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BIO-OCEANS ASSOCIATION NEWSLETTER

Issue 33, January 2007

Contents:

From the President

By the time you read this, the Christmas season will have passed into history. I do hope that all of you had a very happy time during the holidays, with family and friends and good food and drink.

I am delighted to inform you that the BIO senior administration has approved in principle the BIO-OA's Ocean Outreach Initiative and has given their blessing to the development of a pilot project. Your Executive will be spending much of January determining where we go from here. On a related note, George Fowler has agreed to be the Association's representative on the Exhibits Subcommittee for the BIO Open House tentatively slated for October 2008, and we hope that he will be able to provide us with further ideas of displays that could be incorporated into the project.

On a less serious note, BIO-OA members enjoyed two very successful social/educational events during the autumn. As expected, Keith and Carol Manchester proved to be excellent guides as a group of us toured the Shubenacadie Canal system on a glorious day in October 2006. Then, on 23 November 2006, close to 50 people, including some members of the general public, heard Janet Kitz talk about the Halifax Explosion, with technical assistance from Gordon Fader who had helped her convert her slides into a PowerPoint presentation. Many thanks, Gordon.

Yet more events are planned for the winter and spring 2007:

- George Anderson has arranged for BIO-OA members and their friends to spend the evening of Wednesday, 31 January at the Newfoundland Club in Dartmouth (see page 10 for details).
- Our exciting spring celebration and seminar will take place at BIO on Sunday afternoon, 25 March (see page 11 for details).
- On 15 March, the Association will co-sponsor a public lecture by Dr. Brian Atwater of the US Geological Survey who will be talking about *The Orphan Tsunami of 1700: A Trans-Pacific Detective Story*. Details will be e-mailed to members as they become known.
- Finally, we are hoping to organize a tour of Georges Island for sometime during June when there is at least the possibility of good weather.

Clearly, lots of activities are underway. Please join us and bring family members and friends. Everyone is welcome.

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— Betty Sutherland

Beluga Award 2007

It is appropriate to remind members that we are soliciting new nominations for the 2007 Beluga Award that will be made in May of this year. In order to make the nomination process clear, we are republishing the criteria and the general guidelines for making the nomination.

The BIO-Oceans Association Beluga Award is intended to recognize past and present staff members of the Bedford Institute of Oceanography who have exhibited unselfish dedication to community spirit. The award is for an individual in any professional or technical field, craft, or skill who has made exceptional contributions to the success of projects, initiatives, or programs, and whose contributions exemplify unselfish effort that encourages cooperation and fosters teamwork.

Any individual or group may make a nomination of candidates for the Beluga Award. Nominations should be prepared using the general guidelines listed below. Nominations must be sent to Dale Buckley (Chair, Beluga Award Committee), 21 Dumbarton Avenue, Dartmouth, NS B2X 1Z7, or by email to dbuckley@ns.sympatico.ca. Nominations must be received by Thursday, 15 February 2007. Note that candidates may be re-nominated in successive years.

In order to provide the Beluga Award Committee with sufficient information to make a selection of a successful candidate, please provide the following:

1. Name of candidate, home address, and telephone number.
2. A brief history of the nominee's association with BIO, including areas of specialization and organizational units in which the nominee has worked.
3. Examples of the candidate's spirit of cooperation within the institute, illustrating diversity of activities and specific contributions to the oceanographic community.
4. Examples of projects and initiatives undertaken by the candidate that were successful due to exceptional efforts by the candidate.
5. The nomination may be supported by letters or citations from any source that confirm the candidate's suitability.

This will be our seventh Beluga Award and it is with a great deal of pride that we note that the recipients represent a wide variety of skills and occupations. We note that most of the nominations were initiated by staff members who were not members of BIO-OA. We urge members to become more active in initiating nominations or supporting groups who are preparing nominations.

Stolen Ship Model Recovered After 20 Years

Donald Gordon

In September 1968, as I was completing my PhD in oceanography at Dalhousie University, I wanted to give my supervisor, Gordon Riley, a special gift for his excellent counsel and guidance. I decided to make a half model of the R.V. *Atlantis,* a 142′ steel-hulled double-ended ketch built in 1930 that was the first research vessel acquired by the Woods Hole Oceanographic Institution in Massachusetts. Gordon had spent a lot of time on the vessel conducting oceanographic research; my own first oceanographic cruise took place aboard her in 1962.

I got the lines of the *Atlantis* from my friend Redwood Wright at Woods Hole and made the half model while writing my thesis. I presented it to Gordon Riley immediately after my thesis defence. Gordon, who was the Director of the Institute of Oceanography, hung the model in his office at Dalhousie and then in his home when he retired.

After he died in 1985, his wife Lucy suggested that we move it to her cottage. Soon after this was done, there was a break-in and the model was stolen. The theft was reported to the RCMP, but the model was never recovered. We thought it was gone forever.

