



Trailblazing into the Future

Otter Ponds Demonstration Forest 2017 Annual Report

by Christie Verstraten
July 2018



Photos courtesy of Dan Hutt and Christie Verstraten



INTRODUCTION

We have had another exciting year at Otter Ponds Demonstration Forest. 2017 was a busy year of infrastructure development, research, and many successful events and workshops. Thanks to our dedicated volunteers, we have: cut out over 4 kilometers of hiking trail; hosted workshops on roads, trails and bridges, boundary line maintenance, and tolerant hardwood management; and led tours for schools and local groups. We also partnered with organisations like the Northern Hardwood Research Institute and the Mersey Tobeatic Research Institute to further develop our research and educational opportunities.

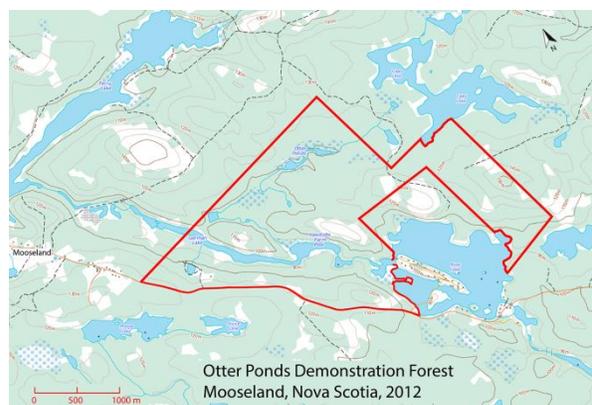
The OPDF continues to grow into a destination for woodlot owners, naturalists, biologists, hikers, families, researchers, and anyone with an appreciation for responsible, multi-value forest management. We look forward to building on our successes this year to expand our programming and further develop the necessary infrastructure for an active demonstration forest.

BACKGROUND

Otter Ponds Demonstration Forest (OPDF) is a 486-hectare (1200-acre) parcel of Crown forest near Mooseland, Nova Scotia. Operated as a division of the Nova Scotia Woodlot Owners and Operators Association (NSWOOA), the OPDF is a place for all Nova Scotians to learn about ecologically, economically and socially sustainable management of our native Acadian Forest. OPDF is a living laboratory that shows how timber production can be compatible with the protection of the full range of other forest values and services. It provides opportunities for woodlot owners, elementary and high school groups, university students and researchers, non-profit organizations, and individuals to visit an outstanding example of working forestland.

Otter Ponds demonstrates the philosophy, science, and practice of uneven-aged management in the Acadian Forest. It produces timber for market using the best forest practices presently known, while protecting wildlife habitat and the Tangier River watershed, respecting the ecosystem services provided by the parcel, and enhancing the social and cultural value of the forest. Another important objective of the OPDF is education and public outreach through field trips, public field days, workshops and other on-site events. We also reach out directly to woodlot owners through NSWOOA's newsletter and our Facebook page.

Management practices are certified to the Forest Stewardship Council's Maritime Standard. OPDF is managed by a unique partnership that includes four non-governmental organizations (NSWOOA, Ecology Action Centre, Eastern Shore Forest Watch, and Mooseland and Area Community Association), Northern Pulp Nova Scotia and the Nova Scotia Department of Natural Resources.



INFRASTRUCTURE

Trail Development

Following the completion of the OPDF Master Trail Plan in 2016, volunteers have been hard at work roughing out our new trail system. Over the summer of 2017 we held three trail construction work parties for directors and volunteers on August 17th, 28th and September 9th. Our focus was on three areas: Otter Ponds Marsh Loop (near the visitors' shelter), Otter Ponds Brook to Hawboldt's Farm Hill Trail, and a short loop on Hawboldt's Farm Hill.

Otter Ponds Marsh Loop was first roughed out in 2016, so efforts in this area were focused on finishing up sections of trail with a clearing saw and adding a new shortcut near the beginning of the loop to make a shorter, more accessible trail. A section of the Otter Ponds Brook to Hawboldt's Farm Hill Trail had been roughed out the previous year but still required some work to make it possible for tour groups and visitors. Work on this trail mainly consisted of manual removal of branches and coarse woody debris from the trail and some chainsaw work to junk up larger woody material.



The newly constructed loop on Hawboldt's Farm Hill was not part of the Master Trail Plan, but was constructed to facilitate tours for our Tolerant Hardwood Management Workshop in October. The short loop is approximately 1 km in length and goes through stands where we have partnered with the Northern Hardwood Research Institute to experiment with hardwood management techniques.

