# ~ FUNDY TIDINGS ~

Newsletter of the

# Bay of Fundy Ecosystem Partnership (BoFEP) December 2022 Issue

### A. BoFEP and its activities:

### 1. BoFEP AGM

The 2022 BoFEP Annual General Meeting was held via Zoom on October 21st, 2022. The agenda and reports presented at the meeting are available online (as a complete set, or as individual reports) as follows: <u>Full AGM Documents PDF</u>

Welcome and Agenda

Minutes of 2021 AGM

BoFEP Chair's Report

Membership Report

Report on BoFEP/ACCESS Conference

Communications Report

Ocean and Climate WG Report

EIUI WG Report

Work Plan 2022-23

At the AGM, our guest speaker Dr. Jeff Ollerhead of Mount Allison University gave an excellent talk "Expect the previously unexpected: shoreline change with accelerated climate change". Shoreline erosion and coastal flooding have become very serious problems in the Fundy region, accentuated by more severe storms during the hurricane season.

### 2. BoFEP celebrates 25th anniversary

This is BoFEP's 25th anniversary! We continue with a steering committee and a small management team, representing many environmental partners and between 350-400 paid and non-paid members (support is voluntary) across multiple sectors and the two provinces surrounding the Bay of Fundy. We focus on science communication, filling an information niche for the Bay, and we continue under the over-arching theme of ocean and climate literacy for the people and communities in this region. A link to the 2023 Work Plan is in item A1 above.

### 3. In Memoriam - Joseph Kerekes

BoFEP members will be saddened to hear of the passing of Joe Kerekes on September 17th, 2022. He was a long-time member of the BoFEP Steering Committee. After receiving a BSC degree in Biology in 1962, he spent time studying at the University of Alberta, and then completed his PhD at Dalhousie University in Halifax. He became a limnologist with the Canadian Wildlife Service, where he conducted research across the Atlantic provinces. He was well known in recent years for leading conservation work on the Common Loon (Gavia immer) in Kejimkujik National Park, on which he published recently (Kerekes and Hope 2022). Joe was an inspiration to many regional environmental biologists and citizen scientists.

Obituary. (SaltWire Network) Celebrating the career of Dr. Joseph J.. Kerekes – internationally renowned, Nova Scotia limnologist (PNSIS Vol 50 part 1, 2019).

### 4. Proposed WG on Climate Change and Coastal Flooding. Interested?

BoFEP proposes to establish a Working Group to generate discussion and activities pertaining to the growing concern over rising sea level and storm surges severely impacting coastal areas around Fundy. The issue is how to mitigate and adapt to climate change (increased and more severe storm activity, sea level rise due to increased global air temperature) which is causing increased coastal erosion, and coastal. The big concern is the effects on critical infrastructure and coastal habitats. The group would seek/organize/consolidate relevant information so that people have resources they can use. It is anticipated that this group will mostly meet virtually via Zoom. The terms of reference will be developed by the group for approval by the BoFEP Management Committee. If you are interested in participating in the Working Group or have ideas for the group to consider, please contact the BoFEP Vice-Chair Sandra Currie at: sandra.currie@fundyforce.ca

### 5. New BoFEP Steering and Management Committees

At the 2022 Annual General Meeting on October 21, 2022, the following members of the Steering Committee and Management Committee were elected to serve for the 2022-2023 term.

Steering Committee

Management Committee

### 6. Become a BoFEP supporter

Members are the heart of our organization. As a non-profit, volunteer organization, we rely upon donations and membership dues from individuals and organizations to operate our core activities and programs. 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. Please take a moment to renew your support for BoFEP and the important work it does on behalf of the Bay of Fundy and its natural and human communities.

BoFEP Membership Form docx BoFEP Membership Form pdf.

