

VOICEPIPE

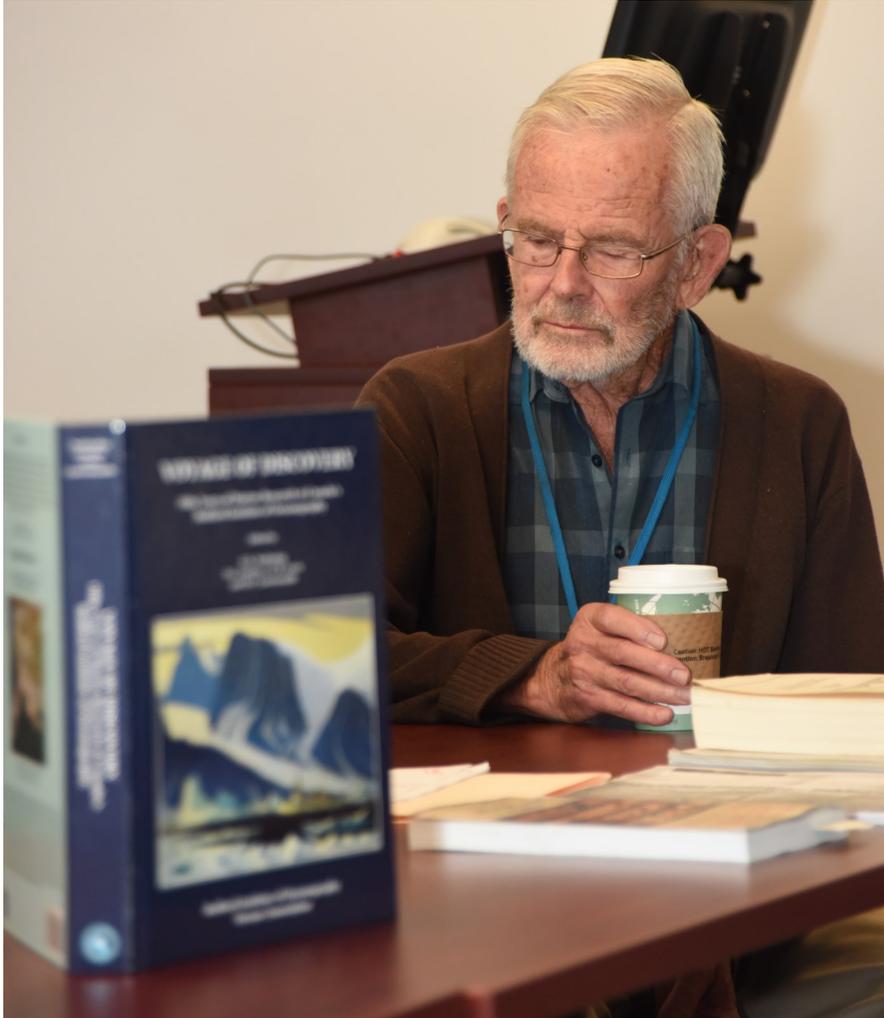
Issue 68

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The Newsletter of the BIO-Oceans Association



Celebrating Our Founding Scientific Leaders



Lloyd Dickie at the celebration with the ubiquitous 'Voyage of Discovery' in the foreground.

A gathering was held at BIO on 30 September 2015 to celebrate the 50th anniversary of the arrival of Bill Ford, Gordon Riley, and Lloyd Dickie to our local oceanographic community. Readers are reminded of the extensive article on the contributions of these individuals to our community in *Voice-Pipe* #67. Several dozen people from

BIO and Dalhousie University gathered and shared stories of these three influential individuals. Attendees included Lloyd Dickie, the only survivor of the three men, who described what conditions were like when he arrived in 1965. A good time was had by all and many memories were shared.