Those taking part in trail construction in 2017 were: Dan Hutt (director), Steve Wournell (director), Mike Murray (safety officer), Jacob Prest (director), Dale Prest (volunteer), and Christie Verstraten (staff). We hope to hold more work parties in 2018 to continue with trail network construction.

Sidney Prest Memorial Bench

Sidney Prest, previous director and long-time champion of Otter Ponds, passed away in December 2015. As a memorial to Sidney's many years of help and support, the board commissioned a bench in his honor, to be placed in a prominent place within the project lands. Kate Campbell finished constructing



the bench in May, and a spot overlooking Otter Ponds Brook has been selected for it to be placed. We plan to level the spot and place the bench in 2018.

Water Crossing Treads

The new water crossings constructed on Powder Horn Hill Road in 2016 required more narrowly spaced tread planks than originally designed. Kate Campbell added the new tread planks on May 12th, 2017.

EDUCATION AND PUBLIC OUTREACH

Forest Roads, Trails and Bridges Workshop

For the past few years, the Nova Scotia Woodlot Owners and Operators Association has led the Woodland Owner Mentorship Program in partnership with the Mersey Tobeatic Research Institute and the Federation of Nova Scotia Woodland Owners. The Program is sponsored by the Nova Scotia Department of Natural Resources and is linked to their Woodlot Management Home Study Program. Every year, the groups host a total of six workshops around the province, each focusing on one or more module from the Woodlot Management Home Study Program.

On May 13th, 2017 one of the workshops, centering around ‘Forest Roads, Trails and Bridges’, was hosted by Otter Ponds. Just over 20 participants took part in the workshop, led by Kate Campbell with Wade Prest, Dan Hutt and Andy Kekacs. Participants were shown parts of the Otter Ponds road network, our main bridge and two new water crossings, and sections of walking trails at various levels of construction, and were shown how this infrastructure was planned, designed, constructed and maintained.



Lichen Identification Workshop

On September 23rd, we hosted a Lichen Identification Workshop organised by the Mersey Tobeatic Research Institute. The workshop was led by local lichen expert, and co-author of *Common Lichens of Northeastern North America: A Field Guide*, Frances Anderson along with her colleague Troy McMullin. Over 20 people attended this event, with about half being professionals wishing to learn more about lichen identification for their work and the other half being interested members of the public. The morning was spent in a classroom setting at the Mooseland Community Centre and the afternoon session took place on-site at Otter Ponds. Participants were taught how to identify various kinds of



lichen and in which areas to find certain species. Dan Hutt was the Otter Ponds volunteer who worked with MTRI to organize the workshop.



Tolerant Hardwood Management Workshop

In 2017 the board agreed to partner with the Northern Hardwood Research Institute to demonstrate new silvicultural prescriptions for hardwood management at OPDF and to track the results of these treatments. Three sample plots were established on Hawboldt's Farm Hill: two different treatments and one control. Prescriptions were developed over the summer of 2017 and Dale Prest and Mary Jane Rodger completed the tree-marking for those stands in September.

