



## Bluff Trail Stewardship Program (BTSP) Year in Review 2018

WRWEO respectfully acknowledges that we are located in Mi'kma'ki, the unceded and unsundered ancestral land of the Mi'kmaq (L'nu). We are all treaty people.

### Background

Completed in 2005, **The Bluff Wilderness Hiking Trail** was constructed by the Woodens River Watershed Environmental Organization (WRWEO) under a letter of authority from the Nova Scotia Department of Natural Resources (DNR). The trail runs through ecologically sensitive barrens, reaches into the dwindling habitat of the endangered mainland moose and broom crowberry, a coastal plain species threatened elsewhere. The purpose of the trail was to allow the public to become aware of the extraordinary natural assets of this area, in the belief that awareness was the first step in protection. In 2011, the Province designated Five Bridge Lakes Wilderness Area under the *Wilderness Areas Protection Act*. However, by 2015, the trail and the wilderness area were showing signs of distress. As a result of the significant increase in the volume of visitors, there was an alarming increase in harmful human impacts. Visitors expressed concern and disappointment about the damage caused by the ever widening trail, the increased amount of garbage, toilet paper, and human waste in the area, harm caused by inappropriate camping, the cutting of trees, and the damage to soil surface and tree canopy caused by camp fires. These observations were reiterated in the annual trail inspections performed by Department of Natural Resources staff.

**The Bluff Trail Stewardship Program** is a joint project of the Woodens River Watershed Environmental Organization (WRWEO) and the Saint Margaret's Bay Stewardship Association (SMBSA). With support from the Nova Scotia Environment – Protected Areas and Ecosystems Branch, Five Bridges Wilderness Heritage Trust (FBWHT), and contributions from individuals, the program seeks to decrease the number and severity of harmful human impacts and to ensure the careful and responsible management of The Bluff Trail and the surrounding area.

### 2018 BTSP Paid Labour

In 2018, BTSP received support from Five Bridges Wilderness Heritage Trust, the Province of Nova Scotia, and individual donors. BTSP funds were used to employ the BTSP Stewardship Coordinator, Mike Lancaster, for approximately 770 hours from January to

December. BTSP employed a short-term Data Manager, Michelle Wood, for approximately 130 hours from June to December. Additionally, BTSP funding was used to leverage funding from Canada Summer Jobs program and to supplement the wages of four Summer Stewardship Assistants: Michael Booth; Jacob Cheverie; Keltie O'Brien; and, Bruce Rae for a total of approximately 1,500 hours from June to August.

### 2018 Interns & Co-op Students

In addition to the six paid workers, BTSP supported three students from the Nova Scotia Community College (NSCC) Natural Resources Environmental Technology (NRET) program: Jason Millbury; Marin Stubbings; and, Scott Walsh. These students completed part of their on-the-job (OTJ) internship through BTSP. Additionally, BTSP supported the completion of one co-op student placement from Sir John A. Macdonald High School. Thomas MacLeod began his co-op placement in October 2017 and completed his 100-hour work placement in January 2018.

### 2018 BTSP Data Collection & Research Support

During their OTJ training, the NRET Interns collected trail-width data along the Pot Lake Loop. Measurements taken every 10 m along the corridor indicated an average trail width of 173 cm. Measurements taken every 50 m along the loop indicated an average width 120 cm. This data collection built on work from September and November 2017, when the initial trail-width data on the Pot Lake Loop was conducted at 200 m and 100 m increments respectively. During their time on the Pot Lake Loop, the NRET Interns also identified 19 wet area locations which would benefit from rock hardening or boardwalk remediation.

In October 2018, approximately one dozen students from NSCC collected data related to the channelling effect occurring along the side of the long boardwalk. The data will build on the baseline study conducted in September and October 2017; however, the 2018 data is currently being processed and the findings are not yet available.

In addition to the NSCC intern and student field work, BTSP also supported the research of Kathleen Hipwell, a second year Environmental Engineering Technology (EET) student at NSCC. Hipwell's research will build on the 2017 work of Laura Struthers and Logan Hunter

examining microplastic pollution and macroinvertebrate health in the Woodens River Watershed.

2018 Approximate Contributions & Program Valuation

<b>Initial Program Funding</b>		<b>\$25,000.00</b>
Five Bridges Wilderness Heritage Trust – Environmental Stewardship Grant Program	10,000.00	
Province of Nova Scotia	10,000.00	
Private Contributions from supports of BTSP, WRWEO, and SMBSA	5,000.00	
<b>Additional Funding</b>		<b>\$20,000.00</b>
Canada Summer Jobs Program	20,000.00	
<b>In-Kind Contributions</b>		<b>\$36,000.00</b>
On-Trail Labour	30,700.00	
Off-Trail Labour	5,100.00	
Materials & Equipment	300.00	
<b>2018 BTSP Approximate Total Program Value</b>		<b>\$81,000.00</b>



Photo by Ben Armstrong, BTSP Stewardship Day 16 Sept. 2018

## BTSP by the Numbers: 2018

During its second year of operation, the Bluff Trail Stewardship Program:

### Trained

**52 BTSP Stewards** – an average of 4 BTSP Stewards trained per month

### Collected

**198 Reports** from BTSP Stewards and other trail users – an average of 17 per month documenting:

**151 Days** of BTSP Stewardship Presence on the trail – an average of 13 days per month

3 Days with presence at the trailhead

9 Days with presence in the wider Five Bridge Lakes Wilderness Area (FBLWA)

30 Days with presence on Hay Marsh Loop

39 Days with presence on Bluff Loop

58 Days with presence on Mi'kmaw Hill Loop

137 Days with presence on Pot Lake Loop

**2,443 Hours** of BTSP Stewardship Presence on the trail – an average of 204 hours per month  
920 hours (38%) were paid and 1525 hours (62%) were volunteer hours

