



INTERNATIONAL OCEAN INSTITUTE



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

2009 COURSE REPORT



**Dalhousie University, Halifax, Canada
20th May – 17th July, 2009**

INTERNATIONAL OCEAN INSTITUTE

2009
COURSE REPORT

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INTRODUCTION

This report provides a record of the 2009 training programme in *Ocean Governance: Policy, Law and Management*, conducted by the International Ocean Institute at Dalhousie University, Halifax, Canada. Held from 20th May to 17th July, this was the 29th annual course since the training programme was instituted by the late Elisabeth Mann Borgese, Founder of the IOI.

The programme was attended by 12 participants from a range of disciplines and backgrounds. A good balance of countries and regions was achieved, with participants coming from Africa, Asia, the Arctic and the Caribbean. As usual, emphasis was placed on having strong female representation among the group, with equal numbers of men and women in the class this year.

For the 11th 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:	Law of the Sea and Principled Ocean Governance
Module 3:	Ocean Sciences
Module 4:	Toolbox
Module 5:	Integrated Coastal and Ocean Management
Module 6:	Media, Communications, Negotiation
Module 7:	Energy
Module 8:	Fisheries and Aquaculture
Module 9:	Marine Security
Module 10:	Marine Transportation
Module 11:	International Round Table
	Conclusion of Training Programme

GROUP PHOTOGRAPH



Photo credit: Nick Pearce, Dalhousie University

Front row (from left to right): Noel Brown, 2009 Course Director (Jamaica/USA), Donna Kenneally (Canada), Xu Heyun (China), Maxine Monsanto (Belize), Wang Xinyi (China), Ivet Hernández Hernández (Cuba), Sahar Fahmy Mehanna (Egypt), Soulafa Al-Abbasi, 2009 Course Co-ordinator (Canada/Syria), Tom Traves, President, Dalhousie University (Canada).

Second row: Wesley Clerveaux (Turks & Caicos), George Looby (Antigua & Barbuda), DeHaan Brown (Jamaica), Oluwaseyi Leigh (Nigeria), Feng Lei (China), Iwan Setiyono Ko (Indonesia), Madeleine Coffen-Smout, Programme Officer (England).

Back row: Paul Macnab, Lecturer (Canada), David Griffiths, Senior Research Fellow (Canada), Mike Butler, Director (England/Canada), Jennifer Barr, Financial Officer (Canada), Hugh Williamson, Module Leader (Canada), Scott Coffen-Smout, Lecturer (Canada).

INTERNATIONAL OCEAN INSTITUTE

IOI–Canada is one of the 23 active Operational Centres of the International Ocean Institute (IOI), an international, independent, non-governmental, non-profit organisation, incorporated in the Netherlands. Founded in 1972 by the late Elisabeth Mann Borgese, the IOI aims:

- ▼ 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 of the IOI are:

- ▼ education and training,
- ▼ research and analysis,
- ▼ organisation of conferences and meetings,
- ▼ institution-building and partnerships,
- ▼ promotion and communication, and
- ▼ fundraising in support of the activities of the Institute and its network.

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. 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*, with 23 volumes having been published since 1978.

IOI-Canada is based at Dalhousie University in Halifax, Nova Scotia. Through its flagship course, it has trained more than 580 individuals from over 90 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 2009 training programme was organised into 11 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 2009 course website, and these can be reviewed at <<http://internationaloceaninstitute.dal.ca/IOI2009/LectureTopics.doc>>.

SYLLABUS

MODULE 1 Orientation and Introduction to the Training Programme

Wednesday, 20th May

9.15 – 9.45	Introductions & Administrative Matters	Ms Soulafa Al-Abbasi
10.00 – 12.00	Kaleidoscope: the Intercultural Experience	Ms Soulafa Al-Abbasi Mr Jack Potter
1.30 – 3.00	Introduction to Computing Services	Ms Nellie Clyde Ms Mary Taylor
3.00 – 4.00	Walking Tour of Upper Campus	Ms Kathleen Somers

Thursday, 21st May

9.00 – 10.30	Killam Library Tour	Ms Michelle Paon
10.45 – 11.45	Study Period	Participants
1.00 – 3.00	Managing at University	Dr David Mensink
3.15 – 4.30	Introduction to UN Agencies	Dr Mike MacKinnon

Friday, 22nd May

9.00 – 12.00	Organisation of Course Work, and Introduction to Modules, Module Leaders & Simulation Exercise	Mr Mike Butler Module Leaders IOI staff
1.30 – 3.00	The Sea in Human History	Mr David Griffiths
4.00 – 6.00	Opening Ceremony	Dr Art Hanson All

Saturday, 23rd May

All day	Free. Optional morning trip to Farmers Market	
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Sunday, 24th May

