Orono Bog Boardwalk Annual Report 2019

On May 24, 2019 the Orono Bog Boardwalk (OBB) opened for its 17th season. This year will be remembered as the year we completed the reconstruction of the Boardwalk after 9 years of fund raising and 7 years of reconstruction. Congratulations to all! Please see the reconstruction section of this report. We opened late this year because we were installing new sections. Because of the late date we did not have an honorary opener.

This year our people counter needed to be replaced so we do not have an accurate count of visitors. UM Professor Andy Reeve installed the new counter in August. Between August and November we had 20,000 visitors. We know we had several thousand more between May 24 and July 31. Thanks Andy! Based on visitors who signed our guest book we had visitors from 41 states and 20 foreign countries, including 4 new countries: Honduras, Chile, Mongolia, and Saudi Arabia. See **Appendix 1** for a graph of the count.

In the sections that follow we provide information about the capital campaign, reconstruction, publicity, events attended, docents, guided group walks, nature walks, maintenance, OBB finances, the capital campaign, and our Facebook page and website. We feel fortunate to have a core group of volunteers that have stayed active over the years and a number of new volunteers, especially on the maintenance team who have joined us in the past few years. We realize, however, that as with any volunteer-run organization, it is important to increase the volunteer base. Our primary goals for the coming year are to do educational outreach, raise funds for our education and endowment funds, and to recruit, train, and retain volunteers.

As Director, I thank the many individuals who have volunteered their time and talents this past year, especially the Group Leaders, the Management Committee, the Capital Campaign Committee, and our Facebook and website coordinators: Al and Nancy Larsen, docent scheduling; Phil Locke, maintenance coordinator; Helen Koch, tour guide scheduler; Capital Campaign Committee members Donna Dwyer, Gerry Dwyer, Cindy Mehnert, Jerry Longcore, Jen and Cason Snow, Judy Round, and Jim Bird; Donna Dwyer, Facebook coordinator, Jerry Longcore, Orono Land Trust representative to the Management Team, Endowment Fund coordinator, reconstruction manager, and record keeper of the Operating Fund; Erik Blomberg, University of Maine representative to the Management Committee and OBB webmaster; Tracy Willette, City of Bangor representative to the Management Committee; Jim Bird, Boardwalk Director; and Kimberly Stoddard and Maddie DeMoranville, our summer interns. I also thank all of the docents, guides, reconstruction, and maintenance volunteers who have contributed greatly to the operation and mission of the OBB. A list of all dedicated volunteers is in Appendix 2. We again calculated the number of hours volunteers worked at or for the Boardwalk this year and the total equaled a minimum of 3,100 hours. Based on the figure of \$23.12 / hour as a benchmark value for a general volunteer hour in Maine (as reported by Independent Sector (http://independentsector.org/volunteer time)), we will be able to report a minimum \$71,672 of in-kind support when completing grant proposals.

Our year at the OBB was successful in many ways, as described in the sections that follow.

Publicity, Events Sponsored or Attended, Open House, and Other Activities

Epic Sports' Rabbit Run took place in the Rolland F. Perry (Bangor) City Forest on April 29th. The Boardwalk was co-sponsor of the race. Brad Ryder of Epic Sports made a donation of \$500 to our educational and outreach fund in memory of Wendal Tremblay. Thanks Brad!! A big thank you to the following Boardwalk volunteers who helped during the race: Phil Locke, Jerry Longcore, Cason Snow, Dick McClay, John Tjekema, Chris Jones, Al Larson, Will Somes, and Jim Bird.

The OBB had an informational table at the annual University of Maine Retirees Homecoming in June. Several people stopped by to find out about the OBB. Jim Bird staffed the table. Note that during the retirees' event, Judy Round, long time Boardwalk volunteer (Capital Campaign Committee and yard sale) was presented with the Barbara Hikel Retiree Award from the UM President's Council of Retired Employees. Over the years, Judy has volunteered for a number of UM organizations. Congratulations Judy!

Jim Bird went to the Bangor City Council meeting on July 15 and to the Orono City Council meeting later in July to give a Boardwalk reconstruction update. Both councils were informed that OBB volunteers completed the Boardwalk reconstruction on July 3.

UM Professor John Daigle teaches Forest Recreation Planning (PRT 470). This year John Daigle brought his class to the OBB on September 26th to hear a presentation by Jerry Longcore on the OBB. Jerry's presentation was very well received. The students were also taken on a tour of the Boardwalk.

On August 17 and 18, OBB volunteers held an open house to celebrate the July 3rd completion of the Boardwalk reconstruction project. Since 2010 Boardwalk volunteers raised \$1,058,000 to complete the project. From 2013-2019, 125 volunteers installed the new Boardwalk. The first day of the event was very well attended with about 70 people at the celebration. Volunteers had brought food and drink for the guests. There was a ceremonial ribbon cutting done by 2 children (Laura and Bri) that were selected from the crowd for this honor. Local media was present. All in all a great 2 days at the Boardwalk.

In 2019 we updated the 3 kiosk posters at the cabin. The Capital Campaign poster now reflects all donors to the campaign. Thanks Kourtney Collum and Jerry Longcore! The volunteer poster is current through 2018. Thank you Mark Anderson and Jim Bird! It will be updated in 2020 to reflect 2019 volunteers. The reconstruction poster was updated to reflect the completion of the Boardwalk. Thank you Mary Bird! In 2020 we will redo the reconstruction poster with photographs of the reconstruction effort from 2013-2019.

