

On the Road to Range Management: Coupling Academic and Traditional Skills

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"Range management has been defined as the **science** and **art** of procuring maximum sustained use of the forage crop (or maximum livestock production) without jeopardy to other resources or uses of the land. It is a **science** because knowledge is accumulated by observation and classification of facts, then systematized and formulated with reference to discovery of general truths or principles. It is an **art** because the knowledge is made useful or efficient only by skill or experience in its systematic application to bring about desired results" (Burchan 1982, p. 118).

College students studying agriculture and agriculture-related fields are receiving a better scientific education than ever before. With sophisticated data bases, libraries, and computerized outputs, as well as expanding technologies and the rapid dissemination of this new information in everything from irrigation to marketing, today's graduate is far more knowledgeable than his/her predecessors. Yet many students are handicapped by a lack of practical farm/ranch skills. For example, nearly 75% of the undergraduates in the field of rangeland resources at Oregon State University come from urban/suburban backgrounds. Foreign students and students from distant regions of the country are often further hampered by limited familiarity with western customs, lifestyles, and thought processes.

A student with this kind of background may have excellent academic skills in plant physiology or wildlife/domestic livestock interactions from a theoretical point of view, but if he/she cannot open the pasture gate, the knowledge may never be shared with the landowner. Farmers and ranchers tend to doubt the credence of individuals who cannot perform rudimentary farm tasks.

For several years the Department of Rangeland Resources at Oregon State University has attempted to provide the academic skills associated with range management, while still recognizing the importance of the practical farm skills. We have attempted to provide experience in some of the farm/ranch skills through a series of "Saturday Practicums" where non-credit, hands-on seminars, built around a practical skills competency list, are conducted at one of the University's farms. Elements of fence construction, horsemanship, tractor driving, and other skills have been taught in concurrent sessions or on separate Saturdays devoted to a specific subject.

The students have responded favorably. Those with limited



Receiving horsemanship instruction.

practical skills have been given a chance to gain some; those with considerable background have been asked to help teach. In a setting designed to reduce anxiety and promote camaraderie, our students have laid aside their books briefly in favor of traditional activities which build confidence and practical credibility through experience.



Learning tractor operations and uses.

Oregon State University's educational function is not that of a trade school. However, we recognize that to be successful an individual needs both a strong scientific, theoretical base and the entry-level techniques to survive in a competitive marketplace.

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A list of traditional farm skill competencies given to incoming students.

OREGON STATE UNIVERSITY
Department of Rangeland Resources
Practical Farm/Ranch Skills Competency

It is the role of a university to provide opportunities for learning and critical thinking for its students. We believe a student should prepare for a lifetime of growth and education.

We do not see the University's role to be that of vocational training for an entry-level position. However, we do recognize that certain traditional farm skills are helpful, it not critical, in job performance. To this end we are committed to ensuring that each student recognize these skills and take appropriate steps to gain competencies as needed.

A partial list of these skills is listed below. If you are weak in any of these areas, we recommend that you spend some time "beefing" them up during your weekends and/or vacation periods. REMEMBER, as in all things, the key to success is a positive ATTITUDE and a sense of RESPECT for yourself, for others, and for the equipment or animals in which you are dealing.

Do you understand:

Four-wheel drives
 Manual transmissions
 Wheel and crawler tractors
 Winches, handiman jacks, come-alongs, and other devices for getting unstuck
 Reseeding equipment such as plows, discs, and drills
 Backing up a two-wheel trailer
 Trailer hitches
 Large trucks
 Haying equipment, terminology and philosophy
 Fence building
 Gate operation
 Aerial photos
 Compass and abney levels
 Map-reading
 Horsemanship
 Changing tires
 Chaining up
 Basic safety and use of standard tools which should always be in your vehicle
 Chainsaws
 Handtools
 Troubleshooting gasoline and diesel engines
 Basic animal husbandry
 First aid
 Survival in the wilderness
 Appropriate clothing for different jobs
 How to tell animals apart (one horse or cow from other horses or cows)
 When to push and when to back off when driving over rocks, in the mud, when towing, or when working livestock.

Call for Papers

"Forests and the 49th Parallel: Historical and Comparative Perspectives on the Canadian-American Frontier" is the title of a symposium sponsored by the Forest History Society on October 9-10, 1986 in Vancouver, B.C. Prospective contributors should send brief proposals for papers and a copy of their curriculum vitae by April 1, 1985 to Dr. Graeme Wynn, Department of Geography, University of British Columbia, 1984 West Mall, Vancouver, B.C. V6T 1W5.



Students constructing a brace post during a "Saturday Practicum."

References

- Buckhouse, John C. 1979.** The changing fact of the range student. *Rangelands*. 1:186.
Burcham, L.T. 1982. Range management education . . . and how it grew. *Rangelands*. 4:114-121.
Stechman, John V. 1982. Range management education for youth—an enigma. *Rangelands*. 4:3-6.
Whetsell, Dick. 1982. Range management intern program. *Rangelands*. 4:186-187.

ALRA Announces the LUCINDA Program

The American Land Resource Association (ALRA) announces the creation on the LUCINDA Program, a nationwide computerized networking program which puts people who already know why land must be conserved in contact with people who know how. The acronym stands for Land Use and Conservation Information Network Data Access. It means if someone wants to preserve farmland in a county, ALRA can provide the name, address and telephone numbers of people who are working or have worked on the very same problem in other areas of the country. Or, if they need to find a model ordinances for transfer development rights or the "state of the art" in protecting groundwater the way to start is to "Call LUCINDA" at ALRA. For more information on the LUCINDA Program or the program of the American Land Resource Association, contact Kevin Coyle at ALRA, 5410 Grosvenor Lane, Bethesda, Maryland 20814 or call 301-493-9140.

Soils Specialist Certification

SCSA, in late 1979, agreed to sponsor a program for Certification of Erosion and Sediment Control Specialists. Certification, according to an establishing Memorandum of Agreements, is for the purpose of designating qualified professionals whose standard of competence is in the best interest of the public and the environment.

For additional information on this certification program contact: Soil Conservation Society of America, 7515 N.E. Ankeny Road, Ankeny, Iowa 50021.