

# ~ *FUNDY TIDINGS* ~

Newsletter of the

**Bay of Fundy Ecosystem Partnership (BoFEP)**

**December 2021 Issue**

## **A. BoFEP and its activities:**

### **1. Mark your calendar for Upcoming BoFEP/ACCESS Conference**

The joint Bay of Fundy Ecosystem Partnership (BoFEP) and Atlantic Canada Coastal Estuarine Science Society (ACCESS) conference will be held from May 18th-21st 2022. It is anticipated that the workshop will be held on the Dalhousie University agricultural Campus in Truro (Covid permitting). Further details about the program, registration and call for abstracts will be circulated early in the new year. In the meantime, mark your calendar!!!! [View Conference Initial poster](#).

### **2. BoFEP Chair recognized for ecotoxicology contribution**

Congratulations to BoFEP Chair Peter Wells, EIUI researcher, marine toxicologist, & long-time science-to-policy advocate, who received the 2021 Outstanding Contribution to Canadian Ecotoxicology Award at the recent Canadian Ecotoxicology Workshop conference in Halifax.

[https://twitter.com/EIUI\\_Dal/status/1443930568773804036](https://twitter.com/EIUI_Dal/status/1443930568773804036)

### **3. Ocean Literacy editorial**

The latest issue of Proceedings of the Nova Scotian Institute of Science (2021) Volume 51, Part 2, pp. 253-256 includes an editorial "*Ocean literacy – communicating science in an ocean province*" by Peter G. Wells, Michael J.A. Butler, and Sondra Eger. Nova Scotia, an ocean province, is a regional hotbed for ocean science and technology in Atlantic Canada. Given this fact and the various issues affecting the seas locally and globally, especially climate change, it behoves us to have an ocean-literate population and to promote ocean literacy in Nova Scotia and throughout the Atlantic Provinces. [Current Issue](#). (Available online to PNSIS members only for the first 6 months following publication)

### **4. Chair presentation to FORCE**

On December 8th BoFEP Chair Peter Wells was guest speaker at a Christmas update meeting and reception sponsored by the Fundy Ocean Research Centre for Energy. His [PowerPoint presentation on BoFEP](#), its history and activities, was well received and generated a lot of questions, as well as compliments about BoFEP's work over the years. Two other two talks given were 1) FORCE updates, by Dr. Dan Hasselman, Science Director of FORCE and 2) Berth Holder Updates, by DP Energy, Sarah Thomas, and Sustainable Marine, Craig Chandler.

### **5. BOFEP Fundy video series**

BoFEP is producing a series of short videos showcasing a variety of Bay of Fundy topics. These will be in the 2 – 5 minutes length range. Their purpose is to inform and spark interest in the history, biology, happenings, and actions in and around the Bay of Fundy. Keep your eyes open for these videos in the new year (via our website [www.bofep.org/wpbofep](http://www.bofep.org/wpbofep) or Facebook page [Bay of Fundy Ecosystem Partnership | Facebook](#) or newsletter). We who reside in the region all have a special kinship and connection to the Bay of Fundy; while those who visit are often overwhelmed and fascinated by the majesty, ecological and geographical uniqueness, slow transformation, and awesome strength of the Bay. We are a community whether living in St. Andrew's, Digby, or Truro, eager to share our experiences with others. We would like to share the range of knowledge of people involved with BOFEP and the Bay of Fundy with a larger audience through such social media. If you would like to contribute or to suggest suitable potential speakers/topics for the series, please contact:

[Sandra.Currie@fundyforce.ca](mailto:Sandra.Currie@fundyforce.ca)

## 6. BoFEP Reports to GOMC Meetings

At the June and December 2021 Meetings of the Gulf of Maine Council BoFEP Chair Peter Wells presented brief reports on BoFEP and its activities. He especially noted that 2022 will be the 25<sup>th</sup> Anniversary of BoFEP, an NGO group set up to enhance communication about environmental issues (covering science, information, policy, and coastal management) around the Bay of Fundy, the north-eastern part of the Gulf of Maine. BoFEP has been a formal member of GOMC since 2006. [Copy of June report.](#) [Copy of December report.](#)

## 7. Join or renew your BoFEP membership

Members are the heart of our organization. Membership is open to any individual or group who shares its vision for protecting, conserving and sustainably using the Bay of Fundy ecosystem. Membership fee for individuals is \$25 and for organizations \$100. The membership is on a calendar year basis. Please consider joining/renewing today. Please submit membership form below.