But, in September 2006, just after my wife and I had visited Woods Hole in fact, our good friend Sifford Pearre called to say that he had just seen what looked like the stolen half model for sale on eBay! I could not believe it. I immediately logged on and sure enough there it was - one of almost a thousand ship models for sale. From its photo and distinctive size and shape, it was very easy for me to identify. I immediately called the RCMP. I then

← *The lost is found: Don Gordon holding the model.*

contacted eBay to let them know that they had listed a stolen item. They replied that they could not investigate further unless contacted by a law enforcement agency. So, I got back in touch with the RCMP. Bidding was due to close in a few days so we had to act quickly!

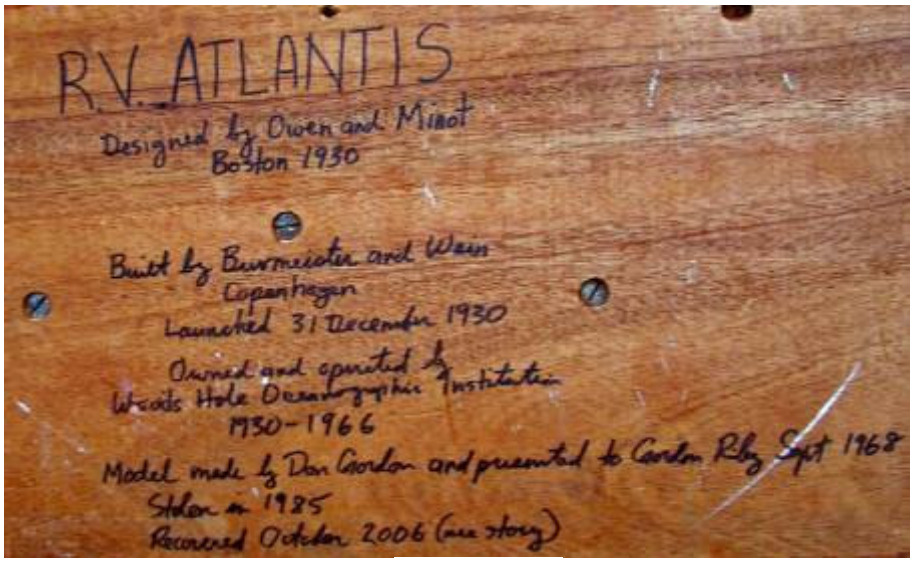
I drove out to the Tantallon RCMP Detachment to file a statement. The constable handling the case was forthright in telling me that it was unlikely that much could be done. Nevertheless, she dutifully collected the evidence and prepared a handwritten statement for me to sign. I made it clear that my interest was in getting the model back if at all possible, not in finding out who was responsible for the original theft. She said she would pursue the case as time allowed and we agreed that it could be useful if I contacted the seller directly through eBay. We knew he lived somewhere in Canada.

I sent the seller an email just as bids were approaching $500 US. I said that the model *w*as stolen property, and that the RCMP was investigating. I also gave my name and phone number. Within the hour, the phone rang. It was the seller, a Brad Atwood, who lived on Pleasant Street in Dartmouth, not far from our house! He had bought the model in June at Value Village on Canal Street for $25.

As soon as Brad got my message, he withdrew the model from eBay. He was amazed to hear my story and wanted to return the model to me without question. Early the next morning, I went over to his house to pick it up. I gave him $25 to cover his original purchase price as well as a bottle of Mount Gay rum, Gordon Riley's favourite. As soon as I got home, I contacted both eBay and the RCMP to tell them that the case was closed. Finally, I called Lucy Riley to tell her that the long lost model had been recovered.

My wife and I are left to wonder what adventures the model had in the 21 years it was missing. It probably stayed in the Metro Area and passed through numerous yard sales and flea markets before ending up in Value Village. It was quite a coincidence that our friend Sifford spotted the model on eBay just after we returned from a visit to Woods Hole Oceanographic Institution. And we were lucky that Brad Atwood was so understanding and just lived around the corner.

The inscription on the back of the ship model. ↓



Noteworthy Reads: BOOK REVIEWS IN BRIEF

David N. Nettleship, Book Review Editor

The ***Noteworthy Reads*** section is an effort by the BIO-OA to produce a representative list of recent noteworthy book publications related to the marine sciences and other subjects of general interest. The listing is not intended to be comprehensive or complete, but merely an attempt to highlight a number of 'good reads' that may be of interest to OA members and associates. Most books listed are available at local bookstores and HRM libraries. Book prices are regular retail in Canadian funds, but discounts of 20-30% are normally available on line at: e.g., amazon.ca or chapters.indigo.ca. Contributions of book reviews to 'Noteworthy Reads' are welcome – send via e-mail to David Nettleship: dnnlundy@navnet.net (phone: 902-826-2360).

