~ FUNDY TIDINGS ~

Newsletter of the Bay of Fundy Ecosystem Partnership (BoFEP) February 2025 Issue

A. BoFEP and its activities:

1. Reminder: BoFEP 2024 Workshop material on website

Progress is being made in compiling the proceedings of the BoFEP/ACCESS 2024 Conference held in St. Andrews NB this past June. The theme for the conference was "Tides of Change: Accelerating Conservation and Protection Efforts in Atlantic Canada's Estuaries and Coastal Waters." In the meantime, for more information about the conference visit: <u>More details and</u> <u>Conference program and book of abstracts. General overview of conference</u> - particularly from the point of view of participants from the <u>Environmental Information</u>: <u>Use and Influence</u> and the Ocean Frontier Institute Marine Spatial Planning research groups at Dalhousie University.

2. BoFEP needs and challenges in 2025

At recent BoFEP Management Committee meetings attention and been focussed on strengthening BoFEP by addressing several critical needs and challenges. Some of the issuers that will be discussed at the upcoming meeting include the following: <u>BoFEP Needs and</u> <u>Challenges 2025.</u> (DOCX)

3. BoFEP supports Fundy Colouring Book

BoFEP is supporting the Bay of Fundy Colouring Book being produced by <u>Oceans North</u> with an initial purchase of 50 books that will be offered for resale to our membership and others. Keep your eyes peeled for this.

4. Upcoming Meeting of BoFEP SC

The BoFEP Management Team wishes to have a full Steering Committee meeting in February to discuss the Work Plan for FY 2025-26. Some suggested dates are Thursday, Feb. 20th, or Thursday, Feb. 27th. It would be an evening on-line Zoom meeting, 1930-2100 hr. It would be a follow-up to our Fall AGM, the purpose being to set the Work Agenda and everyone's involvement for FY 20-26. A poll of proposed dates is being circulated to SC members.

5. Please support BoFEP - start/renew your membership

We invite you to renew your 2025 membership in BoFEP. We rely on membership income to fund the core activities of this volunteer environmental organization. \$25 individual or \$100 organization. You can pay either by e-transfer or mailed cheques. The details are on the BoFEP Membership Application Form.

B. Partners and other organizations:

1. GMC invites nominations for 2025 awards

The Gulf of Maine Council is accepting nominations for its 2025 awards program to recognize volunteers, professionals, businesses, and organizations for outstanding efforts to promote a healthy and sustainable Gulf of Maine ecosystem. <u>Nominations forms must be submitted by Friday, February 28, 2025.</u>

2. In Memoriam Thierry Chopin

It is with profound sadness that BoFEP learned of the passing of Professor Thierry Chopin on July 18, 2024. He was a pioneering force in the field of aquaculture, renowned for his groundbreaking work on Integrated Multi-Trophic Aquaculture (IMTA). He was an early supporter of BoFEP. <u>Obituary</u>. <u>Summary of distinguished career at UNB</u>

3. Indigenous perspective on danger of nuclear energy

A 10-minute video titled "Askomiw Ksanaqak (Forever Dangerous): Indigenous Nations Resist Nuclear Colonialism" was released on Nov. 29 as part of a study by the SSHRC-funded Contesting Energy Discourses through Action Research (CEDAR) project at St. Thomas University. Peskotomuhkati Nation of Skutik Chief Hugh Akagi and Wolastoq Grand Council Chief Ron Tremblay feature heavily in the video, explaining the lack of consultation around the development of the Point Lepreau Nuclear Generation Station in New Brunswick. Forever dangerous: New video outlines Indigenous Nations' positions on nuclear energy and waste (NB Media Co-op). Canadian First Nations resist "nuclear colonialism" (National Indigenous Times).

