



Belfast Bay
Watershed
Coalition

WATERSHED NEWS

The Penobscot Bay Stewards Program 2024 Wants You!

Whether you're new in town or you've been here a while, the Penobscot Bay Steward 2024 program invites you to deepen your relationship with the beautiful environment that surrounds you. As a Pen Bay Steward, you will explore the Penobscot Bay watershed, meeting with local experts who study the natural environment.



Learning about Maine geology at Settlement Quarry in Stonington



Examining mosses at Barred Island Reserve on Deer Isle



Hearing about Maine aquaculture at a fish hatchery

In 2023, the Pen Bay Stewards watched alewives leaping up the stream to spawn, toured the Hurricane Island Science and Research Center, learned about kelp farming and scallop research, listened to Maine First Americans discuss their culture, and met scientists who protect seabird nesting spots. A 2023 steward said, *"I joined the Penobscot Bay Steward Program to widen my world. What I didn't realize is how much it would also deepen it."*

The Penobscot Bay Steward program is freely offered by the Belfast Bay Watershed Coalition. All that is asked is a commitment of 30 hours of volunteer work in any environmental organization over the next year. The 2024 program will meet twice a week from May 7 to June 18, 2024. Applications will be available in January 2024 on the BBWC website (belfastbaywatershed.org) or go to <http://belfastbaywatershed.org/pen-bay-stewards.php>. Contact Greg Biddinger (gbiddi@gmail.com) for more information.

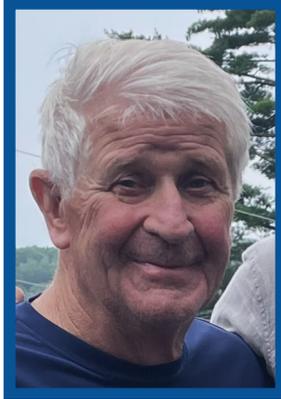
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Tom King, Legendary Leader



When Tom King passed on September 16, Belfast Bay Watershed Coalition, our community, and the fish, birds, and other wild inhabitants of our state lost a towering leader. Tom was a fisheries biologist and hatcheries manager and the former executive director of Craig Brook National Fish Hatchery. Tom joined BBWC in 2010, bringing his experience, expertise and can-do spirit to the organization. He became a valued leader right away and served four years as president of the board. As president, Tom added new vision, kept us aware of local, state, and national issues, and often initiated new projects to address environmental problems.

Tom was “a mover and a shaker.” He developed and coordinated BBWC’s Fish Friends program, involving area school children with raising and hatching salmon fry that are released into local streams. With Skip Pendleton, Tom evaluated and documented over 200 barriers to fish passage in our watersheds and advised towns about how to remove barriers. He led the Board in the expansion of the Penobscot Bay Steward’s Program, envisioning a way to encourage others to advocate for the environment.

When Tom’s term as president ended, he continued to work on the Board of BBWC and the Steering Committee of the Penobscot Bay Stewards Program. He tackled new initiatives including Earth Day and Arbor Day programming. He carried on the work of Fish Friends single-handedly, trouble-shooting equipment and educating teachers and students. He worked for years to get alewives into Wescot Stream and started the process of getting the Little River Community Trail under permanent conservation.

Tom was upbeat and fun at board meetings, listening to others, and sharing his experience and wisdom. For his many years of commitment to BBWC, we feel deep gratitude. We are a far better organization because of Tom’s vision, energy, and efforts. And, because of the ripples spreading from Tom King’s work, the world is a better place.

You are invited to the

**Belfast Bay Watershed Coalition’s
Annual Meeting**

Thursday, February 15

6:00 - 8:00pm

in the Abbott Room at the Belfast Library.

Join us in celebrating a year of accomplishments.

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BBWC Monitors Water Quality in Belfast Bay

by Joy Bowles, Water Quality Management Team Leader

Climate change has seriously affected the quality of marine life as ocean temperatures rise. Because of this concern, fifteen Pen Bay Stewards from the class of 2023 and previous classes have come together to revitalize the Water Quality Monitoring Program (WQM) for Belfast Bay.