Benefits of becoming a BoFEP Member:

- Periodic emailing of Fundy Issues, Fundy Tidings newsletter and other BoFEP publications,
- A vote at our Annual General Meeting (organizations are entitled to ONE voting representative)
- Opportunity to join the BoFEP Steering Committee
- Opportunity to join the BoFEP Management Committee
- Knowledge that you are contributing to the efforts to sustain the Bay of Fundy as a healthy, productive ecosystem

[BoFEP Membership form MS Word](#) [BoFEP Membership form PDF](#)

## B. Partners and other organizations:

### 1. Parks Canada seeks "Coasties" to document changing shorelines

Canadians are being invited to share their photos from special cellphone cradles or stands set up at five Maritime national parks, including Fundy NP. A Parks spokesman explained that a coastie is simply a photograph of the coastline that Parks Canada and the University of Windsor will use to help to monitor coastal change, and better understand the impacts of climate change. ['Coastie' pics a fun way people can help Parks Canada track coastline changes](#) (CBC News)

### 2. Cliffs of Fundy Geopark in spotlight

The Cliffs of Fundy Geopark was designated (by UNESCO) in July 2020 and has more than 40 geological and archeological sites such as caves and basalt cliffs cooled from the outpouring of lava. Over the past year it has national and international attention for its uniqueness and scientific importance. It was recently featured in two Alberta newspapers. [Stepping back in time at the Cliffs of Fundy UNESCO Geopark](#) (Edmonton Sun) [Photos: The Cliffs of Fundy UNESCO Geopark](#) (Calgary Sun). As an additional feather in its cap, on November 13th at a ceremony in Parrsboro the Geopark receive the Lieutenant Governor's Community Spirit Award on behalf of all the communities in the Geopark. Congratulations to all involved in making the Geopark such a remarkable success. [Community Spirit Is Alive in the Cliffs of Fundy Geopark](#) (Cliffs of Fundy Geopark)

### 3. Cliffs of Fundy Calendar available

The Cliffs of Fundy Geopark is offering its 2022 community Calendars entitled "Tidal Landscapes on an Ancient Shoreline" for sale at \$20 each. It features a selection of stunning photos of the region submitted by community members. [Order copies online.](#)

### 4. Award for salmon conservation

The New Brunswick Salmon Council recently announced that Mrs. Debbie Norton is the recipient of the 2020/2021 Lieutenant Governor's Award for Wild Atlantic Salmon Conservation for her strong support of the conservation and restoration of wild Atlantic salmon in the province. [Recipient for Lieutenant Governor's Award For Wild Atlantic Salmon Conservation Announced](#) (New Brunswick Salmon Council/ASF)

## 5. DFO restarts consultations about east coast MPAs

After a two-year hiatus, the Federal government has restarted consultations to create more marine protected areas (MPAs) on the Scotian Shelf and Bay of Fundy in Nova Scotia and New Brunswick. The Department of Fisheries and Oceans is seeking feedback on three identified candidate MPAs up for designation and an additional 31 potential conservation sites in the bioregion. [Feds hit 'reset button' on marine protected areas in N.S., N.B.](#) (CBC News)

## 6. Publication on seabirds of Bay of Fundy Island

A new publication "Seabirds in a changing ocean: An overview of 20 years of research and monitoring on Machias Seal Island, Bay of Fundy, Canada" by Antony Diamond appears in Proceedings of the Nova Scotian Institute of Science (2021) Volume 51, Part 2, pp. 365-409. This paper reviews some of the more obvious changes in the populations and diets of seabirds breeding on Machias Seal Island, at the junction of the Bay of Fundy and the Gulf of Maine, from 1995 through 2015.

# C. Fundy/GOM and other news:

## 1. Lobster Fishers 1, Right Whales 0 in GOM

A federal judge in Maine in October blocked a seasonal closure to traditional lobstering in part of the Gulf of Maine on grounds that the science used to justify the closure was flimsy at best. But scientists argue that the opposite is true. The hotly contested closure, which was slated to go into effect last Monday, would have banned traditional lobster fishing in a lucrative, 967-square-mile stretch of the Gulf of Maine for three months out of the year in an attempt to save the critically endangered North Atlantic right whales from extinction. [Whale scientists fire back – with science – at critics of new lobstering rules - CentralMaine.com](#) (Kennebec Journal)

## 2. Right Whale population still declining

The population of North Atlantic right whales continues its downward trajectory. At its annual meeting in October the North Atlantic Right Whale Consortium announced that the population dropped to 336 in 2020, an eight percent decrease from the 366 estimated in 2019. This is the lowest number for the species in nearly 20 years. [Population of North Atlantic right whales continues its downward trajectory – New England Aquarium](#) (Atlantica Live)

## 3. Whales heading north with ocean warming

Long-finned pilot whales are moving the center of their range to the north, according to 25-year study by US marine scientists recently published in the journal "Scientific Reports". These whales are swimming farther north even though some of their prey, including fish and invertebrates such as squid, aren't shifting as far north, while others are moving into deeper offshore waters. This could have broad ecological consequences. [SBU's Lesley Thorne tracks long-finned pilot whales north amid warming.](#) (TBR News Media)