SPECIAL PUBLICATION: THE OCEANS: FASCINATION AND INTRIGUE

Frances, Peter and A.G. Guerrero, eds. 2006. Ocean: The World's Last Wilderness Revealed. Dorling Kinderley (DK Publishing), New York, NY. 512 pp. Hardcover, $65.00 (ISBN 0756622050). – Here is a visual feast of ocean waters in all their structural and functional diversity and intrigue. The hundreds of colour illustrations capture one's attention immediately, but it is the text that delivers the 'meat' of the story of the blue planet. The work, commissioned and coordinated by the American Museum of Natural History, starts with a photographic essay that celebrates the drama and beauty of the oceans. The remainder is divided into four main parts: an 'Introduction' that sets the stage by providing a succinct and informative review of ocean water, physical and chemical oceanography, ocean geology, circulation and climate, tides and waves, followed by three other sections: 'Ocean Environments' (description of key zones and features), 'Ocean Life' (overview of marine life followed by profiles of individual species), and 'Atlas of the Oceans' (bathymetric maps of the world's oceans, detailed maps of major seas). It is the structure and integration of these four parts along with an outstanding visual presentation of facts and their interpretation that distinguishes this work from others focused on the subject for the general public. This overview of the earth's oceans and marine life will captivate and hold the attention of all readers, from the layperson (young and old) to the professional marine scientist – truly "something for everyone"! Overall, a comprehensive and highly illustrated guide to all aspects of the oceans of the world.

GENERAL REVIEWS

Bartlett, Robert A. 2006. The Log of Bob Bartlett: The True Story of Forty Years of Seafaring and Exploration. Flanker Press, St. John's, NF. 318 pp. Softcover, $16.95 (ISBN 189731700X). – Go back in time with Captain Bartlett and share his amazing exploits in Arctic America, Newfoundland and Labrador, and adjacent coldwater regions. The Log, first published in 1928, details his many voyages including his two most historic feats – with Robert E. Peary part way to the North Pole in 1908-09 and with the Canadian Arctic Expedition 1913-18 under Vilhjalmur Stefansson in the western Arctic as commander of the 'Karluk' on her final voyage– and in subsequent years sailing his schooner 'Effie M. Morrissey' in Greenland and Canadian arctic waters, mostly for many science institutions and researchers. This record provides information not widely known about those experiences and the many others accumulated during his 40 years of marine adventures. A captivating read, and an invaluable log to be read and reread! Good to see the book re-issued once again to enhance its availability.

Browne, Janet. 2006. Darwin's Origin of Species: A Biography. Douglas & McIntyre, Vancouver, BC. 174 pp. Hardcover, $22.95 (ISBN 1553652487). – This volume, one of the first of a new series of small exploratory books focused on "Books that Shook the World", by Janet Browne, renown biographer of Charles Darwin through her acclaimed 2-volume work: 1995 ('Voyaging') and 2003 ('The Power of Place'), provides a succinct and moving introduction to Darwin and his 'The Origin of Species', published in 1859. The account of Darwin's two-decade delay in publication owing to the explosive effect he felt the book and its teachings would have on religion and religious belief makes for gripping reading, as does the outline of what actually followed after its publication. Browne's short summary of Darwin the man and the impact of his ideas on humanity to this day successfully meets the primary objective of the series. Clearly, this book provides an easy way into the subject of biological evolution and allows the reader to "absorb big ideas" in a short period of time.

Burger, Joanna. 2006. Birds: A Visual Guide. Firefly Books, Buffalo, NY. 304 pp. Hardcover, $29.95 (ISBN 9781554071777). – Here is a splendid introduction to birds and their wonders. Featuring hundreds of striking colour photographs and a concise text, avian scientist and teacher Joanna Burger presents full details of bird biology and ecology, behaviour, and evolution. The book covers a vast range of information on birds, from details of avian families and individual species, to major subjects including the mechanics of flight, avian migration across continents and oceans, feather structure and adaptations for an aerial existence, as well as the historical role of birds in the arts and literature. This is a definitive reference for avian information, a sourcebook that no one with an interest in birds should be without.

Chartland, René, Keith Durham, Mark Harrison, and Ian Heath. 2006. The Vikings: Voyagers of Discovery and Plunder. Osprey Publishing, New York, NY. 208 pp. Hardcover, $34.95 (ISBN 1846030870). – Want a gorgeous illustrated history of the Vikings to add to your Norse collection? 'The Vikings' treats us not only to a rich illustrated account of this legendary culture, but also to a succinct and captivating review of the evolution of the Viking Age (c. 790 to 1070 AD) and all its consequences. It traces the Vikings' campaigns of conquest and colonization, made possible by major social and technological developments including a population explosion in Scandinavia and advances in maritime knowledge and shipbuilding. Although ferocious sea conquerors of lands near and far, the Vikings were also innovative as farmers, fishermen, merchants, craftsmen and carpenters. The authors showcase many Viking artifacts in glorious colour photos that display the non-military talents of the fierce men of the north. Altogether, the book provides a magnificent look at a unique group of people that changed European history and discovered the 'New World' half a millennium before Columbus!