Kip and Rusty at Young's Lobster Pound

The first meeting was held on July 27th where questions were answered regarding why we should sample, what parameters will we measure, and the “where, when and who” will sample. A small group of team members reviewed procedures before the entire team was trained to use the equipment. Small groups first practiced in a classroom environment with each piece of equipment for the five parameters to be tested - dissolved oxygen, conductivity, pH, salinity, and turbidity (or water clarity). Afterwards, the team went into the field for the more intensive experience of sampling from a dock (“onshore sampling”) and on a boat (“offshore sampling”). The in-classroom training paid off, as it was a very windy day and the team had to deal with the challenges of using the equipment and managing the sampling on a rocking dock and boat.

The team conducted four consecutive weeks of sampling from September 11th to Oct. 5th. Two sampling events occurred each week. There was offshore sampling at four sites on Mondays near Thompson Wharf, #4 and #2 buoys, and the outfall of Little River. On Thursdays, the team conducted onshore sampling at three docks located on the Harbor, upriver on the Passagassawakeag River and at Young's Lobster Pound. The sampling concluded in the first week of October as boats and docks were removed for the winter.

The data collected is now in a spreadsheet and the Water Quality Monitoring Team, with the assistance of groups such as the Maine Coastal Observance Alliance and BBWC Board members John Tipping and Dave Thomas and students in the Belfast Area High School Marine Institute, are working on the analysis. Our goal is to increase the amount of data for various sites around Belfast Bay and document any significant changes from previous baseline sampling results. The team plans to resume sampling in 2024 from mid-May through early October.



Photos left to right: Mickey uses equipment to grab water for testing salinity; Rusty and Sue conduct onshore sampling from the dock of Young's Lobster Pound (Caryn and Kim in background); Joy and Bev sample and record the data offshore; Mickey, Bev, Barb & Joy display the new “Aquavue” tube for better visual measurement of water clarity; Rusty and Kim assist with offshore sampling; Sue lowers one of the probes to measure water quality.

Many thanks to our terrific team of volunteers: Bev Baker, Barbara Bell, Michael Bowe, Caryn Converse, Sue Dwyer, Mickey Green, Kip Hillman, Kim Ingraham, Rusty Ingraham, Eli Rogosa Kaufman, Skip Luken, Lauren Murray, Rene Quellet, and Dave Thomas. Special thanks go to Dan and Wendy Rowland for the use of their dock on the river, Young's Lobster Pound for the use of their dock to sample the east side of the Bay, and to Mickey and Sam Green (pictured right) for the use of their boat, the *Mary Alma*.



Anyone interested in joining the Water Quality Monitoring Team can contact BBWC or the Team Lead, Joy Bowles (JoyL.Bowles@gmail.com).

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BBWC in the Schools

Students Engage with the Environment at Troy Howard



There is a newly formed nature study club at Troy Howard Middle School (THMS). The Merlin Club meets twice monthly, once during school, and one afternoon after school. Collaborating THMS teacher Kathleen Gass is working with BBWC volunteers Cheryl Wienges, Dianne Torresen, and Cloe Chunn to guide the 22 students who have chosen to join the club. Students choose topics of investigation according to season.

For the first month, students voted to study mushrooms, with some interest in trees and fall wildflowers. They looked at mushroom gills, pores, and other means of identification, and drew various types of fungi in their journals. With the help of 4 more volunteers, they made shiitake mushroom logs to take home. The program is off to a good start as we look ahead to winter.

Fundraising Begins to Send Area Students to Hurricane Island

Last year, with the help of private donors, First National Bank and the Hurricane Island Center for Research and Leadership, BBWC was able to send twelve middle school students and their teacher David Wessels to the Hurricane Island Center for a week of exploration and study. Students learned about their environment and participated in aquaculture research. And, on a more personal level, they met new friends and conquered new challenges. Below Zadie Paige, a freshman at Belfast Area High School, describes her experience:



When I heard about Hurricane Island in the 8th grade, I wanted to go. I knew there would be lots of opportunities to learn and also, I wanted to be pushed out of my comfort zone and meet new people and possibly make new friends.

