

# *Achieving Environmental Security*

*Ecosystem Services and Human Welfare*

*July 6-10, 2009*

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## **SCHEDULE**

**MONDAY, JULY 6**

**DAY ONE**

### **DEFINING ECOSYSTEM SERVICES**

**8:00-9:00 Breakfast**

**9:00-9:30 Formal Opening Session**

#### **WELCOME FROM SALVE REGINA UNIVERSITY**

Dean E. de la Motte, *Vice President for Academic Affairs*

#### **INTRODUCTION & THEMES OF THE NATO ARW**

Co-Directors

P. H. Liotta, *Executive Director*

*Pell Center for International Relations & Public Policy  
Salve Regina University, Newport, Rhode Island (U.S.A.)*

Mu'taz Mohammad Al-Alawi

*Karak Directorate for Environment (H.K. Jordan)*

**9:30-11:45 Panel Session One**

#### **DEFINING "ECOSYSTEM SERVICES"**

Allan W. **Shearer**

Donald D. Harrington Faculty Fellow, University of Texas at Austin, School of Architecture (U.S.A.)

**"Make the Weather: Ecosystem Services and the Utopian Impulse"**

Robert **France**

Adjunct Associate Professor, Department of Landscape Architecture  
Harvard University, Graduate School of Design (U.S.A.)

**"In (Ecosystem) Service:**

**Climate Change, Phenology, and the Building of Concerned Citizen Scientists"**

Nikolai **Bobylev**

Technische Universität, Berlin/Russian Academy of Sciences (The Russian Federation)

**"Ecosystem Services in the Context of Human Development"**

**11:45-13:00 Lunch**

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**13:00-15:15 Panel Session Two**

## **DEFINING & VALUING ECOSYSTEM SERVICES IN THE CONTEXT OF BIODIVERSITY, HUMAN WELFARE & ECONOMIC BENEFIT**

**David Mouat**

Division of Earth and Ecosystem Sciences, Desert Research Institute (U.S.A.)

**“Why Should We Care about Biodiversity: Perceptions, Policies, and Scenarios for Change”**

**Ralf Seppelt**

Head of Department for Computational Landscape Ecology, Martin-Luther Universität  
Halle Wittenberg, Centre for Environmental Research (UFZ), Leipzig (Germany),

**“Modelling and Simulating Ecosystem Services? What’s So Smart About?”**

**Jan Staes**

University of Antwerp, Department of Biology, Ecosystem Management Research Group (Belgium)

**“The Valuation of Ecosystem Services”**

**15:15-15:30 Coffee Break**

**15:30-16:45 ARW FOUNDATION FORUM ONE: DEFINING ECOSYSTEM SERVICES**

## **HOW SCIENCE AND TECHNOLOGY CAN IMPROVE ECOSYSTEM SERVICES, BUILD SUSTAINABLE RESOURCE MANAGEMENT & PREVENT CATASTROPHES**

**Gilbert L. Rochon**

Associate Vice President for Collaborative Research and Engagement, Chief Scientist for the Rosen  
Center for Advanced Computing, Director of the Terrestrial Observatory, Purdue University (U.S.A.)

**“Real-Time Remote Sensing in Support of Environmental Security: A NATO Sponsored  
Partnership among Academic Institutions in Egypt, Turkey and the USA”**

**Giuseppe Conti**

Fondazione Graphitech—Center for Advanced Computer Graphics Technologies (Italy),

**“Geographic Systems and Their Benefit for Ecosystem Services and Human Welfare”**

**16:45-18:00 Free Time**

**18:00-20:00 PUBLIC KEYNOTE ONE**

**Screening: ABC NEWS Documentary**

**“Earth 2100: The Final Century of Civilization?”**

**post-screening discussion with ABC Producer Michael Bicks**

**20:00 Dinner at Ochre Court State Dining Room**

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**TUESDAY, JULY 7  
DAY TWO**

## **DESIGNING ECOSYSTEM SERVICES**

**8:00-9:00 Breakfast**

**9:00-11:15 ARW Foundation Forum Two: Designing Ecosystem Services**

**Thomas H. Lillie**

Consulting Fellow, Army Environmental Policy Institute (U.S.A.)  
**“Ecosystem Management in the United States Military”**

**Stuart Schoenfeld**

Chair, Department of Sociology, York University (Canada)  
**“Cooperation and Barriers to Maintaining Ecosystem Services in the Eastern Mediterranean”**

**Simon M. Berkowicz**

Scientific Coordinator, Hebrew University of Jerusalem Arid Ecosystems Research Centre, Project  
Coordinator of the Interuniversity Institute for Marine Sciences, Eilat (Israel)  
**“Challenges, Opportunities and Dilemmas  
for Coping with Environmental Security in Drylands”**

**11:15-12:00 Lunch**

**12:00-16:00 Panel Session Three**

### **THE NEED TO “OPERATIONALIZE” ECOSYSTEM SERVICES: CASE EXAMPLES & SCIENTIFIC ASSESSMENTS**

[Note: Panel Session Three consists of two alternate sessions that run in parallel, allowing scientists to engage in more intensive and active discussion on topics of specialized concern, and to more freely share diverse professional experience.]

