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

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Research begun in the summer of 1982 is being continued on the Ray Gillespie ranch 6 miles south of Whitehall, Montana to determine the nutritional value of leafy spurge as a forage component for ewes and lambs. Since previous research, conducted by Montana State University graduate assistant Barb Landgraf, showed that after a 2 to 3 week adjustment period sheep would selectively consume 40 to 50% of their diet as leafy spurge, it was suggested that the nutritional benefits of this weed be explored by further monitoring sheep as they selectively graze leafy spurge.

Nine 1.8 ha pastures, each containing 5 lamb/ewe pairs, have been divided into three treatments: 1) leafy spurge controlled with chemicals, 2) light levels of leafy spurge (about 10% of the plant composition), and 3) heavy levels of leafy spurge (about 20% or more of the plant composition). Ten utilization cages have been placed in each pasture to determine species selected (grasses, forbs, or spurge) and to estimate diet intake by use of the paired plot technique. In addition, lamb production will be measured by recording lamb weight gains once every 2 weeks, and ewe performance will be estimated by monitoring lambing records of those ewes grazing leafy spurge.

Preliminary data have shown that lambs eating leafy spurge have gained up to 5 pounds more during the 9-week data collecting period than those lambs grazing only native grasses. In addition, the lambing records of those ewes grazing leafy spurge during the summer of 1982 have not shown any birthing difficulties, abnormalities, or abortions as a result of eating leafy spurge. However, since data from the summer of 1983 have yet to be collected and combined with these results, it would be presumptuous to make any conclusions concerning these preliminary findings at this point in time.