#### On the Web at <u>www.bio-oa.ca</u>

# OICEPIPE



#### January 2021

### The Newsletter of the BIO-Oceans Association



Issue 86

#### **New Membership** Categories Page 11

Contents	
Shawn Roach 2020 Beluga Winner	1
From the President	3
Mason's Cabin March	4
Tribute to M Latremouille and B Nicholls	6
A.G. Huntsman Award	7
CSS Acadia Update	8
Betty Anderson	9
Technology Development at BIO	9
Membership News	11
CSS Acadia at Night	11
Editor's Keyboard	12

Fig. 1 - Shawn Roach, this year's Beluga Award recipient. (Photo - Kelly Bentham)

# Shawn Roach - 2020 Beluga Award Recipient

This year's recipient of the Beluga Award is Shawn Roach, a Benthic Systems Technician in the Habitat Ecology Section of DFO. This year marks the 20<sup>th</sup> anniversary for the Beluga Award, an annual award established by the Oceans Association to recognize employees who have exhibited unselfish dedication to community spirit at the Bedford Institute of Oceanography (BIO). The Award recognizes individuals in any field or specialization, including ship's crew, administrative personnel, technicians and scientists, who have made exceptional contributions to the success of BIO projects, initiatives or programs. Equally important as these contributions are the nominee's efforts to encourage cooperation and foster teamwork at BIO, and their overall value to the BIO community.

#### Page 2

#### VOICEPIPE 86

#### January 2021

It is evident in reading the letters of support for Shawn's nomination that he exceeds all the criteria listed for this award. In one of the many letters of support for his nomination, Shawn was labelled a Super Tech, denoting a person who "provides the highest level of support through expertise and perhaps most importantly through dedication and commitment. These people act responsibly, work very efficiently, regularly exceed expectations, deliver on time, and never make excuses. These people are rare, but Shawn Roach is such a person."



Fig. 2 – Shawn at work with the Dive Team. (DFO photo)

Shawn exemplifies the personal qualities of a Beluga Award winner. As stated in one letter of support, "It is hard to get to know someone well when you just see them at BIO during the day. However when you get out in the field with long drives to the work site, cooking supper and planning your next day's work, you really get to know them. I have spent many days with Shawn in the field and I would not want to go in the field without him. He is extremely hard working and takes pride in his work. He is a gifted carpenter and mechanic which comes in very handy with many of our incidents. He helps anyone in the Institute who asks for assistance and is a very valuable resource. All this adds up to Shawn being a very deserving candidate to receive a Beluga award. I would recommend him without the slightest hesitation."

Others noted his willingness to cooperate with various groups at BIO: "His dedication was an incredible asset to the group and he transferred his sense of cooperation to working and supporting various other groups over the years, from the Aquatic Invasive Species program to the Dive team to the Habitat Ecology Section as a whole. When weather does not cooperate and his time for running the Pakcat is limited, Shawn is putting lots of effort and showing creativity to make things happen in the end, fostering cooperation between various groups. Triple chocolate cookies bribes are ac-

cepted but not mandatory! His patience with people who are seasick, don't know where to put DEF fluid or lose equipment in the field is legendary. In summary, Shawn's contributions are paramount for the success of many BIO projects and programs. He has always taken a team-work approach in his multi-disciplinary work at BIO and definitively deserves a huge Beluga award."



Fig. 3 – On the water. (DFO photo)

In addition to his commitment to his job and his colleagues. Shawn also contributes significantly to the greater BIO community, including broader community initiatives and outreach. He has contributed considerable time and energy to help coordinate and organize his Section's participation in the BIO Open House (3 events since 2007), BIO fundraising activities such as contributing his time and musical talent to raising money for the BIO Christmas family, and taking responsibility for organizing weekly pickup hockey activities at BIO even though field work often keeps him from participating. He generously stepped forward to help the Oceans Association when we needed someone to be responsible for the storage of the *Voyage of Discovery* inventory; admittedly a small job for Shawn, but it was a huge relief for our organization.

The following excerpt from a letter of support is a fitting summary for his nomination: "Shawn has always been one of the hardest working individuals I've ever met. He continually goes out of his way to be helpful, often going above and beyond what you would expect of anyone. He is diligent, conscientious, and thor-

ough and his work reflects this. One of his greatest qualities is how industrious he is, earning his nickname as the "MacGyver" of our section. It's not unusual to run into Shawn as he's leaving to go home, ask him to help design something that would fit an instrument, and then have a completed "prototype" on your desk the very next morning before your first coffee. His ability to think quickly, willingness to adapt and modify a field plan, and mostly his ability to think independently and creatively, are all qualities that makes him so valuable in a collaborative project.