On December 7th volunteers Jim Bird and Jerry Longcore along with Boardwalk interns Kimberly Stoddard and Maddie DeMoranville staffed the OBB table at the University of Maine Page Farm and Home Museum Holiday Shoppe. This was the 12th time we attended this event. This was a great opportunity to talk with visitors about the OBB. We made almost \$300 for the OBB Operations fund through the sale of OBB merchandise and donations. Jessica Wade made some wonderful pendants (Bog Bling) by encasing wood, lichens, and moss from used deck boards in clear resin. We thank Patricia Henner, Director, Page Farm and Home Museum, for hosting this annual event and we look forward to next year's Holiday Shoppe.

On August 13 Boardwalk volunteer Grace Bartlett gave a presentation on the Orono Bog Boardwalk to 25 seniors at the Phillips-Strickland House in Bangor. The presentation was very well received.

On September 3, Jim Bird and Jerry Longcore gave a Boardwalk tour for University of Maine's recently installed president Joan Ferrini-Mundy and her husband Rick. She was very interested in the Boardwalk, asking many questions. It turns out that the President is a bird watcher. We will keep her informed of upcoming migratory bird walks. The OBB continues our bottle deposit at Burby and Bates in Orono. We typically make about \$60-\$150/ year. Thanks Jerry.

Jim Bird was interviewed by all three TV stations and Judy Harrison of the Bangor Daily News during the year about the OBB reconstruction and completion.

Docents and Student Intern

Docents and student interns daily open and close the OBB gate, greet visitors, inform users of rules, maintain the appearance of the cabin and OBB, answer visitors' questions about bog natural history, report any problems to the Director, sell OBB t-shirts, hats, bog bling, and other items, provide local area information and insight, and generally oversee the day-to-day workings of the OBB. Without these volunteers and student interns a visit to the OBB would be a much less satisfying experience. In 2019 we were very fortunate to hire 2, 20/hr/wk student interns, Kimberly Stoddard and Maddie DeMoranville. They did an outstanding job! Using a Boardwalk photograph that she took, Kimberly made Boardwalk stickers through the website MakeStickers. Over the season we have sold more than 50 of them. Kimberly also printed a Boardwalk bingo sheet using photographs that she took. A Boardwalk inventory spreadsheet was developed by Kimberly so that docents would be kept current on our inventory stocks. In February 2020, Jim nominated Kimberly for the UM Student Employee of the Year award.

A list of OBB docents is provided in Appendix 2.

Boardwalk Tour Report - 2019

In 2019, long time tour scheduler John Maddaus and his wife Elizabeth moved away from the area. Helen Koch, another long time volunteer agreed to take on the challenge of scheduling tours and finding tour guides. Helen did an outstanding job! For the first time we (volunteers) tried to keep track of both guided and unguided tours. All docents were asked to note unguided tours (group, number, date, and time) in the docent log. We had 33 tours, 16 guided and 17 unguided. Total participants: 448 guided and 389 unguided.

See **Appendix 3** for a list of our guided and unguided walks See **Appendix 4** for a list of tour guides in 2019. Helen Koch coordinated the scheduling of the guides.

Nature Walks

Every year the Boardwalk Director arranges for a variety of "by reservation-only" nature walks led by experts in particular subject areas. In March or early April, potential leaders are contacted to see if they would like to lead a nature walk related to their area of interest or expertise. This year we hosted a number of nature walks. See **Appendix 5** for a list of OBB nature walks.

Financial Information: Fund-raising (contributed by Jerry Longcore) Fiscal Year 2019

The Operating Fund began the fiscal year with equity of \$769.28. The Operating Budget is based on the current University of Maine 2019 fiscal year, which extended from July 1, 2018 thru June 30, 2019. During this period income was \$5,336 and expenses were \$4,189 for the Operating Fund. Cash donations at the OBB for 2019 equaled \$3,592 and donations from products equaled \$5,123 (Total Operations = \$8,715 minus \$500 designated for the Capital Campaign Fund and minus \$170 earmarked for the Endowment Fund) (does NOT include \$267 from Page Farm and Home Museum holiday Shoppe sales and \$33 in donations and also, individual checks were received for Operations [\$200] and the Endowment Fund {\$100]). Bottle redemption at Burby and Bates yielded \$62. Total income from all these sources was \$9,497. Temporary investment income on Operating Budget was \$51.32. Expenses were Wages (Student Intern) (\$1,534.08), Postage and Shipping (\$100.00), Printing and Copying (\$262.93), Supplied and Materials (\$400.31), Telephone and Website (\$150.35), and restocking our T-shirt and cap inventory (\$1,742.15) for a Total of \$4,189.82. Endowment Fund principal at end of FY-2018 was \$183,897. End of Fiscal Year (EOFY) balance of principal in FY 2019 was \$184,407, an increase of \$510. Endowment earning in FY-2018 were \$5,740 which were paid over to the Operating Fund. The total Endowment fund principal as of June 30, 2019 was \$184,407, but in the first 6 months of FY-2020 gifts were \$8,944, which brought the total to \$192,842 (FMV = \$214,965) and close to our goal of \$200,000. For the Capital Campaign Fund as of July 1, 2018 the FMV was \$142,926 and at June 30, 2019 the EOFY FMV was \$107,733 reflecting a payout of \$125,340 for purchase of remaining boardwalk sections.

