

Belfast Area Watershed Group

BAWG

Field & Activities Report 2021



Prepared by Sherry Pelkey, Rachel Adams,
Jenna Smith, Thomas Bruce

Table of Contents

President's Report	3
Team	4
Funding Partners.	5
Communications & Outreach	6
Events	7
Other Community Involvement.	8
Wildlife Conservation Fund	9
Training & Webinars	10
Monitoring	11
In-Stream Activity Report	14
Additional Activities	19
Words of Note	21



President 's Report

Belfast Area Watershed Group (BAWG) marked a successful fourth year of operations in 2021, albeit still under restrictions due to COVID-19 public health guidelines impacting various community events. The 2021 field season included seven crew members plus Coordinator. The crew included: Thomas Bruce, Jenna Smith, Morgan Gill, Miranda Ings, Sophie Lannigan, Isaac Edward, Colin Jeffrey, Sherry Pelkey

BAWG's first major restoration project, the Roseberry Pond Alaskan fishway installation, was completed in September. This project was partially funded through a grant from the Rural Municipality of Belfast's gas tax funding for recreational infrastructure. Outside of the professional work by an engineer and contractors, the community pulled together and volunteered time with landscaping and donation of supplies. In addition, the good turn-out at a fundraiser, "Tunes for Roseberry" proved the community commitment to our work. Colin Jeffrey was a welcome addition to the staff to assist with project management for the Roseberry Pond fishway project.

A second pollinator garden was installed at the Wood Islands Visitors village, while the managed garden at Gillis Lodge received maintenance, including seed collection at the end of the season. The Gillis Lodge pollinator garden is doing exceptionally well. Both locations had signage installed with funding provided by Wildlife Conservation Fund (WCF).

Our community tree/shrub planting day at Portree Trail was well attended, with 21 community members and the entire BAWG summer crew. Approximately 300 shrubs were installed at this location. The BAWG staff also planted on various riparian, retired fields, and shoreline zones in the region, which resulted in over 1093 native species being planted.

The field crew had a busy season with stream assessments, water quality testing, bat and bank swallow surveys, counting fence (Flat River), and electrofishing. Restoration activities were concentrated above the Roseberry Pond branch of the Pinette with the installation of brush mats and debris clearing; further debris clearing was executed in Wood Islands (below MacLeod Rd.). Trail clearing was conducted at the Hancock-MacDonald trail, Ken's Trail (Wood Islands), and Selkirk Park trail. In addition, partnering with Point Prim Lighthouse Society and Greening Spaces, 100 wetland shrubs were installed at the shoreline to enhance the newly armoured (boulders) area and provide a wildlife habitat.

Although COVID-19 restrictions and lack of event space caused the cancellation of the planned inside events/presentations, the group was able to hold various outside events throughout the season. Events included Tree Swallow box sale, Bird Walk, Family Fishing Day, Spreading Roots tree drive, Tunes for Roseberry (fundraiser), and seven youth events.

An important aspect contributing to BAWG's success throughout the 2021 season and into 2022 was the significant contribution made by our community volunteers, with over 1100 hours supporting multiple activities. For this, we are incredibly grateful. In addition to strong volunteer participation by community members, our membership grew to 258 as of March 31, 2022.

Scott Roloson, President

Team

Executive Board of Directors (2021)

President - Scott Roloson
Vice President - Andy Henry
Treasurer - Ian Dohoo
Secretary - Emily Mutch

Board of Directors (2021)

Curtis Penny
Terry Morrison
Brenda Simmons
Elizabeth Dacombe
Kevin Jeffrey
Ian Watt
Eric Edward
Bradley Davies



From left to right: Jenna Smith (Crew Member), Sophie Lannigan (Crew Member), Thomas Bruce (Crew Member), Andy Henry (Vice President), Colin Jeffery (Crew Member), Morgan Gill (Crew Member), Brenda and Fran Hancock (Land Owners).

*Missing from photo: Isaac Edward, Miranda Ings (Crew Members)
Photo by: Sherry Pelkey, Coordinator*

Funding Partners

BAWG would not have been able to achieve as many goals as we did this season without the generous contributions of all our funding partners. The following table outlines our funding partners. Other important contributors are our members that support us through fundraising efforts and direct donations.

