains, South Florida/Caribbean, and Southern Appalachian Mountains.

A total of 95 universities (including 18 minority institutions) and 24 state, tribal and non-governmental partners participate in 12 CESUs; 45 states and territories are represented.

For a map of the CESU Network, please see <http://www.cesu.org/cesu/maps/maps.html>

Rocky Mountains CESU <http://www.forestry.umt.edu/research/cesu/>

The Rocky Mountain-Cooperative Ecosystem Studies Unit was founded in June 1999 as a partnership between six Rocky Mountain universities and four federal agencies. The following are members of the RM-CESU: The University of Montana-host; University of Idaho College of Natural Resources; Montana State University, Salish Kootenai College, Utah State University College of Natural Resources; Washington State University Department of Natural Resource Sciences; USDA Forest Service; USDI Bureau of Land Management, National Park Service, and Geological Survey. Since its inception, the RM-CESU has added the University of Wyoming and the University of Colorado at Boulder and Denver, and just voted to add the Environmental Protection Agency Region 8.

Mission: The mission of the Rocky Mountain-Cooperative Ecosystem Studies Unit is to improve the scientific base for managing ecosystems in the rapidly changing social, cultural, and environmental landscape of the Rocky Mountain Region, and to extend its expertise to national issues where appropriate.

Themes:

- Understanding ecosystem and social change
- Improving university and agency interaction and collaboration
- Enhancing dialogue between and among scientists and managers
- Understanding, addressing, and education about the national importance of the wild Rockies and wilderness
- Assisting with the training of effective land managers

In the first few year of operation the RM-CESU has facilitated 219 research, technical assistance, and education projects totaling over \$10.3 million dollars. A few examples include:

- Workshop on the remote delivery of biologics to wildlife
- Research and technical assistance with archeological inventories
- Student internships and graduate research with federal land agencies

- Technical assistance evaluating wildlife response to winter human use

Pacific Northwest CESU <http://www.cfr.washington.edu/research.cesu/index.asp>

The Pacific Northwest Cooperative Ecosystems Studies Unit (PNW CESU) is a cooperative venture between 12 leading academic institutions in the Pacific Northwest region, one state agency and 7 Federal land management and natural resource research organizations. The University of Washington serves as host to the PNW CESU. Other partners include: U.S. Fish and Wildlife Service, National Park Service, U.S. Geological Survey, Bureau of Reclamation, U.S. Forest Service, Bureau of Land Management, Environmental Protection Agency, U.S. Marine Fisheries (membership pending 2003) University of Alaska – Anchorage University of Alaska – Southeast, University Of British Columbia, Heritage College, University of Idaho, Oregon State University, University of Oregon, Tuskegee University, University of Vermont, University of Washington, Washington State University, Western Washington University, and the Alaska Department of Fish and Game.

Mission: The Pacific Northwest Cooperative Ecosystem Studies Unit (CESU) is a partnership for research, technical assistance and education to enhance understanding and management of natural and cultural resources.

PNW CESU projects involve the physical, biological, social and cultural sciences to address complex social and natural resource management issues such as

- Restoring at-risk ecosystems
- Identifying subsistence and other traditional uses of federal lands by Native Americans and residents of rural communities
- Monitoring impacts from visitor and recreational use
- Developing strategies for conserving bio-diversity
- Evaluating impacts to threatened and endangered species
- Developing air and water quality measurement models

Since beginning in October 2000, over 83 projects have been facilitated through the PNW CESU Cooperative Agreement totaling over \$3.5 million dollars.

How do we get our partners involved or more so?

Identifying Impediments to Participation

- Hidden activities- participation may not be reflected in the numbers
- RMRS and USGS also science providers, but CESU agreement does not necessarily show their contributions
- Shrinking budgets and staff has reduced capacity and traditional relationships win-out. The CESUs are a new way of doing business
- Contracting staff misunderstanding of how system works- not a grant or a contract, but a cooperative agreement

- Unlike the NPS, other agency partners have not benefited from appropriated CESU start-up funds or host university posted CESU Research Coordinators.

