

duced in the 11 Western states, but he is grossly misinformed. U.S. Department of Agriculture figures over the past few years show that figure to be closer to 20 percent. In addition, many of those cattle accounted for in the Midwest or in feed lots spent a portion of their lives grazing in the West.

I submit that grazing in the 11 Western states is a significant factor, and if all grazing on public lands were eliminated tomorrow, it would have a dramatic impact on the beef industry in the nation as a whole. (Just think what a 20 percent decrease in beef production would do to beef prices.)

At Lazy B Ranch alone, we support six families on this piece of dry Arizona-New Mexico desert. We pay income tax, county tax, property tax, sales tax, and we make a living.

Abbey's statement that "ranchers don't work very hard" is preposterous. Abbey's idea of a cowboy is the Eastern myth, and this obvious from his description of the so-called cowboy in his story. The cowboy spends far longer hours, in far

worse conditions, than Abbey does at his typewriter, and he does it regardless of how cold it gets, or how wet, or how dark.

The cowboy's job is one of the few professions left that allow one to see the wonders of nature in an unspoiled fashion, to experience the change of the seasons, and to see birth and death firsthand.

Ranching is the ultimate form of organic production, the harvest of a portion of what is grown naturally. If we can't live in harmony with nature and make productive use of this desert, then should we live in the West at all?

I say we can live here, and we can make the West a better place for all forms of life if we don't get caught up in a hysterical negativism. There are positive solutions to every problem.

Alan Day is a rancher whose grandfather settled the Lazy B Ranch in 1880.

Ranching Efficiency in South Texas—a Rancher's Viewpoint

Kenneth D. Sparks

The opportunity for additional flexibility in both livestock and grazing management are major reasons for the interest in short duration grazing in southwest Texas. Alvis Cardwell, who ranches 2,300 acres in Zavala County—about 20 miles south of Uvalde, Texas—has been using some type of rotation grazing for several years. Cardwell states, "I started rotating 1 herd of cattle through 7 pastures in the early 1970's." My goal at that time was to divide my pastures into about 300-acre units. Because my operation is small for this country, I knew I had to intensify management."

A director of Winter Garden Soil and Water Conservation District, Cardwell runs commercial crossbred cattle. He continues, "I rarely keep any replacement heifers. This allows me to keep my cattle in 1 herd most of the time, and I am able to use exotic bulls without fear of calving problems.

"In my rotation, I have found the greater the number of pastures available, the better my cattle do. Also, with more pastures my range is receiving more deferment and I get faster improvement."

He is presently rotating through 21 pastures, which average just over 100 acres in size. Grazing periods per pasture generally range from 2 to 4 days, depending on growing conditions.

Some of the pastures are fenced in a cell arrangement, with central livestock watering facilities serving several pastures.

Regardless of the fencing arrangement, Cardwell has learned that frequent movement of his cattle is not a problem because they are accustomed to moving and are ready to



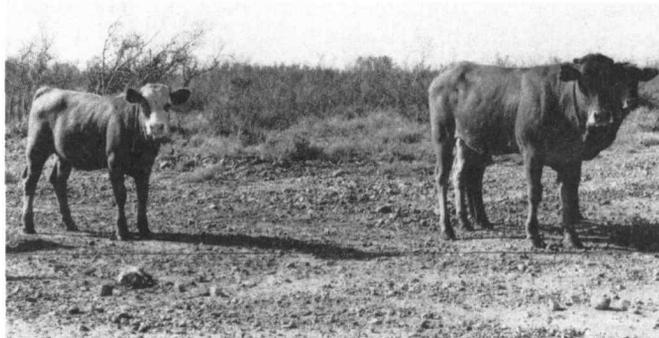
Alvis Cardwell examines results of rootplowing on his southwest Texas Ranch.

move to fresh forage.

The availability of high tensile fence wire and improved fence chargers has allowed him to use permanent electric fences, keeping his fencing cost well below conventional barbed wire. Cardwell says, "Most of my country is blackbrush-guajillo hills. About 80% of the soils on the ranch are relatively shallow and gravelly.

