Perch River, Black Pond, and Point Peninsula Wildlife Management Areas
Pale Swallow-wort Control: PHASE II

2015 Field Activities
SLELO – PRISM
May- November 2015



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Introduction and Background:

Ducks Unlimited, Inc. (DU) received funding from the St. Lawrence – Eastern Lake Ontario Partnership for Regional Invasive Species Management (SLELO PRISM) in May 2015 (contract number C009075) to support continued grassland enhancement efforts in the St. Lawrence Valley (SLV). DU partnered with NY State Department of Environmental Conservation (NYSDEC) to advance enhancement of 9-acres of grassland habitat through invasive species control of Pale swallow-wort (*Cynanchum rossicum*). The project was a Phase II effort to retreat sites that were treated in 2014 (i.e., Dog Hill Road and Pine Wood Road; Figure 1) and treat two new areas of infection (i.e., Pinewood Road and Black Pond Trail; Figure 1).

Locations:

Site 1: Dog Hill Road (1-acre of retreatment; Figure 1): Perch River WMA, Jefferson County, stretches 8,080 acres through the towns of Pamelia, Brownville and Orleans. Perch River WMA is considered a priority site for invasive species eradication due to its high diversity of plant and animal species including threatened and endangered species such as Northern Harrier (*Circus cyaneus*), Upland Sandpiper (*Bartramia longicauda*), Sedge Wren (*Cistothorus platensis*) and Henslow's Sparrow (*Ammodramus henslowii*)

Site 2: Pine Wood Road (1-acre retreated, 6-acres new treatment): Point Peninsula WMA, Jefferson county, contains 1,045 acres and provides important grassland bird habitat and is also home to threatened and endangered species such as Short-Eared Owl (*Asio flammeus*) and Northern Harrier (Figure 1).

Site 3: Black Pond Trail (1-acre new treatment): The Black Pond WMA, Jefferson County, is a natural wetland complex consisting of barrier beach, dune, open water, emergent marsh, and wooded/shrub swamp. The 526-acre WMA provides significant breeding and over-wintering habitat for birds along the eastern shoreline of Lake Ontario. The area also supports a Commissioner Policy Three (CP3) trail that provides temporary motor vehicle access to state lands (Figure 1).

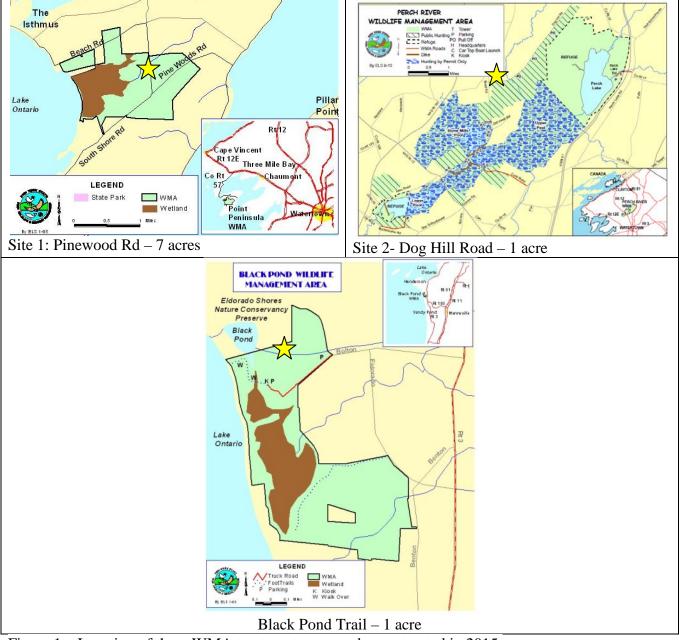


Figure 1 – Location of three WMA treatment areas and acres treated in 2015.

2015 Accomplishments:

In 2014, DU partnered with the NYSDEC to enhance of 3-acres of grassland habitat through the control of non-native and invasive pale swallow-wort. Studies support that herbicide treatment is one of the best option to help reduce the spread of pale swallow-wort. The goals of both the 2014 and 2015 treatment is to eradicate (95% successful treatment) pale swallow-wort. However, successful treatment of swallow-wort often takes several treatments spread over several years. Dog Hill Road, Perch River was treated for the first time in 2014, and a repeat spraying was completed in 2015. In 2014, when treating Pinewood Road, Point Peninsula WMA, 6-acres of new swallow-wort invasion was identified, and thus DU advanced treatment of the newly identified 6-acres in 2015 and retreated the 1-acre treated in 2014 (total area treated was 7-acres). Similarly, a new infestation site was identified by NYSDEC at Black Pond WMA in 2014, and the 1-acre infestation was treated in 2015.