De Roy, Tui and Mark Jones. 2006. New Zealand: A Natural History. Firefly Books, New York, NY. 160 pp. Hardcover, $40.00 (ISBN 1554071968). – Here is a book that truly reveals the beauty and remarkable wildlife of a remote, southern land. Without question, New Zealand is a place of living wonders, exotic and alluring species, many endangered. The authors combine a rich text with over 300 colour photographs to describe the unique nature of New Zealand's exotic flora and fauna, and its many "evolutionary oddities". De Roy and Jones have produced an outstanding visual feast of the islands' wildlife and their habitats. The aim to inform the reader of the region's biological richness and the need for major conservation effort is achieved.

Hollenburg, Martin J. 2006. Marco Polo: The Story of the Fastest Clipper. Nimbus Publishing, Halifax, NS. 154 pp. Softcover, $19.95, (ISBN 1551095653). – If you're looking for an adventurous sea-story about sailing and tall ships, go no farther! 'Marco Polo' is an engaging account, told by a grand storyteller, from the vessel's birth and christening in New Brunswick through its adventures en route to becoming one of the most famous clipper ships of all time. The book is a good read, and provides a means for the landlocked sailor to get out to sea during the winter senescence.

Lovelock, James. 2006. The Revenge of Gaia: Earth's Climate Crisis & the Fate of Humanity. Basic Books, New York, NY. 176 pp. Hardcover, $28.50 (ISBN 046504168X). – When James Lovelock, the originator of Gaia theory, issues a warning as blunt as the one given here – impending disaster by changing the environment through human activity – it would be wise to listen and pay heed. Lovelock's message is clear: "We are now so abusing the Earth that it may rise and move back to the hot state it was in 55 million years ago, and if it does most of us, and our descendants will die." The combination of a sun whose intensity is slowly increasing and an atmosphere whose greenhouse gases have recently spiked will result in drastic global warming that will leave the tropics uninhabitable and alter human demography. Lovelock goes on to describe the stress of our planetary system, how humans are contributing to it, and what must be done immediately to help rescue it. Few of us are as familiar with our planet as James Lovelock, and to ignore the trove of insights presented in 'The Revenge of Gaia' would be foolhardy indeed.

Monbiot, George. 2006. Heat: How to Stop the Planet from Burning. Doubleday Canada (Random House), Toronto, Ontario. 277 pp. Hardcover, $29.95 (ISBN 0385662215). – Here is another book on climate change and factors responsible. George Monbiot, a radical thinker and environmental activist who has won the UN Global 500 award for outstanding environmental achievement, explores how we can reduce carbon emissions by 2030 and by doing so, reduce or at least stabilize the heat buildup of the planet. The intent of this book as identified by the author is to stir up attention and encourage people to change their life styles and to force their governments into action. In this Canadian edition, Stephen Harper and environment minister Rona Ambrose are taken to task for killing the Kyoto initiative and offering little as a meaningful alternative including the shameful 'Clean Air Act'. Many other politicians are also chastised for their inactivity on the climate change issue, as are the rest of us owing to our fossil fuel addiction. Overall, an important and worthwhile read that may cause even the most ardent denier of global warming to do some serious thinking and, in the end, to force our governments to commit to stopping climate change caused by human activity. [A great companion to Al Gore's 'An Inconvenient Truth' (see review, BIO-OA Newsletter Issue 32, October 2006.)]

Mowat, Farley. 2006. Bay of Spirits: A Love Story. McClelland & Stewart, Toronto, Ontario. 320 pp. Hardcover, $34.99 (ISBN 0771065388). – This beautiful memoir by Farley Mowat, Canada's premier raconteur and storyteller, takes us back in time to the outports of Newfoundland in the years after the island joined Canada in 1949. This was the period when Joey Smallwood initiated his 'resettlement program' to provide a better future for all Newfoundlanders. Mowat revisits the outports of the time and recounts one nautical adventure after another experienced during this tumultuous period of cultural change. His descriptions of the ever-industrious 'baymen' are written with great clarity and compassion, as is his concern for the conservation and protection of marine mammals and other marine animals. The book is also the story of human relationships and love, a vivid picture of Mowat's love for his wife, Claire. This is a book that any fan of Farley Mowat must have, and an account that will move the hearts and minds of all readers.

