Repositioning Rangeland Education for a Changing World

A project of the Range Science Education Council

The profession of rangeland management attracts people who want to work in the grasslands, shrublands, woodlands, and deserts we know as rangeland. In a rapidly changing time of demands for rangeland resources the workforce to manage these lands is shrinking and getting older. Data from the Office of Personnel Management reveal that 50 to 75% of the professionals currently classified as “Rangeland Management Specialists” in the US Forest Service, Bureau of Land Management, and Natural Resources Conservation Service will be eligible to retire in the next decade.

Who will fill their shoes? Is our profession keeping up with the new demands, new trends, and new tasks required to manage the range? Do the new range science graduates have the academic, social, and technological skills to meet today’s challenges out on the range? The Range Science Education Council (RSEC) was awarded a USDA Higher Education Challenge grant in October 2010 to address these questions.

The overall goals for this USDA-supported project are to clarify the knowledge and skills needed by future rangeland professionals and revitalize rangeland science curricula and instruction to better meet demands for knowledgeable and highly-skilled rangeland professionals in the face of a critical workforce shortage.

With this project we intend to:
- Transform rangeland science and management curricula to meet the needs of current and future rangeland management professionals.
- Maintain, and even increase, the capacity of U.S. universities to produce graduates of rangeland science and management.
- Increase student recruitment into university rangeland programs.

The outputs of the project are expected to:

1. Establish Contemporary Learning Outcomes of Rangeland Education Programs. Conduct a needs analysis to identify core competencies of rangeland professionals and establish specific curricular goals.
- Focus Group Discussions – Convene discussions with a wide variety of rangeland stakeholders across the western U.S. to identify the future demands for rangeland resources and the knowledge and skills that graduates will need to address these demands.
- Internet Survey of Graduates and Employers – Examine views of recent graduates from rangeland programs and employers of rangeland professionals to identify important skills and knowledge needed by current and future rangeland professionals.

2. Increase Quality and Accessibility of Rangeland Educational Resources. Create a web site linked to the Range Science Education Council, Society for Range Management and RangelandsWest.org to highlight available resources for people seeking rangeland education opportunities, including:
- Catalog of On-line and Alternative-Format Courses – Develop an internet catalog of on-line, time-intensive, workshop-style and field courses in rangeland ecology and management that create opportunities for students on and off-campus.
- Clearinghouse of Teaching Resources - Create an internet collection of reusable teaching objects (RTOs) that cover basic rangeland topics and embrace new internet technologies. This resource will give educators ready access to high quality teaching resources and increase efficiency and quality of course delivery by sharing resources across states and topic areas.

3. Programs to Advance Teaching Skills of Rangeland Faculty. Convene a series of workshops for teaching and learning concurrent with annual professional meetings to discuss effective pedagogical approaches, and share ideas as a collegial community of range science educators.

4. Increase Effective Student Recruiting Efforts. Conduct surveys and discussions with students to identify key factors that influence their interest in the range science profession. Develop a strategic plan among universities and employers to promote the rangeland profession and create effective programs to recruit students to university degrees and careers in rangeland science and management.

The Range Science Education Council was awarded a USDA Higher Education Challenge grant entitled “Repositioning Rangeland Education for a Changing World.” The overall purpose of this proposal is to provide innovative curricula, relevant courses, and appropriate delivery approaches so students with a variety of backgrounds and experiences can gain the knowledge and skills to manage rangelands and the important ecological services they provide.

University Rangeland Programs directing this project are the University of Idaho, Humboldt State University, New Mexico State University, Oklahoma State University, South Dakota State University, University of California-Davis and Utah State University.

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