On a personal level, I've learned a lot from Shawn on how to treat others; he is one of the kindest, most thoughtful, and considerate people I've ever met. His dedication to his wife, children, and friends is truly second to none. All of this is reflected in the amount of friends Shawn has in his coworkers. It's difficult to walk down the hallway with him without him being stopped to answer a question, call out a joke, or simply say "Hi" back to someone, and always with their name first. He brings a sense of camaraderie and fun to any team he works with; qualities that are invaluable in the success of a project.

It is for all of these reasons that I nominate Shawn Roach for the 2019 Beluga Award. He exemplifies the very nature of the honour and I can't imagine anyone more deserving!"



Fig. 4 – Hard at work in front of BIO. (DFO photo)

With reduced access to BIO due to Covid 19 restrictions, we are still deciding how to proceed with the Beluga Award presentation ceremony, where we will also honour the late Dale Buckley who was earlier awarded a special Beluga Award. Also, please watch for the upcoming notices for nominations for the 2021 Beluga Award. Randy King and his committee will be looking for nominations shortly.



## **From the President**

Let me first wish everyone a happy and healthy 2021, with hopes we will soon resume what is likely to be a new normal. The top story in this issue is the award of the 2020 Beluga to Shawn

Roach. The nominators and the Beluga Award committee have certainly identified a very worthy recipient. Congratulations Shawn. We are trying to arrange details for a ceremony for both Shawn and Dale Buckley.

On a more somber note, I need to mark the passing of Mike Latremouille and Brian Nicholls. Both made remarkable contributions to the BIO Community. Brian led the BIOMAIL office that built valuable relationships with outside organizations. I remember Mike for his contributions to scientific editing, especially the Voyage of Discovery. As well, he was the editor of the BIO OA Newsletter before Mike Murphy and me.

We held a virtual AGM on October 29, 2020. We welcomed several new members to the Executive. Patrick Potter was acclaimed as First Vice President and President Elect. Shirley Pegler, Tim Lambert, Kelly Bentham, and Ruth Jackson are new Directors. Gerry McCormack has joined the Executive as liaison for the Community Garden and Ruth will act as liaison for the Bernard Pelletier Fossil Garden. Thank you to all of the members of the Executive for their continuing commitment to the BIO OA and especially to Betty Sutherland and Michael Sinclair who decided not to reoffer for an Executive position this year.

Don Gordon has done it again. After his contribution as an editor of Voyage of Discovery and authoring the BIO Chronology he has taken on and completed the History of the Marine Ecology Laboratory (MEL). Don was an early researcher in MEL, a globally recognized research component of BIO concentrating on the study of ecosystems. It is a comprehensive accounting of the scientific accomplishments and controversial demise of the unit. You can find it on the BIO OA website.

Charlie Schafer has been following the story of the disposition of the decommissioned Navy dive vessel the *Cormorant* and its companion submersible SDL-1. I wrote to Minister Jordan concerning our interest in ensuring the SDL-1 survived the proposed scrapping of the Cormorant. She assured us in her response that the it would be recovered and saved. We anticipate that SDL-1 will eventually be put on public display likely at the Shearwater base.

Finally the process for choosing the 2021 Beluga Award recipient will soon begin. Please give serious thought on nominations. It has been a tough year and we face a challenging year ahead. All the more reason to recognize those at BIO that make the workplace and our community more resilient.

#### January 2021

# Mason's Cabin March (Don Gordon)

(Editor's note - a more appropriate title may be "Men Do Stupid Things")

For many years, I had wanted to hike the trail around the back section of Kejimkujik National Park from Big Dam Lake to the gate at the eastern end of Peskowesk (55 km). One day in early November 1992, Richard Addison and Gareth Harding came into my office to discuss a possible outing. Richard was moving to British Columbia in January and wanted a farewell trip in the woods to provide fond memories before he departed. November seemed to be a good month for such a venture because the weather is cool but not yet wintry. At first, discussion centred on a canoe trip down the Eastern Shore but concern was raised about hunting season and possible ice. I then suggested the Kedge hike since the Park is free of hunting. The others agreed and our fate was sealed. A short while later, Barry Hargrave rounded out our foursome.