<p>Rural Municipality of Belfast</p>	
<p>PEI Wildlife Conservation Fund</p>	 <p>PRINCE EDWARD ISLAND WILDLIFE CONSERVATION FUND</p>
<p>Government of Canada Canada Summer Jobs</p>	
<p>J. Frank Gaudet Nursery Greening Spaces Program</p>	<p>Province of Prince Edward Island SkillsPEI Post-secondary Jobs for Youth</p>
<p>PEI Watershed Management Fund</p>	

Communications & Outreach

- Facebook and Instagram continue to be popular sources of information and engagement. Facebook following increased to 731 up from 576 since last year, per Facebook insights. Instagram has 446 followers. Furthermore, our events and sharings (other watershed group activities) were shared to community members via Belfast Community Info page and member personal pages.
- Monthly updates provided to the Belfast Lions Club Newsletter. Available in print and online. We receive emails and phone calls frequently for memberships or to inquire about services.
- Posters for events shared via community bulletin boards at Country Taste Bakery, Coopers Red & White and The Store (Grey's Rd.)
- Newsletter (online via MailChimp) sent to membership six times throughout the year.
- Coverage with CBC (television and online) and the Eastern Graphic on various activities

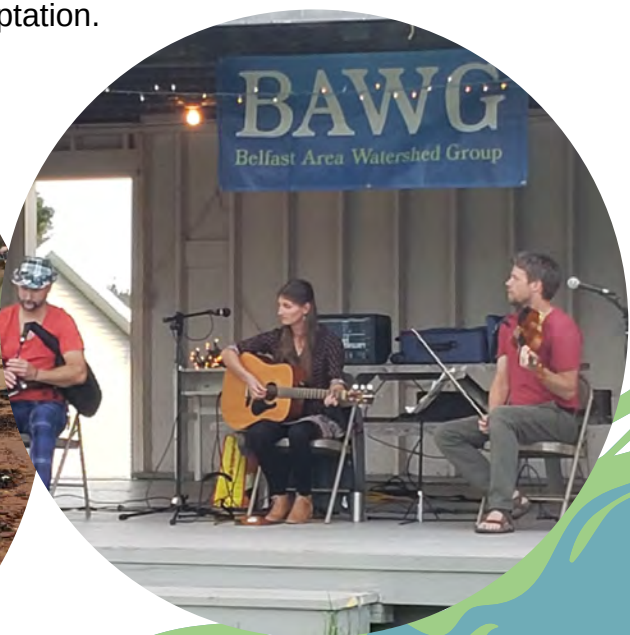


Annual tree swallow nesting-box pop-up sale at Cooper's Red & White.

Events

Note: due to COVID-19 restrictions and closing of public facilities some events were cancelled, however the following were successful events:

- May 22 (10 attendees) - **Family Fishing & Adventure Day**, Roseberry Pond (rainy day)
- June 5 (over 30 attendees) - **Spreading Roots Community Tree Drive**
- June 6 (12 attendees) - **Bird Walk at Roseberry**
- June 26 (21 attendees) - **Portree Trail Community Planting Day**
- July 6, 8, 14, 15 (30 + attendees) In partnership with Go!East PEI held 4 days of **Go!Nature Children's day camps** (average 30/day). Activities included: shelter building, planting, bird walk, nature mandala creation and more.
- July 23 (10 attendees) - **Ladybug Picnic & Critter Dipping** in partnership with Wood Islands Area Development Corporation (children's event). In addition, the Sweet Factory & Whistle Stop donated candy and food to all participants.
- August 19: (12 attending) **Adventures at the Seashore** in partnership with Wood Islands Area Development Corporation (family event).
- August 24 (42 attended) - Hosted a **Tunes for Roseberry musical evening fundraiser** at Selkirk Park. Music provided by Lovely Nelly, who donated their monies back to BAWG. In addition, Belfast Historical Society provided sound equipment, while Belfast Highland Greens/Selkirk Park gifted use of event space.
- November 3 (Field trip, 32 attendees) - Partnered with UPEI Climate Lab to host Belfast School youth on **field trip to Littoral Lane**. Learning included: shoreline erosion and natural techniques for climate change adaptation.