4. Aquaculture group Exec Director steps down

Susan Farquharson is stepping down as executive director of the Atlantic Canada Fish Farmers Association (ACFFA) after more than nine years in the job. She is the longest-serving executive director in the organisation's near 40-year history. The ACFFA board will conduct an executive search to identify the new executive director. During her tenure ACFFA expanded its membership, increased its communications capabilities, launched a successful community outreach program, upgraded its wharf security and capabilities and maintained strong relationships with community, government and industry stakeholders. <u>Atlantic Canada salmon farming champion Farquharson steps down</u> (Fish Farming Expert)

5. Nature Trust's ambitious protection plan

The Nature Trust of New Brunswick, which finds land across the province, either by donation or purchase, to turn into nature preserves, is planning its most ambitious campaign to date. Normally they add three or four a year, but this year they're aiming for 15 to 20. There are several wetlands properties along the Bay of Fundy being added this year which are recognized as a critical habitat for amphibians birds and mammals. <u>Nature Trust aims to preserve record number of N.B. locations this year</u> (CBC Lite)

6. Support the Atlantic Salmon Federation!

The Atlantic Salmon Federation is committed to ensuring these incredible fish thrive for generations to come. From scientific research to habitat restoration and advocacy, their work makes a real impact. Please consider joining us as a member today. Your membership helps fund vital research, advocacy, and conservation programs that ensure future generations can experience the magic of wild salmon. <u>https://www.asf.ca/become-a-member/</u>

7. Fundy immersion course for budding researchers

A two-week field course offered by the College of Biological Science at Guelph University takes students to the Bay of Fundy where the tides are the highest in the world. At the Huntsman Marine Science Centre in Passamaquoddy Bay, N.B., students discover what it takes to become true ocean scientists. <u>Students Dive Into Learning in Unforgettable Marine Biology Course</u> (U. Guelph News)

8. Video calls for fisheries planning

A fishery scientist with Oceana Canada, says Canada needs to focus on rebuilding critically depleted fish stocks to have a sustainable industry. <u>We're fishing without a plan</u>, (Video 0:55 mins).

9. GOM Science Symposium in April

The 2025 Gulf of Maine Research & Monitoring Symposium will take place April 8-9, 2025, at Northern Essex Community College, 100 Elliot Street, Haverhill, MA. The Symposium will bring together monitoring program coordinators, researchers, data-users and policymakers. Learn about ongoing, region-specific monitoring and research efforts within the context of changing conditions in the Gulf of Maine. <u>More info and Registration</u>

10, New online ecological atlas for NS

The UNESCO <u>Southwest Nova Biosphere Reserve Association</u> & <u>Centre of Geographic</u> <u>Sciences (NSCC-COGS)</u> have released a new Ecological Atlas which is now available online. This atlas enables everyone to access ecological information about Nova Scotia. Topics include climate, geology, topography, freshwater, coastal/marine, forests, biodiversity, protected / special areas, agriculture, community, culture/history. <u>Welcome to the Nova Scotia Ecological</u> <u>Science Atlas</u>.

10. GulfWatch samples available to contaminants researchers

Gulfwatch was a transboundary chemical contaminants monitoring program organized and administered by the Gulf of Maine Council on the Marine Environment (GOMC) that ran from 1993 to 2012, and involved the collection of blue mussels (Mytilus edulis) at rotating sites in all jurisdictions around the Gulf of Maine. Archived mussel samples from Gulfwatch, both extracts and whole tissues, are currently stored and maintained at the Huntsman Marine Science Centre in St. Andrews, NB. The GOMC and DFO are making these unique samples available to the scientific community for appropriate monitoring and research projects. <u>Gulfwatch Mussel Sample Archive: Sample Access Policy</u> (Huntsman Marine)

C. Fundy/GOM and other news:

1. Podcast highlights coastal protection in inner Bay

A November podcast features discussion of plans and current actions to protect coastal areas of the inner Bay of Fundy, including a presentation by Karel Allard of the Canadian Wildlife Service about the planning underway to protect Chignecto Bay. <u>Land and water protections in the works</u> for Inner Bay of Fundy, and plans for Shep the Sandpiper sign. (CHMA Podcast 11:23 mins)

