White Sands Ranchers Can Take Aim with Figures for Losses

Tina M. Prow

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Only 7% of the ranchers forced off White Sands Missile Range after the 1940's are still alive, but the fight for additional compensation and the return of their ranges still continues.

Recently, New Mexico State University agricultural economists got involved, not to aid the ranchers or the government, but to provide figures on the opportunity cost of not ranching for what is now a 43-year period.

Drs. John Fowler and James Gray first prepared a report containing data and information on cattle prices and valuations of ranches on WSMR at the request of Howard McDonald, a rancher challenging compensation paid by the government for range confiscated in the 1940's.

The report has since been developed into Range Improvement Task Force Report 15, available to those interested in figuring the value of former WSMR ranches.

"McDonald and other ranchers need factual information to present to the federal General Accounting Office review of their cases," Fowler said. "We have historical budgets, market value surveys and the expertise to prepare objective facts for what has been an emotional issue."

Before 1940, ranchers owned and leased grazing range on what is now the WSMR. War conditions in the 1940's prompted the government to lease the area for military purposes, but many ranchers continued to pay state lease fees, hoping to protect their ranch holdings in the event that the government moved off the range.

Despite the end of the 1940's war effort, the government continues to occupy the area. The government paid for many of the deeded land portions of ranches, but many ranchers claim the compensation was too low.

The economists figured income ranchers would have received and value their ranches would have if the government had not taken the area in terms of historical budgets, land sales and capitalized values.

Historical budgets prepared by NMSU agricultural economists since the 1930's and a 1979 survey on the market value of different size ranches provided figures that allowed the economists to calculate net returns to operator labor, management and total capital for typical 450-head and 1,000-head cattle ranches in New Mexico.

"These typical ranch budgets are starting points," Fowler explained. "With information on them, we can extrapolate values for ranches of different sizes."

New returns for the 1000-head ranch in 1982 dollars during the 43-year period ranged from losses in some years to a gain of $172,476 in 1979.

When adjustments were made for the consumer price index and interest rate payable on savings deposits for each year so that valuation was in terms of 1982 dollars, the cumulative bank balance income for the ranch over the 43-year period came to $10 million.

"The $10 million represents foregone income, in 1982 dollars, that a rancher with a 1,000-head ranch on WSMR would have made over the period between 1940 and 1982," Fowler said. "It doesn't take into account lease payments received and paid over the period."

The economists personalized the budgets for the 992-head McDonald ranch and the 450-head Ira and Laura McKinley ranch by adjusting for net lease payments.

They developed a net lease payment schedule which lists yearly total lease payments received from the federal government less total lease fees paid primarily for state lands.

Taking lease payments into account, foregone net income in 1982 dollars for the 992-head McDonald ranch was $4.9 million. Foregone net income for the 450-head McKinley ranch was $925,347.

"With these two ranches, we see economies of size working over time," the economist noted. "The smaller McKinley ranch cannot be operated as efficiently as the larger McDonald ranch in terms of labor, animal feed and other factors. The differences compound over time."

The second method the economists used to figure ranch value is based on ranch carrying capacity and value per animal units.

The value per animal unit in New Mexico in 1982 is $1,654, according to research conducted in 1981 and updated to 1982 using the New Mexico Grazing Land Index. Multiplying that figure by the number of animal units on a ranch at the time of displacement will give ranchers figures for the current value of their ranches.

In the case of McDonald's ranch, the 992-head operation was worth approximately $1.64 million in 1982.

"This is the easiest method for ranchers to figure the value of their ranches themselves," Fowler said. "This report has the formulas they need, so all they have to know is the long run carrying capacity of their ranges.

Lastly, the economists used several levels of interest rates and the standard ranch appraisal capitalization process to

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Editor's Note: This is an invitational piece requested after I heard Report 15 was out. Hope you find it as interesting and informational as I did. Tina is with New Mexico Agricultural Experiment Station, New Mexico State University, Las Cruces, 88003.

determine the average net value of the 1000-head ranch in 1982 dollars.

