~ FUNDY TIDINGS ~

Newsletter of the Bay of Fundy Ecosystem Partnership (BoFEP) May 2024 Issue

A. BoFEP and its activities:

1. Oceans books for teachers and students

Peter Wells of BoFEP's Ocean Literacy Working Group has prepared a bibliography of ocean related books suitable for high school teachers and students. He states that this is a personal list of popular books on the ocean that he has collected and read over six decades as a marine environmental scientist. He has found them to be informative, thought provoking, sometimes challenging and depressing, and best of all, inspirational. <u>Bibliography of ocean related books</u>. (P.G. Wells, Dalhousie U.)

2. BoFEP/ACCESS 2024 Science Conference Update

The BoFEP/Access Joint Science Conference is fast approaching . It will take place 4-7 June, 2024, at the Huntsman Marine Science Centre in St. Andrew's, N.B. The conference theme is: *"Tides of Change: Accelerating Conservation and Protection Efforts in Atlantic Canada's Estuaries and Coastal Waters"*. The conference aims to bring together experts, scholars, students, and enthusiasts from various fields to share knowledge, exchange ideas, and foster collaboration surrounding key issues impacting our coastal environments. It will be begin on June 4th (optional short course, and opening reception), followed by 3 days of oral and poster presentations (currently ~45 oral and 24 posters - abstract submission is now closed) from June 5th to 7th. There will be a Keynote presentation on June 5 (9:00-10:00am) by Diz Glithero, Director, Canadian Ocean Literacy Coalition whose talk is entitled: *"The rapid growth, relevance, and impact of the ocean literacy movement in Canada and globally"*. Diz is the Founding Director of the Canadian Ocean Literacy Coalition – a centre for ocean literacy collaboration, research, and innovation that is administratively based at Dalhousie University (Ocean Frontier Institute). *More information:* Conference Registration information

Accomodation- Where to stay in St. Andrews

While you are waiting with bated breath for the next Fundy conference we invite you to review the proceedings of the last conference in 2022.

3. Obituary - Arthur A. MacKay 1939-2024

BoFEP members will be saddened to hear that Arthur A. MacKay, peacefully passed away on Monday, April 15, 2024, at the Charlotte County Hospital, St. Stephen, NB. He created a research company that was involved in coastal surveys of the Bay of Fundy and Passamaquoddy Bay and was very proud that the findings from this body of work is currently being used by Huntsman Marine Science Centre, as the base line to determine environmental changes in this place he cared deeply about. Art was an artist, writer, environmental and community activist, as well as an entrepreneur and a marine biologist, who sincerely wanted his community to succeed and grow. <u>Full obituary.</u>

4. Please support BoFEP - start/renew your membership

We invite you to renew your 2024 membership in BoFEP. We rely on membership income to fund the core activities of this volunteer environmental organization. \$25 individual or \$100 organization. p. 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. Rally in support of NS Coastal Protection Act

Join the Nova Scotia Coastal Coalition, The Ecology Action Centre, Nature Nova Scotia and others in a rally to demand that the Nova Scotia government do the right thing and proclaim the Coastal Protection Act to protect our coasts and the communities that rely on them! **Wednesday, May 8 at noon outside the Nova Scotia Legislature (1726 Hollis St., Halifax)**. Rain date: Thursday, May 9, 12 - 2 p.m. <u>More information</u>. *[See also C5 and C6 in this newsletter]*

2. Major grant for documentary on Atlantic salmon

Wildlife cinematographer Nick Hawkins was recently named a 2024 <u>Trebek Initiative</u> grantee. He plans to use the \$100,000 (Cdn) to create never-before-seen footage of the entire life cycle of wild Atlantic salmon, from their home rivers in Canada to their feeding grounds in the icy fjords of Greenland. It will also highlight the passionate efforts of those trying to reverse the species' precipitous decline. Since 1995, wild Atlantic salmon populations in Canada have declined by 50%. Overfishing, habitat degradation, open net pen aquaculture, and climate change are major drivers of this trend. By arming conservationists with the most impactful visuals possible, this documentary, "Atlantic Salmon: The fight to survive" should help transform audiences into advocates. From tiny river eggs to ocean prey, filmmaker aims to capture life of salmon (CBC News). <u>CBC Listen podcast 14:04 Mins</u> (Information Morning - Fredericton). <u>2024 Trebek</u> <u>Grantees</u> (The Trebek Initiative).

