Common Buckthorn
One of Ontario’s Most UN-WANTED Invasive Plant Species

PROFILE

Common buckthorn is a small tree native to Europe and Asia. It was introduced to Canada as a windbreak in farmers fields and is known to spread aggressively through Southern Ontario and east to Nova Scotia. It forms dense even-aged thickets that often cause an overall reduction in the establishment of shade tolerant native shrubs and herbs. It rapidly produces seeds early in the season that are highly viable and germinate quickly. It is also an alternate host of the fungus responsible for oat crown rust, which can impact the agricultural industry.

The preferred habitat of common buckthorn includes a wide range of soil and light conditions, giving it the ability to invade a variety of habitats. Many forest stands such as open oak woodlots are threatened by this plant, since it can thrive in lightly shaded conditions and openings in the forest canopy, created by deadfall or intentional thinning or forest management activities.

MUG SHOT

Common buckthorn can grow to 6 m (22 feet) in height with a trunk diameter of 25 cm (10 inches) and mature specimens have irregular spreading crowns. The bark is grayish brown and becomes coarse in texture as it matures, while the inner bark is yellow in color with a pinkish to orange heartwood. The twigs have raised patches or lenticels and are usually tipped with a spine for a terminal bud. These spines are soft while alive, but turn to sharp thorns once they have died. In the spring, clusters of 2-6 yellowish green four petal flowers begin to emerge from stems near the base of the stock. The male and female flowers are found on separate plants. Small black fruits 6mm (¼ inch) in diameter are also produced which house 3-4 seeds.

The leaves are oval in shape, tipped with a point and are green in color with minute teeth along the edges. The leaves are 2.5-6 cm (1-2.5 inches) long and are arranged oppositely, or nearly so, along the stem. They can also be identified, by observing the 3-4 pairs of veins that curve upward toward the leaf tip. The leaves and fruits of common buckthorn persist late into fall helping to disguise it from other similar species. Birds and mice eat the fruit which acts as a laxative, and unknowingly distributing the seeds, often close by the parent plant to perpetuate the population.
TIPS ON MANAGEMENT

Land managers, farmers, landowners and community members must extend their best efforts to detect this species on their properties early in its establishment, avoiding larger more labour intensive control efforts down the road.

Manual/mechanical removal of Common buckthorn can be effective, however care should be taken to avoid excessive disturbance to the soil which can stimulate buckthorn seeds stored in the soil. Removal techniques involving prescribed burns in the year following manual or mechanical removal, ensure a higher success rate.

Prescribed burning alone has proven ineffective in eradicating this species. It is important when attempting to control Common buckthorn to remove the fruit-producing females and follow up by pulling any seedlings that regenerate.

Mowing can be an effective means of control if it is continued for 2-3 consecutive years as it takes time and repetition to reduce stem numbers, overall vigor and achieve mortality.

The use of herbicides has met with some success, especially for larger infestations. However a Letter of Opinion from the district MNR may be required before controlling invasive plants with chemicals. The Pesticide Act does have some excepted uses including control in forestry, agriculture, public health and safety as well as others. Consult with your district MNR if you have questions. A licensed applicator must do the application.

Foliar applications are not recommended as the spray can greatly impact desirable native species surrounding the target plant(s). Painting cut stumps with a strong solution of herbicide has proven to be effective.

TIPS ON PREVENTING THE SPREAD OF INVASIVE PLANTS IN THE LANDSCAPE

- Learn to properly identify and manage invasive plants on your property.
- Avoid using invasive perennials in gardens and landscaping. Always check your plant references before choosing garden plants.
- Purchase non-invasive plants from reputable suppliers. Native plants will provide a variety of benefits to the plants and wildlife that also depend on them.
- Do not dispose of compost or garden waste in natural areas as this can disturb the natural vegetation.
- When hiking, remain on designated trails and keep pets on a leash to reduce transferring invasive plants and seeds to new areas.
- When an invasive plant is flowering, cut the flower tops to prevent the plant from going to seed, put it in a garbage bag and throw it in the garbage.
- Share this fact sheet and spread the word to friends, family and neighbours.
- When in doubt about a plant, whether it is invasive or how it should be controlled, contact the “Invading Species Hotline” @ 1-800-563-7711 or www.invadingspecies.com or www.ontarioinvasiveplants.ca

A Message from the Ontario Invasive Plant Council (OIPC)

The Ontario Invasive Plant Council facilitates a coordinated and effective response to the threat of invasive plants by providing leadership, expertise and a forum to educate, motivate and empower organizations and citizens. The OIPC is composed of conservation authorities, academic institutions, aboriginal organizations, stewardship networks, private consultants, industry and environmental NGOs as well as all levels of government. For more information on the council please visit www.ontarioinvasiveplants.ca