

Buckthorn Treatment Options – what is known to work

Note: The Label is the Law. Always read the chemical label before using it.

Cut Stump Treatment

Cut all stems of an individual below 1 foot from the ground – any higher will cause the treatment to be less likely to work.

Leave at least 3 inches of the trunk in case the treatment doesn't work, you have room to recut main trunk.

Note: cut below the lowest branch because the branch will act as a barrier and prevent chemical from reaching the roots below it.

Treat within 1 hour after cutting, otherwise the stump will “scab” and chemical is less likely to be absorbed.

DO NOT treat during heavy rain, even with rain proof chemical and at least 1 hour before heavy rain, treatment will not work. Light sprinkles during and after treatment will work.

This treatment works during summer time, ideal during fall time, must mix with non-friendly antifreeze (ethylene glycol) for the winter.

DOES NOT work with the environmentally friendly antifreeze (propylene glycol) because it will gelatinize and render it useless and DOES NOT work during spring time after buckthorn starts budding out.

Apply chemical on the outer ring of the cut stump (cambium layer: aka – green living tissues).

Note: any section of the outer ring that isn't treated will act as a lifeline for the buckthorn and it will resprout where chemical is missed.

Chemical application options:

Hand sprayer



Buckthorn Blasters: <https://landscape-restoration.com/>



Chemical options:

Glyphosate – Round-up (18 – 20% concentration with a dye for visual indication of treated stumps).

Triclopyr:

Garlon 3A (18 – 20 % concentration) **WARNING** – wear eye protection, can cause permanent eye damage.

Vastlan (18 – 20% concentration) new generation from Garlon 3A without the hazard of causing permanent eye damage
use both chemicals with a dye for visual indication of treated stumps.

Basal Bark Treatment

Spray onto bark completely around the trunk – forming a complete collar around the base of the trunk.

Collar must be complete, any section missed will allow for resprouts.

Width of collar is relative to diameter of tree. The smaller the tree, the smaller the chemical collar, larger trees need a larger collar.

Thickness of applied chemical relative to bark. Smoother bark requires less chemical, the rougher bark requires more chemical.

Spray enough chemical that the left-over chemical barely reaches the ground. You do not want this chemical to soak into the ground.

Bark must be free of all water forms (ice, snow, and water).

Water acts as a protective barrier to this oil based chemical and will be a lifeline for the buckthorn.

Must be applied below 1 foot from the ground – any higher will cause the treatment to be less likely to work.

DOES NOT work during spring time after buckthorn starts budding out.

Triclopyr – Garlon 4 (18 – 20% concentration – mix with either bark oil blue or deasil with an appropriate dye).

Note: hot chemical. Do not spray during a temperature inversion or in hot, humid conditions. This chemical could volatilize and kill adult trees and harm the applicator via inhalation.

Non-chemical Options:

- 1.) Pull the seedlings and saplings with your hands.
- 2.) Pull the larger saplings with a weed wrench (note: the more you disturb the soil, more buckthorn and other invasive seeds will germinate). As long as you remove the root crown, the buckthorn is dead. Any roots remaining in the soil will die.
- 3.) Smother the cut stumps of larger saplings with a weighted coffee or tin can (set a large enough rock on top).
- 4.) Smother the cut stumps of large trees with black plastic tarp with the sides weighted down with large rocks.
- 5.) Smother any cut stumps with buckthorn baggies: <http://www.buckthornbaggie.com/>
- 6.) Smother large, dense monoculture patches of buckthorn seedlings with black plastic tarps with the sides weighted down with rocks.

What to do with cut buckthorn materials

Ideally, leave on site (infested property) to reduce the chance of spreading Buckthorn to new areas:

Create small piles of cut materials so that you are not spreading the seeds throughout your property:

Compact the piles and leave them as wildlife habitat.

Burn the piles during the winter – **requires a permit**.

Burn cut material over time in a camp fire **on infested property**, but be careful transporting materials across the property.

Chip the cut material and place back into the infested areas to prevent spreading the berries and to hinder seeds from germinating.

If material must be removed from the site (infested property) there are some legal and ethical aspects to consider:

Ethical: transporting buckthorn material with berries will likely spread to other areas of your property and to other properties that may not presently have buckthorn yet.

Legality:

Both common and glossy buckthorn are listed as a Restricted Noxious Weed by the MN Department of Agriculture.

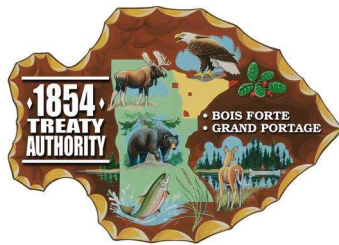
All noxious weed material in transit must be securely contained (e.g. tarped, bagged, etc.) to prevent seed dispersal.

If buckthorn is removed from the property, a permit to transport is required and the material must be properly destroyed there.

A permit is not required if material is taken directly to a MN Dept. of Agriculture approved wasted disposal site for disposal.

Residents of Duluth and other areas serviced by WLSSD can transport their material to WLSSD for proper disposal:

WLSSD prefers that all berries are removed (fallen off over winter/time) before delivering to their composting site. They will accept materials with berries if necessary. **Please contact WLSSD before delivering materials to their composting site and inform them of the presence of buckthorn berries so that they can properly handle and decontaminate the reproductive parts.**



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