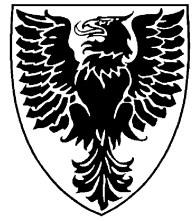


INTERNATIONAL OCEAN INSTITUTE



**TRAINING PROGRAMME ON
*OCEAN GOVERNANCE: POLICY, LAW AND MANAGEMENT***

2013 COURSE REPORT



**Dalhousie University, Halifax, Canada
22nd May – 19th July, 2013**

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INTERNATIONAL OCEAN INSTITUTE

**2013
COURSE REPORT**

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INTRODUCTION

This report provides a record of the 2013 training programme on *Ocean Governance: Policy, Law and Management*, conducted by the International Ocean Institute (IOI) at Dalhousie University, Halifax, Canada. Held from 22nd May to 19th July, this was the 33rd annual course since the training programme was instituted by Elisabeth Mann Borgese, Founder of the IOI.



The programme was attended by 12 participants from a range of disciplines and backgrounds. A reasonable balance of countries and regions was achieved, with participants from Africa, Asia, the Caribbean, Eastern Europe and South America. As usual, emphasis was placed on having strong female representation among the group, with more women than men in the class this year. Lectures and presentations were delivered by about 90 speakers, and included local and international experts and practitioners. The course was organised thematically as follows:

- Module 1:** Orientation and Introduction to the Training Programme
- Module 2:** Ocean Sciences
- Module 3:** Integrated Coastal and Ocean Management
- Module 4:** Law of the Sea and Principled Ocean Governance
- Module 5:** Fisheries and Aquaculture
- Module 6:** Communication and Negotiation
- Module 7:** Maritime Security
- Module 8:** Energy
- Module 9:** Marine Transportation
- Module 10:** International Round Table
Conclusion of Training Programme

Photo credits (unless otherwise indicated): IOI-Canada, Kevin Deagle, Mark Fakhri, Claudette LeBlanc and the ever-helpful Derrick Theophille

GROUP PHOTOGRAPH



Photo credit: Nick Pearce, Dalhousie University

Front row (from left to right): Jiang Mei (China), Alexis Sewpersad-Persaud (Suriname), Riambatosoa Rakontondrazafy Andriamampandry (Madagascar), Kimberlee Cooke-Panton (Jamaica), Tom Traves, President, Dalhousie University (Canada), Patricia González Díaz (Cuba), Zhang Lu (China), Kuenda Laze (Albania), Madeleine Coffen-Smout, Programme Officer (England)

Second row: David VanderZwaag, Lecturer (USA/Canada), Hugh Williamson, Senior Research Fellow (Canada), Monique Lefebvre, 2013 Course Co-ordinator (Canada), Wei Bo (China), Zhang Xinyue (China), Sheralean Stubbs (The Bahamas), Derrick Theophile (Dominica), Jiang Fan (China)

Back row: David Griffiths, Senior Research Fellow (Canada), Jennifer Barr, Finance Officer (Canada), Mike Butler, Director & 2013 Course Director (England/Canada), Ian McAllister, Chair of the Board (England/Canada), John Duff, Lecturer (USA)

INTERNATIONAL OCEAN INSTITUTE

IOI-Canada is a leading member of the International Ocean Institute's network of operational centres and focal points operating worldwide in over 30 countries. One of the earliest IOI centres to be established, it was set up by Elisabeth Mann Borgese in 1979 soon after she arrived at Dalhousie University in Halifax, Nova Scotia, and it has been based at the university ever since.

Registered as the "IOI-Canada Association", IOI-Canada is a not-for-profit organisation, federally incorporated under the Canada Corporations Act, and governed by a Board of Directors. It is guided by the IOI/Dalhousie Oceans Advisory Committee and staffed by an experienced team of professionals, augmented by Senior Research Fellows and interns who contribute to its activities. IOI-Canada is the regional co-ordinator of the IOI Operational Centres in the Americas, which consists of IOI-Brazil, IOI-Costa Rica, IOI-Cuba and IOI-USA, in addition to the Canadian centre. The international headquarters of the IOI have been located in Malta since being founded in 1972 by Elisabeth Mann Borgese. Information on IOI headquarters and the network as a whole can be found at www.ioinst.org.



IOI-Canada's mission is to promote responsible ocean governance and the stewardship and sustainable use of coastal and ocean resources in Canada and around the world. Our goals define what we intend to accomplish in fulfillment of the mission. We aim to encourage and develop the potential and capacity of individuals, institutions and communities to foster:

- a network of individuals dedicated to effective coastal and ocean governance;
- a network of institutions devoted to coastal and ocean governance, management, education, training, research and outreach; and,
- sustainable and prosperous coastal communities.

IOI-Canada accomplishes its mission and goals through three main activities: education and training, collaborative research, and outreach. Interdisciplinary training is its major focus, and through its flagship course, it has trained over 640 individuals from around 100 countries.

THE TRAINING PROGRAMME

Purpose and Approach

With the support of Dalhousie University, the International Ocean Institute has offered an intensive, interdisciplinary training programme in Halifax annually since 1981. This flagship course is available through the IOI network's OceanLearn suite of programmes.

The purpose of this training programme is to:

- deepen understanding of the ever-increasing importance of the oceans and their resources in world politics and sustainable economic development;
- assist developing countries in the formation of a core of decision-makers fully aware of the complex issues of coastal and ocean management; and,
- maximise benefits to be derived from the United Nations Convention on the Law of the Sea through the proper integration of coastal and ocean management into national and international development strategies.