The total area of treatment in 2015 at Perch River, Point Peninsula, and Black Pond WMAs was 9-acres.

DU completed all proposed tasks on time. DU cooperated with NYSDEC to complete project layout by marking, with flags, the actual swallow-wort plant and the proposed locations for spraying. DU prepared bid packages and solicited three bids for the herbicide treatment. The lowest bid contractor was awarded the job and the contracting agreement between DU and the selected contractor was secured July 2015. All permits where received by July 2015. DU provided maps and GPS locations to the contractor detailing the project locations, and a site visit was completed to review the treatment areas July 20, 2015.

The swallow-wort plant usually emerges in the spring and flowers from June to July, followed by the production of seed pods. Herbicide should be applied when the plants are actively growing, and before seed pods will produce viable seeds (i.e., before seed pods open). Only when the plant flowers will it be large enough to receive enough chemical on the exposed leaf surface to deliver a killing dose to the roots. It is recommended not to spray before July 1. The applicator treated all live swallow-wort plants with Garlon 4 Ultra (active ingredient triclopyr) in and along the pre-identified location at Dog Hill Road, Perch River WMA, Pinewoods Road, Point Peninsula, and Black Pond Trail, Black Pond, WMA.

The first round of Garlon 4 herbicide was applied to the foliage of the swallow-wort plants either by spraying or wicking by July 30, 2015. A second follow up spraying was completed in August 2015. It was the responsibility of the contractor to ensure all chemical control methods and regulatory guidelines were adhered to, thus ensuring no hazardous effect to local vegetation or crops. There was no damage resulting from the chemical herbicide application. The herbicide treatment was completed in accordance with label specifications and applied by a certified commercial pesticide applicator. The contractor followed NYSDEC permit guidelines. DU oversaw the project delivery and ensured the herbicide activities where completed in accordance to permit specifications and regulations. The final site inspection was completed by DU on August 30, 2015 with a follow up mid-September. Observations indicate the herbicide application was delivered according to contractual requirements.

Monitoring:

In the future the NYSDEC will continue to identify and conduct yearly site visits of the treated areas and any newly identified location will be reported this will help ensure swallow-wort is controlled on state lands.

Problems experienced:

No problems were experienced during the project delivery. All tasks were delivered on time and within budget.

Summary:

The 3-treatment locations should be reevaluated in spring 2016 to determine if additional follow up straying may be required. It is likely that a repeat spraying will be required in 2016 at Black Pond Trail and Pinewood Road, as these were the treated for the first time as part of this grant.

The successful completion of this project has further demonstrated both the need for conservation of critical habitats and the ability to build partnerships to execute conservation goals. DU promoted the SLELO partnership at several presentations, and the project will be highlighted in the 2015 DU annual conservation reports (final report will be available in March 2016). Similarly, through NYSDEC outreach programs and SLELO communications the project details will be available to the public. Therefore, the community will gain an understanding and appreciation for the role that federal and local partnerships can play in resource restoration.

This project provides continued momentum towards meeting biologically sound conservation goals for the St. Lawrence Valley and builds upon the landscape scale conservation activities currently underway in the region. The enhancement of the grassland habitat is consistent with basin wide goals described in the Atlantic Coast Joint Venture, Bird Conservation Region 13, New York State Wildlife Action Plan, and USFWS Strategic Habitat Conservation Plan. Therefore, to continue to advance the collaborative partnerships in the St. Lawrence Region, DU and the SLELO partnership are using the Phase II state grant funds as match towards a federal small North American Wetlands Conservation Act (NAWCA) grant. The NAWCA grant will continue restoration efforts at Perch River, WMA thought the enhancement of 39 acres of wetland habitat.

Photos collected by Ducks Unlimited, Inc.



Chase Enterprises, applying herbicide at Point Peninsula, WMA 2015



Chase Enterprises, applying herbicide at Black Pond, WMA, 2015



Chase Enterprises, applying herbicide at Perch River, WMA