Invasive Plant Management

By Greg Gagliano, DNS Backvard Habitat Coordinator & Red Tail Restoration Manager

Invasive plants are a serious threat to our ecosystem. This group of exotic plants out-competes native plants, reduces species diversity, and often negatively alters wildlife habitat. Areas smothered with invasive plants in the region seem to have expanded exponentially over the past few decades. We cannot eradicate the threat completely, but we can support forest health by restoring and protecting high-priority areas, and eliminating the further spread of invasive plants through landscaping.

Invasive plants have entered our region through landscaping, packing material, accidental introductions, and even purposeful establishment by earlier ecologists. These plants out-compete native species because they may grow faster, spread quicker, seed earlier, lack predators and pathogens, or even affect soil chemistry. With these traits, they are effective at colonizing disturbed land where forest canopy and other vegetation have been removed, often taking hold at the edge of a forest and encroaching inward. One of the most likely areas to be overrun with invasive plants is previously disturbed forestland surrounding development. Thus, homeowner awareness and action can be the first line of defense against this regional issue.

Step 1: Identify the invaders. Identify which species are in your area by referring to field guides, websites, or local experts. The Delaware Invasive Species Council provides a great resource for identification and removal strategies on their website, www.delawareinvasives.net.

Step 2: Know your enemy. Determine which species are invading your land and learn when they grow, how they spread, and when they are most vulnerable to removal techniques. For example, Japanese Stilt Grass is an annual that drops seeds in early September before it dies. Seeds may persist in the dormancy state for over three years in the soil. Therefore, the only way to stop an infestation is to stop the seeds from falling on the land for at least three consecutive years until the seed bank is completely exhausted! In practice, populations of Japanese Stilt Grass begin to plummet after only one or two years of management, requiring less effort in the following years. To stop it from seeding, choose removal techniques such as hand-pulling, foliar spray, weed-whacking or mowing in late August, or inhibiting seedlings from sprouting through herbicide or newspaper. Your choice of technique depends on the specific area in which you are working.

Step 3: Plan your attack. Once you understand the invasive plant life cycles, determine the areas that you can restore and protect. Many landscape beds are small enough to restore through a few well-timed removal efforts over a period of time. For your woodland property, find areas that look fairly healthy and protect them by routinely inspecting and removing the few invasive plants that surface. Then, restore heavily-invaded land by improving just a little bit each year. For larger areas of land such as homeowner associations, community parks, or townships, consider hiring a professional to lead restoration efforts.

Step 4: Stay focused and be persistent. Keep the project goals consistent with the effort you can provide, and enjoy watching the land transform into a healthier environment over time. Collaborate your efforts with your family, neighbors or even dedicated groups such as school environmental clubs, town committees and neighborhood associations that can make huge improvements to natural areas when led by a knowledgeable project leader. Working with others can be rewarding and public education is an important part of any restoration project.

To see the current state of our forests through the eyes of an invasive plant ecologist is to see a system that is far out of balance. Everyone can help fight against this regional issue by volunteering to remove invasive plants in public areas or around your home, starting a community project, or simply choosing native plants for your property. Most importantly, teach others not to use invasive plants for landscaping. Environmental conservation is everyone's responsibility and invasive plant management is an opportunity for anyone to make a difference.