#### **Alternate Session A: PELL CENTER BOARDROOM**

**Iryna Klimkina**

Ecology Department, National Mining University, Dnepropetrovsk (Ukraine)  
**“Assessment of the Consequences of Anthropogenic Catastrophes  
on Ecological-Genetic Environmental Conditions and Human Health”**

**Mohammed K. Zaidi**

Idaho State University, College of Engineering, Pocatello (Azerbaijan)  
**“Provisioning and Supporting Ecosystem Services:  
Wastewater Storage, Process, Reuse and the Factors Affecting Environmental Security”**

**Mohamed Tawfic Ahmed**

Suez Canal University, Ismailia (Egypt)  
**“Ecosystem Services and Human Well-Being: A Dryland Ecosystem Case Study”**

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**Mu'taz Mohammad Al-Alawi**

Karak Directorate for Environment (H.K. Jordan)

**“Water Resource Management in Jordan: A Security Issue”**

**Khalid Bichou**

Centre for Transport Studies, Imperial College, London (Morocco)

**“Achieving Environmental Security in International Shipping and Port Operations”**

## **Alternate Session B: PELL CENTER SEMINAR ROOM**

**Hrabrin Bachev**

Institute of Agricultural Economics, Sofia (Bulgaria)

**“Mechanisms of Governance of Agro-Ecosystem Services”**

**Hami Alpas**

Middle East Technical University, Engineering Faculty, Food Engineering Dept., Ankara (Turkey)

**“Food Security and Eco-terrorism: Recognizing Vulnerabilities and Protecting Ecosystems”**

**David Smith**

Team Leader, Poverty and Environment Unit,

United Nations Environment Programme (UNEP), Nairobi, Kenya (United Nations)

**“Poverty Reduction Strategies for Human Security & Millennium Development Goals: Ways to ‘Operationalise’ & Deliver the Social and Economic Benefits of Ecosystem Services”**

**Liviu-Daniel Galatchi**

Associate Professor, “Ovidius” University of Constanta (Romania)

**“Ecosystem Services and Human Welfare  
in the Danube Delta and Along the Romanian Black Sea Coast”**

**Jyotiraj Patra**

Commonwealth Scholar, Centre for the Environment (OUCE), University of Oxford (UK)

**“Environmental Security in Situations of Double Exposure:  
Understandings from a Coastal Social-ecological System in Orissa, India”**

**16:00 Optional Session on Formatting Paper Requirements  
for Scientific Volume Preparation**

**16:00-18:00 Free Time**

**18:00-19:30 PUBLIC ADDRESS TWO**

**Dragana Dulić**

Professor and Director, Center for Human Security Studies

University of Belgrade, Универзитет у Београду (Serbia)

**“The Geopolitics of Humanitarian Assistance”**

**19:30 Dinner**

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WEDNESDAY, JULY 8

**DAY THREE**

**FIELD ACTIVITIES**

**8:00-9:00 Breakfast**

**9:00 Depart the Pell Center for Field Visit with Ocean Drive Tour**

**9:30-14:30 Field visit to:**

**United States Environmental Protection Agency**

Office of Research and Development, National Health and Environmental Effects Research  
Laboratory, Atlantic Ecology Division (EPA)

**If time and schedule allow, additional visits to:**

**University of Rhode Island**

Graduate School of Oceanography (GSO), Narragansett Bay Campus:  
Meetings with Oceanographers & Environmental Scientists  
Tour the Ocean Research Vessel, Endeavor

**National Oceanic and Atmospheric Administration**

Northeast Fisheries Science Center, Narragansett Laboratory (NOAA)

**Lunch TBD**

**14:30 Depart for Pell Center**

**15:30-17:30 Free Time**

**17:30-19:00 Dinner at the Pell Center**

**19:00 Free time**

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THURSDAY, JULY 9

**DAY FOUR**

**DELIVERING ECOSYSTEM SERVICES  
TOWARDS A NEW POLICY AND RESEARCH AGENDA**

**8:00-9:00 Breakfast**

**9:00-11:00 ARW Foundation Forum Three: Delivering Ecosystem Services**

**DELIVERING ECOSYSTEM SERVICE STRATEGIES**

Ismail Abdel Galil **Hussein**

Chairman, Desert Research Center, (Arab Republic of Egypt)

**“The Economic Values of Ecosystems: Positive or Negative?”**

Noureddine **Zemmouri**

Department of Architecture University of Biskra (Algeria)

**“Delivering the Architecture of Ecosystem Services:  
Daylight Modelling for Sustainable Building Design”**

Zdravko **Špirić**

Director, Oikon Institute for Applied Ecology, Zagreb (Croatia)

**“Delivering Ecosystem Service Benefits:  
Science and Innovation for Sustainable Development”**

**11:00-11:15 Coffee Break**

**11:15-12:15 PLENARY ADDRESS**

Christian D. **Klose**

Columbia University, School of Engineering and Applied Science  
Geohazards Researcher, Lamont-Doherty Earth Observatory (U.S.A.)

**“Human-Triggered Earthquakes and Their Impacts on Human Well-Being”**

**12:15-13:15 Lunch**

**13:15 Free time to enjoy Newport**

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FRIDAY, JULY 10

**DAY FIVE**

**8:00-9:00 Breakfast**

**9:00-11:30 Plenary Session**

**HOW BEST TO DEFINE, DESIGN & DELIVER ECOSYSTEM SERVICES**

**P. H. Liotta**

Executive Director, the Pell Center for International Relations & Public Policy  
Salve Regina University, Newport, Rhode Island (USA)

&

**Allan W. Shearer**

Donald D. Harrington Faculty Fellow, University of Texas at Austin School of Architecture, (USA)

**“The Fog of Vulnerability: States, Security, and the Environment”**

**Concluding Thoughts from the Co-Directors & Organizing Committee**

Discussion of Scientific Volume Publication  
Thanks and Suggestions for Future Collaboration

**11:30 Lunch**

**CONCLUSION OF CONFERENCE**