All day Free

MODULE 2 Law of the Sea and Principled Ocean Governance

Monday, 25th May

9.00 – 12.00	Introduction to Law of the Sea	Mr Hugh Williamson (Module Leader)
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1.30 – 4.00	Ecosystem Approach and Integration	Dr Lucia Fanning
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Tuesday, 26th May

9.00 – 12.00	Environmental Impact Assessment and Public Participation	Mr Peter Mushkat
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1.30 – 2.45	Legal Aspects of Maritime Boundary Delimitation	Dean Phillip Saunders
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3.00 – 4.00	Social Justice and Equity	Dr Donald Clairmont
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Wednesday, 27th May

9.00 – 12.00	Precautionary Principle	Dr David VanderZwaag
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1.30 – 4.00	Polluter Pays	Mr Kenneth MacInnis, QC
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Thursday, 28th May

9.00 – 12.00	Implementation of Principled Ocean Governance in the Wider Caribbean	Dr Winston Anderson
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1.30 – 2.45	Legal Aspects of Marine Scientific Research	Dr Zhang Haiwen
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3.00 – 4.00	Module Wrap-up	Mr Hugh Williamson
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Friday, 29th May

9.30 – 11.20	The Effect of Biodiversity Conventions on Caribbean Judicial Decision-making (IOI-MAP-MELI seminar)	Dr Winston Anderson
11.20 – 12.00	Study Period	Participants
1.30 – 4.00	Simulation Exercise	Mr David Griffiths Mr Marco Boccia

Saturday, 30th May

All day Free

Sunday, 31st May

All day Free

MODULE 3 Ocean Sciences

Monday, 1st June

9.00 – 12.00	Introduction to Module, and Health of the Oceans	Dr Peter Wells (Module Leader)
1.30 – 4.00	Introduction to Oceanography	Dr Anna Metaxas

Tuesday, 2nd June

9.00 – 12.00	Marine Biodiversity	Dr Martin Willison
1.30 – 4.00	Estuaries and Coastal Waters	Dr Graham Daborn

Wednesday, 3rd June

9.00 – 12.00	Ocean Weather and Forecasting	Mr Peter Bowyer
1.30 – 4.00	Eco-boundaries and Habitat	Dr John Roff

Thursday, 4th June

9.00 – 12.00	Climate Change	Dr John Shaw
1.30 – 3.30	Science into Policy	Dr Bruce Hatcher
3.30 – 4.00	Module Wrap-up	Dr Peter Wells

MODULE 4 Toolbox

Friday, 5th June

9.00 – 12.00	Introduction to GIS	Ms Jennifer Strang Mr Raymond Jahncke
12.15 – 1.15	Working Lunch: Simulation Update	Mr David Griffiths
1.30 – 4.00	GIS Applications	Mr James Boxall

Saturday, 6th June

All day Free

Sunday, 7th June

All day Free

Monday, 8th June (World Oceans Day)

All day	Field trip: Bedford Institute of Oceanography	Mr Bruce Anderson Dr Sherry Niven Mr Scott Coffen-Smout Mr Andrew Cogswell Mr Joe Crocker Mr Tom King Mr Steve Campana Mr Bob McDonald Dr Brian Todd Mr Gordon Fader Dr Jacob Verhoef Mr Tim Hall Ms Jennifer Hackett
7.00 – 8.30	Elisabeth Mann Borgese Ocean Lecture – Canada & the Circumpolar World: the Coming Blizzard	Dr Rob Huebert
8.30 onwards	Reception	

Tuesday, 9th June

9.00 – 10.00	Panel on Arctic Issues	Dr Rob Huebert Dr Bob Fournier Ms Donna Kenneally
10.15 – 12.00	Informatics and Data Discovery	Mr Paul Boudreau (Module Leader) Dr Elaine Toms
1.30 – 4.00	Performance Monitoring	Mr Mike Haley

Wednesday, 10th June

9.00 – 12.00	Ecological Impact Assessment	Mr Ted Potter Mr Kristian Curran
1.30 – 4.00	Remote Sensing	Mr Dirk Werle

Thursday, 11th June

9.00 – 12.00	Technical Aspects of Maritime Boundary Delimitation	Mr Galo Carrera
1.30 – 4.00	Introduction to Integrated Coastal and Ocean Management (ICOM)	Mr Larry Hildebrand (Module Leader)

Friday, 12th June

9.00 – 12.00	Presentation Skills: Putting Your Best Face Forwards	Professor Kim Kierans Mr Tim Tracey
1.30 – 4.00	Project Cycle Management	Professor Ian McAllister
4.00 – 5.00	Simulation Exercise	Mr David Griffiths

<p style="text-align: center;">MODULE 5 Integrated Coastal and Ocean Management</p>
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Saturday, 13th June