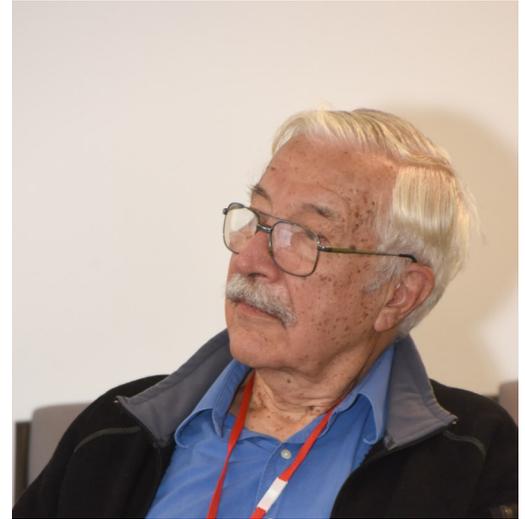
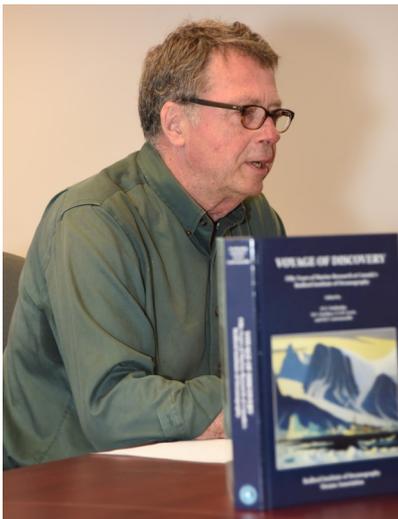
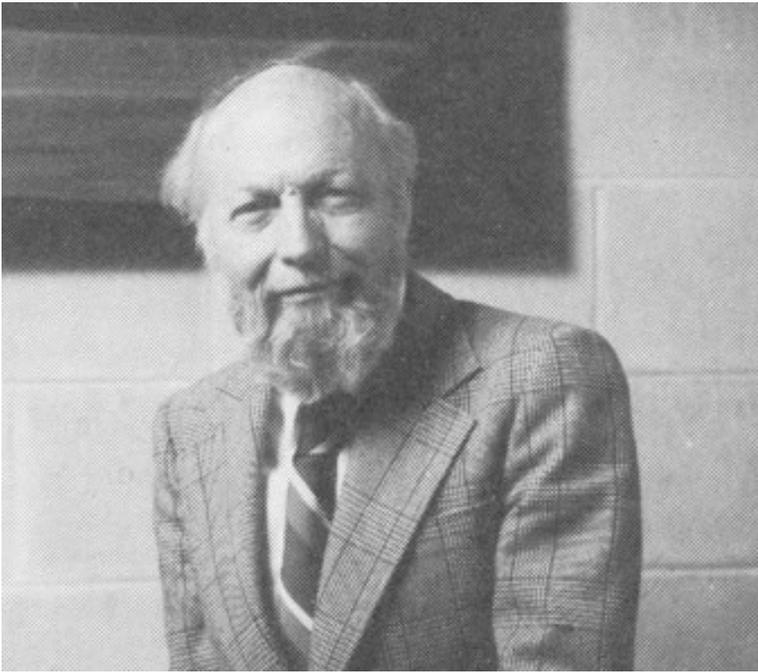
**2016 Beluga Award
Nominations deadline
1 March 2016
See Page 4**



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Photos: top: Gordon Riley (left); a younger Lloyd Dickie (right); middle row: participants in the celebration, Don Gordon (left), Keith Manchester (centre), and Bosko Loncarevic (right); bottom: Betty Sutherland (left) and Bob Fournier (right).

[Editor's note: A photo of Bill Ford is included in Dave Heffler's article *Sailing with Bill Ford* in this issue on page 8.]





FROM THE PRESIDENT

The Association had a busy fall and all indications are that this will continue into the spring as several new projects get underway. Before speaking about these, I would like to review some of our

activities from the fall. Over 30 members participated in the tour of the Shubenacadie Canal Greenway in downtown Dartmouth on 10 November. Thanks to Mike Hughes, our events coordinator, for organizing this tour and we look forward to other events he may be planning for this winter.

Iris Hardy continues to work on preserving the history of BIO. She has been examining appropriate ways to refurbish the Sable Island mural near the cafeteria, and has been trying to locate a ceremonial mask from Senegal that was formerly on display at the Coast Guard Base. If anyone has information on its location, please contact Iris.

The Beluga Award committee, headed by Penny Doherty, is moving forward with the call for nominations for the 2016 Award. Announcements will be posted through various venues (e.g., In the Loop, BIO distribution list) and there will be a poster campaign similar to last year. An initial ‘Who’s your beluga?’ poster has already been posted around BIO to get people thinking about nominations, with the deadline for nominations this year being 1 March 2016.

