# ~ FUNDY TIDINGS ~

Quarterly Newsletter of the

## Bay of Fundy Ecosystem Partnership (BoFEP) August 2020 ~ Autumn Issue

## A. BoFEP and its activities:

### 1. BoFEP AGM coming up in October

Final details are being worked out for holding the 2020 BoFEP AGM in October. To accommodate the restrictions accompanying the ongoing Covid 19 pandemic we anticipate holding a hybrid meeting comprising both in-person and virtual (Zoom) participation. The locale will be the <a href="Fundy Ocean Research Centre for Energy">Fundy Ocean Research Centre for Energy</a> (FORCE) facility located in Parrsboro, NS. We hope to have a guest speaker on a topic of broad Fundy interest and, if weather permits, perhaps an invigorating walk along a nearby coastal trail! All the details about the AGM, including the agenda, will be posted ASAP on the BoFEP website (<a href="www.bofep.org/wpbofep">www.bofep.org/wpbofep</a>) as well as circulated to everyone on our membership and newsletter mail list. Hope to see many of you there..... In person or on screen!

#### 2. BoFEP Chair attends Global Geopark Official Opening

BoFEP Chair Peter Wells represented BoFEP at the official opening of the Cliffs of Fundy UNESCO Global Geopark on August 5th at Five Islands Provincila Park and Lighthouse Park on the Parrsboro shore of the Minas Basin. Talks were given by numerous dignitaries on behalf of the Global Geopark. Picture of ribbon cutting. The Geopark's role is to promote the geology, paleontology and biodiversity of the coastal environment, tourism and educational opportunities along the north shore of the Minas Basin. There is potential for a link to BoFEP's Ocean Literacy WG and its program, as there is an education committee for the Cliffs of Fundy Geopark Society. For more details about the Geopark opening see item B1 below.

#### 3. Become a BoFEP Supporter/member

Members are the heart of our organization. Membership is open to any individual or group that shares its vision for protecting, conserving and sustainably using the Bay of Fundy ecosystem. The 2021-22 membership fee for individuals is \$25 and for organizations \$100. Memberships are based on the calendar year. Additional donations from members are welcome and encouraged. As a non-profit, volunteer organization, we rely upon donations and membership dues to operate our core activities and programs. BoFEP membership form (MS Word) BoFEP membership form (PDF)

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

#### 1. Cliffs of Fundy Designated UNESCO Geopark

The Cliffs of Fundy have been recognized as a new UNESCO Global Geopark, a designation that recognizes sites and landscapes of international geological significance. The "prestigious designation" was announced Friday, July 10, at a meeting of the United Nations Educational, Scientific and Cultural Organization (UNESCO) executive board in Paris, France. the Cliffs of Fundy Geopark stretches 125 kilometers (78 miles), from Debert, N.S., to the Three Sisters cliffs past Eatonville, N.S. -- and out to Isle Haute in the Bay of Fundy. Photo of ribbon cutting ceremony. More details at:

Cliffs of Fundy set to become UNESCO Global Geopark this month (CBC News)
Cliffs of Fundy Geopark set to receive official UNESCO designation (Saltwire Network)
Cliffs of Fundy expected to get UNESCO Global Geopark designation Friday (Halifax Today)
Cliffs of Fundy, Bonavista Peninsula named UNESCO Global Geoparks (CBC News)
Canada's Cliffs of Fundy, Bonavista Peninsula given UNESCO status (Digital Journal)
Nova Scotia's Cliffs of Fundy are now a UNESCO Global Geopark (Lonely Planet Travel News)

#### 2. Fundy Geopark AGM coming up

The Cliffs of Fundy Geopark Society will hold its Annual General Meeting (AGM) on Tuesday September 29, 2020 beginning at 7 p.m. at the Economy Recreation Centre, 3323 Highway 2 in Economy. The meeting is by invitation to members and presenters only and not open to the general public. Due to COVID-19, masks will be required to be worn to enter and leave the building.