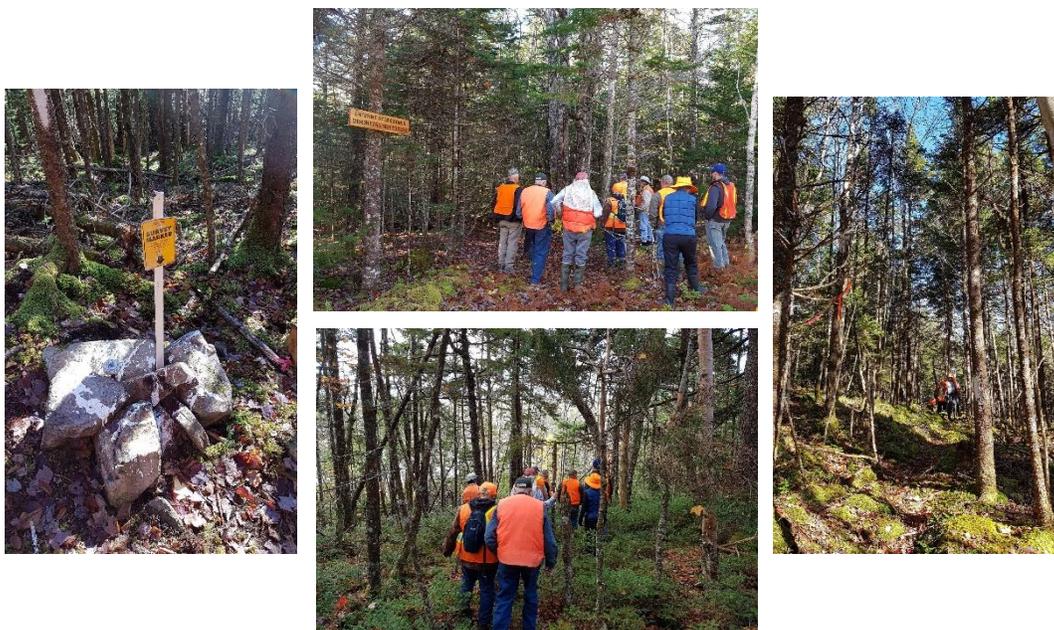


As part of this partnership, Dale Prest and Christie Verstraten coordinated a Tolerant Hardwood Management workshop on October 12th, which was attended by over 50 participants and another 15-20 volunteers and presenters. Participants were broken into four groups and cycled through four stations along the Otter Ponds roads and trails network, visiting two in the morning and two in the afternoon. The four stations were: Northern Hardwood Research Institute's Silviculture Prescription System and the sample plots on Hawboldt's Farm Hill; hardwood log value optimization by Groupe Savoie; applying NSDNR's Forest Ecosystem Classification and Pre-Treatment Assessment; and the success of the Nova Scotia Salmon Association's decade of lime dosing on the West River Sheet Harbour. The workshop was attended by both forestry professionals and interested members of the public and received very positive feedback.



Boundary Line Maintenance Workshop

This year's Boundary Line Maintenance Workshop was held on Saturday, October 28th and was led by retired NSLS surveyor Britt Roscoe. There were 10 participants in attendance as well as staff support from Christie Verstraten. Participants spent about an hour at the Mooseland Community Centre in a classroom setting going over the basics of boundary line maintenance and spent the rest of the day on-site at Otter Ponds along the North border of the property. We received excellent feedback from participants. This was the fourth Boundary Line Maintenance Workshop that Otter Ponds has held.





Bird Count Data

We were contacted by Dalhousie University bird researcher Cindy Staicer, who was interested in the data we collected at our 2016 spring bird count. The board approved a motion to share this data with Dr. Staicer and it was sent to her.

Field Trips and Tours

On October 5th, we hosted a group of over 20 students from Dalhousie University's School for Resource and Environmental Studies. Andy Kekacs (staff) led the tour with assistance from Christie Verstraten (staff), Scott Asling (director) and Ryan Dickie (director). Students were introduced to the history and goals of the Otter Ponds Demonstration Forest while hiking through a portion of our growing trail network.



The Shore Active Transportation Association visited Otter Ponds on November 2nd for a hike through our trails and a primer on what Otter Ponds is and what we do. Andy and Christie led eight participants through the project lands while discussing what constitutes responsible forestry and how to balance harvesting with ecological integrity.

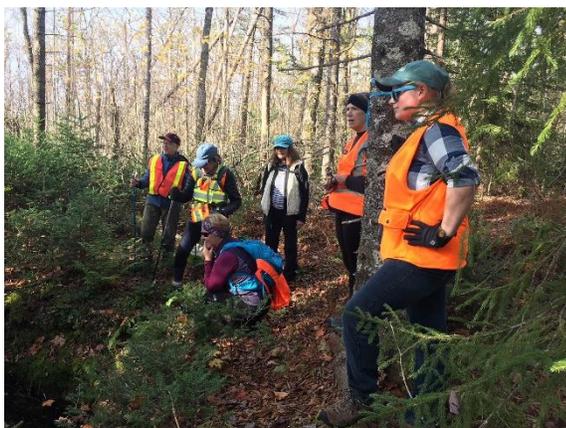


Photo credit: South Shore Active Transportation

Education Program Coordinator (November 2016 – May 2017)

School groups, woodlot owners, individuals and organizations interested in ecologically, economically, and socially sustainable forest management have visited OPDF annually since the project was launched in 2010. To date, much of the planning and delivery of these programs has been provided by OPDF board volunteers with one day per week of support from NSWOOA staff. The EAC agreed to fund Clare Robinson as a Forest Education Program Coordinator for 7.5 hours/week over a six month term to help build the sustainability of these programs into the future. Clare worked closely





with NSWOOA staff and directors to pursue and secure funding for the development and continued delivery of education programs at OPDF.

There were four objectives for this contract: (1) establish audience or target group; (2) build a program outline for funding proposals; (3) secure funding; and (4) develop a guide/trail map for our proposed trails network. For the first objective, Clare determined that we should target local schools with our programs, with an eye toward building community around our project message. This conclusion stemmed from brainstorming sessions with OPDF Directors and NSWOOA Staff, and discussions with partners, stakeholders and others offering similar forest-education programs in this region.

