MAPMATTERS The Newsletter of the Marine Affairs Program, Dalhousie University

Marine Affairs program

> DALHOUSIE UNIVERSITY

Celebrating the MMM Class of 2014



Spring 2015 Issue MMM Class of 2014 MMM Class of 2015 Alumni News MAP News



Congratulations to the **MMM Class of 2014** that graduated on May 27th. (I to r): Elise Will, Shelby MacLean, Danielle Scriven, Sonia Jind, Cameron Christensen, Alana Caplan Vineberg; Claudio Aporta, Robert Fournier, Stacie Sybersma, Sarah Chamberlain, Amber Giles and future MMM graduate, Meegwun. Ainsley Allen, Chloe Ready and Randel Thompson were unable to attend the convocation.



Elise Will was the recipient of the <u>2014 Gold</u> <u>Award</u> which was presented by Dr. Robert Fournier, Interim Director of MAP. The Gold Award is named in honor of Dr. Edgar Gold, one of the founders of the Dalhousie Oceans Studies Program.



Marine Affairs Millennium Prize Awards were presented to members of the 2013-2014 MMM class at the Making Waves: Graduate Project Presentations event held in late November 2014. The recipients were (left to right): Stacie Sybersma (Marine Management); Amber Giles (Interdisciplinarian of the Year); Elise Will (Marine Science and Technology) and Shelly McLean (Marine Policy)

Making Waves 2014

The Master of Marine Management class of 2014 presented their graduate project research at the annual Making Waves event in November 2014. The MMM 2014 class was the first to extend their program to 16 months. The audience included faculty, academic supervisors, internship hosts and members of the MMM class of 2015. Following is a list of the graduate projects with live links.

- Ainsley Allen <u>Cetacean conservation in the age of oil and gas: Minimizing acoustic disturbance to the northern bottlenose</u> whale (*Hyperoodon ampullatus*) through spatio-temporal mitigation
- Alana Caplan Vineberg Offshore oil and gas development in Nunavut: Policy challenges and lessons from Atlantic Canada
- Sarah Chamberlain <u>Developing and implementing a research framework to determine the overall use and influence of a</u> long-term marine environmental monitoring program: A Case Study on Gulfwatch in Nova Scotia
- Cameron Christensen <u>Opportunities for the reduction of skate bycatch in Atlantic Canada trawl fisheries: A case study of two innovative trawl gear designs</u>
- Amber Giles -<u>Improving eel fishery management through the incorporation of indigenous knowledge into policy level deci-</u> sion making – A case study in Eskasoni, Cape Breton
- Sonia Jind Making the switch: Assessing the potential for catch-and-release in Nova Scotia's recreational shark derbies
- Shelby McLean A study of the use of data provided by coastal atlases in coastal policy and decision-making
- Chloe Ready <u>Places of refuge in Jamaica: Identifying prospective site suitability through an analysis of environmental, socioeconomic, and physical criteria</u>
- Danielle Scriven The development of ballast water management in Canada: A critical analysis of the journey
- Stacie Sybersma <u>Assessment of Grand Cayman's George Town Landfill and application of integrated coastal management</u> for improved environmental sustainability
- Randel Thompson <u>An assessment of the socio-economic and marine environmental impacts associated with the St. Kitts</u> and Nevis geothermal energy project
- Elise Will <u>The use of ecosystem service valuation and environmental sensitivity analysis for ship-source oil spill preparedness and response planning in Chedabucto Bay, Nova Scotia</u>



MMM Classes of 2014 and 2015 pose together at the Making Waves event

Welcoming the MMM Class of 2015



The Marine Affairs Program welcomed the MMM Class of 2015 at the annual Welcoming Reception in September 2014. MAP Faculty, Staff, Students and Alumni were in attendance to greet the new students.

