PROJECT TITLE: Rangeland Curriculum Modules for Secondary Schools in Idaho

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ACCOMPLISHMENTS:

Rangelands cover over half of western North America and nearly half of Idaho. These grasslands, shrublands, woodlands and deserts serve as outdoor classrooms and provide students and teachers hands-on opportunities to explore ecological principles and develop land management skills. Through support of the David Little Endowment, a new teacher resource guide on principles of rangeland management is now available. This guide is designed to educate high-school students about Idaho's rangelands and is available on-line at: http://www.cnr.uidaho.edu/what-is-range/Curriculum/index.htm through the Department of Rangeland Ecology and Management at the University of Idaho.

The Rangeland Teaching Resource Guide includes six modules with clearly stated learning objectives; background information; student note guides and teacher keys; internet activities; quizzes and student evaluation tools:

- **Rangeland Overview** describes different types of rangelands and defines rangeland management. The valves and uses of rangelands are also explored.
- Rangeland Plants details the identifying characteristics of plants, how to categorize plants according to type, the impacts that invasive weeds have on rangelands, and highlights identification of 50 major rangeland plants of Idaho. This module contains color flash cards and PowerPoint presentations featuring these major rangeland plants.
- **Rangeland Animals** describes the types of animals that inhabit rangelands and the habitat elements for these animals. This module includes activities for determining animal forage requirements in animal unit months and setting stocking rates based on animal demand and forage availability.
- Describing and Monitoring Rangelands describes different biomes and ecoregions of Idaho and includes resources on how to differentiate the biotic and abiotic factors, plant communities, water availability, watersheds and soil characteristics that create different ecological sites. A field activity allows students to develop a rangeland site description that includes estimating slope, aspect, soil texture, and plant biomass and composition.
- **Forces of Change -- An Ecological Perspective** focuses on developing an understanding of how climate, invasive species, grazing, and fire cause rangelands to change. Activities are focused on showing the dynamic nature of rangelands.
- Integrated Rangeland Management explores the individual preferences people have for specific uses of rangelands and illustrates how personal values and behaviors influence land use.
 Activities in this module help students develop skills to accomplish land management in light of conflicts among users.

The rangeland guide was introduced to teachers in a workshop in June 2008. This workshop included teachers and involved identification of topics that need to be expanded and developed.

BUDGET EXPENSES: *starting balance:* \$11,570

Office Supplies	
Postage/Mailing	\$285.02
Printing/Photocopy	\$1,291.08
Teaching/Office Supplies	\$797.92
Subtotal	\$2,374.02
Personnel	
Student Assistance	\$6,641.75
Salary (L. Roselle)	\$1,151.90
Fringe Benefits	\$217.53
Subtotal	\$8,011.18
Travel	
Mileage	\$33.95
Rental car	\$210.49
Airfare	\$392.40
Perdiem	\$547.96
Subtotal	\$1,184.80
Total	\$11,570.00

PUBLICATIONS AND IMPLEMENTATION:

Twenty-five copies of the handbook have been printed and distributed to teachers, with a CD including files in electronic form. The handbook has been placed on an internet site. We believe the guide is being widely implemented based on e-mails we have received from at least eight teachers in Idaho and teachers in Colorado, New Mexico, Nevada, Montana, Nebraska, and Greece.

We also developed a press release that was place in at least three newspapers and one newsletter. In all our efforts to promote the Teacher Resource Guide we have acknowledged the support of The Little Endowment.

We will continue to develop and expand the teacher resources available in this guide. Future plans include using the "background" information at the beginning of each module to create a handbook for the Master Naturalist program. We will also use modules in the teacher guide to support a USDA Secondary Education grant that we are currently developing (to be submitted 15 Dec 08).