Ruse, Michael. 2006. Darwinism and Its Discontents. Cambridge University Press, Cambridge, UK. 326 pp. Hardcover, $34.95 (ISBN 052182947X). – Want to get a clear account of Darwinian evolution and the state of evolutionary thinking today? If you do, join evolutionary historian and philosopher Michael Ruse as he reviews things Darwinian and assesses the merit of the many criticisms made of Darwinism from its conception to this day. This book accomplishes three major things. First, it provides an outstanding primer on the tenets of Darwinian evolution. Second, it provides a thorough examination of the key arguments put forward by a wide range of evolution critics. And lastly, it shows how these criticisms fail to offset the essential correctness of Charles Darwin's thinking as presented in 'The Origin of Species' in 1859. Ruse's review is unfailingly honest, and is unique in the combination and application of knowledge of evolutionary principles, the history of science, philosophy, and theology.

Streeter, Michael. 2006. The Mediterranean: Cradle of European Culture. New Holland Publishers, London, UK. 240 pp. Hardcover, $67.00 (ISBN 1845371925). – This lavishly illustrated work chronicles the history of the Mediterranean region, its natural features, diversity of peoples, languages and cultures through time. The book is divided into five chapters. The first describes the natural life of the region bordering Europe, Africa and Asia. The political and military history is then reviewed, followed by a careful analysis of Mediterranean artists and intellectuals including Socrates, Plato, and other Greek philosophers. The final two chapters describe the history of exploration and technological innovation in the region, and the belief systems that have dominated the region. In total, Streeter shows us how the glories of the region's past have helped make Europe and the world what they are today.

Ward, Peter D. 2006. Out of Thin Air: Dinosaurs, Birds, and Earth's Ancient Atmosphere. Joseph Henry Press, Wahington, DC. 276 pp. Hardcover, $31.50 (ISBN 0309100615). – This book presents a bold new hypothesis to explain why dinosaurs weathered several mass extinctions that doomed many other animal groups during their 180-million-year-long reign: oxygen depletion as the key. Ward argues that dinosaurs and their avian descendants responded to a major global drop in oxygen levels 175 to 275 million years ago by the development of a new kind of respiratory system. This adaptation provided a competitive edge over many other animals, particularly during the Triassic-Jurassic extinction event, a low-oxygen period that dinosaurs successfully survived. Ward uses the dinosaur example along with others to draw the conclusion: "The history of atmospheric and oceanic oxygen levels through time has been the most important factor in determining the nature of animal life on Earth – its morphology and basic body plans, physiology, evolutionary history, and diversity." 'Out of Thin Air' offers a new look at the role oxygen has had in shaping life – a stimulating and exciting read.

On the Lighter Side

A woman brought a very limp duck into a veterinary surgeon's office. As she lay her pet on the table, the vet pulled out his stethoscope and listened to the bird's chest.

After a moment or two, the vet shook his head sadly and said, "I'm so sorry, your duck Cuddles has passed away."

The distressed owner wailed, "Are you sure?

"Yes, I am sure. The duck is dead," he replied.

"How can you be so sure," she protested. "I mean, you haven't done any testing on him or anything. He just might be in a coma."

The vet rolled his eyes, turned around, left the room, and returned a few moments later with a black Labrador Retriever.

As the duck's owner looked on in amazement, the dog stood on his hind legs, put his front paws on the examination table, and sniffed the duck from top to bottom. He then looked at the vet with sad eyes and shook his head.

The vet patted the dog, escorted it out the door, and returned a few moments later with a cat.

The cat jumped up on the table and also sniffed intently at the bird from head to foot. The cat then sat back on its haunches, shook its head, meowed softly, and strolled out of the room. The vet looked at the woman and said, "I'm sorry, but as I said, this is most definitely a 100% dead duck."

The vet then turned his attention to a microcomputer. He entered some data, hit a few keys, and produced a bill, which he handed to the woman.

The duck's owner, still in shock, took the bill.

"$150!" she exclaimed. "You want $150 just to tell me my duck is dead?"

The vet shrugged. "I'm sorry, but if you had taken my word for it, the bill would have been $20. Now, with both a Lab Report and a Cat Scan, it's $150!"

Shubenacadie Canal Trip

D.L. McKeown

On 25 October 2006, Keith Manchester and Mike Hughes led about 15 members of the BIO-OA on an excellent tour of the Shubenacadie Canal system. The event started at the site of the old Starr Manufacturing Plant in downtown Dartmouth where we met up with our tour guide for the morning phase, Bernie Hart. He explained that initially there were a series of locks at this location to raise vessels from Halifax Harbour up to Sullivan's Pond before these locks were replaced by an inclined plane. Remnants of the turbine shaft that

powered this latter device still exist, but are temporarily buried to protect the structure. The Canal Commission hopes to eventually excavate the shaft and create a park on the site.

We then moved on to the beautifully restored lock at Sullivan's Pond. Much to my embarrassment I had to admit that I had never taken the time to stop here to look at it, but I felt somewhat better when Gordon Fader, a lifelong resident of Halifax, admitted he hadn't either. Next was a welcome stop at the Fairbanks Centre in Shubie Park where we warmed up with hot coffee while Bernie provided a brief lecture and slide show outlining the history, geography, and engineering details of the canal system. If you, like myself, have never visited this Centre and its adjacent locks, I urge you to do so as it is not only very informative but also a very attractive setting.