All day	Field Trip to Annapolis Valley: Grand Pré, Fort Anne, Annapolis Tidal Power	Ms Soulafa Al-Abbasi Mr Leslie Smith Mr Mike Butler Dr Peter Wells Mr Dirk Werle
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Sunday, 14th June

All day	Field Trip to Annapolis Valley: Habitation, lobster boat trip, Bear River First Nations Cultural Centre	Ms Soulafa Al-Abbasi Mr Chris Hudson Mr Frank Meuse Jr Mr Mike Butler Dr Peter Wells Mr Dirk Werle
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Monday, 15th June

All day	Field Trip to Annapolis Valley: Innovative Fishery Products, CFB Greenwood	Ms Soulafa Al-Abbasi Mr Doug Bertram Sgt Scott Beeston Mr Mike Butler Dr Peter Wells Mr Dirk Werle
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Tuesday, 16th June

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

Wednesday, 17th June

9.00 – 12.00	Coastal Tourism (venue: Museum of Natural History)	Mr Jonathan Foster Ms Heather Yule Mr Wally Hayes
1.30 – 4.00	Coastal Management Framework	Mr Sean Weseloh McKeane

Thursday, 18th June

9.00 – 12.00	Role of Communities	Ms Alison Evans
1.30 – 4.00	Lessons Learned and Module Wrap-up	Mr Larry Hildebrand

MODULE 6 Media, Communications, Negotiation

Friday, 19th June

9.00 – 12.00	Media	Mr Ian Porter Professor Kim Kierans
1.30 – 4.00	Communications Management	Mr Peter MacLellan (Module Leader)

Saturday, 20th June

6.00 onwards	International Potluck Dinner	Participants IOI Staff and SRFs Hosts Module Leaders
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Sunday, 21st June

All day	Free	
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Monday, 22nd June

9.00 – 12.00	Simulation Exercise	Mr David Griffiths
1.30 – 4.00	Negotiation Theory	Dr Gil Winham

Tuesday, 23rd June

9.00 – 12.00	Preparing for Negotiation	Mr Hugh Williamson Professor Diana Ginn
1.30 – 4.00	Participant Presentations	Participants

MODULE 7 Energy

Wednesday, 24th June

9.00 – 12.00	Introduction to Module, and Oil and Gas from a Global Perspective	Mr Carey Ryan (Module Leader)
1.30 – 2.45	Introduction to Geology	Mr David Brown
3.00 – 4.00	Geophysics	Mr Tony LaPierre

Thursday, 25th June

9.00 – 10.30	Exploring, Drilling and Production of Offshore Oil and Gas	Mr Cal Ross
10.45 – 12.00	Risks	Mr Cal Ross
1.30 – 2.45	Regulating Offshore Activities	Mr Eric Theriault
3.00 – 4.00	Canadian Environmental Assessment Agency	Mr Derek McDonald

Friday, 26th June

9.00 – 10.30	Tidal Energy	Mr John Woods
10.45 – 12.00	Wind Energy	Mr Peter Archibald
1.30 – 2.45	Module Wrap-up	Mr Carey Ryan
3.00 – 4.00	Participant Presentations	Participants

Saturday, 27th June

All day Free

Sunday, 28th June

All day Free

<p style="text-align: center;">MODULE 8 Fisheries and Aquaculture</p>
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Monday, 29th June

9.00 – 12.00	Classroom Discussion	Dr Noel Brown
1.30 – 2.45	Overview of Fisheries Management in Canada	Mr Bob O'Boyle
3.00 – 4.00	Fish Processing	Mr Greg Roach

Tuesday, 30th June

9.00 – 12.00	Fisheries Science and Ecosystem-based Management	Dr Alida Bundy
1.30 – 4.00	Status of Fish in the Ocean	Dr Camilo Mora

Wednesday 1st July (Canada Day)

All day Free

Thursday, 2nd July

9.00 – 12.00	Small-scale Fisheries, Rights and Food Security	Mr Chris Milley
1.30 – 4.00	Aboriginal and Community Fisheries	Mr Chris Milley Mr Bob Capistrano

Friday, 3rd July

9.00 – 12.00	Participant Presentations	Participants
1.30 – 4.00	Aquaculture	Mr David Roberts

Saturday, 4th July

9.00 – 1.00	Field Trip: Freshwater Aquaculture Centre, Truro	Mr Mike Edwards
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Sunday, 5th July

All day Free

<p>MODULE 9 Marine Security</p>
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Monday, 6th July

9.00 – 9.45	Concepts of Contemporary Security	Mr David Griffiths (Module Leader)
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9.45 – 10.45	Simulation Exercise: Progress Reports	Mr David Griffiths
11. 00 – 12.00	Diplomatic Aspects of Ocean Policy Development	Mr Harold Foster
1.30 – 4.00	Field Trip: Port of Halifax	Mr Gord Helm