We met over lunch the week before the trip to plan our route, gear and food. Because of the distance involved and not to be rushed, we decided to take three days for the trip. Much to our surprise, the next day it snowed! While we only got 5-10 cm in Metro, more fell in the western end of the province. I think we all figured that it would melt by the weekend so it never concerned us, at least no one admitted it verbally. We were still keen to go by the end of work on Friday.

Saturday dawned bright and clear. Barry and Margot came over at 0800 for a hearty breakfast. The wives agreed that we were crazy and were very glad that they were staying home. We packed our gear and departed Dartmouth at 0900. I followed Jo in the other car as far as the cottage at Cox Lake where she had a basketry class for the day. Despite the snow, we had no problem driving in the road. We helped her open up the cottage and build a fire in the fireplace before we headed further west.

We arrived at the Park about 1130. Much to our surprise, the Visitor Centre was locked up but there was a place beside the door where we could sign in for the three-day hike. In so doing, we learned that another party was doing the same trip as ours. Since they were going around counterclockwise, we decided to proceed in the opposite direction, so our destination for the first night was Mason's Cabin which was only about 8 km from where we planned to park the car. That would be an easy walk for the first day. Gareth, Richard and Hamlet (Gareth's dog) arrived about 1215. They agreed with the routing we proposed so we took off for Big Dam Lake to deposit one of the cars.

When we reached the road to Big Dam Lake, we were surprised to see it closed because of the snow. We were not too concerned because the road was only about 2 km long, so we left my car by the barrier and loaded our packs onto the top of Gareth's car for the drive to the start of the trip at Peskowesk Lake. While driving, we began to wonder if the road into Peskowesk would also be closed. Sure enough, when we reached the old fish hatchery, there was a barrier across the road. We parked the car and had a short conference. There were only two main options: cancel the trip or hike 27 km to Mason's Cabin through the snow! It was already 1245 and we figured that we had at least an eight-hour walk. The sun set about 1645 which meant that we would have to walk in the dark for about three hours. Without much hesitation, we decided to go for it. We were well equipped, we knew the country we were heading into and the weather was fine. So, after a quick bite of lunch, we shouldered our packs and headed off.



Fig. 1 - Richard Addison (left) and Don Gordon head out. (Photo - Barry Hargrave)

The weather at the start was ideal, sunny with the temperature just below freezing. Park vehicles had passed over the road so there were well-packed tracks in which to walk. There were lots of animal tracks and we flushed out several deer and grouse. We made good time down to the Eel Weir where the road crosses the Mersey River. Here we stopped for a rest and snack. Our next stop was at the bridge crossing Peskowesk Brook where we also rested and had a snack. Spirits were high and we continued to make good time. We did not reach the gate at the end of Peskowesk, where we had originally planned to park, until almost 1700. By that time, we were getting tired but still had another 8 km to go. To make matters worse, no vehicles had preceded us so from here on we had to break our own trail through the 15-20 cm deep snow. Rain was forecast for the night and clouds began to gather.

We pressed on with visions of Mason's Cabin and a warm fire. Stops became more frequent. Despite the darkness, we could see surprising well and used our flashlights sparingly. It was especially dark walking through stands of evergreens. We kept walking into trees bent over the trail by their loads of snow. It started to drizzle about 1800. We walked for a long while without passing any visible landmarks to indicate our rate of progress. I was beginning to wonder if we might not see Mason's Cabin in the dark and walk right by it. At one point, we considered stopping and making our own camp in the woods for the night but everyone agreed to continue. Off to the south, we could hear the rapids on the Shelburne River below Irving Lake. Spirits lifted when we could see Beaverskin Lake immediately to our left and crossed the portage trail from Peskowesk. We stopped here briefly for a drink of water and a rest. Now we knew exactly where we were and there was only about 2.5 km to go but the rain started to come down more heavily. I stayed ahead of the rest for most of the time so that I could navigate without my vision being affected by flashlights. It was a real challenge to see where you were going. At one point, I walked off the trail into the woods. Near the end, I was using my compass to navigate by the direction of the trail. Finally, I could see what seemed to be a faint light immediately off to the left that turned out to be a small lake. A quick check with the map indicated that it must be Pebbleloggitch Lake that meant we were almost there. After a few hundred meters more. I was relieved to see the outline of Mason's Cabin immediately to the right of the trail. It was after 8 pm as I waited for the others and said nothing until they spotted the cabin as well. I don't think that in its long history anyone ever entered Mason's Cabin was as tired, wet and thankful as the four of us.