The course emphasises the importance of viewing the ocean as a system with varied users and multiple, often competing and conflicting, uses. It also aims to increase awareness of the fact that ocean management requires broad interdisciplinary skills, new institutional and legal infrastructures, and new forms of intergovernmental and non-governmental organisation and cooperation at the local, national and international levels.

The training programme takes place in Halifax on the campus of Dalhousie University, and consists of approximately 200 hours of intensive learning. While it is primarily lecture-based, the course also includes interactive discussions, participant presentations, exercises and simulations, field trips and an international round table.

Participants

The training programme is specifically designed to benefit developing country mid-career professionals who are responsible for some aspect of coastal or ocean governance. Given the under-representation of women in the upper echelons of administration and policy-making worldwide, particular emphasis is placed on trying to achieve equal numbers of female and male participants, and to create a forum where men and women can learn together, sharing different perspectives and examining issues from different viewpoints.

Course Content

The course is a foundational programme in a very important field of development strategy; it is not intended to provide specialised training. Participants are therefore expected to step out of their fields of specialisation and be exposed to broadly interdisciplinary work.

The 2013 training programme was organised into 10 modules and covered a wide range of different themes and issues, as set out in the following syllabus. When provided by lecturers, a brief summary of the topics to be covered in their presentation was posted on the IOI-Canada website, and these can be reviewed at <http://internationaloceaninstitute.dal.ca/2013LectureTopics.doc>.

SYLLABUS

<p>MODULE 1 Orientation and Introduction to the Training Programme</p>

Wednesday, 22nd May

10:00 – 10:30	Introductions & Administrative Matters	Ms Monique Lefebvre (Module Leader)
10.45 – 12.15	Killam Library Tour	Ms Michelle Paon
1.30 – 3.15	Managing at University	Dr David Mensink
3.30 – 4.30	Walking Tour of Upper Campus	Ms Katherine Hay

Thursday, 23rd May

9.00 – 10.30	Introductions, and Understanding Canada	Mr Michael Butler
10.45 – 12.00	Intercultural Awareness	Ms Joanne Fraser
1.30 – 4.00	Ethical Issues in Ocean Governance	Prof. Ian McAllister

Friday, 24th May

9.00 – 12.00	Organisation of Course Work, and Introduction to Modules & Module Leaders	Mr Mike Butler Module Leaders IOI staff
1.30 – 2.30	The Sea in Human History	Mr David Griffiths
2.30 – 2.45	Introduction to Simulation Exercise	Mr David Griffiths
4.00 – 6.00	Opening Ceremony	Mr Brian Flemming, QC All

Saturday, 25th May

All day	Free: optional morning trip to Farmers Market
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Sunday, 26th May

All day Free

MODULE 2 Ocean Sciences

Monday, 27th May

9.00 – 12.00	Introduction to Ocean Sciences, and Health of the Oceans	Dr Peter Wells (Module Leader)
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1.30 – 4.00	Introduction to Oceanography	Dr Anna Metaxas
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Tuesday, 28th May

9.00 – 12.00	Land/Sea Interface: Estuarine and Coastal Waters	Dr Graham Daborn
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1.30 – 4.00	Mangroves and Human Security	Dr Brad Walters
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Wednesday, 29th May

9.00 – 11.30	Ocean Weather and Forecasting	Mr Doug Mercer
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11.30 – 12.00	Simulation Exercise 2	Mr David Griffiths
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1.30 – 4.00	Climate Change	Dr John Shaw
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Thursday, 30th May

9.00 – 12.00	Remote Sensing and the Oceans	Mr Dirk Werle
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1.30 – 4.00	Marine Biodiversity: Census of Marine Life, and Ocean Tracking Network	Dr Ron O’Dor Mr Bob Branton
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Friday, 31st May

All day	Field Trip: Bedford Institute of Oceanography	Dr Steven Campana Mr Scott Coffen-Smout Mr Michel Goguen Mr Tim Hall Mr Paul Macnab Dr Hilary Moors-Murphy Dr David Mosher Dr Sherry Niven Dr Tom Sephton Ms Maxine Westhead
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Saturday, 1st June

All day Free

Sunday, 2nd June

All day Free

<p style="text-align: center;">MODULE 3 Integrated Coastal and Ocean Management</p>
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Monday, 3rd June

9.00 – 12.00	Introduction to Integrated Coastal and Ocean Management	Dr Lucia Fanning
1.30 – 2.45	Information Access for Coastal and Ocean Management	Mr Andy Sherin Ms Alexi Westcott
3.00 – 4.00	Information Management for Environmental Solutions	Dr Bertrum MacDonald Ms Suzuette Soomai

Tuesday, 4th June

9.00 – 12.00	Marine Spatial Planning	Mr Paul Macnab Mr Glen Herbert
1.30 – 4.00	Project Cycle	Prof. Ian McAllister

Wednesday, 5th June

9.00 – 12.00	Environmental Economics	Mr Scott Wood
1.30 – 4.00	Coastal Tourism (<i>venue: Maritime Museum of the Atlantic</i>)	Ms Heather Yule Mr Richard MacMichael

Thursday, 6th June

9.00 – 12.00	Planning in Coastal Regions	Dr Patricia Manuel
1.30 – 2.45	Coastal Framework	Mr Bill Whitman
3.00 – 4.00	Simulation Exercise 3	Mr David Griffiths

Friday, 7th June (*venue: Elizabeth May GIS Lab, Ground Floor, Life Sciences Centre*)

9.00 – 12.00	Introduction to GIS	Mr James Boxall
1.30 – 4.00	GIS Applications	Ms Jennifer Strang Dr Eric Rapaport

Saturday, 8th June: World Oceans Day

All day Free

Sunday, 9th June

All day Free

<p style="text-align: center;">MODULE 4 Law of the Sea and Principled Ocean Governance</p>