Other Community Involvement

- Participated in a stakeholder meeting with i-Imagine consultant Harvey Sawler regarding BAWG insights and suggestions for the ACOA backed Revitalization Plan at Wood Islands. Offered a host of suggestions for possible inclusion, including our concern of bank swallow protected habitat.
- Board of Directors and Coordinator participated as stakeholder with Fotenn Community Planners on the community plan for the Rural Municipality of Belfast
- June 14 - in partnership with Point Prim Lighthouse Society and Greening Spaces planted a section of the newly armoured area with wetland plants. Volunteers from Society assisted with transportation, planting, and signage installation.
- Our second pollinator garden was designed and installed at Wood Islands Visitors Village. The garden holds five native species plants – Canada anemone, blue flag iris, yellow coneflower, swamp milkweed and joe-pye weed.
- Working with PEI Watershed Alliance, placed and collected 4 acoustic bat monitoring stations in the region. In addition, the first year of transit (driving) bat monitoring was completed.
- Bank swallow monitoring continued with mapping, development of a protocol and report shared with PEIWA. In addition, shared information on active areas with Island Nature Trust as part of their funded bank swallow project.
- Electrofishing – 4 days with volunteers and summer staff. Assistance provided by PEI Watershed Alliance.
- Tree swallow nesting box sales - April 10, 2021 and March 26, 2022 with pop-up kiosk at Coopers Red & White, Eldon.
- November 26 - Christmas in Belfast (host Belfast Historical Society) participated with donated craft items made by volunteers and coordinator. High school student Sheila Walsh volunteered for the day.
- Secured \$ 7, 095 in 2021 from Wildlife Conservation Fund “Sustaining Biodiversity” project, which supported various activities and purchases from pollinator garden to riparian zone enhancement.

Wildlife Conservation Fund

"Sustaining Biodiversity" Activities Summary

Belfast Area Watershed Group (BAWG) carried out a multifaceted project aimed at sustaining biodiversity in our region, namely bird and native plant species. The project included community engagement through outside in-person events and informative social media shares. A successful Bird Walk, Family Fishing at Roseberry and Community Tree planting day were all well attended, in addition to six days of children's events in partnership with Go! East PEI and Wood Islands Development Corporation were an outstanding success for children and parents.

An integral part of our project was the continuation of our tree swallow boxes building projects. Over 30 tree swallow boxes were distributed to community members and BAWG maintained tree swallow boxes and observed nesting activity in 8 monitored boxes. Three large, multi-chambered bat houses were built, and the bat houses will become part of a future project to monitor nesting and populations. The bat houses followed the suggested design of the Canadian Wildlife Health Cooperative.

Further goals included the continued restoration of the Pinette, Flat and Belle River systems, including two locations in Wood Islands and to enhance fish habitat. Brush mats and patch cuts were created where appropriate using nature materials and native species. Additional activities were focused on increasing the resilience of buffer zones with additional vegetation, resulting in 615 trees and shrubs being planted. Additional trees, shrubs and wildflowers were distributed for specific locations. The outcome saw a total of 1093 plantings in our region.

Phase One of a pollinator garden was installed at the Wood Islands Visitors Village, including informative signage. This installation was developed with the permission of the Wood Islands Development Corporation and is part of attracting people to enjoy the small trail and pond, of which BAWG assisted with maintenance— clearing the trail and creating access points from pollinator garden to pond.

BAWG staff worked with partners to address other threats to species by:

- Installing symbolic fencing, to protect the nesting area of bank swallows along a section of the Wood Islands Provincial Park, including signage to educate public
- Continued with surveys of bank swallows along 32.4km of our coastline (3 year)
- Conducted weekly garbage removals along our coastlines, including partnering with the PEI Aquaculture Alliance for a river clean-up.
- Installation of signage for the Clean Drain Dry Initiative. Clean Drain Dry hopes to normalize good boating practices that will prevent the arrival and spread of zebra mussels on PEI.
- Monitoring of wood bins with the PEI Invasive Species Council for the Don't Move Firewood campaign

Training & Webinars

Staff Training:

- June 23 - MacPhails Ecological Woods Project & BAWG day - 3 crew assisted in weeding, pruning, plus patch cut demos
- July 5 - MacPhail's training for watershed workers
- July 5 - Emergency First Aid - 2 summer crew attended
- July 19 - Electrofishing training update for Supervisor, Thomas Bruce

Training Sessions hosted by PEI Watershed Alliance and attended by Coordinator, Sherry Pelkey:

- January 19 – CB Wetlands
- January 25 – Wildlife Camera
- February 9 – 5R Environment
- February 16 – Agri-Watershed
- February 8 – Forested Landscape Priority Place
- February 23 – CLIMAtlantic
- March 9 – Bat webinar
- March 16 – WG Report Cards
- March 24 – Species at Risk (SAR) & Invasive
- Sherry Pelkey – completed Green Shores Level II organized by PEIWA and delivered by British Columbia Institute of Technology



Coordinator Sherry Pelkey conducting a fall clean-out of BAWG-monitored tree swallow boxes.

Monitoring

Flat River Counting Fence

Year two scientific experiment w/permit (Flat River) for in-stream counting fence to gauge species and populations of fish movement upstream. Counting fence in operation July 13 - August 5, 2021). However, due to lateness of receiving the permit, a comparison (2020) report was not developed. Final report submitted to DFO and Government PEI.

