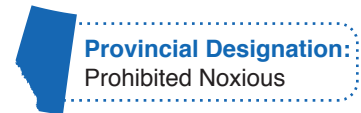


Autumn Olive

Elaeagnus umbellata



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Overview:

Autumn olive is a deciduous shrub or shrub-by tree, native to Eurasia, which was introduced to the U.S. in the early 1800's.³ It has been used to reclaim mine tailings and other nutrient-poor soils, stabilizing coastal areas,¹ for wildlife food and cover,⁴ and it is also valued as an ornamental for its silvery leaves and drought tolerance.³ Autumn olive begins to leaf out early spring and flowers soon after - it is pollinated by variety of insects.² It grows rapidly and begins producing fruit in 3-5 years, as well as producing large amounts of seed.³ Birds will consume the fruits and it is believed that contributes to seed spread. Seed germination is enhanced by a period of cold stratification.¹

It grows well in nutrient-poor soils because of nitrogen-fixing root nodules.² This can negatively impact the nitrogen cycle of native plant communities that may depend on infertile soils.³ Autumn olive in full leaf creates heavy shade which suppresses understory plants which require full sunlight.⁴

Habitat:

Autumn olive can grow on sandy, loamy, and coarse-textured soils as well as soils with some clay content. It tolerates a pH range of 4.8-6.5.² It can grow in partial shade but is more productive in full sun. Autumn olive is intolerant of wet soils.

Identification:

Stems: It is usually multi-stemmed, growing to 3.5 m,⁴ with thorns 2.6 cm long.³

Leaves: It is usually multi-stemmed, growing to 3.5 m,⁴ with thorns 2.6 cm long.³

Flowers: Are borne in stalked clusters from axils of branch thorns. White to light yellow, fragrant flowers are 8-9 mm in length and 7 mm in diameter, and contains both male and female organs. The fruits are ovoid, 3-9 mm long and 5 mm in diameter. It has a thin skin and the contents are pulpy and juicy. Seeds are 7-8 mm long and yellow.³

Prevention:

Despite Autumn olive's previous value for

windbreaks and ornamental plantings, do not purchase and grow this shrub/tree. It will invade adjacent grasslands and disturbed areas.

Control:

Grazing: Not grazed. Invasive plants should never be considered as forage.

Cultivation: Cultivation can be effective as long as it is deep enough to cut the roots off below the root crown and must be repeated for at least two seasons. Care must be taken not to transport root pieces that could start new infestations elsewhere.

Mechanical: Cutting and burning of autumn olive stimulates re-sprouting and would likely only be an effective control method on new plantings, and would need to be repeated.

Chemical: Glyphosate is registered for use on *Elaeagnus* spp. in Canada. Always check product labels to ensure the herbicide is registered for use on the target plant in Canada by the Pest Management Regulatory Agency. Always read and follow label directions.

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Autumn Olive (Continued)

Consult your local Agricultural Fieldman or Certified Pesticide Dispenser for more information.

Biological: A species-specific rust was found attacking *E. umbellata* in China, *Aecidium elaeagni-umbellatae* (Huang et al., 2004). No further research has been done. <http://www.cabi.org/isc/?compid=5&dsid=20728&loadmodule=datasheet&page=481&site=144>



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