3. Canadian Whale Institute's important work

The goal of the Campobello Island based <u>Canadian Whale Institute</u> is the long-term survival for endangered whales, particularly the North Atlantic right whale, in Canadian waters. Born out of the belief that more needed to be done, urgently, to protect the North Atlantic Right Whale from extinction, the Canadian Whale Institute has been pursuing this objective since 1997. The whales face a variety of threats, as our oceans become ever more industrialized, of entanglement in fishing gear, collisions with ships, acoustic interference, ingestion of plastics, and climate change induced loss of food supplies. CWI has programs tackling many of these critical issues. It also operates two <u>whale rescue boats</u>, *Scamper* and *Scratcher* to help free entangled animals.

4. What's a GESAMP?

The Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection (GESAMP) is an advisory body, established in 1969, that advises the United Nations (UN) on the scientific aspects of marine environmental protection. Its functions are to conduct and support marine environmental assessments, to undertake in-depth studies, analyses, and reviews of specific topics, and to identify emerging issues regarding the state of the marine environment. More information: <u>The UN Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection (GESAMP) — An ocean science-policy interface standing the test of time - ScienceDirect By Wendy M. Watson-Wright, Peter G. Wells et al. (Marine Pollution Bulletin 199 (2024) 115917)</u>

5. NARWC dedicated to recovery of Right Whales

Started in 1986 as a collaborative data sharing group, the North Atlantic Right Whale Consortium (NARWC) has grown to include more than 200 individuals from various research and conservation organizations, shipping and fishing industries, technical experts, U.S. and Canadian government agencies, and state and provincial authorities, all of whom are dedicated to the conservation and recovery of the North Atlantic right whale. The NARWC Consortium Annual Meeting will be held on 23-24 October 2024 at the Renaissance Hotel in Providence, Rhode Island. Information about the Annual Meeting. Subscribe to NARWC newsletter.

6. Reducing whale entanglement in fishing gear

The Ropeless Consortium is dedicated to finding innovative ways of reducing the impacts of various types of fishing gear on whales. The next annual meeting is tentatively planned for October 21-22, 2024. More information about consortium and sign up for newsletter.

7. Cliffs of Fundy Geopark newsletter

It's been a busy time at the Cliffs of Fundy UNESCO Global Geopark. Get caught up on all the exciting news with the latest March 2024 Issue of their newsletter "The Fundy Current". It includes links to some extraordinary new videos you won't want to miss! <u>Latest Geopark</u> <u>newsletter</u>.

8. Upcoming Oceans 24 Conference

This four-day event will be held from September 23-26, 2024 at the Halifax Convention Centre, where industry thought leaders will gather to highlight relevant topics and current trends in marine technology. The event will include, Plenary sessions with leaders from industry, academia, and government, 100+ exhibitors showcasing new innovations and Training sessions and workshops. The call for abstracts has been extended to May 10th! <u>More information and registration</u>.

9. Fundy tide stars in new CBC Doc

CBC's Nature of Things program has just aired a new documentary entitled "*Kingdom of the Tides*" about the Bay of Fundy and its remarkable tides. Hosted by Marine biologist Sarika Cullis-Suzuki, the program gets up close and personal with the organisms and ecosystems of the Bay of Fundy to examine how they survive in in these dynamic powerful waters. <u>This is the biggest tide on earth and its in Canada.</u> (CBC documentary trailer 1:10 mins). <u>Kingdom of the Tide</u> (complete documentary 44:00 mins - includes ads!)

C. Fundy/GOM and other news:

1. Concern over mismanagement of aquaculture industry

In his column <u>To the Point, in the Feb. 9, 2024 edition of The Telegram</u>, Don Mills describes Glen Cooke and his company Cooke Inc. as a seafood juggernaut. A concerned citizen notes that "This may be an unfortunate but telling metaphor, because the governments of Atlantic Canada have been blindly sacrificing our scarce ocean resources to Cooke and others in the aquaculture industry for more than 40 years. Companies have been able to grow rich while valuable lobster grounds and pristine marine environments have been destroyed". <u>LETTER:</u> <u>Columnist should have included both sides of the Cooke Aquaculture story</u> (Saltwire). Also see similar criticism: <u>BRIAN ROGERS: N.S. premier's comments about aquaculture are concerning</u> (Saltwire).

