



INTERNATIONAL OCEAN INSTITUTE



**30th ANNIVERSARY TRAINING PROGRAMME ON
*OCEAN GOVERNANCE: POLICY, LAW AND MANAGEMENT***

2010 COURSE REPORT



**Dalhousie University, Halifax, Canada
19th May – 16th July, 2010**

INTERNATIONAL OCEAN INSTITUTE

2010 COURSE REPORT

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INTRODUCTION

This report provides a record of the 2010 training programme on *Ocean Governance: Policy, Law and Management*, conducted by the International Ocean Institute at Dalhousie University, Halifax, Canada. Held from 19th May to 16th July, this was the 30th annual course since the training programme was instituted by the late Elisabeth Mann Borgese, Founder of the IOI.

The programme was attended by 13 participants from a range of disciplines and backgrounds. A good balance of countries and regions was achieved, with participants coming from Africa, Asia, the Caribbean, South Pacific and South America. As usual, emphasis was placed on having strong female representation among the group, with slightly more women than men in the class this year.



For the 12th consecutive year, the Course Director was Dr Noel Brown, former Director of UNEP's Regional Office in North America. Lectures were delivered by over 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:** Integrated Coastal and Ocean Management
- Module 3:** Ocean Sciences
- Module 4:** Law of the Sea and Principled Ocean Governance
- Module 5:** Fisheries and Aquaculture
- Module 6:** Communication and Negotiation
- Module 7:** Energy
- Module 8:** Marine Security
- Module 9:** Marine Transportation
- Module 10:** International Round Table
- Conclusion of Training Programme

GROUP PHOTOGRAPH



Photo credit: Nick Pearce, Dalhousie University

Front row (from left to right): Loureene Jones Smith (Jamaica), Jiyeon Choi (Korea), Illisriyani Ismail (Malaysia), Allena Joseph (St Lucia), Tom Traves, President, Dalhousie University (Canada), Rachel McPherson-Duncan, Intern (Canada), Soulafa Al-Abbasi, 2010 Course Co-ordinator (Canada/Syria), Huang Renwang (China).

Second row: Ingrid Peters (Guyana), Rosemarie Kishore (Trinidad & Tobago), Filly Sanneh (The Gambia), Ursula Kolkolo (Papua New Guinea), Le An Thai (Vietnam), Chi Napoleon Forpah (Cameroon), Paul Boudreau, Lecturer (Canada).

Back row: David Griffiths, Senior Research Fellow (Canada), Mike Butler, Director (England/Canada), Jennifer Barr, Financial Officer (Canada), Peter Wells, Senior Research Fellow (Canada), Alwyn Ponteen (Montserrat), Ian Porter, Lecturer (Canada), Meng Qinglei (China), Madeleine Coffen-Smout, Programme Officer (England)

Missing from picture: Noel Brown, 2010 Course Director (Jamaica/USA)

INTERNATIONAL OCEAN INSTITUTE

IOI-Canada is one of 22 Operational Centres of the International Ocean Institute (IOI), an international, independent, non-governmental, non-profit organisation, which was incorporated in the Netherlands and has special consultative status at the United Nations. Founded in 1972 by the late Elisabeth Mann Borgese, the IOI's mission is:

- ▼ to ensure the sustainability of the Ocean as “the source of life”, and to uphold and expand the principle of the common heritage as enshrined in the United Nations Convention on the Law of the Sea; and,
- ▼ to promote the concept of *Pacem in Maribus* – peace in the Ocean and its management and conservation – for the benefit of future generations.

In pursuit of this mission, the main functions and activities of the IOI are:

- capacity development,
- research,
- policy analysis,
- advocacy,
- dissemination of information,
- training and education,
- project implementation, and
- promotion of peaceful use of the ocean.

The IOI's decision-making body is its Governing Board, with the Executive Committee carrying out the duties of the Board during the inter-sessional period. A Committee of Directors advises the Board on issues related to the operations of the Operational Centres, and on projects, workshops, seminars and training courses. In addition, four elected Directors of Operational Centres attend a joint meeting – the Board of Governance – at the beginning of the annual session of the Governing Board. The Secretariat monitors the implementation of the decisions taken by the Governing Board and Committee of Directors, while also being responsible for the co-ordination and communication with the IOI Network and external partners, and for the establishment of an effective Network management.

In its work, the IOI aims to serve as a stimulus and catalyst—but not to be utopian. Among its key activities listed above, training programmes and the organisation of *Pacem in Maribus* conferences have played an important role in the institute's work since the late 1970s. Its major publication is the *Ocean Yearbook* (www.dal.ca/law/melaw/oyb), with 24 volumes having been published since 1978.

IOI-Canada is based at Dalhousie University in Halifax, Nova Scotia. Through its flagship course, it has trained nearly 600 individuals from approximately 95 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. It is one of the courses 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 ocean management; and,
- ▼ maximise benefits to be derived from the United Nations Convention on the Law of the Sea through the proper integration of 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, 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 ocean governance or marine management. 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 2010 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/2010LectureTopics.doc>.

