

profile...

Rancher Joe Urrutia believes in trying out new ideas. Because of that philosophy, he found that range fertilizer is worth the extra effort and cost

IF you draw a line around the ranch of Joe Urrutia, Friant, Calif., and consider it as a system, you find that his operation boils down to "feed and fertilizer in, beef out." As such, it is representative of many Western cattle operations.

Urrutia works 7000 acres of rolling land at the base of the Sierras near Sequoia National Forest. Of this, he dry-farms 2000 acres with barley, using the rest as grazing range. He averages 1500 to 1600 head; he buys them as yearlings, feeds them on the range for about six months, and finishes them in his feed lot for another six months. He has two men with him, one to do the barley farming, one to feed and care for the cattle.

Uses Weather to Advantage

Rainfall in Urrutia's area averages between 15 and 18 inches per year, falling mostly between November and May. Temperatures seldom go below

freezing and when they do, they do not stay there very long. To use this weather pattern to advantage, Urrutia feeds his stock on range grass during the wet season and uses the "summer fallow rotation" method to grow barley. He seeds 1000 acres in October, crops it the following July, leaves it fallow until the following February, when he plows it. He leaves it plowed until the next October, when he seeds it again. He fertilizes only his poorer land, using about 200 pounds of triple superphosphate per acre, applied either at seeding time or shortly thereafter.

With this system, Urrutia reaps 1600 to 1800 pounds of barley per acre, a yield which is about the average in his part of California for dry-farmed land. He uses no nitrogen or potash. He has found, as have others, that they are of no help on his sort of soil (Vista fine sandy loam) when dry-farmed.

In cooperation with the Madera

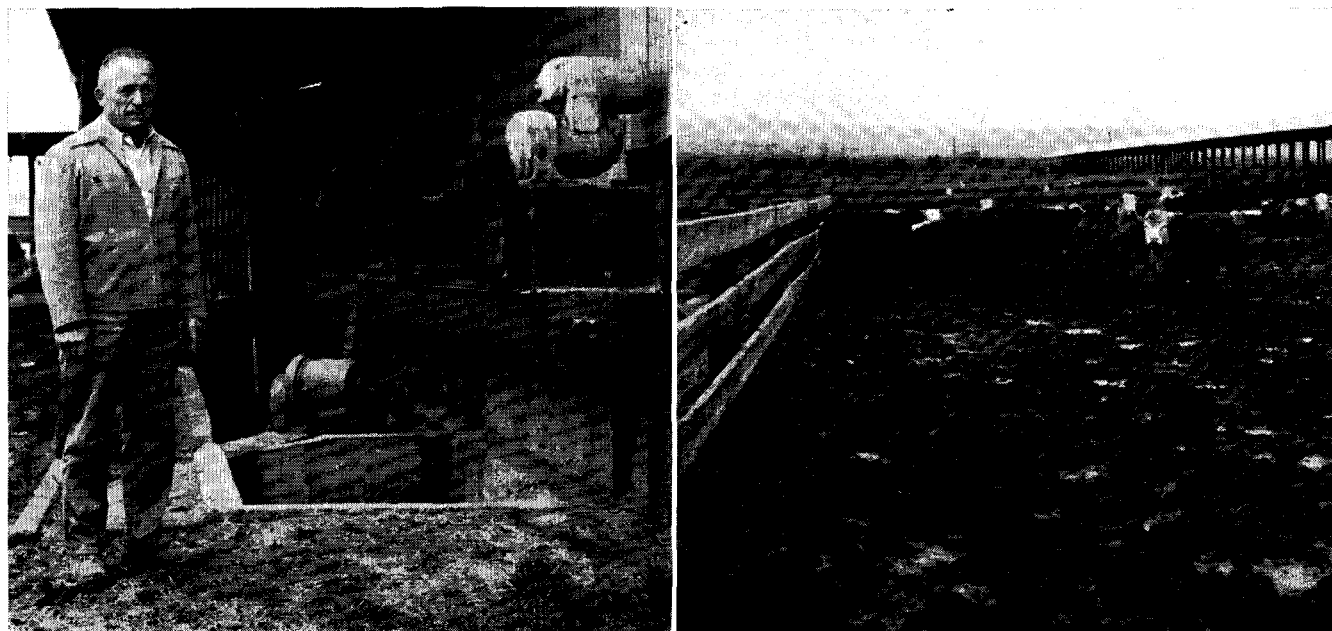
County agricultural extension service, Urrutia is experimenting with an annual barley crop, using aqua ammonia—60 lbs. per acre—as fertilizer. This experiment is entering its third year; results are promising, but Urrutia cannot yet say whether this would be better than his summer fallow rotation system.

