Invasive Honeysuckle: From Beauty to Ecosystem Disruptor

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In mid-summer 2017, I attended a yoga retreat in the Finger Lakes region of New York. The woods around the site were dotted with stunning shrubs sporting bright red or orange berries that resembled gumballs. They were captivating, but I later learned that these shrubs were invasive Asian honeysuckle bushes that had taken over the area. At the time, I hadn't encountered anything similar in Virginia, but a few years later, I began noticing a few bushes near our house and scattered throughout the neighborhood.

photo: Oregon State University

Japanese Honeysuckle blooms

Although honeysuckles have long been favored in ornamental gardening for their sweet fragrance and attractive flowers, several non-native species - especially those from Asia - have become invasive threats to ecosystems across much of the United States.

Initially introduced from East Asia for erosion control, wildlife forage and aesthetic appeal, these honeysuckles have since caused significant ecological damage, threatening native plants, forests and wildlife habitats.

Japanese Honeysuckle

Japanese honeysuckle *(Lonicera japonica)* is a climbing or sprawling vine that can overwhelm shrubs, trees and forest floors, often choking out native vegetation. It is one of the most common and widespread invasive honeysuckle species in the country.

photo: Texas Tech

This vine is semi-evergreen, with leaves that persist into winter in warmer climates, giving it a competitive advantage over many native plants. Like most honeysuckles, it produces fragrant white or yellow tubular flowers that bloom from late spring to early summer and eventually give way to small black berries in late summer or early fall. While these berries are not as nutritious as many native species, they are still eaten by birds and wildlife, who then help spread the plant by dispersing its seeds. Japanese honeysuckle adapts easily to various environments, including forests, fields, roadsides and urban areas.

Bush Honeysuckles

Several bush honeysuckle species are also invasive, including Amur honeysuckle *(Lonicera maackii)*, Morrow's honeysuckle *(Lonicera morrowii)* and Tatarian honeysuckle *(Lonicera tatarica)*. Unlike Japanese honeysuckle, these species grow as shrubs, but they are equally invasive and thrive in many of the same environments.

Bush honeysuckles typically have wider and shorter leaves than their climbing cousins. These leaves often persist into late fall, extending the plant's growing season. Depending on the species, bush honeysuckle flowers vary in color,

photo: Cornell University

Amur honeysuckle

ranging from white to yellow and pink. Their berries are typically red or orange and just as problematic in aiding the plant's spread.

Invasive honeysuckles pose significant threats to native ecosystems by outcompeting native species for essential resources such as light, water and nutrients. Japanese honeysuckle vines form dense mats that block sunlight, preventing native plants from photosynthesizing and thriving. Similarly, bush honeysuckles create thickets that overshadow native seedlings, stunting forest regeneration and altering forest structure. Over time, this can lead to a reduction in plant diversity and a thinning forest canopy, as mature trees die without younger ones to replace them. In addition to crowding out native plants, invasive honeysuckles disrupt wildlife habitats. While some birds and small mammals do eat honeysuckle berries, these fruits are often less nutritious than those of native plants, reducing the quality of available food. Moreover, dense honeysuckle thickets negatively affect the habitat for ground-dwelling fauna and beneficial insects.

These invasive plants often thrive in disturbed areas, where they exacerbate soil erosion and contribute to the degradation of water quality. They also alter soil composition by changing nutrient availability, making it harder for native plants to survive.

Effectively controlling invasive honeysuckle often requires a combination of mechanical, chemical and biological methods over several years. Early detection and rapid response are critical to prevent these plants from spreading and establishing themselves in new areas.

Hand-pulling, mowing and cutting are common strategies. Hand-pulling can be effective for small infestations if the entire root system is removed, as honeysuckles can regenerate from root fragments left in the soil. For bush honeysuckles, cutting the shrubs at the base can reduce growth, but this should be followed by herbicide application to prevent resprouting.

For large or well-established populations, herbicides are often necessary. Glyphosate, a non-selective herbicide, can be applied as a foliar spray or used in cut-stump treatments. See more detailed information on the application of glyphosate in the VCE fact sheet below.

Long-term success in eradicating invasive honeysuckle requires consistent monitoring. Since discovering the first honeysuckle bush in my yard, I've kept an eye out for new sprouts, removing them before they become established. Additionally, planting native species in their place helps restore the ecosystem and reduces the likelihood of honeysuckle reestablishing. Dogwoods, chokeberry, winterberry holly, northern arrowwood, serviceberry and native viburnum would be good native replacements.

Don't mistake native honeysuckles, such as northern bush honeysuckle *(Diervilla lonicera)* and American fly honeysuckle *(Lonicera canadensis)* for exotic ones. Native honeysuckles have solid rather than hollow stems and do not form extensive growth areas. By learning to identify invasive honeysuckles and applying appropriate control measures, we can protect native ecosystems and prevent further degradation, ensuring a healthier environment for future generations.

References

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