SYLLABUS

MODULE 1

Orientation and Introduction to the Training Programme

Wednesday, 19th May

9.30 – 10.00	Introductions & Administrative Matters	Ms Soulafa Al-Abbasi
10.15 – 12.00	Killam Library Tour	Ms Michelle Paon
1.30 – 2.45	Introduction to Computing Services	Mr Amir Feridooni
3.00 – 4.00	Campus Tour	Ms Katherine Hay

Thursday, 20th May

9.00 – 10.00	Individual Study Period	Participants
10.00 – 12.00	Kaleidoscope: the Intercultural Experience	Mr Jack Potter Ms Soulafa Al-Abbasi
1.30 – 3.30	Managing at University	Dr David Mensink

Friday, 21st May

9.00 – 12.00	Organisation of Course Work, and Introduction to Modules & Module Leaders	Mr Mike Butler Module Leaders IOI staff
1.30 – 2.45	The Sea in Human History	Mr David Griffiths
4.00 – 6.00	Opening Ceremony	Dr Tony Charles All

Saturday, 22nd May

All day	Free. Optional morning trip to Farmers Market
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Sunday, 23rd May

All day Free

MODULE 2 Integrated Coastal and Ocean Management
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Monday, 24th May

All day	Introduction to Integrated Coastal and Ocean Management (ICOM)	Dr Larry Hildebrand (Module Leader)
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Tuesday, 25th May

9.00 – 12.00	Marine Spatial Planning	Mr Paul Macnab Mr Scott Coffen-Smout
1.30 – 4.00	Environmental Economics	Mr Scott Wood

Wednesday, 26th May

9.00 – 12.00	Coastal Tourism (venue: Maritime Museum of the Atlantic)	Ms Heather Yule Mr Richard MacMichael
1.30 – 4.00	Role of Communities	Ms Alison Evans

Thursday, 27th May

9.00 – 12.00	Coastal Management Framework	Mr Sean Weseloh McKeane
1.30 – 3.30	Simulation Exercise	Mr David Griffiths

Friday, 28th May

9.00 – 12.00	Toolbox: Introduction to GIS (venue: GIS lab)	Ms Jennifer Strang Mr Raymond Jahncke
1.30 – 4.00	Toolbox: GIS applications (venue: GIS lab)	Mr James Boxall

Saturday, 29th May

All day Free

Sunday, 30th May

All day Free

MODULE 3 Ocean Sciences

Monday, 31st May

9.00 – 9.30	Introduction to Module Leader)	Dr Peter Wells (Module
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9.30 – 12.00	Health of the Oceans	Dr Peter Wells
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1.30 – 4.00	Introduction to Oceanography	Dr Paul Hill
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Tuesday, 1st June

9.00 – 12.00	Estuarine and Coastal Waters	Dr Graham Daborn
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1.30 – 4.00	Eco-boundaries and Habitat	Dr John Roff
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Wednesday, 2nd June

9.00 – 12.00	Ocean Weather and Forecasting	Mr Doug Mercer
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1.30 – 2.45	Marine Biodiversity: documentaries & discussion	Mr Bob Branton
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3.00 – 4.00	Participant Presentations	Participants
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Thursday, 3rd June

9.00 – 12.00	Climate Change	Dr John Shaw
1.30 – 4.00	Remote Sensing	Mr Dirk Werle
4.00 – 4.30	Module Wrap-up	Dr Peter Wells

Friday, 4th June

9.00 – 10.45	Toolbox: Information Management - Access and Dissemination	Mr Paul Boudreau (Toolbox Module Leader)
11.00 – 12.00	Simulation Exercise	Mr David Griffiths
1.30 – 4.00	Waterfront Oceans Day Displays	Participants

Saturday, 5th June

All day Free

Sunday, 6th June

All day Free

<p>MODULE 4 Law of the Sea and Principled Ocean Governance</p>

Monday, 7th June

9.00 – 12.00	Introduction to Law of the Sea	Mr Hugh Williamson (Module Leader)
1.30 – 4.00	The Precautionary Principle	Dr David VanderZwaag

Tuesday, 8th June (World Oceans Day)

All day	Field Trip: Bedford Institute of Oceanography	Mr Bruce Anderson Mr Stephen Caines Mr Scott Coffen-Smout Ms Tania Davignon-Burton Mr Fred Dolan Ms Anna Dorey Mr Gordon Fader Ms Jennifer Hackett Ms Jazmine Hayden Mr Glen Herbert Mr Warren Joyce Mr Marty King Dr David Mosher Ms Marci Penney-Ferguson Ms Heidi Schaefer Dr Jacob Verhoef Dr Alain Vézina Ms Megan Wilson
7.00 – 8.30	Elisabeth Mann Borgese Ocean Lecture - Science versus Politics: Tales from CITES	Dr Susan Lieberman
8.30 onwards	Reception	All

Wednesday, 9th June

9.00 – 12.00	Individual Study/Networking Period	Participants
1.30 – 4.00	Environmental Impact Assessment and Public Participation	Mr Peter Mushkat

Thursday, 10th June

9.00 – 12.00	Ecosystem Approach and Integration	Dr Lucia Fanning
1.30 – 4.00	Toolbox: Technical Aspects of Maritime Boundary Delimitation	Mr Galo Carrera

Friday, 11th June

9.00 – 12.00	Polluter Pays	Mr Kenneth MacInnis, QC
1.30 – 2.45	Legal Aspects of Boundary Delimitation	Prof. Phillip Saunders
3.00 – 4.00	Simulation Exercise	Mr David Griffiths

Saturday, 12th June

All day Free

Sunday, 13th June

All day Free

Monday, 14th June

9.00 – 12.00	Toolbox: Performance Monitoring	Mr Mike Haley
1.30 – 2.45	Toolbox: Project Cycle Management	Prof. Ian McAllister
3.00 – 4.00	Introduction to UN Agencies and International Financial Institutions	Dr Mike MacKinnon

<p>MODULE 5 Fisheries and Aquaculture</p>
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Tuesday, 15th June

9.00 – 10.30	Introduction to Fisheries and Aquaculture	Dr Tony Charles (Module Leader)
10.45 – 12.00	Fishery Governance: Issues and Solutions	Dr Tony Charles
1.30 – 2.45	Overview of Fisheries Management in Canada	Mr Bob O'Boyle
3.00 – 4.00	Participant Presentations	Participants

