

Grazing Goats Help Control Invasive Weed Species

By: Pat McGrane, NRCS Public Affairs Specialist

Controlling invasive noxious weeds is required by Nebraska weed laws, but what if one weed species is so obnoxious it just won't go away! What can a person do?

That's a question Don Reeves and his family who own grazing land in Howard County northeast of St. Paul, Neb., want answered, and they are working hard to try and find a solution.

One weed, leafy spurge, is a particular pest. Its roots grow deep so the plant is resistant to most herbicides. When the seed pods open, the plant can throw or "spit" the seed 15 feet from the parent plant. Cultivation won't kill it. At best, is the ranchers fight to keep it from spreading. County weed districts have been known to quarantine hay that contains leafy spurge to control the spreading. Leafy spurge, if eaten by cattle, is mildly poisonous making it difficult to eat or drink and cattle avoid grazing near leafy spurge.

Looking for help is why Don, his brother Ladd, and sisters Virginia Fraser and Kay Owens volunteered their land for an invasive plant treatment demonstration to the Nebraska Grazing Lands Coalition. The NGLC is a non-profit group of ranchers united to help their fellow ranchers with range management and natural resources issues. NGLC receives some sponsorship from the USDA Natural Resources Conservation Service (NRCS).

Ross Garwood, current NGLC chairman and rancher near Amelia, Neb., said "One of our goals is education. We were looking for someone willing to experiment with concentrated goat grazing as a means for spurge and cedar tree control in grazing land. Invasive weeds are a hot topic receiving funding from the Unicameral this past session too. We need to find out what works."

The Reeves siblings entered a two week experiment with the NGLC to bring nearly 600 goats on their property to feed in a closely confined area on weed patches. The goats are confined behind portable electric fence. The enclosure, or paddock, is generally about 2/3 of an acre but can vary with the amount of fencing and area needing control.



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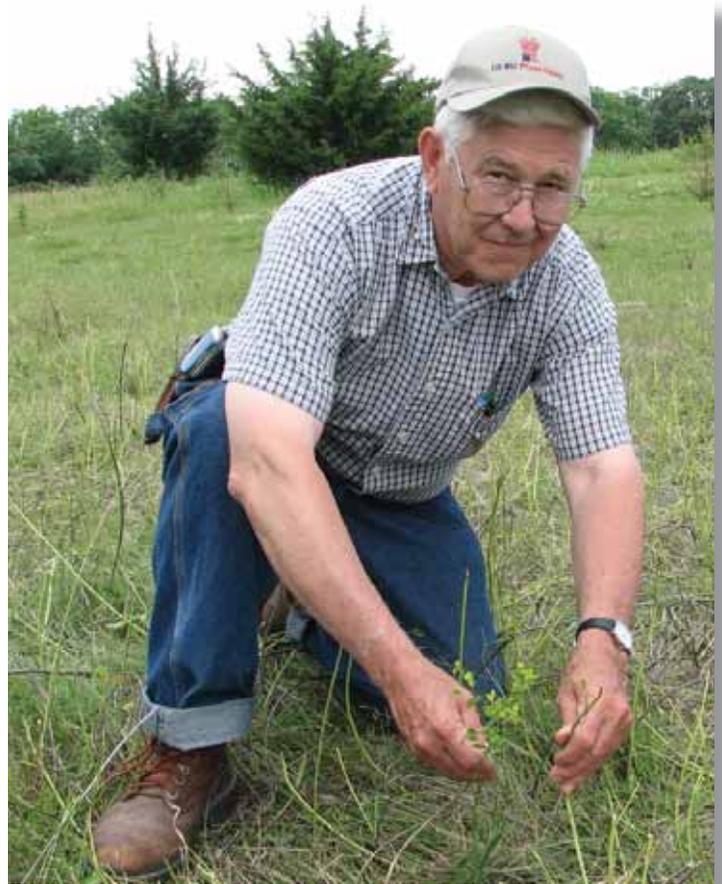
About 600 goats graze an area intensively to help control invasive weed species like, leafy spurge, musk thistle and cedar trees.

The paddock is moved about every 12 hours, depending on the amount of plant material, because the goats are very effective in eating the weeds.

“The goats are effective in removing the undesired plants. They pretty much chew the plant off. We will have to watch the long term impact on the plants because the roots are still there,” said Don Reeves. The NGLC hired the Grazing Operation Attuned to Soils (G.O.A.T.S.) company to transport and supply the goats, fencing and management of the herd movement during the two-week trial.

Michelle Wendell, G.O.A.T.S. owner said, “This is a biological process of weed and tree control. The goats’ chewing and digestive process destroys the seeds, so the eaten seeds are not replanted with the manure, like happens with birds. The manure is also smaller and more spread out than cattle manure so it adds to the soil organic matter quicker.”

Don Reeves said, “For six of the last 15 years we have been strictly using the herbicide Plateau and focusing on the timing of spraying to limit the leafy spurge patches. This is a strong chemical only available through weed district offices. We tried other products in other years but they are not as effective.”



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Howard County landowner Don Reeves compares a grazed leafy spurge stem to a non-grazed plant. The goats eat off everything but the main stem of the plant greatly reducing its ability to spread.



Photos provided by G.O.A.T.S. Company

The photo on the left shows a thick stand of leafy spurge. The photo on the right shows the same area after the goats had grazed the area for just 12 hours.

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- Michelle Windell
G.O.A.T.S. owner

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The Reeves family is also using improved grazing management and prescribed burning to try and control weed and cedar trees. "This Spring we burned one pasture of about 200 acres. After several years of drought, and not grazing that pasture for a year we didn't have a lot of grass matter for a good burn. We got rid of some trees, but the burn would have been more effective under better weather conditions."

The Reeves family has an Environmental Quality Incentives Program (EQIP) contract through NRCS that has helped them divide up their 1,440 acres into eight smaller pastures. With some funds from EQIP, and some from their own pocket, the Reeves put in cross fences and watering tanks fed through underground pipeline. This will allow the Reeves' to better utilize their grass by rotating the cattle between pastures compared to continuous grazing.

NRCS State Range Management Specialist Dana Larsen said, "The Reeves are trying to do a good job of controlling the invasive weeds and trees. It's not a job you can do once. It takes continued scouting and treatment every year."

Using many methods like grazing, burning, herbicide and mechanical treatment may provide a better solution long-term. The results of this project will offer various treatment methods along with the costs at a tour scheduled for October 12, 2007.

For more information about this project or to register for the tour, contact Roger Chesley, project coordinator, NE Grazing Lands Coalition, (308) 848-2500 or visit their web site at www.ne.nrcs.usda.gov/partnerships/NGLC_home.html. ♦

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