After a short stop at Portobello to view the location of the second inclined plane on the system, Bernie left us and Keith and Mike took over guide duties. Our first stop under their direction was a very congenial lunch at the Inn on the Lake followed by a visit to lock 4 at the north end of Fletcher Drive. We then went on to lock 5 at Wellington. To my mind this was the most attractive location of the tour and Carol and I plan to return here with our kayak and a picnic lunch next summer. The final stop was at lock 6 in Enfield. Very little remains of this lock but there is a very pleasant trail through the woods that crosses several Manchester-Hughes bridges.

I know I am speaking on behalf of all participants when I say thank you to Keith and Mike for a very enjoyable outing. [Anyone wanting to trace our route on their own can contact me for a series of maps showing the location of the sites we visited and the recommended parking area adjacent to each.]

Benthic Habitat Studies: An Engineer's Perspective – Part V

David McKeown

We finished our Grand Banks trawl impact project in 1995 and used the 1996 ship time allocation to find a suitable site for a follow-on experiment on the Scotian Shelf. We chose an area on Western Bank with a gravel bottom in contrast to the sandy bottom of the Grand Banks site and began work there in 1997. By this time Terry Rowell had retired and Don Gordon took over leadership of the program. As with the Grand Banks experiment, we had both a trawled and an adjacent undisturbed area that was surveyed before and after trawling using sidescan, Campod, Video Grab, and BRUTIV. In marked contrast to the Grand Banks experiment, the fish density was so high here that our new trawled area was much smaller and, after about half the planned passes with the trawl, the cod end of the net was left open to allow the unwanted fish to escape.

By 1998, CCGS *Parizeau* had been removed from the list of active science vessels so we moved to CCGS *Hudson* for year two of our Western Bank trawl impact project. The move from a small to large research vessel resulted in some very positive changes in addition to the obvious ones of more workspace and greater sea keeping comfort. First, we were able to carry a substantially larger staff so operations changed from a 24/7 work/eat/sleep cycle to a more relaxed one where there was actually time to read, watch satellite TV, etc. The second notable change was the ability to invite a number of university students to join us. For most of them, it was a new experience and for some probably one that might never be repeated. For us, their enthusiasm, wonder, and excitement about what was being done and what could be learned about the seafloor reminded us jaded "old hands" of our early seagoing days. Thirdly, it gave us the opportunity to invite along scientific staff from DFO in Ottawa so that they could see first-hand the activities that they were being asked to champion on our behalf.

In addition to the trawl gear study, Dale Roddick and Kent Gilkinson initiated another study on Banquereau that year. Two companies had licenses to harvest surf clams there. These were being processed and fresh frozen at sea then shipped to Japan. Each harvesting vessel towed a pair of hydraulic dredges consisting of large steel mesh baskets with a row of water jets arranged across the mouths. Water under high pressure would be pumped down to and out these nozzles to liquefy the sand thus freeing up the clams that would then be captured in the baskets. During the bottom disturbance phase of the investigation, Dale, Kent and several other staff members transferred onto the *Atlantic Pursuit*, the clamming vessel that was assisting us in order to sample the catch. At the conclusion of the dredging operation they returned to CCGS *Hudson* with several pounds of surf clams. The next day, the cooks incorporated these into a clam chowder. If you have never had surf clam chowder, you can duplicate the recipe by making up a chowder base then adding the fingers from orange coloured rubber gloves. The Japanese must have a method of preparation that our cooks were not privy to.

At the completion of the clam dredging work we headed to Louisbourg for a staff change prior to the second leg of the cruise. On the way, Gordon Fader carried out a sidescan survey of the freighter M/V *Flare* at the request of the Transportation Safety Board. This ship had sunk off Cape Breton the previous winter. The plan was to do several passes by the wreck, each time moving the sidescan fish a little closer. The first pass went as planned. On the second one, Gordon suddenly realized that we were about to pass directly over the wreck so he began to furiously haul in the tow fish. Meanwhile, the Captain who had been watching proceedings in the lab, stepped out onto the starboard side and saw the upper ends of several large mooring hawsers floating past the ship. He shot back into the lab, ordered us to get the gear on board and told the ship to immediately get underway for Louisburg. Thus ended our M/V *Flare* survey!

The entry into Louisbourg Harbour on a fine, sunny morning was very dramatic. There were rocky shoals close by on either side of the vessel as we approached and ahead of us we could see the mighty fortress of Louisbourg. This must have seemed a very formidable objective to any enemy sailing vessel in by-gone days. As soon as we anchored, the local Coast Guard Search and Rescue (SAR) boat came alongside with the first group of staff who were to join us for the second leg of the cruise to Hibernia. We had several hours of shore leave while staff and equipment were ferried to and fro. The SAR people took several of us for high-speed rides about the harbour.