Tuesday, 7th July

9.00 – 12.00	Introduction to Integrated Maritime Compliance and Enforcement (IMCE)	Cdr Bob Edwards (ret'd) Mr Glen Herbert
1.30 – 2.45	IMCE Exercise	Cdr Bob Edwards (ret'd) Mr Glen Herbert
3.00 – 4.00	Participant Presentations	Participants

Wednesday, 8th July

All day	IMCE Exercise (cont.)	Cdr Bob Edwards (ret'd) Mr Glen Herbert
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Thursday, 9th July

9.00 – 12.00	Emergency Management and Coastal Communities	Ms Murielle Provost Dr Ron Pelot Mr John Webb Mr Adam Rostis
1.30 – 3.30	Emergency Management and Coastal Communities (concluded)	Ms Murielle Provost Dr Ron Pelot Mr John Webb Mr Adam Rostis
3.30 – 4.00	Module Wrap-up	Mr David Griffiths

MODULE 10 Marine Transportation

Friday, 10th July

9.00 – 12.00	Introduction to Marine Transportation	Mr Dick Hodgson (Module Leader)
1.00 – 1.20	Briefing on Marine Affairs Programme (optional)	Ms Becky Field
1.30 – 4.00	Economic Dimensions of Shipping	Dr Mary Brooks

Saturday, 11th July

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

All day	Simulation Exercise: Preparation of Presentations	Participants
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Monday, 13th July

9.30 – 11.00	Field Trip: Eastern Canada Response Corporation	Mr Addison Vickard
1.30 – 2.45	Safety of Ships	Capt. Alan Knight
3.00 – 4.15	Human Elements of Shipping	Capt. Angus McDonald

Tuesday, 14th July

9.00 – 12.00	Role and Record of IMO	Mr Marcel LaRoche
12.15 – 1.15	Lunchtime Address	Dr Awni Behnam
1.30 – 3.00	The Future of Marine Transportation and Associated Governance	Mr Dick Hodgson
3.15 – 4.00	Module Wrap-up	Mr Dick Hodgson

MODULE 11 International Round Table Conclusion of Training Programme

Wednesday, 15th July

9.00 – 10.30	Round Table – Panel Presentations and Discussion	Dr Awni Behnam Ms Cecilia Engler Dr Ricardo Federizon Mr Terrence Phillips Dr Robert Rangeley Dr Noel Brown Mr David Griffiths Participants
10.30 – 10.45	Round Table – Introduction to Simulation & Scenario	Dr Awni Behnam Ms Cecilia Engler Dr Ricardo Federizon Mr Terrence Phillips Dr Robert Rangeley Dr Noel Brown Mr David Griffiths Participants
11.00 – 12.30	Round Table – Participant Presentations: National Oceans Policy Frameworks	Dr Awni Behnam Ms Cecilia Engler Dr Ricardo Federizon Mr Terrence Phillips Dr Robert Rangeley Dr Noel Brown Mr David Griffiths Participants
1.30 – 4.45	Round Table – Participant Presentations: National Oceans Policy Frameworks (continued)	Dr Awni Behnam Ms Cecilia Engler Dr Ricardo Federizon Mr Terrence Phillips Dr Robert Rangeley Dr Noel Brown Mr David Griffiths Participants

Thursday, 16th July

9.00 – 12.00	Round Table – Working Sessions	Dr Awni Behnam Dr Ricardo Federizon Mr Terrence Phillips Dr Robert Rangeley Dr Noel Brown Dr Peter Wells Participants
1.30 – 4.15	Round Table – Participant Presentations: Regional Oceans Policy Framework	Dr Awni Behnam Dr Ricardo Federizon Mr Terrence Phillips Dr Robert Rangeley Dr Noel Brown Mr David Griffiths Dr Peter Wells Participants
4.30 – 6.30	Closing Ceremony and Reception	All

Friday, 17th July

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

INTRODUCTION

As with previous sessions, the class of 2009 continued to validate the vision of IOI's founder, Elisabeth Mann Borgese, on the importance of education, training and capacity building in support of the United Nations Convention on the Law of the Sea (UNCLOS) and sustainable oceans governance. Although somewhat smaller in number than in previous years, the group was highly professional, well informed and eager to enhance their skills and knowledge. As a result, there was a fair amount of enthusiasm and engagement in the classroom.

Because of budget uncertainty, recruitment was somewhat later than usual; nevertheless, we succeeded once again in striking the proper balance in terms of both geography and gender, which in effect enriched the programme considerably. The class was further enriched by the presence, for the first time, of an Inuit participant from the Canadian Arctic. This was perhaps the first encounter between the class and someone from this region. In effect the Inuit presence gave a human face to the Arctic story and the extent to which global warming was disrupting both the lifestyles and livelihood of a group of indigenous peoples. This addition to the class further reinforced the Director's recommendation that the course should include more First Nations participants, particularly those with maritime and coastal responsibilities.