UM codes	43631 43695	44199	43660 / 43640	46300	43670	
Month	Endowment Fund, Interest	Temporary Investment Interest	Gifts and Donations	Sales T- shirts & products	Misc.	Totals
	a	b	С	d	e	f
July 1, 2018		4.37	2,594.42			2,598.79
Aug		4.03	325.50			329.53
Sep		4.34	1,040.26			1,044.60
Oct		3.83				3.83
Nov		4.16				4.10
Dec		4.20	35.00			39.20
Jan '19		4.52				4.52
Feb		4.60				4.60
Mar		4.16				4.10
Apr		4.63				4.63
May		4.71	227.94			232.65
June 30, 2019		3.67	1,062.23			1,065.90
Totals		<mark>51.32</mark>	<mark>5,285.35</mark>			<mark>5,336.5</mark> 7

University of ME, Fiscal Year: 2018 / 2019 OBB, Operations Account, Income

Unive	ersity of	Maine,	Fiscal Y	Year: 2018 -	- <mark>2019</mark> : Oi	rono Bog	Boardv	valk, Ope	rating Acc	count, <mark>Ex</mark>	penses
	a	b	С	d	е	f	g	h	i	j	k
Mon th	(a)Wa ges (b) Transf er from Endow m	Stude nt Wage s 53301	Empl oyee Benef its	Members hip Dues/ Fees (Tng/ Award) 60305	Postag e & Shippi ng	Printi ng & Copyi ng 60603	Renta Is, Leasi ng Pro servic es	Suppli es & Materi als 61000	Telepho ne & Website 64000	Other T- shirts, Produ cts Supplie s	Totals
July 1, 2018		183.7 5							T6.16		189.9 1
Aug		201.4 6						82.79	T6.11	535.15	825.5 1
Sep		118.7 8			50.00			253.97	Т6.27	456.42	885.4 4
Oct		332.5 4							T6.11		338.6 5
Nov		63.00							T6.15		69.15
Dec									T6.15		6.15
Jan' 19									T6.41		6.41
Feb									T6.41 75.00		81.41
Mar									T6.41		6.41
Apr									T6.41		6.41
May		11.00			50.00			63.55	Т638		130.9 3
June 30, 2019		623.5 5				31.50 231.43			T6.38	750.58	1,643. 44
Total s		<mark>1,534.</mark> 08			<mark>100.00</mark>	<mark>262.93</mark>		<mark>400.31</mark>	<mark>150.35</mark>	1,742. 15	<mark>4,189.</mark> 82
Total s	UM Fd										

Boardwalk Reconstruction Campaign

We had a very good year raising funds for the OBB reconstruction. We received \$8,000 from the STK Foundation. With these funds plus other donations received through the University of Maine Foundation and donations from Boardwalk visitors we were able to complete our fund raising for the reconstruction project. From 2010 to 2019, we raised \$1,058,000 - an amazing accomplishment!!

In January 2019, we needed \$18,000 more to complete the reconstruction of the Boardwalk. Jim Bird approached a campaign supporter about the possibility of guaranteeing these funds so we could order the last of the new sections. This person agreed to guarantee that we would have these funds when the final bill came due. We would have to repay all or part of this amount when the Boardwalk was finished. As it turned out, we were able to raise the needed money and did not have to take advantage of this generous offer.

The Capital Campaign Committee met one time in 2019. Members of the committee are Jerry Longcore, Judy Round, Jim Bird, Donna and Gerry Dwyer, Jen and Cason Snow, and Cindy Mehnert. Jim Bird and Jerry Longcore continued to prepare grant proposals.

In September Jim Bird sent out a one page letter to all OBB campaign donors (approximately 400 people) thanking them for contributing to the Reconstruction Capital Campaign. The letter included photographs of installing the last section, #349. The letter resulted in several thousand dollars of donations to our Operating, Education and Outreach, and Endowment funds. Thanks Mary Bird for editing/layout and Donna and Gerry Dwyer and Steve McKay for photographs!

Orono Town Manager Sophie Wilson again donated \$1,000 to the OBB reconstruction campaign to sponsor a new section for the Town of Orono. Thank you Sophie!

On September 4, Ariadne DiMoulas a recent University of Maine graduate and CEO of Paramount Planet Product of Orono and Portland held a fund raiser at her home in Orono. Many people came to listen to music played by local artists. Thanks Ariadne for raising \$100 for the Boardwalk Reconstruction Campaign!

Boardwalk Director Jim Bird hand wrote scores of "thank you" notes to our University of Maine Foundation reconstruction campaign donors.

Boardwalk Reconstruction

On April 29th, 47 new sections were delivered to the OBB by Great Northern Docks, our contractor. The last section (#349) had to be specially built. Prior to new section arrival, a crew from Bangor Parks and Recreation blocked off half of the Tripp Dr. parking lot (Thanks Tracy Willette!). OBB volunteers also had to make room for the new sections by moving the picnic table and several stacks of wood by the cabin. For safety reasons, the forklift loads (6 sections at a time) from the Tripp Dr. parking lot were walked to the cabin area by OBB volunteers. Prior to the section arrival, 3 Home Depot carts were picked up so that old sections could be wheeled out and new sections wheeled in to replace them. Note: The carts were returned in May.

On April 30th volunteers started the preparation for the removal of old sections and new section installation. Much work needed to be done before we could take out the sections:

Remove all railings Remove all chains and float ropes and washers holding the sections together and to the floats Remove the 3 benches at the wheel chair turnarounds Remove the 3, 2'x8' sections at wheelchair turnarounds Put up yellow caution tape

Several OBB volunteers also did all that was required to open the OBB for the season: Install signage, uncover and clean interpretive stations and kiosks, attached the brochure box, thermometer, chains, and money box, put out the "No Picking" and "Stay on the Boardwalk" signs along the Boardwalk, and install water pipe and explanation sign at Interpretative Station #6.

On May 1, 8 pie-shaped wedges were installed at the turns from last year's new section installation.