Urrutia buys his yearlings toward the beginning of the rainy season and puts them out on range during the wet season. On unfertilized range, he can feed one steer on about $3\frac{1}{2}$ acres from about November until late May or early June. When the grass dries, he transfers the stock to the feed lot, where he finishes them with a diet of barley, cottonseed meal, molasses, sugar beet pulp, and a supplement containing bone meal, limestone, vitamin A, dehydrated alfalfa meal, and a conditioner to aid the stock's transfer from range to lot feed. For roughage, he uses his own barley straw plus some alfalfa hay.

Chemicals Keep Them Healthy

Urrutia uses a limited number of chemicals to keep his animals healthy. He uses malathion and DDT for fly control in the feed lot throughout the hot weather, spraying whenever the flies get bothersome. He sprays the stock with rotenone in November and January to control cattle grubs. All his stock is vaccinated for blackleg (similar to anthrax) and for "shipping fever" when the animals arrive. Other chemical control is aimed mainly at pneumonia (using penicillin or streptomycin), or foot trouble, Urrutia says.

Joe Urrutia shows off his automatic feed machinery which proportions various ingredients into a mixer, then feeds the mix by a screw mechanism to cattle in the lot. On the right are some of his animals. Manure in the lot will be removed, dried, and bagged for sale to nearby nurseries and home gardeners



Range Fertilization

Urrutia is one of the cooperating ranchers for California's studies on range fertilization. He has been experimenting for about four years, and is firmly convinced of its merits. His results can be summarized in the following manner:

Year	Fertilizing Program	Steers Fed	Control
1	380 lb. (NH ₄) ₂ SO ₄ /acre on 40 acres	40	10
2	Carry-over	30	10
3	Carry-over	20	10
4*	Carry-over	15	10
		<u>105</u>	<u>40</u>

* The fifth year has no carry-over effect.

Thus one application of ammonium sulfate has, in four years, given Urrutia feed for 105 steers where he could feed only 40 on a control plot of the same size. His conclusion: range fertilization is certainly worth the effort and cost.

Urrutia has not begun a widespread program to fertilize all his range at once, however. To do so would take a major increase in capital, both to buy the fertilizer and to stock the ranch to utilize all the extra feed. Thus, he has begun a building program, wherein he fertilizes parts of his range in a five-year cycle, beginning with one-fifth of a test section and fertilizing another fifth each succeeding year. As he increases his working capital, he will increase the percentage of his range put under the five-year cycle.

Where He Gets His Information

Urrutia is a graduate of University of California, Davis campus. He works closely with the county extension service for common problems as they arise. For special projects, he works with special officers from University of California, as he has done for the range fertilization studies.

Fertilizer and pesticide salesmen also supply him with ideas for tests. They call on him routinely, and offer him their experience gathered throughout the state on problems similar to his. "Salesmen have their place," he says. "Of course, they will sell you all the chemicals you will buy, but at the same time, they are mostly reputable and conscientious. Their main approach: Try it."

"And only by trying out ideas," Urrutia concludes, "can you know how good they are. Besides, some one has to try them, if agriculture is ever to become a science."



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