Sales of the ‘Voyage of Discovery’ (VOD) continue, especially as we have now established our presence on Amazon.com. We have to give many thanks to David Nettleship and his crew for their continued efforts to promote and sell this wonderful volume that details the history of science at BIO. At our November executive meeting, we presented Francis Kelly with a life membership in the OA as a token of our appreciation for conducting the final digital layout for the VOD with such commitment and to such a high quality.

David also has established a link with Geoforce Group Ltd. A number of us met with the owner, Graham Standen and marketing manager, Ulrich Lobsiger to review a proposal that highlights our ‘Voyage of Discovery’ book as part of an Institute for Ocean Research Enterprise (IORE) Connector event to be held later this year. Plans are for a short presentation on the VOD both to promote sales of the book and, more broadly, to highlight the utility of close collaboration between the marine industry and government science. Hopefully, these

lessons from the past will demonstrate an approach to acquiring new knowledge about the global ocean – theoretical and applied – that a new generation of ocean explorers will find attractive. Stay tuned for more details on this project.

At our October executive meeting, BIO-OA member Odette Murphy described the Maritime Museum of the Atlantic’s Hebridee II project to see if there are avenues for cooperation between the OA and the MMA. The Murphy family donated the Hebridee II, a wooden schooner, to the Museum in 2009. Built in 1953 and currently being restored, it is expected to be launched and ready to sail in 2017. The idea is to preserve it through use; it could be used as a platform for collaboration between the MMA and the BIO Oceans Association to demonstrate the use of oceanographic equipment on older boats or for observation science projects. There was general enthusiasm for the project and agreement that the OA should meet with the MMA to develop this project. Dave McKeown, Dick McDougall, and Tim Lambert volunteered to work on this project and met recently with the Museum to discuss the project and to look at ways to cooperate for this summer’s Oceans Day event in June. Again, stay tuned for more information as this project develops.

To conclude, I want to provide an update on the work of the review committee that I discussed in the last newsletter. The group has reviewed the mandate and activities of the OA and has submitted its report to the executive. There are many solid suggestions for renewing the organization, with an emphasis on how to expand our membership among sectors not traditionally represented in the OA and among the younger members of the BIO staff. The committee noted that many in the BIO community had little awareness of the OA and its work. The recommendations center on making the OA a more project-based, outward looking organization with a focus on the ocean sciences. We will be discussing this report at our January executive meeting to consider how best to meet the needs of present and future members. We will also post the review committee’s report on the OA website so all members can review and participate in the discussion around any proposed new directions for our organization. I welcome any comments from the membership on this topic.

Mike Murphy
President



Call for Nominations

2016 Beluga Recognition Award

The official call for nominations for the 2016 Beluga Recognition Award will close 1 March 2016, so please start thinking about deserving nominees and fill out your nomination forms. Nomination Forms can be found at <http://www.bio-oa.ca/beluga.php>

The 2015 Beluga Recognition Award recipient, Barry MacDonald, was an excellent example of an employee who continues to exhibit unselfish dedication to community spirit at BIO. The Award has a broad scope and recognizes individuals in any professional or technical field, craft or skill who have made exceptional contributions to the success of BIO projects, initiatives or programs. These contributions should exemplify unselfish effort that encourages cooperation and fosters the team-work approach of BIO. All present and past employees who work or have worked at BIO in any field or specialization are eligible. It is intended that this Award should recognize all professions including ship's crew, administrative personnel, technicians and scientists.

The Beluga Award Committee looks forward to receiving your nominations over the coming months. Nominations can be sent to Penny.Doherty@dfo-mpo.gc.ca.

One of the Grey Fleet Returns

by David McKeown

Late last November I was walking along the Halifax Harbour boardwalk and saw the *Leeway Odyssey* tied up at the Maritime Museum wharf. It looked familiar to me although I did not recognize the name. However, it did set me on a trip down memory lane.

When I arrived at BIO in 1968, most of us were employed either by the Department of Energy, Mines and Resources (DEMR) in the Atlantic Oceanographic Laboratory (AOL) or by the Fisheries Research Board (FRB) in the Marine Ecology Laboratory (MEL). There were six major research vessels at BIO at that time, CSS *Hudson*, CSS *Baffin*, CSS *Kapuskasing*, CSS *Acadia*, CSS *Maxwell*, and the newly arrived CSS *Dawson*. If my recollection of the colour scheme on these vessels is correct, the boot topping (the narrow band at the waterline) was green, the upper hulls and superstructures were painted white and the funnels, winches, etc. were a buff colour. Also, the CFAV *Sackville* operated out of BIO. This Canadian Navy Auxiliary vessel had a black hull and grey superstructure. In addition, the FRB operated the MV *E.E.Prince* which sometimes docked at BIO. This vessel had a black hull and white superstructure. At that time, the fisheries patrol vessels docked on the Halifax waterfront and were operated by the Department of Fisheries and were painted overall in a military grey.