2. Monitoring saltmarshes from on high

A new paper on saltmarsh monitoring by Swarna M. Naojee et al. is now available online. Saltmarshes provide important ecosystem services, including coastline protection, but face decline due to human activities and climate change. There are increasing efforts to conserve and restore saltmarshes worldwide. This study evaluated the effectiveness of Sentinel-2 satellite imagery to monitor landcover changes using a saltmarsh restoration project undergoing its 9th to 12th year of recovery in the megatidal Bay of Fundy. <u>Monitoring Saltmarsh Restoration in the</u> <u>Upper Bay of Fundy Using Multi-Temporal Sentinel-2 Imagery and Random Forests Classifier</u> (MDPI)

3. Erosion threat leads to lighthouse relocation

As erosion threatens the East Hants coastline, the Walton Lighthouse has been moved away from the cliff where it was built in 1873. It is the only surviving lighthouse in Hants County. It was used to help ships move through the upper Bay of Fundy to Walton. <u>A 151-year-old N.S.</u> lighthouse has been moved away from a vanishing shoreline (CBC News)

4. Tidal power development still struggling

The Bay of Fundy's legendary high tides could be perfect for power production, with100 billion tonnes of water flowing in and but twice each day. but at a November gathering in Halifax, it was clear that the industry is continuing to fight against the current of physical and financial setbacks. <u>Canadian tidal power is swimming hard against the current</u> (National Observer)

5. Eastport opts for tidal and solar power

Making Eastport energy resilient has put it at the forefront of Maine's renewable energy transition and made it a leader in energy independence. A community initiative is developing solar and tidal power to feed a microgrid that will allow the city to withstand interruptions in grid power without resorting to the use of a diesel generator. Eastport, Maine Is The Ideal Place For Solar, Tidal Power, And A Microgrid (Clean Technica)

6. Company supports Fundy wind and tidal energy

Inyanga Marine Energy Group is setting up an office to help the development of offshore renewable energy in Eastern Canada. The company, called Inyanga Maritime Services Nova Scotia Limited, based in Halifax, will provide marine engineering and offshore operations support to the marine renewable energy industry in the offshore wind and tidal energy sectors. (Inyanga Marine Energy Group to spearhead renewable energy development in Canada (Brazil Energy Insight). Inyanga Marine Energy steps into Canada with new subsidiary (Offshore Energy). Falmouth marine energy firm has opened new office in Canada (Falmouth Packet)

7. FORCE anticipates significant gains in marine energy

The ocean is one of the planet's biggest untapped sources of renewable energy, and for decades people have been trying their best to harness its power. Lindsay Bennett, executive director of the Fundy Ocean Research Centre for Energy (FORCE) in Nova Scotia, Canada, which researches tidal energy sees the marine-energy field making really significant headway in the next three to five years. <u>U.S. Support and New Investments Buoy Hopes for Marine Energy</u> (Yale Environment 360)

8. Discussion on climate concerns in NB

The Irving Oil Refinery Saint John is the biggest greenhouse gas emitter in New Brunswick according to a panelist speaking about the climate crisis back in December. The panel on the climate crisis was the final instalment in the Connections series held at Haven Music Hall in Saint John. The series was designed to provide space for difficult, but important, conversations relevant to communities in Saint John. <u>Solidarity encouraged to fight climate change where</u> Irvings cast a long shadow (NB Media Co-op)

9. NS ignoring coastal threats from climate change?

A retired environmental consultant suggests that the Nova Scotia government has demonstrated a complete disregard for Nova Scotia with its 13,000 kilometres of coastline which is vulnerable to effects of climate change. Climate change puts the entire province and its peoples at risk for erosion, flooding, storm surge and rising sea levels since no place is more than 60 kilometres from the ocean. <u>COMMENTARY: Nova Scotia's vulnerable coastal environment</u> (Saltwire)

