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## The nutritional value of leafy spurge as a forage component for ewes and lambs

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Research was begun in the summer of 1982 and is still being conducted on a cooperative basis with the Montana Agricultural Experiment Station and Ray Gillespie of Whitehall, Montana to determine the nutritional value of leafy spurge as a forage component for ewes and lambs.

Nine 1.8 ha pastures have been divided into three treatments: 1) leafy spurge controlled with chemicals, 2) light levels of leafy spurge infestation (about 10% of the plant composition), and 3) heavy levels of leafy spurge infestation (about 20% or more of the plant composition). Five lamb/ewe pairs were placed in each pasture and allowed to selectively graze spurge as well as associated native grasses. Sheep were not starved onto spurge, but had plenty of native grasses made available to them in addition to the spurge. Lamb weights were recorded once every two weeks during June, July and the first three weeks of August to determine lamb gains in each of the different spurge concentrations. Since another summer of data has yet to be collected, the following lamb gain data must be considered inconclusive until the summer of 1983's data can be collected and combined with it.

Table 1. Lamb weight gain averages as a result of foraging on three different percent infestations of leafy spurge.

Level of Infestation	Lamb Weight Gain (in pounds))
Control	14.9
Light	18.1
Heavy	21.3

Research is to be continued in the summer of 1983 with exclosures being used to determine ewe and lamb use of leafy spurge. In addition, lamb weights will again be recorded to determine lamb gains as a result of ingesting different concentrations of leafy spurge.