

In this issue:

MMM Class of 2013-2014

MAP News

Research Activities

Alumni News

Ottawa Tour

Publications



Welcome to the MMM Class of 2013-2014

Members of the class began their MMM journey with four days of orientation activities during the last week of August which included the Making Waves Graduate Project presentations of the 2013 MMM class. The 13 new full time students (from across Canada (AB, BC, NS, ON, PEI & QC), Grenada and St. Kitts and Nevis) spent the next few days meeting with MAP Faculty, learning about the MMM program and getting to know their classmates. This year's class join nine continuing part-time students.

The MMM class of 2014 will, for the first time, undertake the program over 16 months, a change adopted by MAP and approved by the Faculty of Graduate Studies earlier this year. The move to 16 months reflects a genuine need among the students for more time to assimilate and synthesize ever greater amounts of information.

The MMM Class of 2014-2015 was welcomed at a reception on September 4th in the atrium of the new Dalhousie

Ocean Sciences Building by Chris Moore, Dean of Science, and Bob Fournier, MAP's Interim Director. MMM alumni and MAP associates from the Halifax region also attended.

At the Welcoming Reception, the recipient of the Douglas M. Johnston-Maritime Awards Society of Canada Marine Affairs scholarship was presented to Nicolas Winkler (above on the left). Nicolas holds a BSc from Plymouth University and a MA in Development Studies from East Anglia. He plans to focus his studies on coastal management in the Arctic.



The MMM class of 2014 on the Halifax Harbour tour, a regular assignment of the MARA 5001 core course, Contemporary Issues in Ocean and Coastal Management.

MAP News

MAP joins the Faculty of Science

Reflecting its cross-cutting, interdisciplinary nature, MAP has been hosted by three different faculties (Law, Graduate Studies and Management) since its inception in 1986. Bob Fournier, MAP's interim Director, offered a few comments to the incoming class regarding this move to its new home in the Faculty of Science. Those remarks are briefly summarized below.

"Effective on July 1, 2013, the Marine Affairs joined the Faculty of Science with the explicit purpose of conducting activities that will contribute to the science-public policy interface. For many years scientists have believed that the natural endpoint of their research was the publication of their results. However, the environmental changes increasingly experienced by the world's oceans, such as rapid warming, acidification, larger and more abundant storms, and sea level rise, have begun to erode that earlier complacency. Today, society has come to understand that change is happening rapidly, perhaps in some cases even exponentially, and that although additional research is desirable our current understanding of physical and biological processes is adequate for us to contribute to the public policy process. Our ultimate goal must be to change human behaviour so that the insults routinely produced by the planet's increasing population can be moderated or eliminated, and with those changes return the oceans to the 'even keel' of sustainability. MAP's cooperative presence in the Faculty of Science will contribute some small way to these much needed changes."

As part of the move to the Faculty of Science, the MAP website was updated. Please visit us at <http://marineaffairsprogram.dal.ca> today and let us know how we look!

Claudio Aporta joins the Marine Affairs Program

Dr. Claudio Aporta joined Marine Affairs Program in the summer of 2013 as an associate professor. Claudio is a social and cultural anthropologist with interests in history, geography, cartography and geomatics. He holds a BA in Communications, and a PhD from the University of Alberta. At Carleton University, Claudio's research focussed on how Inuit interact with a dynamic environment, in particular the marine and coastal areas of Arctic Canada. Since arriving at MAP, Claudio has been meeting MAP colleagues across the campus, developing a research strategy and preparing to teach MARA 5001, Contemporary Issues, and MARA 5012, Community-Based Co-management.



Claudio Aporta at the Uruguay COLACMAR Conference.



Graduation

Congratulations from the MAP community to the 12 MMM students who graduated on October 9 2013. This photo shows the students who attended the convocation ceremony. Left to right are: Shawn MacDonald, Leah McConney, Anna Naylor, Jessica MacIntosh, Carrie-Ann Creamer, Jessica Corkum and Jeremy Corbin. Best wishes to these most recent marine managers as they begin their 'honest broker' careers.