Species	Upstream	Downstream
Brook trout	104	4
Rainbow trout	14	3
Total	118	7

Water Quality Monitoring

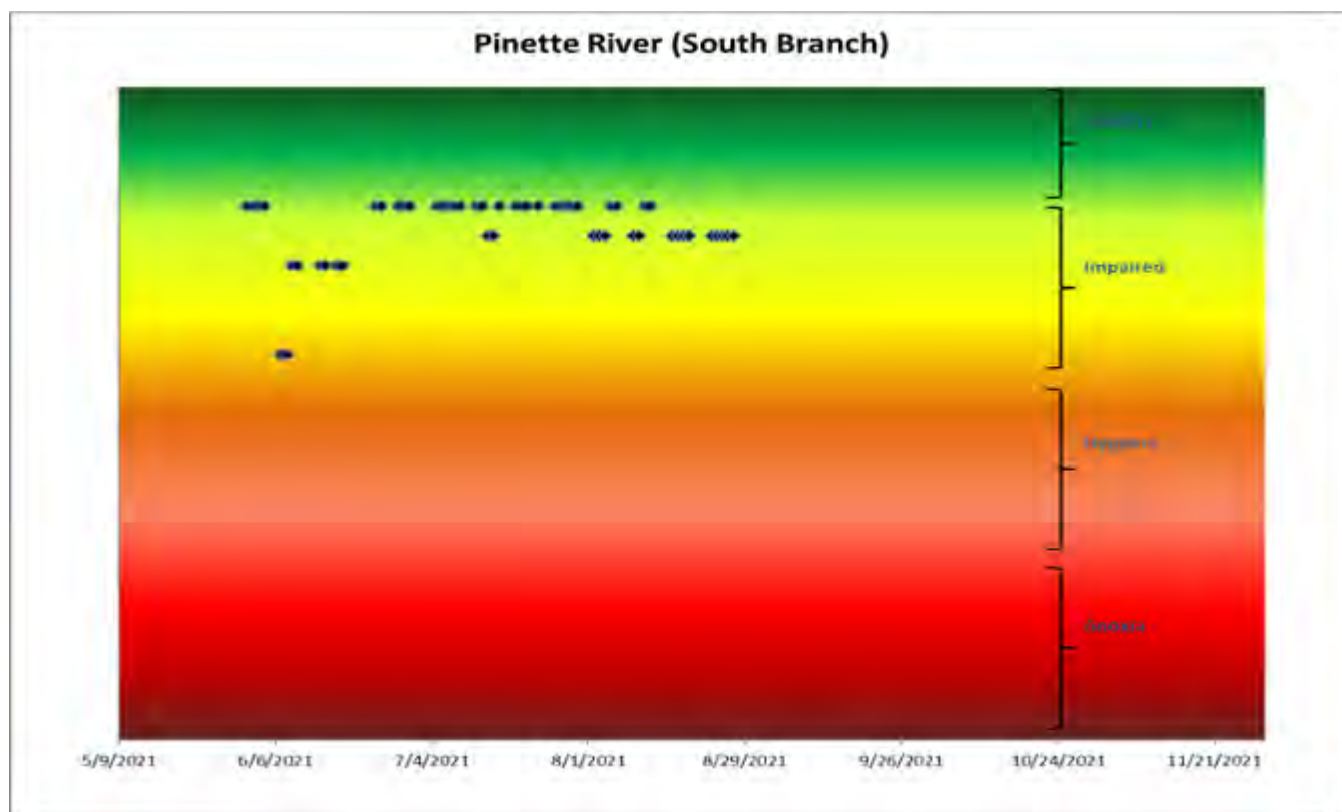
Stream flow was monitored bi-weekly at the following locations: downstream of MacPherson's Dam, upstream of Roseberry road stream crossing for Roseberry Twins, downstream of Roseberry Pond, upstream of Camp road stream crossing for Flat River, downstream of Munns Road stream crossing for Belle River, downstream of MacLeod Road stream crossing, and downstream of Highway crossing for Littoral Lane.

Data entered to [Atlantic DataStream](#). We encourage you to visit BAWG at Atlantic DataStream for complete details of water quality testing, explanations and maps.



Estuary Health

In 2021, BAWG began participating in the PEI Estuary Watch Program, beginning with the Pinette River. The estuary watch protocol and booklet is a standardized program used across the province; to track anoxic events, This program is used to produce a score on the health of the estuary. Daily observations of water clarity, water colour, presence of odours and the presence of sea lettuce is recorded. The information is sent to the Department of Environment, Energy and Climate Action for inclusion in provincial data.



