Knox County
Cooperative Invasive Species Management Area

Invasive Species of the Month for November 2018

Japanese Barberry (*Berberis thunbergii*)

Origin: Japan

Introduction: Intentional, for landscaping in the late 1800s

Interesting Fact: Japanese Barberry infestations have been shown to be correlated with increased blacklegged tick populations. Control of Japanese Barberry decreases the amount of ticks present.

Botanical Terminology:

Axillary – occurring where the leaf meets the stem

Vegetative – reproduction by asexual means.

Description: Japanese Barberry is a small, perennial woody shrub that can grow up to 6 ft. tall. It has alternate leaves, yellow axillary flowers, and red berries.

Defining characteristics:

- Spoon-shaped, alternate leaves that taper drastically to the stem
- A sharp thorn occurs underneath each leaf/group of leaves along the stem
- Axillary, yellow flowers that develop into red berries
- Young reddish stems develop into tan, deeply furrowed mature bark
- The inner wood and roots are a bright yellow color

Left Image: A deep crimson foliage cultivar of Japanese Barberry.
Center Image: The foliage of an escaped Japanese Barberry individual.
Right Image: The bright red, egg-shaped berries of Japanese Barberry, which mature in Fall.

Habitat: Roadsides, pastures, forest edges, woodlands, thickets, etc.

Above Image: A dense patch of Japanese Barberry at Brown County SP in Fall.

Ecological threat: Japanese Barberry produces many berries, which are spread readily by birds. It can even produce seeds at low light levels, and its seeds also have a high germination rate. Besides high productive potential and dispersal, Japanese Barberry can tolerate a wide variety of environmental conditions, ranging from medium shade to full sun and moist to dry soil conditions. In addition to seed production, Japanese Barberry can reproduce vegetatively by tip layering, when the tip of a branch is forced into to ground and roots. Japanese Barberry tends to create dense thickets that suppress native species.

Control Methods:

- Manual: Pulling up young individuals is quite effective since they have shallow root systems. Larger individuals up to a 2-3 in. diameter stem can be removed with a leverage pulling tool, like the Pullerbear™. Be careful to get all of the major roots as Japanese Barberry can resprout from root fragments. Propane torches have been demonstrated to be effective, but take all fire safety precautions first.
- Chemical: A foliar application of glyphosate or triclopyr* is generally effective. Cut stump applications of glyphosate* are also very effective on larger shrubs. Lastly, 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*. This last method can increase mortality rate.

*Always follow herbicide label instructions.

References

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