### Observed

**2,773 People Observed & 1,024 People Engaged** – or **37%** of visitors observed on the trail

**414 Dogs Observed** on the trail – approximately 48% of the dogs observed were off leash

Approximately 7% of the dogs observed were disturbing other users and/or the environment

### Monitored

The four Leave No Trace (LNT) Educational Camping Sites were regularly checked on:

Coyote/U'lukwej was checked on **49** times – on average, approximately four times per month

Crow/Ka'qaquj was checked on **54** times – on average, more than four times per month

Squirrel/Atutu'wej was checked on **14** times – on average, approximately once per month

Moose/Tia'm was checked on **8** times – on average, approximately once every six weeks

## Remediated

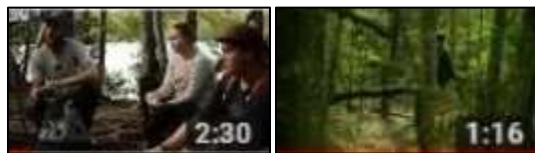
**24<sup>+</sup> trail spur barriers** constructed or refurbished, **18<sup>+</sup> trail braiding barriers** constructed or refurbished, **12<sup>+</sup> fire pits** remediated, **6<sup>+</sup> fallen trees** removed, **4<sup>+</sup> areas of disturbed soil** remediated, **2<sup>+</sup> trail widening barriers** constructed or refurbished, **1** area of boardwalk constructed to address wet area, **1** way marker repaired, **1** Rope barrier repaired, & Graffiti removed from rock

## Facilitated

**1 Guided Hike for NSE Personnel** (29 May)  
**1 NSCC Field Study Day** to examine channeling along the boardwalk (10 Oct)  
**2 Group Presentations** (11 Aug: Trips by Transit & 28 Oct: Dalhousie Environmental Club)  
**2 Special Group BTSP Training Days** (3 Feb: Dalhousie Parks Club & 11 March: Trips by Transit)  
**3 NSCC Intern On-The-Job (OTJ) Training Days** (8 May; 10 May; 11 May)  
**11 BTSP General Public Training & Volunteer Days**  
 (25 Feb; 22 April; 7 May; 26 May; 23 June; 22 July; 18 Aug; 16 Sept; 20 Oct; 4 Nov; 9 Dec)

## Released

**2 Information Videos:** *Introduction to the BTSP* and *Trail barricades: combatting trail widening and trail spurs* see: [wrweo.ca/wp/the-bluff-trail/the-bluff-trail-stewardship-program/#Videos](http://wrweo.ca/wp/the-bluff-trail/the-bluff-trail-stewardship-program/#Videos)



## Generated

More than **\$36,000.00** in donated volunteer labour\*, materials, & equipment:  
 \$30,651.50 of on-trail labour + \$5,162.00 Off-trail Labour + \$341.50 of M&E = \$36,155.00  
 On average, the program generated more than \$2,500 per month of on-trail labour,  
 \$400 per month of off-trail labour and \$25 per month of donated materials and equipment.

\* WRWEO calculates the value of volunteer labour according to the 2015 study, *Working for a Living, Not Living for Work*, released by the Canadian Centre for Policy Alternatives – Nova Scotia in partnership with United Way – Halifax. The report used the Canadian Living Wage Framework to calculate the living wage for Halifax at \$20.10/hr.

## BTSP Comparison 2017 &amp; 2018

	2017	2018	Improvement
Number of Stewards Trained	40	52	✓
Number of Reports Collected	180	198	✓
Days of Presence on trail and/or in FBLWA	130	151	✓
Days of Presence on Pot Lake Loop	121	137	✓
Days of Presence on Mi'kmaw Hill Loop	70	58	✓
Days of Presence on Bluff Loop	34	39	✓
Days of Presence on Hay Marsh Loop	25	30	✓
Hours of Presence on trail and/or in FBLWA	1757	2443	✓
Check-Ins at Coyote/U'lukwej	38	49	✓
Check-Ins at Crow/Ka'qaquj	36	54	✓
Check-Ins at Squirrel/Atutu'wej	14	14	✓
Check-Ins at Moose/Tia'm	11	8	✓
People Observed	3045	2773	✓
People Engaged	1181	1024	✓
Percentage of Observed People Engaged	39%	37%	✓
Dogs Observed	562	414	✓
Percentage of dogs off-leash	63%	48%	✓
Approximate total In-Kind Contributions	\$38,000.00	\$36,000.00	✓
Approximate In-Kind Labour On Trail	\$23,744.00	\$30,652.00	✓
Approximate In-Kind Labour Off Trail	\$13,453.00	\$5,162.00	✓
Approximate In-Kind Materials & Equipment	\$1,170.00	\$342.00	✓
Approximate Total Program Value	\$70,000.00	\$81,000.00	✓

SMBSA and WRWEO wish to express their sincere appreciation for the support of the Nova Scotia Environment – Protected Areas and Ecosystems Branch, Five Bridges Wilderness Heritage Trust, Canada Summer Jobs Program, and the many individual donors who have made the BTSP possible. We are especially grateful to the volunteers who have given so generously of their time to help ensure the continued careful and responsible management of The Bluff Trail and the surrounding area.