



## Invasive Species of the Month for March 2019

### Autumn Olive (*Elaeagnus umbellata*)

**Origin:** Eastern Asia

**Introduction:** First introduced as an ornamental species and for wildlife habitat and erosion control in the 1800s

**Interesting Fact:** Autumn Olive used to be promoted by the then Soil Conservation Service (now Natural Resources Conservation Service) and was propagated and sold in DNR wildlife packets.

**Description:** Autumn Olive is a large, perennial woody shrub in the Oleaster Family that can grow up to 30 ft. tall. It has alternate, oblong to elliptical leaves, white-yellow axillary flowers, and reddish berries.

#### Defining Characteristics:

- Oblong to elliptical, alternate leaves that have a silvery underside
- Sweet smelling white-yellow axillary flowers in the Spring
- Smooth, red to light grey bark that turns darker gray with fissures as it matures
- Presence of sharp spurs on its stems

#### Botanical Terminology:

*Axillary* – occurring where the leaf meets the stem

*Nodules* – a knob-like growth generally occurring on roots of certain plants

*Oblong* – a leaf shape that is rectangular with rounded edges

*Spur* – a modified, shortened stem produced on some woody plant species



Left Image: The flowers of Autumn Olive

Center Image: Autumn Olive fruits

Right Image: Roots of Autumn Olive (nodules circled in red)



## Knox County Cooperative Invasive Species Management Area

---

**Habitat:** Roadsides, old fields, open areas, forest edges, interior forest and other disturbed areas



Above Image: A picture of Autumn Olive lining a roadside in Gibson County.

**Ecological Threat:** Autumn Olive produces many berries, which are spread readily by birds and small mammals. Autumn Olive also has nodules on its roots with nitrogen fixing bacteria, giving it a competitive advantage over other plant species. Autumn Olive grows densely, inhibiting native species.

### **Control Methods:**

- Manual: Pulling up young individuals can be effective. Larger individuals up to a 2-3 in. diameter stem can be removed with a leverage pulling tool, like the Pullerbear™.
- Chemical: A foliar application of glyphosate\* or triclopyr\* is generally effective. Cut stump applications of glyphosate\* are also very effective on larger shrubs. Shrubs can be cut back in spring, and the regrowth can be treated a couple weeks later with a foliar application of glyphosate\* or triclopyr\*. Lastly, basal bark application with triclopyr\* can also be effective.

\*Always follow herbicide label instructions.



## References

- Fordham, I.M, R.H. Zimmerman, B.L. Black, B.M. Clevidence, and E.R. Wiley. 2003. Autumn olive: a potential alternative crop In: J. Maas (Ed.), *XXVI International Horticultural Congress: Berry Crop Breeding, Production and Utilization for a New Century* (Acta Horticulturae No. 626, pp. 429-431). Leuven, Belgium: International Society for Horticultural Science.
- Gage, Karla. nd. Management of Invasive Plants of Southern Illinois. River to River Cooperative Weed Management Area. [http: //www.rtrcwma.org/Management\\_SILinvasiveplants.pdf](http://www.rtrcwma.org/Management_SILinvasiveplants.pdf)
- Kaufman, Sylvan R. and Wallace Kaufman. 2012. *Invasive Plants*. Stackpole Books.
- Munger, G.T. 2003. *Elaeagnus umbellata*. In: Fire Effects Information System. U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Fire Sciences Laboratory.