Fig. 2 - Mason's Cabin, morning of day 2. Left to right: Barry Hargrave, Gareth Harding, and Richard Addison. (Photo Don Gordon)

It did not take us long to unpack and make camp. A fire was built in the stove, wood split, candles lit, water procured from the well and clothes changed. Gareth was in charge of cooking supper. A pot of hot soup was the start of our nourishment. Soon thereafter, the rum and Irish whisky came out. It did not take long for our spirits to be rekindled. By now, the rain was really pelting down outside and we were very thankful to be under shelter. We had great fun recounting the events of our long march. Supper was superb with steaks, mushrooms, onions, baked potatoes, squash and blueberry pie. We even had a litre of Barry's homemade wine. It was almost midnight by the time we finished eating and were ready for bed. Wet clothes and boots were hung from a line strung across the cabin above the stove. We reflected that, while we came to hike, we could have skied all the way in to Mason's Cabin. In contrast, the previous January we came to ski but since there was no snow we had to hike instead. The joys of weather in Nova Scotia.



Fig 3 - Barry Hargrave (L), Hamlet and Gareth Harding. (Photo Don Gordon)

The night was mild and the rain continued. I did not sleep very well on the plywood bunks and was bothered with leg cramps. We awoke to a foggy Sunday morning and bare ground most everywhere. It was painful getting out of bed. We were all very stiff and found it difficult to navigate. Much laughter was enjoyed watching the others trying to walk and no one was immune.

I cooked a leisurely breakfast of sausage, cheese and mushroom omelette, English muffins and coffee. Since we had over-extended ourselves on the first day and we would be heading into the most isolated part of the Park, we all agreed not to attempt to complete the round-trip but to return to Gareth's car by the same route. We packed our gear, cleaned up the cabin and departed about 1100.

After walking three hours in the dark the evening before, it was a real pleasure to hike in the light and see the landmarks we had missed. Most of the snow was

#### VOICEPIPE 86

#### January 2021

#### Page 6

gone but there were many puddles of water that had to be skirted. We were slow at the start and it took us quite a while to loosen up. In fact, you could probably say that we hobbled most of the day and we had to make many stops along the way. We stopped for lunch of cheese, sliced meats, pita bread and fruitcake near the eastern end of Peskowesk where Park staff distribute firewood to campsites on the lake. The weather cleared in the afternoon making walking conditions just about perfect.

We reached the Mersey River at the Eel Weir about 1630 and decided to camp there for the night. While it is only designated as a picnic site, we did not care for we were tired and did not want to walk the remaining 8 km to the car. We built a fire, rigged a rain fly and pitched our tents beside the river. It was Barry's turn to cook and he produced a delicious venison stew with rice followed by a dessert of brownies, all of which he carried on his back for 46 km. The evening was mild and clear. It was very pleasant sitting around the fire despite being late November. Everyone was tired and went to bed early. We all slept well even though it started to rain in the middle of the night.

I was the first up soon after daybreak. It was raining heavily so I moved the breakfast gear into a seasonal skiing shelter erected by the Park in a nearby parking lot. The shelter was equipped with a stove, dry wood, table and benches. I built a fire and got organized for breakfast before the others appeared on the scene. We had another leisurely breakfast, this time of oatmeal, English muffins and coffee, with lots of good talk. We broke camp and moved our gear into the shelter for packing and hit the trail again about 1030.



Fig. 4 - Still smiling. Left to right: Harding, Hargrave, Addison. (Photo Don Gordon)

While not quite so bad as the previous morning, it took us a while to loosen up. Again, there was lots of laughter watching each other trying to walk in normal fashion. The walk out in the rain was uneventful and we reached Gareth's car at the hatchery about noon. We were wet, tired but contented. Instead of walking 55 km around the park, we walked 54 km into and out from Mason's Cabin, the same distance we had planned but a different route. The total distance of the complete loop with the roads closed is about 75 km.

We picked up my car and then stopped at the Visitor Centre which, being Monday, was open. We went inside to return our permit, gathered around the wood stove to dry out and eat our lunch, and chatted with Park staff about our adventures. We then stiffly made our way to the cars and drove back home in the rain. If nothing else, we gave Richard some vivid memories to take with him to British Columbia.



Fig. 5 - Finally heading home, R. Addison. (Photo D. Gordon)

# **Tribute to Brian Nicholls and Mike Latremouille**

The Oceans Association acknowledges the recent passing of two long standing members, Brian Nicholls and Mike Latremouille. Brian was a charter member of the OA while Mike was a former editor of the *Voicepipe* and one of the editors of the *Voyage of Discovery*. We reprint their respective obituaries here and take this opportunity to express our sincere condolences to their families.