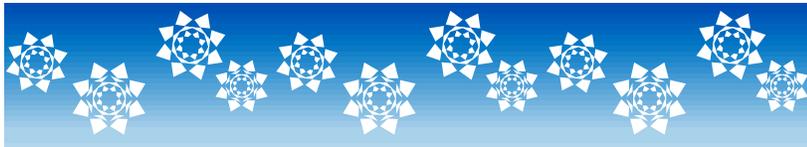


Jenna Stoner - Gold Award Recipient

Congratulations to Jenna Stoner, 2013 Gold Award Recipient, named in honour of Dr. Edgar Gold, CM, QC, one of the original founders of the Dalhousie Ocean Studies Programme. The Gold Award is an annual financial award presented to the most deserving MMM graduate at the end of each academic year. The candidate is judged to be outstanding among their peer group based on academic performance, and their overall ability to reflect the ideal graduate as the “honest broker” - i.e. one who is mindful of the complementary and competing multi- and inter-disciplinary interests that influence the design, implementation, and outcome of the management process in marine affairs. In addition, the Gold Award recipient is the student who best exemplifies MAP’s objectives of providing its graduates with the knowledge,

skills and attitudes necessary to be a leader in the field of marine affairs.

Jenna is the Sustainable Seafood Campaign Manager at the Living Oceans Society in Vancouver, BC. She attended the World SeaFood Congress that was held in St. Johns Newfoundland in October where she presented the paper *Ecolabels: the rubber stamp of seafood sustainability?* which has been published in the Journal of Ocean Technology.



MAP Research

Open Ocean Working Group Meeting Oct 7-9, 2013

Lucia Fanning hosted a workshop at Dalhousie focusing on assessing governance for the Open Ocean component of the Global Environment Facility (GEF)-funded project aimed at assessing governance arrangements in all World Bank designated transboundary water categories. In addition to Lucia Fanning, the Open Ocean Working Group consists of four ocean governance experts from across the globe (Dr. Oran Young, Dr. Magnus Ngoile, Dr. Kristina Gjerde and Dr. Robin Mahon) who came together for a working session to review the research conducted to date and provide feedback and guidance for the next steps of the research. MAP research associates, Selicia Douglas (MMM 2006) and Mike Reid (MMM 2012), participated in collecting and analyzing the data on governance arrangements in the Open Ocean and also contributed to the workshop. A final report is to be submitted to GEF by March 2014.

Uruguay COLACMAR Meeting

Claudio Aporta visited Uruguay to participate in COLACMAR 2013 (Latin American Conference for Ocean Sciences), which took place in Punta del Este in October 27-31. COLACMAR is the main ocean sciences conference in Latin America, and attracts scholars and students from all fields. During a session addressing Integrated Coastal Management, he presented a paper on marine management in the Canadian Arctic. He also participated in a round table discussion on co-management, along with professors Daniel Conde (Universidad de la Republica, Uruguay), Marinez Scherer (Universidade Federal de Santa Catarina, Brazil), and Filomena Cardoso Martins (Universidade de Aveiro, Portugal). Aporta’s visit was sponsored by IDRC (International Development Research Centre). In addition, Aporta gave a public lecture at the Museum of Indigenous and Pre-Columbian Art in Montevideo, sponsored by IDRC and the Canadian Embassy in Uruguay.

Dalhousie Marine Piracy Project (DMPP) Children in Piracy Workshop Oct 21-23, 2013

In conjunction with the Romeo Dallaire Child Soldiers Initiative, the MAP-led TK-funded Dalhousie Marine Piracy Project (DMPP) hosted a 3-day workshop at CFB Stadacona focusing on providing guidance to front-line naval personnel and merchant mariners on the use of best practices when encountering children involved in piracy operations. The workshop, led by Dr. Shelly Whitman, the DMPP socio-economic module lead and director of

the Child Soldier Initiative, brought together some 25 experts from around the world to develop a training manual for distribution globally to both navies and the merchant marine sector. In addition to Dr. Whitman, DMPP module leads, Mark Sloan and Hugh Williamson, gave presentations and chaired working sessions. Lucia Fanning, principal investigator for the DMPP, also participated in the workshop.



Participants of the DMPP Children in Piracy workshop.

