

Blue Carbon Scientific Working Group
Bali Workshop July 26-28, 2011
Bios

EXPERTS

Copertino, Margareth, Ph.D. – Federal University of Rio Grande, Brazil



My research interest is mainly focused on marine benthic ecology, particularly about the effects of environmental parameters and climatic variability on seagrass and macroalgal populations and communities. In addition, I have a profound interest in multidisciplinary studies dealing with the impacts of antropogenic factors and climate changes on marine and coastal habitats and populations.

Since 2010, I have a fixed position as lecturer and researcher at Oceanography Institute, Federal University of Rio Grande (FURG, www.furg.br), Brazil, working within the Coastal Plant Ecology Laboratory. I have lectured the disciplines Ecology of Macroalgae & Seagrasses, Coastal Plant Ecology and Ecosystems Ecology.

I am a member of some Brazilian integrated research programs and projects such as: *Brazilian Long Term Ecological Research Program – Site FURG* (www.peld.furg.br). This project aims to study the long-term effects of natural and human perturbations on estuarine/marine habitats, population abundance and structure and trophic interactions in the Patos Lagoon estuary. Within this integrated project, I am responsible for the subproject *Dynamics of Submerged Aquatic Vegetation (DIVAS)*, which seeks to monitor and to investigated the causes for the temporal and spatial variability on the abundance and distribution of seagrasses and macroalgae n Patos Lagoon estuary.

Climate Change Research Network (Rede CLIMA) & National Institute for Climate Change (INCT Climate Change). Within these programs I am from the coordination board for the *Coastal Zone Network* (www.mudancasclimaticas.zonascosteiras.com.br), an interdisciplinary team that aims to evaluate the impacts of Global Climate Changes on Brazilian coastal zone. Within this program, I have the opportunity to organize the I Brazilian Workshop on Climate Changes in Coastal Zones (www.mudancaclimatica.zonacosteira/workshop.com.br) and to edit the Special Issue *Climate Changes on Brazilian Coastal Zones*, published by the Pan-American Journal of Aquatic Sciences (http://panamjas.org/artigos.php?id_public=183), together with other principal investigators.

Benthic Habitats Brazilian Network (ReBentos). This very recent observational program aims to monitor and integrate studies about Brazilian benthic coastal habitats (mangroves, salt marshes, seagrass beds, reefs and sandy beaches), seeking mainly on antropogenic and climate changes impacts and on conservation issues. Within this program, I am the coordinator of the *Seagrass* project, together with Dr. Joel Creed, which aimed to improve the knowledge about seagrass biology and ecology in Brazil, by integrating existent data, by applying a systematic monitoring protocol and by mapping the seagrasses distribution and abundance.

Email: doccoper@furg.br

Crooks, Steve, Ph.D. – Director of Climate Change Services, ESA PWA



Dr Crooks is a wetland scientist/sedimentologist with 19 years specialized experience coastal wetland systems and their response to human impacts and climate change. His experience transcends science, restoration practice and policy. His work quantifying the carbon budgets of coastal wetlands forms the basis of several recent reports and a panel event at the UNFCCC COP 16.

Dr Crooks' Ph.D. examined the sedimentology (including carbon content) of coastal wetlands, exploring with comparison to undisturbed reference sites, the impacts of wetland drainage and restoration on soil properties.

Subsequently, Dr Crooks won a Post-Doctoral Research Fellowship and, based at the University of East Anglia, worked for five years with policy analysts and economists on the integration of wetland into climate change mitigation and adaption approaches. In 2004 joined Philip Williams and Associates, a leading consultancy in the field of wetlands restoration science, planning and design. As Director of Climate Change Services he leads projects related to wetland restoration feasibility assessment and design, assessment of landscape response to sea level rise, guidance on the development of wetlands restoration offset protocols, and climate change adaptation planning.