Wednesday, 16th June

9.00 – 12.00	Fisheries Science and Ecosystem-based Management	Dr Alida Bundy
1.30 – 4.00	Fish Processing	Mr Geordie MacLachlan

Thursday, 17th June

9.00 – 10.30	Fisheries and the Coast	Dr Tony Charles
10.45 – 12.00	Participant Presentations	Participants
1.30 – 4.00	International Fisheries: What's Needed?	Ms Susanna Fuller

Friday, 18th June

9.00 – 12.00	Aquaculture	Mr David Roberts
1.30 – 4.00	Aboriginal and Community Fisheries	Mr Chris Milley
4.00 – 4.30	Module Wrap-up	Dr Tony Charles

Saturday, 19th June

All day	Field Trip to Bay of Fundy: Grand Pré, Fort Anne, Nature Reserve, Annapolis Tidal Power Station	Ms Soulafa Al-Abbasi Dr Peter Wells Dr Jon Percy Mr Leslie Smith
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Sunday, 20th June

All day	Field Trip to Bay of Fundy: Habitation (Port Royale), lobster boat trip & Cooke Aquaculture, Bear River First Nation	Ms Soulafa Al-Abbasi Mr Chris Hudson Mr Frank Meuse Jr
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Monday, 21st June

All day	Field Trip to Bay of Fundy: Innovative Fishery Products, Winery Tour	Ms Soulafa Al-Abbasi Mr Doug Bertram
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MODULE 6 Communication and Negotiation
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Tuesday, 22nd June

9.00 – 11.30	Media	Mr Ian Porter
11.45	Class photograph	All
1.30 – 4.00	Communication	Mr Peter MacLellan (Module Leader)

Wednesday, 23rd June

All day	Presentation Skills: Putting Your Best Face Forwards	Mr Ian Porter Mr Tim Tracey
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Thursday, 24th June

9.00 – 12.00	Negotiation Theory	Dr Gil Winham
1.30 – 4.00	Preparing for Negotiation	Mr Hugh Williamson Prof. Diana Ginn

Friday, 25th June

9.00 – 12.00	Simulation Exercise	Mr Michael Butler
1.30 – 4.00	Toolbox: Environmental Assessment	Mr Derek McDonald Mr Donald Humphrey

Saturday, 26th June

All day	Free	
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Sunday, 27th June

All day	Free	
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MODULE 7
Energy

Monday, 28th June

9.00 – 12.00	Introduction to Energy Module	Mr Carey Ryan (Module Leader)
1.30 – 2.45	Introduction to Geology	Mr David Brown
3.00 – 4.00	Introduction to Geophysics	Mr Tony LaPierre

Tuesday, 29th June

9.00 – 12.00	Exploration and Risk	Mr Mike Coolen
1.30 – 2.45	Regulations	Mr Eric Theriault
3.00 – 4.00	Canadian Environmental Assessment Act	Mr Mike Atkinson
7.30 – 9.30	Oceans Film Festival: film and discussion (venue: Museum of Natural History)	Dr Peter Wells Ms Rachel McPherson-Duncan All

Wednesday, 30th June

9.00 – 10.30	Tidal Energy	Mr John Woods
10.45 – 12.00	Wind Energy	Mr Larry Leblanc
1.30 – 2.45	Carbon Dioxide Capture and Geological Storage	Mr Andrew Henry
3.00 – 4.00	Solar Energy	Dr Peter Allen
4.00 – 4.15	Module Wrap-up	Mr Carey Ryan
7.15 – 10.00	Oceans Film Festival: films and wrap-up (venue: Museum of Natural History)	Ms Rachel McPherson-Duncan All

Thursday, 1st July (Canada Day)

All day Free

Friday, 2nd July

9.00 – 10.30	Simulation Exercise	Mr David Griffiths
10.45 – 12.00	Toolbox: State of the Environment Reporting for Coastal and Ocean Management	Dr Jay Walmsley
1.30 – 4.00	Participant Presentations	Participants

Saturday, 3rd July

All day Free

Sunday, 4th July

All day Free

MODULE 8 Marine Security

Monday, 5th July

9.00 – 9.40	Issues in Contemporary Maritime Security	Mr David Mugridge
9.40 – 10.20	Security and the Marine Manager	Mr David Griffiths (Module Leader)
10.20 – 11.00	Understanding Risk	Dr Ron Pelot
11.00 – 1.30	Field Trip: HMCS Sackville (incl. lunch)	Mr David Griffiths
2.00 – 4.00	Field Trip: Port of Halifax	Ms Deidre French

Tuesday, 6th July

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

Wednesday, 7th July

All day	IMCE Exercise	Cdr Bob Edwards (ret'd) Mr Glen Herbert
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Thursday, 8th July

9.00 – 12.00	Emergency Management and Coastal Communities	Ms Murielle Provost Mr John Webb
1.30 – 3.30	Emergency Management and Coastal Communities (cont.)	Ms Murielle Provost
3.30 – 4.00	Module Wrap-up	Mr David Griffiths

<p>MODULE 9 Marine Transportation</p>

Friday, 9th July

9.00 – 12.00	Introduction to Module	Mr Dick Hodgson (Module Leader)
1.00 – 1.20	Briefing on Marine Affairs Programme (optional)	Ms Becky Field
1.30 – 4.00	The Evolution of Containerisation and its Impact on Globalisation	Mr Jim Frost

Saturday, 10th July

All day	Simulation Exercise: Preparation of Presentations	Participants
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Sunday, 11th July

All day	Simulation Exercise: Preparation of Presentations	Participants
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Monday, 12th July