# **B.** Partners and other organizations:

### 1. Students and Mentors Explore Fundy Coasts

A diverse crew from all over the Maritimes has been on a unique sea voyage, looking to learn more about our coastlines and ocean and share their perspectives with a wider audience. It's part of a long-running project from a group called the <a href="Students on Ice Foundation">Students</a> (SOI) which is dedicated to connecting students, including a contingent of indigenous students, with experts from all kinds of disciplines. The expedition visited the southeastern shore of Nova Scotia, and all around the Bay of Fundy. The voyage began on Sept. 7 and ran through to Sept. 29. <a href="We all want a healthy ocean">We all want a healthy ocean</a>: Conservation expedition winds its way along Maritime coast (CTV Atlantic News) <a href="Wolastoqey youth learn about marine conservation research aboard science vessel">Wolastoqey youth learn about marine conservation research aboard science vessel</a> (CBC News) <a href="Ocean Conservation Expedition">Ocean Expedition Starts</a> <a href="Discussion On Conservation">Discussion On Conservation</a> (Huddle). <a href="The Bay of Fundy: Sea and skies Episode 52">The Bay of Fundy: Sea and skies Episode 52</a> (Canadian Geographic podcast 26:34 mins)

### 2. Federal funding to enhance Fundy Geopark

The Government of Canada is supporting the expansion of an enhanced visitor experience at the Cliffs of Fundy UNESCO Global Geopark that explores the connections between geology, communities, culture, heritage and nature. ACOA, announced non-repayable federal contributions totaling \$265,000 to the Cliffs of Fundy GeoPark Society. The funding will enable the Society to implement the priority recommendations made by the UNESCO Global Geoparks evaluators to improve the visitor experience and ensure the site upholds the highest standards

required to maintain its UNESCO designation. <u>Cliffs of Fundy Geopark taking steps to attract visitors to this world-class destination</u> (Mirage News)

### 3. Seeking ideas on habitat enhancement opportunities in Fundy

As part of the planning for a marine construction project that will require fish habitat offsetting measures, we are identifying marine/freshwater enhancement ideas in the Bay of Fundy. These could be ongoing projects or new initiatives. Examples of such habitat enhancement projects include the placement of artificial reef balls, removal of anthropogenic barriers to fish passage, control of aquatic invasive species and shellfish seeding. If you are aware of any fish habitat enhancement opportunities or have any ideas, please contact us by one of the following methods: Dale Conroy, Stantec Consulting Ltd., <a href="mailto:dale.conroy@stantec.com">dale.conroy@stantec.com</a> work: 902-566-5329

### 4. Saint John Harbour Fish Diversity

When ACAP Saint John set out on a four-year study of fish life and water quality in the Saint John Harbour, the environmental group wasn't setting out to answer any big questions. The study, which began in 2018, was designed to set a baseline for the general health of fish populations in the harbour. No one had made an effort to see how many species of aquatic life were in the tidal waters of the harbour, and in what numbers -- they were surprised by what they found. The study is available on ACAP Saint John's website <a href="Community-based monitoring in the Saint John Harbour (2018 - 2021)">Community-based monitoring in the Saint John Harbour (2018 - 2021)</a> <a href="Study of fish populations in Saint John Harbour shows">Study of fish populations in Saint John Harbour shows</a> <a href="Surprising diversity">Surprising diversity</a> (CBC News)

### 5. Swim with Salmon in Fundy Park

Fundy National Park in New Brunswick offers a "Swim with the Salmon for Science" program. This is a rare chance for the public to join researchers working to jump-start the wild salmon population. Parks Canada staff guide small groups through the day-long experience while a Fort Folly First Nation member shared the cultural and historical significance of salmon. There are likely less than 200 wild adults remaining in this population. But Fundy Park has been part of the innovative and collaborative recovery efforts of the Fundy Salmon Recovery project, which brings together government, Indigenous, academic and private industry partners. Visiting Fundy's Endangered Atlantic Salmon (National Parks Traveler)

### 6. Podcast features efforts to restore inner Fundy salmon stock

John Robinson of Parks Canada talks about the work being done to help bring back Fundy Atlantic salmon populations from the brink of extinction. The focus is on the Point Wolf River in New Brunswick's Fundy National Park. A unique subspecies, unlike all other Atlantic Salmon, the Fundy Salmon doesn't migrate to Greenland after leaving its spawning grounds. It stays in the Bay of Fundy, in part because the waters are so rich. As recently as the 1970s, there were 40,000 Fundy salmon living in the Inner Bay and spawning in dozens of its rivers. By 1998 that number had dropped to just 200, caused principally by habitat loss. Fundy Salmon – Back from the Brink (26:02 mins - Canadian Geographic)

### 7. Life-size Right Whale model finds new home

Many of the New Brunswick Museum's artifacts have been sitting in storage since its Market Square location in Saint John was emptied in October, but Delilah the right whale has found a new place to hang. The 13-metre model of the North Atlantic right whale whose death led to conservation efforts in the Bay of Fundy will be part of a new exhibit at the Huntsman Marine Science Centre's Fundy Discovery Aquarium in Saint Andrews. Delilah the whale finds new home after N.B Museum closes exhibit space (CBC News)