2. Tidal Energy Task Force report released

At the end of February, the Government of Canada released the Tidal Energy Task Force's final report. This seeks to clarify regulatory requirements for tidal energy projects in the Bay of Fundy with the aim of defining the path for growth of the industry. The report stems from the work of the Tidal Energy Task Force, led by Fisheries and Oceans Canada and Natural Resources Canada, with members from the Nova Scotia government, industry, and research organizations, and input from indigenous groups and stakeholders. <u>Task Force on Sustainable Tidal Energy</u>

<u>Development in the Bay of Fundy Final Report</u> (DFO PDF 1MB) <u>Government of Canada</u> <u>releases report to guide the path towards tidal energy projects in Bay of Fundy</u> (Yahoo Finance) <u>Canadian govt charts path for sustainable tidal energy development</u> (Offshore Energy) <u>Ottawa</u> <u>streamlining rules for tidal power development in Bay of Fundy</u> (CBC News video 2:37 Mins)

3. DFO seeks to cut tidal energy red tape

The federal government is looking to make permitting processes for tidal energy projects as predictable as the natural phenomenon they rely on. A new report from a government task force focused on tidal energy replaced the existing approval process with a single 15-year lifecycle permit in an effort to provide greater certainty for investors. DFO looks to streamline permitting process for tidal energy projects (ipolitics - paywall)

4. Support for closing elver fishery in 2024

There is growing support for the proposed closure of the elver fishery for the 2024 season. A Senior Fisheries Advisor for Oceans North stated that "We recognize the difficulty of this decision, particularly when people's income is affected. However, given the high value of the fishery, the amount of illegal, unreported and unregulated fishing taking place, and the challenges with monitoring and enforcement, stronger regulations and sustainability practices should be in place before re-opening." American eels have been assessed as endangered by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) and are awaiting a listing decision under the *Species At Risk Act.* Conservation and Safety Concerns Give Grounds for Closure of Elver Fishery, Oceans North Says (Oceans North) Also see: What Canada can learn from Maine's approach to the lucrative baby eel fishery (CBC News))

5. NS caves and scraps Coastal Protection Act

After more than two years of saying he was assessing his options and three rounds of public consultation, Nova Scotia Environment and Climate Change Minister Tim Halman confirmed recently that his government would not proclaim the Coastal Protection Act, which was passed with all-party support in 2019. Supporters of the Act feel that the government has caved in to the demands of coastal property owners who are concerned that provisions under the act would have a negative impact on their property value *(see next item)*. In addition, there is a feeling that the government has decided to download difficult decisions and rulemaking to municipalities, many of which do not have the in-house expertise for such planning work. N.S. government scraps Coastal Protection Act (CBC News)

<u>Municipalities call on Nova Scotia government to proclaim Coastal Protection Act</u> (CBC News) <u>Documents show Nova Scotians urging minister to proclaim Coastal Protection Act</u> (CBC News)

6. Lukewarm interest in flood risk mapping in NS

Nova Scotia faces some of the <u>highest sea level rise in Canada</u> (CCCR 2019) under current climate change projections. Yet last week, the Nova Scotia government <u>decided not to proceed</u> with the long-awaited Coastal Protection Act (CPA), which had been passed with all-party assent in 2019. Among other things, the act would have regulated how close people could build to the ocean based on assessments of sea level, storm projections and information about the elevation and erosion risk of each section of coast. A number of polls suggested residents were very concerned that flood risk mapping would have a negative impact on their real estate value. Flood risk maps are an essential public good. Indeed, many countries like the United Kingdom already offer flood risk mapping. Canada committed to a public flood risk mapping portal in the 2023 budget</u>. However, despite the increasing frequency and impact of large, catastrophic floods, we still have a sparse patchwork of flood risk maps at municipal and provincial scale. The unacknowledged reason why there is a lack of flood risk mapping in Canada to see flood or wetland mapping <u>withdrawn or modified</u> because of public pressure. <u>Flood risk mapping could</u>

<u>help us, so why are we so opposed to it?</u> (The Narwhal) Get flood risk information for planning in England (gov.UK) Understanding Psychological Drivers of Attitudes Towards Coastal Climate Adaptations in the Minas Basin, Nova Scotia (Dalhousie University) Wetlands are superheroes: expert sets out how they protect people and places (The conversation)

7. Fundy future sold out to private interests?

In 2022 a group of leading thinkers gathered in Halifax, to set about imagining *"what could plausibly happen to the Bay of Fundy coast by 2072."* The group produced four "storylines," or scenarios, of plausible futures for the region. With the recent scrapping of Nova Scotia's Coastal Protection Act, it seems like some of these predictions may rapidly be coming to pass. Without the CPA, the future of the Bay of Fundy and the entire Nova Scotia coast —including the human and non-human communities that depend on them — now rests in the hands of private interests. The domination of private interests presents a risk to the long-term health of the Bay of Fundy (The Conversation)