9.00 – 12.00	The Human Factor in International Shipping	Capt. Angus McDonald
1.30 – 4.00	Field Trip: Eastern Canada Response Corporation	Mr Richard Reid Mr Robert Starkes

Tuesday, 13th July

9.00 – 12.00	Role and Record of the International Maritime Organisation	Mr Barry Shepherd
1.30 – 2.45	Safety of Ships	Capt. Alan Knight
3.00 – 4.00	The Future of Marine Transportation, and Module Wrap-up	Mr Dick Hodgson

MODULE 10 International Round Table Conclusion of Training Programme

Wednesday, 14th July

9.00 – 10.45	Round Table – Panel Presentations and Discussion, Introduction to Simulation & Scenario	Mr Neil Bellefontaine Dr Ricardo Federizon Dr Dan Lane Mr Eiji Sakai Dr Vladimir Shibanov Mr Jim Sniffen Mr Hiroshi Terashima Dr Noel Brown Participants
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11.00 – 12.30	Round Table – Participant Presentations: National Oceans Policy Frameworks	Mr Neil Bellefontaine Dr Ricardo Federizon Dr Dan Lane Mr Eiji Sakai Dr Vladimir Shibanov Mr Jim Sniffen Mr Hiroshi Terashima Dr Noel Brown Participants
1.30 – 4.45	Round Table – Participant Presentations: National Oceans Policy Frameworks (continued)	Mr Neil Bellefontaine Dr Ricardo Federizon Dr Dan Lane Mr Eiji Sakai Dr Vladimir Shibanov Mr Jim Sniffen Mr Hiroshi Terashima Dr Noel Brown Participants

Thursday, 15th July

9.00 – 10.45	Round Table – Working Sessions	Mr Neil Bellefontaine Dr Ricardo Federizon Dr Dan Lane Mr Eiji Sakai Dr Vladimir Shibanov Mr Jim Sniffen Mr Hiroshi Terashima Dr Noel Brown Participants
11.00 – 12.00	Round Table – Case Study: Japan’s Basic Act on Ocean Policy	Mr Hiroshi Terashima

1.30 – 4.15	Round Table – Participant Presentations: Regional Oceans Policy Framework	Mr Neil Bellefontaine Dr Ricardo Federizon Dr Dan Lane Mr Eiji Sakai Dr Vladimir Shibanov Mr Jim Sniffen Mr Hiroshi Terashima Dr Noel Brown Participants
4.30 – 6.30	Closing Ceremony and Reception	All

Friday, 16th July

9.30 – 12.00	Feedback, What Next? and Closing Remarks	Dr Noel Brown IOI Staff Dr Peter Wells Participants
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COURSE DIRECTOR'S REPORT

Introduction

The class of 2010 marked the 30th anniversary of the IOI Training Programme in Canada. As such it remains one of the principal and most consistent supporters of the United Nations Convention on the Law of the Sea in the field of Education, Training and Capacity-building. In the process it has contributed significantly to the scholarship on ocean governance, policy, law and management.

This year's class was held against a backdrop of a major oil spill in the Gulf of Mexico, caused by an explosion on 20 April of an offshore drilling rig – Deep Horizon – owned by BP, which has been characterized as the worst such spill in US history. According to government estimates, some 206 million gallons of crude oil were released from the damaged rig and it took several months before the well could be effectively capped.



While it will be some time before the full costs, both environmental and financial, have been definitively assessed, it has now been reported that BP has already paid \$9.5 billion for clean-up costs as well as establishing a victims' compensation fund of some \$20 billion. BP also faces a number of lawsuits filed by both Mexican and US states bordering the Gulf, arguing that the spill had harmed tourism, fishing and commercial shipping, damaged national resources and the environment, and burdened states with expenses in preparing an adequate response.

Beyond such immediate costs, however, the spill is reported to have affected public health, as well as to have caused long term physical and psychological damage to populations in five states. Even Canada has been reportedly affected as migratory birds, such as the Gannet that return to Newfoundland and Labrador, are being killed this year.

Although the spill may be local in origin there will be long term international implications, both for the wider Caribbean and beyond. There will also likely be long term environmental implications which will take some time to be fully assessed.

The Class of 2010 was able to follow the disaster as it unfolded and to see the many connections with the themes of the curriculum and the implications for Oceans Governance, which was the subject of their study. They were also able to gain insights into the risks and challenges inherent in the exploitation and development of maritime resources. This in turn brought into focus such questions as the adequacy of existing regulatory frameworks, advances in drilling technologies, coastal vulnerabilities, limits of human management capacities, and the livelihood of those dependent on near shore resources, such as shrimp, lobster and oysters, which are vital to the economy of the Gulf states as well as a major source of employment. All these ingredients clearly suggest important areas of scholarship on the coastal zone.

In light of these considerations, planners of future IOI courses may wish to give greater prominence to the coastal zones as well as devote more attention to coastal vulnerabilities and risk management in the

development of coastal resources. In the meantime, it is worth reaffirming that with its well-tested and well-established curriculum and its access to a community of highly qualified scholars and presenters – numbering over 80 – the IOI training programme must be ranked among the most distinguished and most effective programmes of its kind. When coupled with the support of the university and local maritime community, this programme could certainly become a model for other IOI operational centres, which might even consider supporting regional and subregional programmes to this effect. It is understood that such an initiative is being launched in the Caribbean, which deserves the widest support.

The Curriculum

With the necessary adjustments to ensure its relevance to the changing maritime policy landscape, the curriculum continues to provide an integrated perspective on ocean governance with regard to policy, law and management. The eight themes – *Integrated Coastal and Ocean Management, Ocean Science, Law of the Sea and Principled Ocean Governance, Fisheries and Aquaculture, Communication and Negotiation, Energy, Marine Security, and Marine Transportation* – are often enhanced and refined by developments in the marine sciences. At the same time, given the growing significance of Climate Change and the urgent need for policy adjustments to ensure effective governance, course planners may wish to give added emphasis to this dimension, especially in light of carbon-induced acidification and its implications for marine life. As a result, the forthcoming Climate Conferences in Cancun (COP 16) should be of particular interest to the Class of 2011.

