

your garbage contractor for information. Call your city hall or county to learn about burning ordinances or compost sites.

Buckthorn greater than 1½" diameter may be cut and treated with herbicide, only in the fall, when buckthorn is easiest to identify, and the sap will carry herbicide to the roots to kill the plant. Cut close to the ground and treat the stumps immediately with herbicide. **If you do not herbicide the stump, the plant will resprout.** We recommend one of the following herbicides:

- Glyphosate products at a concentration of 25-27% active ingredient.
- Trichlopyr products at a concentration of 8% active ingredient.

The herbicides listed above **should not be used near water** - they kill aquatic life. Do **not** use near **storm sewers, wetlands, ditches, streams, rivers, lakes or ponds**. If you are removing buckthorn near areas with water, use **Rodeo®** herbicide (at a concentration of 25%).

Herbicide use tips: Use herbicide **only in the fall** to avoid resprouts. When using herbicides, ***always read and follow the label directions***, with the following exception: do not drill holes in stumps and pour herbicide into the holes. This is ineffective, wasteful, and could be hazardous.

Concentration: An herbicide may be sold in many different concentrations. Check the label to ensure you are buying the correct concentration of active ingredient. Lower concentrations may not be effective and higher concentrations may be harmful.

If using a spray bottle, carefully transfer the herbicide to the spray bottle. You may add food coloring to the bottle, to visibly

mark what you have sprayed. Hold the sprayer close to the stump; avoid nearby plants. Spray the yellow or orange ring of soft wood just underneath the bark. Be careful that the spray does not run off the stump. Avoid stepping on the stump after spraying, to prevent exposure to humans and nearby plants. If resprouting occurs, cut and apply herbicide again.

Protect yourself and others: Always use caution when using chemicals. Please wear protective gear. Old clothes (long sleeves and pants), eye protection, rubber gloves, and rubber knee high boots are recommended. Remove footwear outside. Always wash this clothing separately from other household laundry.

Replacement Plantings

Once buckthorn has been removed, the area may be devoid of vegetation. Many beneficial, non-invasive native shrubs and perennials may be planted as substitutes. Visit the nature center to see examples of native plants, and pick up a copy of our native shrub list (also available on our website).

Maplewood Nature Center &
Neighborhood Preserves
www.ci.maplewood.mn.us
Click on "Nature Center"
651-249-2170

Buckthorn Hotline (Maplewood residents):
(651) 249-2188

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Buckthorn Management



Maplewood Nature Center & Neighborhood Preserves

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European Buckthorn

Rhamnus cathartica

European or common buckthorn is a non-native plant that originated in Eurasia. It was brought to the United States to use for hedges and as ornamental shrubs. Minnesota has classified buckthorn as a noxious weed. Selling or transporting buckthorn is illegal. Removal is advised.

Once mature buckthorn plants are established in an area, it is spread to new areas by birds. Birds eat the berries and distribute the seeds through their droppings. These seeds sprout along structures and in natural areas, becoming a nuisance.



European buckthorn quickly out-competes beneficial native plants. An area infested with buckthorn often lacks other vegetation. This may result in soil erosion and lead to poor water quality. Natural areas become less able to support wildlife, and species diversity declines.

Identifying Buckthorn

European buckthorn grows to the size of a

shrub or small tree. It may reach 25' tall and 12" in diameter.

Small 1/4" blue-black fruits hang from the twigs. Each fruit contains 3 to 4 seeds. Although birds readily consume them, *the berries are toxic to humans.*

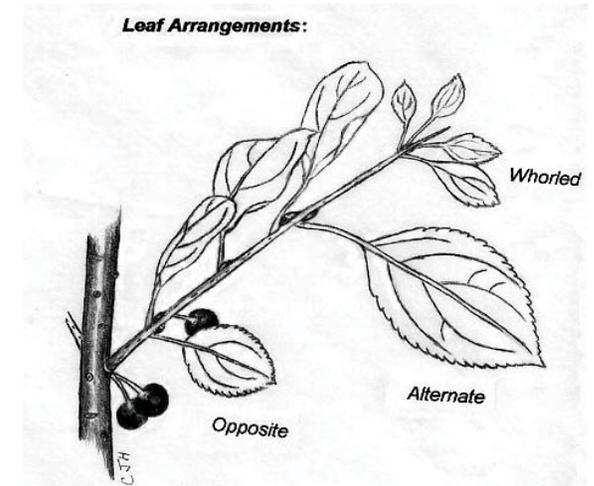


The thin bark varies from light gray to a purplish brown color. It often has small dots or horizontal lines, much like a cherry or plum tree. The bark on older trees may peel like that of a mature cherry or plum.

Thorns develop at the branch tips and may grow longer in following years.

Leaves vary in size, shape, and color. Leaf margins have fine, rounded "teeth". The most consistent leaf characteristic is the unusual curving of the leaf veins along the edge of the leaf. (*Dogwoods also have curving leaf veins, but they have opposite and/or whorled leaves.*)

European buckthorn is the **only shrub in our area that may have opposite, alternate and whorled** leaf arrangements all on the same plant (see illustration).



Buckthorn is easily identified in the late fall. Its leaves stay dark green and remain on the shrubs long after all other leaves have fallen.

Controlling Buckthorn

The Maplewood Nature Center and Neighborhood Preserves is managing buckthorn on city property. We remove mature plants; then use prescribed burns to kill buckthorn seedlings in areas which tolerate fire. This is not feasible for most homeowners. We recommend the following methods for homeowners:

Buckthorn up to 1½" in diameter may be pulled out. Pull in level areas away from water to prevent erosion. Try not to disturb native wildflowers. Pull by hand or use a weed wrench. Make sure that the soil is moist and your knees are bent to prevent back strain. Prevent re-rooting by keeping pulled roots off the ground. Buckthorn seeds remain viable in the soil for several years; pulling may need to be repeated. Dried buckthorn may be burned in areas where burning is allowed, otherwise, contact