

like S11. The current desert conservation plan is the California Desert Conservation Act, managed by the BLM. The Act established an advisory committee to assist in developing the plan. Preparation of the plan cost 8 million dollars, involved massive research, dozens of public hearings and more than 40,000 public comments. Users on both sides commended the balanced nature of the plan. S11 and HR780 would completely nullify the present plan. It would create millions of acres of new National Parks, with 2.5 million taken from existing National Monuments and 3.2 million from BLM-administered lands. They would alter land use of more than half of the BLM-administered lands in the area and establish the new Mojave National Park and more wilderness. The Wilderness designation means that more areas will be closed to all motorized vehicles. National Park designation means the areas would be managed to preserve their *natural* values. Vehicle access is limited to existing roads.

The bills allow no new mining claims, leases for oil and gas, geothermal or mineral exploration or grazing. They call for the acquisition of private and State lands mostly by exchanges using the *remaining* BLM lands as a trade. The proposed bills will directly affect 14 cattle operations in the Mojave. The cattlemen will be allowed to graze only until their permits expire, with no new permits issued. This only allows them time to sell their stock and get out.

The livestock industry in the 13 western states represents 8.2 million head of cattle and sheep. Twenty percent of the calves going to the feedlot and 50% of the marketable lambs graze on federal lands at least part of the year. In 1987, cash receipts from cattle and sheep in these states totaled \$9.5 billion. Ranching has been a historical use on Federal lands for 125 years. Wildlife also use the developed springs, windmills, water tanks and catch basins for water that were originally installed for cattle use.

Most cattlemen are the true conservationists of the desert, but, they haven't gotten the message out.

There are many ways used to close off public lands. Most of the "roads" (or ways) that the cattlemen use will be closed because they do not meet the BLM requirements of being a road. The Big Horn Sheep Society uses "ways" to haul water to guzzlers during drought times, and haul equipment for maintenance of the guzzlers. The cattlemen use them to check on watering holes and windmills. This is not just a California desert issue. This is a national issue. Only three percent of Yosemite National Park is accessible by motorized vehicles and therefore 97 percent is denied to individuals that cannot walk, hike, or ride horses. Many conservation groups are also opposing the proposed legislation. The Big Horn Sheep Society is against the bills as it will stop them from going into an area and building guzzlers for animal drinking water.

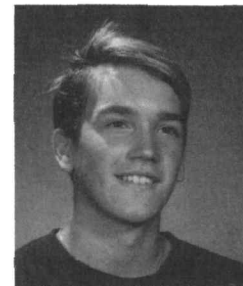
Many developed springs will have to be "put to sleep". A rancher in the desert spends about 75% of his time developing and maintaining water for the cattle, BUT various wildlife like Big Horn Sheep, burros, deer, quail and chuker use them too.

People involved in range management, cattle and other interests in multiple use must learn how to use the media. We can help by becoming involved in issues, attending service organization meetings and presenting the facts. And VOTE! Votes are what influence the politicians. We need to write to our Congressmen and Senators, and express our opinions. We need to work to elect representatives that represent our position. If we are to be properly represented, we **MUST** become better organized.

The main thing I have learned throughout this whole issue is that the Sierra Club is not always right—but they are better organized!

Elk and Cattle: A Conflict in Land Use?

Zeb Hogan



In Arizona, as in many other places, elk and cattle are competitors. This competition causes problems for the managers of the land on which they both live and graze. As a result, much of our rangeland is being overgrazed. In some areas, eighty to ninety percent of the forage of preferred species is being utilized by elk alone. The overgrazing by these animals is causing the slow destruction of the habitat, notably the valuable riparian zones and adjacent uplands.

Editor's Note: This paper was the second place finisher in the High School Youth Forum contest at the 1990 Annual Meeting in Reno, Nevada.

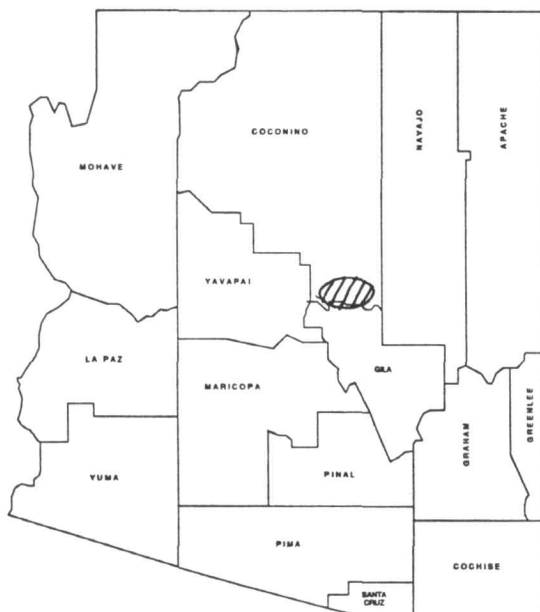
The lack of forage in many areas has forced the elk to eat almost anything—both native and introduced grasses, shrubs, and even small trees. Dwarf trees, caused by the elk nibbling at new growth on young conifers, demonstrate the amazing stress placed upon the plant life. Grasses can be found that are growing horizontally rather than vertically—a sign of heavy grazing pressure on the habitat. Unless something is done soon, the elk will exhaust all of their food sources, which can result in a sharp drop in elk populations.

