

Headline

Battling Invaders at Kittery's Fort Foster

Text

You may have noticed some changes taking place at Kittery's Fort Foster recently. But you may not have noticed the catalyst behind these changes: invasive plant species.

For some time now, a number of well-known invasive plants have been steadily and silently consuming more and more territory at this popular waterfront park owned by the Town of Kittery. And as these invaders have continued to out-compete native species and broaden their foothold over the years, they've destroyed bird and animal habitat, diminished native biodiversity, and degraded the natural landscape of this ecologically diverse and vital Gerrish Island community.

Similarly, awareness of the threat of invasive plant species has been slowly creeping into the public consciousness. Many people have at least heard of purple loosestrife (*Lythrum salicaria*), an invasive plant that's already established itself in New England's waterways, and most boaters are familiar with Eurasian milfoil (*Myriophyllum spicatum*) and how it colonizes new territories by stowing away on watercraft. Few people, however, are truly aware of the costly damage these alien plants can cause. In fact, the State of Vermont has already spent millions of dollars combating Eurasian milfoil and Water chestnut alone—and these are just two species among a long list of invasives. Left unchecked, the damage invasive plants cause to natural landscapes and biodiversity are very real, threatening to destroy the natural beauty that draws people to live in—and tourists to visit—these environmental gems of New England.

The state of Maine has also been stepping up its efforts to manage and minimize the impact of invasive plant species. And in Kittery specifically, the Kittery Parks Commission noticed the growing problem it faced within Fort Foster. After carefully assessing the status of invasive plants within the park, the Parks Commission decided to first target the locations where invasives had already run rampant; the bunker adjacent to the big pavilion and its surrounding area was quickly identified as a critical site.

This bunker had been almost completely overrun by invasives, with a massive snarl of Asiatic bittersweet (*Celastrus orbiculatus*) comprising the majority of its bulk. Additional stands of Japanese barberry (*Berberis thunbergii*) and honeysuckle (*Lonicera morrowii*) had also staked their claims to the takeover. At a glance, this may not have seemed altogether unbecoming to the layperson, but the reality is that this tangled thicket of invasives had already wrought significant damage. All native plants in the vicinity had been effectively choked out, forming a dense, viney shroud that was too vulnerable to predators for any birds to consider it for nesting. What's more, the honeysuckle's berries are a lipid-poor "junk food" that is not a preferred food source for birds but is easily dispersed in order to ensure the rapid spread of the plant. When it comes to invasive plants, this area in particular had reached a critical mass.

To help address the problem, the Parks Commission brought in an ecological restoration specialist to selectively remove the invasive plants mechanically—the only environmentally responsible method for combating an invasive infestation of this scale. After doing so, previously overshadowed native junipers have been freed from the grip of their alien neighbors, permitting them the opportunity to thrive once more. Sections of the area where no native vegetation remained will now be seeded with native grasses and erosion-control species and subsequently planted with native shrubs. In time and with effort, the site will be returned to good health.

In addition, the Kittery Parks Commission identified the presence of Garlic mustard (*Alliaria petiolata*) within Fort Foster. Though it hasn't been widely reported in the past, garlic mustard now appears to be gaining a foothold in southern Maine. This particularly insidious invasive disrupts the important relationship between native plants and underground mycorrhizal fungi—robbing the plants of essential mineral nutrients and suppressing the growth of tree seedlings. And with as many as 3,000 seeds per plant that can remain viable and germinate for up to 11 years, it's easy to see why garlic mustard is so prolific—and difficult to control. After having located several large swaths of garlic mustard, the Parks Commission organized two days of hand-pulling these invaders with volunteers from the Rachel Carson National Wildlife Refuge, the Invasive Plants Atlas of New England (IPANE) project and a group of students from North Berwick's Noble High School. Future hand-pulls may be necessary as well, but for now the problem has been better contained.

Of course, these steps are just the beginning a larger, sustained process. The successful prevention and control of invasive plant species and restoration from their negative effects can only be achieved with an organized, long-term strategy and effort. Fortunately, getting involved is easy and everyone can do their small part to help. Homeowners can learn more about invasive plants and identify and remove undesirables from their own yards; landscapers can replace invasive plants with non-invasive alternatives; gardeners can ask their local garden suppliers to stock more native plant species; voters can contact their representatives to voice their concerns; and anyone can volunteer to help. For a good place to start, both for more information and to sign up as a volunteer, check out the IPANE website at www.ipane.org.

Every little step forward takes us all closer to the shared goal of preserving our precious natural landscapes so that Maine will continue to look like Maine—and its beauty will continue to be enjoyed by generations to come.