At Hurricane Island, there were so many new things to do each day. Some of my favorite activities were rock climbing and going on nature hikes. On the first day, a couple of friends and I made it a goal to go swimming each day and we accomplished it! But there were other activities like fishing, boat rides, collecting scallops, and using the microscopes to look at plankton.

We all had jobs to do. After a couple of days on the island, two other groups of students joined us, and we got to be around new faces. I personally came out of my comfort zone and made conversation with new friends. I learned that pushing yourself is hard, but once you accomplish your goal, it makes you feel amazing. It helps build your personality and helps you understand what other people are feeling. It brings you together. Thank you for making this trip possible.

If you would like to help send middle school students to Hurricane Island in the coming summer, send a contribution to BBWC earmarked Hurricane Island.

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Plastic Pollution Solutions Seeks to Eliminate Plastic Cutlery in Belfast



Four members of Penobscot Bay Stewards' Class of 2023 have wasted no time getting involved in a project aimed at ridding the local environment of those pesky single-use plastic forks, knives and spoons that seem to turn up everywhere. Jacquie Gage, Rene Ouellet, Kris Shula, and Dianne Torreson have formed Plastic Pollution Solutions to encourage local restaurants to cut back or eliminate the unsustainable practice of handing out plastic cutlery, straws, coffee stirrers, lids, condiments, as well as paper napkins. "We want to collaborate with those who are interested in finding petroleum-free, PFAS-free, yet functional and cost effective alternatives and strategies to reduce single-use plastics and waste and protect our bay from the breakdown into microplastics."

As communities nation-wide seek ways to reduce their waste stream, Plastic Pollution Solutions is focused on restaurants and food vendors, including schools and grocery and convenience stores as they work towards reducing plastic waste. The group notes that less than 10 percent of plastic is actually recycled, and 70 percent of marine waste consists of disposable items such as plastic takeout containers, bottles, and straws. Plastics are responsible for wide-ranging health impacts, including cancers, birth defects, and lung disease in humans. Plastic waste also affects the health of marine life.

Possible strategies that will be pursued by the group include inspiring local restaurants to require customers to request cutlery, condiments, napkins, and straws as opposed to businesses automatically stuffing takeout bags with those items. Customers would be advised of this practice through menu notes or signage. The group is also considering pushing for an outright ban on plastic straws and stirrers in Belfast, as there are already wood alternatives on the market.

There would also be an educational component to the local initiative, encouraging consumers to carry their own reusable cutlery and containers whenever possible. Although group members have made initial contact with some restaurants and businesses, next steps will involve more in-depth discussions and a possible meeting with city officials to elicit their ideas.

According to UMaine News, engineers at the university have created a grease-proof, water-resistant container from recyclable cellulose nanocomposites. Plastic Pollution Solutions believes that a move to cellulose-based cutlery and containers would promote Belfast businesses as leaders in sustainability while cleaning up the environment.

For more information or to get involved, write Kris Shula at shulafamily@gmail.com or Jacquie Gage at jacquiegage@gmail.com.

225,163 Cigarette Butts Collected

*and recycled in BBWC's Butts Be Gone program. Thank you, BBWC's
Ban the Butts Committee and considerate smokers in Belfast.*

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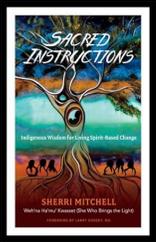
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Read with Us this Winter

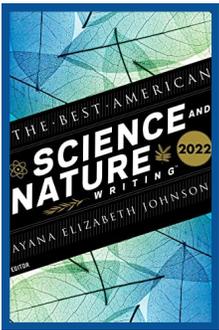
Curl up with a good book that inspires appreciation of the natural world. Join us in a discussion with new and old friends at the Belfast Free Library.