The FPV *Cape Harrison* outfitted as the survey and research vessel CCGS *Louis M. Lauzier*. Photo: Shipspotting.com.

During the next two decades, all of us except the staff in Marine Geology and Marine Geophysics but including the ships moved through several departmental name changes finally ending up in the Department of Fisheries and Oceans. More recently, our research vessels were transferred to the Canadian Coast Guard and were repainted in the red and white colours of that fleet.



The *Leeway Odyssey* (formerly FPV *Cape Harrison*) tied up on the Halifax waterfront. Photo: with the permission of Mac Mackay.

By now you are wondering how this relates to the *Leeway Odyssey* and I am finally coming to that. When AOL became part of the Department of Environment, the fisheries patrol fleet was moved to BIO. These included the FPV *Cygnus* and FPV *Chebucto* which were fitted with cannons on the fore-deck. To differentiate

between them and our research vessels, we began to use the terms “grey fleet” for the former and “white fleet” for the latter.

In 1976 two new fisheries patrol vessels (sans cannons!), the FPV *Louisbourg* and the FPV *Cape Harrison*, were added to the “grey fleet” at BIO. These very “yachtie” looking vessels were built of aluminum by Breton Industry Ltd., Port Hawkesbury, Nova Scotia. According to an item I found on Mac Mackay's excellent website, (<http://shipfax.blogspot.ca/2015/11/leeway-odyssey.html>), the *Cape Harrison* was laid up in 1982 then in 1983 it was converted to a survey and research vessel by the addition of some lab space and more accommodation. A very good photo of her in this configuration can be found above and at <http://www.shipspotting.com/gallery/photo.php?lid=109885>. After some years working in the St. Lawrence River and Great Lakes she was chartered by Memorial University of Newfoundland from 1998 to 2005. She was then returned to the Canadian Coast Guard for use as a patrol vessel until 2014. In 2015 she was sold to Leeway Marine, a Halifax based marine service company who plan to offer it on charter as an oceanographic research and naval defense training platform. Thus, the name *Leeway Odessy*. Meanwhile, according to Mac Mackay's website, the *Louisbourg* continued service as a Canadian Coast Guard patrol vessel until 2013. It was then sold and has become the yacht *La Cristy*.

The BIO Christmas Party



Photos: clockwise from top left: Managers serve up the traditional chowder (from the left) Rhea King, Stephen Locke, and Mary-Lynn Dickson; the ‘spread’ of sandwiches, cheese and fruit laid out for the enjoyment of BIO staff and their families; two party goers enjoy the craft tables, and Gabrielle Tompkins-MacDonald and her son examine the whale exhibit.

Christmas Eve saw the staff and their family members gather in the seasonally decorated cafeteria and the auditorium at BIO for the annual Christmas party hosted by managers, unions, and the BIO Oceans Association.

Never wanting to miss a chance to sell a copy of the ‘Voyage of Discovery’, a sales table was set up by the front door. The traditional chowder was served along with a groaning board with trays of sandwiches, chees-



Photos: clockwise from top left: Former BIO-OA Event Coordinator and 2014 Beluga Award winner Claudia Currie (right) with Helen Haiden (left) and Murray Scitny (centre); BIO-OA members at the VOD sales desk (from the left) Philip Spencer, Nelly Koziel, Mike Lewis, and David Nettleship; Santa arrives in the BIO Auditorium; BIO staff and family in conversations in the cafeteria; and Santa invites future BIO staffers to share what they want from him for Christmas.

es, and fruit. Santa made an appearance in the auditorium. A long line of boys and girls were waiting to share their list of toys they wanted Santa to bring on Christmas morning and to attest to the fact they had been good. Craft activities had also been arranged for the children to enjoy. It appeared to your reporter that the party was remarkably similar to the ones his children used to attend, with young staff and children everywhere.