Solutions to Impediments

- Hold workshops/courses for contracting personnel on how the CESU agreement works
- Show collaboration more boldly- identify all partners associated with a project, not just the money trail
- Identify what is being done now that would not be possible without CESUs. Example: Technical assistance projects and collaborative multi agency projects
- The NFS can only enter into agreements for specific things. They're free to use CESUs for technical assistance and education, but not for research. Only the R&D part of the Forest Service can obligate research funds. Therefore, more opportunities for technical assistance and education would increase the Forest Service's involvement.
- Universities have dispersed faculty and programs; one way to connect with them is to have site visits/outreach trips.
- Could use a "research catalog" from each agency that would inform campuses not just about the research needs of the federal agencies, but also to let them know what "resources" the agencies have (e.g. housing, free camping, library of Chronic wasting disease tissues and other items of benefit to researchers).
- Need for "contacts" on campuses to represent the different schools and departments beyond the one "official" university contact per institution
- Convince other federal agencies to follow the NPS model of placing CESU Research Coordinators on partner campuses
- Improve communication network- better system of getting information out to multiple sources
- Non-governmental organizations are already cost-share partners for the USFS and BLM. Could NGOs play a larger role thereby facilitating BLM/USFS increased involvement?
- Make multiple one-on-one visits to agency and university partner offices to present info and dispel myths about the CESU network. Most agencies have regular management leadership team meetings – this would be an opportune time to discuss the CESU with partner agency managers. Examples: BLM's state managements leadership team meets every 2-3 months and the Forest Service has Leadership Team meetings once per year with all their regional managers.

How to involve minority institutions

- Minority faculty cannot compete with other University faculty because of teaching requirements. Therefore, we need to "build" projects around their areas of interest (e.g. restoration and bison)
- University faculty need to "team" with minority institution faculty
- Some minority partners could provide great assistance with traditional knowledge documentation. Many of the minority institution partners could contribute more in cultural studies and history rather than the hard sciences. Maybe this would be a good niche?

- Would be good to have “wish list” from agencies for smaller projects that minority institution partners could choose from and manage.
- Would be good to get lecturers from Federal agencies/ other Universities to come to talk to students at minority partner campuses to generate interest in natural and cultural resource studies and federal employment opportunities in those fields.
- Minority partner institutions could provide excellent training programs for federal employees on communicating with minority populations.
- Providing scholarship programs, or other financial assistance for minority students to study natural and cultural resources would help federal agencies ensure the diversity of their workforce in the future.
- Summer intern positions with agency partners

Tour of Grizzly Bear Research Facility and Wild Ungulate/Small Mammal Research Facility

<http://www.natural-resources.wsu.edu/research/bear-center/index.html>
<http://www.natural-resources.wsu.edu/Research/i-research.html>

The WSU Bear Program was started in 1986 in response to the threatened status of many bear populations. Six of the eight species of bears worldwide are threatened or endangered, including the grizzly of North America.

The WSU Bear Program is the only facility in the world to house adult grizzlies for research. The physical facility includes a 2-acre exercise yard and six indoor-outdoor pens with temperature-controlled dens. Faculty and students from WSU and numerous other universities, as well as scientists from the National Park Service and the U.S. Fish and Wildlife Service, have worked with these bears and facilities.

The number of bears in the captive population fluctuates depending on research needs, but the average population has been eight bears ranging in age and weight from newborn cubs weighing less than a pound to 15-year-old males weighing as much as 830 pounds. All of the current bears were either orphaned as cubs and would not have survived on their own or have been produced at WSU from resident bears. All are untamed and potentially very dangerous. Undergraduate and graduate students majoring in wildlife, zoology, or biology clean the pens and feed the bears daily from April to November. During hibernation, the bears do not eat or defecate and, thus, do not require daily care.

Most of the research has used both captive and wild bears and has been focused on nutritional and ecological topics important to understanding and managing wild bears. Examples of graduate student projects include determining the importance of salmon and other meat resources to bear productivity, the value of wild berries for fall fat accumulation, the nutritional importance of herbage, the historical and current diets of numerous wild populations, and milk intake and growth of cubs nursed by their mothers. Field study locations have ranged from Wyoming to Alaska.

The WSU Bear Program is directed by Charles Robbins, an internationally recognized authority on wildlife nutrition. The program has been supported by federal and state wildlife conservation agencies, federal research foundations, and private donations.

The **E. H. Steffen Center** complex includes indoor and outdoor captive wildlife facilities used by various wildlife faculty. Caribou, moose, mule deer, and elk have been housed in large outdoor pens as part of ongoing research efforts over the past ten years. New facilities to support research on Northwest pygmy rabbits will hopefully provide researchers with information to explain their precipitous population decline. Most of the research conducted at the E. H. Steffen Center has revolved around understanding the nutrition and foraging behavior of herbivores. These studies have determined the nitrogen, energy, and other nutrient requirements of these species, the effects of fiber and tannins on digestion and passage of forages, and how herbivores select and harvest vegetation.