Thematic Modules

The organisation of the course around eight thematic modules continued to provide a coherent analytical framework for examination of the critical issues that need to be addressed in any serious consideration of integrated oceans management. Moreover, through the structure of module managers, participants were provided with an expert's overview of the content of the module as well as gaps that needed to be filled. The current arrangement was especially enriched by the presence of these module leaders throughout the presentations as well as at the “wrap-up” sessions.



The process was also enriched by the convening of joint meetings to which all module leaders were invited and offered opportunities to exchange views with the participants. This tended to heighten appreciation for both the importance of the module and the organisation of the course.

Classroom Lectures

Again, course planners should be commended for maintaining a consistently high quality in the selection of presenters, many of whom not only mastered their subject, but were also generous with their time. Because of the mix of both academics and professionals, participants were able to gain insights into the latest developments in the science of ocean governance as well as day-to-day policy challenges which face the practitioner. This is especially important in light of the fact that the *training* is the essence of the course and the “hands-on” experience was therefore especially important. Participants were thus able to address questions that they faced in their own work and thereby benefited from the way in which these problems were addressed and solved within the Canadian context.



On the other hand, given the number of presenters and the variety of themes addressed, it might be useful to review the lecture programme in order to determine where themes might be consolidated, thereby reducing the number of lectures or introducing a panel format where several lectures may be simultaneously available for interactions with the students. At the same time, course organisers should be commended for consistently selecting presenters of such calibre, many of whom have had field experience and worked in several of the countries from which the participants had come.

Classroom Presentations

The requirement that participants make a 15 minute presentation continues to be successful and is met, in many instances, with a measure of enthusiasm. Clearly in the pre-arrival briefings participants were advised of the importance of such presentations and the need for effective preparation.

In all but a few instances participants came well prepared, which was clearly in evidence in the quality and creativity of their PowerPoint presentations. These proved to be especially effective when they addressed real problems faced by the countries in which the participants were working, and made for very lively exchanges. More importantly, however, is the fact that they gave each participant an opportunity to address the class and to organise the information in such a way that the impact could be quite powerful. Perhaps more attention should be given to expanding these opportunities as they provide a good gauge of the effectiveness of training and the opportunities afforded to enhance presentation skills. These presentations also revealed a number of new dimensions of the governance challenges facing many countries and the ways in which they are or could be addressed.



Again it is hoped that these presentations will be collected and archived as they could become effective training tools for future programmes. When these presentations are coupled with the Media Training session, I believe the course may have found a combination which added measurably to its effectiveness and might be reviewed and perhaps strengthened.

Simulation Exercises

This year's simulation exercise began early in the course with a significant amount of time devoted to what was involved and why it is important in helping to grasp the intricacies of the subject and to sharpen the negotiation skills. As a learning tool, this proved to be extremely effective and seemed highly valued by participants.

Its relevance was clearly in evidence in the intensity with which participants approached the subject and the clarity and sophistication which were evident in the formulation of their policy and position papers. No doubt the skills being cultivated in such exercises are likely to serve participants well beyond the course, and will add considerable value to their careers.



It also demonstrated the value of working together to find common ground, and of always keeping in focus what is important and the kind of outcome desired. It is strongly recommended that we retain the pattern of introducing the simulation exercise early in the course.

Field Trips

Beside providing opportunities for students to be away from the classroom and to see a bit of the maritime region, the field trips also enabled participants to meet the local population as well as high level professionals and policy makers. The selection of the field sites seemed especially relevant this year, bringing participants into direct contact with first nation peoples within their own communities, and examples of the operation of tidal technology and the historic Bay of Fundy with its unique tidal features.



Because of the “big spill” in the Gulf of Mexico, the visit to the Eastern Canada Response Corporation’s Halifax Response Centre was especially timely and brought into focus the importance of dedicated response systems and the need for a state of readiness in dealing with maritime disasters. This visit admirably reinforced the classroom presentations on emergency management for coastal communities. Despite the cost which obviously is involved in the organisation of such an emergency management system, participants were eager to explore ways in which similar systems might be organized in their respective countries to be able to respond in a timely fashion to inevitable emergencies.

World Ocean Day 2010

World Ocean Day 2010 was celebrated widely throughout the Halifax community, where it seems now to have taken hold. Of particular interest were the water-front exhibitions which participants visited. These were also enriched by the fact that 2010 represented the centenary of the Canadian Navy, which not only showcased Canada’s naval capacities, but gave participants a better appreciation of the relevance of the navy through history and its importance in dealing with Ocean Governance challenges of tomorrow’s world.

The day was also used to pay tribute to the memory of the founder of the IOI, Elisabeth Mann Borgese, with the sixth annual EMB Lecture. This year’s theme, “Science versus Politics: Tales from CITES,” was addressed by Dr Susan Lieberman, Deputy Director of the Pew Environment Group. The lecture has attracted growing participation from both students and the community at large, and in time should become a major event in observance of the World Oceans Day. In this connection, IOI should be given credit for the fact that the Day is beginning to enjoy a measure of visibility which is very much in keeping with a recent decision by the United Nations confirming 8 June as International Oceans Day and the need for worldwide observance.