#### 8. Panel on Aquatic Nuisance Species seeks input

The Northeast Aquatic Nuisance Species Panel ("NEANS Panel" NortheastANS.org) would like to hear from you about your work and involvement with marine invasive species. The Panel is one of six of the federal Aquatic Nuisance Species Task Force. The NEANS Panel works in the northeast US and Canada region (New England, New York, New Brunswick, Nova Scotia, Québec, and Prince Edward Island) to form a regional response to invasive plants and animals through communication, coordination, and collaboration. Aquatic Nuisance Species in the Northeast NEANS Panel Fact Sheet (PDF)

## C. Fundy/GOM and other news:

### 1. Where are all the Fundy Phalaropes?

Millions of showy little shorebirds called red-necked phalaropes once descended on Passamaquoddy Bay during their fall migration. Then, in the 1980s, they seemed to up and vanish. As many as two and a half million red-necked phalaropes, used to funnel through a small slice of the bay, around Canada's Campobello and Deer islands, in the late summer, gorging on tiny plankton, before continuing their journey from their Arctic nesting grounds to the open waters of the Pacific, off the coasts of Ecuador, Peru, and Chile. We don't know whether or how the phalaropes' disappearance is connected to the many disruptions to Gulf of Maine ecology — in part because so much remains unknown about the species. Where Have All the Phalaropes Gone? (Down East)

### 2. Poem book about Bay of Fundy published

Local environmental activist Arthur Bull has just completed a book length poem about the Bay of Fundy entitled "While Looking Out at the Bay". Published by Moose House Publications <a href="https://www.moosehousepress.com">https://www.moosehousepress.com</a>, the poem contemplates the Bay of Fundy. The Bay draws out of him discoveries that weave together art and commerce, tides and human relations, continuity and change. It's a kitchen party meditation, with visits from everyone from Karl Marx to Charles Darwin to Simone Weil. It can be ordered on the <a href="Moose House Press website">Moose House Press website</a>, or from Amazon: <a href="While looking out at the Bay: Bull, Arthur: 9781990187490: Books - Amazon.ca">Amazon.ca</a>.

### 3. NS Fisherman Reconstructs Humpback Skeleton

Jess Tudor is giving new meaning to a "whale of a tale." Known as the "whale bone hunter," the Brier Island, N.S., fisherman has a long family history of collecting bones from the ocean creatures. This summer, he collected a near-complete skeleton of a dead juvenile humpback whale – 150 bones to be exact – which are now on display in his front driveway. Whale of a Tale: Brier Island, N.S, fisherman collects skeleton of dead humpback (CTV Atlantic News) Brier Island fisherman had a few bones to pick this summer — 150 to be precise CBC News)

### 4. Right Whale population still declining

Along the East Coast, North Atlantic Right Whales face two major, human-induced threats — collisions with ships and fishing gear entanglement. And the impact of these threats is astounding. According to the new 2022 report from the North Atlantic Right Whale Consortium (NARWC), the critically endangered population has dropped 2.3 percent in the last year. One thing is clear: To protect this species, something must be done — fast. Click here for a closer look at the status of the North Atlantic right whale, and here for more on NOAA's new proposal. New report reveals 2.3 percent population decline in North Atlantic right whales (SaportaReport)

### 5. Community effort rescues stranded dolphins in Digby, N.S.

A local fire department, Fisheries and Oceans officers and community members came together to rescue a pod of white sided dolphins stranded on a mudflat in Digby, N.S. in early November. The rescuers are happy to report that all 16 dolphins eventually were successfully returned to the water. Community comes together to rescue stranded dolphins in Digby, N.S. (Global News) A pod of dolphins got stuck in the mud at low tide — here's how a N.S. community saved them (CBC News)

### 6. Indigenous lobster fishery in Fundy

Members of the Acadia, Annapolis Valley, Bear River and Glooscap First Nations will continue their moderate livelihood lobster fisheries in Nova Scotia this fall. The Department of Fisheries and Oceans (DFO) announced it has renewed an interim "understanding" with the First Nations for the beginning of the fall lobster season. In 1999, the Supreme Court of Canada ruled that Indigenous harvesters have a treaty right to catch fish to earn a moderate livelihood. The Marshall decision, however, also ruled the federal government can regulate the treaty fisheries to ensure conservation of the lobster stock. Moderate livelihood lobster fishery in N.S. renewed by DFO (SaltWire Network)