Tuesday, January 23, 3:00 - 4:30 p.m.: *Sacred Instructions: Indigenous Wisdom for Living Spirit-Based Change* by Sherri Mitchell (Weh'na Ha'mu'Kwasset)



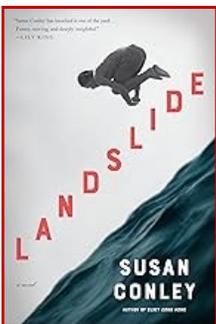
Winter can be a time for introspection and Sherri's Mitchell's *Sacred Instructions* provides much for us to reflect upon. Using her perspective as a member of the Penobscot Nation, she considers how our values shape our relationships with each other and our environment and how values differ between Western and indigenous cultures. Her book is both a history of indigenous wisdom and a roadmap for bringing collaboration and respect to our lives. *Discussion to be facilitated by Kate Hanson*

Tuesday, February 27, 3:00 - 4:30 p.m.: *The Best American Science and Nature Writing 2022*, ed. by Ayana Johnson.



The editor of this collection chose essays that would "put ideas into conversation with one another." Essays range from short to long, from technical to whimsical, from somber to hopeful. Find something fascinating here, and you will become the person at any table with the most interesting conversation! We'll focus on specific essays: the introduction (p. xvi), *How Far Does Wildlife Roam* (p.30), *How Rising Groundwater*. (p. 51), *Power Shift* (p.246) and *Why Combining Solar Power and Farms* (p.231). Readers will be invited to talk about essays that they particularly enjoyed. *Discussion to be facilitated by Jennifer Craig.*

Tuesday, March 26, 3:00 - 4:30 p.m.: *Landslide* by Susan Conley



In *Landslide*, Susan Conley describes a mother working to keep her family together in coastal Maine after her husband is injured in a fishing accident and hospitalized in a distant town. Her teenaged boys are struggling to grow up. The fishing industry along with the whole coastal economy is beginning to slide. As she waits for her husband to come home, she is holding the family together while trying to keep her artistic career going. Full of tender moments as well as the clash of family dynamics, *Landslide* visits contemporary Maine economic and environmental issues for working class families. *Discussion to be facilitated by Ann Kennedy*

Left Bank Books has generously offered a discount to buyers participating in this book club.

The book club is co-sponsored by the Belfast Free Library. Discussions will be held in the Abbott Room of the library. To register for the discussion and to reserve a book, please stop by the main circulation desk of the Belfast Free Library or call 207-338-3884

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Winter Programs

Thursday, March 21, 2024 – Mainely Mammals - Laura Craver Rogers, Education and Outreach Coordinator at Maine Department of Inland Fisheries and Wildlife



Learn about Maine's mammals and their exciting, yet often misunderstood lives. With a wide variety of mammal species in Maine, each has its own unique adaptations to be an important part of Maine's ecosystems, as prey, predator, and even scavenger. We will talk about interspecies relationships, unique features of certain mammals, and some key identifiers of each species. This program is for adults and older youth.

Laura Craver-Rogers has a background in wildlife biology and environmental education. She has worked for US Fish and Wildlife Service, Disney's Animal Kingdom, and the Dennison Pequotsepos Nature Center. While pursuing a career as a biologist, she found a love for sharing information about wildlife with the public. She and her husband love to spend time outdoors paddling, fishing, bird watching, hiking, foraging, hunting, and so much more.

Thursday, April 18, 2024 - Meet the Belfast Bay Watershed Coalition

Members and new faces are all invited to an evening of meeting and greeting, of finding out what is happening in BBWC, and of sharing ideas and hopes for future efforts.

Come and get acquainted with the movers and shakers of the Belfast Bay Watershed Coalition. Learn about our programs and initiatives. We want to meet friends of all ages, backgrounds, interests, abilities, and ideas.