Tuesday, June 10, 2003

Managers Up & Coming Issues – Brainstorming session

Research Ideas:

- Understanding the context of change in parks – incorporating the scientific and historical perspectives to help shape future ecosystem change projections. (Leigh Welling, Glacier)
- Recreational impacts on resource elements – soil, invertebrates, water, etc. (Regina Rochfort, North Cascades Park)
- Species viability characterized by ecotypes (Bruce Bernhart, Nez Perce NF)
- Optimum or practical density of older age stands distributed on a limited size landscape (density per unit acre). (Bruce Bernhart, Nez Perce NF)
- Science dealing with federal energy policy (Bob Alverts, USGS)
- West Nile Virus (Bob Alverts, USGS)
- Rangeland Health (Bob Alverts, USGS)
- Water Issues – Headwater, dam removal, hydrology, geomorphology (Bob Alverts, USGS)
- Exotic Species (Leigh Welling, Glacier)
- Develop and disseminate methodology for determining equivalent clear-cut acres, what thresholds affect animal species, what are the triggers? (Kimberly Brandel, Payette NF)
- What constitutes an adequate fuel break, etc. Better quantifiable information about fire management will ease the job of educating (and convincing) the public about federal fire management policies. (Kimberly Brandel, Payette NF)
- Characterization of fire behavior and effects on ecological type – integrated characteristics (Bruce Bernhart, Nez Perce NF)

Tech Transfer/Education ideas:

- Extension education for the public about fire management and fire risks (Leigh Welling, Glacier)
- Working with the National Forest Plan, creating fire education seminars and materials for home-owners in sub-divisions near federal lands (Kimberly Brandel, Payette NF)
- John Tolliver of the RMRS, noted that their office already addresses many of these fire related issues, especially educational outreach materials.

- Engineering issues related to maintenance problems faced by agencies (e.g. living snow fence construction) (Terry Terrell, Rocky Mountains NP)
- Training on statistical and economic analysis for things other than timber sales
- USGS and USFS have existing research mandates and considerable political pressure to effectively disseminate the information they already collect. They don't have the capacity to be both the researchers and the educators. Taking on the science transfer/educator role could be a very useful niche for the CESU network. (John Toliver/RMRS)
- There is a need for better methods of scientific information transfer to land managers

Solutions:

- Annotated Bibliographies (Jeff Braante/University of Idaho)
- Information threads (Bruce Berhardt/Nez Perce NF)
- Target ranger level managers (e.g. District ranger or lower) (Bruce Berhardt/Nez Perce NF)
- Multi-audiences (managers, resource specialist, rangers); therefore multi-strategies to target the different groups (Terry Terrell/Rocky Mountain NP & Regina Rochefort/North Cascades Park Complex)
- Need involvement and/or support of senior managers (Park Superintendents and Forest Supervisors) (Terry Terrell/Rocky Mountain NP)
- Ways to get answers to questions- discussion groups, newsgroups, etc. (Bruce Berhardt/Nez Perce NF)

General Management issues: How can CESU help?

- Making scientific information available and accessible to managers in an understandable and palatable way. Can university partners assist with information packaging for managers? Integration of disciplines: use resources available on university campuses for business and marketing techniques (Terry Terrell/Rocky Mountain NP, John Toliver, RMRS, Bob Alverts, USGS)
- Looking across agencies: Differing mandates and management practices and how they effect one-another. (Terry Terrell/Rocky Mountain NP) (Regina Rochefort, North Cascades Park noted that this work is already well supported in the PNW region)
- The importance of place based research – integrated packages of science will help earn political support. This is original emphasis of CESU network. Place based research also provides the opportunity to integrate the natural and cultural sciences (Bob Moon, NPS- Intermountain region, Bob Alverts, USGS)
- Information explosion is real- how to handle? Managers' work covers a broad spectrum. Scientist tend to specialize. How do we connect the two? (Kelly Brendan/University of Alaska Southeast)

Symposium

Delphi Surveys for Inventory and Monitoring the Greater Yellowstone and the Northern Colorado Plateau-- Edwin Krump, University of Idaho

Hypospectral imagery and the Elwha Corridor: an example of multi agency cooperation through a CESU agreement-- Jeff Braatne, University of Idaho

Glacier Film Project “Saving the Grizzly, One Hair at a Time”-- John Shier, Montana State University

How a research catalog, small amounts of money, good students and the PNW CESU agreement make significant contributions to North Cascades National Parks biological science program-- Regina Rochefort, National Park Service

Do military combat training overflights impact human users of selected Alaska protected areas: results from a large multi-agency social project-- Jane Swanson, University of Washington

