harvesting area were a small portion of an extensive woodland. Integrated pest management is a continuing necessity in energy harvesting.

Grazing management is essential if the site improvement is to have a change for successful establishment and eventual persistence of desirable forage species. This means that initially livestock must be exluded to assure seedling establishment. After establishment, the harvested and revegetated site has inherently different forage production from any remaining woodland, creating a problem in grazing animal distribution.

Public land management agencies have been so overwhelmed by the sudden increase in demand for areas to be used by private citizens for fuel wood harvesting that little consideration may have been given to the design and execution of harvest plans, or post-harvest revegetation and management.

Despite the big upsurge in demand for fuel wood from public lands, a segment of the public may view such harvesting as destruction of a non-renewable natural resource. The uninformed public may view juniper or pinyon trees that have invaded shrub/grasslands as a natural part of the environment. Knowledgeable land managers know that this is not true, but this will not lessen the public outcry.

Prospective

An acre of western juniper woodland with 60 trees per acre and trees 30 feet tall can produce through fuel wood harvesting (10 cords/acre) energy equal in heating value to 1,800 gallons of fuel oil or roughly $1,800 per acre at 1980 prices. If we view this as a method of financing rangeland improvement, there is a tremendous chance to improve and stabilize many acres of rangeland. Many people have forcefully spoken out on the need to improve our degraded rangelands. Congress has passed a rangeland improvement bill, but funds to accomplish this improvement have been lacking. Woody biomass for energy in return for rangeland improvement may offer a means of accomplishing at least a portion of the needed rangeland improvement. ●

Forage Is up in Southern California

Ricardo Gonzalez

The available forage trend in southern California forests is on an upward swing. This means that forage on public lands is increasing. This increase is *not* due to good range management, but rather, this upward trend is related to factors affecting the rancher who uses these lands. Let us examine the factors that have had a tremendous effect on the rancher the past 10 years.

Taxation is a factor that has affected everybody in the country, but more so for the southern California rancher. As urbanization moves out towards the rangelands, the system used for assessing value of urban land is used on a comparable basis for rangelands. Thus, the rancher who has more land will pay more taxes.

The **livestock market** within the last 10 years has been so erratic that a rancher stands a better chance in a Las Vegas gambling casino. This high cost of feeds, veterinary care, ranching operation, and maintenance reduces the net value of the rancher' product. Even more so, when the true value of beef-on-hoof is *not* even close to the price paid at the supermarket, then one wonders where it all is going to end.

Family tradition is another factor that is eroding away. No longer is the rancher's son willing to experience the hardships of making a living on the range from Sunday to Sunday. And why should he, when there is a 40-hour work week, with weekends off, and stable careers as lawyers, brokers, truck drivers, plumbers, state and federal employees, etc., waiting for him out in the real world.

If by chance the family tradition is *not* eroded when the head of the family dies, then the surviving heirs have to face the burden of **inheritance taxes.** This burden is satisfied by either selling part or all of the ranch unit.

There is another concern, catastropic wildfires and air quality that has initiated an extensive fire suppression effort. Out of this effort has come brush encroachment onto rangelands and the loss of an active tool for range improvements. In other words, there has been too much **fire protection.**

New laws have come into the picture too. The environmentalists have screamed "preservation" at Washington, D.C., and it has responded with enactments of laws for wildernesses. The recreationists flapped their recreating spirit wings at Washington; it responded with enactment of laws for recreation areas. The rancher hollered at Washington, "Let us continue to make a living on the land that made this country great," and Washington responded with business as usual.

As people respond to the ideal climate of southern California, in come **urbanization and high real estate values.** Thus, at the same time, upsurge of urbanization increases the value of rangelands—but not for grazing. Because of this great increase of sale values, ranging from $8,000 to $45,000 an acre, the rancher has no incentive to keep ranching for low cash returns. For example, the Grant Stokes Valle de Pamo Ranch was 17,443 acres in size in 1901, with the surrounding population being 91 people. In 1979, the rancher no longer existed—only the ranch house with two acres and a "For Sale" sign hung on the gate. The ranch is known today as Ramona, California, with a population of 11,000.

In conclusion, we can say that the trend of available forage in southern California is increasing. It is not because we are creating more, but because the rancher is not using the range as much as in the past. He is being affected drastically by heavier taxation, a fluctuating livestock market, decline in family ranching tradition, inheritance taxes, fire protection, new laws, urbanization, and high real estate values.

What is the solution, or is there one? Should we consider southern California forest rangelands in the historical sense, such as the old coal-burning trains and horse-drawn stage coaches? Should these lands be turned into other cash crops such as oranges and avocados? One solution for continuing grazing on public ranges is **communication** between the land administrator, the public, and the rancher. Let us all look at the land administrtor, the public and the rancher. Let us all look at the land and see what its full capabilities are and then work within them. Let's look at the beef products that can be produced from the land and will reach the homes of the public. Let's show rangelands in their true colors as part of the public lands, as contributing to the local and national economies, and as part of the natural ecosystems. But most of all, let's not let public rangelands and the rancher fade away into *Public Rangelands History.* ●

The author is range conservationist, Cleveland National Forest, San Diego, California. This article is adapted from a talk given by the author at the 1980 SRM annual meeting in San Diego, California.