Thursday, May 16, 2024 Bird Week Program - Maine's Spring Birds - Nick Lund - Advocacy and Outreach Manager, Maine Audubon Society



Millions of birds of hundreds of different species pour into Maine each spring, and it can be an overwhelming experience for birders. Join Maine Audubon to calm your nerves about spring migration, learning about why and how it happens, and what species to expect.

Nick Lund is Maine Audubon's Advocacy and Outreach Manager, and also the author of the American Birding Association's Field Guide to the Birds of Maine.

Programs will be held at 6:30 pm in the Abbot Room of the Belfast Free Library.

March and May's programs are co-sponsored by the Belfast Free Library.

If you would like to view a past BBWC program, click on the video link to the archived program on the BBWC website - <http://belfastbaywatershed.org/2022-programs.php>.

Many thanks to Ned Lightner, Insight Productions, for filming our programs.

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Winter Outings

Saturday, December 2, 10:00am - 12 noon - Winter Tree Identification

Walk this ADA accessible Rail Trail and learn about our tree friends after they shed their leaves. Meet at 10:00 am at the central parking lot on the Rail Trail, a mile out on outer High Street. We'll spend 2 hours walking, examining conifers, and learning how to know bare trees by their twigs and bark.

Saturday, January 13, 10:00am - 1:00pm - Cross Country Ski/Snowshoe Party

Come to Cloe and David's Farm, 210 Oak Hill Road in Swanville, and ski or snowshoe their beautiful property. All levels of skiers welcome; beginning techniques taught. Choice of different trips for distance and level of challenge. At noon, have fun and friendship as we eat our bag lunch around a campfire. Bring skis or snowshoes, boots, poles, water, and lunch. Wear warm layers.

Saturday, February 17, 10:00am - 12 noon - Snowshoe/Ski Sucker Brook Trail

Sucker Brook Trail, is a new addition to Coastal Mountain's Land Trust's Meadow Brook Preserve Trail in Swanville. Meet at 10:00 am at 593 Oak Hill Road, Swanville. Bring snowshoes or skis, boots, poles, water, and a snack. Wear warm layers.

Saturday, March 16, 10:00am - 12:00 noon - Winter Hike on the Hills to Sea Trail

Join us on a leisurely one mile hike over a hill and back. We'll name the evergreens and bare deciduous trees, and note other phenomena as we make our way. Bring water and a snack. Wear warm layers and snowshoes or boots, depending on snow cover. Meet at 10:00 am at the Waldo County Tech Center on Rt. 137 in Waldo.

Saturday, April 20, 10:00am -1:00pm - Celebrate Earth Day on the Hills to Sea Trail

Meet at Waldo County Tech Center on Rt. 137 in Waldo at 10:00 sharp. We'll carpool the rest of the way. The hike is about 6 miles over medium-rugged terrain. Bring water, lunch, and rain gear.

All hikes are sponsored by the Belfast Bay Watershed Coalition. For more information about any of the outings, call Cloe Chunn - 207-338-1147. No texts please.

Be a Naturalist!

*Join a circle of friends learning together.
Lead walks to help others learn about nature!*

We don't have to be experts to share our love and enjoyment of our natural surroundings. It is never too early or late to make more friends in the natural world.
Anyone of any age is welcome to participate.

Starts in January, 2024.

There will be seven indoor classes and two monthly field trips.

The course is free but you may want to buy some guidebooks and equipment.

Info and registration: cloechunn@gmail.com or 207-338-1147 No texts please.

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A Message from Our Board:

by Greg Biddinger, President



2023 brought a much-needed return to normalcy for the Belfast Bay Watershed Coalition (BBWC). All our major activities and programs that were disrupted by the pandemic are fully back, spearheaded by our wonderful volunteering members. In particular, the Penobscot Bay Stewards (PBS) class of 2022, helped assemble a great 2023 PBS program. The strong volunteer ethic demonstrated by the members of the class of 2023 has resulted in an infusion of new leadership into the organization. This new burst of energy has led to the revitalization of the Little River trails, water quality monitoring and the Butts Be Gone programs, as well as new initiatives, including an effort to eliminate the use of plastic cutlery in the City of Belfast.