Henry Brian Nicholls With a deep sense of sorrow and loss, our family announces the passing of our father, and papa Henry Brian Nicholls on November 10, 2020 at the age of 88 years. Brian was born and raised in the United Kingdom, where he shared many fond memories of his life in Portsmouth and Mac-

clesfield. His family immigrated to Pinawa, Manitoba in 1968. In 1971, Brian and his family relocated to Bedford, Nova Scotia where he worked until he retired at the Bedford Institute of Oceanography in Dartmouth.

Brian and his wife moved to Edmonton, Alberta in 1998 in order to be closer to their kids and enjoy their retirement. Brian enjoyed his time in the garden, volunteering at the Telus World of Science, playing with his grandchildren, dining out with his wife, and enjoying a glass of wine with his friends.

He is remembered with love by his wife of 65 years, Nadine, their three sons Tim, Andrew, and Clive (Patty) and two grandchildren Cara and JT. The family would like to extend a special thank you to the wonderful staff at Covenant Health Youville Home in St. Albert who cared so much for Brian during his stay there.



#### Mike Latrémouille

73, of Dartmouth, passed away at Hospice Halifax on October 28, 2020. Born in Ottawa, June 12, 1947, son of the late Jacqueline Dagenais and Albert René Latrémouille, Mike is survived by his wife of 49 years Jane Isabelle Latrémouille (nee Swindel), his adult children Davide, Daniel (Annette Lantz), Claire (Simon Bouchard-Robert), his

beloved grand-children Noah, Rachel and baby Isla, his sister Louise (Robert Butler) and nieces Ainsley and Catherine Butler of Ottawa.

After graduating high school and undergraduate studies from University of Ottawa (Honours, Geology) Mike became a scientific editor at B.I.O. (Bedford Institute of Oceanography), I.C.O.D. (International Centre for Ocean Development), Natural Resources Canada and Parks Canada (from which he retired in 1998). Mike made significant contributions to various scientific journals, and was a lead editor for BIO's *Voyage of Discovery*. He was president of the AESE (Association of Earth Science Editors) and loved nothing better than to rewrite and suggest improvements on anybody's writing. A passionate photographer, he set-up each shot meticulously to the groans of all concerned.

His love of travelling took him throughout Nova Scotia and across Canada with Jane, in his various RVs. He also travelled abroad with his children wherever possible. Later in his life, Mike doted on his wife and was very active in the lives of his children and grandchil-

dren. A lover of laughter, the ocean, dogs, camping, the outdoors, lakes, hot tubs, canoes, sweets (carrot cake!), coffee, wheat and stout beers, with questionable taste in music and movies but a great sense of humour, Mike will be missed whenever and wherever his loved ones gather.

## 2020 A.G. Huntsman Medal

The 2020 A.G. Huntsman Medal was awarded to Dr. John Marshall on November 24 in recognition of his extraordinary ability to combine physical reasoning with analytical and numerical investigations which have led to major contributions in many areas of physical oceanography, the interaction of the ocean with the atmosphere, and the role of the ocean in climate.



Fig. 1 – Dr. John Marshall (photo courtesy of A.G. Huntsman Foundation)

The A.G. Huntsman Award was established in 1980 by the Canadian marine science community to recognize excellence of research and outstanding contributions to marine sciences. It is presented by the Royal Society of Canada. The award honours marine scientists

# of any nationality who have had and continue to have a significant influence on the course of marine scientific thought. The Award is named in honour of Archibald Gowanlock Huntsman (1883–1973), a pioneer Canadian oceanographer and fishery biologist.

Dr. Marshall's work has greatly expanded our capability to understand and predict ocean processes and variability, and their role in the climate system, for example, one of his major contributions is a better understanding of the ocean's overturning circulation. A pioneer in developing and applying numerical ocean models, Prof. Marshall has made essential contributions to understanding and parameterizing ocean processes in numerical models of ocean circulation and in coupled climate models, which are extremely important tools in international efforts to project future climate. The MITgcm, a widely used general ocean circulation model, was developed under his leadership and is the gold standard of community ocean models.

Dr. Marshall is a Professor at the Massachusetts Institute of Technology in the USA. He has broad interests in climate and the general circulation of the atmosphere and oceans. His research is directed at understanding the cause of the general circulation of the oceans, its interaction with the atmosphere and its role in the global climate and climate change.

