## The Backyard Invasives Project Training Manual

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OUR PURPOSE: To assist landowners in removing invasive plant species from their properties and encouraging them to re-plant with native plants.

WHY DOES THIS MATTER?: When humans began moving around the globe, they brought plants and animals with them and introduced them into new ecosystems. The plants were often valued for their beauty, and were planted as hedgerows and garden plants. Since native plants were everywhere, those plants got labelled as "weeds" and anything different/exotic was coveted. Because there were no predators to these plants in their new environment, they were able to spread out of control into wild areas, crushing the competition and dominating large areas of land. Not only does this contribute to the loss of native plants, but also the loss of food sources for native wildlife, contributing to the mass extinctions we are seeing around the globe. Our ecosystem evolved with specific pollinator/plant interactions, and the loss of native species will create a cascading effect up the food chain, impacting both larger animals and ecosystem services. Depending on the species, invasive plants can harbor ticks (increasing rates of lyme disease), kill butterflies, make the water too acidic for amphibians, leach chemicals into the ground that prevents anything else from growing, take down trees, increase erosion, and more.

**TOP PRIORITY SPECIES:** 

**Oriental Bittersweet** (*Celastrus orbiculatus*): vining plant, bright orange roots, rounded leaves with a point. Pull up as much root as you can. Cut vines left in tree will rot. Roots will resprout. Small plants should be bagged, large ones piled.



**Garlic Mustard** (*Alliaria petiolata*) Biennial/two year plant. First year small basal leaves, second year it shoots up and has a white flower. Pull it by the base to get the white tap root. Pull it before the seed pods dry out and spread seeds. MUST BE BAGGED!





**Bush Honeysuckle** (*Lonicera spp.*) Soft oval leaves, hollow stem (native has solid stem), shallow roots pulled up by hand or with the help of a pick axe. Pile and leave to dry out.



**Glossy Buckthorn** (*Frangula alnus*): Small tree. White speckles on young stems, oval leaves with straight distinct veins, red/purple roots. Gives birds diarrhea. Pile to dry.



**Japanese Knotweed** (*Polygonum spp.*): EXTREMELY INVASIVE! Looks like bamboo, leaves standing dead behind to save its place, old growth has large woody roots that need to be pick axed. Can be cut consistently to starve the root out, or dug up and then cut to maintain. NEEDS TO BE BAGGED OR ELSE IT WILL SPREAD EVERYWHERE IT IS EVIL!



**Japanese Barberry** (*Berberis thunbergii*): ornamental plant, invades understory and harbors ticks. Spoon shaped leaves, thin spines, bright yellow root. Pick axe and pile to dry.



**Burning Bush** (*Euonymous alatus*): Green stems with "winged" appendages. Gets very large and invades the understory. Needs to be pick axed out. Pile and let dry.



**Goutweed/Bishop's Weed** (*Aegopodium podagraria*): Herbaceous plant, looks kind of like queen anne's lace, roots are fragile so it needs to be dug up from below and bagged (shake out the soil first, but try to get all of the roots).



**Multiflora Rose** (*Rosa multiflora*): Green stems, thorns point down to base of plant, compound leaves. Pick axe root and leave in pile to dry. Takes over the understory.



**Black Swallowwort** (*Vincetoxicum nigrum*): ROOTS ARE VERY FRAGILE NEEDS TO BE DUG UP AND BAGGED!!! Toxic to humans, dogs, horses. Kills butterflies.