Sailing with Bill Ford

by Dave Heffler



William Livingstone Ford (1913-1992)

I worked at BIO from 1971, during the years that W. L. (Bill) Ford was director. Since I was in a lowly position, I did not have the opportunity to know him then. I worked for the Atlantic Geoscience Centre which was in a different federal department.

I met Bill at a party at Sheri and Vivian Shrivisava's home in 1981, several years after Bill's retirement from BIO. We talked about sailing, his 'Ontario 32', my experiences on my schooner, and as navigator on some ocean racing yachts. He seemed like a very friendly fellow. He said that I must come sailing with him but I didn't expect it to happen.

About a month later, on a Saturday in late September, or maybe in October, the phone rang with the message... "Hi, Bill Ford here. We are sailing tomorrow. Be at 9 Boulderwood at 1000 hours." I muttered "yes" to what seemed like a command.

I picked up a six pack and made a lunch. I arrived at his address and found his boat at the end of his dock on the

North West Arm, Halifax's sailing centre. Another young crew was putting on a smaller jib and Bill asked me to help him throw a second reef in the main. He thought it might be blowing hard outside the Arm. I thought this is going to be a boring sail with this timid old man—little did I know.

As we cleared Point Pleasant Park, I found that Bill had guessed correctly about the wind and had chosen the proper sails. There was one other boat outside and it was returning home. The wind was blowing up the harbour and we tacked out with head winds up to 45 knots and spray coming across the deck. Bill was in his glory. How he loved to be there on his trim little ship with a couple of able hands. And how I learned to love sailing with Bill.

We tacked out to the Neverfail Buoy and then Bill suggested running back in through The Passage. The Eastern Passage is an eastern route into Halifax on the other side of McNabs Island which most people do not do, even in calm weather. That day we surfed at up to 10 knots through the shallows. We anchored in the lee of the island and had our lunch. Bill then asked if we wanted to do it again. Of course we were up for it so we rounded the north end of McNabs and headed back out again. This time, as we rounded Neverfail, we ran back into the main channel and arrived off the lighthouse. Bill looked at his watch and said, "It's only 4:30, I was not planning to be back until 6." We came around and sheeted in for another beat out of the harbour which we had to ourselves that day. How wrong I was about a boring sail with a timid old man.

I became Bill's delivery crew. He would give me a call when he wanted to take the boat somewhere. His wife, Marjorie, would join him there. He had a custom of spending Thanksgiving at anchor with a couple of his friends in Rogue's Roost or Prospect. Bill and I would sail the boat around for an exciting late season sail and then Marjorie would arrive by car with the turkey. Nova Scotia cools off by mid October but the sea stays warm. I remember being anchored among the autumn colours and Bill checked the sea water temperature. The old ocean scientist did not lean over the rail. Instead he took his thermometer below and held it under the sea water spigot as he operated the foot pump in the galley. "17 degrees" he said. "That's warm enough", I said and jumped in to swim around the raft of three boats.

We sailed through the fog of the eastern shore of Nova Scotia before GPS, when Loran C was the latest option. Once we sailed in thick fog into Ship Harbour and could

not find the harbour buoy, but we could see the backs of breakers on an unknown island. We circled the island, very close in so we could just see the breakers through the fog. On the lee side of the island, we found some shelter and suitable depth and dropped the anchor without being really sure which island it was. The morning broke clear and sunny and we happily sailed out. We noticed that the buoy was not at its charted location.

One summer we brought the boat back from Baddeck on Cape Breton Island. Not only was Bill a great sailor but it was fun to hear his stories of his career in marine science. He had been at the early atom bomb tests in the South Pacific. He talked about his early experiences in scientific management in a variety of Canadian labs. I wish I had taken notes and could remember more but that story has been written by others. I remember the sailing.

Bill had been a senior public servant but was not a wealthy man. He had a house on the arm and an able boat by being frugal and he was very good at that. Once, we sailed from Halifax to Charlottetown, a trip of three or four days. The Halifax grocery stores were having a price war on bananas and Bill was so proud of the bananas he had bought for ten cents a pound. We listened to the radio news as the price war continued and the price dropped to a nickel a pound and then to a couple of cents. When one store offered two pounds for free, I think Bill wanted to sail back just for the free bananas.

Bill suffered a debilitating stroke in 1986 and our sailing was over. I visited him in the hospital and had tears in my eyes as I went down the elevator. Although he was still alive, the Bill I knew was gone. I would visit him at his home and it was so distressing to see this vital man no longer able to speak or walk. I had young sons and his eyes would light up when they came on the visits. It was difficult to tell how much of Bill was still inside.

