DURHAM'S INTEGRATED PEST MANAGEMENT APPROACH TO INVASIVE AND NOXIOUS PLANTS

Friday Update, August 21, 2020

For the past several years the Land Stewardship Subcommittee, Conservation Commission, Trustees of Trust Funds, DPW and other Town staff, volunteers, and conservation partners have been implementing many stewardship projects on Durham-owned conservation areas and parks. The outcomes are improved, more sustainable and interconnected trails, heathier forests and wildlife habitats, more interpretive signage, trail maps and other guidance for trail users, fewer invasive plants, and other benefits to the community.

Invasive plants are a particular focus on Town lands as well as along roads as they impact the health of native habitats and can block roadway visibility. On Town conservation areas, the Land Stewardship program has ongoing invasive plant control initiatives at Oyster River Forest, Doe Farm, Thompson Forest, Milne Nature Sanctuary, and Mill Pond Park. These efforts involve a variety of techniques that include mechanical (pulling, digging, cutting, smothering, uprooting, shredding), cultural (education, early detection and rapid response), and targeted herbicide applications by certified pesticide applicators, when other options are not feasible or effective. Funding comes from a variety of sources: Conservation Fund, Land Use Trust Fund, private donors, conservation partners, grants, and in-kind volunteer and staff time.

The NH Department of Agriculture, Food, & Markets maintains a list (currently 35) of prohibited invasive plants species. NH Agriculture rule 3800, states: "No person shall collect, transport, import, export, move, buy, sell, distribute, propagate or transplant any living and viable portion of any plant species" on this list. The goal is to protect the health of native species, the environment, commercial agriculture, forest crop production, and human health. Other species, such a poison ivy are considered "noxious weeds," because, although native, they can cause severe rashes in some people. As many of us have noted in our own neighborhoods, poison ivy is expanding along roadsides, sidewalks, trails, and in parks.

Invasive plants are pervasive throughout New Hampshire, including in the Town of Durham. It is not possible to eradicate these plants, but we can reduce their impacts and their spread by using an Integrated Pest Management (IPM) approach. This involves several strategies:

- Identify land/property management goals and how invasive plants affect these goals
- Use prevention, early detection, and rapid response to help prevent invasive plants from becoming a problem
- Survey, map, and monitor current and potential invasive plants
- Select control methods (cultural, mechanical, chemical) based on science and current technology to have best effect with least environmental impacts
- Conduct education, including workshops, and outreach efforts that increase invasive plant awareness among the public, volunteers, and Town staff
- Continue to improve and adapt our response to invasive plant management

Invasive (and noxious) plant management takes time, patience, perseverance, collaboration, flexibility, humility, as well as funding. Given the prevalence of these plants in our community, it will take time and a variety of tools. Land Stewardship Coordinator, Ellen Snyder, oversees several invasive plant control efforts on Town conservation areas using IPM. Anyone interested in volunteering to help pull invasive plants is welcome to contact Ellen at ellensnyder1@gmail.com. This is a great way to learn your plants, help restore native plant communities, and reduce the need for herbicide. DPW is exploring the benefits

of having a Certified Pesticide Applicator on staff. This would provide greater flexibility in our IPM approach, by having knowledgeable and skilled practitioners in the community.