10. Promising slow increase in Right Whale population

Conservationists and right whale enthusiasts received some much-welcomed good news at the North Atlantic Right Whale Consortium's annual meeting in October as the Consortium's annual population estimate for the embattled marine mammals shows a slight increase in their numbers in recent years. The findings show a positive trend from 2020 when the species hit a low of 358 at the back end of seven straight years of decline. The 2023 estimate was 372, including 12

calves. <u>Newest Estimate Of Right Whale Population Provides Much-Needed Relief For</u> <u>Conservationists</u> (CapeCod.com)

11. Whale poop provides treasure trove of information

Researchers studying whale feces in the Bay of Fundy and elsewhere report that it can tell us not only about the diet of a whale, but also about their hormones, stress levels, gut microbiome and reproductive status. It can also reveal the parasite load, pollutant levels in the habitat and genetic lineage. <u>I'm obsessed with whale poop: 'It can be neon green, bright red – or even sparkle'</u> (The Guardian)

12. NOAA survey and other Right Whale news

A marine mammal observer shares a few memorable highlights and photographs from this year's NOAA Fisheries North Atlantic Right Whale Shipboard Survey in the Gulf of Maine and the Bay of Fundy. The researchers returned to port with hard drives full of images and data, biopsy samples in the freezer, and so much plankton they ran out of jars to hold it. The survey was a success! <u>Searching for Right Whales During Our Annual Research Survey</u> (NOAA Fisheries) Other Right Whale news of interest includes: <u>3 North Atlantic right whales spotted entangled in gear this month</u> (CBC News). <u>Why 1st North Atlantic right-whale calf of the season is sign of hope</u> (Video 1:10 mins CBC News). <u>Disputed waters no refuge for right whales</u> (National Fisherman). Lack of fishing prohibitions in 'grey zone' could pose risk for right whales, expert says (CBC News).

13. Right whale genetic database funded

DFO has awarded Saint Mary's University a contract to update the DNA database of critically endangered Right Whales in Canadian waters. <u>New funding will help Saint Mary's researchers</u> <u>update database of right whale DNA</u> (Video 2:06 mins CFBC News)

14. Fundy rocks clarify dinosaur evolution

A study of ancient volcanism shows that dinosaurs took over the Earth about 200 million years ago because they thrived in the cold. This challenges long-standing theories that heating of the Earth was the principal impact on evolution of the dinosaurs. Recent studies of geological deposits from Morocco, the Bay of Fundy in eastern Canada/US, and the Newark Basin in New Jersey, US lends support to this view. <u>Dinosaurs took over after extremely concentrated</u> volcanism and global cooling (Cosmos)

15. Working to save Fundy's wild salmon

A project that uses salmon farming techniques to boost numbers of endangered wild salmon in Atlantic Canada is undertaking new research to speed up recovery of wild populations. The project captures young salmon from the wild, rears them on a dedicated marine farm site until maturity, and then releases them back to native rivers to spawn naturally. This is a partnership between academia, First Nations, government and private industry that is helping recovery of the population which has been listed as endangered since 2003. <u>Canadian salmon recovery project launches \$1.9m research phase</u> (Fish Farming Expert)

16. DFO ups monitoring of Fundy lobster fishery

Enforcement officers with the federal Department of Fisheries and Oceans will soon have a new tool to lift, check and seize illegal lobster fishing gear from the waters between Nova Scotia and New Brunswick. The department is seeking a crew and vessel that would be contracted to take DFO officers on patrols to inspect fishing equipment. <u>DFO to increase year-round lobster gear</u> monitoring in Bay of Fundy (CBC News). Federal memo estimates up to 30% of lobster catch in Atlantic Canada goes unreported (CBC News)