As in previous years, the programme continued to provide both a creative learning environment and an opportunity for participants to move beyond narrow specialisation through interaction and exchange of ideas with people from different disciplines. This seems to be of special relevance since the course is not academic in character but geared more to policy development and support, where different interests and diverse views have to be accommodated.



Dalhousie University

MODULAR MANAGEMENT

The appointment of module leaders proved once again to be both effective and productive. This year's programme had the added advantage of requiring such leaders to present in writing a statement on the overall objective of the module, the nature of the content and what it was likely to achieve. This was supplemented by the submission of similar outlines by lecturers, which in turn gave participants a more coherent sense of both the direction in which the information and ideas presented would flow, and also what would be required of them in terms of preparation and participation.

For these reasons the Director would strongly urge that the modular management programme be continued. At the same time it is believed that the process could be greatly strengthened if, at the end of the course, one session could be devoted to an exchange between the module leaders and participants, thereby giving a sharper focus and greater sense of coherence to the overall programme.



In the classroom

THE CORE GOVERNANCE AGENDA

Once again the course covered nine themes – law, science, tools, coastal zone management, media/communications and negotiations, energy, fisheries and aquaculture, maritime security, and marine transportation – which could be said to form the core of the sustainable oceans governance agenda. While each theme was adequately supported by reading and other reference resources, such programme support might be reviewed in light of the fact that the internet makes the acquisition of all relevant resource materials immediately accessible and all participants now seem to be completely computer literate. At the same time, new emphasis might be given to at least two areas within the thematic framework. One would be greater attention to small island developing states and their relevance to oceans governance, and the other to climate change and the oceans.

CLASSROOM LECTURES

The lectures continue to be of a consistently high quality, with presenters distinguished in their fields and generous in their contributions to the success of the programme. Most are “repeat” presenters who for many years have organised their calendars in such a way that they may be available to join the programme during the training period. This is clearly indicative of the high value they place on the course and their willingness to help cultivate another generation of ocean professionals.



One of the 80+ course lecturers

With more than 80 lecturers contributing, however, it may be time to reconsider how to optimise the use of their time and insure that participants receive maximum benefit. One thought might be a more flexible approach and one that would be more interactive. In this way, participants would be more engaged in the discourse and not simply eager recipients of the information being imparted. Perhaps this matter could be explored during pre-course consultations with presenters.

On the other hand, the lecturers continued to be highly innovative, especially for example in the area of media and communications training. This year, after an outline of communications basics such as preparation and presentation, participants were given an opportunity to make two-minute presentations which were televised and

played back immediately. This proved to be immensely successful, and consideration should be given to how it might be strengthened and better integrated into the overall programme. Because public officials are increasingly expected to communicate with various constituencies on complicated issues, we believe that it is essential that they are well prepared to perform such tasks. That is why we remain convinced that the development of communications and presentations skills should be an integral part of the training programme.

FIELD TRIPS

These were well planned and effectively targeted. Besides providing a break from an intense classroom lectures, the trips gave the participants an opportunity to explore other aspects of training including interactions with practitioners and those engaged in maritime matters.



*Local lobster meets
Caribbean participant!*

fisheries, an invertebrate depuration plant, a major air base, and numerous cultural features.

This year's visit to the Halifax Port Authority seemed especially useful in its exposition of some of the security threats and challenges facing major ports around the world. Given the growing importance of maritime trade, ports are becoming increasingly important in the global economy. They are also highly vulnerable to disruption in ways that would create immense difficulties for many countries. Participants clearly appreciated this visit to a modern maritime port that seems to be very effectively managed, and the Harbour Master should be commended for both his generosity and the clarity with which he explained the operation of his port.

Visits to such institutions as the Bedford Institute of Oceanography (BIO), Canada's premier oceanographic centre, provided useful insights on how such institutions inform public policy, develop scientific and research agendas and give encouragement to young scientists to engage in new research areas. It also gave participants an opportunity to meet with some of Canada's leading marine scientists and to explore the possibility of joint research arrangements or visits by Canadian scientists to other countries as lecturers or experts.

A major field trip was the three days spent in the Annapolis Valley of Nova Scotia, adjacent to the Bay of Fundy. Participants were introduced to the local lobster and aquaculture



Aboard a fishing boat in south-west Nova Scotia

CLASS PRESENTATIONS

Having been advised that they would be required to make 10-15 minute presentations to the class, participants seemed surprisingly well prepared. In almost every instance, presentations were well organised with the use of highly effective graphics and creative ways of introducing to the class the challenges facing their respective governments in connection with oceans governance. Again, this Director would like to propose that these presentations, which are now on disks, should be carefully archived for use in subsequent training programmes.

