

Charlotte Invasives Collaborative

The Charlotte Invasives Collaborative (CHIC) is a working group formed to address head-on exotic/invasive plant infestations within the town of Charlotte, Vermont. CHIC will complement existing national, state, and regional initiatives to address this growing concern. CHIC will work in partnership with the Champlain Valley Invasive Plant Partnership¹, Charlotte Road Commissioner, Charlotte Conservation Commission, The Nature Conservancy and Vermont Agencies of Natural Resources and Transportation in pursuing and attaining the following objectives:

1. **Provide management guidance information:** CHIC will serve as an information source for Charlotte residents, providing best invasive plant management practice guidance to those interested in treating infestations and reducing their spread.
2. **Manage town funds:** the Select Board has allocated \$1,000 in the current budget for the treatment of infestations on town-owned and town-managed lands. Funds will be used for the treatment of infestations. CHIC will identify treatment sites, manage volunteer and contracted labor, apply for permits, and fully document work performed. In addition to achieving control of infestations, CHIC hopes to increase understanding of the efficacy of different treatment options within varying landscape and climate conditions.
3. **Early detection and Mapping:** CHIC will employ iMapInvasives², a GIS-based system developed by The Nature Conservancy to track and monitor infestations. CHIC will draw upon a variety sources for early detection and mapping including ongoing assessment work of County Forester and reporting by town officials and residents.

There is no denying that the exotic invasives present a daunting and sometimes overwhelming challenge to Charlotte and other towns. We believe that applying resources with the appropriate scope and focus will yield meaningful results that will be evident within our town's landscape.

CHIC's work can be monitored at demonstration sites [TBD] and on-line, through the Conservation Commission section of the Town of Charlotte website. Input from residents is always welcomed and encouraged.

Year 1 Focus - Phragmites

The Charlotte Invasives Collaborative has identified numerous sites throughout the town compromised by *Phragmites australis*, or Common Reed. We are certain many more will be identified through the Collaborative's work, and will include additions submitted by Charlotte citizens as awareness increases.

Phragmites australis is an exotic invasive plant that infiltrates wetlands, displacing wetland plants native to Charlotte and the Champlain Valley. Infested wetlands often transition to monoculture, severely affecting the multitude of native species that depend on the wetlands for food and shelter. *Phragmites* reproduce vegetatively and by seed. It is a strong colonizer, producing an abundance of wind-dispersed seeds, though its seed viability is typically low and may vary year by year. In the United States, *Phragmites* is spread mainly through vegetative means via rhizome (root) fragments. As it dominates wetland communities it produces dense mats that not only displace native plant species, but alters wetland hydrology and may even increase the potential for wildfire.

We believe a *Phragmites* control effort within Charlotte is warranted and timely. While infestations are numerous, many are relatively small (for the time being) encompassing less than 1 acre. Data indicates³ that treatments of infestations of this size are often effective in achieving eradication. This initiative has received the endorsement of the Vermont Chapter of The Nature Conservancy⁴ and the Charlotte Road Commissioner. The state of Vermont identifies *Phragmites australis* as a class B noxious weed⁵. Vermont Invasives, a collaboration of UVM Extension, The Vermont Chapter of The Nature Conservancy, and the Vermont Department of Forests, Parks and Recreation, all identify *Phragmites australis* as a significant threat within Vermont (<http://www.vtinvasives.org>.)

Our primary objective is the control and eradication of *Phragmites* infestations within Charlotte. Prior to initiating treatment of *Phragmites*, the Collaborative will submit to the town specific site assessments, treatment plans, and monitoring plans. Treatment plans for *Phragmites* will be reviewed and approved by the Wetlands Section of the Vermont Agency of Natural Resources.

Footnotes

¹ Champlain Valley Invasive Plant Partnership: a collaboration of the towns of Hinesburg, Richmond, Monkton, Huntington, Charlotte, Bristol, Shelburne and Lewis Creek Association to support participating organizations and their communities in long-term efforts to control of invasive exotic species in order to maintain and restore the ecological health of our communities.

² The *MapInvasives* Partnership facilitates the management and sharing of invasive species information, including extent of infestations, search efforts, and treatment outcomes. Affordable, sustainable, and collaborative tools developed by the Partnership provide a flexible platform for aggregating invasive species data from a wide variety of sources. These tools add value by organizing the data to support early detection of new populations that may require a rapid response, and analysis of management strategies at scales relevant to user needs. The Partnership seeks to support all those working to safeguard environmental resources from the effects of invasive species including citizens, volunteers, natural and agricultural resource managers, as well as scientists, program administrators, and policy makers. <http://www.imapinvasives.org>

³ The Adirondacks Nature Conservancy has achieved complete eradication for 39% of *phragmites* sites treated since 2010. <http://www.adkinvasives.com/documents/2013TerrestrialInvasiveSpeciesProjectReport.pdf>

⁴ TNC letter of Support (see attachment)

⁵ "Class B Noxious Weed" means any noxious weed that is not native to the state, is of limited distribution statewide, and poses a serious threat to the State, or any other designated noxious weed being managed to reduce its occurrence and impact in the State, including those on the Federal Noxious Weed List (7 C.F.R. 360.200). (http://agriculture.vermont.gov/sites/ag/files/pdf/plant_protection_weed_management/noxious_weeds/NoxiousWeedsQuarantine.pdf)