

Multi-Species Grazing of Leafy Spurge

Benefits of multi-species grazing

Multi-species grazing is the practice of using two or more livestock species in the same grazing system. Where cattle and horses will not consume leafy spurge (*Euphorbia esula*), sheep and goats will. Sheep or goats can be added to an existing herd without large reductions in cattle or horse stocking rates as the different animals use different forage resources in the pasture. Goats will preferentially graze leafy spurge, while sheep will graze it after becoming accustomed to its taste. Sheep overlap the diet of cattle by 20 to 40%, and goats overlap by only 5 to 20%.

With proper management, in 3 to 5 years, leafy spurge can be reduced by as much as 90%. *Implementing grazing is the only control that is revenue-neutral or even revenue generating.*

Stocking rates

Studies have shown that continuous grazing will give the quickest reduction in leafy spurge, although rotational grazing is also effective. Stocking rates will depend upon:

- Length of grazing season
- How much you are willing to reduce your cattle or horse herd
- Amount of bush (sheep and goats will make up a good portion of their diet in woody browse if it is available)
- Amount of leafy spurge in the pasture

A good place to start would be from 1 to 3 infested acres per sheep or goat. Stocking rates should be based on actual infested acreage rather than on total pasture size to minimize grass consumption by sheep. As leafy spurge decreases, the number of sheep or goats will also need to be decreased as they will start to overlap the diet of your cattle or horses.

Fencing

Thoroughly research the variety and prices of fencing, as it will likely be one of your biggest investments. Existing cattle fencing will have to be modified to hold sheep or goats. Types of fencing to consider include closely spaced barbed wire, electric fencing, woven wire, and high-tensile fencing. Each variety has its advantages, so the fencing investment will depend on your needs. Doing it right the first time will save you the trouble and cost of “patch jobs” later.

Predator control

Guardian dogs, llamas and donkeys have all been effectively used as guard animals against predators. These animals live full-time with the herd or flock to head off any attacks and are well worth the investment. Other options may include the use of full time herders who live at the site in the summer.

If you aren't willing to buy your own...

Look for a producer who will rent or lease his or her livestock. If you are lucky, you may even find someone willing to provide sheep or goats free for the summer. There are benefits for both parties, as the sheep/goat producer gets free forage for the livestock, and you get leafy spurge control.

IPM

Multi-species grazing is an excellent tool to combine with other management tools such as biological control or herbicides. Research has shown that using a combination of herbicides and grazing produces better results than either alone. For example, animals may be grazed from mid-May to mid-August, and then removed to allow some re-growth of the spurge before it is sprayed.

Resources

Manitoba Sheep and Goat Specialist: <http://www.gov.mb.ca/agriculture/livestock/sheep/bsa01s00.html>

Manitoba Sheep Association: <http://www.Gov.mb.ca/agriculture/livestock/sheep/bsa01s18.html>

Team Leafy Spurge: <http://www.team.ars.usda.gov/>

Local Ag Rep Office

Manitoba Goat Association



Cattle and goats



Sheep grazing leafy spurge