Monday, 10th June

9.00 – 12.00	Introduction to Law of the Sea	Mr Hugh Williamson (Module Leader)
1.30 – 3.00	Introduction to Law of the Sea (cont.)	Mr Hugh Williamson

3.00 – 4.00	Study Period	Participants
7.00 onwards	Elisabeth Mann Borgese Ocean Lecture: <i>Communicating the Oceans</i> , and reception	Mr Nikolaus Gelpke All

Tuesday, 11th June

9.00 – 12.00	Precautionary Principle	Dr David VanderZwaag
12.15 – 12.30	Official Group Photograph	All
1.30 – 4.00	Ecosystemic Law and Management	Prof. John Duff

Wednesday, 12th June

9.00 – 12.00	Polluter Pays	Mr Kenneth MacInnis, QC
1.30 – 4.00	Equity and International Fisheries Law	Ms Cecilia Engler
6.30 onwards	Oceans Film Festival (optional)	

Thursday, 13th June

9.00 – 12.00	Maritime Boundary Delimitation	Prof. Phillip Saunders, QC
1.30 – 4.00	Participant Presentations	Participants

Friday, 14th June

9.00 – 10.45	Contemporary Issues	Mr Hugh Williamson
11.00 – 12.00	Simulation Exercise 4	Mr David Griffiths
1.30 – 4.00	Study/Networking Period	Participants

MODULE 5
 Fisheries and Aquaculture

Saturday, 15th June

All day	Field Trip to Bay of Fundy: Sustainable Fish Farming Canada Ltd, Grand Pré Historic Site, Annapolis Tidal Power Station	Mr Allan Archibald Mr John Charlton Dr Graham Daborn Mr Leslie Smith Mr Bruce Gurnham Ms Monique Lefebvre
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Sunday, 16th June

All day	Field Trip to Bay of Fundy: Fundy Adventures, Port Royal	Ms Wanda VanTassel Ms Monique Lefebvre
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Monday, 17th June

All day	Field Trip to Bay of Fundy: Lobster Boat Trip, Cooke Aquaculture Centre, Acadian Seaplants	Mr Chris Hudson Mr Michael Johnston Mr Todd Mosher Mr Will Neily Ms Monique Lefebvre
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Tuesday, 18th June

9.30 – 12.00	Introduction to Module, and Fishery Governance Issues	Dr Tony Charles (Module Leader)
1.30 – 2.45	Participant Presentations	Participants
3.00 – 4.30	Salmonid Fisheries	Dr Fred Whoriskey

Wednesday, 19th June

9.00 – 12.00	Community-based Fisheries	Mr Chris Milley
1.30 – 4.00	Small-scale Fisheries and Guidelines	Mr Mauricio Castrejón Ms Katie Schleit
6.30 onwards	Oceans Film Festival (optional)	

Thursday, 20th June

9.00 – 12.00	Ecosystem-based Fishery Management	Dr Tony Charles Dr Nancy Shackell
1.30 – 2.45	Species at Risk	Ms Heidi Schaefer Mr Trevor Floyd
3.00 – 4.00	Participant Presentations	Participants

Friday, 21st June

9.00 – 10.30	Seafood Value Chain	Mr Art Drysdale
10.45 – 12.00	Aboriginal Fisheries	Prof. Patricia Doyle-Bedwell
1.30 – 2.45	Simulation Exercise: Group Study Period	Participants
3.00 – 4.00	Fisheries Wrap-up	Dr Tony Charles

Saturday, 22nd June

All day Free

Sunday, 23rd June

All day Free

Monday, 24th June

9.00 – 12.00	Aquaculture	Mr David Roberts
1.30 – 4.00	Simulation Exercise 5	Mr David Griffiths

<p style="text-align: center;">MODULE 6 Communication and Negotiation</p>
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Tuesday, 25th June

9.00 – 12.00	Introduction to Module, and Media	Prof. Kim Kierans (Module Leader)
1.30 – 4.00	Interview and Presentation Skills	Prof. Kim Kierans

Wednesday, 26th June

9.00 – 12.00	Interview and Presentation Skills (cont.)	Prof. Kim Kierans Mr Tim Tracey
1.30 – 4.00	Interview and Presentation Skills: Lessons Learned	Prof. Kim Kierans Mr Tim Tracey
6.30 onwards	Oceans Film Festival (optional)	

Thursday, 27th June

9.00 – 12.00	Theory of Negotiation	Dr Gil Winham
1.30 – 4.00	Communication	Mr Peter MacLellan

Friday, 28th June

9.00 – 12.00	Preparation for Negotiation	Mr Hugh Williamson
1.30 – 3.30	Participant Presentations	Participants

Saturday, 29th June

All day Free

Sunday, 30th June

All day Free

Monday, 1st July

All day Free: Canada Day holiday

MODULE 7 Maritime Security

Tuesday, 2nd July

9.00 – 10.00	Simulation Exercise 6	Mr David Griffiths
10.15 – 12.00	Maritime Security Issues	Mr David Griffiths (Module Leader)
1.30 – 4.00	Study Period	Participants

Wednesday, 3rd July

9.00 – 10.30	Introduction to Integrated Maritime Compliance and Enforcement (IMCE)	Cdr Bob Edwards (ret'd) Mr Glen Herbert
10.45 – 12.00	IMCE Exercise	Cdr Bob Edwards (ret'd) Mr Glen Herbert
1.30 – 4.00	IMCE Exercise (cont.)	Cdr Bob Edwards (ret'd) Mr Glen Herbert