Fish-WIKS Nova Scotia Regional Meeting Nov 13, 2013

On Wednesday Nov 13, 2013, Lucia Fanning (Fish-WIKS Principal Investigator), Stephanie Boudreau (Post-doctoral Fellow) and Amber Giles (Fish-WIKS Master's student) journeyed to Eskasoni, Cape Breton, for a think tank session with First Nations partners of the SSHRC-funded Fish-WIKS project. The purpose of the session was to have an open discussion on promoting relations-building among the Nova Scotia research partners and to discuss areas for research priorities. The think tank was led by Elder Albert Marshall and was organized by Fish-WIKS partner Shelly Denny and Fish-WIKS Community Liaison Coordinator, Tyson Paul. The session was facilitated by Clifford Paul and also included Tom Johnson, Crane Seafoods and commercial fish captains Albert Paul and Lawrence Paul.

Uruguay MCISur Workshop Nov 17-22

Bob Fournier, Lucia Fanning and several Uruguayan colleagues developed and participated in two workshops in Uruguay. The first included two levels of government (departmental and municipal) from the departments of Colonia, San Jose and Montevideo, while the departments represented in the second included Canelones and Maldonado. The purpose of these workshops was to enhance cooperation between the integrated coastal management unit (MCISur) in the university (UdelaR) and the municipalities that were impacted most by anthropogenic-induced changes in the coastal zone. These workshops were the culmination of a very successful Canadian-sponsored project that transplanted the principal elements of the Marine Affairs Program to Uruguay.

Alumni News

Please join MAP in congratulating two alumni that recently completed their PhD studies.

Sandra Elvin, MMM 2005, successfully defended her PhD thesis “Making sense of mitigation used to address industrial effects on wildlife in Canadian Environmental Assessments” at York University this fall. The following is a summary of the research provided by Sandra:



“To better understand the mechanisms of mitigation programs used to offset effects to wildlife in the Canadian Environmental Assessment process, I established three studies consisting of quantitative and qualitative methods of inquiry. First, I interviewed experts on their use and perceptions of success of various mitigation programs. I found that programs used by experts in different occupation groups differ in terms of frequency of use. Also, experts were hesitant to label any mitigation program as reliably successful in offsetting adverse environmental effects. Second, I examined the role of an informational tool in informing EAs and subsequent mitigation. Using a Strengths, Weaknesses, Opportunities, and Threats analysis, I evaluated the telemetry tool. I found that a specific set of support systems is needed to implement telemetry on a useful basis. Last, I used data from experts’ knowledge interviews to unearth trends in mitigation practices. I used this information to develop policy and operational recommendations for improving the Canadian EA process.”

Sandra is currently the Large Marine Ecosystem Coordinator at NOAA Headquarters in Silver Spring, Maryland, U.S.A.

Mohamed Shainee, MMM 2006, completed his PhD at the Norwegian University of Science and Technology on September 27, 2013. The thesis, titled “Conceptual Design and Experimental Investigation of a SPM cage Concept for Offshore Mariculture”, is summarized as:

Offshore mariculture is gaining more attention as expansion of nearshore aquaculture, led by increasing demand for food fish, is faced with stiff resistance from nearshore stakeholders, including environmentalists. Due to the necessity to move into offshore waters for aquaculture, single point mooring (SPM) fish cage concepts in offshore mariculture are presently being considered as viable candidates for achieving such an objective. Economic and environmental advantages over the traditional grid mooring systems have been reported for SPM cages. In addition, from an engineering point of view the ability

of the SPM cage systems to align with the prevailing current or weather direction implies a smaller projected area, and correspondingly, a reduction of environmental loads and stresses which are associated with the mooring components.

Harnessing these advantages of the SPM cage concept, during the PhD research work outlined in the thesis, a SPM cage concept that allows self-submergence was developed. The numerical simulation results were verified, and the self-submersible SPM cage system is shown to have a potential for being used for the purpose of offshore mariculture. The full abstract is available at <http://www.diva-portal.org/smash/record.jsf?pid=diva2:651943>.