At the reception, **Maryann Watson** (pictured left) was announced as the recipient of the <u>Douglas M Johnston</u> <u>Maritime Awards Society of Canada (MASC) Scholar-</u> <u>ship in Marine Affairs.</u>

Hugh Williamson, MAP Adjunct Professor was also recognized for his contribution to MAP over 18 years. Hugh has taught Politics of the Sea, Integrated Maritime Enforcement and Compliance and Contemporary Issues in Ocean Management and Development, supervised numerous graduate projects, mentored students, and was Project Manager of the <u>Dalhousie Marine Piracy Project</u>. (2011-2013).

Sobey Fund for Oceans News

The <u>Sobey Fund for Oceans</u> has awarded scholarships since 2012 to students whose goals are to conduct research on marine conservation issues and recommend unique solutions. Scholarship recipients for 2014-2015 are **Manuel Duriel** (PhD Biology), **Julie Hovey** (MMM) and **Maryann Watson** (MMM).

Healthy Oceans Healthy Canada is the theme for the annual student-led conference supported by the Sobey Fund for Oceans. The Sustainable Oceans 2015 (<u>SOCANADA 2015</u>) conference will be held on October 2 & 3, 2015 at Dalhousie University.

The conference will open with keynote speaker <u>*Cristina Mittermeier*</u>, conservationist, marine biologist and photojournalist. The evening will

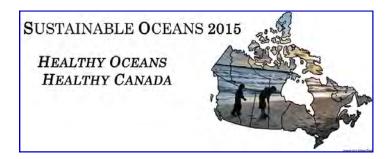
close with a reception that will include a poster and photography display. On Saturday, the conference will continue with student presentations and posters. A panel discussion on Canadian developments in ocean management and sustainability from the Pacific, Arctic and Maritime regions of Canada will include members from NGOs and the government.

This year, the conference includes a <u>photography contest</u>. Submission information to the contest is available on the <u>Facebook</u> page. Submit your photo today and include the reason why you think Canada's oceans should be our priority.

Attendance at SOCANADA 2015 is free (pre-registration required). Check Facebook & Twitter regularly.



Recipients of the Sobey Fund for Oceans Scholarship **Julie Hovey** (left) and **Maryann Watson** (right) with Robert Fournier, Interim Director of Marine Affairs (centre).



Making Waves August 2014

Mark Chupick (left) and **Abdulraouf Hamrouni** (right) presented their graduate project research in August 2014. The titles and live links are:

Mark Chupick - <u>Marine Mammal Mitigation Proce</u> <u>dures in the Royal Canadian Navy (RCN)</u>

Abdulraouf Hamrouni - <u>Establishing an appropriate</u> regulatory framework and harmonized security measures for the Protection of Mixed-Use Marine Facilities within Canadian Ports



MMM student speaks at Dalhousie donor event

Julie Hovey, Master of Marine Management student, and Sobey Fund for Oceans scholarship recipient, gave a presentation at the annual Dalhousie donor appreciation event in the fall. The donors were recognized for providing valuable contributions that support student scholarships, bursaries, awards and prizes. Julie spoke at the event as one of the beneficiaries of donor generosity: her studies at Dalhousie are supported by the <u>Sobey Fund for</u> <u>Oceans</u>, based on a gift from the Donald R. Sobey Foundation that supports a conservation legacy for oceans.

Julie noted the generous contributions has enabled her current and hopefully future successes.

She described how, even in the initial weeks of her studies at Dal, her ambitions changed. She is now moving toward education, advocacy and management roles the oceans.



"This program, in the past three months alone, has challenged me each day, forced me outside of my comfort zone and pushed me beyond what I thought my limits were," she said.

Source: DalNews publication 'Celebrating the Generosity of Dal's Donors' by Ryan McNutt - December 12, 2014.

Class Field Trip

The MMM class of 2015 traveled to Joggins, NS in early September 2014 to visit the Joggins Fossil Cliffs, a UNESCO World Heritage Site. The visit was hosted by Jenna Boon, Executive Director of the Joggins Fossil Institute and parttime MMM student. Jenna gave a presentation on the process by which Joggins became a UNESCO World Heritage site. In addition, the class enjoyed a walk along the beach at low tide.