#### 3. RARGOM Science Meeting coming up

The Regional Association for Research on the Gulf of Maine (RARGOM) Annual Science Meeting will occur on October 14-15th. Due to concerns with COVID, the meeting will be conducted as a webinar. The format should allow for larger attendance and better accessibility. The overall theme will be "Emerging Issues in the Gulf of Maine" with six thematic areas during the three day meeting:

- -The changing pattern of ecological, commercial, and social uses of the Gulf of Maine coast
- -Changing landscape of Gulf of Maine fisheries
- -Ocean acidification in the Gulf of Maine
- -Protected species interactions in the Gulf of Maine
- Lower trophic level response to climate change in the Gulf of Maine
- Opportunities and Challenges for Aquaculture in the Gulf of Maine.

The deadline for abstracts is September 13th. Program, submission and registration details.

#### 4. New guide to NS wildflowers

The Blomidon Naturalists Society has just published a new guide to the wildflowers of Nova Scotia. In 75 pages it features 170 species. More information from Blomidon Naturalists.

## 5. Sign up for Huntsman Newsletter

The Huntsman Marine Science Centre is a registered, private, not-for-profit research and science-based teaching institution located in St. Andrews, New Brunswick. The Huntsman was established in 1969 by a consortium of universities, government departments, and private sector interests. To keep up to date on their activities subscribe to their Rising Tides Newsletter.

#### 6. Shorebird reserve reeling from pandemic and break ins

It has been a rough season for the staff at Johnson's Mills Shorebird Reserve in the upper Bay of Fundy. For the first time in the site's 20 year history, they've had to close the interpretive centre to the public because of COVID-19, although the reserve remains open. While it is free of charge to visit the reserve and interpretive centre, visitors make donations, which the site relies on to help cover their operating costs. If the loss of donations was not enough, two recent break-ins at the site are making it even harder for staff to do their work. They lost all of their equipment. Johnson's Mills Shorebird Reserve centre closes for first time in 20 years (CBC News). Please consider making a donation to the Nature Conservancy of Canada, which looks after the Johnson Mills site, to help them continue their important work.

### 7. Oceans Day Youth Council seeks members

Young people are invited to apply to join the World Oceans Day Youth Advisory Council! Work with change makers around the globe to unite youth and others around our blue planet to take action for a healthy ocean and sustainable society! All young people, between the ages of 16 and 24, are invited to apply. Applications are due 2 October, 2020. Application form and details: <a href="https://www.surveymonkey.com/r/YAC2020apps">https://www.surveymonkey.com/r/YAC2020apps</a>

#### 8. Bay of Fundy Water Protectors Facebook group

This is a gateway portal and information hub dealing with environmental and indigenous rights. Created in 2016, with a vision to unite people who are passionate about protecting, preserving and restoring the Fundy environment. This is an action group with 597 members that believes in sustainability through education, conservation and marine stewardship in order to restore the health and safety of the Bay of Fundy. Bay Of Fundy Water Protectors

## C. Fundy/GOM and other news:

## 1. Lost fishing gear to be retrieved/recycled

Rope recycling bins are coming to many harbours in southwest Nova Scotia as part of an ambitious project to remove up to 22 tonnes of ghost fishing gear. Using local information from fishermen and the Department of Fisheries and Oceans, the Ocean Tracking Network will deploy sidescan sonar to find the biggest concentrations of ghost gear on the ocean floor. The \$432,000 project led by the conservation group Coastal Action will then use fishermen to retrieve lost rope, buoys and traps. The project involves a wide range of partners, including fishers in southwestern Nova Scotia and the Bay of Fundy. 22 tonnes of ghost gear to be retrieved from Canada's richest fishing grounds (CBC News)

#### 2. Report on state of wild salmon released

The Atlantic Salmon Federation's 2020 "State of Wild Atlantic Salmon Report", released in June, shows last year's adult salmon returns to North America were among the lowest in a 49-year data series, continuing a downward trend that threatens the sustainability of the species. Freshwater habitat has been degraded by dams, industrial forestry, large-scale agriculture, and invasive species, making rivers less resilient to climate change. In bays and estuaries where open net pen salmon aquaculture is present, young salmon are exposed to intense concentrations of sea-lice and infectious agents. By-catch in commercial fisheries persists and surging predator populations are wreaking havoc on vulnerable species. ASF President Bill Taylor also discussed the plight of the salmon and actions needed on three CBC radio talks: Mainstreet; The Broadcast and Shift NB See also:

- Wild Atlantic salmon returns in North America near historic low in 2019 (ASF Press Release)
- Salmon population continues to decline (Chronicle Herald)