Shainee was knighted with the golden anchor, a tradition granted upon successful completion of a PhD from NTNU. He is currently the Minister of Fisheries and Agriculture for the Maldives.

Addition to the MAP Family

Congratulations to Shannon (McCormick) Olson, MMM 2006, and her husband Jon, on the arrival of their daughter Emilia Marie Leila, born on December 6, 2013. The family lives in Eastern Passage, NS. Shannon is on leave from her position as Planning Coordinator with the Associate Regional Director General’s Office of Fisheries and Oceans Canada Maritimes Region.



Ottawa Tour 2013

On December 10 and 11, MAP administrator Becky Field and Brenda Smart, Internship Coordinator of the School for Resource and Environmental Studies accompanied 5 MMM, 2 MES and 10 MREM students on a tour of government departments in Ottawa. The main objectives of the tour were to give the students an opportunity to: expand their networks of potential internship hosts, employers and alumni; practice networking skills; and discover potential career opportunities. The students might also learn about the federal government departments along with some current policy issues.

During their visit, they met with 30 members of Natural Resources Canada, the Canadian Environmental Assessment Agency, Fisheries and Oceans Canada, Parks Canada and Environment Canada. The group also met Mike Wilson, Executive Director of Sustainable Prosperity,

Publications

The following is a list of recent publications by MAP Faculty (**bold**), MAP Adjunct Professors (*italic*) and MMM Alumni (underline) (in alphabetical order). Please submit your publication for listing on the MAP website and in the next issue of MAP Matters to marine.affairs@dal.ca.

Brooks, M.R., Pelot, R., Reuchlin, J.W. and Raze, S., 2013. Dalhousie Marine Piracy Project: Non-operational Predictive Indicators of Piracy: Identifying Potential Outbreaks (Marine Affairs Program Technical Report #10).

Fanning, L, R. Mahon and *P. McConney*, 2013. Applying the large marine ecosystem (LME) governance framework in the Wider Caribbean Region. *Marine Policy* 42: 99-110.

MacIntosh, J. and J. Stoner (Eds), 2013. Building Bridges in Ocean Management: Connecting the Policy, Science and Public Spheres. (Marine Affairs Program Technical Report #11).

Mahon, R., A. Cooke, L. Fanning and *P. McConney*, 2013. Governance arrangements for marine ecosystems of the Wider Caribbean Region. Centre for Resource Management and Environmental Studies, University of the West Indies, Cave Hill Campus, Barbados. CERMES Technical Report No 60. 99p.

Reid, M., 2014. The Advantages of Incorporating Historic Geographic Information Systems (H-GIS) into Modern



Ottawa tour participants (L to r): Nicolas Winkler, Sonia Jind, Chloe Ready, Shelby McLean, Becky Field and Alan Vineberg.

national green economy think tank, located at the University of Ottawa. The individuals they met included Human Resources staff, policy analysts, and Director Generals. A reception was held during which the students interacted with local alumni, products of their respective programs.

Coastal Management Planning. *The Journal of Map and Geography Libraries* 10(1). [In Press].

Shiels, S., 2012. Why Two Old Ferries went to India: A critical review of the Canadian ship-recycling legal regime. Paper presented at the Sustainable Oceans: Management and Development Conference – 2012, March 30-31, 2012, Dalhousie University. 23 pp. (Marine Affairs Program Technical Report #9).

Soomai, S. S., MacDonald, B. H., & Wells, P. G., 2013. Communicating environmental information to the stakeholders in coastal and marine policy-making: Case studies from Nova Scotia and the Gulf of Maine/Bay of Fundy region. *Marine Policy*, 40, 176–186.

Stoner, J., 2013. *Ecolabels: the rubber stamp of seafood sustainability?* *Journal of Ocean Technology* 8: 30-38.

Wells, P. G., 2013. Canadian aquatic science and environmental legislation under threat. *Marine Pollution Bulletin* 69: 1-2.

Did you know that MAP publishes the MAP Policy Forum and the MAP Technical Series? These publications are listed at <http://www.dal.ca/faculty/science/marine-affairs-program/research/research-news.html>.

Submissions to MAP Matters are welcome from the MAP Family. Please send submissions to marine.affairs@dal.ca.