A capitalization rate at 12% placed the ranch value at $765,015, while a capitalization rate at 10% made the ranch worth $918,020. Capitalization rates of 7 5/8% and 3% placed the ranch value at $1.2 million and $3 million.

"The federal government uses the 7 5/8% capitalization rates. We feel the 7 5/8% or the 3% rates are the most reasonable rates," Fowler said, "because these are primarily federal land ranches."

In addition to the budgets, the report contains trends of private and state land grazing fees per head per month and gross average livestock prices per hundredweight in New Mexico between 1940 and 1982.

This information and the formulas provided with each valuation technique will allow ranchers to figure their personal ranch value or set up a price scenario with their own sales records.

"Much of this report is support data that has been available, but not compiled in one source," Fowler said. "It is the practical information necessary to figure ranch values in terms of 1982 dollars."

Report 15, "Alternative Valuation Methods for Cattle Ranches on the White Sands Missile Range 1942-1982," is a cooperative project involving the Range Improvement Task Force, and NMSU Agricultural Experiment Station and Cooperative Extension Service. The report is available from NMSU Agricultural Information Bulletin Office, Box 3AI, NMSU, Las Cruces, NM 88003; telephone 505/646-3228. ●

Kangaroo Rats

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Kangaroo rats *(Dipodomys* ssp.) are small, beautifully marked mammals found in the arid portions of western north America. They are distributed from southern portions of western Canada to central Mexico, as far west as California, and east to central Kansas and Oklahoma. Kangaroo rats occupy the sparsely vegetated areas of dry steppes and even the most barren of western rangelands. Recent studies of the seed and seedbed ecology of such important range forage and browse species as Indian ricegrass *(Oryzopsis hymenoides)* and bitterbrush *(Purshia tridentata)* have shown that seed collection and caching activities of rodents such as kangaroo rats are essential in the regeneration of these plants.

The kangaroo rats are strictly nocturnal. Because of this, a person can spend much time on the open range without ever actually seeing them. However, loose soil reveals paw prints and strange curved impressions made by long balancing tails, verifying the rat's nighttime activities. People camping on rangelands occasionally observe kangaroo rats in the evenings around the campfire. The animals approach timidly at first but become much bolder with each successive venture into the campsite, filching whatever may be found. Opportunistic and swift in their nocturnal activities, kangaroo rats reside during the day in burrows dug in soft soils.

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About the author: Sjoberg has been an undergraduate research assistant at the University of Nevada working with the USDA, Agricultural Research Service. Raised in Nevada, she grew up with long-established ranching families. She received a BS degree in Wildlife Management at the University of Nevada, Reno. While a research assistant she became very interested in range management and its importance to wildlife management. Her special research interest is bitterbrush and rodent interactions.

Taxonomy

Kangaroo rats belong to the order Rodentia (rats, mice, beavers, squirrels, marmots, etc.). This group is classified as such because of their upper persistently growing incisors. The family *Hetermyidae* includes kangaroo rats *(Dipodymus)*, pocket mice *(Perognathus)*, and kangaroo mice *(Microdipodymus)*.

Kangaroo rats are sometimes confused with pack rats (*Neotoma* spp.). The pack rats are widely distributed on western rangelands, especially in pinyon/juniper woodlands. The pack rats belong to the family *Cricetidae* so they are not closely related to the kangaroo rats.

The family of heteromyids appeared in the Oligocene, but kangaroo rats are known from as recent as the Pliocene epoch when the vast deserts formed in western north America. Of 20 species identified in current taxonomic texts, only two species are currently threatened with extinction. Those are the big-eared kangaroo rat *(Dipodomys elephantinus)* and the Texas kangaroo rat *(D. elator)*. It has been suggested that the kangaroo rat is closely aligned taxonomically with the family *Sciuridae* (squirrels and chipmunks). The most widely distributed of the 21 generally recognized species is Ord's kangaroo rat *(D. ordii)* which ranges from Alberta and