Bill died in 1992 and a memorial service was held for him at BIO, in what is now the Bill Ford Auditorium. While others spoke of his scientific achievements and his family, I remembered Bill the sailor, the man who loved the sea, not only the science but also the joy of being there. I pictured Bill with his bib wet gear, standing in the companionway passing up beers and bowls of cheese and crackers and pickles as we sailed, hard on the wind, down the Northumberland Strait.

'Protons for Breakfast' comes to Halifax

by Andy Sherin

Michael de Podesta, researcher and science ambassador for the National Physical Laboratory, London, England delivered a public lecture at Dalhousie University on 20 January 2016 entitled *How Does Anyone Really Know What the Temperature is?* Dr. de Podesta's lecture was fast paced and entertaining including several demonstrations, some using dry ice, liquid nitrogen, and balloons. He passed



around several temperature measuring devices

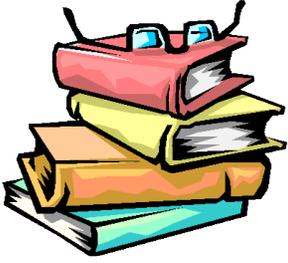
Dr. Michael de Podesta delivering his public lecture at Dalhousie University.

and demonstrated a spherical device that used sound resonance to measure the temperature in the lecture hall.

He described the international system for standardizing temperature measurement and passed around the audience a triple point cell that is used for calibrating thermometers. A triple point cell contains all three phases of pure water: liquid water, ice, and water vapour. The temperature at the point in the flask where all three phases meet is 0.1°C. An interesting connection to the ocean was Vienna Standard Mean Ocean Water (VSMOW). VSMOW is the standard water used for calibrating instruments such as thermometers. Water will freeze and boil at different temperatures depending on the mix of isotopes it contains and VSMOW standardises these ratios.

His team has built the most accurate thermometer in the world using the sound resonance technique he demonstrated in his lecture. His thermometer uses an acoustic resonator made from two hemispheres of copper which have been carefully machined.

Dr. de Podesta was awarded an MBE for his science communication activities in 2009. He is the founder of the 'Protons for Breakfast', a six lecture course for people interested in science and its impact on our lives. On his website he states "I feel frustrated that many people feel excluded from [our scientific understanding of the world we live in]. My motive in creating this course was to reduce people's sense of alienation from this collectively great achievement."



NOTEWORTHY READS: BOOK REVIEWS IN BRIEF

David N. Nettleship
Book Review Editor

'TREATS FOR WINTER READING'

The *Noteworthy Reads* section is an effort by 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 public 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:

EARTH'S LARGEST OCEAN

Winchester, Simon. 2015. Pacific: Silicon Chips and Surfboards, Coral Reefs and Atom Bombs, Brutal Dictators, Fading Empires, and the Coming Collision of the World's Superpowers. HarperCollins, New York, NY. 493 pp. Hardcover, \$35.99 (ISBN 978-0062315410).- Following his outstanding and award-winning biography of the Atlantic Ocean (*Atlantic: A Vast Ocean of a Million Stories*, 2010), Simon Winchester now focuses on the larger Pacific Ocean, not on its geological history or a slow chronological summary of events through the 16th century circumnavigations by Ferdinand Magellan and Francis Drake, or the three 18th century voyages of James Cook. Instead, Winchester reviews key happenings since the 1950s, events that reveal the Pacific Ocean's significance to the world today. And what a story it is, told by a master analyst and synthesizer. He takes the reader from the Bering Strait to Cape Horn, and deals with ten aspects of the ocean and its near shore inhabitants – the islanders – to illustrate historical points and the geopolitical forces presently at work, especially the rise of China. Through this process and a number of side-subject elaborations, the reader learns a great deal about the ocean with special emphasis on the damage humankind is inflicting on the natural world – on sea and land - and the high diversity the assault takes both in form and origin. However, despite the abuses and environmental consequences (all negative), Winchester concludes that a reversal of events is possible if political will, international fraternity, and commitment prevail. Overall, a superb analysis of a 'world wonder', its present problems and future welfare.