Thursday, 4th July

All day	IMCE Exercise (cont.)	Cdr Bob Edwards (ret'd) Mr Glen Herbert
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Friday, 5th July

All day	Emergency Management	Ms Murielle Provost Ms Joanne Lawlor
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Saturday, 6th July

All day Free

Sunday, 7th July

All day Free

MODULE 8 Energy

Monday, 8th July

9.00 – 12.00	Introduction to Energy Module	Dr Alain Joseph (Module Leader)
1.00 – 2.00	Introduction to Geophysics	Mr Tony LaPierre
2.15 – 3.30	Introduction to Geology	Mr David Brown
3.30 – 4.00	Participant Presentation	Participants

Tuesday, 9th July

9.00 – 10.30	Exploration and Risk	Mr Doug Gregory
10.45 – 12.00	Regulation and CEEA	Mr Eric Theriault
1.00 – 1.25	Briefing on Marine Affairs Programme (optional)	Ms Becky Field
1.30 – 2.45	Tidal Power: Technical Aspects	Mr John Woods
3.00 – 4.15	UN Agencies and International Financial Institutions	Dr Mike MacKinnon

Wednesday, 10th July

9.00 – 10.30	Wind Power	Mr Larry Leblanc
10.45 – 12.00	Solar Power	Dr Peter Allen
1.30 – 4.00	Performance Management	Mr Mike Haley

<p style="text-align: center;">MODULE 9 Marine Transportation</p>
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Thursday, 11th July

9.00 – 12.00	Shipping Fundamentals	Mr Dick Hodgson
1.30 – 3.45	Evolution of Containerisation	Mr James Frost (Module Leader)
4.00 – 5.00	Seminar: Can We Protect High Seas Ecosystems under Current International Law? Lessons from the Sargasso Sea Project (<i>Venue: Weldon Law Building</i>)	Dr David Freestone

Friday, 12th July

All day	Field Trip: Eastern Canada Response Corporation, HMCS Sackville, Port of Halifax	Mr David Griffiths LCdr Doug Thomas (ret'd) Mr Patrick Bohan Ms Alison Winsor Mr Jack Long Ms Monique Lefebvre
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Saturday, 13th July

All day	Simulation Exercise: Preparation of Presentations	Participants
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Sunday, 14th July

All day	Simulation Exercise: Preparation of Presentations	Participants
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Monday, 15th July

9.00 – 12.00	Human Elements of International Shipping	Capt. Angus McDonald
1.30 – 4.00	Shipping Trade Realities and Public Policy	Mr Patrick Bohan

Tuesday, 16th July

9.00 – 12.00	Safety of Ships	Capt. Alan Knight
1.30 – 4.00	Role and Record of the International Maritime Organisation (IMO)	Mr Bud Streeter

<p style="text-align: center;">MODULE 10 International Round Table Conclusion of Training Programme</p>
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Wednesday, 17th July

9.30 – 10.45	Round Table – Panel Presentations and Discussion, Introduction to Simulation & Scenario	Dr Awni Behnam Dr Daniela Diz Pereira Pinto Mr David Dzidzornu Dr Dan Lane Mr David Griffiths Participants
11.00 – 12.30	Round Table – Participant Presentations: National Oceans Policy Frameworks	Dr Awni Behnam Dr Daniela Diz Pereira Pinto Mr David Dzidzornu Dr Dan Lane Participants
2.00 – 5.15	Round Table – Participant Presentations: National Oceans Policy Frameworks (cont.)	Dr Awni Behnam Dr Daniela Diz Pereira Pinto Mr David Dzidzornu Dr Dan Lane Participants

Thursday, 18th July

9.00 – 12.00	Round Table – Working Sessions	Dr Awni Behnam Dr Daniela Diz Pereira Pinto Mr David Dzidzornu Dr Dan Lane Participants
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1.30 – 2.45	Round Table – Participant Presentations: Regional Oceans Policy Framework	Dr Awni Behnam Dr Daniela Diz Pereira Pinto Mr David Dzidzornu Dr Dan Lane Participants
3.00 – 3.30	Beyond 30 Years of UNCLOS	Dr Awni Behnam
3.30	Conclusion of Round Table	All
4.30 – 6.30	Closing Ceremony and Reception	All

Friday, 19th July

9.30 – 12.00	Feedback, What Next? and Closing Remarks	Mr Michael Butler IOI Staff/Module Leaders Participants
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COURSE DIRECTOR'S REPORT

This is the third year that I have had the pleasure of being both the Course Director and the Director of IOI-Canada. It once again provided me with valuable insights into the delivery and performance of the presenters, the participants and the Training Program in general. As in previous years the organization of the Course and the logistics associated with bringing course participants to Halifax from all parts of the world have been a tremendous team effort involving Madeleine Coffen-Smout (Programme Officer), Jennifer Barr (Finance Officer) and Monique Lefebvre, this year's Course Coordinator. Although the eight-week program has its moments of stress and drama, we, at IOI-Canada, always have a great feeling of satisfaction at the successful conclusion of the course and particularly when we review the feedback received from the participants.

The Opening Ceremony on Friday, 24 May was once again well attended by friends of the IOI, Dalhousie faculty and staff, host families and other invited guests. The 12 course participants were officially welcomed by a panel of speakers, representing Dalhousie University (Professor Ian McAllister), Halifax Regional Municipality (Councillor Jennifer Watts), the Province of Nova Scotia (Andrew Younger, Member of the Legislative Assembly) and the Federal Government represented by Canada's Department of Fisheries and Oceans (Dr Alain Vézina). Alexis Sewpersad-Persaud from Suriname responded on behalf of the participants. Mr Brian Flemming QC, then kindly provided this year's inspirational keynote address with his customary humour.



