

Leafy Spurge and Grazing Cattle



Photo courtesy of Karen Ferguson

Declared a noxious weed in Manitoba, leafy spurge (*Euphorbia esula* L.) is a long-lived and hardy plant introduced to North America from Europe and Asia. Leafy spurge growth begins in April but may not be recognizable until it starts to bloom in late May to early June. It is a shrubby plant that at maturity is 16-32 inches in height. Leaves are pale blue-green, or green with numerous yellow bracts that form a flat-topped cluster to resemble flowers.

As there is no single method to control leafy spurge, the Leafy Spurge Stakeholders Group advocates for an Integrated Pest Management (IPM) strategy that incorporates biological, mechanical, chemical, and grazing controls. These controls offer more effective control of leafy spurge, greater cost-effectiveness, and lower environmental impact. Without coordinated prevention and control strategies, the costs of leafy spurge will rise exponentially above the 1999 estimates of \$20 million a year for Manitoba.

Training Cattle to Graze Leafy Spurge?

Recent studies conducted in the US and Canada suggest cattle can be trained to eat leafy spurge and a variety of other weeds, including Canadian thistle and knapweed. This training process does not involve manipulation through starvation. Although previous research indicates cattle will not eat leafy spurge due to its toxicity, new research has suggested the opposite with no negative health effects observed. For more information about the U.S. project, please consult www.livestockforlandscapes.com.

Cattle, preferably young heifers, can be trained to eat leafy spurge and other weeds with the implementation of a training period as short as 8 days in length. Cattle grazing during leafy spurge's bolting or flowering stage is most damaging to the plant. Training and subsequent grazing is most effective in managed pastures.

Do's

- Training cattle to eat leafy spurge will help to control this weed.
- Trained cattle will influence untrained cattle.
- Trained cattle are more willing to add new varieties of plants to their diets.
- Having cattle eat weeds increases forage options and reduces the competitiveness advantage the weeds have over the preferred forage.

Don'ts

- Cattle should not be stressed before implementing training.
- Producers must be willing to devote sufficient time to work with animals during the training process.
- Trained cattle should never be placed in leafy spurge infested area that offers no other additional nutritional grazing.
- Training cattle in larger pastures will not be as effective as smaller intensively managed pastures as the effect on weeds and grass will be sporadic.
- Grazing on leafy spurge early in the season is suggested as grazing after the seeds have set can spread the weeds to uninfested areas.

Resources

- Leafy Spurge Stakeholders Group: www.brandonu.ca/rdi/leafyspurge.html
- Team Leafy Spurge: www.team.ars.usda.gov
- Local MAFRI Office
- Local Weed Supervisor



Leafy Spurge Identification and Prevention



Declared a noxious weed in Manitoba, leafy spurge (*Euphorbia esula* L.) is a long-lived and hardy plant introduced to North America from Europe and Asia. Without coordinated prevention and control strategies, the costs of leafy spurge will rise exponentially above the 1999 estimates of \$20 million a year for Manitoba alone.

What does it look like?

Growth begins in early April, allowing the spurge to establish itself before surrounding plants begin active growth. Although leafy spurge is quite distinctive during its blooming period, the vegetative form is often overlooked enabling time for the plant to establish itself before landowners notice it.

Each plant may produce several stems, giving the spurge a shrubby appearance. Height of mature stems may vary from 16-32 inches (40-81 cm). The stems are hairless, with numerous linear-shaped, pale blue-green or green leaves. The alternating leaves are 3/4 - 3 inches (2-7.5 cm) long.

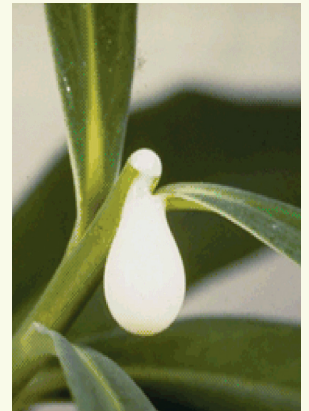


Numerous greenish yellow bracts forming a flat-topped cluster start to appear in May, about three weeks after the plant emerges. Often mistaken for the flowers, these bracts form a flat-topped umbel. The small, green and inconspicuous true flowers will emerge two weeks after the bracts. Flowering is usually complete by mid-July, and the seeds have matured and are dispersed by late July to early August. Some plants may produce flowers until frost.

Each leafy spurge plant produces approximately 140 seeds per stem. At maturity, the seed capsules will explode, hurling the seeds up to 15 feet (4.6 m) from the plant. Most leafy spurge seeds will remain viable for up to eight years, although some may survive even longer.

The root system of leafy spurge is extensive, often growing 26 feet (7.9 m) deep and 15 feet (4.6 m) across annually. Buds along the root system will create new seedlings, which is the main method leafy spurge spreads.

All parts of the plant produce sticky latex, often irritating the skin, mouth, eyes, and/or digestive tract when in contact.



Where is it found?

It is most commonly found on roadsides, trails, pastures, wet riparian areas and disturbed sites such as gravel pits and construction areas. Leafy spurge invades overstocked grazing land and under-vegetated or fragile grasslands where it has the competitive advantage.

How do you stop it?

The best defence against leafy spurge is early detection. New infestations often occur as the result of a disturbance. If you see a new infestation, contact your local weed supervisor who can provide assistance. Avoid transporting forage and straw, and soil or gravel from contaminated areas. Clean vehicles and equipment when moving them from infested areas as seed and root fragments can cause new infestations.

Need More Info?

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