Above: chart shows estuary conditions in the south branch of the Pinette River in 2021. This was the first time an Estuary Watch record was submitted for this estuary. Records were kept routinely between June 1st and August 27th, 2021. During this time the estuary was either in a healthy or impaired state.

Sea lettuce risk in the south branch of the Pinette River estuary was moderate for most the record. Sea lettuce coverage only ranged between less than 5% to less than 25%. This lettuce was healthy or growing at all observations. Abundant algal growth can contribute variable dissolved oxygen levels in water. There was enough lettuce present to possibly lead to elevated dissolved oxygen levels during daylight hours and depressed levels at night (slightly impaired conditions). There was some cloudy water present which could indicate a possible issue with decomposing vegetation (impaired conditions). Phytoplankton blooms can also contribute to variable dissolved oxygen in estuaries. No conditions consistent (with phytoplankton blooms clear, green water) were present in this record.

Did you know?

Dissolved Oxygen (DO) - Healthy water should generally have dissolved oxygen concentrations above 6.5-8 mg/L and dissolved oxygen saturation between about 80-120%.

Bank Swallows (Species-at-Risk)

We surveyed 32.4km of shoreline and found 14 locations with bank swallow colonies present. (Wood Islands, Cherrycliff Park Road, Beach Point, Morrisons Beach Road, Cape Bear, Guernsey Cove, Ponds Road, Big Point Road, Stewart Point Road, Factory Road, MacAulay's Wharf Road, Bessie Willow Lane, Cameron Island, Point Prim). Our surveys found an approximate total of 997 bank swallow cavities and 456 bank swallows.

Total Number of Bank Swallow Cavities 2019 - 2021



This includes active and non-active cavities.

Wood Islands has been showing a general increase in the number of cavities excavated. Cameron Island showed an increase in 2020, and it maintained the number of cavities in 2021. Point Prim colonies did not appear to fare well, most of the few cavities were eroded away when we went to check on them in 2021.

Tree Planting

The crew, volunteers and members helped with the planting of 1093 native trees and shrubs throughout the season. Areas planted included: retired agriculture, buffer zone (increase), Portree Trail in Eldon, patch cuts along riparian zones on Pinette River. In addition, a successful community tree & shrub drive saw approximately 300 native trees and shrubs find a home with many residents.



Mosquito identification workshop with Kyle Knysh, facilitator



Portree Trail Community Planting day volunteers

In-Stream Activity Report

Roseberry Pond Recreational Infrastructure Project

Roseberry Pond is a major feeder stream of Pinette Bay, and an important part of our community. It has historically been referred to as "Nan Ross's Dam" and it served over the past centuries as an important sawmill in the community.

Since the construction of the historic mill dam, the watercourse was diverted over a 14' waterfall and subsequently during this period, there have been access problems for migratory fish species. The waterfall is located at the head of tide, where salt and freshwater meet.

To the best of our knowledge, migratory fish species that migrate between fresh and saltwater (called anadromous fish) are completely blocked from re-entering fresh water.

With a grant of \$50,000 secured through the Rural Municipality of Belfast (RMB) Gas Tax Project – recreational infrastructure, the rehabilitation of the watercourse runaround was completed. A series of rock weirs were created, and the installation of an Alaskan-style steep-pass fishway was permanently installed. This will enable several fish species to pass between fresh and saltwater along the waterfall with a more fitting slope and resting areas. There are many benefits from this project such as improved recreational fishing opportunities for community residents, stronger fish populations and improved diversity of fish species and lastly, improved opportunities for commercial fishers in Pinette Bay, who target species such as gaspereau and smelts, which both require access to freshwater for spawning. In addition to the grant further support came from our Watershed Management Fund, and many community donations. As a private pond and trail area, it is important to note that this project was only possible through the commitment and support of the Morrison family, who allow public access (in a responsible manner) to the fishing area. Roseberry Pond is a gem in our region.

Recreational fishing is a form of nature-based recreation enjoyed by all ages and is considered a cultural ecosystem service that carries value towards life enhancement. Additionally, the vast knowledge base (skills) of local fishers can be passed on to younger generations. For recreational fisheries to be successful, there are times when site management is required. In our case, constructing a new fish way will promote recreational opportunities and community engagement and enable our group to engage a new generation of outdoor enthusiasts.

