



TORONTO MASTER GARDENER

INVASIVE PLANTS FACT SHEETS

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AUTUMN OLIVE

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SUPPORTED BY
THE INVASIVE SPECIES CENTRE





AUTUMN OLIVE

(Elaeagnus umbellata)

Autumn olive is a shrub native to Asia from the Himalayas to Japan. It was introduced as an ornamental. It grows easily in a wide range of environments including those poor in nutrients. It is a non-leguminous nitrogen fixer and tolerant of low pH soil.

WHY IS AUTUMN OLIVE A PROBLEM

Autumn olive is a prolific seed producer usually producing about 66,000 seeds each year but may produce up to 200,000 with germination rates between 70-90%. Fruits are eaten by birds and animals and as a result seed dispersal is wide. Plants establish easily and are hardy and resilient with a rapid growth rate and adapt to a wide variety of soil and moisture conditions. As a result it rapidly colonizes areas and

outcompetes and displaces native plants quickly forming dense monoculture thickets. Where it dominates shorelines and stream banks, it can result in an increase in stream water nitrate concentrations. There is also evidence that suggests autumn olive releases allelopathic chemicals which may impact native species growing nearby. Autumn olive reduces plant species richness and diversity and is named as a specific threat to several species at risk in Ontario including colicroot (*Aletris farinosa*), slender bush-clover (*Lespedeza virginica*), climbing prairie rose (*Rosa setigera*) and Virginia Goat's-rue (*Tephrosia virginiana*).

IDENTIFICATION

Height 1.5-6 m but 3-5 m is typical, width may be up to 9 m, shape of the crown is round

Branches: young twigs are silvery with orange or brownish marks and age to become light gray to gray brown and fibrous. Long thorns (2.5 to 5 cm) occur on spur branches



Leaves are alternate, simple, elliptic to lanceolate with undulate (wavy) and entire margins. They are bright green to grayish green above, and distinctively silvery/scaly below, with short petioles. Leaves vary from 2.5 - 10 cm long and 1-4 cm wide



Flowers are fragrant, 4-10 mm long, 7 mm diameter, cream or light-yellow, tubular with four petals and four stamens. The flowers are arranged in clusters of 1 to 10 in the leaf axils.



Fruit are small drupes, rich pink or red when ripe with seeds 3-9 mm long



MANAGEMENT FOR THE TORONTO GARDENER

Do not plant autumn olive. Autumn olive is extremely difficult to eradicate completely once established. The entire root must be removed because cutting, mowing, or burning will likely lead to vigorous resprouting. Even repeated cutting is apparently ineffective without herbicide. Protective clothing is recommended when managing the plant due to its thorny nature.

Seedlings and young plants, up to 9 cm diameter, can be hand pulled or dug anytime. Dispose of non-reproductive plant parts with yard waste. Reproductive plant parts should be placed in the garbage.

If you see autumn olive or other invasive species in the wild, please contact the Invading Species Hotline at 1-800-563-7711, or visit EDDMapS Ontario to report a sighting.

SIMILAR NATIVE PLANTS AND ALTERNATIVES

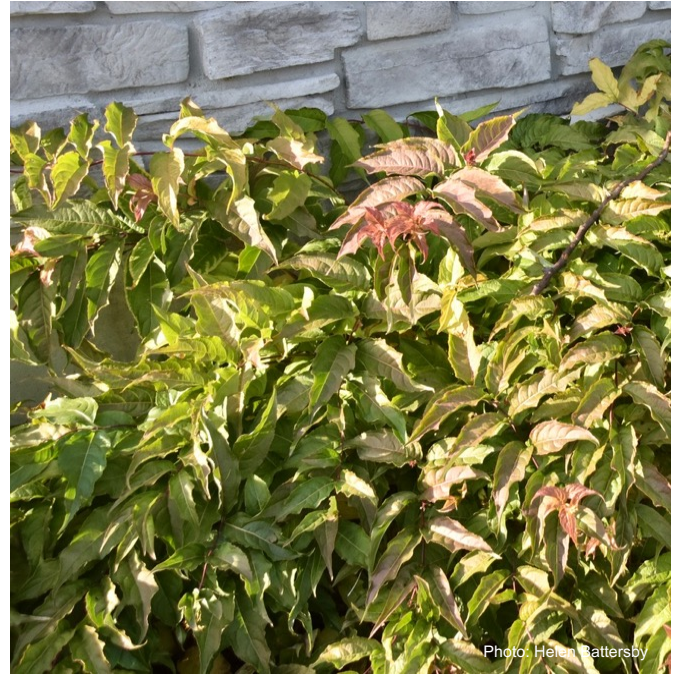
Shrubs native to Ontario that might be confused with autumn olive (and make beautiful alternatives) include:



SILVERBERRY
(Elaeagnus commutata)



CANADA BUFFALOBERRY
(Shepherdia canadensis)



NORTHERN BUSH HONEYSUCKLE

(Diervilla lonicera)

*Notably, none of these native plants have thorns.

REFERENCES

Credit Valley Conservancy. (2011). "Alternative Plants for Invasive Species." <https://cvc.ca/wp-content/uploads/2011/09/11-185-invasivesalternatives-2011-list.pdf>

Warne, Amanda. (2018). *Autumn olive (Elaeagnus umbellata) Best Management Practices in Ontario*. Ontario Invasive Plant Council, Peterborough, ON. Accessed at: <https://www.ontarioinvasiveplants.ca/wp-content/uploads/2020/10/AutumnOlive-BMP.pdf>

PHOTO CREDIT

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