Since 2007 Dr Crooks has guided agencies and working groups on the potential for coastal wetlands to contribute to climate change mitigation strategies. Groups include the Climate Action Reserve, I.U.C.N., World Bank, Conservation International.

Dr. Crooks has contributed to numerous committees, interdisciplinary research groups and programs. He chairs a Blue Ribbon Panel, which developed an Action Plan to establish a North American greenhouse gas offset protocol for wetland restoration and management projects. He is a Co-Principal Investigator of a National Center for Ecological Analysis and Synthesis workshop on Coastal Wetland Modelling, and a Co-Chair of an International Blue carbon Working Group on quantification of carbon within coastal wetland soil.

PWA ESA
550 Kearny Street, 9th Floor
San Francisco, CA 94108-2404
scrooks@esassoc.com

Emmer, Igino, Ph.D – Sylvestrum



Igino Emmer has a PhD in Earth Sciences and has been working in the field of forestry and climate change since the early 1990s. He built up experience in the development, management and certification of AFOLU projects in Eastern Europe, Southeast Asia, Africa, South America, and The Netherlands. His main asset is being able to coordinate work with experts from various environmental, social, economic and legal disciplines, in governmental and non-governmental organisations, and business. He has been a member of the A/R Working Group of the UNFCCC's CDM Executive Board and participates

in the Technical Advisory Group of the VCS AFOLU, being lead-author of the ARR standard. Igino is the lead author of the Peatland Rewetting and Conservation requirements of the VCS and of a Tidal Forest A/R methodology submitted for CDM validation.

Dorpsstraat 4
1546 LJ Jisp
The Netherlands
Tel:+31 653 699610
Email: igino.emmer@silvestrum.com

Fortes, Miguel D., Ph.D., Professor – Marine Science Institute CS, University of the Philippines Marine Plant Ecologist, Biodiversity & Integrated Coastal Area Management Specialist,



A Filipino scientist-humanist, Professor of Marine Science at the Marine Science Institute (BSc., MSc. and Ph.D. degrees in Marine Botany and Ecology (University of the Philippines and Universität Hamburg, West Germany); Head of the UNESCO Intergovernmental Oceanographic Commission Regional Secretariat for the Western Pacific, Bangkok, Thailand (2003-06), with at least 27 years experience as: (1) a marine plant ecologist (seagrass, mangroves, and seaweeds; coastal restoration ecology); (2) academic supervisor to 5 masters and 3 Ph.D. students, both foreign and local (1993-2009); (3) member of editorial boards and referee of manuscripts for 5 international scientific journals; (4) member in 15 Technical Advisory Bodies, both foreign and local, dealing with ocean research and management, policy formulation, and education; (5) Technical Consultant to 39 projects since 1981 on resource assessment, mitigation, advocacy, and policy formulation as these relate to marine and coastal protected areas. From 1979, published 49 articles in primary peer-reviewed journals, 61 in proceedings; wrote 2 booklets and 16 contributed chapters in books. Head of the Philippine Delegation to the Executive Council and General Assembly of the Intergovernmental Oceanographic Commission (IOC) of UNESCO since 1995; Member of the Technical Expert Panel on Marine and Coastal Protected Areas of the Convention on Biological Diversity; Co-Chair of the Biodiversity Programme for East and Southeast Asia of the Japan Society for the Promotion of Science; Member of the Steering Committee of the Southeast Asia Global Ocean Observing System (SEA-GOOS); Vice-President of the UNESCO Man and Biosphere Programme, Inc. and Philippine Focal Point on matters concerning Natural World Heritage Sites of UNESCO, and Integrated Coastal Area Management of the IOC; Past President of the World Seagrass Association, Chair of the National Committee on Marine Science (1993-2003, present) and Commissioner for Science & Technology of the UNESCO National Commission of the Philippines (2000-2003), and a Fellow of the National Defense College of the Philippines (2000-2003) where he, as the expert in the environment, inputs into a better understanding and resolution of national security issues.

