

Non-native invasive plants are covering all our natural areas in the region. The quantity of native plants and animals replaced by competition with non-native species is greater than that lost from all other causes except direct development in our terrestrial habitats and water pollution in our aquatic habitats.

Non-native invasive species of plants such as English Ivy, Japanese Stiltgrass and Kudzu are covering the natural areas that we in the conservation movement have worked so hard to protect from habitat destruction, erosion and water pollution. Just as we are making progress on wetlands, stream bank stabilization, and endangered species, these plants from other parts of the world have typically covered 20-90% of the surface area of our forests, streams and meadows. Many of us feel demoralized and powerless to combat these invaders that have few natural herbivores or other controls. A typical park is 50-500 acres and has over a hundred species of native plants let alone the hundreds of native species of insects, mushrooms, snails, reptiles, mammals and birds that depend upon the plants prior to being covered by monocultures of 5-10 alien species.

Five programs are especially emphasized for successful control of non-native invasive plants, Patrol our borders, manual removal, the use of carefully targeted herbicides when necessary to complement manual removal, host specific biological controls, and early detection/rapid response for very harmful but recently introduced invasive species such as Wavyleaf Basketgrass; if you see it get it removed.

Of the 15 top non-native invasive plant species in the mid-Atlantic region, Purple Loosestrife and Mile-a-minute now have one or two non-native insects or fungi that feed on them. They were brought over after being tested for host specificity in Eurasia and then tested in quarantine conditions in the United States. Typically, about 50 such biological -control agents control these species in their native countries so if one or two can control them here that is amazing. In actuality, bio-controls work about half the time reducing the invasive species to about 10% of its former abundance. The problem of bio-controls harming non-target organisms is only about 3% as frequent as before the new rules of proving host specificity went into effect

about 15 years ago. Native biological controls are also of about equal importance. A native insect and pathogen combination appeared as tree of heaven moved South after 250 years. It is often 100% effective. Yes, you only have to pull for 500 years!

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Here is the concept I mentioned at a workshop about choosing invasive plant control restoration sites where we can win the battle, followed by moving on later to more invaded sites to win the war.

Surveys and management plans. Inventory and prioritize. In choosing the site it is best to start with the more sensitive areas [dominated by native rather than non-native plants] and work out as volunteer and staff support grows. Some of the natives remain to re-colonize as invasive plant control advances and environmental stresses are controlled. These sites also become sources of native plants for contiguous areas and sites nearby, especially when resources are available to remove invasive species by their land managers. These sites also tend to have better deer control which also reduces the risk of deer ticks.