Roseberry Pond project continued



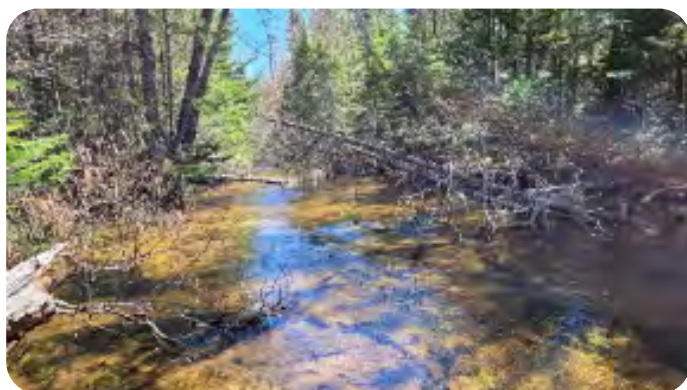
The installation of the fish way for local recreation includes many benefits to the community:

1. Roseberry Pond surroundings are well maintained and are accessible and available to all members of the public, with responsible use;
2. Recreational fishing adds to physical activity, promotes well-being, social skills and de-stressing capacity.
3. Provides an opportunity for social bonding. The pond is popular with all ages, young families and seniors alike.
4. Generates economic opportunities – such as fishing equipment, support for local restaurants and service stations.
5. The purchase of fishing licenses help support watershed groups and conservation initiatives.
6. Further generates an appreciation for nature and promotes ecosystem health.
7. Enhancing the recreational fishing at Roseberry Pond, provides opportunity to partner with other recreational services suited to the area – adventure walks and scavenger hunts around the pond, as an example.
8. Our annual family fishing day is a highlight event of our group where we provide a safe family-oriented recreational event with BBQ, prizes, and additional recreational activities.

Overall, the installation of the fishway to enhance the natural migration of fish provides an opportunity to further the value associated with recreational fishing. Recreational fishing provides social, physiological, and psychological benefits to all that participate.



Before, during, and after the installation at Roseberry.



Belle River

Stream Assessments: conducted from Garfield road stream crossing to point just above stream crossing at Munn's road. Summary of stream assessment is available in season work plan.

Clearing: No clearing was done on Belle River this season.

Brushmats: No brushmats were built on Belle River this season.

Patch Cuts: No patch cuts were made on Belle River this season.

Electrofishing: 3 passes completed at one location, below Munn's Rd., bridge

Plantings: No plantings made on Belle River this year



Flat River

Stream Assessments: conducted from stream crossing of Camp road to Hughie's dam (MacPherson Mill Rd.) and then continued just above Huey's dam until Garfield road. Summary of stream assessment is available in season work plan. Black Marsh stream was observed and it was advised that a new culvert was needed downstream of the pond.

Clearing: Clearing was started working downstream from crossing above pond. Discovery of beaver dams at this point.

Brush mats: No brush mats were built on Flat River this season.

Patch Cuts: No patch cuts were made on Flat River this season.

Electrofishing: Two passes were made on the section below Hughie's Dam.

Plantings: Approximately 100 trees were planted behind the Davies property by the pond, while 53 trees and 50 shrubs were planted along Black Marsh stream section.



Pinette River
(Main Branch / MacPherson's Dam)

Stream Assessments: conducted from head of pond at MacPherson's

Clearing: Stream was cleared from head of MacPherson's dam to first crossing (end of Edwards property).

Brush mats: Nine brush mats were made above MacPherson's dam to first crossing (end of Edwards property)

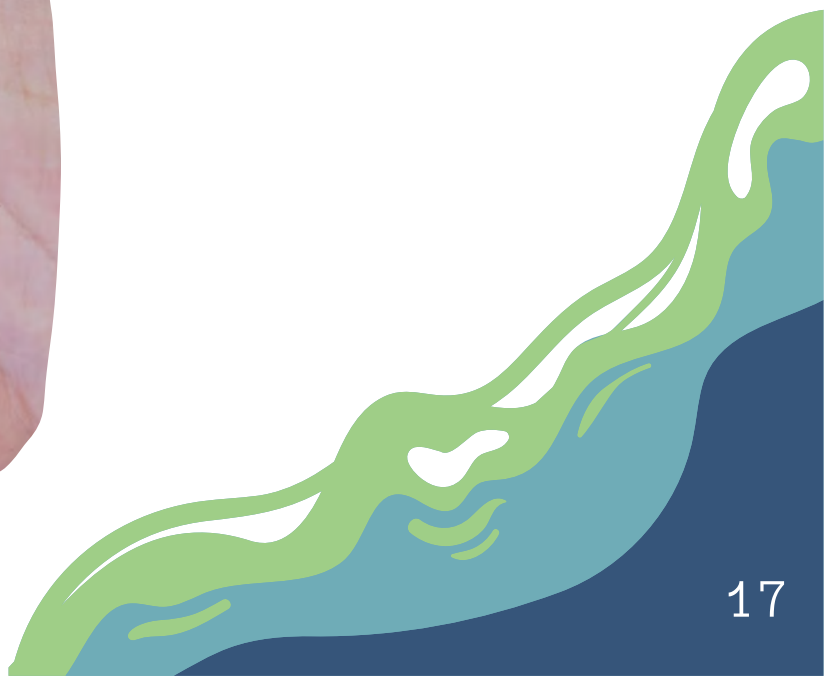
Patch Cuts: Nine patch cuts were made above MacPherson's dam to first crossing.