First Ocean Film Festival

The IOI partnered with the Maritime Museum of the Atlantic to present Halifax’s First Oceans Film Festival from 29-30 June 2010. The films – *Sea Change*, *Wild Ocean* and *End of the Line* – were carefully selected and were designed to educate and inspire, providing critical insights on the state of the world’s oceans and the challenge of environmental sustainability. Screenings were followed by discussions, and it is hoped that such

a festival will continue in the future as both an educational tool and a contribution by IOI to better understanding the oceans through the cinematic arts.

International Roundtable

The training programme was concluded with a roundtable where students were given an opportunity to present reports on the development of national and regional oceans policy for three fictitious countries – Coconia, Didonia and Longa – before a distinguished panel from international, regional and national agencies and academia. Each panel member was invited to make a presentation on their own work and to engage in interaction with participants. They were also invited to meet with participants organised in their three country groups for input from the practitioner's perspective. These roundtables have proved to be especially effective and highly valued by the participants.



Feedback and Wrap-Up Session

Just before the formal conclusion of the course, the 2010 programme participants were given the opportunity to offer their assessments and insights, share experiences and suggest ways in which the course might be improved. These remarks were genuinely positive with one recurring concern that, given the amount of material to be covered, the time was too short and that perhaps the course should be extended to a minimum of 10 weeks.

They also expressed the hope that greater use might be made of the growing alumni community and that similar initiatives should be attempted in their countries and regions. There were few comments about any serious shortcomings of the course or personal grievances experienced that had not been resolved. All expressed gratitude for the opportunity to participate in the programme, which broadened their perspective and moved them beyond the constraints of their own academic disciplines or work programmes. Moreover, through the course they were able to meet participants from different countries, cultures and professions, thereby broadening their global vision and enhancing their sense of responsibility for the protection of the marine environment. Many will explore ways in which they might further assist the programme and at least one expressed a willingness to return as a presenter for the Class of 2011.

Conclusion

From the very positive feedback of the participants as well as the enthusiasm for the course, it is clear that the IOI Training Programme definitely contributes to developing the skills necessary for effective oceans



governance. Unfortunately its expansion has been greatly constrained by insufficient and unpredictable funding. Nevertheless, it is a great tribute to not only the founder's vision of an urgent need for ensuring the viability and relevance of UNCLOS, but also the strong commitment of Canada to help develop the skills necessary for Sustainable Oceans Governance. With the "Big Spill" providing a new focus on some fundamental challenges, and Climate Change revealing new dangers to both the Arctic and marine life and structures, the course hopefully will be one of a number of initiatives dedicated to training effective oceans managers and enlightening various publics on the state and the fate of the oceans.

Thank You

The Course Director once again wishes to express his sincere appreciation to the IOI secretariat and its Director and small but able staff, for once again organizing a course which reflected considerable work and strong commitment. Throughout the entire period, the secretariat was always available to quietly assist participants in addressing some urgent and often personal problems. In addition, it ensured that ample documentation would be available and that reference sources could be easily accessed. The classroom was generously provided with maps and the necessary audio/visual equipment. These enhanced the learning environment and made for smooth presentations throughout the entire period.

A special word of thanks is also due to the Course Coordinator for her effective and sensitive work in ensuring that the participants' needs were met, and that faculty and presenters were always given the right information in a timely fashion. These services likewise ensured the smooth running of the course, for which we can only say: thank you!

In Memoriam

Toward the end of the course one member of the group lost a parent, which prevented his participation in the final sessions. This news brought a moment of shared sadness for the class and outpouring of condolences to their fellow student and his family. This provided another demonstration of the well bonded group and a sense of solidarity in a time of grief and mourning.

Dr. Noel J. Brown
2010 Course Director

Photo credits: Rusudan Grigolia, Kevin Daigle, Le An Thai

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Finally, sincere thanks are due to the various organisations which contributed to the 2010 programme by hosting the class and/or assisting with field trips and the Oceans Film Festival. These included Annapolis Tidal Generating Station, Bear River First Nation (through Stone Bear Tracks and Trails), Bedford Institute of Oceanography/Department of Fisheries and Oceans, Eastern Canada Response Corporation, Innovative Fishery Products, Maritime Museum of the Atlantic, Museum of Natural History, and Port of Halifax.

Caribbean Regional Fisheries Mechanism (www.caricom-fisheries.com)

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 and Barbuda, The Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Haiti, Jamaica, Montserrat, St Kitts and Nevis, St Lucia, St Vincent and the Grenadines, Suriname, Trinidad and Tobago, and the Turks and Caicos Islands.

The CRFM consist 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, comprising a permanent body of technical, scientific and support staff.

Under a Memorandum of Understanding with the IOI, the CRFM has in recent years provided funding to cover the airfares of several participants from its member countries. This year's travel grants went to fisheries department staff from Guyana, Montserrat and St Lucia.

Dalhousie University (www.dal.ca)

Founded by the ninth Earl of Dalhousie in 1818, Dalhousie University has grown from being the little “college by the sea” into a leading research and teaching university, spread over nearly 80 acres. With one of the lowest student-professor ratios in the country, it currently offers 3,700 courses in 180 undergraduate, graduate and professional degree programmes, as well as an extensive continuing education programme. The university’s approximately 16,000 full and part-time students come from across Canada and from more than 110 countries around the globe.

Dalhousie’s teaching and research strengths go hand in hand, with a strong core of talented and internationally recognised researchers conducting basic and applied research. 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.

In addition to its teaching and research facilities, Dalhousie has a system of specialised campus libraries, student residences, an Arts Centre, an art gallery, a Student Union Building, athletic and recreational facilities, and other facilities of many kinds. Major teaching hospitals, federal and provincial research laboratories, and the provincial archives are all close at hand.

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 scientists in the world, the university is an ideal host for a course of this kind.