8. Extinct (?) gray whale in New England waters

Scientists experienced an "incredibly rare event" recently when they saw a gray whale cruising through New England's coastal waters. The gray whale (*Eschrichtius robustus*) was believed to be extinct in this part of the Atlantic Ocean; the species has not been spotted there in more than 200 years, according to a statement from Boston's New England Aquarium. <u>'Should not really</u> exist in these waters': Scientists spot gray whale, thought to be extinct in the Atlantic, off Massachusetts coast (Live Science)

9. Update on whales migrating near Cape Cod

The whale watch season around cape Cod has officially started, and so far it has been very good, with 20-25 Right Whales spotted. Local fishermen report that they've also seen humpbacks, finbacks, and white-sided dolphins as well on their trips. Many of these are on their way north to the Bay of Fundy region. <u>The Spring Show Begins: Watching Provincetown Harbor in wonder as right whales come in close</u> (The Provincetown Independent)

10. Right Whale news update and archive

After being hunted for centuries, today's North Atlantic right whales face many challenges, including entanglements with fishing gear, ship strikes and climate change. This combination of threats, most of which are attributable to human activities. There are now fewer than 350 individuals. In 2017, 18 right whale carcasses were discovered in the North Atlantic, sounding alarm bells across the scientific community. While the species historically frequented the Bay of Fundy, several individuals had ventured into the Gulf of St. Lawrence, resulting in an unusual uptick in the number of mortalities. Given the steep challenges of coexisting with humans, the survival of this species hangs by a thread. Since then, a number of scientific studies have been conducted, initiatives to help the species have taken root, and regulations and special protection measures have been put into place. Follow the latest research on this iconic species, view trends in the population and access 8 years of archived information by subscribing to the Whales Online newsletter. Round-up of 2024 north Atlantic right whale news (Whales Online)

11. Protection measures for Right Whales announced

The federal government has announced the fishery vessel management measures for the 2024 season to protect and support the recovery of North Atlantic right whales. It will continue to implement seasonal and dynamic fishing area closures for non-tended fixed gear, trap and pot fisheries in the Gulf of St. Lawrence, Bay of Fundy, Roseway Basin and critical habitat areas where right whales have previously been spotted The approach maintains the previous year's strategies to prevent entanglements and collisions—primary threats to these whales. <u>Ottawa</u>

announces right whale protection measures for 2024 season (Saltwire). <u>Canada renews</u> protections for North Atlantic right whales (Country 94). <u>2024 fishery management measures</u> North Atlantic right whales (Fisheries and Oceans Canada).

12. Right Whale calf mortality concerning

Oceana Canada, an international environmental organization is calling on the federal government to step up protections for endangered North Atlantic right whales beyond the 2023 measures it's planning to repeat this year, noting that birth rates are already below expectations for the season and at least three of the 19 calves born so far are believed to have died. Endangered North Atlantic right whales lose three of 19 calves this season (CTV News)

13. Counting whales from on high!

This time of year scientists fly daily over Gulf of St. Lawrence and Bay of Fundy at levels between 1,500 and 800 feet in search of endangered right whales. With 460,000 square kilometres of ocean to survey, and only about 450 North Atlantic right whales left in the world, the people trying to spot the endangered giants from airplanes have a tough assignment. The data collected is the main tool for managers at the federal departments who make the decisions about closing fishing areas and reducing speed limits in shipping lanes in the continuing effort to protect the whales. So far 27 right whales have been spotted from the skies this season. Spotting whales from 240 metres like finding 'a needle in a haystack' (CBC News)

14. Study of impact of grey seals on Fundy cod

The recovery of many groundfish stocks in the Northwest Atlantic has been impeded by elevated mortality among older/larger individuals. The sources of groundfish mortality are generally uncertain, though predation by growing grey seal herds and unreported fishing are thought to be drivers of mortality for Atlantic cod (*Gadus morhua*) on the Western Scotian Shelf and Bay of Fundy. This inte4raction is examined in a new study entitled: <u>Evaluating the potential impacts of grey seal predation and fishery bycatch/discards on cod productivity on the Western Scotian Shelf and in the Bay of Fundy</u> (by Steven P Rossi, Yanjun Wang, Cornelia E den Heyer, Hugues P Benoît - ICES Journal of Marine Science, fsae053 Published: 12 April 2024).