The IOI-Canada Senior Research Fellows (see page 54 of this report), as always, played an important role in the planning of the ten course modules. In many cases they assumed the role of Module Leader to ensure the thematic integrity of their respective module and its logical relationship with the other modules. The sequencing of the modules and content have changed over the years to reflect feedback from the course assessments provided by the participants, and the opinion of the lecturers, module leaders and Course Director. The availability of our distinguished 90 plus speakers (see page 35), who provide their invaluable expertise on a *pro bono* basis, dictates the scheduling of some of the subject matter within each module. Almost all presenters allow their digital material to be copied on a memory stick so that, at the conclusion of the course, the participants are provided with a comprehensive compilation of the lectures for future reference and to share with their colleagues at home. In addition to the two-day Integrated Maritime Compliance and Enforcement exercise and the major course-length simulation (requiring teams of course participants to prepare ocean governance plans for fictional countries), other simulation exercises were successfully introduced this year by a number of lecturers to enhance the

hands-on experience of the participants. The simulation exercises are increasingly being designed to integrate with the course-length simulation to provide greater impact and relevance.

The field trips were again considered to be one of the highlights of the course. The three-day Bay of Fundy / Annapolis Valley trip involved visits to land and sea-based aquaculture sites; a seaweed cultivation and research centre; a family-run seaweed harvesting and mollusc operation; a tidal power station; a boat trip to experience and observe the local lobster fishery; a unique hook and line fishery with direct sales from fishermen to customer, and of course witnessing the highest tides in the world. Cultural events were not neglected and included visits to centres of early Acadian and British settlement in Canada. An exhausting three days, so we are considering adding an additional half or full day in 2014.



Shorter day trips included visits to the Bedford Institute of Oceanography, Canada's premier ocean research establishment; the Port of Halifax; HMCS Sackville, Canada's naval memorial; the Maritime Museum of the Atlantic; and the Eastern Canada Response Corporation which deals with oil spills on land and at sea.



Other activities that complemented the academic offerings included the public Elisabeth Mann Borgese Ocean Lecture, the ninth in the annual series. This year it was presented by Nikolaus Gelpke, the president of the Ocean Science and Research Foundation and Managing Director of maribus gGmbH, as well as Vice President of IOI. A graduate of the third IOI-Canada Training Program in 1983, Nikolaus presented on the topic of "Communicating the Oceans", a focus of his publishing and media organisation in Europe. Course participants also attended the three evening showings of the fourth Halifax Ocean Film Festival (HOFF), initiated by IOI in 2010 and now partnered by seven other like-minded organizations. Both the EMB Ocean Lecture and HOFF celebrate Oceans Day (June 8) and complement other ocean activities that month, including the Halifax waterfront display to which IOI contributes.

The important role played by the host families cannot be over-emphasised. Course participants are invited to take advantage of this opportunity to experience Canadian culture and hospitality with local families. It has proved to be very popular. The participants express their gratitude to their hosts with a potluck supper to

which we are all invited. This occasion always proves to be a veritable feast with culinary dishes from all over the world!



The Training Program is under ongoing review to ensure that it maintains the high standards set by Elisabeth Mann Borgese. All of the presentations are critiqued on a weekly basis by the participants via a standardised evaluation sheet. On the final day of the course a half day is devoted to analysing the full eight weeks with the participants, IOI staff and module leaders. At this point the participants are more confident to openly express their views. As Course Director, I emphasise the importance of this feedback in order to improve the educational experience of the course. IOI-Canada is also planning to organise an external review of the course to ensure that we continue to provide a globally competitive and relevant service.

The final week of the Training Program includes a two-day Round Table when the participant teams present their National Ocean Policy frameworks, based on the course-length simulation and the module material, to a distinguished panel of experts. The panellists critique the presentations and provide guidance to the team members in both the plenary sessions and small working groups. It has proved to be a productive learning experience. This year our panellists were Dr Awni Behnam (President, IOI), Dr Dan Lane (University of Ottawa), Dr Daniela Diz (World Wildlife Fund) and Mr David Dzidzornu (Schulich School of Law, Dalhousie University).



The Closing Ceremonies in the Great Hall of Dalhousie University conclude the eight-week Training Program. Dr Behnam officiated and presented the participants with their Certificates. Dr Harvey Silverstein and Commander (ret'd) Bob Edwards welcomed the new graduates to the IOI-Canada Alumni, which now number over 640 from 100 countries. Sheralean Stubbs from the Bahamas, together with Derrick Theophille from the Commonwealth of Dominica and Kim Cooke-Panton from Jamaica, responded on behalf of the participants. It was a happy occasion.

What must we do next year to respond to some of the shortcomings of this year? The order of the modules will again be changed to better facilitate the preparation of the National Ocean Policy frameworks by the participants. The Regional Policy framework will be given more emphasis and time will be provided accordingly for the panel discussions. Efforts will continue to be made to attract Aboriginal participants to the course, in addition to other Canadians. I consider 18 participants to be optimal but reaching this goal in recent years has been dependent on the availability of scholarship funds. The recent establishment of the Ocean Governance Training Foundation (OGTF) will, among other responsibilities, guide us in this respect and complement our other funding initiatives.

To conclude: it was a privilege and pleasure to work with and get to know the participants, from eight countries, on this year's Training Program. They will all be worthy "Ocean Ambassadors."

Michael J.A. Butler
2013 Course Director



PARTICIPANTS

Albania: Ms Kuenda Laze, Environmental Consultant, ILIRIA, & PhD Candidate, Leibniz Institute of Agricultural Development, Tirana

Bahamas: Ms Sheralean Stubbs, Chief Executive Officer, Ministry of Foreign Affairs and Immigration, Nassau, N.P.