Alumni News

MAP Alumni Establish OCEANS-NS

MMM alumni Liz Wilson (MMM 2007), Jessica MacIntosh (MMM 2013), Anna Naylor (MMM 2013) (pictured below) and Jenna Stoner (MMM 2013), along with MREM alumna Karen Devitt, established the Oceans and Coasts Education Awareness Network Society – Nova Scotia (<u>OCEANS-NS</u>) in 2014 as a non-profit society with a mission to connect and engage youth in Nova Scotia with ocean education and career awareness. They were inspired by a report commissioned by the International Ocean Institute (IOI-Canada) and completed by a group of graduate students in Dalhousie's *Management Without Borders* course that focused on strengthening oceans education in Nova Scotia.

The primary focus of OCEANS-NS is to create hands-on ocean -themed professional development opportunities for teachers, with a strong focus on building awareness about careers in the ocean and coastal sector among youth through experiential learning. OCEANS-NS also engages in community outreach activities, conferences and events as a way to increase awareness about oceans and coasts. Since its inception, Oceans-NS has worked on several <u>projects</u> with students in NS schools along with their teachers. Technology Council of NS (OTCNS) a student career networking event for the oceans technology sector.

OCEANS-NS activities are currently managed by Liz Wilson (Program Manager) and Gillian Fielding (Project Coordinator), and supported by numerous volunteers. <u>www.oceansns.com</u>, <u>oceansnovascotia@gmail.com</u>, <u>Twitter @OceansNS</u>.

We gratefully acknowledge the support and guidance provided by the International Ocean Institute, Marine Affairs Program, Corporate Residency MBA Program, Dalhousie University, NS Provincial Departments (Education and Early Childhood Development; Labor and Advanced Education, ERDT (now Business) and Fisheries and Aquaculture), and the Ocean Technology Council of Nova Scotia.

OCEANS-NS Receives Award

Oceans-NS is the recipient of the 2015 Gulf of Maine Visionary Award NS, which is awarded annually in recognition for innovation, creativity, and commitment to protecting the marine environment. *Congratulations from MAP!*

In June, OCEANS-NS initiated the Seaze the Change - Connecting urban communities with our oceans and co-hosted with the Your Environmental Student Society (YESS), the Wave of Waste project, *as part of the* <u>100 in 1 day</u> Halifax 2015 festival. Being Oceans month, other outreach activities include "Bringing the oceans" to the IWK Children hospital, a guest session at the Nova Scotia Museum of Natural History, and co-hosting with the Ocean





Aurelie (centre) with her co-supervisors, Joanna Mills Flemming, Department of Mathematics and Statistics (left) and Boris Worm, Biology (right).

PhD defended

MAP congratulates **Aurélie Cosandey Godin** (MMM 2009) on successfully defending her PhD thesis in Biology on March 12, 2015 at Dalhousie University. The title of her thesis is:

Elasmobranch Bycatch In The Canadian Northwest Atlantic And Arctic Adjacent Seas: Composition, Biogeography, And Mitigation





Professor William Tetley Award

Congratulations to **Danielle Scriven** (MMM 2015) on receiving the <u>Pro-fessor William Tetley Award</u>. The Canadian Maritime Law Association established the literary prize to honour of the late Professor William Tetley, C.M., Q.C., who taught maritime law at the Faculty of Law of McGill University. Danielle submitted her graduate project research paper <u>The</u> development of ballast water management in Canada: A critical analysis of the journey for consideration. Her submission will be published in the Canadian Maritime Law Association Journal.

Sources

Professor William Tetley Award - <u>http://www.cmla.org/tetleyaward.php</u> Professor William Tetley Award Established - <u>http://www.cosbc.ca/index.php/local/item/777-</u> professor-william-tetley-award-established



Pakistan Conference Participation

In February, **David Griffiths** (MMM 2005) presented the opening thematic paper at the 6th International Maritime Conference at Bahria University's National Centre for Maritime Policy Research (NCMPR) in Karachi, Pakistan, where he is an Honorary Fellow.