15. Dead basking shark on Grand Manan

An unusual find on the southeast shore of Grand Manan Island is attracting the attention of locals and visitors. A 7.6-metre basking shark washed up on the island's shore in February . While this breed of shark isn't a rarity in the Bay of Fundy, it's unusual for the animal to be in the area in the winter, experts say. They now believe the shark either starved to death or froze to death. <u>A basking shark has washed up in Grand Manan. Experts say it is a rarity in winter</u> (CBC News)

16. Seaweed dumping for carbon sequestration?

16. In response to a recent wave of hype touting the potential for dumping seaweeds to the deep ocean for carbon sequestration, a group of 20 world experts, led by Dr. Thierry Chopin, from the University of New Brunswick, prepared a commentary on the subject. In their paper entitled "Deep-ocean seaweed dumping for carbon sequestration: Questionable, risky, and not the best use of valuable biomass", (CellPress abstract - paywall) the authors argue that deep-ocean seaweed dumping is not a biological, environmental, economical, societal or ethical answer to climate-change mitigation via carbon "sequestration" as it is not based on sound science.

17. Toxic red tide in GOM coastal waters

"Red tide," is an outbreak of single-celled organism that produces a toxin harmful to human health. Microscopic algae of the genus *Alexandrium* bloom and produce a neurotoxin that can lead to paralytic shellfish poisoning (PSP). Though the health of the shellfish is not affected by

the toxin, they store it in their flesh. Yearly bloom of red tide usually start to the north, in the Bay of Fundy, then moves down the Eastern seaboard, sometimes reaching as far south as the New Hampshire and Massachusetts coasts. According to researchers shorter and milder winters allow for earlier and longer-lasting algal blooms. <u>Salt Pond Closed for a Second Time by Red Tide Toxicity</u> (The Provincetown Independent)

18. Lepreau low in performance and indigenous support

Since 2014 the Point Lepreau nuclear generating station, located on the shores of Fundy, has been one of the poorest-performing reactors among dozens of similar facilities in five countries, a pair of unflinching reports commissioned by N.B. Power about the troubled plant suggest. The reports also indicate that Lepreau's performance may worsen in future years if amounts spent on keeping ahead of trouble are not increased significantly. <u>N.B.'s Point Lepreau nuclear plant ranked as poor performer among international peers</u> (CBC News). In addition, Leaders from three First Nations in New Brunswick made the trip to Ottawa to voice their opposition to the expansion of a nuclear power plant in the province. <u>First Nations leaders voice opposition to nuclear power plants</u> (APTN National News). <u>Press Conference video - 2:31 mins.</u> (APTN National News)

19. Energy East pipeline cancelled

The proposed Energy East Pipeline was canned in early October. While some are seething at the cancellation and consequent loss of jobs, members of at least one environmental group are breathing a sigh of relief. The pipeline would have carried more than one million barrels of oil every day from the prairies to be refined or exported from facilities in New Brunswick and Quebec. The risk for oil spills in the Bay of Fundy and Gulf of St. Lawrence posed a real threat to the fisheries and the coastal habitats of the region. <u>'Turn the page': Energy East cancellation a relief for environmental protection group</u> (CBC News)

20. Enlarged Fundy provincial park

Nova Scotians will soon be able to enjoy new or expanded provincial parks, including an enlarged <u>Five Islands Provincial Park</u> in the Bay of Fundy region. <u>15 New Provincial Parks to be</u> <u>Designated, Two Expanded</u> (NS Natural Resources and Renewables press release). <u>Our Parks</u> and Protected Areas: A Plan for Nova Scotia.

21. Ephemeral sculptures no match for Fundy's tides

Imagine racing against the clock to build an over three-metre-tall, realistic sculpture out of sand — only to watch high tides wash all your work away. That's what contestants do every week on CBC's Race Against the Tide. The sandcastle competition features teams of artists competing to produce sculptures from a beach in New Brunswick's Bay of Fundy, before the tide rises to destroy their work. This former Burlington resident is a sand sculpting champ. She's also a judge in a Race Against the Tide (CBC News). Squamish artists take on the challenge in CBC's sand sculpting reality show (Squamish Chief)

22. Lobster marathon winner?

A lobster tagged in New Brunswick as part of a long term study of aging was recaptured in Maine, some 250 kilometres away. There is currently no way to tell exactly how old the crustaceans are, as their shells molt and are regrown. They don't show typical signs of aging like other species, so age estimates are normally based on size. The study, led by UNB professor Rémy Rochette, has been taking tissue samples from small tagged lobsters since it started tagging them in spring 2022. Lobster tagged in New Brunswick caught over 250 kilometres away in Maine (CBC News)

23. Video of Petitcodiac River tidal bore

Watch from a hovering drone as the rising Fundy tide overpowers the river to form a visible wave that sends the water rolling back upstream. <u>A drone's-eye view of a tidal bore on Moncton's</u> <u>Petitcodiac River</u> (CBC News video 0:58 mins)

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!

BoFEP-Membership-form-current (docx)

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