China: Mr Jiang Fan, Assistant Engineer, Operation and Planning Division, National Centre of Ocean Standards and Metrology, Tianjin

China: Ms Jiang Mei, Deputy Head, Division of Policy and Planning, Chinese Arctic and Antarctic Administration, Beijing

China: Dr Wei Bo, Assistant Professor, Third Institute of Oceanography, State Oceanic Administration, Xiamen, Fujian

China: Ms Zhang Lu, Programme Manager, National Marine Environment Forecasting Centre, Beijing

China: Ms Zhang Xinyue, Graduate Student (SSGS), Dalhousie University, & Researcher, National Institute for South China Sea Studies, Haikou, Hainan

Cuba: Dr Patricia González Díaz, Professor, Centre for Marine Research, University of Havana, Havana

Dominica: Mr Derrick Theophille, Fisheries Liaison Officer (Data), Fisheries Division, Ministry of Environment, Natural Resources, Physical Planning and Fisheries, Roseau

Jamaica: Ms Kimberlee Cooke-Panton, Senior Fisheries Officer (Actg), Fisheries Division, Ministry of Agriculture and Fisheries, Kingston

Madagascar: Ms Riambatosoa Rakotondrazafy Andriamampandry, Project Assistant/Consultant (Vulnerability & Adaptation to Climate Change), Ministry of Environment and Forests, Ampandrianomby, Tana

Suriname: Ms Alexis Sewpersad-Persaud, Aquaculture Assistant, Fisheries Department, Ministry of Agriculture, Animal Husbandry and Fisheries, Paramaribo



FUNDERS

The International Ocean Institute wishes to acknowledge the very generous support for the 2013 training programme, which it received from a number of sources. Dalhousie University continues to provide significant in-kind support for the programme. Major scholarship funding for the course was made available by the Stiftung für Meereswissenschaft und -forschung (Ocean Science and Research Foundation) through both its IOI Women/Youth and the Sea Programme and the Danielle de St Jorre Scholarship. Acknowledgement is also gratefully given to the following organisations for their contributions towards individual participant expenses: Caribbean Regional Fisheries Mechanism, Government of The Bahamas, National Institute for South China Sea Studies, State Oceanic Administration, University of Havana, Western Indian Ocean Marine Science Association and World Wildlife Fund – US through its Russell E. Train *Education for Nature Programme*. A brief profile of each of these organisations, listed alphabetically, is provided in the following pages.

In addition, sincere thanks are due to the various organisations which contributed to the 2013 programme by hosting the class and/or assisting with field trips or the Oceans Film Festival. These included Acadian Seaplants, Annapolis Tidal Power Station, Bedford Institute of Oceanography/Department of Fisheries and Oceans, Canadian Parks and Wilderness Society, Canadian Wildlife Federation, CM Hudson Fisheries Ltd, Cooke Aquaculture, Dalhousie University's Marine Affairs Program, Eastern Canada Response Corporation, Ecology Action Centre, Fundy Adventures, HMCS Sackville, Maritime Museum of the Atlantic, Museum of Natural History, Port of Halifax, Sustainable Fish Farming Canada Ltd, University of King's College and WWF – Canada. Finally, acknowledgement should also be given to Cape Breton University, for generously contributing to the expenses of sending a staff member to lecture on the course.

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Inaugurated in 2003 and headquartered in Belize, the Caribbean Regional Fisheries Mechanism (CRFM) is an intergovernmental organisation with a mission to “promote and facilitate the responsible utilization of the region's fisheries and other aquatic resources for the economic and social benefits of the current and future population of the region.” Its members are Anguilla, Antigua & Barbuda, The Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Haiti, Jamaica, Montserrat, St Kitts & Nevis, St Lucia, St Vincent & the Grenadines, Suriname, Trinidad & Tobago, and Turks & Caicos Islands.

The CRFM consists of three bodies – the Ministerial Council, the Caribbean Fisheries Forum, and the CRFM Secretariat. The Ministerial Council is the highest decision-making body of the CRFM, and is responsible for formulating the policy of the Mechanism. It is comprised of the Ministers responsible for Fisheries in each Member State. The Forum is made up of one representative from each Member, each Associate Member and each Observer. The CRFM Secretariat is the technical unit, located in offices in Belize and the eastern Caribbean (St Vincent and the Grenadines), comprising a permanent body of technical, scientific and support staff.

Under a Memorandum of Understanding with IOI, the CRFM provides funding to cover the airfares of participants from its member countries. This year's travel grants enabled three fisheries staff from Dominica, Jamaica and Suriname to attend the course.

Dalhousie University

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Founded by the ninth Earl of Dalhousie in 1818, Dalhousie University has grown from being the little “college by the sea” into one of Canada’s leading research and teaching universities. Spread over nearly 80 acres in Halifax and with its recently acquired agricultural campus in Truro, it currently offers over 4,000 courses in more than 190 undergraduate, graduate and professional degree programmes, as well as an extensive continuing education programme. Due to the university’s proximity to the ocean, one of Dalhousie’s two areas of special emphasis is Ocean Studies, with the other being Health Studies.

The university has approximately 18,200 full and part-time students. These come from across Canada and from more than 110 countries around the globe, and enjoy one of the lowest student-professor ratios in the country. Dalhousie’s graduates form a powerful network making important contributions in all walks of life, and include the first female Supreme Court of Canada judge, the first American woman to walk in space, and 87 Rhodes Scholars.

