



CAKE

Charlevoix • Antrim • Kalkaska • Emmet
Cooperative Invasive Species Management Area



Identification and
Recommended Management
Techniques

for

**Common
Buckthorn**

Rhamnus cathartica

Species Identification

- **Species Description:** A deciduous shrub that can grow from 10 to 25 ft. tall. Outer bark is brown or gray with lenticels and inner bark is an orange color. The stems branch near the crown of the plant, with many twigs bearing thorns near the ends.
- **Habitat:** This shrub is only partly shade tolerant, and so is often found along roadsides, woodland edges, as well as prairies and fields.
- **Leaves:** the leaves are simple and sub-opposite, although they may appear to be alternate or opposite at times. Leaves are dark green in color with small teeth along the margins. Veins curve towards the leaf tip.
- **Flowers:** small, four-petaled flowers, green to yellow in color, dioecious. Flowers bloom from May to June.
- **Fruit:** round, small black-berries, May be found in winter.
- **Reproduction:** seeds are spread by birds, stumps may resprout after being cut.



Invadingspecies.com



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Recommended Control Measures



Invasive buckthorn is a resilient plant that will often re-sprout after cutting efforts. It is important to treat consistently and thoroughly to achieve effective results for buckthorn infestations. Remove trees with fruit first to for maximum control effectiveness. .

Early Detection

As with any invasive species, early detection is critical to prevent buckthorn from naturalizing itself. Monitor areas of concern that are sunny and open such as roadside edges, woodland edges, old fields and prairies . Begin monitoring for this species in early spring, as it tends to leaf out before many native species. If detected early enough, young seedlings may be pulled by hand before roots become too extensive. Young seedlings may be dug out as well - ensure that all roots are removed.

Method I: Foliar Spray

Foliar spraying may be effective for larger infestations of buckthorn, where there are limited native/desirable species in the area. Apply chemicals such as triclopyr (amine or ester if no water bodies are present). Triclopyr is selective to broadleaf plants and will not kill grass if applied correctly.

Method II: Cut Stump

Cut stump treatment can be an effective form of control. Cut the plant near the base and apply an herbicide such as triclopyr immediately after cutting to ensure absorption by the plant. Chemical can be painted on with a brush or applied with low-volume herbicide sprayer.

Recommended Control Measures



Method IV: Hack and Frill

Hack and frill can also be an effective method of treatment. Use a hatchet to make downward cuts in the bark, just above the soil line. Make sure that cuts break through to the cambium layer (this is the layer just below the bark). Use a paint brush or a sprayer to apply herbicide inside the cuts.

Method V: Basal Bark Treatment

Basal bark treatments are also effective with this species. This method involves applying an herbicide containing triclopyr ester, mixed with kerosene or a diluent. This should be applied on the bark from the ground up to between 12 to 18 inches high for maximum effectiveness, and can be applied any time of year that this part of the tree is accessible to treatment.

Method VI: Buckthorn Bags

This non-chemical form of treatment has proven to be effective on stumps to prevent resprouting. Use small, heavy duty black bags and zipties to cover the stumps and cut off all light from the plant. Bags should stay on the stumps for several months to ensure effectiveness. Make sure to recover bags after use, as they are not biodegradable. .

About the CAKE CISMA



Who We Are

The CAKE CISMA is the Charlevoix, Antrim, Kalkaska and Emmet Cooperative Invasive Species Management Area. The CAKE CISMA provides education, outreach and land management assistance to the public within its service area, and is funded by the Michigan Invasive Species Grant Program, a funding effort by the Michigan Department of Natural Resources, the Michigan Department of Agriculture and Rural Development, and the Michigan Department of Environment, Great Lakes and Energy. The CAKE CISMA is directed by a steering committee comprised of invested environmental agencies and organizations, including the Antrim Conservation District, Kalkaska Conservation District, Emmet Conservation District, Little Traverse Conservancy, Grand Traverse Regional Land Conservancy, Little Traverse Bay Band of Odawa Indians, Tip of the Mitt Watershed Council, and the Walloon Lake Association and Conservancy.

Our Mission

“The mission of the CAKE CISMA is to protect the natural resources, economy, and human health in Northern Lower Michigan through collaborative outreach and management of invasive species.”

Contact Us

For invasive species related questions and concerns, don't hesitate to visit the CAKE CISMA office at the Antrim Conservation District, 4820 Stover Road Bellaire MI 49615, or call the office at 231-533-8363 ext. 5, or email the CAKE CISMA program coordinator at benjamin.vandyke@macd.org.