## 3. Encouraging early salmon sightings in Fundy Park

Biologists at Fundy National Park are excited about the possibility of a good salmon run this fall after eight Atlantic salmon were spotted in the Upper Salmon River. Seeing salmon this early is a strong indicator of strong runs to come. <u>Early sightings of Atlantic salmon in Fundy National Park an encouraging sign</u> (CBC News). <u>Podcast about salmon sightings</u> (7:32 mins)

#### 4. Aquaculture industry lacks transparency

In an article in the Chronicle Herald the leader of the Nova Scotia Green Party, Thomas Trappenberg, points out the lack of transparency by the industry and the concerns of residents regarding the impacts of this industry that abuses the inshore waters treasured by those living in the province. He notes that openpen fish farms often consume more protein than they produce (it takes more food to grow the fish than the food value contained in the fish), and very serious problems of contamination from feces, antibiotics and sea lice from the farmed fish into the open ocean remain unsolved. Let's clear the air with fishfarming facts. (Chronicle Herald)

#### 5. Controversy flares over the Avon River Causeway

Ever since a causeway was installed in 1969 to control flooding on the Avon River and facilitate the crossing of the 101 Highway it has been the subject of intense controversy. The early history of the controversy has been summarized in Fundy Issue #25 "The Cause in Causeway: Crossing the Avon River at Windsor". Recently, the controversy has flared up again as construction begins on the twinning of the last remaining stretch of highway passing Windsor. Some residents had advocate for total removal of the causeway and replacing it with a bridge. Others had argued to retain the causeway and maintain Lake Pisiquid as a freshwater impoundment, with more or less controlled water levels to keep the recreational asset of the lake. Another suggestion has been for an hybrid arrangement, whereby the dam would remain closed during summer months, but would be opened to the tide for much of the winter and early spring. Each of these options has dramatically different ecological implications. It appears that the first of these options is going ahead. The Friends of the Avon River (FAR) claim that the Canadian Government is neglecting a priority salmon-producing river in Nova Scotia, Canada. The Avon River is not only home to the endangered Atlantic Salmon but also to the now endangered American Eel. They

suggest that the causeway has been <u>an ecological disaster</u>. They have also launched <u>an e-petition</u> calling for the gates to be kept open for extended periods to allow fish passage.

Other relevant articles pertaining to the controversy include:

- Nova Scotia residents raise alarm over causeway's threat to local fish stocks (Global News)
- Building second causeway will perpetuate environmental disaster (Saltwire)
- Sipekne'katik First Nation calls for immediate stop to Windsor Causeway project pending review (Global News)
- <u>Sipekne'katik First Nation says construction harming fish in N.S. river</u> (APTN News)

  <u>Nova Scotia has duty to consult on Avon River Causeway: First Nation</u> (Chronicle Herald)

  (With contributions from Peter Wells and Graham Daborn)

## 6. More white sharks visiting Atlantic Canada?

Climate change, a supply of seals to eat and effective conservation in the United States are all possible explanations for the apparent increase in great white sharks in Atlantic Canada, according to a newly published paper in the Canadian Journal of Fisheries and Aquatic Sciences. Inconspicuous, recovering, or northward shift: Status and management of the white shark 2 (Carcharodon carcharias) in Atlantic Canada by G. Bastien. et al. The report is based primarily on satellite tracking data from Florida-based Ocearch, an organization that collects and publishes ocean data, in part through tagging sharks and taking samples from them. The main hot spots occurred on the southeastern coast of Nova Scotia and the Bay of Fundy. See also:

Why more great white sharks are showing up in Atlantic Canada (CBC News)
Woman killed in rare shark attack off Maine's coast has been identified (CBC News)
Couple spots great white shark off coast of Saint Andrews (CBC News)
NB Portal to information about all types of sharks in Fundy (New Brunswick.net)

## 7. Young Right Whale Sighting Encouraging

An endangered North Atlantic right whale yearling was spotted by a whale-watching tour in mid-July, something that used to be a common occurrence but now draws spectators to the shore. The young whale, which was a calf in 2019, was spotted off Campobello Island by the Quoddy Link Marine tour boat. They contacted the Canadian Whale Institute, who followed the whale as it swam along the Deer Island shore, to Eastport, Maine, and back into Canadian waters toward the Bay of Fundy. Moira Brown, scientist with the Institute, was on the boat that followed the whale. She said everyone was delighted to see a healthy young whale. <a href="'>'Curious' North Atlantic right whale yearling spotted by whale-watching tour">'Curious' North Atlantic right whale yearling spotted by whale-watching tour (CBC News)</a>

