

Management Techniques

- 1. (All year) Herbicide. Best if done in the fall, when native plants are dormant. After plants have died and dried out, follow up with technique 2, 3, then 4. Choose ONE of the following techniques, based on the size of the plants and infestation:
 - A. For large plants, treat cut stumps with a 12.5% triclopyr solution (selective for broadleaf plants) or a 20% glyphosate solution (**Important Note: Glyphosate is non-selective, avoid contacting non-target plants) Larger plants can be double girdled
 - B. For small or large plants, use a basal bark treatment with a 25% triclopyr and 75% oil solution C. For highly infested areas, use a foliar spray with a 2% triclopyr plus a surfactant solution
- 2. (Spring or Fall) Prescribed burn. Fire will kill seedlings due to their poor root system. Repeat once a year for at least 3 years to deplete the seed bank. Check for re-sprouting.
- 3. (Spring-Fall) Underplanting. Plant native plant species under the canopy to prevent growth of unwanted species. This will only work if there is enough light available for the native plants to grow. Check for re-sprouting.
- 4. (Spring-Fall) Mowing/Cutting. Mow or cut the saplings to decrease re-sprouting. Check for re-sprouting.

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:

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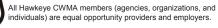


The Hawkeye Cooperative Weed Management Area (HCWMA) is a collective group of county, state, and federal agencies, nonprofit organiza-



tions 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.

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Common & Glossy Buckthorn Rhamnus cathartica & Rhamnus frangula



A SERIOUS THREAT То Iowa's Woodlands

What are Common and **Glossy Buckthorn?**

- Small tree or tall shrub.
- Introduced from Eurasia in the mid 1800's as ornamentals.
- Often used as hedges in landscaping.
- Quickly spreads to new areas.
- Most easily spread to woodland edges and openings in the forest floor.



An infestation of Common Buckthorn

What is the threat to lowa?

- Grows in dense clusters that shade out native plants.
- Has a longer growing season than native plants, leafing out earlier in the spring, and remaining green later in the fall.
- Produces many berries that are eaten and spread by birds and small mammals.
- Birds become very sick after eating berries.
- Can be grown in a wide variety of soils and sun exposures.
- Has a rapid growth rate.
- · Seeds remain viable for up to 3 years in soil.

What do Common and Glossy **Buckthorn Look Like?**

Similar traits:

A small tree or tall shrub. Bark is browngray with light colored lenticels. The

sapwood is yellow and heartwood is pink to orange. The terminal buds are shaped like a bucks hoof, come in pairs, and contain a thorn in between the two buds. The pea-sized fruits produce a laxative effect on birds when eaten. Seeds can remain viable in the soil for 2 to 3 years.

Leaves:

Common-Simple, opposite, ovate, and with minute teeth on margins. Dark green in color, with shiny topsides. Veins curve towards the leaf tip. Twigs have sharp spikes at their tips.

Glossy-Alternate, untoothed, and with hairy undersides. Veins first extend straight, then curve towards the leaf tip. No spikes present on twigs.

Native Alternatives:

many birds and small

many different conditions.

American Black Currant (Ribes americanum)-

This native deciduous shrub reaches up to 5 feet tall.

Flowers:

Common- Fragrant, small, greenvellow flowers cluster near the end of stems in the leaf axils. Bloom from May to June. Each flower contains 4 petals.

Terminal buds:

Glossy- Hairy.

Common- Not hairy.

Glossy- Pale yellow flowers contain 5 petals each. Bloom late May until the first frost.

Fruit:

Common- Only the female plant produces fruit. Fruit are clustered, black, and pea sized/shaped. Ripen from August to September, and can remain on the plant until the following spring.

Glossy- Both male and female plants produce fruit. Progressively ripen from red to dark purple from July through September.

Nannyberry (Viburnum lentago)-

This deciduous shrub makes a great hedge, due to it's dense foliage. Clusters of white wispy flowers bloom in May, attracting butterflies and hummingbirds alike. Wildlife are attracted to the blue-black berries that

ripen in the fall and persist throughout the winter. Leaves change to purple in the fall. Humans may eat the fruit right off the bush or make it into jelly.



Similar Species:

Care should be taken to not confuse Common or Glossy Buckthorns with these native shrubs:

Alder Buckthorn (Rhamnus alnifolia)-

Alder Buckthorn is significantly shorter than it's invasive relatives, standing less than 3 feet tall. It has hairless twigs and, in the winter, dark scales may be found on the buds. However, the leaves, bark, flowers, and fruit are very similar between Common, Glossy, and Alder Buckthorns.



Lance-leafed Buckthorn (Rhamnus lanceolata)-

This native shrub grows less than 6 feet tall. It can be found mostly in wetlands and areas of moist soil. Like Alder Buckthorn, scales can be found on the buds during the winter. Lance shaped leaves are smooth on the top and hairy on the bottom. Flowers and fruit are very similar to it's invasive relatives.