SIMULATION EXERCISE

This component of the programme continues to be refined and streamlined. This year's exercise seemed especially well organised and clearly presented guidelines for participants. In effect, this remains the heart of the training programme. Because of its "hands on nature" it provides participants with opportunities to gain practical experience in the development of their leadership and negotiations skills. This year it seemed particularly intense but produced outcomes that clearly revealed a measure of understanding and growth. It also enabled participants to apply negotiation principles to almost all the other modules, as well as in their daily transactions. Again we would propose that this component of the programme be strengthened, and as part of the orientation programme its nature and importance should be clearly communicated.

WORLD OCEAN DAY 2009

World Ocean Day was again celebrated by the class, but this year was given a boost by both the United Nations' official recognition of it, and President Obama's Declaration of June as Oceans Month for the United States. Observation of World Ocean Day also included a visit to BIO which, as previously mentioned, introduced participants to some of Canada's leading marine scientists as well as its research agenda.



Rob Huebert at the reception following the fifth annual EMB Ocean Lecture

As in the past, World Ocean Day began with the waterfront exhibit of government agencies and NGOs etc. associated with coastal and ocean issues, and concluded with the Elisabeth Mann Borgese Ocean Lecture, which focused on the Arctic with a lecture by Dr Rob Huebert on "Canada and the Circumpolar World: the Coming Blizzard". This event was very well attended by an appreciative audience and members of the community. It also served to underscore an area of growing importance for the IOI, as this could be an arena of both competition and potential conflict, particularly if warming trends continue. All indicators suggest that an ice-free Arctic could open new transit routes to Europe and Asia. It could also prove to be a new frontier for the exploration of oil and other minerals. Already some Arctic states are beginning to map their boundaries within the framework of the boundary delimitation of UNCLOS and have made applications to the United Nations to this effect. At the same time there is a human side to these developments as the Inuit people and others of the Circumpolar North begin to address Human Rights

questions posed by the threat of global warming. As IOI considers emerging ocean challenges, it may want to look more closely to those posed by the changing Arctic.



Hands-on GIS session

ROUND TABLE

Coming at the conclusion of the course, the International Round Table provides an opportunity both to gauge the effectiveness of the material presented and to test the participants' ability to shape these into national and regional policies for ocean governance. As both our visitors and guests will agree, the participants' performance was most impressive and revealed a clear grasp of the complexity of policy-making which is a major objective of the course. We were also impressed by the participants' ability to defend the policy choices made and to fit these within the learning framework provided by the modules.

By way of critique of the presentations, there was general agreement that not enough attention had been paid to the financial implications of the policy prescriptions – a matter to which greater attention should be devoted in the future. As a matter of fact, it was strongly suggested that future courses include a specific component on "Financing Sustainable Oceans Governance". With regard to the professionals and the practitioners who served as panel members, consideration might be given to broadening the representation even further.

WAVES OF CHANGE: A GLOBAL CAMPAIGN TO PROTECT OUR OCEANS

During the course the participants were given a presentation on *Waves of Change*, a global campaign for the protection of the marine environment and the promotion of the sustainable use of its resources. The Campaign is designed to empower and inspire people everywhere, especially at the grass roots level, to take greater responsibility for the care and maintenance of the planet's oceans and seas. With a strategic focus on Global Oceans Literacy, its priority themes are pollution, ecosystems restoration, marine food security, climate change and ocean champions. The Campaign will utilise the new media and the resources of communications technologies to reach broad audiences around the world, and it aims to inspire a new sense of personal responsibility as well as a new oceans ethic necessary to heal the water planet.

CONCLUDING OBSERVATIONS

As it approaches the 30th anniversary of the Halifax training programme, the IOI can boast nearly three decades of solid and consistent support for the UNCLOS in the field of education, research, training and capacity building. For nearly a generation it has encouraged the establishment of a community of oceans professionals, largely in the developing countries, and in the process has enriched the formulation of both national and regional policies. Not only have many alumni of the programme served their respective countries on the national levels, but a number have also represented their countries at international gatherings and have distinguished themselves in the process. A few have succeeded in developing their careers within the United Nations and regional intergovernmental organisations, while others have joined the private sector in areas such as maritime industry or commerce.

Overall, this 30 year experiment must be considered a success and must be strengthened. Financing remains a challenge, which could become even more so during the current economic crisis. Thus new and creative ways have to be found to mobilise the IOI community and especially its alumni to become more fully engaged in helping to put this very important institution on a much sounder financial footing. This being said, great recognition should be given to small staff that has managed this programme over the years and, through their faith and determination, somehow kept the training programme alive. We salute them and wish them continued success. I would also personally like to extend profound appreciation to the Course Co-ordinator for her remarkable competence, humour, and generosity in making the Class of 2009 the best yet.