The livestream broadcast is available on youtube at: <u>AG Huntsman Award YouTube</u>

(Story courtesy of the A.G. Huntsman Foundation)

# **Restoration of the CSS** *Acadia*

The Oceans Association has been actively pushing for the restoration of the CSS *Acadia* with various levels of government. Our President, Andy Sherin, recently exchanged letters with the newly appointed provincial Minister of Communities, Culture and Heritage, the Honourable Suzanne Lohnes-Croft. We reprint Andy's original letter and the Minister's encouraging reply. We will continue to closely monitor progress on this restoration project.

#### Dear Minister;

I am writing to congratulate you on your appointment as Minister of Communities, Culture and Heritage and to let you know that we have had correspondence with Minister Glavine in the past concerning the restoration of the CSS / HMCS *Acadia*. As you are probably aware the *Acadia* is the only ship still afloat that was in the harbour during the Halifax Explosion and she served Canada in both World Wars. She has also had a remarkable history of contributing to ocean science.

I am the President of the BIO Oceans Association and a member of a multi-organization task group supporting the preservation of the military and scientific heritage of the 'Grand Old Lady'. The ship was a museum ship moored at the Bedford Institute of Oceanography for many years after completing its active life of scientific endeavours and declared a National Historic Site. She was transferred to the care of the Province of Nova Scotia in 1982.

We were delighted to hear Minister Glavine announce a significant investment in the repair of the 'Grand Old Lady' and the plans the Maritime Museum of the Atlantic had for using the ship as an educational resource.

Please let us know about the status of the restoration work on the *Acadia* and in particular when dry docking is planned for inspection and repair of the hull. Again, congratulations on your appointment and we are certain you will take your responsibility seriously in maintaining the historic and economical value of this jewel on the Halifax Waterfront.

#### Andrew Sherin President, BIO Oceans Association



Fig. 1 - CSS *Acadia* at the Halifax wharf with its custom cover. (Photo Andy Sherin)

Dear Andrew Sherin:

Thank you for your letter of congratulations on my appointment as Minister of Communities, Culture and Heritage and your inquiry regarding the status of the restoration of CSS *Acadia*.

Indeed, *Acadia* has a significant national heritage – one which is recognized in its official status as a National Historic Site. I do understand, too, that before be-

coming a museum ship at the Maritime Museum, *Acadia* was moored at the Bedford Institute of Oceanography. I am pleased to hear that you continue to take interest in the ongoing plans for CSS Acadia and its role as a signature attraction on the Halifax Waterfront.

The restoration is going extremely well, and the staff of the museum are delighted with the progress. Extensive work has been completed on nearly all aspects of the vessel, including replacement of the wooden decks, upgraded electrical throughout, lead paint abatement and complete repainting, new deck rails, new fenders and gangways, new alarms, upgrades to the bilges, new functioning heads, refinished brightwork, new upholstery, flooring, safety systems and PA systems as well as a new winter cover.

When the winter storm season has past, we anticipate *Acadia* will be towed to a drydock for work on the hull to complete the restoration. In addition, *Acadia* now has a Vessel Management Plan and an Interpretative Master Plan to guide all future work and to ensure optimal visitor experiences and preservation work will continue.

With the completion of the restoration work and the implementation of plans to increase engagement with the public, including youth, students and researchers, we are confident that CSS *Acadia*'s reputation as a significant historic ship, a destination for experiential learning, and a highlight of the waterfront will become widely known.

Thank you for making your introduction and for your inquiry into the CSS *Acadia*. We are hopeful the ship will be open to the public next season, following its work at drydock.

Sincerely, Suzanne Lohnes-Croft Minister



Fig. 2 - CSS *Acadia* with her new winter cover. (Photo Andy Sherin)

## Merry Christmas from Betty Anderson



Christmas may be over, but we thought we should share this photo of Betty Anderson courtesy of Camp Hill. She wishes everyone a Happy New Year, and she would welcome visitors or phone calls from her many friends in the Oceans Association (902-428-2463).

# **Technology Development at BIO or How I Wrote a Journal Article (**Michael Murphy)

Don Gordon recently discovered my article on the development of technology at BIO in *Scientia Canadensis*, an academic journal of the history of science in Canada, and he suggested that I provide an outline for our newsletter. But I think a better story is how the paper came to be. My plan when I retired from DFO in 2011 was to return to school. I had dropped out of a Master of Mathematics program at the University of Waterloo in the fall of 1974, but with the idea that I would return and complete that degree sometime. However, life interrupted that plan and I went on to do the things that allowed me to retire at a relatively early age.