On May 6 and 7, OBB volunteers were joined by a 5 Trustie crew + supervisor Leon Gerry from the Mountain View Correctional Facility. These trusties worked for 2 days and removed 47 old sections and all shim stacks and leftover wood, taking the debris to the cabin area where OBB volunteers loaded them on the trailer provided by Steve McKay and moved them to the outhouse area. The Trusties used Home Depot carts to wheel the old sections to the cabin area. They also staged some new sections. We did publicize that the public could have any of the old sections as long as they picked them up. Donations to the reconstruction campaign were encouraged. Many old sections were picked up for reuse. This includes sections left over from last year.

We provided lunches to the Trusties and OBB volunteers on May 6 and 7. Thanks to Hannaford Old Town, Olive Garden, Moe's BBQ, and Shaw's Supermarket in Bangor for donating food, water, and soft drinks. Thanks as well to Phyllis Leeman, Trudy Tremblay, and Fred Kirchesis (food pick-up and distribution). Thanks also to the daily donut elves (OBB volunteers) who kept us supplied with breakfast donuts.

From May 8-23, OBB volunteers accomplished much! Forty-seven new sections and 3 wheel chair turnarounds installed, several pie-shaped wedges installed, composite shim stacks created, tighten bolts at the 8 new pie-wedges, cover and clamp plywood pieces over the wedge gaps, benches installed, all bracket bolts tightened, cabin and front porch cleaned with all tools and hardware stored, removed all extra shims from the OBB, Great Northern Docks shipping crates dismantled, OBB picnic table sanded and primed, raise the OBB between Interpretative Stations 3 and 4.

Because of the high water level at the start of the OBB (first 27 sections or so) we had to stabilize these sections. before opening, 10 dragon floats were ordered from Great Northern Docks. They arrived at Jim Bird's house on May 17th and were transported to the cabin area by Steve McKay and Jim Bird and installed by Jerry Longcore, Steve McKay, Dick McClay, Adrienne Leppold, Brandon Keim, and Jim Bird.

All OBB volunteers worked extremely hard from April 29 to the day before opening day on May 23. The following volunteers spent 700 hours making sure that the OBB was opened by May 24th. Thanks to all! It was an amazing effort!: Jerry Longcore (who oversaw installation), Gerry Dwyer, Donna Dwyer, Dave Easler, Dave Lambert, Dick McClay, Steve McKay, Al Larson, Mike McCarthy, Brandon Keim, Christopher

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D'Amico, Dave Lambert, Roger Merchant, Phil Locke, John Fitzgerald, Sharon Fitzgerald, Tim Couch, Karl Hill, Helen Koch, Chris Jones, Adrienne Leppold, Fred Kirchesis, Thomas Daniels, Kevin Perry, Diana Furukawa, Ashley Crabtree, Cason Snow, Braeden Selby, Benjamin Kelley, Shane Spratt, Austin Albee, Rhonda White, Bob Buntrock + grandson, Kevin Perry, Trudy Tremblay, and Jim Bird, and the 5 Trusties from the Mountain View Correctional Facility and their supervisor Leon Gerry. Thanks also to Corey Hill, Mountain View Correctional Facility, for arranging for us to have the help of the Trusties.

Phil Locke, our long time maintenance coordinator, made a scale model of an original Boardwalk wooden section, complete with wheel chair turnout and red bench! The model is kept in the cabin so that docents can show visitors what the original Boardwalk looked like. Thanks Phil!!

On August 20, Boardwalk volunteer Donna Dwyer noticed some cracks on the bench supports at 3 interpretative stations. The next day Jim Bird and Jerry Longcore went out and inspected all bench supports at interpretative stations and wheel chair turnarounds . We found one more crack/bulge. We contacted Steve Merriam, Great Northern Docks. He said that more than likely some water got into the supports and that Great Northern Docks would manufacture new ones. In September, 2 workers from Great Northern Docks came to the Boardwalk and replaced the damaged bench supports. We will be checking bench supports at regular intervals in the future.

We now have a new OBB valued at approximately \$1,400,000 (insurance purposes). The cost to. install a new Boardwalk would be \$100,000. It will be very important for us to maintain the Boardwalk so that it will last well into the future. To that end, Jerry Longcore and Jim Bird are currently working on a detailed maintenance schedule. Once a draft is done, we will distribute to long time maintenance volunteers for input.

Black and White Boardwalk Brochures

After all these years we were still using the original Boardwalk black and white brochure written and designed by Boardwalk founder Ron Davis. In 2019 the brochure was updated to include sections on Reconstruction, Volunteers, and Visitors and Education. Thanks Jim Bird for the updated wording.

Boardwalk T-Shirts and Hats

We were in the market for a new t-shirt design. Boardwalk volunteer Donna Dwyer had taken a wonderful photo of the Boardwalk. It would be perfect for a new t-shirt. We went to our t-shirt maker, Advertising Specialists in Bangor. The new t-shirts arrived and after a few days a brown border showed up around the photograph. Advertising Specialists picked them up and had them re-done. So far they look good. We also ordered all 5 Boardwalk hats: Canada Warbler, Pitcher Plant, Muskeg Darner, Black Bear, and Leopard Frog. Over the years the Canada Warbler and Leopard Frog hats have been our biggest sellers

Visiting Researcher

During the summer, Lindsey Pett, a PhD student at the University of Vermont contacted Jim Bird about the possibility of visiting the Boardwalk to sample pitcher plants. She is studying aquatic ecosystem stoichiometry using *Sarracenia purpurea* (pitcher plant) as a model system. She and several other helpers came and sampled pitcher plants. Jim asked her to send us any abstracts and/or publications from her research.