From the discussions mentioned above, Clare recommended the following as things we need funding for (the second objective):

- Target local schools and build a partnership with at least four teachers
- Work with individual teachers to develop a program based on curriculum outcomes (including a classroom visit and on-site tour)
- Assemble an OPDF 'tickle trunk' of items to help us communicate our message (such as cruising gear, tree cookies, non-timber forest products, laminated pictures of the project lands, etc.)
- Develop and purchase educational and promotional materials such as brochures, posters, maps and handouts
- Purchase tree seedlings and begin a tree planting program
- Further develop and maintain our online/social media presence.

For the third objective, Clare submitted three funding proposals on behalf of OPDF to: the HRM Community Grant; the MEC Community Investment Grant; and the WWF Go Wild Grant. She successfully secured a HRM Community Grant for \$2500 which provided funding for materials for education, outreach and promotion (e.g. forestry equipment, printed materials). Clare also identified four other possible grants that OPDF could pursue in the future.

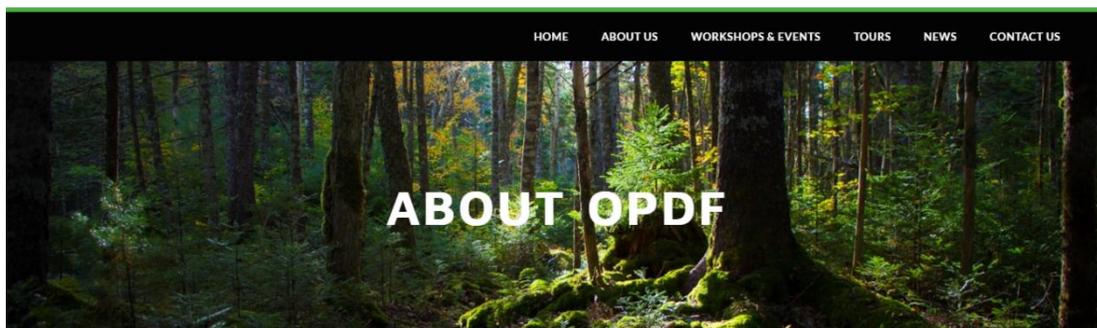
Through Clare's interviews and the data collected and included in our Master Trail Plan, we have the information to complete the final objective of developing a guide/trail map. While several kilometers of trail have been constructed so far, it was recommended that further work on the trail network be completed before framing up the map and brochure.

Communication and Marketing

The OPDF Facebook page was updated regularly by staff with forest-related articles, project announcements, and upcoming events at Otter Ponds. This year, page 'likes' rose from 284 on January 1st to 351 on December 31st.

The new Otter Ponds website, otterponds.ca, was launched early in 2017 after the board approved a draft site. Traffic for the old site at opdf.ca has been redirected to the new one. The site is updated regularly by Christie Verstraten and gives us a place to advertise upcoming events and accept online registrations. Event announcements for Otter Ponds programs are also posted to nswooa.ca, and nswoods.ca as well as on the NSWOOA and OPDF Facebook pages for maximum visibility.

A new Basecamp account was created this year and all files were transferred over. While the OPDF board has been using Basecamp for communication and file sharing for several years now, our project page was under the account of a retired NSWOOA director. The NSWOOA board thought it best for NSWOOA to have their own account, and OPDF has a new project page there.



In the Media

The Tolerant Hardwood Management Workshop held on Oct. 12th was described in an article published in the November 2017 edition of Atlantic Forestry Review. The piece by Dan Hutt was entitled “The elusive hardwood sawlog”.

Other Outreach Activities

The annual Spring Woodland Conferences were held in March and April, with approximately 350-400 people in attendance. As the Provincial Coordinator for these conferences, NSWOOA staff attended with the NSWOOA/OPDF display to talk to participants about the project and hand out brochures. Christie Verstraten also attended the Maritime Forest Carbon Opportunity Conference with the display.

Dan Hutt presented on OPDF at the 2017 NSWOOA Annual General Meeting on May 6th, in Debert, NS. Dan showed a photo slideshow of the events and activities taking place at Otter Ponds and updated members on the status of our new trails.

On June 10th, Clare Robinson represented OPDF at a NatureBlitz event in Dingle Park (Halifax, NS). The family-friendly event was organised by the Halifax Young Naturalist Club and included several stations by different nature-related groups to engage kids and teach them about different ecosystems.