While *Hudson* is a grand vessel, it is getting on in years so, for some time, we had been pressing Ottawa to begin design and con-

struction of a replacement vessel. When the Coast Guard took over responsibility for the operation of the department's science vessels, they decided that the solution would be to convert one of their large, offshore buoy tenders, the CCGS *Sir Edward Cornwallis*, to an oceanographic research vessel. Ron Grady, CCG Technical Services in Ottawa, was placed in charge of the design project. In order to better acquaint him with our needs, I had invited him to participate in the second leg of the cruise and he was one of those who joined us in Louisbourg. Little did I know that this innocent invitation would lead to a near-death experience for me. A few days after Ron came on board, the Chief Engineer decided to show him how the main sounding ram in the vessel was constructed. To access it, they removed the circular hatch in the floor of the Officer's Pantry and descended into the compartment below without putting up any barriers or warning signs. Soon after that, I wandered into the pantry to get coffee and dropped feet first into the hole. Fortunately I caught the rim of the hole with my elbows as I fell through; otherwise I would have been impaled on the ram but I did incur some serious damage to my lower leg. I was able to crawl out onto the deck and into my nearby cabin where I passed out. I awoke to find two very large (250 lb, 6'6") emergency medical crewmembers, Dave Boyd and Greg McClellan, plus their extensive first-aid gear jammed into my tiny cabin administering to me. Their skill at caring for my injuries was amazing. Ever after, I have referred to them as the 'gentle giants'.

I'll close this account by relating an event that actually occurred three years earlier at Hibernia, but one I forgot about until now. One of our activities there involved lowering the Campod to observe the sea floor every two hours over a twenty-four hour cycle. On my first solo lowering just before dawn the day after Kelly Bentham trained me, I carefully lowered the Campod with the lights on so that I could make a gentle landing when the sandy bottom came into sight. Instead of sand, what I saw was a withering mass of sandlance, a vision straight out of an Indiana Jones movie. My startled shout over the intercom brought most of the deck crew running into the lab to look. Of equal interest was the next lowering, two hours later after the sun had come up. When I commented that not a sand lance was to be seen, Kevin MacIsaac told me to look carefully at the bottom and I saw hundreds of pairs of tiny black eyes poking out of the sand. You need only watch these fish dive headfirst and disappear into the sand without the slightest effort to realize why they are called sandlance. They are just one of the many curious creatures in the ocean.

More Nova Scotian Students Needed

Ron Macnab

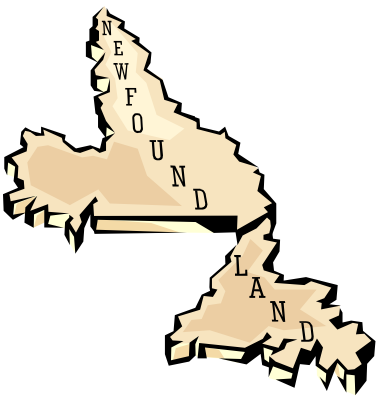
While attending a recent Board of Directors meeting at the Canadian Polar Commission, I had occasion to receive a briefing from Geoff Green, the Canadian founder and director of "Students on Ice Expeditions". This organization enables groups of young people to visit the Arctic and the Antarctic, and to become acquainted with the geographical significance of these regions. Its informative website at www.studentsonice.com outlines a wide range of activities, and explains how to apply. *Students on Ice* will be organizing nine special IPY Arctic and Antarctic expeditions between 2007-2009 that will give a once-in-a-lifetime opportunity to over 500 youth to explore the Polar regions!

Among other things, Geoff informed me that Canadian students are well represented among the groups that travel to the North and to the South, but Nova Scotians tend to be underrepresented in comparison with participants from other parts of the country. He assured me that *Students on Ice* would welcome more 'Bluenose' applicants.

It occurred to me that members of the BIO - Oceans Association could help spread the word about this program; many worked in Canada's northern regions during the course of their careers, and the enthusiasm that they experienced at the time remains undiminished. Also, many are no doubt in regular contact with younger persons (nieces, nephews, grandchildren, etc.) who meet the eligibility requirements for *Students on Ice*, i.e., age 14-19, currently attending high school or university.

By introducing these young people to the program and by encouraging them to apply, Association members would not only develop a new outlet for their polar enthusiasms, but they could also contribute to the nurturing of a new generation of polar investigators. Such an outcome would be a fitting personal legacy of *The International Polar Year*, a large scientific program focused on the Arctic and the Antarctic from March 2007 to March 2009.

AN EVENING AT THE NEWFOUNDLAND CLUB



George Anderson invites all members to a night of fun and friendship at the *Newfoundland Club*. The club's normal cover charge will be waived for members and any of their friends – the only requirement is to simply identify yourself as "from BIO" at the door.