Elk are found in Central Arizona, essentially in lands dominated by ponderosa pine and mixed conifers. While ponderosa pine upland habitats dominate the landscape,

elk also use mixed conifer sites and concentrate in riparian areas.

Elk are creating difficulties for Arizona ranchers in these areas. Ranchers report the forage is gone from elk grazing the land before the cattle are rotated to a pasture. In other words, the land without livestock is receiving as much use as areas grazed by cattle. Furthermore, elk do not seem to be retreating onto traditional winter range, resulting in greater stress on already exhausted regions. If this animal competition continues, both the cattle and the elk will suffer. Poor elk habitat will cause unhealthy elk populations, cattle that weigh less, and an eroded poor-quality watershed.

As mentioned earlier, many riparian areas are being threatened by elk and cattle. To investigate this problem, a study site has been established on the Coconino National Forest on the Blue Ridge Ranger District. This area is located above the Mongollon Rim, approximately 120 miles northeast of Phoenix and 60 miles southeast of



Flagstaff. Sites were established to discover if an overgrazed riparian zone could be restored to its original condition. Once a forested area, the Blue Ridge riparian habitats are now sparsely vegetated with woody plants and only a few spruce still standing. Parts of these habitats have now been fenced. The riparian zone can be evaluated and observed without grazing by elk.

To rejuvenate the area, wooden barriers have been placed in creeks to increase the amount of moisture in the soil. Trees are being planted along the stream. Hopefully, the area can be restored to resemble conditions that existed fifty to one hundred years ago. Although the fencing restricts the elk movement in the vicinity, fencing is not feasible for all such areas and provides only short-term relief for small areas. In trying to resolve the primary problem of competition between cattle and elk, three alternatives are being considered: reduce livestock num-

bers, issue more hunting permits to reduce the elk population, and/or develop a plan to manage the elk using livestock as a tool.

Reducing livestock numbers is not a viable solution, because this action may only postpone the current problem. Elk populations will continue to increase until they once again exhaust available forage resources. In addition, reducing livestock numbers is not popular with ranchers, who would be left with decreased profits.

The second alternative, the issuance of more elk hunting permits, is also a short-term solution. Increasing the number of permits does not automatically mean the elk population would drop or even level off. Elk reproduction rates could potentially cause the populations to continue to grow. Another drawback is the reaction this might elicit from preservationists, naturalists, and perhaps even the general public.

If a management strategy can be developed that utilizes cattle as a tool to "rotate" elk, neither of the previous two alternatives will have to be considered. The advantages are obvious. First, additional numbers of elk would not have to be harvested. Second, cattle would be allowed to graze in the same pastures. Also, if the elk could be "rotated," pastures would be given time to regenerate.

Research is needed to solve the problem and to define management solutions. Information is needed on:

- Impact of elk to habitats
- Degree of cattle/elk interaction
- Seasonal use—diets of elk and cattle
- Vegetative diversity of habitats
- Sustainability of hydrologic cycle
- Stability of soils

Elk management with cattle grazing strategy

A study to resolve these questions related to the possibility of using cattle to manipulate elk is currently being planned for the Pivot Rock District of the Coconino National Forest. Cattle are being moved from area to area, while the elk's reactions are recorded. It has been hypothesized that the elk may follow the cattle to take advantage of the tender new sprouts growing from the shrubs and grasses in the area previously grazed by cattle. Although the range managers expect the elk to follow cattle, their actual behavior is not yet known. The project has received a considerable amount of public input. Interested organizations include the Rocky Mountain Elk Foundation, Kaibab Industries, Arizona Cattle Growers Association, Audobon Society, Arizona Wildlife Federation, and the Coconino County Sportsmen. The research is being funded by Arizona Game and Fish, the U.S. Forest Service, Coconino National Forest, Region III, and Arizona State University.

There are no quick solutions to the problem caused by the competition between cattle and elk in Arizona, but the problem is recognized. Hopefully, the studies currently in progress will provide a basis from which concerned organizations can make intelligent decisions regarding the future of elk and cattle in Arizona.