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You Ain't From Around Here! Exotic Invasive of the Quarter: Japanese Honeysuckle (*Lonicera japonica* Thunb.)

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I will be featuring an invasive species in each newsletter. This section will provide resources to help you identify and control these plants, diseases and insects, hopefully before they become a problem!

Exotic invasives are non-native plants, diseases and insects that are able to thrive and spread aggressively outside their natural range. When spread is extensive, they can alter ecosystem function by replacing native species, changing forest structure, decreasing forest productivity and biodiversity. Some key characteristics include: prolific seeding or reproduction, efficient dissemination, adaptability to different environments, rapid growth, and lack of natural controls. Landowners can help stop invasives before they get out of control by 1. inspecting their property regularly, 2. maintaining a healthy forest with minimal disturbance, 3. treating invasives as soon as they are detected and 4. rehabilitating sites after eradication.

As you know, there is usually some inspiration for my choice of an exotic invasive of the quarter. This summer, my inspiration is the sickly sweet smell of Japanese honeysuckle which permeates the air in my neighborhood as Bob (the dog) and I walk on summer evenings. I can only imagine how cloying it must seem to Bob's giant Labrador nose!

There are over 180 species of honeysuckle in the world; China is home to over 100 of these species, while Europe and North America each have about 20 native species. Some native North American honeysuckle species include: yellow (*L. flava*) and trumpet (*L. sempervirens*). Yellow honeysuckle has, as you would expect, solid yellow flowers, and orange-red berries; trumpet honeysuckle has many different varieties with different colored flowers. If you see a honeysuckle in Virginia, however, it is most likely an exotic invasive.

Japanese honeysuckle (also known as white or Chinese honeysuckle) is found all across the southern United States, up into New England, and in the Great Lakes States; it has also found its way to Hawaii and Puerto Rico. It was initially introduced on Long Island. As is the case with many of our exotic invasives, this introduction was intentional. Japanese honeysuckle was used to stabilize road banks, as an ornamental, and for wildlife habitat (sound familiar?). Not too surprisingly, it is still planted in some areas for these same purposes. I found several websites which specifically market Japanese honeysuckle as a landscaping plant. It is usually sold as "Hall's Prolific" (*Lonicera japonica* var. *Halliana*).

Japanese honeysuckle is found throughout Virginia, although it is most common in the Piedmont and Coastal Plain. Like many invasive species, it thrives in disturbed areas with full sunlight. It can, however, survive under low light conditions and will respond with rapid growth to any increases in light levels. Japanese honeysuckle is listed as a noxious weed in Virginia.

Identification:



Yellow to white flowers are arranged in pairs (top); hairy elliptical leaves are oppositely arranged (bottom). Photos by:
Jennifer Gagnon, Virginia Tech

form: semi-evergreen or evergreen trailing or climbing vine which can climb up to 40 feet or more in trees and can trail up to 80 feet;

stem: slender, woody becoming stout (2 inches) in diameter; young vines are brown and hairy; turn tan and fissured as they mature; climb on other vegetation;

leaves: usually hairy, simple, oppositely arranged, ovate to elliptical, 3 inches long, 2 inches wide; on short petioles, leaf edges are smooth, but can be lobed when young, underside appears whitish;

flowers: April through August; occur in pairs, grow in the leaf axils (between stems and leaves), on short flower stalks (known as peduncles), white to yellow, very fragrant, double-tongued, opening white and fading to yellow;

fruit: June to March; round green berry ripening to black 0.2 inches in diameter, 2-3 seeds per berry.

Uses: Japanese honeysuckle has a high medicinal value in China where it is valued for its antibacterial and anti-inflammatory properties; it's also used in conjunction with other plants to remove toxins and ulcers. The vine is also an effective ground cover with low to moderate wildlife values.

Control:

Non-native vines are difficult to control because they often form extremely dense mats, making herbicide application difficult. In some cases, they form mixed-species infestations with other on-native trees and shrubs, and controlling the vines actually releases the other invasives which may need to be controlled by a different herbicide. So, after treatment, be sure to monitor the site for new exotic invasive problems.

Mechanical Control:

- **cutting/mowing:** cut vines just above the ground line every two weeks to deplete nutrient reserves; will not kill root systems but twice yearly mowing can slow spread – however, vigorous resprouting may increase stem density;
- **flaming:** use a kerosene torch to wilt leaves on a bi-weekly schedule; will not kill root systems;
- **burning:** annual burning can reduce crown volume by 80% and ground cover by 35%; roots will resprout, but spread will be limited; can be used to reduce dense ground mats prior to herbicide application;
- **grubbing:** mechanical removal and destruction of entire plant, a labor intensive and locally destructive process; works best from fruiting to winter and into early spring;
- **grazing:** controlled grazing by goats; roots will resprout without continuous grazing.

Chemical Control:

- Escort (active ingredient metsulfuron) applied with a surfactant to foliage June to August (broadcast 2 oz/acre in water or spot spraying 2-4 oz per acre in water); or
- treat foliage with one of the following herbicides in water with a surfactant (July to October or warm days in early winter– glyphosate 2% solution mix, or Garlon 3A or Garlon 4 as a 3-5 % solution; or
- cut large stems just above the ground surface and treat freshly cut stem with a glyphosate herbicide or Garlon 3A as a 20% solution in water with a surfactant July – October;
- please note, Glyphosate herbicides are biodegradable, but non-specific, so they will also kill adjacent vegetation. To avoid killing desirable vegetation, apply glyphosate herbicides with a spray applicator in late autumn, when honeysuckle is still biologically active, but other vegetation isn't.

Follow these control methods by planting fast growing native grasses or other native vegetation. If you have a passion for flowering vines, try some native alternatives: trumpet creeper, Virginia creeper, wild ginger and trumpet honey suckle.

Happy honeysuckle hunting!