## Invasive Species Alert: Japanese Knotweed

**Origin**: Japanese knotweed (*Reynoutria japonica*) is native to Japan, China, Korea, and Taiwan. It was purposefully introduced to North America as an ornamental plant in the late nineteenth century and has become a fast growing invasive in the United States.

**Growth**: Japanese knotweed spreads rapidly by underground rhizomes, growing up to 10cm per day, and can regenerate from broken stems as short as an inch!





**Danger**: Once established, knotweed can be extremely difficult to control and quickly displaces native species. Because of this rapacious growth the dense thickets it forms suffocate native plant life, decreasing the variety of habitats and food sources available for native animals.

Management: Rhizomes must be controlled to manage the knotweed population. Chemical control methods (foliar spray, cut-and-wipe, stem injection) used in conjunction with cutting are effective. Removed or cut plant materials should be bagged and disposed of to prevent new growth.



## Invasive Species Alert: Morrow's Honeysuckle

**Origin**: Morrow's honeysuckle (*Lonicera morrowii*) is native to Asia and was purposefully introduced to North America in the 1800's as an ornamental.

**Growth**: Morrow's honeysuckle rapidly grows complex root systems, is successful in most soil types, and produces berries that attract birds who then spread their seeds.





**Danger**: This species causes damage to various aspects of ecosystemsoutcompetes native plants, and can suffocate other plant life leading to a loss in biodiversity. The berries produced by this species is attractive to birds yet provides very little nutrition.

**Management**: Small plants can be easily removed by manual labor. For larger plants, morrow's honeysuckle can be pulled and cut where possible, and an herbicide can be applied to the bark, leaves, and cut stems. Be sure to try to remove as much of the root system as possible.



## Invasive Species Alert: Multiflora Rose

**Origin**: Multiflora rose (*Rosa multiflora*) is a species native to Asia. It was intentionally introduced to the U.S. in 1886 as an ornamental rose.

**Growth**: Multiflora rose produces prolific seeds which rapidly colonize a variety of habitats, and forms dense thickets that suffocate and dominate native plant life.





**Danger**: Although pretty, this aggressive invasive species suffocates native plant life, lowers the diversity of ecosystems, and reduces the habitat quality for native animals.

Management: Manual cutting combined with chemical applications (such as glyphosate) to the freshly cut stumps or regrowths is effective. Repeated cutting or mowing on a monthly cycle is most effective.



## Invasive Species Alert: Garlic Mustard

**Origin**: Garlic mustard (*Alliaria petiolata*) is native to Europe and parts of Asia. It was intentionally introduced to the United States in the 1860's for food and medicinal purposes.

**Growth**: Garlic mustard is a winter annual that produces an abundance of seeds, and can grow to be as high as 6 feet tall.





**Danger**: Garlic mustard is a destructive invasive species that grows in dense clusters, displacing native plants. It also prevents the regrowth of native flora because its roots secrete a toxin that kills soil fungi beneficial for native plant growth.

**Management**: Manual removal of garlic mustard is effective, especially early in the season. It is important to properly bag and dispose of all plant parts to prevent regrowth. Because seeds can remain viable in the soil for up to 10 years, plants must be removed each season until the seed banks have been exhausted.