Christie Verstraten and Simon Melrose attended the annual Association for Science Teachers Conference at Halifax West High School in Clayton Park, NS for the fourth year with the OPDF poster and educational documents. They talked to several interested teachers and had a sign-up list for those who were interested in learning more. There was a lot more interest from participants this year than in previous years.



Postponed or Cancelled Events

We had a couple of postponed or cancelled events this year, for different reasons. The Boundary Line Maintenance Workshop had originally been planned for June 3rd, but was postponed to the fall due to low pre-registration numbers. The annual bird count this year was first scheduled for June 17th, then rescheduled to June 24th due to poor weather, and then unfortunately had to be cancelled in the end after more bad weather conditions.



SILVICULTURE/HARVEST

As mentioned above, we have partnered with the Northern Hardwood Research Institute to demonstrate treatments recommended by their hardwood silviculture prescription system. Three stands on Hawboldt's Farm Hill were mapped out, two of which will receive different treatments with one left as a control. The silviculture treatments have not yet been carried out, but eight hardwood trees (various species) were cut and taken to a landing area for the Tolerant Hardwood Management Workshop in October. The logs were used as part of the hardwood log utilization presentation by Groupe Savoie.



Road construction continued on Powder Horn Hill Road with a right-of-way cut, yielding 260 tonnes for market. Marshall Bateman completed the 550 meters of the next section of road in January 2018 and plans to return to do the next 450 meters in mid-2018.

FUNDING

This year, OPDF was the recipient of three grants to further our education efforts. The first was the **HRM Community Grant**, which was one of the funding opportunities that Clare Robinson pursued as part of her EAC contract. We received \$2500 toward equipment and materials for our tours and workshops, as well as program promotion and delivery materials. The materials will be used to purchase: forestry cruising gear (increment borer, clinometer, diameter tapes, prism, soil auger) and tree planting equipment (shovels, tree bags); navigational gear (compasses and a GPS receiver); one promotional poster; and new brochures.

The second grant was a donation from **Halifax C&D Recycling Ltd**, a local company interested in supporting the good work being done at Otter Ponds. The company reached out to Andy Kekacs about donating, and we submitted a proposal to them to use the funds to further develop our trail system, focusing on areas with difficult terrain and a short section of highly accessible trail. Halifax C&D Recycling generously donated \$5000 toward these efforts.

The final grant received was from the **Community Health Board Wellness Fund**, which Christie Verstraten applied for on behalf of OPDF. The original application focused on further improvements to the Otter Ponds trail system and hoped to leverage the \$5000 donation from Halifax C&D Recycling to request \$1834 for equipment rentals and materials. While the Community Health Board was very interested in our proposal, the selection committee was informed that they could no longer fund infrastructure projects. Rather than reject application, they funded individual items from the proposed budget that were not infrastructure related, which resulted in a \$200 grant for refreshments and drinks for volunteer work parties. One committee member also generously shared our application with another funding body that was interested in our project. We will follow up with them in early 2018.



GOING FORWARD

The past year was very busy for Otter Ponds Demonstration Forest, and we are excited for what 2018 will bring. Using the funding we received from Halifax C&D Recycling and the Community Health Board, we plan to continue with trail construction based on the plans laid out in our Master Trail Plan. Our focus will be on difficult or wet areas of trail and finishing our 1 kilometer of highly accessible trail, as well as completing the sections that have been roughed out but not finished. We would also like to construct a landing and place the Sidney Prest Memorial Bench this year. Work parties will be held throughout the summer to accomplish this work.

In March 2018, the funding from the HRM Community Grant was used to purchase: forestry and navigation equipment (one increment borer, six clinometer/compasses, one diameter tapes, one prism, one soil auger, and one GPS receiver), planting gear (one shovel and two tree bags), and promotional materials (1 poster and 1000 brochures). The education committee will brainstorm ideas for additional and updated workshops and events we could host using this equipment. We will use the compasses for our annual Boundary Line Maintenance Workshop, and hope to offer a workshop on navigating your woodlot in the near future. The board is interested in using the planting equipment with a local youth group to establish a tree nursery on-site.

We hope to have the final section of right-of-way on Powder Horn Hill Road cut out in 2018, with plans to have Marshall Bateman construct the remainder of the road this summer. The board would like to have a harvest this year if markets improve enough. We currently have approximately 40 hectares tree-marked and ready to be harvested on Powder Horn Hill, as well as the approximately 2 hectares to be harvested on Hawboldt's Farm Hill.

We hope 2018 will be just as busy and exciting as 2017, and look forward to growing as a destination for woodlot owners, naturalists, biologists, hikers, families, researchers, and all Nova Scotians to explore responsible forest management on the Eastern Shore.