Dalhousie’s teaching and research strengths go hand in hand, with a strong core of talented and dedicated researchers conducting basic and applied research. As Atlantic Canada’s leading research university, Dalhousie attracts more than \$140 million in external research grants and awards each year. Many of its researchers are nationally and internationally recognised for their work, and the university is home to 50 Canada Research Chairs – more than any other university in the region. Chairholders advance the frontiers of knowledge in their fields, not only through their own work, but also by teaching and supervising students and co-ordinating the work of other researchers.

Each year since the inception of the course in 1981, Dalhousie University has provided crucial in-kind support to the IOI training programme. With the ocean at its doorstep, and with ready access to one of the highest concentrations of marine experts in the world, the university is an ideal host for a course of this kind.

Government of The Bahamas

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The Ministry of Foreign Affairs of the Commonwealth of The Bahamas is the premier, official vehicle by which The Bahamas establishes sovereign links with other nations, and the channel through which initial representation should be made to The Bahamas Government, both by other countries and regional and international organisations. As such, it has overall responsibility for advancing the country's interests abroad through co-ordinating, conducting and managing The Bahamas' foreign relations. The Ministry is also responsible for the coordination of technical assistance.

In carrying out its responsibilities, the Ministry:

- monitors, analyses and advises Government on international political, economic, legal and other developments;
- implements Government's foreign affairs priorities;
- represents The Bahamas abroad;
- has oversight of international treaties and agreements, and refugee matters;
- develops friendly relations with other states and their representatives;
- promotes and protects the interests of Bahamian nationals and businesses in foreign countries;
- receives and disseminates information and facilitates contacts between foreign governments and international organisations and other Ministries/Departments of Government; and,
- coordinates some aspects of The Bahamas' international technical cooperation activities.

In addition, the Ministry helps to protect the borders of The Bahamas through the issuance of visas and authentication of documents. It is also responsible for Government's Protocol functions, including the accreditation to The Bahamas of all foreign envoys and of Bahamian envoys to other countries; and relations with Embassies, High Commissions, Consulates General and Honorary Consulates of foreign governments located in The Bahamas.

The Ministry of Foreign Affairs co-sponsored their Chief Executive Officer by providing the airfare for her to attend the 2013 training programme.

National Institute for South China Sea Studies

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The National Institute for South China Sea Studies (NISCSS) is an academic institute in China dedicated to research on South China Sea issues. Its predecessor, the Hainan Research Institute for South China Sea Studies (HRISCS), was established in 1996 as China's foremost research centre for South China Sea issues and as the mainland coordinator for the Cross-Strait Workshop on South China Sea Issues. In 2004, the State Council gave approval for HRISCS to be upgraded to a national level institute, when it was renamed the National Institute for South China Sea Studies.

Major research subjects of the NISCSS are:

- history and geography of the South China Sea, territorial disputes of the South China Sea islands, and relevant maritime delimitation;
- geopolitics of the South China Sea, neighbouring countries' policies on the South China Sea and regional security;
- application of international law in the South China Sea, peaceful resolution of the South China Sea disputes;
- development and management of natural resources, environmental protection in the South China Sea; and,
- strategic studies on maritime economy, marine science in the South China Sea.

The NISCSS currently has five sections: the Research Centre for Oceans Law and Policy, the Research Centre for Maritime Economy, the Research Centre for Marine Science, the Division for International Exchanges and the Administrative Office. In addition, it established a Beijing office in January 2013 as part of its long-term development strategy and to strengthen the academic network.

The institute provided funding for one of its researchers to attend the course as part of a six-month programme of graduate studies at Dalhousie University.

State Oceanic Administration

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The State Oceanic Administration (SOA) is the government administrative agency in China responsible for:

- the supervision and management of sea area use, marine environment protection, marine disaster forecasting and mitigation;
- ensuring China's marine sovereignty and rights; and
- promoting research in marine science and technology.

Its main functions include:

- comprehensive coordination of marine environmental monitoring, scientific research, waste disposal and ocean resources exploitation;
- formulation of national marine strategy and policies; planning and supervising the implementation of medium and long term National Development Plans for marine issues and a National Development Plan for the marine economy;
- establishing and improving systems concerning marine management, and drafting marine laws and regulations concerning the coastal zone, islands and sea areas;
- supervision, evaluation and information dissemination on marine economic performance;
- regulating, supervising and managing sea area uses;
- island ecological protection and legitimate use of uninhabited islands;
- protection of the marine environment;
- implementing marine research and surveys, promoting marine scientific and technological innovations, undertaking research into – and application and management of – seawater use and marine renewable energy resources, and managing the marine series satellites and ground application system;
- marine environmental observation and forecasting, and marine disaster warning;
- international cooperation and exchange activities;
- safeguarding national maritime rights and interests according to international and domestic laws.

With about 50 years of experience, SOA has developed an administrative management system and workforce responsive to the ever-changing situation and able to meet the demands for fulfilling its mandate. Within SOA's framework, there are eight departments in its Beijing-based headquarters, three branches, seven national-level operational centres, five oceanography institutes and two offices responsible for polar affairs and international sea bed mineral resources research and exploration affairs respectively.

SOA provided four scholarships to enable staff members to attend the 2013 course from the Chinese Arctic and Antarctic Administration (Beijing), National Centre of Ocean Standards and Metrology (Tianjin), National Marine Environment Forecasting Centre (Beijing) and Third Institute of Oceanography (Xiamen).

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The Ocean Science and Research Foundation (OSRF) is a charitable foundation registered in Switzerland. Its general objective is to promote research in the social and natural sciences pertaining to the oceans by granting financial contributions to appropriate research and training projects. Support for the 2013 training programme included funds through both the IOI Women/Youth and the Sea Programme and the Danielle de St Jorre scholarship.