The theme of the conference was "Maritime Economy, Environment, And Security Co-Operation: Bringing The West Pacific and the Indian Ocean Closer." David's presentation indicated that traditional threats that strategists and policy makers face on a regular basis are important. But the subtle and dangerous risks of inappropriate thinking - clinging to illogical fallacies and biases - can be as strategically threatening as any pirate, smuggler, terrorist or military force.



For more on the conference see the NCMPR website at http://ncmpr.bahria.edu.pk/

Subarctic Marine Station established

No ecosystem on this planet is changing faster than the Arctic. Glaciers are disappearing, changing the environment as they melt. In Iceland, a country dependent on the sea since the first Vikings settled on the island over 1,000 years ago, you will experience nature as never before. **Michael Honeth** (MMM 1997) and Mathilde Loubeyres, an oceanographer from Sorbonne University, are launching the <u>Ísafjörður Subarctic Marine Station (ISAMS)</u> this year. Marine researchers and climate change experts from around the world will join the station as they seek to understand the implications of these changes and gain wisdom from the wild.

ISAMS offers customised field programs where students can practice glacial ice coring, study the Northern Lights, perform fisheries observation and whale identifications, monitor bird populations, and travel into a volcanic magma chamber. In partnership with the <u>University Centre of the Westfjords</u>, IS-AMS also hosts graduate and post-graduate researchers. The agenda is largely driven by the Circumpolar Biodiversity Monitoring Plan established by the <u>Conservation of Arctic Flora and</u> <u>Fauna (CAFF)</u> of the Arctic Council. It is expected that research demands will include intensive fieldwork, for which expeditions of 5-6 individuals will be assembled to support ISAMS scientists. Expeditions could involve up to a fortnight of hiking, kayaking and camping in the wilderness while gathering data or observing wildlife behaviour or natural phenomena.

You are welcome to contact Michael or Mathilde at study@icelandresearch.org



Town of Isafjordur, home base of ISAMS

MAP News

Queen Elizabeth II Diamond Jubilee Scholarships

The Marine Affairs Program along with International Development Studies and the Global Health Office at Dalhousie University have teamed up with partners in the Caribbean, Uganda and Tanzania to build a network of young global leaders. Supported by the Rideau Hall Foundation, Community Foundations of Canada and Universities Canada, the Queen Elizabeth II Diamond Jubilee Scholarships (QES) will be awarded to students through internship placements and graduate degree programs.

MAP's long time connections in the Caribbean region will be enhanced through internship placements. Elsa Tokunaga (BSc double major student in Economics and Sustainability) has undertaken the first placement with the Global Socioeconomic Monitoring Initiative for Coastal Management (<u>SocMon</u>) in Barbados and Dominica. Under the direction of Dr. Patrick McConney (Senior Lecturer, Centre for Resource Management and Environmental Studies (<u>CERMES</u>),University of the West Indies, Cave Hill and MAP Adjunct Professor) and Maria Pena, CERMES Project Assistant, Elsa will track socioeconomic activities in the region by assisting with training fisheries managers and other stakeholders in SocMon Caribbean methods through workshops. She will also participate in preparing and monitoring SocMon sites.

Prior to departing for Barbados this spring, Elsa had the opportunity to attend the Rideau Hall Foundation appreciation dinner at Rideau Hall. She is pictured here with the Governor General, His Excellency the Right Honourable David Johnston.

Follow the activities of the Dalhousie QES scholars at <u>http://www.dal.ca/dept/geii-scholarships/home.html</u>.



Publications

Allen, A. S. (*) (2014). The development of ships' routeing measures in the Bering Strait: Lessons learned from the North Atlantic right whale to protect local whale populations. Marine Policy 50: 215-226. <u>(Full text available here - external site)</u>

Amyot, J. (*) and Grant, J..(2014). Environmental Function Analysis: A decision support tool for integrated sandy beach planning. Ocean & Coastal Management 102: 317-327/

Batongbacal, J.L.(*) and Carandang, E.F., Eds. (2014). Bajo de Masinloc Scarborough Shoal: Maps and Documents. Fort Bonifcaio, Taguig City: National Mapping and Resource Information Centre and Diliman, Quezon City: Institute for Maritime Affairs and Law of the Sea. 112 p.

