

Winter River-Tracadie Bay Watershed Association

Field Work Report 2015



WINTER RIVER - TRACADIE BAY
WATERSHED ASSOCIATION

Supporting The Watershed,
So It Can Support You

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Preface

The field work season of 2015 was primarily focused in two key areas; property owned by the City of Charlottetown adjacent to the Union Road Pumping Station and Friston Creek. The first site mentioned consisted of two old fields that had a small amount of natural forest succession already in progress. The latter site is a stream which the Winter River-Tracadie Bay Watershed Association had never done any restoration work on prior to this year.

There were 9 main tasks that were carried out over the summer. These tasks included; tree planting, hare guard installation, invasive species removal, stream clearing, brushmat construction/maintenance, spawning bed restoration, nest box placement, and running the fish trap at Officer's Pond.

Tree Planting

Nearly 900 trees were planted so far this year. The bulk of these trees were planted at the Union Road Site. Other locations where trees were planted included Brackley and Grand Tracadie community centres and a couple of properties on Silver Birch Lane in Donaldston.

Species planted were selected based upon site specifications. Because our main planting area was predominantly old fields, the main species planted was white spruce (*Picea glauca*). Various other species typical of the Acadian forest were also planted (see below).

Table 1. Tree and shrub species planted during the 2015 field work season.

Common Name	Scientific Name
Red Oak	<i>Quercus rubra</i>
Red Maple	<i>Acer rubrum</i>
Yellow Birch	<i>Betula alleghensis</i>
Blueleaf Birch	<i>Betula xcaerulea</i>
Gray Birch	<i>Betula populifolia</i>
White Birch	<i>Betula papyrifera</i>
White Pine	<i>Pinus glauca</i>
Red Pine	<i>Pinus resinosa</i>
Eastern Larch	<i>Larix laricina</i>
Eastern White Cedar	<i>Thuja occidentalis</i>
Common Name	Scientific Name
Green Ash	<i>Fraxinus pennsylvanica</i>
Wild Rose	<i>Rosa sp.</i>
n/a	<i>Spiraea</i>
Black Spruce	<i>Picea mariana</i>

Hare Guard Installation

In areas with high risk of snowshoe hare (*Lepus americanus*) browse on our trees; protective guards were installed to reduce the risk of tree mortality caused by rabbits. Only species of trees that are preferred browse of snowshoe hare were equipped with guards (such as birches, maples, and oak). All trees that were planted and needed guards have been equipped.

Invasive Species Removal

At the abandoned field next to the Union Road Pumping Station, there was several large scots pine (*Pinus sylvestris*) and a large infestation of glossy buckthorn (*Frangula alnus*). All scots pine was cut down and the majority of the glossy buckthorn was also cut down. The slash from the invasive species was partly removed but it was decided to leave the remaining piles on the site to cut down on transportation costs⁷. These will have to be removed either in the fall or next year. A follow up survey and cutting of any possible remaining glossy buckthorn is recommended for next year.

Stream Clearing

A lot of stream clearing has been completed this year. The majority of our focus was on opening up Friston Stream to ensure that fish passage would be possible and that stream flow patterns could be properly restored. There were many blockages throughout the entire system. As of August 14th, the entire Friston Stream had been cleared from Pleasant Grove Road to Friston Road (~2km). The next focus of work will be to install brush mats in the lower portion of the stream to attempt to catch silt and reconstruct flow patterns when the substrate drastically begins to shift due to the removal of blockages. Other areas where maintenance clearing was conducted included MacLauchlan Branch, the section of river upstream of York Bridge, and some minor clearing in Tim's Creek.



Figure 1. One of the blockages on Friston Stream.

Brushmat Construction/Maintenance



Figure 2. Before and after photos of two brushmats constructed on MacLauchlin Branch.

The 2015 field season saw multiple new large brushmats constructed, as well as many of our older mats added to with the hopes of catching more sediment and accelerating stream bank creation. The majority of this focus was on the MacLauchlan Branch where 4 large mats had been constructed, along with multiple smaller ones. Another key area of focus was on Tim's Creek. This creek had many brushmats that had been constructed in 2013. Many of the brush mats in this area, particularly close to the double culvert on Suffolk Road, had either been blown out and needed to be replaced, or needed to be topped up with more brush.

Spawning Bed Restoration

Several springs on the MacLauchlan Branch were excavated by hand with the hopes that the springs would be deep enough to provide access for brook trout (*Salvelinus fontinalis*). After the springs were dug out, gravel was added with the hopes of attracting brook trout to the area to spawn. On Friston Creek, any beds of gravel that were beginning to become laden with sediment were agitated with beaver hacks to remove any sediment build up.

Nest Box Placement



Figure 3. American kestrel (*Falco sparverius*) in a nest box in Blooming Point.

Approximately 50 American tree swallow (*Tachycineta bicolor*) nest boxes which were constructed during the 2014 field season were placed in two areas; around the lower portion of Hardy's Pond and around Courts' Island Pit. Other boxes placed for different species were four wood duck (*Aix sponsa*) boxes at Deroche and Hardy's Ponds and one barred owl (*Strix varia*) box at Tim's Creek. All American kestrel boxes from 2013 that needed adjusted doors had been replaced and the boxes cleaned from previous use.

Fish Trap at Officer's Pond

Throughout the course of the field season, a fish counting fence had been installed and monitored in the ladder at Officer's Pond. The trap has been checked twice a day for the entire summer. The main focus of monitoring the fish fence was to determine how many brook trout were using the ladder for access to the pond. Unfortunately, there were few trout moving through the ladder throughout the entire season.

Other Projects

- Shoreline clean-up
- Garbage removal
- Assisted in moving Alewife (*Alosa pseudoherangus*)
- Data logger deployment
- V-notch weir maintenance and repair
- Tree Survival Surveys
- Nest Box Success Rate Survey
- Fish cover log construction and deployment (ongoing)



Figure 4. Crew members Gavin Toombs, Tessa Doncaster, and Carter McQuaid checking the fish trap at Officer's Pond.