Dr Noel Brown
2009 Course Director



IOI President, staff and participants at Closing Ceremony

Photo credits: Rusudan Grigolia, Mike Butler, Kevin Deagle, Soulafa Al-Abbasi

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Finally, sincere thanks are due to the various organisations which contributed to the 2009 programme by hosting the class and/or assisting with field trips. These included Annapolis Tidal Generating Station, Bear River First Nations Cultural Centre (through Stone Bear Tracks and Trails), Bedford Institute of Oceanography/Department of Fisheries and Oceans, CFB Greenwood, Eastern Canada Response Corporation, Freshwater Aquaculture Centre, Innovative Fishery Products, Museum of Natural History, and Port of Halifax.

Caribbean Regional Fisheries Mechanism (CRFM)

<http://www.caricom-fisheries.com>

The Caribbean Regional Fisheries Mechanism (CRFM) is the core of a complex, interactive network of a wide variety of stakeholders in fisheries. It is made up of three bodies: the Ministerial Body, the Caribbean Fisheries Forum, and the CRFM Secretariat. In total, 18 countries from the Caribbean region are members, with the headquarters being based in Belize and an Eastern Caribbean Office in St Vincent and the Grenadines.

The CRFM's mission is "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." In pursuing this mission, its programmes are organised into nine priority areas:

- research and data analysis to support policy formulation and decision-making;
- preparation for global competitiveness;
- resource assessment and management;
- human resource development and institutional strengthening;
- strengthening of fishers' organisations and improved community participation;
- promotion of expansion and utilisation of un-utilised and under-utilised aquatic resources;
- development and promotion of aquaculture;
- development and promotion of risk reduction programmes; and,
- development and promotion of programmes for conflict resolution among multi-users in coastal zones.

Under the Memorandum of Understanding between the CRFM and the IOI, the CRFM provided funding to cover the airfares of participants from the member countries of Antigua & Barbuda, Belize, Jamaica, and Turks & Caicos.

Coastal Nova

“Coastal Nova: Where Nova Scotia meets the Sea” is a partnership between the Coastal Coalition of Nova Scotia, the Ecology Action Centre, Dalhousie University’s Marine Affairs Programme, and the Environmental Studies Programme at Saint Mary’s University. In 2009, Coastal Nova presented a series of public lectures and workshops to provide a forum for discussion of Nova Scotia’s coastal future.

Coastal Coalition of Nova Scotia (ccns.chebucto.org)

The Coastal Coalition of Nova Scotia (CCNS) is composed of a group of individual organisations, each with its own mission, sharing common concern for the future of Nova Scotia’s coastal lands. The Coalition is dedicated to the preservation, restoration and sustainable use of the physical, biological and cultural heritage of Nova Scotia’s coastal ecosystems.

Ecology Action Centre (www.ecologyaction.ca)

The Ecology Action Centre (EAC) has acted as a voice for Nova Scotia’s environment for nearly 40 years. With over 1,000 members, 250 volunteers and staff, and seven active teams and committees, it works closely with social and natural scientists and makes strong use of science in communicating its message to the public. Its earliest projects included recycling, composting, and energy conservation, all of which are now widely recognised environmental issues. Its current areas of focus include: Built Environment, Marine Issues, Coastal Issues, Wilderness, Food, Transportation, and Energy Issues.

Marine Affairs Programme, Dalhousie University (marineaffairsprogram.dal.ca)

The Marine Affairs Programme (MAP) at Dalhousie offers ocean managers a professional education at the graduate level. The Master of Marine Management is a one-year, professional, non-thesis and interdisciplinary degree programme offering required classes in the marine and social sciences, as well a a choice of electives from approved marine-related classes. In addition to education, MAP’s mandate includes research and service/outreach.

Environmental Studies Programme, Saint Mary’s University (www.smu.ca/academic/science/envstud)

The Environmental Studies Programme at Saint Mary’s provides interdisciplinary education and research on a wide range of environmental and natural resource themes. Faculty involved in the programme work on topics ranging from green chemistry to urban ecology to coastal management. The programme offers a rigorous science undergraduate BSc, while students majoring in a Bachelor of Arts or Commerce discipline may also take a minor in Environmental Studies. The programme uses an interdisciplinary approach to learning, with the goal of providing students with the academic preparation to allow them to contribute positively to an environmentally sound future.

Through its partners, Coastal Nova provided financial and in-kind support towards the 2009 Elisabeth Mann Borgese Ocean Lecture. Delivered by Dr Rob Huebert, this lecture was held as one of the World Oceans Day activities in Halifax, and was also part of the 2009 training programme curriculum.