Visiting Videographers

On July 26, videographers from Maine Highlands visited the Boardwalk to shoot video for a tourism project. On October 10, a small class from Husson University's New England School of Communication visited the Boardwalk to shoot a video for a class project.

EAB Trap

For the past several years, the U.S.Department of Agriculture, Animal and Plant Health Inspection Service (APHIS) has put up an Emerald Ash Borer "purple" trap at section 10. The trap goes up in the first 2 weeks of June and is taken down in September. This trap is a great education tool as all of our tour guides talk about it to Boardwalk visitors. Based on research, EABs are attracted to the color purple. So far no EABs have been found at the OBB. However EABs have been found in northern and southern Maine. Thank you APHIS employee Rachel Nyce for taking care of the "purple" trap.

Boardwalk Cards

In the summer, Brownville Maine artist Peggy Clark Lumpkins stopped by the Boardwalk and spoke with docent Chris Jones about the possibility of selling her pitcher plant cards at the Boardwalk. The cards are beautifully done. Jim Bird ordered the cards (wholesale) and Peggy delivered them. Since then we have sold at least 30 cards and have reordered another 30 cards. At the UM Page Farm and Home Museum Holiday Shoppe in December, Jim spoke with Orono artist Lara Max about the possibility of ordering some cards at wholesale and selling them at the Boardwalk. When we open in 2020 we will have Lara's beautiful cards for sale.

Dogs on the Boardwalk

Both of our Boardwalk signs (at cabin and at Tripp Dr. parking lot) note that dogs are not allowed on the Boardwalk - service animals excepted. These signs do not work as we keep having more and more dogs on the Boardwalk. Toward the end of the 2019 Boardwalk season Jerry Longcore had a new, larger brown and white lettered sign made that we put up at the start of the Boardwalk (left hand side by the gate). The sign also informed visitors that smoking and running/jogging were not allowed on the Boardwalk as well. After installation, we did notice a decrease in visitors with dogs on the Boardwalk. However the sign needs to be moved closer to the OBB as it is a couple feet to the left of the gate - some people just don't notice it. In 2020 we will move the sign closer to the OBB to see if that makes a difference.

Boardwalk Material Donations

Long time Boardwalk volunteer John Maddaus donated several natural history books to our cabin library. He and his wife Elizabeth Johns also donated a Native American ash & sweetgrass basket for tour guides to use. Thank you John and Elizabeth!

In going through leftover yard sale donations we (Jim. and Mary Bird) discovered 4 items that we thought would interest Patty Henner, Director of the UM Page Farm & Home Museum. Patty accepted the following items for their collection: upholstery stretcher, clothes hanger, plumb bob, and a general purpose kitchen tool.

Wildlife Observations

On July 22nd we had a confirmed sighting of a spruce grouse. This was the first one seen in 3 years. On July 27, a Boardwalk visitor noted bear scat on the Boardwalk between interpretive stations #6 and #7. On August 11, some yellow jackets took up residence in the railing pipes along the first part of the Boardwalk. One of our student interns reported that some people were stung. Jim Bird and Jerry Longcore went out early the next morning and sprayed.

Outhouse

A BIG "Thank You" to Boardwalk volunteer Dave Easler, who, every week rain or shine, cleaned and restocked the outhouse with toilet paper and hand sanitizer as well as changed the fly traps.

Boardwalk Gate Lock

Our gate padlock became unusable because the numbers were so worn. Many openers complained about the lock. A new lock was purchased that seems to work well.

Boardwalk User Survey

We conducted a user survey of OBB visitors in 2004 and 2010. A third user survey was to take place in 2019. Unfortunately this did not happen due to time constraints. We hope to conduct the survey in 2020.

Drone Policy

In 2019 we started to get requests from the public to fly drones over the Boardwalk. In the past we have let selected people fly drones; most notably Sam Hess (UM physics professor) and Adam Kuykendal (UM Marketing). Because of safety concerns, all drone requests must now be referred to the Boardwalk director for a decision, made in consultation with other management committee members.

Webpage and Facebook page

Our webpage managed by Erik Blomberg, is updated on a regular basis. Our Facebook page managed by Donna Dwyer is updated frequently and we now have ------"likes" and ----- "follows" as of -----, 2020. Both our Facebook and Web pages help us recruit volunteers and publicize the OBB and all our nature walks. Our "donate now" button on the Facebook page has been used several times in the past year to help us with our reconstruction campaign. Thank you Erik and Donna!

Boardwalk Camera

The City of Bangor is maintaining a night-time camera at the start of the Boardwalk.

Boardwalk Vandalism:

In June 2019 graffiti started showing up on our new Boardwalk. Over the next couple months we had 4 or 5 instances of someone vandalizing benches, toe railings, and interpretative station stands. Jim Bird contacted Steve Merriam at Great Northern Docks to see the best method to remove. Steve contacted LumberRock, the manufacturer of the OBB decking. We were advised to use lacquer thinner and water. Jim and Mary Bird tried this and it did work, however there is still a faint outline visible. We did take a photograph of the graffiti (all the same word) and sent it to Tracy Willette (Bangor Parks and Recreation) who has a catalogue of graffiti types to see if it was possible to identify the tagger. No luck!!

Two of our carabiners that we use to hold up the shelf/tables at the information kiosks were stolen. Several new carabiners were purchased and put in the green box tray

Boardwalk Stereoscope

Great Northern Docks made a wonderful viewing stereoscope that shows the OBB going off into the distance. Steve Merriam installed the stereoscope in front of the cabin. Over the course of the season, many visitors (especially children) enjoyed this unique view of the Boardwalk. Thank you Great Northern Docks!

Boardwalk - in memory

In 2019, two long time Boardwalks passed away.