Institute of Marine Affairs (www.ima.gov.tt)

The Institute of Marine Affairs (IMA) is a multidisciplinary marine and environmental research organisation which commenced operations in 1978. It was established following an agreement between the Government of Trinidad and Tobago and the United Nations, through its Executing Agency, the United Nations Development Programme (UNDP). The institute's major objectives are:

- to develop and implement programmes and projects that translate the marine and related policies of the Government into activities that contribute to national development;
- to develop and execute programmes and projects that foster and encourage regional and international collaboration in the exploitation of the marine and other related areas of the environment;
- to promote a public understanding of and appreciation for all aspects of the marine related environment;
- to stimulate and advance the conduct of marine scientific research in Trinidad and Tobago; and,
- to promote the utilisation and conservation of the marine resources for the economic and social benefit of Trinidad and Tobago and to enhance the national capabilities.

Over the years, the IMA has taken up its Caribbean mandate by its involvement in a number of regional projects which have contributed to the sustainable development of the coastal and marine areas of the insular Caribbean. Many of these projects have been initiated by either CARICOM or UNEP's Caribbean Environment Programme. IMA's main areas of focus are currently Fisheries and Aquaculture, Environmental Research, Marine Chemistry, and Legal and Policy Research.

As the Government, private sector and citizens have become more environmentally conscious, greater demands have been made on the IMA to provide information and inform policy on marine and environmental matters. To meet these demands, the Institute of Marine Affairs is building on traditional strengths while becoming more flexible and responsive. Research programmes are being strengthened through the recruitment of research staff; and some buildings are being replaced.

The Institute of Marine Affairs provided an airfare for a member of its research staff, to enable her to attend the 2010 course.

Korea Maritime Institute (www.kmi.re.kr)

The Korea Maritime Institute (KMI) is a national R&D centre. Established in 1984 as a research centre specialising in shipping economics, it was reorganised and expanded in 1997. Since then, it has contributed to the development and implementation of marine affairs and fisheries policies as a new growth engine for the 21st century.

Currently, the KMI is strengthening its R&D capability to build up global competitiveness in maritime affairs and fisheries initiatives at the national and international level. The institute pursues development and innovation in order to establish national policies in the fields of marine affairs, integrated coastal management, fisheries, shipping, and ports, thereby contributing to national economic growth. As well, it aims to develop into a world-class research centre by engaging in exchange programmes and joint research activities with prominent overseas universities, research institutes and international organisations, thereby promoting Korea's status in the international community.

The KMI focuses its research activities in three major areas:

- **Marine & Coastal Policy Research** embraces a wide range of global and domestic issues and concerns regarding integrated coastal management, marine science and technology policies, and international cooperation in the field of marine policy. The main aim of this research is to improve the quality of the marine environment and to create added value for the nation.
- **Shipping, Port & Logistics Research** covers all fields of maritime transportation including marine security and the development, management, operation and digitalisation of shipping and ports nationally and internationally. The purpose of this area of research is to contribute to economic rehabilitation and lead national initiatives to encourage the shipping, port and logistics industry.
- **Fisheries Policy Research** is comprised of all fields of the fishing industry including production of fish and fisheries products, resource management, trade, international cooperation, and fishing village development, so as to promote fisheries as a sustainable and competitive industry and to construct prosperous and vibrant fishing villages.

The KMI provided the course expenses for one staff member to attend the 2010 programme during her year at IOI as a Visiting Scholar.

The Lloyd's Register Educational Trust (www.lr.org/LRET)

The Lloyd's Register Educational Trust (The LRET) is an independent charity, established in 2004 and based in London. Its principal purpose is to support advances in transportation, science, engineering and technology education, training and research worldwide for the benefit of all. It also funds work that enhances the safety of life and property at sea, on land and in the air.

The LRET focuses on four areas:

- **pre-university education:** promotes careers in science, engineering and technology to young people, their parents and teachers, through appropriate organisations;
- **university education:** provides funding to universities for undergraduate and MSc scholarships;
- **vocational training and professional development:** supports professional institutions, educational and training establishments working with people of all ages; and,
- **research:** funds existing or new centres of excellence at institutes and universities.

In the area of 'vocational training,' The LRET provided funding to IOI to enable six promising professionals from Africa, Asia and the Caribbean to participate in the 2010 training programme.

Ocean Management Research Network - Réseau de recherche sur la gestion des océans (www.omrn-rrgo.ca)

The Ocean Management Research Network (OMRN) is an independent, not-for-profit national network with its secretariat located at the Telfer School of Management of the University of Ottawa. Its aim is to create and share knowledge for the application of critical thinking and best practices in oceans management in Canada. Interdisciplinary, with a focus on the human dimension of oceans policy and social science, the OMRN provides a forum for over 800 members including researchers, managers, and policymakers to evaluate timely and innovative linkages, integrate lessons learned, transfer and share knowledge, and help create an expert core of ocean researchers. It facilitates value-added research, provides seed funding, and seeks to establish a long-term research agenda. The OMRN has been funded periodically since 2001 as a Joint Initiative by the Social Sciences and Humanities Research Council (SSHRC) and Fisheries and Oceans Canada.

OMRN focuses its activities in three major areas:

A strong research platform provides an integrated perspective of the humanities and social sciences with links to the natural sciences, health sciences and other ocean-related disciplines.

Knowledge mobilization and transfer, defined by the Social Sciences and Humanities Research Council (SSHRC) as “moving knowledge into active service for the broadest possible common good,” is fundamental to the OMRN. OMRN’s outreach and dissemination activities consolidate, synthesise, and disseminate in order to transform knowledge, as well as findings from specific research, while drawing on the experience of its vast network of researchers and stakeholders. In this regard, OMRN provides an integrated perspective to a vast array of political, social, cultural, economic, legal and related ocean management issues.