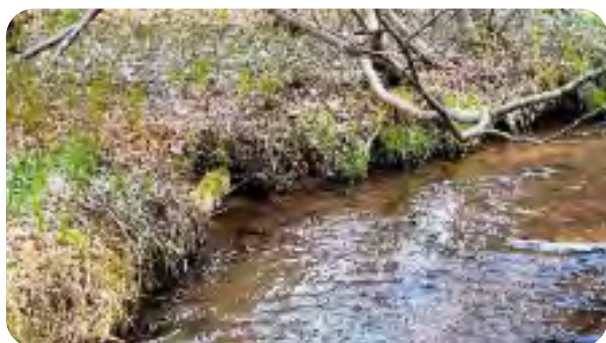
Electrofishing: No electrofishing was done on this branch

Plantings: 5 trees and 12 shrubs were planted in the patch cuts along this stream. Less trees were needed due to the presence of young species such as spruce and red maple among the alders.



*Patch cut on Pinette river above MacPherson's dam.
See non-used wood piled to recreate fallen trees*





Roseberry Twins Branch (West)

Stream Assessments: conducted from Roseberry road to Garfield road

Clearing: No clearing was done on Roseberry Twins branch (West)

Brush mats: No brush mats were made on Roseberry Twins branch (West)

Patch Cuts: No patch cuts were made on Roseberry Twins branch (West)

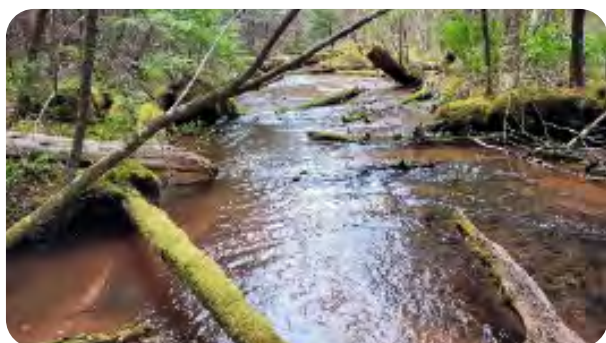
Roseberry Twins Branch (East)

Stream Assessments: conducted from Roseberry road to Garfield road

Clearing: No clearing was done on Roseberry Twins branch (East)

Brushmats: No brushmats were made on Roseberry Twins branch (East)

Patch Cuts: No patch cuts were made on Roseberry Twins branch (East)



Roseberry Pond Branch

Stream Assessments: conducted from Roseberry road to Garfield road

Clearing: Roseberry Pond branch was cleared from above Roseberry pond to pond above Mini Mills.

Brushmats: Five brush mats made just above Roseberry pond

Patch Cuts: No patch cuts were made on the Roseberry pond branch

Electrofishing: Three passes were made on the Roseberry pond branch on the section downstream of Garfield road.

Plantings: No plantings were made on the Roseberry pond branch this year.



Additional Activities

- Littoral Lane: Approximately 300 metres of stream was cleared downstream of highway to the pond above Littoral Lane. Stream crossing for Littoral Lane was cleared twice to lower the pond due to debris blocking culvert and threatening bridge passage.
- Trail Clearings: Hancock-MacDonald Trail was fully cleared and marked with flagging tape. Ken's Trail (Wood Islands) was fully cleared and marked with flagging tape. Selkirk Trail at Campground was fully cleared.
- Our crews assisted with Goose Banding (Canadian Wildlife Service/Ducks Unlimited and Morell Watershed)
- New supervisor spent 2 days with Souris and Area Branch of the PEI Wildlife Federation
- First year - Amphibian's survey. Based on protocol from South Shore Watershed Association were completed
- Hosted UPEI Environmental Studies (Fatoumata Bintou Tangara) student to begin website content strategy for BAWG
- July 13, Sept 1 - Coordinator participated in Stratford Living Shoreline project in partnership with PEIWA.
- July In partnership with Go!East PEI held 4 days of Go!Nature Children's day camps (average 30/day). Activities included: shelter building, planting, bird walk, nature mandala creation and more.
- August : (10 attending) Ladybug Picnic & Critter Dipping in partnership with Wood Islands Area Development Corporation
- August: (12 attending) Adventures at the Seashore in partnership with Wood Islands Area Development Corporation
- August 24 (42 attended) - Hosted a Tunes for Roseberry musical evening fundraiser on Selkirk Park. Music provided by Lovely Nelly, who donated their monies back to BAWG. In addition, Belfast Historical Society provided sound equipment, while Belfast Highland Greens/Selkirk Park gifted use of event space.
- November 3 (Field trip) - Partnered with UPEI Climate Lab to host Belfast School youth (32) on field trip to Littoral Lane. Learning included: shoreline erosion and natural techniques to mitigate.
- July Installed 2 more sites with erosion pins with UPEI Climate Lab.
- July Assisted UPEI Climate Lab with drone survey of erosion control sites.