### 7. NB Farmers worried about Potash exploration

In October, the New Brunswick <u>issued a request for proposals</u> for potash exploration in southeastern regions. The RFP involves more than 26,000 hectares of mainly private land southeast of Norton. The National Farmers Union in New Brunswick (NFU-NB), said the organization is troubled by the plan. They are concerned about water and the water table and the aquifer and the impact that resource extraction has on those resources. An assessment done in 2012 showed that groundwater from Grand Lake to the Bay of Fundy, which is included in the RFP, is vulnerable to contamination. <u>Farmers Speak Out Against Potential Potash Exploration</u> (Huddle)

### 8. Fundy Gemstone Hunting

The fascinating geological past and ongoing tidal activity make Nova Scotia an excellent location for rock and fossil hunting. The Bay of Fundy is one of the most fruitful modern sites for Canadian fine and beautiful mineral specimens. Parrsboro, Nova Scotia's Partridge Island, is also a great spot for gemstone hunting while surrounded by a marvelous panorama. Gemstone Hunting: Where To Find Precious Gems In Nova Scotia (The Travel)

#### 9. New approach to harnessing Fundy tidal energy

The Bay of Fundy has one of the world's most powerful tides. Now, engineers and Scientists hope to finally turn it into a clean energy source. Fundy has long tantalized and frustrated engineers hoping to harness its record-setting 50-foot high tide to generate electricity. A new coalition of entrepreneurs and scientists in Nova Scotia are trying again. One participant, <a href="Sustainable Marine">Sustainable Marine</a>, has devised a new technology and successfully operated it for more than seven months. Rather than placing stationary turbines onto the seabed, the company floats movable ones on the surface, lifting them when a dangerous object approaches and for maintenance. <a href="Who Will Win the Race to Generate Electricity From Ocean Tides?">Who Will Win the Race to Generate Electricity From Ocean Tides?</a> (New York Times).

### 10. Smart Grid Controller being tested in Fundy

A smart grid controller to integrate ocean and other energy resources and regulate their distribution goes into full-scale testing. The controller is intended for use in distributing energy to islands and remote communities and increasing their use of renewable energy sources as a replacement for diesel power generation. The testing is taking place at Sustainable Marine Energy's substation in the Bay of Fundy in Nova Scotia, with the primary renewable energy

source provided by the company's PLAT-I tidal energy device, a floating inshore tidal energy system designed for simple deployment in remote locations. <u>Canada's ocean energy smart grid project reaches milestone testing</u>. (Smart Energy International)

#### 11. Zebra Mussels Invade St. John River Watershed

Zebra mussels have already wreaked havoc in the Great Lakes, altering ecosystems and the food chain, and damaging water pipes in municipal water systems, power plants and other industrial sites. Now the invasive species has spread — or been carried — to the east and is at the edge of New Brunswick. Zebra mussels have been discovered in the St. John River watershed, according to the New Brunswick Invasive Species Council. <a href="Invasive zebra mussels discovered">Invasive zebra mussels discovered in St. John River watershed in Quebec.</a> (CBC News)

### 12. What killed great White Shark in Fundy?

Maritime scientists descended on a New Brunswick beach recently where a great white shark had washed on shore, and now they're trying to figure out why the seemingly healthy fish died. It's estimated the mature male shark that washed ashore in in Pointe-Sapin, N.B., Sunday was between 22 and 25 years old, but the cause of death is still a mystery. Scientists stumped by death of great white shark that washed ashore in N.B. (CTV News)

### 13. Action needed to protect vulnerable NS-NB land link

There is almost unanimous agreement that the Isthmus of Chignecto is among Nova Scotia's most vulnerable areas to the ravages of climate change and storm surges. Rail, road, communications and energy infrastructure are at risk. However, there is little sense of when proposed infrastructure protection for the isthmus, an invaluable corridor connection between the province and the rest of the country, will be acted upon. The MLA for Cumberland County urges both levels of government to commit the needed funding in spring budgets and release a date for when construction will start. <a href="Cumberland MP">Cumberland MP</a>, MLA call for swift action to upgrade dikes protecting vital N.S.-N.B. connector (SaltWire Network)

### D. ADMINISTRIVIA