



Leafy Spurge *Euphorbia escula*



Leafy spurge	
General	Family: Spurge (Euphorbiaceae) Native to Europe and Asia Colorado List B - Control required
Habitat	Deep-rooted, long-lived perennial Very invasive. Extremely difficult to control Has plant toxins that may displace other plants Found in disturbed sites, meadows, pastures, abandoned fields, roadside areas. Prefers dry locations but can tolerate moisture. Will grow in many soil types
PLANT	
Vegetation	Mature plants are 1½-3½ feet tall Contains a milky latex sap that is irritating to skin and eyes. May cause blistering in livestock Grows in dense patches Stems are light green, hairless, turn reddish in the fall Shoots develop from numerous stem and root buds and from seed Leaves are ¼ inch wide and 1-2½ inches long Plants will regrow after grazing or mechanical treatments
Roots	Vertical and horizontal. Vertical roots to 26 feet deep. Horizontal roots - may grow 15 feet a year Roots have buds that sprout new plants Contain large food reserves
Flower	April - May but may continue until fall Yellowish-green, enclosed in two heart shaped bracts. Rarely flowers the first year Seeds are dispersed 4-6 weeks after flowering. Flowers produce seed 45-55 days after bolting
Seed	Dried seed pods explode and expel seeds up to 15 feet Each stalk can produce up to 350 seeds. Can remain viable for 8 years or more
Seedling	Germinate in early spring - Peak germination is in May Produces vegetative buds 10-12 days after germination
Reproduction	Seed Vegetative - Can reproduce from root fragments 1/2 inch long

CONTROL – CHEMICAL		
Timing	Herbicide	Notes
Fall	Aminocyclopyrachlor + chlorsulfuron (Perspective) Dicamba (Banvel, various) Dicamba + Diflufenzopyr (Overdrive) Imazapic (Plateau) Picloram (Tordon - Restricted Use) Quinclorac (Paramount)	Use of a surfactant is recommended for most herbicides to help increase contact with the vegetation and to facilitate herbicide uptake. Refer to the specific label for the appropriate type of surfactant. Treating at appropriate growth stages stops weeds from using resources that desirable plants need to prosper. Refer to the individual label for allowed sites, specific timing, and restrictions about grazing and haying. Formulations with more than one active ingredient are available.
Late Spring - Flowering	Aminocyclopyrachlor + chlorsulfuron (Perspective) Dicamba (Banvel, various) Dicamba + Diflufenzopyr (Overdrive) Glyphosate - Spot treatment only (RoundUp, various) Picloram (Tordon - Restricted Use) Quinclorac (Paramount)	Control will take a few years so treatment will need to be repeated.
CONTROL -- NON-CHEMICAL		
Technique	Timing	Method
Biological	Spring-Summer	Works best as part of a IPM plan <i>Aphthona sp.</i> - flea beetles <i>Hyles euphorbiae</i> - Leafy spurge hawkmoth <i>Oberea erythrocephala</i> - Red-headed leafy spurge stem borer <i>Spurgia esulae</i> - Leafy spurge tip gall midge
Burning	Not recommended	Not effective for controlling but may improve grass growth, which may act as competition. Burning may not be allowed so check with your local fire protection district for current restrictions.
Cultivation	Not recommended	Cultivation severs the roots which will regrow plants from the fragments.
Grazing	Spring to Summer Actively growing	Goats and Sheep - Short term intensive grazing is most successful. Must be repeated as plants regrow. Cattle - Will not graze. Causes lesions around the eyes and mouth. Is a digestive tract irritant.
Mowing	Spring to Early Fall	Repeat monthly before plants set seed. Follow in the fall with herbicide after last flush of plants are 12-18 inches tall.
Prevention	Anytime	Maintain the health of the site by encouraging healthy stands of grass.
Removal	Not recommended	Hand pulling is not effective. Pulling perennial weeds with deep or spreading roots breaks the roots. New plants grow from the fragmented pieces and can increase an infestation.
	Early Spring Early flower stage	Bolting and early flowering plants (before seed formation) may be clipped near the base. Place the cut plants into trash bags and place them in the trash or take to the landfill. If done when plants are small, it results in less bulk. Repeat monthly and follow up in the fall with herbicide treatment. Do not pull established plants because they will resprout from root fragments. The sap can cause skin irritation so wear long sleeves and gloves.

Use all chemicals according to the manufacturer's label. The label will provide specific instructions including allowed sites, application methods, rates, storage, re-entry requirements, and personal protective equipment. No specific recommendation or endorsement is made or implied by listing the above methods or products. 9/2021