Dalhousie University

<http://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. With one of the lowest student-faculty 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 c.15,400 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 has in recent years been 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.

Dalhousie University continues to provide key in-kind support to the IOI training programme which is essential for conducting the course. 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 programme of this kind.

Inuit Relations Secretariat (IRS)

<http://www.ainc-inac.gc.ca/ap/in/irs>

Established in 2005, the Inuit Relations Secretariat (IRS) has a dual purpose: to serve as the Government of Canada's primary point of contact for collaboration with Inuit organisations and Inuit issues, and to be an internal government source for information, advice and expertise on Inuit matters. By delivering outreach programmes and providing support for research and policy development, the Secretariat works with Inuit organisations, federal departments and agencies, and other stakeholders to bring greater coherence, relevance and effectiveness to the programmes and policies of the Government of Canada affecting Inuit in Canada.

IRS assists in addressing federal policy and programme development to ensure Inuit interests are considered by:

- working collaboratively across the federal government and with provincial and territorial governments;
- participating in policy development issues affecting Inuit within Indian and Northern Affairs Canada;
- analysing and providing advice on existing and proposed federal policies and programmes; and,
- facilitating research on Inuit issues in partnership with other organisations.

The Secretariat is also responsible for the management of the Inuit component of the Aboriginal Representative Organisation Programme (AROP) funding – the only federal programme which it manages. AROP funding ensures aboriginal perspectives are reflected in the development of government policies and programmes, and provides key national and regional Inuit organisations with the capacity to represent the interests of their communities.

IRS provided a full scholarship for an Inuk participant to attend the 2009 course.

The Nippon Foundation

<http://www.nippon-foundation.or.jp>

The Nippon Foundation is a grant-making organisation which supports innovative initiatives to bring about positive change in the world. Established in 1962 as the Japan Shipbuilding Industry Foundation, and later renamed as the Sasakawa Foundation with an expanded mission, the Nippon Foundation (as it was renamed in 1995) is a non-profit, philanthropic foundation. The foundation's fundamental aim is the realisation of a peaceful and prosperous global society, in which none need struggle to secure their basic human rights.

Since the beginning, the foundation's efforts to bolster the domestic development of Japan have focused largely on the maritime and shipping fields. In addition, as the years have gone by, it has expanded its activities to include such fields as education, social welfare and public health, both within Japan and in more than 100 countries to date. Its current activities are divided into four basic areas:

- Domestic Social Welfare
- Domestic Volunteer Support
- Maritime Development
- Overseas Cooperative Assistance

One of the projects which the Nippon Foundation funds is a two-year initiative entitled *Strengthening Principled Ocean Governance Networks - Transferring Lessons from the Caribbean to the Wider Ocean Governance Community (PROGOVNET)*. This is a collaborative project between the Nippon Foundation, IOI-Canada, Dalhousie University (Marine Affairs Programme, and Marine & Environmental Law Institute), and the University of the West Indies (Centre for Resource Management and Environmental Studies). Its goal is to understand the role networks can play in the successful implementation of a principled ocean governance regime for the Wider Caribbean, and to use the lessons learned to develop a regional ocean governance framework that can be adapted by other ocean governance communities throughout the world.

Under the *PROGOVNET* project, full scholarships for the 2009 course were offered to three participants from the Wider Caribbean, namely oceans professionals from Antigua & Barbuda, Jamaica, and Turks & Caicos Islands.

Ocean Management Research Network - Réseau de recherche sur la gestion des océans (OMRN-RRGO)
<http://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. OMRN facilitates value-added research, provides seed funding, and seeks to establish a long-term research agenda. It is funded 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 a donation towards the expenses of the 2009 Elisabeth Mann Borgese Ocean Lecture. Delivered by Dr Rob Huebert, this lecture was held as one of the World Oceans Day activities in Halifax, and was also part of the 2009 training programme curriculum.

State Oceanic Administration (SOA)

<http://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 40 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 provided full scholarships for two of its staff members and a travel grant for a third, so they could attend the 2009 course.

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 2009 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 2009 IOI-Canada course, this programme provided substantial funding for three female participants from Central America, Asia and Africa (Belize, China and Egypt respectively), as well as top-up funding for the Danielle de St Jorre scholar from the Caribbean (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 2009 recipient, a Marine Biology Researcher from Cuba, chose to use the scholarship to enable her to participate in the Halifax training programme.

World Wildlife Fund - US (WWF-US)

<http://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 close to 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.

Assistance was provided to the Indonesian participant under the Russell E. Train EFN Programme in the form of a contribution towards some of his expenses.

MODULE LEADERS, LECTURERS & FIELD TRIP CO-ORDINATORS

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