#### 8. Whale skeleton reconstructed at Cape Forchu Light

A Shelburne County man has donated a complete 65 foot long humpback whale skeleton for display at the Cape Forchu Lighthouse in Yarmouth County. Whale of a tale takes shape at Cape Forchu Lighthouse in Yarmouth County (Saltwire). Short video (1:53 mins) of reconstruction.)

#### 9. Papers on Fish and invertebrates of Minas Basin

A paper was recently published in the Proceedings of the Nova Scotia Institute of Science [PNSIS Vol.50(2) 2020]: <u>Diversity, abundance and size structure of fishes and invertebrates captured by an intertidal fishing weir at Bramber, Minas Basin, Nova Scotia</u> by Michael J. Dadswell, Aaron D. Spares, Erica Porter, Darren Porter. Another paper: "A Review of the Fishes and Fisheries of Minas Basin and Minas Passage, Nova Scotia and their Potential Risk from Tidal Power Development", by Michael J. Dadswell and Roger A. Ruifson has been accepted and will appear in PNSIS [51(1) 2020] shortly.

#### 10. New initiative to restore Acadian forest

Researchers at the University of New Brunswick (UNB) have been awarded funds over the next three years to investigate and implement an alternative paradigm of restorative forestry practices in the Maritimes. The work will include collaborating with landowners, conservation groups and groups undertaking forestry activities in the region. The Acadian Forest Region, including much of the Fundy watershed, has been extensively degraded through centuries of intensive land-use and forestry practices favouring single-aged, softwood-dominated forests. The forest landscape is now relatively young and

suffers from a lack of diversity and complex habitats. New partnership forms for restoring Acadian forest on private land in the Maritimes (Nbmediacoop.org)

#### 11. Shale oil resources in Fundy region

The NS Department of Natural Resources website includes a comprehensive summary of the <u>geography</u> and <u>distribution of shale and tight resources</u>, particularly in the upper Bay of Fundy region. It includes four general sections <u>Geography and Geology</u>, <u>Exploration and Production</u>, <u>Regulation</u>, and <u>Public</u> <u>Research</u>. While there is currently a moratorium on fracking in NS, indications are that there will be growing pressures to exploit these hydrocarbon resources.

### 12. Toxic bacterial mats appear in St. John River

A University of New Brunswick biologist reported in July about a dangerous toxin in the St. John River between Fredericton and the Mactaquac Dam. Cyanobacteria die in the winter months but come back in small pockets on the bottom of the river as the weather warms up. Now they cover almost 90 per cent of the river floor in some parts of the river. A warning was sent to the Department of Environment about a massive lift-off of the bacteria in the Fredericton area. In 2018 three dogs died shortly after coming in contact with contaminated water. A fourth dog died in 2019. <a href="Dangerous cyanobacteria lifting off the bottom of St. John River">Dangerous cyanobacteria lifting off the bottom of St. John River</a> (CBC News)

## 13. Warming ocean bringing catastrophic changes to GOM

The University of New England has produced a new documentary, warning of catastrophic changes as Gulf of Maine warms rapidly. The Gulf of Maine is warming faster than 99% of the world's oceans, making it the perfect microcosm for scientists studying the effects of climate change. Reckoning With Climate Change in the Gulf of Maine (23:58 mins) features Maine scientists grappling with impacts of climate change and what their role is in advocating for change. People who live along the Bay of Fundy should be very concerned about what's happening in the Gulf of Maine. See also: Documentary warns of 'catastrophic' changes happening in Gulf of Maine. (CBC News)

## 14. Joggins visitor finds remarkable fossil tracks

A Halifax woman visiting the Joggins Fossil Centre was walking the beach near the centre when she found a remarkable example of trackways created 310 million years ago by a prehistoric salamander-like amphibian and a millipede-like creature arthropleura. Halifax woman makes impressive fossil discovery in Joggins (Journal Pioneer)

## D. ADMINISTRIVIA