## 4. Rising sea level impacts on Chignecto Isthmus

Experts have for decades warned that the combination of a high tide with a powerful storm up the Bay of Fundy could overwhelm aging dikes and flood large portions of the Amherst, N.S., and neighbouring Sackville, N.B. Legislators in the region say that efforts to safeguard the area from a potential climate disaster have dragged on too long. An engineering study commissioned to develop "three viable solutions" to the risk of the 35 kilometres of dikes being overwhelmed on the Chignecto Isthmus, which straddles the boundary, was expected in the spring but still hasn't been released. [Rising seas: Delays to safeguarding Chignecto Isthmus worry N.S., N.B. politicians](#) (Global News)

## 5. NS proposes tough new climate change reduction plan

The new provincial government has tabled an "Environmental Goals and Climate Change Reduction Act," an updated version of the previous Liberal government's Sustainable Development Goals Act of 2019. The new act features 28 targets, including phasing out coal-fired electricity generation by 2030 and replacing it with renewable resources. A spokesman said "we are looking at wind, we are looking at solar. There are many tests being done on tidal power and battery storage....there is no option off the table."

[Environmental Goals and Sustainable Prosperity Act](#) (Government of Nova Scotia)  
[PCs introduce environmental legislation](#) (Halifax Examiner)  
[N.S. pledges to end use of coal for electricity 10 years earlier than scheduled](#) (CBC News)  
[Mixed reaction to N.S. climate change reduction act](#) (CTV News)  
[PC climate crisis targets exceed campaign promises, but do they go far enough?](#) (The Coast)

## 6. Will land-based aquaculture farm foul coastal waters?

A Chilean company "Boreal Salmon" is proposing to construct an open-flow land-based salmon farm at Chebogue Point in Yarmouth County. The farm would produce 5,500 metric tonnes per year of Atlantic Salmon and or Sea Trout. Many members of community have [voiced their opposition](#) to the plan including stakeholders in the fishing industry. Water taken in from the Bay of Fundy would be released back into the Bay after being filtered. The company does not foresee any effects on the ocean. However, Marine biologist Inka Milewski cited a study which evaluated the efficiency of drum filters and found them to be between 40-70% efficient at collecting waste. She says discharged waste, paired with climate change, could create marine coastal dead zones. [Boreal Salmon Presents to MODY on Proposed Salmon Farm](#) (Acadia Broadcasting) [New 5,500 tonnes land-based fish farm project looking to establish in Nova Scotia](#) (Salmon Business)

## 7. Ten million dollars for land-based aquaculture research

There is mounting evidence around the world that land-based aquaculture, particularly recirculating aquaculture systems (RAS), are the wave of the future for farming finfish and protecting our coastal waters. The University of Maine has been awarded a \$10 million U.S. Department of Agriculture (USDA) grant to research land-based salmon aquaculture. RAS are an emerging technology with a substantial potential to expand production and add resilience to domestic finfish aquaculture. Regrettably, the NS Department of Fisheries and Aquaculture seems to be wilfully oblivious to this rapidly spreading new approach to fish farming. [UMaine Receives \\$10M for RAS Salmon Research](#) (U. Maine/ASF)

## 8. Open pen aquaculture regulation faces rising criticism

The sorry state of government regulation of the aquaculture industry in Nova Scotia is becoming more and more apparent. Again and again the Department of Fisheries and Aquaculture has shown itself to be more concerned about the welfare and promotion of the aquaculture industry than in the protection of our coastal waters and wild marine species. Fish farms regularly thumb their noses at already inadequate regulations with apparent impunity. The following articles indicate just a few of the recent problems posed by this insidious, poorly regulated industry.

- [Atlantic Gold agrees to a tentative plea deal that would have the company pay \\$120,000 to the Nova Scotia Salmon Association to atone for breaking environmental rules, but 'no deal,' says the Salmon Association](#) (Halifax Examiner)
- [Cooke Aquaculture operated salmon farm three times larger than allowed for 17 years, now expansion is under review](#) (Saltwire)
- [Endangered wild salmon at risk from sea lice outbreak at two fish farms in Annapolis Basin](#) (Halifax Examiner)
- [Farmed salmon impact on wild questioned at Cooke hearing](#) (CBC News)
- [New regulator shuts down questions on fish farm oversight in Nova Scotia](#) (CBC News)
- [If you want to understand aquaculture impacts, start looking: At a rare public hearing on aquaculture in Atlantic Canada, ASF calls for enhanced monitoring to answer long lingering questions](#) (Atlantic Salmon Federation)
- [JIM VIBERT: Aquaculture Review Board hearing won't engender trust](#) (Saltwire)
- [Cooke salmon farm boundary application spawns clashing arguments at hearing](#) (Saltwire/ASF)
- [Lobstermen and NPS Say No to Fish Farm Next to Acadia Park](#) (E&E News/ASF)
- [First Canadian-grown genetically modified Atlantic salmon being harvested and sold](#) (CTV News)
- [Advocate wants stricter regulations after escaped aquaculture salmon found in Maritime rivers](#) (CBC News)