Belfast Area Watershed Group | 2021-2022 Field & Activities Report

- Tour of area to assess appropriate wood duck box areas with John Clements, Delta Waterfowl and begin building Wood duck box interactive map. Member Rus Compton is assisting with the landowner locator.
- Installed fencing, to protect the nesting area of bank swallows along a section of the Wood Islands Provincial Park, including signage to educate the public. With permission of PEI Parks.
- Conducted weekly garbage removals along our coastlines, including partnering with the PEI Aquaculture Alliance for a river clean-up.
- Installation of signage for the Clean Drain Dry Initiative. Clean Drain Dry hopes to normalize good boating practices that will prevent the arrival and spread of zebra mussels on PEI.
- Monitoring of wood bins with the PEI Invasive Species Council for the Don't Move Firewood campaign
- June 10 - Living shoreline planting - 100 plants were installed at a vulnerable shoreline area on McInnis Point, Earnscliffe, complete with a water station provided by the landowner.



Electrofishing with crew members Morgan and Sophie. Left: Mary Finch, Ecologist



Seashore Adventures Day in partnership with Wood Islands Area Development Corporation

Words of Note

Anadromous: Fish that spend part of their adult life in saltwater and return to freshwater streams and rivers to spawn.

Anoxia & anoxic events: The process by which a water-body becomes so depleted in oxygen that most of the life within cannot adapt and dies; cycles of anoxia occur in several Island estuaries during the summer, when sea lettuce blooms, dies and the microbial decomposition process uses up all available oxygen in the water due to the sheer volume of materials being broken down.

Braiding (of stream): Where a stretch of stream is divided into separate channels that repeatedly meet and divide.

Fish ladder: A series of pools arranged like ascending steps at the side of a stream, enabling migrating fish to swim upstream around a dam or other obstruction.

Large woody debris (LWD): A general term referring to all wood in streams greater than 10 cm in diameter and 2 m in length, naturally occurring or artificially placed and including whole trees, branches, root wads, logs and log-jams.

Marsh: A class of wetland having the following characteristics: periodically inundated by standing or slowly moving water; surface water levels may fluctuate seasonally, with declining levels exposing drawdown zones of matted vegetation or mud flats; waters are often eutrophic; substratum usually consists dominantly of mineral material; characteristically show a zonal pattern of pools or channels interspersed with clumps of emergent sedges, grasses, rushes and reeds; where open water areas occur, a variety of submerged and floating aquatic plants flourish.



Crew member Isaac Edward assisting camp attendees with egg-carton planting activity

Monitoring: Recording or tracking a defined set of measures that are of interest; measurements taken over space or time for the purpose of characterizing and assessing environmental conditions.

Perched culvert: A culvert with an outlet elevated above the downstream water surface, allowing a freefall condition (also referred to as a hanging culvert) requiring migrating fish to leap into the culvert from the downstream pool.

Point bar: Crescent-shaped deposit of fine sediment located on the inside of a stream bend.

Restoration: The process of restoring site conditions as they were historically, before disturbance and/or environmental degradation.

Riffle: Habitat characterized by shallow water (< 25 cm), moderate current and with broken surface flow, usually over gravel, cobble and boulders.

Understory (forest): The community of young trees, shrubs and herbaceous plants that live under the higher canopy of a forest.

Watershed: The area of land drained by one river, including all of its tributaries and the groundwater that discharges to them; also called a drainage basin.



Monarch at the pollinator garden.



Shrub planting at Point Prim in partnership with Point Prim Lighthouse Society. Funding provided by Greening Spaces Program.

Volunteer Rachel Adams temperature logging at Roseberry Pond.



Crew member Sophie with kids at Seashore Adventure Day.



Miranda Ings and Jenna Smith installing symbolic fencing at Wood Islands to protect the bank swallow nesting area.

Children enjoying their custom-build shelter at Go! Nature camp



Setting sail - shingle boat launched at Seashore Adventure Day