



WEED MANAGEMENT AT THE CHARLOTTE PARK AND WILDLIFE REFUGE—November 2019

The work to control invasive plants in the Charlotte Park and Wildlife Refuge began in 2007 with volunteers cutting honeysuckle and buckthorn in areas along Roberts Way, the trail that starts at the Greenbush Road parking area. In 2009, the Nature Conservancy and the University of Vermont Land Stewardship Program developed the *Charlotte Park and Wildlife Refuge Invasive Species Management Plan*. The Nature Conservancy provided guidance on cutting honeysuckle and buckthorn and treating with herbicide using cut stump treatment. Since then, work has continued throughout the park using a variety of resources and methods. Workers have included Park Committee members, many local volunteers, school groups, crews from the Chittenden Regional Correctional Facility, and contractors hired to brush-hog or clear dense areas of honeysuckle and buckthorn using machinery. The above map shows project areas listed:

1. At several places along Roberts Way, honeysuckle and buckthorn have been cut or pulled. Herbicide has been used in some locations to control re-growth. Last year, volunteers pulled small buckthorn plants, grown from seed in a previously cleared area.
2. In 2011, Mark LaBarr from Audubon Vermont coordinated a project to create a shrubland bird habitat area in the northwest corner of the park. This area is maintained as a meadow with copses of native shrubs. Management guidance is provided in *Audubon Vermont Habitat Assessment for the Charlotte Park and Wildlife Refuge* (2012).
3. Purple loosestrife is controlled by the release of *Galerucella* beetles. The U.S. Fish and Wildlife Service has assisted with collecting, raising and releasing beetles.
4. There have been several projects in this area to remove honeysuckle and buckthorn along the trail and in the woods. Hand cutting and stump treatment have been used. Using an excavator, dense patches of honeysuckle were pulled, piled and burned. Often, brush piles are left in the woods, away from the trail.
5. Along the northern edge of the meadow, invasive plants were cleared to prepare for an erosion control project. Many projects in the park have multiple benefits—allowing native plants to grow, improving the park's scenic qualities, and in this case, as part of a project to slow the flow of water during heavy rains.
6. Until around 2012, portions of this area were used for pasture. Fences have been removed, and now the meadow and hillside are managed for wildlife. Work has included cutting and treating honeysuckle, buckthorn, multiflora rose, and Asiatic bittersweet. Brush-hogging has been done. Use of a skid-steer with a front mounted brush-hog has worked well when working around native trees and shrubs.
7. There have been several projects to clear invasive plants from hedgerows. This work encourages the growth of native trees and shrubs and helps to open the view toward the Adirondack Mountains.
8. The Park Committee has worked hard to keep wild parsnip from spreading in the park. Brush-hogging around July 1 is done where there are larger patches. The Town has permission from the Vermont Agency of Transportation to mow along Route 7. Plants in smaller patches throughout the park are pulled or cut wherever they are found.
9. Maintaining an open view to the west is important here. After much work to clear invasive plants and tall trees from the western end of the field, the area is maintained by brush-hogging every few years. Wild parsnip is mowed, cut or pulled before it goes to seed.
10. Invasive plants on this hillside include honeysuckle, buckthorn, barberry, bittersweet, wild parsnip and Dyer's Greenweed. These have been controlled by cutting (and using herbicide when appropriate), pulling and brush-hogging. Dense honeysuckle in the hedgerow at the top of the hill was pulled using machinery.