

# Lancaster County Weed Control – City of Lincoln Weed Abatement

May 2015

## MAY 2015:

Leafy Spurge – Management,  
Strategy and Chemical Control 1

Biological Management of Leafy  
Spurge 1

Nebraska's Noxious Weeds 2



Two yellowish heart-shaped bracts surround the flower and seed pods



Plants contains milky latex – helps in identification



Deep, woody roots with numerous pinkish buds



Leafy Spurge flea beetle

## Leafy Spurge – Noxious Weed in Nebraska since 1962

### Management

Leafy spurge (*Euphorbia esula*) is a perennial plant ranging in size from 6 to 36 inches in height. A native of Europe and Asia, leafy spurge emerges early in the spring and gets a head start on other vegetation in a race for space, sunlight, nutrients and water. Prolific seed production and an extensive root system give the plant a huge competitive advantage and make consistent, long-term control difficult. Deep roots – which can exceed 15 feet in depth – store reserves of nutrients to see the plant through hard times, while lateral roots form a network that enable it to rapidly reproduce and spread. And, perhaps worst of all, leafy spurge is highly adaptable and can thrive in a variety of conditions and situations. Monitoring of areas with known or potential leafy spurge infestations is critical; adequate control is possible if management procedures are implemented in the



Severe Leafy Spurge infestation in rural Lancaster County

early stages of infestation, before the root system gets fully established. 100% eradication of spurge is rarely achieved, but infestations can be reduced to manageable levels with the use of herbicides.

### Strategy

The control of well-established leafy spurge stands must be considered a long-term management program. A landowner must develop a persistent annual program that will prevent the spread of larger stands, eliminate smaller infestations and prevent the spread to new areas. **No single treatment will eradicate this invader.** A consistent annual treatment program can provide long-term control.

Once you have achieved a high level of control, remaining isolated patches can be spot-treated, resulting in a less costly control program. Be vigilant in your spray program.

### Chemical Control

The key to controlling leafy spurge is early detection and treatment of the initial invading plant. Because the weed is difficult to eradicate, a persistent management program is needed to control top growth and to gradually reduce the nutrient reserve in the root system. Leafy spurge infests 1,521 acres in Lancaster County and the City of Lincoln. In 2014, our office made 799 inspections and found 490 properties infested.

## Biological Management of Leafy Spurge

Two *Aphthona* flea beetle species have been released in Lancaster County. Flea beetles overwinter as larvae in soil near spurge roots. As soil temperatures warm up, generally in April or May, the larvae “wakes up” and begins feeding on spurge roots. Flea beetles typically take several years to impact leafy spurge

infestations, but the payoff can be well worth the wait. **It is important to understand that flea beetles do not eliminate leafy spurge.** Chemical control around the perimeter of the release site is still required. When flea beetles work, they establish a natural balance with the weed, reducing it to a non-impact plant and tolerable

member of the plant community. If you're thinking about biological management as an easy way to control spurge – “forget it”. It actually takes a lot more time and effort than spraying spurge. Sheep and goats are another management tool.

Lancaster County Weed Control  
 444 Cherrycreek Rd. Bldg B  
 Lincoln, NE. 68528

Phone: 402.441.7817  
 Fax: 402.441.8616  
 E-mail:  
[weeds@lancaster.ne.gov](mailto:weeds@lancaster.ne.gov)



We're on the Web!  
[www.lancaster.ne.gov/weeds](http://www.lancaster.ne.gov/weeds)



STOP INVASIVE SPECIES  
 IN YOUR TRACKS.  
[PlayCleanGo.org](http://PlayCleanGo.org)

Good Neighbors –  
 Control Invasive Weeds !!!

# Nebraska's Noxious Weeds

*It is the duty of each person who owns or controls land to effectively control noxious weeds on such land.*

Noxious weed is a legal term used to denote a destructive or harmful weed for the purpose of regulation.

The Director of Agriculture establishes which plants are noxious. These non-native plants compete aggressively with desirable plants and vegetation. Failure to control noxious weeds in this state is a serious problem which is detrimental to the production of crops and livestock, and to the welfare of residents of this state. Noxious weeds may also devalue land and reduce tax revenue.



<p><b>Musk Thistle</b>                  Height 1.6–9.8 ft</p> <p>Pink to purple flowers                  Mature seedhead</p>	<p><b>Canada Thistle</b>                  Height 1–3.9 ft</p> <p>Pink to purple flowers</p>	<p><b>Plumeless Thistle</b>                  Height 1–4.9 ft</p> <p>Purple flowers</p>
<p><b>Phragmites</b>                  Height 3.2–20 ft</p> <p>Young seedhead                  Mature seedhead</p>	<p><b>Leafy Spurge</b>                  Height 3–2.6 ft</p> <p>Large yellow leaves (bracts)                  Stems/leaves have milky sap</p>	<p><b>Sericea Lespedeza</b>                  Height 1.5–6.5 ft</p> <p>White or cream to yellowish white flowers</p>
<p><b>Japanese Knotweed</b>                  Height 3–10 ft</p> <p>Creamy white to greenish white flowers</p>	<p><b>Giant Knotweed</b>                  Height 8–13 ft</p> <p>Creamy white to greenish white flowers</p>	<p><b>Purple Loosestrife</b>                  Height 1.3–8 ft</p> <p>Purple to magenta flowers</p>
<p><b>Saltcedar</b>                  Height 3.3–20 ft</p>	<p><b>Spotted Knapweed</b>                  Height 1–3.9 ft</p>	<p><b>Diffuse Knapweed</b>                  Height 1–3.9 ft</p>