Elvin, S.S. (*) (2014). The large marine ecosystem approach to assessment and management of polar bears during climate change. Environmental Development. 11: 67-63. (Full text available here until Sept. 10, 2014 - external site)

Ganapathiraju, P. (*), Nakamura, K., Pitcher, T. and Delagran, L. (2014). Estimates of illegal and unreported fish in seafood imports to the USA. Marine Policy 48: 102-113.

Hodgson, J.R.F.([‡]), Russell, W.D. (*) and Megannety, M. (*) (2014). Exploring Plausible Futures for Marine Transportation in the Canadian Arctic: A Scenarios' Based Approach. Report prepared for Transport Canada. <u>Full Text - PDF (2.15MB)</u>

Mahon, R.,(‡) Fanning, L.(*) and McConney, P. (‡) (2014). Assessing and Facilitating Emerging Regional Ocean Governance Arrangements in the Wider Caribbean Region. Ocean Yearbook 28. Dalhousie University Marine and Environmental Law Institute. Ed. Chircop, A., Coffen-Smout, S., McConnell, M.L. Halifax.N.S. 631-671.

Scriven, D.R. (*), DiBacco, C., Locke, A. and Therriault, T.W. (2015). Ballast water management in Canada: A historical perspective and implications for the future. Marine Policy 59: 121-133. (Full text available until August 9, 2015 - external site)

Williamson, H. (‡) (2013). New Thinking in the Fight Against Marine Piracy: Financing and Plunder Pre-Empting Piracy Before Prevention Becomes Necessary. End Game! An International Conference on Combating Marine Piracy. Case Western Reserve Journal of International Law, 46(1-2): 335-354.

* MMM alum _____ MAP Adjunct Professor

International Development Week

In January 2015, Camilo Mateo Botero Saltarén, Researcher at the School of Law, Universidad Sergio Arboleda Santa Marta, Colombia, and Visiting Researcher at MAP, gave a presentation on <u>land and marine spatial</u> <u>planning in the Caribbean</u>. Dr. Botero was visiting MAP as part of the project "Effectiveness Indicators for landuse planning, governance and integrated management in the coastal zone of South-East Cuba and the Caribbean coast of Colombia", supported by the International Development Research Centre (IDRC)).

The presentation discussed recent efforts in Colombia and Cuba to use integrated planning to better manage the coastal zone, by connecting land use planning, coastal management and the management of marine use and space.

Women and Marine Science: Seazing the Opportunities

On Wednesday, March 25 2015, the Marine Environmental Observation Prediction and Response Network (<u>MEOPAR</u>) hosted a luncheon in celebration of International Women's Day The keynote speaker was Dr. Julie Laroche, Tier 1 Canada Research Chair in Molecular Biology and Physiological Ecology of Marine Phytoplankton, and Professor, Department of Biology, Dalhousie University.

Dr. Laroche spoke of her academic, professional and personal life 'checklist' (*that varied from the opportunities life presented to her and that she sought out...and was all in one*). She noted that "it's ok if your path deviates from your plans". (Source: http://meopar.ca/iwd2015/)



Becky Field, MAP Administrator (second from left) attended the luncheon along with MAP Alumni including: **Alexandra Vance** (MMM 2014), Marine Conservation Specialist, <u>Canadian Wildlife Federation</u>; **Leah Beveridge** (MMM 2013) Research Assistant, <u>Maritime Activity and Risk Investigation Network</u>; and **Aurélie Cosandey-Godin** (MMM 2009) and PhD Biology graduate 2015.

Additions to the MAP Family

MAP sends best wishes to the newest members of the MAP Family.



Claribell, daughter of **Talia Choy McCall** and **Robin McCall** (both MMM 2004), was born on March 11, 2014.



Lucia Skye, second daughter of Jennifer and **Sean Weseloh McKeane** (MMM 2004) was welcomed by sister Ava on August 11, 2014.



Aimee Gromack and Chris Burbidge (both MMM 2008) with Isaac, born on August 14, 2014. Although they live on the west coast, their hearts are on the east coast.