"I figure without a rotation, you have to allow 30 to 35 acres per cow on this type country. I have been running from 75 to 150 cows since I started rotating my grazing.

"I know I can run more cattle with the rotation. But, the



Stocker cattle provide flexibility in stocking rate on the Alvis Cardwell Ranch due to the fluctuating climatic conditions in southwest Texas.



Rootplowing pattern helps maintain and improve wildlife habitat on the Alvis Cardwell Ranch.

rotation may not prevent being overstocked during drought years.

"In the future I plan to run a base herd of about 100 cows. I will add stockers, either steers or light heifers, during years of favorable rainfall.

"We have our share of drought in this area, and flexible stocking appears to be the only possible means of dealing with our fluctuating climate."

Over the years, Cardwell has tried many types of brush control-shredding, disking, and use of chemicals.

"I have been disappointed with shredding and disking. I have had good success with the pelleted herbicide Tebuthiuron at the rate of 1-1/2 pounds active ingredient per acre. This rate gives me a satisfactory kill on blackbrush and allows me to retain most of my guajillo."

Browse furnished by the guajillo is important to his cattle, as well as deer. "Management to maximize wildlife habitat is very important to my wife, Judy, and me," Cardwell said. "Not only from personal satisfaction but because of economic consideration as well.

"We have experienced much more upward stability in markets for deer and quail hunting leases than for cattle.

"I do not want to get rid of all my brush but if I can thin it out in certain areas, I can grow more feed for cattle and wildlife."

Cardwell entered into a contract with the Soil Conservation Service for technical and cost-share assistance through

the Great Plains Conservation Program in 1983. The contract consists of plans for improvement of livestock watering facilities, brush management, range seeding, and further acceleration of grazing and wildlife management.

Cardwell recently purchased a dozer and rootplow to allow him to do his own brush management, using patterns that will benefit wildlife habitat and to take advantage of the better soil types on the ranch. Rootplowed areas are planned in small blocks and strips to leave adequate brush cover and to increase edge vegetation for wildlife and browse for both deer and cattle. Rootplowed areas are seeded to a mixture of grasses. Varieties such as Selection 75 Kleingrass, blue panicum, green sprangletop, and sorghum alnum are used because of their grazing value and the usefulness of the seed as feed for quail and other game birds. Buffelgrass and Kleberg bluestem are also used in the mixture because of their known stability during drought, which so frequently occurs in the area.

"I believe the rotation will be essential to maintaining these seeded grasses," Cardwell said.

"I have done my share of south Texas brush poppin over the years, working cattle in large brushy pastures. There may be a certain amount of romance in this way of ranching, but this kind of romance won't pay my bills.

"I have to intensity management and short duration grazing is the best tool I have found."

Symposia

The Shrub Research Consortium is sponsoring the **5th Wildland Shrub Symposium** June 30 to July 2 at Utah State University, Logan. The symposium, "Shrub Ecophysiology and Biotechnology," will feature invited and contributed papers, which will be published by the USDA Forest Service Intermountain Research Station.

Titles and abstracts of contributed papers, to be 20 minutes long, are due March 31 to Dr. Arthur Wallace, Laboratory of Biomedical and Environmental Sciences, UCLA, 900 Veteran Ave., Los Angeles, Calif. 90024. Preregistration information is available from Michael B. Price, Eccles Conference Center, Room 103 F, Logan, Utah 84322-5005.

A symposium, "**Leadership in Natural Resources**," is scheduled for April 17, College of Natural Resources, Utah State University, Logan. For information contact the Dean's Office, College of Natural Resources, Logan, Utah 84322-5200 or call 801-750-2445.

The **2nd Geographic Information Systems Conference and Workshops** scheduled for October 26-27 in San Francisco is calling for papers for a 20-minute presentation. Titles and 200-300 word descriptions are due April 15. Contact Russell Congalton, Dept. Forestry and Resource Management, Univ. of California, Berkeley, CA 94720.