Not all the events of 2023 were so positive. In the fall of this year, we found ourselves mourning the loss of a long-time BBWC leader, Tom King. As a board member and past president, Tom organized many of our most successful programs. He was also a friend and a mentor to me and other Board members and will be sorely missed. Once again, the salve for this loss has been our volunteering members who have already stepped in to fill the gap so that programs like “Fish Friends” will continue to involve Belfast’s school children in environmental activities.

This month, we will kick off planning for the 2024 Penobscot Bay Steward’s program. The 2024 application process will start on January 1st, 2024, and run through February 28th. If you would like to be part of this great training program, please look at our website (<http://belfastbaywatershed.org/pen-bay-stewards.php>) for details.

Winter Birding on the Bridge



December 9
January 13
February 10
March 9
April 13



Winter is the best season for seeing birds in Belfast Harbor. We see several arctic species who migrate down “south” for better eating. Many of our resident birds are also here.

The Belfast Bay Watershed Coalition invites you to drop in at the Belfast Footbridge where Ron Harrell and Gary Gulezian lead a monthly bird watch. From November through March on the second Saturday of each month, Gary and Ron will be at the footbridge at 8:30 am—10:00 am with their spotting scopes to show people the birds in the harbor area and answer questions about them. Bring personal binoculars and dress appropriately for the weather.

Save the Date - Cathy Morgan Bird Week, May 11-18

**You’ll be among bird loving friends as we welcome back our migratory birds,
and greet our faithful residents, too.**

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Volunteer Opportunities Available

The Belfast Bay Watershed Coalition is looking for committed individuals who are interested in the health of the Belfast Bay watershed and have time and energy to share. Work with a great group of people, have fun, and make a positive impact on our environment.

Volunteers can help:

- ◆ Maintain the Little River Trail
- ◆ Monitor water quality in Belfast Bay
- ◆ Teach natural literacy to area school children
- ◆ Lead hikes and walks
- ◆ Spread the word about our good work to the public and local press
- ◆ Share knowledge with others in our Educational Programs

If you're interested, call Cloe Chunn at 207-338-1147 or write her at cloechunn@gmail.com. No texts please.

BBWC Board of Directors

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Ann Kennedy, Vice President

Kate Hanson, Secretary

Gene Randall, Treasurer

David Bond

Cloe Chunn

Noah Gilchrist

Pat Gladding

Dave Thomas

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Natural Literacy Educator

Nicolle Littrell,

Publicity and Website

Newsletter Committee

Ann Kennedy, Editor

Cloe Chunn

Jennifer Craig

Lisa Pohlmann

Jeff Shuler



New Members Invited!

Jump on board and help expand and strengthen our work in the community and watershed.

Visit our website or email us at info@belfastbaywatershed.org.

Printed on Recycled Paper

Mission: *The Belfast Bay Watershed Coalition works to support conservation and stewardship of natural, scenic and public access resources of the Belfast Bay watershed through research, community building and education.*

Subscribe on-line to this newsletter and receive monthly reminders of our activities.

Subscribe at www.belfastbaywatershed.org or send an email to info@belfastbaywatershed.org.

Please visit our website calendar for updates on outings and programs.

BBWC wishes to thank all our individual members and donors, community partners and supporting businesses including the Belfast Community Co-op, Belfast Free Library, Belfast Veterinary Hospital, Front Street Pub, Front Street Shipyard, First National Bank, The Grasshopper Shop, The Green Store, Insight Productions, Left Bank Books, and Little River Veterinary Hospital. Many thanks to our grant-ing organizations: Leonard C. and Mildred F. Ferguson Foundation, Maine Community Foundation, New England Grassroots Environmental Fund, and The Onion Foundation.

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