General Reviews

Bauer, Susan Wise. 2015. The Story of Science: From the Writings of Aristotle to the Big Bang Theory. Norton, New York, NY. 320 pp. Hardcover, \$ 34.95 (ISBN 978-0393243260).- This exploration of the history of science as viewed through key scientific texts is both revealing and exciting. By tracing the development of great science writing, judged by those books and essays that have changed the course of scientific investigation, the author divides her findings into five parts: 'The Beginnings' (Hippocrates, Plato, Aristotle, Archimedes, Copernicus), 'Birth of the Method' (Newtonian physics), 'Reading the Earth' (geology), 'Reading Life' (biology), and 'Reading the Cosmos' (from Einstein's theory of relativity through quantum theory, cosmology, and chaos theory). Bauer's review informs and goes a long way to explain 'the why' of scientific discovery.

Darwin, Charles. 2015. Charles Darwin: The Voyage of the Beagle – The Illustrated Edition of Charles Darwin's Travel Memoir and Field Journal. Zenith Press, Minneapolis, MN. 480 pp. Hardcover, \$48.00 (ISBN 978-0760348130).- Want to revisit Charles Darwin's iconic science and travel memoir of his five-year cruise (1831-36) on the survey ship *Beagle*? Well, here is a beautifully illustrated version of this historic voyage that features over 350 historical and modern illustrations, photographs, and maps of the people, places and species Darwin wrote about during the expedition. A 'must-have' volume for biologists and geologists, as well as anyone interested in natural history and the development of evolutionary theory.

Dawkins, Richard. 2015. Brief Candle in the Dark: My Life in Science. Ecco/HarperCollins, Toronto, ON. 416 pp. Hardcover, \$34.99 (ISBN 978-0062288431).- The much waited for second volume of the acclaimed evolutionary biologist's autobiography. And it does not disappoint, and takes us from the fascinating growth period displayed in the first volume – 'An Appetite for Wonder: My Life in Science' to an intelligent, insightful, and stimulating synthesis of the nature of life and the human condition in 'Brief Candle in the Dark'. From his ground-breaking book 'The Selfish Gene' in 1976 to his 'The God Delusion' forty years later (2006), with many other intellectually challenging books in between, Dawkins shows in this latest work why he is considered to be one of our greatest living writers.

Flannery, Tim. 2015. Atmosphere of Hope: The Search for Solutions to the Climate Crisis. Atlantic Monthly, New York, NY. 256 pp. Hardcover, \$ 24.80 (ISBN 978-0802124067).- A key review by renown scientist Tim Flannery, whose previous works such as 'The Weather Makers' (2005) have warned repeatedly of the dire consequences of human-induced climate change and global warming to all of us. In this book, he offers a more optimistic view by underlining the fact that the destabilizing effects of climate change can be reversed

through international political cooperation to achieve the necessary cut in carbon dioxide emissions. He outlines the nature of the problem with great clarity, and then summarizes energy potentialities and existing roadblocks to energy sources. An important update on this most critical global environmental issue.

Geiger, John and Alanna Mitchell. 2015. Franklin's Lost Ship: the Historic Discovery of HMS Erebus. HarperCollins Publishers, Toronto, ON. 206 pp. Hardcover, \$39.99 (ISBN 978-1443444170).- Interested in Arctic exploration and the intriguing search for remnants of the ill-fated Sir John Franklin expedition of 1845? The story of the loss of the entire party (129 officers and men) can never be fully uncovered owing to the dearth of evidence and solid information. But the recent discovery of one of Franklin's two lost ships - HMS *Erebus* - during summer 2014 will certainly add to the knowledge base. The authors of 'Franklin's Lost Ship' have quickly produced a fully illustrated account that details the history, search effort, and final discovery of *Erebus*. The book is well written and provides a preliminary overview of this important find with the promise of much more to come. The search for answers to this polar tragedy continues.

O'Connor, M.R. 2015. Resurrection Science: Conservation, De-Extinction and the Precarious Future of Wild Things. Palgrave Macmillan, New York, NY. 272 pp. Hardcover, \$29.99 (ISBN 978-1137279293).- Using eight chapters to highlight unique species, past and present, environmental journalist O'Connor calls for radical conservation measures to prevent a major increase in the number of threatened and endangered species worldwide and the need to re-evaluate traditional conservation approaches. The efforts made to safeguard species and prevent extinction are often extreme with little chance of success over the longer term. O'Connor argues for a reduction in effort and expense to save species in peril and an increase in realistic habitat preservation to ensure essential space and ecological requirements for vulnerable animals and systems. Definitely a thought-provoking account of the present conservation challenge and the broader concern of the human condition and the natural world.