As I thought about retirement, I realized that I would need some structure or routine, so I applied to Dalhousie University to start a Master of Arts in History. My first step was to take some qualifying courses over a two year period, presumably to show that I was reasonably serious about this. I spread the courses over

#### Page 10

#### VOICEPIPE 86

two years as I searched for courses related to my area of interest – the modernization of Prince Edward Island in the post Second World War period. Apparently, this is not a topic that excites many researchers as it took me to three different universities (St. Mary's, UPEI, and Dal) to cobble together enough courses to satisfy the requirements. With that done and a research topic selected, Dal accepted me into the Master's program in the fall of 2013.



Fig. 1 - Tools of the trade for physical oceanography in the early 1960s. From the top: bathythermograph (BT) for measuring water temperature at various depths; slide holder and glass magnifier for reading slides from the BT; special slide rule for converting thermometer readings to temperature and depth; illuminated magnifier for reading reversing thermometers; just above is a reversing thermometer; above that is a standard sample of sea water used to compare recovered samples; to its left is a sterile water bottle for storing seawater samples for later testing; far left is a Knudsen water bottle for collecting seawater samples. (Photo courtesy of BIO OA website)

Again, I faced a problem. I needed two graduate level courses along with a thesis to complete the degree, but there were no obvious course choices for me. I found one of interest for the first term and looked around for something in the winter term. I saw a course titled "The History of Marine Science" taught by Dr. Eric Mills that was cross listed in a number of faculties: Ocean Sciences, History, and History of Science at King's University. I managed to convince everyone, including Dr. Mills that this could be my second course on the condition that I write a major paper that would be evaluated at the graduate student level. All I had to do now was to select a topic. While searching the internet for ideas, I stumbled on William Whewell, unknown to me but in reality a giant of Victorian science. What intrigued me was his work on tides, something he thought would place him in the "Hall of Fame" of science. Of particular interest to me was his plan to use the Royal

Navy, the American Navy, and government resources around the world to collect data on tides.

I began collecting information and sources all the while wondering why no one else had ever discovered this fascinating character. It all came crashing down when an internet search yielded a PhD thesis by Michael Reidy, titled "The Study of Tides and the Organization of Early Victorian Science". That one paper addressed and answered every research question I had. What really put an end to my plan was a careful reading of my notes from earlier meetings with Eric – he had provided a helpful list of sources which included the book *Tides of History – Ocean Science and Her Majesty's Navy*, by none other than Michael Reidy. I probably should have done that careful reading of the list much earlier. By now, it was late February and I needed a topic and I needed it quickly.

Luckily, I had joined the OA executive in the spring of 2013 as the secretary and had access to finished chapters of the *Voyage of Discovery*. From that and searching through the BIO annual reviews, I hit on the subject of the many technological developments made at BIO in the early years of the institute. Using the readily available sources and with the help of Dave McKeown's program for searching the annual reviews, I cobbled together a paper that satisfied the requirements of my course.



Fig. 2 - A hydraulic crane is used to lower and raise the CECS towed body, which contains the echo sounder's transducer, as part of the acoustic fish counting program. BIO Review '83, 41.

So how did that become an article in Canada's journal of the history of science? Pure coincidence, again with the help of the OA. Dave Pantalony, the curator of the Canadian Museum of Science and Technology, contacted the OA in the summer of 2016 to discuss an upcoming exhibit of oceanographic equipment in

conjunction with the opening of the new museum in 2017. As part of our discussions, I shared my paper with him just as background, and later, he suggested that I submit it for publication in Scientia Canadensis. As he was the editor, I took that as a pretty good sign that it would make it through to the publication. The review process was relatively painless with even some light moments. One reviewer commented that "The author's style indicates that the author is a scientist" and it wasn't meant as a compliment. A second one asked for a number of personal interjections to be deleted, and I reluctantly agreed. My comment back to the editor was the following: "Although I really like the sentence 'One who strays too far from the mandate lives a short but interesting life in government bureaucracies' I have deleted it." I still think that sentence deserves to be in print somewhere.



Fig. 3 - OCTUPROBE, showing the internal structure of the 2 metre probe with three sensors: A is a thinfilm sensor to measure temperature microstructure; B is the conductivity sensor; C are two lift probes to measure two perpendicular components of velocity microstructure or turbulence. (BIO OA Website - Equipment Archive)

If you have continued to this stage of my ramblings, you may be interested in reading the actual article, complete with photos and diagrams. It can be accessed by clicking on this link:

#### Tech Dev at BIO article

# **Membership** News

The OA has a new membership category now, just approved at a recent Executive meeting. It is the Beluga category, available for \$70 for a period of 10 years. Other options include 1 year for \$10, 5 years for \$40, or a lifetime membership for \$150. To access the form, go to <u>http://bedfordbasin.ca/join.php</u> or contact Jennifer Hackett at bio.oceans@gmail.com.