## 9. Instream tidal energy project surging ahead

The firm [Sustainable Marine](#) is set to demonstrate that Nova Scotia can produce vast amounts of clean and predictable energy from its tidal energy streams, after completing construction of its substation at

Grand Passage on Digby Neck. The PLAT-I tidal energy platform – which is installed and due to be grid-connected and generating energy by early 2022 will be the first floating tidal platform in Nova Scotia to connect directly into the power grid. [Canada's first instream tidal energy set for rollout in 2022](#) (Power Engineering International) [Sustainable Marine ready to Deliver Tidal Energy in early '22](#) (Marine Technology News)

#### 10. FORCE researches tidal power impacts on fish

The Fundy Ocean Research Centre for Energy (FORCE) along with several partners is conducting a Risk Assessment Program (RAP) to create a detailed, credible assessment tool to gauge the probability that a fish will encounter a tidal device. This involves assembling the largest ever data set of fish distribution in the Bay of Fundy. Over the last decade, hydroacoustic receivers deployed throughout the Bay of Fundy have collected movement data from a variety of fish species carrying acoustic tags. The information from these fish tagging projects will help to assess potential impacts on animals at multiple trophic levels. [Fish Research Gets a Boost](#) (FORCE) [Risk Assessment Program for Tidal Stream Energy enters year two](#) (FORCE) [Risk Assessment Program fish tagging underway](#) (FORCE)

#### 11. Alton Gas Project finally cancelled

Alberta-based AltaGas has abandoned its Alton Gas storage project, a plan that would have created huge salt caverns north of Halifax to store up to 10 billion cubic feet of natural gas. It planned to create the underground caverns by using water from the Shubenacadie River to flush out nearby natural salt deposits. The decision came after years of delays, court hearings and strong Mi'kmaw opposition. The plan called for dumping the leftover brine into the tidal river, where it would flow into the Bay of Fundy. [Alton Gas project cancelled after years of opposition](#) (CBC News) [Alton Gas cavern project in Nova Scotia scrapped by Calgary-based AltaGas](#) (CTV News) [Alton Gas cavern project in Nova Scotia scrapped by Calgary company](#) (APTN News)

#### 12. Ghost fishing gear cleanup update

The Department of Fisheries and Oceans has released the latest data from their Ghost Gear Program which shows they've now removed 739 tonnes of derelict fishing equipment from Canadian coastlines. 33 partners helped in the latest round of ghost gear cleanup, most of whom are either fishing or conservation groups. British Columbia's coastline has seen the most gear removed with 44 per cent coming from the west coast. The coast of Nova Scotia and the Bay of Fundy ranked second with 39 per cent. Other ghost gear collections took place on the Gulf of St. Lawrence (9 per cent), Newfoundland and Labrador (4 per cent) and Quebec (4 per cent). [Ghost Fishing Gear Cleanup Project Surpasses 700 Tonnes Mark](#) (CKBW); [Canada's Ghost Gear Fund delivering results for cleaner oceans](#) (Benzinga)

#### 13. NB Power seeks renewal of nuclear plant license

The Canadian Nuclear Safety Commission (CNSC) will hold public hearings on January 26, 2022 and May 11–12, 2022, to consider an application from New Brunswick Power Corporation (NB Power) to renew its nuclear power reactor operating licence for the Point Lepreau Nuclear Generating Station (NGS) for 25 years. The Point Lepreau NGS is located on the shores of the Bay of Fundy, approximately 40 km west of Saint John, New Brunswick. The current licence expires on June 30, 2022. [Public hearing for the relicensing of the Point Lepreau Generating Station](#) (Canadian Nuclear Safety Commission)

#### 14. Northern pulp wastewater diverted into Bay of Fundy

Apparently contaminated wastewater from the shut down Northern Pulp mill site at Abercrombie Point is being quietly diverted into the upper Bay of Fundy. Northern Pulp negotiated an arrangement with the Municipality of the Council of Colchester to dispose of its wastewater — landfill leachate and stormwater — in its treatment facility that empties into the Salmon River, which in turn runs into Cobequid Bay in the inner Bay of Fundy. The Halifax Examiner article raises lots of troubling questions about this arrangement and the seeming lack of public information. [Why isn't Northern Pulp using the wastewater treatment plant next door at Canso Chemicals? Is mercury an issue?](#) (Halifax Examiner)

## 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:

[seapencom@gmail.com](mailto:seapencom@gmail.com) Back issues are available at [Fundy Tidings Archive](#)