Wendall Tremblay passed away on March 29, 2019. Wendall was an early volunteer at the OBB, helping to build the original Boardwalk in 2002 and 2003. He was a long time guide and tour leader, leading scores of groups on tours of the OBB. Wendall drafted the original tour guide handbook. Over the years we have had many natural history tours led by University of Maine instructors and many other experts. Wendall attended them all, taking detailed notes to help him in his tour guiding efforts. In 2010 Wendall founded the capital campaign committee, to raise funds for the reconstruction of the Boardwalk. He worked extremely hard organizing the committee. A celebration of Wendall's like took place on April 5th at the Church of Universal Fellowship in Orono.

Joan Martin passed away on March 23, 2019. Joan was an early volunteer at the Boardwalk. She helped build the original Boardwalk in 2002 and 2003. Joan served as a dedicated Boardwalk docent for many years. Joan was our docent scheduler. She kept our contact list of docents, guides, and maintenance volunteers up-to-date. Joan did not like our khaki-colored Boardwalk hats - she wanted them to be pink. We had a special Boardwalk hat manufactured in pink with Joan's name embroidered on the side - she loved it!

We will miss them both - their dedication to the Boardwalk, and their friendship and good cheer!

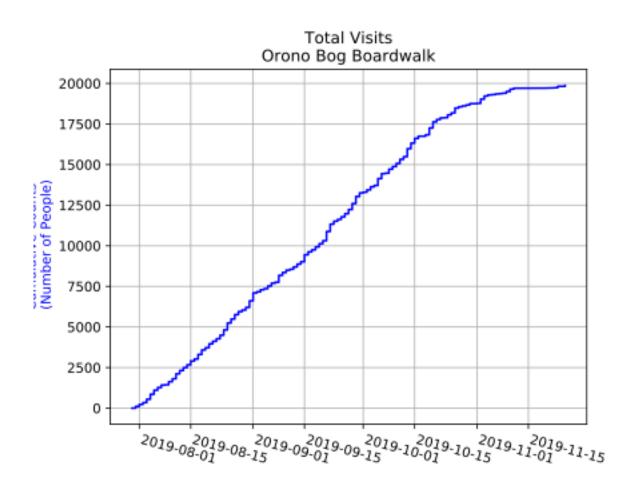
Conclusion

We have accomplished much this year. I look forward to our next season as we continue to operate one of the most popular nature attractions in the area. I have tried to include all that we have accomplished this year, but if I have missed something or neglected to mention someone, please let me know.

Thank you all!

Jim Bird Director, Orono Bog Boardwalk James.Bird@maine.edu 3/31/20

APPENDIX 1: 2019 Counter Numbers.



APPENDIX 2: 2019 Boardwalk Volunteers

Note: 1=docent, 2=general volunteer, 3=maintenance volunteer, 4=walk guide, 5=walk leader, 6=committee leader/co-leader, 7=reconstruction volunteer

Mark Anderson (2) Grace Bartlett (4) Jim Bird (1,2,3,4,5,6,7) Mary Bird (2,5)Erik Blomberg (2,5,6) Hope Brogunier (1,2)Bob Buntrock + grandson (7) Kathy Burns (4) Mountain View Correctional Facility trusties - (7) Tim Cough (3,7)Thomas Daniels (7) John Daigle (2) Christopher D'Amico (3,7) Lee Davis (1,4) Ron Davis (1, 2, 4, 5)Donna Dwyer (1,4,7) Gerry Dwyer (3,7) Dave Easler (3,7)Roxie Easler (2) Jim Ecker (2) Sharon Fitzgerald (2,7) John Fitzgerald (2,7) Barb Friedman (1,2) Diane Furukama (7) Allie Gardner (5) Deb Gendreau (4) Karl Hill (3,7) Rachel Hobbs (4) Brandon Keim (1,7)Fred Kirchesis (3,7) Helen Koch (2,6,7)Dave Lambert (7) Al Larson (1,2,3,4,7) Nancy Larson (1,2,7)Phyllis Leeman (1,2,4) Adrienne Leppold (3,7) Phil Locke (1,3,6,7) Helen Locke (2)

Jerry Longcore (1,2,3,4,5,6,7) Joyce Longcore (2) Jennifer Lund (5) John Maddaus (1,4) Dick McClay (1,3,7) Steve McKay (1,3,7) Cindy Mehnert (2) Steve Mierzykowski (5) Jim Mitchell (1) Brian Olsen (5) Kevin Perry (7) John Pickering (1,2,4) Andy Reeve (2,4,5)Judy Round (2) Kate Ruskin (4) Christa Schwintzer (1,5) Braedon Selby (7) Cason Snow (3,7)Jennifer Snow (2,7) Trudy Tremblay (1) Rhonda White (7) Tracy Willette (2) Jessica Wade (2)