Partnerships are vital to OMRN’s networking and engagement activities. The OMRN works with over 50 partners across Canada including a network of Canadian universities, the Department of Fisheries and Oceans, Parks Canada, Environment Canada, Industry Canada, industry associations, regional organisations, First Nations and NGOs. These partnerships are enhanced, strengthened and evolved through network-wide initiatives as well as thematic Working Groups which emphasise regular collaboration with current partners and potential collaborators, at regional, national and international levels.

The OMRN provided funding for the 2010 Elisabeth Mann Borgese Ocean Lecture. Delivered by Dr Susan Lieberman, this lecture was held as one of the World Oceans Day activities in Halifax, and was also part of the 2010 training programme curriculum.

State Oceanic Administration (www.soa.gov.cn)

The State Oceanic Administration (SOA) is the government administrative agency in China responsible for the supervision and management of sea area use and marine environment protection; for ensuring China's marine sovereignty and rights; and for promoting research in marine science and technology. As a result of the efforts made over the past 46 years, SOA has developed a well-structured administrative management system and a competent workforce responsive to the ever-changing situation and able to meet the demands for fulfilling its mandate.

Since SOA's inception, the development of maritime industries in China has been accelerated, the marine law regime has steadily improved, and breakthroughs have been made in the fields of ocean planning, integrated coastal and ocean management, marine scientific research, oceanographic survey and marine services. Current challenges in the development of coastal and ocean affairs include fully implementing the "Ocean Development Strategy" defined by the 16th National Congress of the Communist Party of China; striving for the realisation of the objective of making China a strong maritime state; and creating a new era for China's ocean affairs.

SOA committed to funding two of its staff members to enable them to attend the 2010 course.

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Stiftung für Meereswissenschaft und -forschung (Ocean Science and Research Foundation)

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 2010 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 2010 IOI-Canada course, this programme provided substantial funding for the female participants from Guyana and St Lucia, as well as top-up funding for the Danielle de St Jorre scholar (see below).

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, the 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 2010 recipient, an Environmental Officer from Jamaica, chose to use the scholarship to enable her to participate in the Halifax training programme.

Universiti Putra Malaysia (www.upm.edu.my)

Universiti Putra Malaysia is one of the leading universities in Malaysia. It began its history in 1931 as the School of Agriculture in Serdang, Selangor, with the objective to produce a skilled workforce in agriculture especially for the Agriculture Department.

In 1947, the institution was upgraded and proclaimed as the Malayan Agriculture College, and in 1971 it merged with Universiti Malaya's Agriculture Faculty to form the Universiti Pertanian Malaysia (UPM). In 1997, UPM was renamed Universiti Putra Malaysia, to reflect its capability in offering various fields of studies in addition to maintaining and strengthening its core competencies of agriculture-related programmes, forestry and veterinary science.

Today, UPM has become a multidisciplinary university with approximately 19,000 undergraduates and 10,000 postgraduate students. Its mission is to be “a leading centre of learning and research, contributing not only towards the creation of wealth and nation building but also towards universal human advancement and discovery of knowledge.” In pursuit of this, the fields of study which it offers include science and technology, economics and management, engineering, environmental studies, nutritional science, medicine, information technology, education, humanities, language and communication. In addition to its main campus in Serdang, UPM has a smaller branch campus in the coastal city of Bintulu.

Universiti Putra Malaysia provided a travel grant for a researcher from its Institute of Agricultural and Food Policy Studies, to enable her to attend the training programme.

Vinalines Shipping Company (www.vinalines-shipping.com)

Vinalines Shipping Company (VLC) is a member unit of Vietnam National Shipping Lines (VINALINES) and was established in May 2002, with its head office in Hanoi. It was the first company to provide container services in Vietnam, and is now taking the lead in the market share of domestic transport with high quality service.

During the past years, Vinalines Shipping Company has grown stronger in all aspects with its field of business and scope of activities being extended incessantly. Its main services are:

- transport of dry cargo by sea
- transport of product oil by sea
- multi modal transport
- time charter out
- logistics.

For enhanced quality of service and effect, Vinalines Shipping Company always ensures and maintains a Safety Management System & Quality Management System. The fleet managed by VLC is classified by reputable Classification Societies in the world, which ensures that VLC provides reliable transport services to domestic as well as foreign customers. In addition to a modern fleet with stability in operation, one important factor in the success of VLC is that its staff are highly qualified, well trained and enthusiastic in serving customers.

The vision and strategy of Vinalines Shipping Company are as follow:

- prestige is the most important asset of the company;
- professional ethics is the most important character of the staff;
- carrying out business activities best step by step;
- providing customers with best services in order to maintain the development of the company.

Vinalines Shipping Company provided the airfare of one of its Deputy Directors to enable him to attend the 2010 training programme.

World Wildlife Fund - US (www.wwf-efn.org)

Founded in 1961, the World Wildlife Fund (WWF) has been protecting the future of nature for nearly 50 years. The world's leading conservation organisation, WWF 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.

WWF's mission is the conservation of nature. Using the best available scientific knowledge and advancing that knowledge where it can, WWF works to preserve the diversity and abundance of life on Earth and the health of ecological systems by protecting natural areas and wild populations of plants and animals, including endangered species; promoting sustainable approaches to the use of renewable natural resources; and promoting more efficient use of resources and energy and the maximum reduction of pollution.

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, former chairman of the board, and current chairman emeritus, 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 participant from Papua New Guinea in the form of a contribution towards her expenses.

LECTURERS & FIELD TRIP CO-ORDINATORS

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 crucial and invaluable donation of time and expertise. Their contribution to the success of the training programme is gratefully acknowledged.

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