**Euphorbia esula**  
(Leafy spurge)

**Common Name(s)**
Leafy spurge

**Full Scientific Name**
*Euphorbia esula* L.

**Family Name Common**
Spurge family

**Family Scientific Name**
Euphorbiaceae

**Images**
- Incursion
- Inflorescence close-up
- Habit
- *E. esula* on right and *E. esula* taller plants and *E. esula*.
Euphorbia esula is an herbaceous perennial that can reach a height of 30-70 cm (1-2.25 ft.). It is a colonial plant that has strong roots. The leaves and stems of the plant are bluish-green in color. The leaves are linear to lance-linear in shape and measure 3-8 cm (1.25-3 in.) long and 3-8 mm (0.1-0.3 in.) wide; they are alternate in their arrangement. The leaves that are just below the umbel are shorter and broader and are lanceolate to ovate in shape. The bracts of the umbel are opposite in arrangement and are broadly cordate to reniform in shape. When this plant is damaged, it exudes white latex.

The flowers are borne in umbels. The flowers themselves are inconspicuous and contained within the larger yellow-green bracts, which form a cup-like structure called a cyathium. The bracts are rounded with pointed tips. The small flowers are arranged in the bract with four reduced staminate flowers on the outside and one pistillate (female) flower in the center. The bracts open in late May to early June, while the flowers themselves do not open until late June. Often below the main umbel of the plant there are smaller umbels that are borne from the upper leaf axils. The plants produce capsules that contain 1 seed in each chamber. The mottled brown seeds are ovoid in shape and 2 mm (0.07 in.) long.


**SIMILAR SPECIES**

Euphorbia cyparissias L. (cypress spurge)

Euphorbia cyparissias is similar non-native invasive species. The most obvious difference between these two plants is that E. esula is much taller and more robust than E. cyparissias; it also has fewer, wider leaves and larger bracts.

**REPRODUCTIVE/DISPERSAL MECHANISMS**

Euphorbia esula reproduces readily both by seed and vegetative means. It forms a deep and complex root system with multiple buds. It can easily re-sprout from small root fragments. Its seeds are dispersed ballistically, have a high germination rate, and can...
remain viable in the soil for a number of years. The seeds may also be dispersed by water or by "hitching a ride" on animals.

**DISTRIBUTION**

*Euphorbia esula* is distributed across southern Canada and all of the northern U.S., including all of New England. It is most problematic in the northern plain states.

**HISTORY OF INTRODUCTION IN NEW ENGLAND**

It is likely that *Euphorbia esula* was transported to the United States as a seed lot impurity or in ship ballast water in the early 1800's. Its presence was first reported in Newbury, Massachusetts in 1827.

**HABITATS IN NEW ENGLAND**

In New England *Euphorbia esula* is most commonly found in disturbed sites, old fields, pastures and along roadsides.

**THREATS**

*Euphorbia esula* threatens native plant species by displacement, outcompeting for light and water, and through the effects of allelopathic compounds. It is especially problematic on the rangelands of the plain states.

**MANAGEMENT LINKS**

Illinois Natural History Survey  
General description and management guidelines  
The Nature Conservancy  
Missouri Department of Conservation  
Wisconsin Department of Natural Resources  
Plant Conservation Alliance  
Fact sheet including management information

**DOCUMENTATION NEEDS**

**Documentation required:** A specific photograph or mounted snippet of the flowers.  
**Best time for documentation:** Summer.
ADDITIONAL INFORMATION

Integrated Taxonomic Information System
Taxonomic information about the species

The PLANTS database
General information and map

The Nature Conservancy
Extensive descriptive and control information

USDA Fire Effects Information System
A wide variety of information including a description and ecology of the species

USDA TEAM Leafy Spurge
An extensive site devoted to this species

Plant Conservation Alliance
A fact sheet with description and control information

Missouri Department of Conservation
General information and control

Illinois Nature Preserves Commission
General information and control

Wisconsin Department of Natural Resources
Description, biology and control information

Invasivespecies.gov
Additional links

REFERENCES


DATA RETRIEVAL

Select a task by clicking the radio button and then click "Submit Selection."

- Formatted display as table
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Submit Selection

MAPS OF PLANT DISTRIBUTION IN NEW ENGLAND

Select a study area by clicking the radio button and then click 'Selection."

- The whole New England area
- One or more states
- One or more counties
One or more towns (county sub-divisions)

Submit Selection