IOI Women/Youth and the Sea Programme

The IOI Women and the Sea Programme (subsequently expanded to the IOI Women/Youth and the Sea Programme) was established in 2000 to enhance the capacity and participation of women in poor developing countries in ocean and coastal affairs. The programme has involved several of the IOI Operational Centres, with activities including: training of women decision-makers (IOI-Canada); improving quality of life for women in poverty-stricken coastal communities (IOI-Costa Rica, IOI-India, IOI-Southern Africa, IOI-Senegal); development of seaweed mariculture and local fish processing (IOI-Eastern Africa, IOI-Southern Africa, IOI-Senegal); youth education on marine awareness (Operational Centres in the Black Sea/Caspian region); empowerment of women on aspects of marine ecology, conservation and fisheries (IOI-Nigeria, IOI-Senegal); education for sustainable management, conservation and development of marine resources, in cooperation with the Women and Fisheries Network (IOI-Pacific Islands); training on marine-related handicrafts for coastal women (IOI-Iran); and an outreach education programme on the oceans for women and youth (IOI-Malta). For the 2013 IOI-Canada course, this programme assisted four female participants, with substantial scholarship funding for the women from The Bahamas and Jamaica, top-up funds for the Danielle de St Jorre scholar from Cuba (see below), and a small contribution for the woman from Madagascar.

Danielle de St Jorre Scholarship

The Danielle de St Jorre Scholarship was established by the IOI in 1999 to honour the memory of the late Danielle de St Jorre, Minister for Foreign Affairs, the Environment and Tourism of the Republic of the Seychelles, and a member of the Governing Board of the IOI, in consideration of all she did in her short life for the benefit of her country, small island developing states (SIDS), and the world at large. This scholarship of Swiss Francs 10,000 annually is for women from SIDS to attend training programmes or university degree programmes in ocean affairs. Candidates are selected in consultation with the Alliance of Small Island States (AOSIS), and the scholarship is administered by the IOI Headquarters. The 2013 recipient from Cuba, a Professor at the University of Havana's Centre for Marine Research, chose to use the scholarship to enable her to participate in the Halifax training programme.

University of Havana

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The University of Havana is one of the oldest institutions of higher education in the Americas, dating back to 1728. Originally a religious institution, it was first housed in the convent of San Juan de Letrán. Its status became secular in 1842, and the university moved to its current site in 1902. With 16 faculties, 14 research centres and approximately 6,000 degree students, the University of Havana continues to be a leader in academic research and the provision of undergraduate and graduate programmes in Cuba.

The University of Havana's Centre for Marine Research was established in 1970. It promotes environmental conservation and sustainable development through the integration of scientific research and teaching in marine biological sciences, aquaculture and coastal zone management, using a multidisciplinary approach.

Through the Centre for Marine Research, the university provided funds for the airfare of a senior CIM staff member.

Western Indian Ocean Marine Science Association

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Western Indian Ocean Marine Science Association (WIOMSA) is a regional professional, non-governmental, non-profit, membership organisation, registered in Zanzibar, Tanzania. It is dedicated to promoting the educational, scientific and technological development of all aspects of marine sciences throughout the region of Western Indian Ocean – Somalia, Kenya, Tanzania, Mozambique, South Africa, Comoros, Madagascar, Seychelles, Mauritius, Reunion – with a view to sustaining the use and conservation of its marine resources. In pursuit of this, the Association:

- provides a forum for communication and exchange of information amongst its members that promotes and fosters inter-institutional linkages within and beyond the region;
- supports marine research by offering research grants;
- implements programmes to build the capacity of marine scientists and coastal management practitioners; and,
- works to promote policy dialogue on key topics by organising meetings and seminars on the findings and policy implications of science.

WIOMSA has approximately 1,000 individual members as well as about 50 institutional members from within and outside the region. This interdisciplinary membership consists of marine scientists, coastal practitioners and institutions involved in the advancement of marine science research and development.

WIOMSA promotes marine science research through the award of research grants under the Marine Science for Management (MASMA) and the Marine Research Grant (MARG) programmes. Support in the form of a MARG III grant was given to the participant from Madagascar to cover her airfare.

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Founded in 1961, the World Wildlife Fund (WWF) has been protecting the future of nature for over 50 years. The world's leading conservation organization works in 100 countries and is supported by 1.2 million members in the United States and over 5 million globally. WWF's unique way of working combines global reach with a foundation in science, involves action at every level from local to global, and ensures the delivery of innovative solutions that meet the needs of both people and nature. WWF is committed to reversing the degradation of our planet's natural environment and to building a future in which human needs are met in harmony with nature. Its mission is to conserve nature and reduce the most pressing threats to the diversity of life on Earth.

In recognition of the fact that effective policy, education, fieldwork, and other conservation initiatives depend on sound technical knowledge and skills, the WWF's Russell E. Train Education for Nature Programme (EFN) was established in 1994. Dedicated to Russell E. Train, WWF's founding trustee, past president, and former chairman of the board, the programme aims to build a dynamic and highly qualified corps of conservation leaders in Africa, Asia, and Latin America. Through a number of initiatives that help build capacity of individuals and institutions, EFN provides potential and proven leaders with financial support for higher education, short-term training, and practical experience needed to take on conservation challenges in their home countries and regions.

Under the Russell E. Train EFN Programme, assistance was provided to the participants from Madagascar and Suriname in the form of a contribution towards their expenses.

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Special thanks are due to all the lecturers and field trip co-ordinators, and particularly the key individuals who acted as module leaders, for their invaluable donation of time and expertise. Their contribution to the success of the training programme is gratefully acknowledged.

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