



Foliage

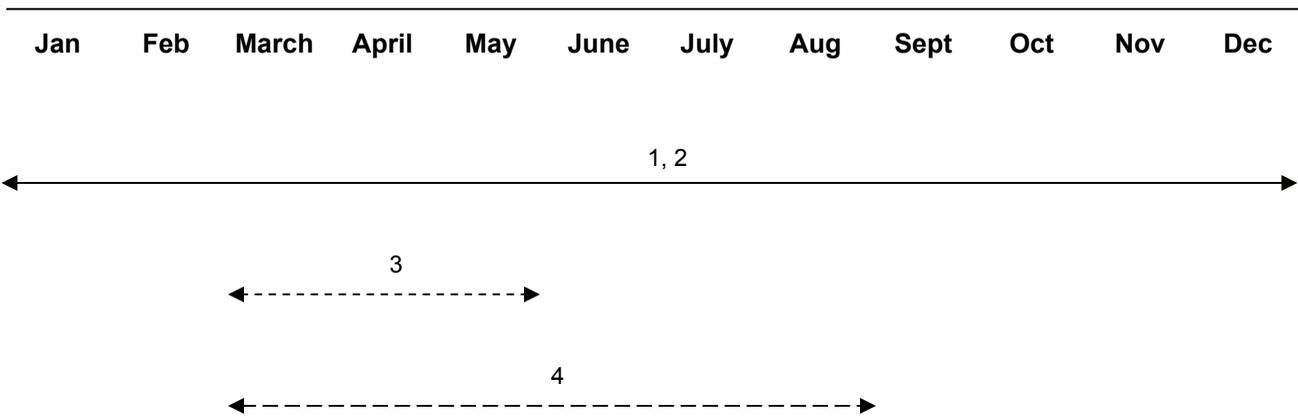


Flowers



Fruit

UGA5238068



Management Techniques

- (All Year) Cover the plant with dark plastic to prevent growth. Works well for small infestations. *Follow up with technique 2.*
- (All Year) After reducing the population, plant a mixture of native grasses and forbs. *After completing any of these other techniques, this must be done.*
- (Spring) Hand-pulling young plants. Make sure to get all parts of the plant. Monitor the site for re-growth. *Follow up with technique 4 and then technique 2.*
- (Spring-Summer) Herbicides. For controlling large populations. First remove plant matter (by mowing or grazing) and then completely cover the entire plant with herbicide to the point of runoff. Follow-up treatments are usually necessary. *Follow up with technique 2. Choose ONE of the following herbicides:*
 - 0.25% Clopyralid solution with a 0.5% surfactant (selective for broadleaf plants)
 - 2,4-D Amine: use the label recommendation; can be used with dicamba
 - 2% Triclopyr solution

For More Information Visit:

<http://www.HawkeyeCWMA.org>

ALWAYS READ AND FOLLOW PESTICIDE LABELS.

Proper training for prescribed fires is highly recommended.

Basic training can be found online at <http://training.nwcg.gov/courses/s130.html> and <http://training.nwcg.gov/courses/s190.html>

Related Websites:

<http://www.iowadnr.com/forestry/invasive.html>
<http://plants.usda.gov>
www.invasivespecies.gov
www.nps.gov/plants/alien

Credits:

Photographs: Dan Tenaglia, missouriplants.com; Chris Evans, River to River CWMA; Jan Samanek, State Phytosanitary Administration; David Cappaert, Michigan State University; Ohio State Weed Lab Archive, Ohio State University; Richard Old, XID Services Inc; John M. Randall, The Nature Conservancy; Bugwood.org

Brochure Created By: Karen Clauson

Last updated: 6/13/2011



The **Hawkeye Cooperative Weed Management Area (HCWMA)** is a collective group of county, state, and federal agencies, nonprofit organizations and community associations who have come together to **combat the invasive species problem in Eastern Iowa**. The HCWMA serves Benton, Cedar, Iowa, Johnson, Jones, Linn, and Louisa Counties and is open to all interested parties. The Term CWMA, or Cooperative Weed Management Area, refers to a local organization that integrates invasive species management resources across jurisdictional boundaries in order to benefit entire regions.

Funding for this brochure provided by the US Forest Service through a Healthy Forest Initiative Grant.

All Hawkeye CWMA members (agencies, organizations, and individuals) are equal opportunity providers and employers.

Bird's-Foot Trefoil

Lotus corniculatus



A SERIOUS THREAT
To
Iowa's Prairies/Grasslands

What is Bird's-Foot Trefoil?

- Also commonly called "Deer Vetch".
- A warm season perennial legume.
- Often found in roadsides, fields, or prairies.
- Native to Eurasia and Africa.
- Was brought to the U.S. to be planted for livestock forage, and was later planted as erosion control.
- Can easily escape cultivation.



An infestation of Birds-foot Trefoil

What does Bird's-Foot Trefoil Look Like?

Identifying traits: Plants can stand up to 2 feet tall and produce bright yellow, pea-like flowers for much of the year. Leaves contain 5 small, long leaflets. Seed pods come in clusters that closely resemble a bird's foot.

Stem:

Each plant contains many erect stems. Stems can be up to 3 feet long (or 2 feet tall), contain many branches that often tangle, and become woody with age.

Leaves:

Leaves are pinnately compound, alternate, clover-like, and contain 5 smooth leaflets.



Flowers:

Bright yellow, pea-like flowers bloom in clusters of 3 to 6 at the tops of stems. Petals are sometimes streaked with red. Flowers bloom between June and the first frost.



Fruit:

Fruits come in clusters of 1 inch long, dark brown seed pods. Each pod contains up to 20 seeds that eject at maturity. Clusters of pods resemble a bird's foot.



Reproduction:

As well as an over 3 foot deep taproot, Bird's-Foot Trefoil sends out underground rhizomes and above-ground runners. These rhizomes and runners help this plant produce stems in new locations. Seeds are an additional form of reproduction.

Native Alternatives:

Showy Tick Trefoil (*Desmodium canadense*)-

This warm-season, native perennial legume can stand up to 6 feet tall. Small purple clusters of flowers bloom in mid-summer, attracting a variety of pollinator species. It grows best in full sun and moist soils. Showy Tick Trefoil is a valuable food source and habitat for wildlife.



Round Headed Bushclover (*Lespedeza capitata*)-

This native wildflower blooms with creamy-white flowers in late summer. It grows best on sunny, well drained sites. The seeds provide a food source for many different bird species. This plant can also be used as a palatable, high protein forage for livestock.



Sustainable Erosion Control-

When it comes to soil erosion control, non-native invasive plants are not your best option. Native prairie forbs and grasses have deeper roots than non-native invasive plants. Deep roots help to stabilize the soil and prevent erosion from wind, water, and foot traffic. Plus, with most natives plants you do not need to worry about the plant spreading into unwanted areas.

The figure below shows how native vegetation can have roots as deep as 11 feet under the ground. Compare this to the roots of the non-native Kentucky Bluegrass (far left) who's roots reach only a few inches deep.



What is the threat to Iowa?

- Creates dense mats that out-compete native vegetation for water, sunlight, and nutrients.
- Threatens the diversity of native plant communities.
- Can easily spread into unwanted areas through seeds, rhizomes, and runners.
- Seeds remain viable under the soil for many years.