17. Delays in releasing data on herring

Advocates and scientists are raising concerns with the availability of data on one of Canada's largest fisheries, as the DFO is waiting on industry to provide data on the herring fishery in southwest Nova Scotia and the Bay of Fundy. For decades, herring stock has been declining, and has been in the critical zone since 2018. While the changing environment and predation played a role, fishing was the strongest single driver of the downturn. Industry withholding data on one of Canada's largest fisheries, advocates say (CBC Lite), Overfishing herring, other stocks in Gulf, Bay of Fundy, has critical impact on ocean health (CBC News)

18. Giant Shorebird Returns to Dorchester, NB!

A non-profit group (<u>The Fundy Biosphere</u>)

that promotes conservation and tourism in the Bay of Fundy region is seeking recognition for its \$9,300 contribution to restoring Shep, the giant shorebird, to its perch in Dorchester's Village Square. <u>Happy ending to Shep shorebird saga?</u> (Wark Times)

19. Leatherback turtle visits Fundy

Passengers on a whale-watching tour in the Bay of Fundy were treated to a special sight last summer, a rarely seen Leatherback turtle. While the species is common in the North Atlantic seeing them is difficult another matter because of their low, small and dark profile. Whale watchers catch rare glimpse of leatherback turtle in Bay of Fundy (CBC News) 20.

Invasive sea vomit spreads in Fundy

Scallop fishers in the Bay of Fundy are keeping an eye out for a creamy-white species that grows on the seabed and could be described as gross. The invasive marine invertebrate is known as sea vomit, sea squirt and pancake-batter tunicate, and large patches of it were found near Deer Island in 2020 and 2022, according to the Huntsman Marine Science Centre in Saint Andrews. the invasive tunicate forms "a rubbery crust" on the ocean bed, disturbing the area's marine ecosystem. Scallop fishers scoop invasive sea vomit from Bay of Fundy in aid of science (CBC News). Gross-looking sea vomit can smother marine life: (video 2:57 mins CBC News). Sea vomit: Why DFO is worried about an invasive species with a disgusting name (CBC News)

21. Crabs impact lobster catch in Fundy

A burgeoning Jonah crab population is proving a challenge for some Nova Scotia lobster fishermen. The crabs are having a significant impact on the lobster catch in certain areas, particularly in the lobster fishing area stretching from Yarmouth into the Bay of Fundy. Increasing Jonah crab numbers a problem for lobster fishermen in parts of Nova Scotia (CBC Lite)

22. Fundy's Isle Haute protected

Isle Haute is finally – officially – protected. The three-kilometre-long, 400-metre-wide island located in the Bay of Fundy was designated a national wildlife area in a Jan. 15 news release. The designation provides broader protection for migratory birds and species and habitats on the island than the Migratory Birds Convention Act and Species at Risk Act provide. The island is home to 60 species of birds, including endangered ones like the peregrine falcon, and 300 species of plants. It is also an important migratory stop for birds as they fly north and south. Government of Canada designates Nova Scotia's Country Island, Isle Haute, and St. Paul Island as Canada's newest National Wildlife Areas (Environment and Climate Change Canada - Press release). Isle Haute protected 24 years after federal government put Bay of Fundy island up for sale (Saltwire)

23. Call for action on fishing litter

After years of cleaning beaches along the Bay of Fundy, organizations are feeling the burden as tens of thousands of lobster bands and debris continue to wind up on the beaches. They're now calling on government to do something about it. <u>Bay of Fundy beaches littered with debris and lobster bands</u> (Video 1:54 mins Global News)

D. ADMINISTRIVIA

Fundy Tidings is circulated, usually quarterly, to members of BoFEP and others who have expressed an interest in BoFEP and its activities. If you know someone who might like to receive Fundy Tidings, or if you would like to be removed from the Fundy Tidings mailing list, e-mail a request to: <u>seapencom@gmail.com</u> Back issues are available at <u>Fundy Tidings Archive</u>

Please consider supporting BoFEP by becoming a member!

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