APPENDIX 3: Guided and Unguided Tours

OBB Tours 2019

Tour Date	Time	Meeting place	Name of group	No. of attendees	Age	Focus	Guides needed	OBB Tour guides (1st guide listed is lead)	Group Contact	Group contact email	Group contact phone
Aonday, April 29	1:30-2:3 0		Univ. of ME, Bangor	15-16	adult	biology class	0	self-guided	Prof. Bob Klose	klose@maine.edu	(207) 262-7954
riday, May 14	9:30-9:4 5 until 11 am		Suzanne M. Smith Elementary School, Levant, Maine	31 children + 5 teachers + 2 chaperones	2nd grade	Plants & animals; learning about what plants need to survive. Scavenger hunt. One student with walker. Plus 30 min. adventuring w/chaperone.	4	Phyllis Leeman, John Pickering, Christa Schwintzer, Donna Dwyer. John Maddaus as back up. Let him know.	Katrice Hinton, teacher	khinton@rsu87.org	852-6925
riday, May 4	Noon-1: 30pm		Penobscot Christian School, Bangor	11 students, 3 adults	Grades 4-6		0	self-guided			
riday, May 4	1:00-2:3 0 pm		William S. Cohen School, Bangor	12 special needs students, 5 adults	Grades 4-7		0	self-guided			
lay 19			OBB: Migratory bird walk					Steve Mierzykow			
May 25th	7 AM	parking lot gate	OBB: Migratory bird walk	7	adult	Migratory bird walk: 34 species seen or heard.	0	Brian Olsen			
uesday, Nay 28	3:45-5:1 5	Tripp Dr.	Bangor Girl Scouts	17 + more children + 4 adults	6 and 7 y.o.	Bog walk & map & compass work	2	Chris Campbell (CALL to remind), Donna Dwyer, John Maddaus	Eliza Currie	elizacurrie@hotmail.c om	
May 30, 2019 May 31	10am- noon 10-11:30 am		Acadia Birdwatchers, Bar Harbor Alton Elementary School	17 adults + 2 leaders 30, k-2 grades, 7 adults	adult 5-7 years old		0	self-guided self-guided			
une 3, 2019	1-3pm		Special needs	20 + 4 leaders	children?		0	self-guided			
une 19, 019	none given		Downeast School	52 students + 7 adults	5-6 y.o.	Four kindergarten classes.	0	self-guided			
une 27, 019	11am-1p m		Bangor YMCA summer campers	18 children + 2 adults	children		0	self-guided			
uly 18, 2019	1-3pm		Dire Woods Summer School	75 children + 7+ leaders	children		0	self-guided			
Tour Date	Time	Meeting place	Name of group	No. of attendees	Age	Focus	Guide neede			Group contact email	Group cont phone
Sunday, July 21	9am		OBB: Insect Walk		adult	Giving annual insect walk.	0	Jen Lund	Jen Lund, State of Maine Apiari and Bee Inspector		
July 25, 2019	11am-1p m)	Katahdin Elementary/ Middle School	27 childrer + 7 adults		1	0	self-guided			
Wednesday, July 31	10 AM		Milo Recreation Dept.	30-35 + 10 chaperone:		Would like a d general tour.	4	Donna Dwyer (prefers younger kids), Phyllis Leeman, Grace Bartlett, Albert Larson (prefers older kids). May John Maddaus.	Jessica Atkinson, Milo Recreation Director	<u>gradyliam@yahoo.</u> <u>m</u>	<u>co</u> 717-7257
Sat., Aug. 10	9 AM	OBB	OBB: Hydrology of Bogs and Fens: Where does the water go?		adult	Water is continuously percolating beneat the Boardwalk. This slow and steady movement of water influences the development of peatlands (bogs and fens) and affects the living ecosystem. We will discuss how groundwater movement is evaluated, the reasons for peat accumulation, and recent hydrology research at Orono Bog related to the linkage between peatlands and greenhouse gases	s f	Andy Reeve	Prof. Andy Reeve, School Earth and Climate Sciences, UMC		
Thurs., Aug.	10 AM		YMCA Bangor	13	Middle School		1-2	Phyllis Leeman	Jim Bird		