Removing Heavy Metals from Ground Water Systems by Precipitation--Edmond Wong, University of Idaho

Cultural resources management and Pacific West CESUs-- David Louter, National Park Service

Attendees:

Rollin Abernethy

Associate VP for Academic Affairs
University of Wyoming
307-766-4286
rollin@uwyo.edu

Bruce Bernhardt

Forest Supervisor
Nez Perce National Forest
208-983-1950 ext 4180
bbernhardt@fs.fed.us

Gordon Bradley

PNW CESU Co-leader
University of Washington
206-685-0881
gbradley@u.washington.edu

Jeff Braatne

Asst. Professor, Floodplain Ecology
University of Idaho
208-885-9080
braatne@uidaho.edu

Bob Alverts

Science Advisor, Office of the Regional
Biologist
USGS
503-872-2786
balverts@usgs.gov

Keith Blatner

Chair, Natural Resource Sciences
Washington State University
509-335-4499
blatner@cahe.wsu.edu

Kimberly Brandel

District Ranger
Payette National Forest
208-347-0300
kbrandel@fs.fed.us

Brendan Kelly

Dean, School of Arts and Sciences
University of Alaska Southeast
907-465-6510

Lewis Brown

*Associate District Manager, Upper Columbia
Salmon Clearwater Dist.*

BLM, Idaho

208-769-5040

lewis_brown@blm.gov

Steven Daley Laursen

Dean, College of Natural Resources

University of Idaho

208-885-6442

stevendl@uidaho.edu

Troy Hall

*Associate Professor, Resource Recreation &
Tourism*

University of Idaho

208-885-9455

troyh@uidaho.edu

Pat Hurley

Chair, Environmental Science Program

Salish Kootenai College

406-675-4800

pat_hurley@skc.edu

Dick Jachowski

Director

USGS Rocky Mountains Science Center

406-994-5304

Richard_jachowski@usgs.gov

Edwin Krumpe

Professor, Resource Recreation & Tourism

University of Idaho

208-885-7428

edkrumpe@uidaho.edu

David Louter

Historian

National Park Service

206-220-4137

david_louter@nps.gov

John McLean

Associate Dean, Faculty of Forestry

Brendan.Kelly@uas.alaska.edu

Perry Brown

Dean, School of Forestry

University of Montana

406-243-5522

pbrown@forestry.umt.edu

Lisa Gerloff

RM-CESU Executive Coordinator

University of Montana

406-243-5346

lgerloff@forestry.umt.edu

Janet Haslerig

*Faculty, College of Agriculture, Environmental
and Natural Sciences*

Tuskegee University

334-727-8856

jhaslerig@acd.tusk.edu

Ken Hyde

Chief of Resource Management

John Day Fossil Beds

541-987-2333 ext. 18

ken_hyde@nps.gov

Darryll Johnson

PNW CESU Co-leader

National Park Service

206-685-7404

darryllj@u.washington.edu

Larry Larsen

Bureau Of Land management

Oregon State Office

PO Box 2965

Portland, OR 97208

503-808-6080

Jason Lyon

Integrated Resource Manager

Nez Perce National Historical Park

208-843-2261 ext. 117

jason_lyon@nps.gov

University of British Columbia
604-822-3360
mclean@interchange.ubc.ca

Mark Petruncio
Forestry Program
Heritage College
509-865-8551
mpetruncio@heritage.edu

Larry Ross
District Ranger
Clearwater National Forest
208-875-1131
lwross@fs.fed.us

John Shier
*Graduate Student, Science and Natural History
Filmmaking Program*
Montana State University
jshier@trex2.msu.montana.edu

Terry Terrell
*Director, Continental Divide Research and
Learning Center*
Rocky Mountain National Park
970-586-1282
terry_terrell@nps.gov

Kathy Tonnessen
Research Coordinator
Intermountain Region, National Park Service
406-243-4449
kat@forestry.umt.edu

Edmund Wong
Graduate Student, Chemistry
University of Idaho

Bob Moon
*Chief, Natural Resources, Research and
Technology*
Intermountain Region, National Park Service
303-969-2856
bob_moon@nps.gov

Regina Rochefort
Ecologist
North Cascades
360-856-5700x254
regina_rochefort@nps.gov

Terry Sharik
Head, Environment and Society
Utah State University
435-797-3270
tlsharik@cnr.usu.edu

Jane Swanson
Research Associate
University of Washington
206 685-9150
swansonj@u.washington.edu

John Toliver
Deputy Director
Rocky Mountain Research Station
970-295-5917
jtoliver@fs.fed.us