Palfrey, John. 2015. Bibliotech: Why Libraries Matter More Than Ever in the Age of Google. Basic Books, New York, NY. 288 pp. Hardcover, \$33.99 (ISBN 978-0465042999).- Here is the much-needed ammunition to counter the unfounded attitude brought about via the digital revolution that library facilities are unnecessary. The author, an expert in internet policy and founding chairman of the Digital Public Library, argues convincingly that public libraries are core institutions of democracy housing the knowledge and dispersion mechanisms that comprise the life-blood of an informed and engaged citizenry. Libraries as public spaces with librarians and digital platforms will play an essential role in the future.

Stone, David P. 2015. The Changing Arctic Environment: the Arctic Messenger. Cambridge University Press, Cambridge, England. 374 pp. Hardcover, \$56.95 (ISBN 978-1107094413).- This well written book by David Stone truly serves as a timely and important 'Arctic Messenger' about the sensitivity of the arctic environment and the need to protect it from the impacts of pollution and climate change. His description of the scientific monitoring programs undertaken by the international community is impressive, as are his explanations of current threats and the complexity of changes already underway, and how findings generated from these inter-governmental monitoring studies have lessened environmental impacts. This is a book to be read by anyone interested in arctic environments, especially those involved in northern research and policy decision-making.

Struzik, Edward. 2015. Future Arctic: Field Notes from a World on the Edge. Island Press, Washington, DC. 216 pp. Hardcover, \$38.50 (ISBN 978-1610914406).- Northern aficionado/explorer and journalist Edward Struzik provides a clear 'warning call' about the dramatic changes occurring in arctic regions and their implications. The focus is on the identification of future challenges facing the region based on a careful assessment of the past and present status of terrestrial and aquatic ecosystems. Details are summarized on pollution, alteration and destruction of habitats, mismanagement of resources, and the major changes brought about by changing weather patterns. The future is precarious with continued warming, rise in sea-levels, and the many unknown environmental alterations that will appear from global climate change. A disturbing but important review of a difficult topic.

Walker, Paul. 2015. Adolphus Washington Greely: A Man of Indomitable Courage. Pelican Publishing Company, Gretna, LA. 224 pp. Hardcover, \$39.24 (ISBN 978-1455619986).- Looking for a biography of a major contributor to nineteenth century arctic science in Canada? Well, this biographical sketch of the leader of the harrowing Lady Franklin Expedition on Ellesmere Island, Adolphus Greely, should captivate and excite. Although the book reviews the many important accomplishments of this skilled and courageous US military officer – from bloody battles during the Civil War and emergency responses to civil tragedies (e.g., yellow-fever outbreaks in New Orleans and the San Francisco earthquake) – it is his extraordinary performance as leader of the US Polar Year Expedition at Lady Franklin Bay (1881-84) that brought him world fame. A biography of Adolphus Greely is long overdue, and Walker's excellent work shows vividly why Greely, at age 91, was awarded the US Congressional Medal of Honor for his lifetime contributions to science and public education. This is a remarkable life story of an iconic figure in the realm of early scientific exploration in the Canadian high arctic.

Editor's Keyboard: Happy New Year and welcome to the first edition of the *Voicepipe* for 2016. First I would like to thank all the contributors to this issue especially Don Gordon for the photographs of the celebration marking the 50th anniversary of three scientific leaders who molded the early days of the oceanographic research behemoth that is Halifax. I want to add my voice to Mike Murphy's and Penny Doherty's to prepare your nominations for the Beluga Award. This award is a centre piece of the BIO community, since

BIO excellence is due to the people who work there together. The BIO-OA Executive is considering the recommendations of the BIO-OA review committee mentioned in the President's messages. The *Voicepipe* is an important vehicle for spreading the word about the BIO-OA but it could be a tool to move forward on some of the recommendations. In invite you to send me your ideas about how the *Voicepipe* could be a better vehicle for sustaining and invigorating the BIO community.
Andy Sherin



ABOUT THE BIO-OCEANS ASSOCIATION

The Bedford Institute of Oceanography Oceans 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 \$10.00 per year, \$40.00 for five years, or \$150.00 for a lifetime membership.

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Note: Some contact information on this page has changed from previous issues of the *Voicepipe*

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