Tour Date	Time	Meeting place	Name of group	No. of attendees	Age	Focus	Guides needed	OBB Tour guides (1st guide listed is lead)	Group Contact	Group contact email	Group contact phone
Saturday, Aug. 17	10 am to 4 pm		Boardwalk Open House			11 a.m. on Saturday (8/17) we will have a ceremonial ribbon cutting. PLEASE - all Boardwalk volunteers (and our 2 student summer interns) should come for the ribbon cutting if at all possible.			Jim Bird		
Sunday, Aug. 18	10 am to 4 pm		Boardwalk Open House						Jim Bird		
August 21, 2019	10-11:30 am		"local agency"	14 elementary age children + 8 adults	children		0	self-guided?			
Weds., Aug. 21 (rain date Aug. 22)	7:30 PM	OBB	OBB: Bat Walk: During this bat walk in the Bangor City Forest, we will use specialized recording equipment (bat detectors) that detect and record the bat's echolocation calls and identify which species are present.			Maine is home to 8 different species of bats, many of which are of high conservation concern because of huge population declines related to White-Nose Syndrome, a fungal disease that has decimated populations of cave-hibernating bats throughout the U.S.	0	Erik Blomberg	Assoc. Prof. Erik Blomberg, Department of Wildlife, Fisheries, and Conservation Biology, UM		
August 27, 2019	10-11:30 am		Husson University	10 students + leader	undergrad uates		0				
Saturday, Aug. 31	9 AM	OBB	OBB: Tick and Mosquito Walk: This walk will cover mosquitoes and ticks that transmit infectious diseases to humans, companion animals, and wildlife in Maine as well as some beneficial mosquito species.			We also will discuss ongoing vector- borne disease research being conducted in Maine and look for mosquitoes in the bog.	0	Allie Gardner	Asst. Prof. Allie Gardner, Arthropod Vector Biology, School of Biology and Ecology, UM		
Tour Date	Time	Meeting place	Name of group	No. of attendees	Age	Focus	Guides needed	OBB Tour guides (1st guide listed is lead)	Group Contact	Group contact email	Group contact phone
Sept. 3, 2019	3-4:30p m		Unity College	20 students + leader	undergrad uates		0	self-guided			
Saturday, Sept. 7	10 am - noon		Friends of Edith Marion Patch	0 (rained)		A morning of avian activities.	0	Jim Bird	Mary Bird	marydickinsonbird@ gmail.com	
Sept. 9, 2019	3-4:30p m		Cohen Middle School, Bangor	30 students + 4 leaders	grades 6-8		0	self-guided			
Sept. 13	1:30:05 PI		Univ. of Maine SFR 452	13	university	Environmental Interpretation		Kimberley Stoddard	Prof. Thomas Mullin		
Monday, Sept. 16, 2019 (or Friday, Sept. 20)	8:30-8:4 5 until 11 am		Orono Middle School	60 + 4-5 adults	7th grade	All students have a clipboard and packet to complete during the walk.	6	Donna Dwyer, Grace Bartlett, John Maddaus, John Pickering, Jerry Longcore, Christa Schwintzer	Jessica Archer	jarcher@rsu26.org	207-852-0577
Monday, Sept. 16, 2019	1:30- 2:30		Univ. of Maine @ Augusta, Bangor Campus	14	under- graduate	Biology Intro.	0	self-guided	Prof. Bob Klose	klose@maine.edu	(207) 262-7954
Monday, Sept. 23rd.	1:20 pm to 3:15 pm.		UMO Ecol. & Env. Sci.	50	UMO freshmen		5	Ron Davis, Donna Dwyer, Grace Bartlett, Kathy Burns (Kate Ruskin)	Kate Ruskin, UMO School of Biol. & Ecol.		
Tuesday, Sept. 24, 2019	10:30 am to 12:30 pm		Univ. of Maine Foundation	4	Seniors		1	Ron Davis, Al Larson			
Thursday Sept. 26	8:30-8:4 5		All Saints Catholic School	28+2+6	4th and 7th graders	ecology. Will have journals and plant list.	3	John Pickering, John Maddaus, Christa Schwintzer	Mary O'Shea (confirmed 9/15)	mary.o'shea@portlan ddiocese.org	942-0955
9/26/2019	2:30 -4:00 pm		class: UM SFR 434	8 + 1	undergrad uates	recreational site planning and management	1	Jerry Longcore	Prof. John Daigle	jdaigle@maine.edu	
9/27/2019	10:30-11 :30		Waldo County YMCA	17+1	seniors	self-guided tour (by their own choice).	0	Jim Bird gave an introduction.			
Thursday, Oct. 3	9 AM		RSU 67, Mattanawcook Jr. High School	40 students + 4	4th grade	Biomes of the world. Looking at the plants and animals that live in each biome and how they adapt.	4	John Pickering, Kathy Burns, Al Larson, Grace Bartlett	Marie Arnold	marnold@rsu67.org	403-0508

Tour Date	Time	Meeting place	Name of group	No. of attendees	Age	Focus	Guides needed	OBB Tour guides (1st guide listed is lead)	Group Contact	Group contact email	Group contact phone
Friday, Oct. 4	9 AM		RSU 67, Mattanawcook Jr. High School	40 students + 4	4th grade	Biomes of the world. Looking at the plants and animals that live in each biome and how they adapt.	4	John Pickering, Donna Dwyer, Christa Schwintzer, Jerry Longcore	Meloney Marquis	mmarquis@rsu67.org	207-578-0805
Saturday, Oct. 5, 2019	10:15	gate	Mapleton/Presque Isle Girl Scouts	14+6	6-12 years old	General tour.	2	Donna Dwyer, Helen Koch	Amanda Robinson	amandarobinson81@ gmail.com	207-762-1420
Oct. 10, 2019	1:30-2:3 0		Amicus	6 adult, disabled + leader	adult		0	self-guided			
Oct. 10, 2019	Time: 2:30-3:3 0pm		Husson University, New England School of Communication	5 undergradu ates + faculty leader	under- graduate		0	self-guided			
Thursday, Oct. 24	1-4 pm		SFR 107 – Forest Vegetation	40 + 4	under- graduate	Each afternoon would have 40 students with 4 instructors. I normally divide each group into 2 sections	1-2	Jim Bird (gives intro), Grace Bartlett, Ron Davis	Prof. Bill Livingston	<u>Williaml@maine.edu</u>	207-581-2990
Friday, Oct. 25	1:30 to 4:30 pm		SFR 107 – Forest Vegetation	40 + 4	under- graduate	Each afternoon would have 40 students with 4 instructors. I normally divide each group into 2 sections	1-2	Jim Bird (gives intro), Christa Schwintzer, Al Larson	Prof. Bill Livingston	<u>Williaml@maine.edu</u>	207-581-2990
Saturday, Nov. 9, 2019	noon	gate	Bangor Girl Scouts, Troop 1076	4 children, 2 adults	5 -6 years old		1	Helen Koch	Darlene Lydick	<u>kayley924@gmail.co</u> <u>m</u>	Cancelled—on morning of— because of winter weather.
Nov. 18			Boardwalk closed due to ice and snow.								

Phyllis Leeman	Ron Davis	Jim Bird	Grace Bartlett
Donna Dwyer	Al Larson	Kate Ruskin	Jerry Longcore
John Maddaus	John Pickering	Kathy Burns	Chris Campbell
Kimberly Stoddard	Deb Gendreau	Christa Schwintzer	
	Helen Koch + guide scheduler	John Maddaus- guide trainer	

APPENDIX 5: Nature Walks:

Date	Tour	Leader	# attending
May 25	Migratory Birds	Brian Olsen	7
June 15	Plant Adaptations	Christa Scwintzer	10
July 20	Insects	Jen Lund	14
August 10	Hydrology	Andy Reeve	12
August 22	Bats	Erik Blomberg	3
August 31	Ticks/Mosquitoes	Allie Gardner	5