The evening's entertainment will be provided by Newfie George and up to 10 lucky guests will have an opportunity to "Kiss the Cod" and be formally inducted into the venerable "Order of the Codfish". There is a full bar and one of Metro's largest dance floors at the Newfoundland Club. Complimentary home-made sandwiches and sweets will be served at 9:30 pm.

WHEN?

WEDNESDAY 31 JANUARY 2007
8:00 TO 11:00 P.M.

WHERE?

THE NEWFOUNDLAND CLUB
40 WRIGHT AVENUE, BURNSIDE
INDUSTRIAL PARK, DARTMOUTH, NS

Directions to the Newfoundland Club: Traveling from Bedford, take the first left on Windmill Road at Wright Ave. just past the cold beer store and, traveling from Dartmouth, turn right on Wright at the Irving station on Windmill. Watch for the "Newfoundland Club" sign just over the railroad tracks.

INTERIM FINANCIAL REPORT — 11 NOVEMBER TO 27 DECEMBER 2006

B. REINIGER, TREASURER

OPERATING FUND		FOUNDATION FUND	
Opening bank balance — 11 November 2006	$115.82	*Opening bank balance — 11 November 2006*	$75.14
➤ Income from fees	70.00	➤ Bank interest	0.01
➤ Bank interest	0.01	*Closing bank balance — 27 December 2006*	$75.15
➤ Transfer from the ING Account	140.00		
➤ Expenses (see note on Expenses below)	(48.93)		
➤ Bank charges	(0.85)		
Closing bank balance — 27 December 2006	$276.05		
➤ Expenses 1) Social — Talk	48.93		
ING account *opening balance — 11 November 2006*	5905.97		
➤ Interest	16.79		
➤ Transfer from the ING Account	(140.00)		
Closing bank balance — 27 December 2006	$5782.76		

BIO-OA "SPRING CELEBRATION & SPECIAL SEMINAR

OPEN TO BIO-OA MEMBERS & THE GENERAL PUBLIC

For All Enthusiasts of the Sea & Marine Life

Main Auditorium
Bedford Institute of Oceanography
1 Challenger Drive, Dartmouth, NS

Sunday, 25 March 2007 (2:00 PM)

Nova Scotia Lighthouses: Guideposts of the Sea

Speaker: Chris Mills

Author, Photographer, Broadcaster, & Lighthouse Keeper

Chris Mills, former lighthouse keeper and author, takes us on a tour of local Nova Scotian lights such as Sambro and Cross Island and relates the experience of lightkeeping families from the late 19th century to the profession's dying days in the early 1990s. His lightkeeping experience from 1989 to 1997 and 35-year love affair with lighthouses have produced lots of great sea stories and a wealth of stunning colour photographs of lighthouses and ocean waters on the east and west coasts of Canada. Chris Mills grew up in St. Margaret's Bay, studied at the University of Kings College (Halifax, NS) and Sterling University (Scotland, UK), and has written two books about his fascination with lighthouses entitled: "*Vanishing Lights*" (1992) and "*Lighthouse Legacies*" (2006). Come and join us for this enlightening presentation about lighthouses, their history, beauty, and service as aids to navigation and the people that operated them, as well as the associated romance of lights and the sea!

There will be time available, before (1:30– 2:00 pm) and after the lecture (3:00-4:00 pm), to talk to our guest speaker and ask specific and/or general questions.

For additional information call: David Nettleship (phone: 826-2360; e-mail: dnnlundy@navnet.net). There is a voluntary donation of $1.00 per person to help offset the costs of refreshments: juices, tea and coffee along with a selection of cookies.

WANTED — A NEW COMPILER/WRITER FOR THE "WHAT'S GOING ON" SUPPLEMENT

The "What's Going On" column of the newsletter first appeared in our January 2005 issue. This popular feature of the *BIO-OA Newsletter* provided a chronological list of some of the current and upcoming events in the Halifax Region over a 3-month period, a list that is not available anywhere else in a single document. The selected list gave key details on more than 70 local events of interest to our members. It was published as a newsletter supplement that could be readily extracted and put up in a convenient place at home for quick reference.

David Nettleship, who initiated and prepared the "What's Going On" column for two years, is now stepping down. WE WANT AND NEED A NEW COMPILER/WRITER TO CONTINUE THIS FEATURE COLUMN. David has established all the contacts and formats needed to make the job of preparing the column as straightforward as possible, and he will be freely available to help a new compiler/writer take over the column.

Please contact the editor [Mike Latrémouille; see contact info. below] if interested in helping out. We would be delighted to hear from you.

ABOUT THE ASSOCIATION

The Bedford Institute of Oceanography Oceans Association 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 $5.00 per year, $25.00 per half decade, or $100.00 for a lifetime membership.

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