

# WHAT YOU CAN DO TO CONTROL BUCKTHORN

## Controlling Seedlings or Small Buckthorn Plants



Bruce Larson

If individual plants are less than 3/8-inch in diameter, remove them by hand. Small seedlings can be pulled and will not re-sprout. If greater than 3/8-inch, use a hand tool that pulls the shrub out, such as a *Weed Wrench* or *Root Talon*. The *Weed Wrench* will remove buckthorn stems up to 2-1/2 inches in diameter. Note that

the *Weed Wrench* can cause some soil disturbance so extra care is needed on sensitive sites or steep slopes. Removing buckthorn by hand is easier if the soil is moist.



MnDNR

Before you pull or dig buckthorn, contact Gopher State One Call at (651) 454-0002 or (800) 252-1166 to make sure there are no buried utilities in the area.

If pulling individual plants is impractical, spray

foliage of short buckthorn or seedlings with a herbicide. Glyphosate, commonly sold under the brand name Roundup, will kill all actively growing vegetation on which it is sprayed. Triclopyr will kill broadleaf plants, but will not harm grasses when applied properly.

## Controlling Large Buckthorn Plants



Cindy Luefh

Buckthorn plants that are 2 inches in diameter or larger, are best controlled by cutting the stem at the soil surface and then covering or treating the stump to prevent re-sprouting.



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applied to cut stumps with a paintbrush, wick applicator, or a low-volume sprayer.

When using water-soluble herbicide products such as Ortho Brush-B-Gon, Garlon 3A, or any of the glyphosate products, treat only the cut surface. When using

oil-based products like Garlon 4, treat the cut surface and the remaining bark to the ground line. In cases where more than a few plants are treated, add an indicator dye (available where pesticides are sold) to the herbicide to mark the cut stumps you have sprayed. Colored flags also can help mark cut stumps. When buckthorn is cut, the stumps are easily covered and lost under cut brush.



Cindy Luefh

This can be done effectively with hand tools (for a few plants), chain saws, or brush cutters. If you are only cutting a few stumps, they can be covered with a tin can or black plastic to prevent re-sprouting. Otherwise, stumps should be treated within two hours after cutting with a herbicide containing triclopyr such as Ortho Brush-B-Gon or Garlon

3A or 4, or glyphosate to prevent re-sprouting.

The best time to cut and chemically treat the stumps is in late summer and throughout the fall. Herbicides can be

For basal stem treatment, a method that applies chemical through the bark, low-volume spray applications can be made with Garlon 4 and similar oil-based products. This application method uses triclopyr ester mixed with an oil diluent (i.e., Bark Oil Blue, kerosene, or diesel oil) applied directly to the bark of buckthorn from the root collar up about 12-18 inches. This treatment works best on stems less than 2-3 inches in diameter.

An ultra low-volume spray wand should be used to minimize herbicide use and reduce the potential for non-target injury. Buckthorn treated in this fashion can be left standing or cut at a later date.

## SEED VIABILITY

Buckthorn seeds can remain viable in the soil for up to five years. Follow-up control of seedlings that emerge after initial control efforts is important on all sites. With no follow-up control, buckthorn will come back. Fire offers a long-term management option in grassland or savanna cover-types. Burning will need to be done every two to three years. If burning is not an option, a follow-up treatment of pulling or spraying the seedlings is needed. Successfully treating buckthorn requires a long-term commitment.