Leigh Welling
*Director, Crown of the Continent Learning
Center*
Glacier National Park
406-888-7894
leigh_welling@nps.gov

Tracy Woodman
PNW CESU Program Assistant
University of Washington
206-616-4850
woodmant@u.washington.edu

PNW CESU Executive Committee Meeting

Tuesday, June 10th, 2003 1-3 pm

Miscellaneous Business

- Everyone in attendance agreed that the PNW/RM CESU joint meeting was very beneficial and suggested more collaboration in the future.
- The annual National CESU meeting is coming up June 23-25 in Washington D.C. Darryll Johnson, Janet Haslerig and Bob Alverts noted they will be attending from the PNW CESU.
- The PNW CESU has 3 new partners in the works. From the federal side, NMFS is in negotiations to sign on as a partner and on the University side, Southern Oregon University and the Alaska Native Science Commission are planning to join. Amendments to the original PNW CESU agreement will be distributed for partner signatures as soon as possible to formally add these institutions.
- The spring timing of the annual meeting was questioned - it was suggested that the timing might be changed in the future to facilitate better partner participation. Tracy Woodman will follow up with a member poll for a possible better time to meet.

Web Site/Member communication

- Tracy Woodman briefly introduced the new and improved PNW CESU web site. From that discussion:
 1. Better information about agency needs is a goal for further site improvement. The NPS Research Catalog example was discussed as a possible model.
 2. Partners are very interested in posting project final reports on the web site – this will become a requirement of all PNW CESU projects.
 3. John McLean suggested adding a link to the Model Forest Program to the web site as an example of a large scale land management program currently working in Canada that the CESU could emulate.
- The PNW CESU newsletter is scheduled to come out again this summer. Partners were asked to please submit information for inclusion. Tracy Woodman plans to publish bi-yearly editions of the newsletter.

Partner Participation

- Darryll Johnson and Gordon Bradley presented their plans to meet one-on-one with many of our less active federal and university partners over the coming year. This strategy was supported by all present. Bob Alverts (USGS) offered to assist in a meeting with the new USFWS rep (who he works with).

- Brendan Kelly will invite Darryll Johnson to present information about the CESU at the University of Alaska South East Science Consortium this fall.
- The discussion at the morning's joint session outlining the federal need for tech transfer/education assistance was reaffirmed by our committee. Hopefully this will be an opening for broader participation by both federal and university partners. Gordon Bradley suggested looking at the College of Forest Resource's FACT SHEET program as a possible guide for the concise transfer of information.
- Partners need better guidelines to follow for projects in agencies outside the NPS. Hopefully meeting with agencies one-on-one will help generate such guidelines.

PNW CESU brochure

- Partners approved the brochure design. John McLean suggested we add the mission statement on the cover, all seemed to support this addition. Tracy Woodman will complete the printing and distribution of the brochure.

Increasing Minority Involvement

- Darryll Johnson proposed earmarking PNW CESU funding in FY04 for specific projects that facilitated the involvement of our minority institutions. He challenges the other federal partners to also take similar steps. Possible projects include: student internships with agencies, projects that make use of our minority institution faculty and student expertise, funding programs at the agency level (as per NFS example at Tuskegee University) for minority student scholarships.

Attendee List

Mark Petruncio

Forestry Program

Heritage College

509-865-8551

mpetruncio@heritage.edu

John McLean

Associate Dean, Faculty of Forestry

University of British Columbia

604-822-3360

mclean@interchange.ubc.ca

Darryll Johnson

PNW CESU Co-leader

National Park Service

206-685-7404

darryllj@u.washington.edu

Keith Blatner

Chair, Natural Resource Sciences

Washington State University

509-335-4499

blatner@cahe.wsu.edu

Larry Larsen

Bureau Of Land management

Oregon State Office

PO Box 2965

Portland, OR 97208

Gordon Bradley

PNW CESU Co-leader

University of Washington

206-685-0881

503-808-6080

Bob Alverts

Science Advisor, Office of the Regional
Biologist
USGS
503-872-2786
balverts@usgs.gov

Tracy Woodman

PNW CESU Program Assistant
University of Washington
206-616-4850
woodmant@u.washington.edu

gbradley@u.washington.edu

Brendan Kelly

Dean, School of Arts and Sciences
University of Alaska Southeast
907-465-6510
Brendan.Kelly@uas.alaska.edu

Janet Haslerig

*Faculty, College of Agriculture, Environmental
and Natural Sciences*
Tuskegee University
334-727-8856
jhaslerig@acd.tusk.edu