# CSS *Acadia* at Night (Andy Sherin)

Sheila and I visited Las Vegas for her \*\*th birthday (*Editor's note - I thought it best to delete the actual year*) and had the opportunity to see a spectacular light and sound show at the Neon Museum. Upon returning I sent a message to the Maritime Museum of the Atlantic suggesting they use the Acadia as a screen for a sound and light show that told Acadia's story. What they did for the Evergreen Festival is a starting point. Below are two photos from that Festival. We hope that the Museum will expand their use of this technology in the future.



Fig. 1 – CSS *Acadia* during the Evergreen Festival. (Photo Andy Sherin)



Fig. 2 – CSS *Acadia* during the Evergreen Festival. (Photo Andy Sherin)

#### Page 12

#### VOICEPIPE 86

#### January 2021

#### **Editor's Keyboard:**

Another year has started, and with it another edition of the Voicepipe. Many thanks to our contributors for their articles and photos. I am always amazed at the activities of our members. It was great to see the photo of Betty, and her request for phone calls. As wonderful as it was to see her, it was just as sad to see the passing of two well known members of the OA -Mike and Brian.

Our thanks as well to Randy and his committee for their work in selecting the Beluga Award recipient. Shawn Roach. Now, to get the ceremony scheduled so we can present the award to Shawn and to the family of Dale Buckley.

The annual meeting of the OA brought with it a number of new people stepping up to be Executive members of the OA. Welcome to all the new Directors and Officers. New people always bring fresh ideas and a renewed vigour to the organization.



#### ABOUT THE BIO-OCEANS ASSOCIATION

he Bedford Institute of Oceanography Cceans Association (BIO-OA) was established in 1998 to foster the continued fellowship of its members; to help preserve, in cooperation with the Institute's managers and staff, BIO's history and spirit; and to support efforts

to increase public understanding of the oceans and ocean science. Membership is open to all those who share our objectives. Most current members are present or past employees of BIO or of the federal departments of Environment, Fisheries and Oceans, and Natural Resources

(or their predecessors) located in the Halifax Regional Municipality. Membership is \$10 per year, \$40 for five years, \$70 for 10 years, or \$150 for a lifetime membership.

#### **OFFICERS AND DIRECTORS**

PRESIDENT VICE-PRESIDENT / PRESIDENT-ELECT VICE-PRESIDENT PAST PRESIDENT SECRETARY TREASURER DIRECTORS AT LARGE:

Andy Sherin Patrick Potter Borden Chapman Claudia Currie Pierre Clement Lori Collins Shirley Pegler Kelly Bentham David McKeown Ruth Jackson

Don Gordon Steve Blasco Tim Lambert

#### COMMUNICATIONS: NEWSLETTER, PR, AND WEB SITE

NEWSLETTER EDITOR PR AND MEMBERSHIP WEBMASTER

Michael Murphy Jennifer Hackett Jazmine Hayden

#### **COMMITTEES / WORKING GROUPS: CHAIRS**

BELUGA AWARD GRAPHIC DESIGN EVENT COORDINATOR BIO ARCHIVES FOSSILE GARDEN EQUIPMENT ARCHIVES David McKeown, Philip Spencer, Randy King

Randy King Art Cosgrove Vacant Don Gordon Ruth Jackson NSIS LIAISON OUTREACH SACKVILLE LIAISON TITANIC SOC. LIAISON **BIO GARDEN** 

Peter Wells Charles Schafer Keith Manchester Steve Blasco Gerry McCormack

#### **PAST PRESIDENTS**

Robert Reiniger (1998-2000), Dale Buckley (2000-02), David Nettleship (2002-04), Donald Peer (2004-06), Betty Sutherland (2006-08 and 2010-11), Bob O'Boyle (2008-10), Paul Keizer (2011-13), Mike Hughes (2013-15), Michael Murphy (2015-17), Claudia Currie (2017-2018)

#### **Membership Information**

Access to our registration form and info at http://bedfordbasin.ca/join.php

Or

Email bio.oceans@gmail.com - request details to become an OA Member

Association Mailing address: Bedford Institute of Oceanography, P.O. Box 1006, Dartmouth, NS B2Y 4A2. Email address: oanewslettereditor@gmail.com