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Sheep prosper on spurge

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In this paper, we report the use of sheep in managing leafy spurge. Sheep were found to effectively control the rate of spread of leafy spurge. In doing so, wasteland, formerly heavily infested with leafy spurge, was turned into profitable grazing land.

The control area used on the Talcott ranch had a total of 503 acres in it. Sheep had not been used in the area before, but some of the land had been treated chemically in 1979 with limited results. Two hundred twenty-six ewes with lambs were placed in the area in April of 1987. In mid-July, with an average age of 90 days, 305 lambs were sold with a total weight of 22,450 pounds.

The grasshopper infestation that year may have kept the weight down some. The gross income was \$19,750, and the unshorn lamb wool incentive brought the total receipts for the lambs to \$20,749 or about \$41.25 gross profit per acre. This figure does not reflect the wool or incentive payment from the ewes.

No less than 200 acres of the 503 acres were covered with old, well-established spurge plants, and, if chemically controlled, would have to be sprayed at the higher recommended rate of 2 quarts per acre with Tordon 22K. The cost per acre to treat the infested areas would be \$45.50 for chemicals. The cost averaged over the total area would be \$18.09 per acre. Some areas could never be sprayed because of the shallow water table, and the closeness of the spurge to the water's edge. It would appear that the cost differential in controlling spurge with chemical versus using sheep the first year would be \$59.34.

If the land was untreated by chemical or sheep, the 503 acres would provide winter pasture for 200 cows for about 6 weeks without supplement, until the spurge eventually infested the total area.

Having experimented with sheep on spurge for six years, Ron Talcott feels that the stocking rate should be decreased the second year after the spurge plants are weakened. Fewer sheep can then control the spurge.

In the spring of 1988, the sheep numbers were reduced by 50% because of the drought conditions. The weight of the lambs was very good and the spurge was totally utilized.

This year in April of 1989, the Talcotts stocked the control area at a higher rate than in 1988. This being a good grass and spurge year in most areas, they found the spurge in a weakened condition in comparison with spurge plants in adjacent pasture not being grazed by sheep. By June 15, the Talcotts will have the sheep moved to another area that is becoming quite heavily infested with spurge.

Mr. Talcott has come to the conclusion that some river-bottom pastures are nearly inaccessible for chemical control, the spray cannot be used near the river or high water table areas, it takes out non-target plants and shrubs and is costly and ineffective. In these areas that are heavily infested with spurge and difficult to control by other means, he has found this noxious weed to be a good high-quality forage for sheep. While the sheep have not completely eradicated the spurge, they have certainly controlled its spread. The wasteland can be turned into the most profitable grazing land on the ranch!