He is the recipient of 18 major awards including the UNESCO Chair and the International Biwako Prize for Ecology (for East and Southeast Asia and Russia, 1995). For 2001, he is the recipient of the Hugh Greenwood Environmental Science Award for his outstanding contribution to the development of seagrass science in Southeast Asia. In 2006, he was conferred UP Scientist 1, the University scientific productivity award, by the Board of Regents of the University of the Philippines. In April-June 2010, he fulfilled his duties as a Visiting Professor in the University of Tokyo, Japan. For 2010-2014, he is the Project Manager and principal researcher of the Philippine-Japan conservation and adaptive management project, which addresses the impacts of local and global environmental change on coastal ecosystems and resources.

Hence, "...Dr. Fortes' expertise is deeply rooted in marine science. But it is this grounding, coupled with his passion to apply and share his science to improve people's lives, that made him 'see something extraordinary' in nature's ordinary designs, making him an internationally

known scientist, a teacher, and a well-respected humanist in science -a rarity in a field known almost to be devoid of such character.” - *The Philippine Daily Inquirer* 2006.

Marine Science Institute CS
University of the Philippines
Diliman, Quezon City 1101
The Philippines
Tel: +632 9223958(59); Fax: +632 924 7678
E-Mails: fortesm@upmsi.ph; migueldfortes@gmail.com, Skype: Smykeforts

Fourqurean, James, Ph. D. – Florida International University, Department of Biological Sciences



Jim Fourqurean is a marine and estuarine ecologist with a special interest in benthic plant communities, food webs, and nutrient biogeochemistry. He studied at the Department of Environmental Sciences at the University of Virginia, where he became familiar with the temperate ecosystems, but he developed a love of tropical ecosystems while doing his dissertation research in Florida Bay. His published research spans many ecosystems, from planktonic systems to mangrove forests. In particular, he has specialized in the application of elemental and stable isotopic composition of organisms as indicators of ecosystem processes. While working on the Water Quality Protection Program for the Florida Keys National Marine Sanctuary, he began to make contributions to the science and application of monitoring in Marine Protected Areas. For the past decade, his main research areas have been in Florida Bay and the back-reef environments of the Florida Keys, but he has also worked around the Gulf of Mexico, in Mexico, Panama and Bermuda, the western Mediterranean and Australia. He is currently a professor in the Department of Biological Sciences and a member of the Southeast Environmental Research Center at Florida International University in Miami, Florida.

Marine Sciences Program – MSB360
Department of Biological Sciences and
Southeast Environmental Research Center
3000 NE 151st St.
North Miami, FL 33181 USA
Email: Jim.Fourqurean@fiu.edu

Hutahaean, Andreas, PhD. – Coordinator and Research, Indonesian Center for Marine and Coastal Resources, Agency for Marine and Fisheries Research



With a background in Marine Biogeochemistry, Andreas supports the blue carbon research project with the Indonesian Research Center for Marine and Coastal Resources at the Agency for Marine and Fisheries research. His recent posts involved teaching at the University of Nagoya, Japan and researching the dynamics of nutrients and water cycles in Indonesia through flow system with the Agency for Marine and Fisheries Research.

In addition to blue carbon, Andreas pursues his interests in biological carbon pumping, coastal-ocean biogeochemical processes, phytoplankton physiology, nitrogen

and carbon cycles, and physical-biological interactions in upper coastal ocean ecosystems.

Research Center for Coastal & Marine Resources
Bld. BRKP, 3rd Floor
Jl. Pasir Putih I Ancol Timur
14430 Jakarta – INDONESIA
Phone: +62 21 647 11 672; +62 0878 6241 2987
Email: andreas0212@gmail.com; andreas@kkp.go.id

Johnson, Beverly, Ph.D. - Associate Professor, Geology Department, Bates College



Johnson is an Associate Professor and currently the Chair of the Geology Department at Bates College, Lewiston Maine. She is a stable isotope geochemist who specializes in reconstructing climate and environmental change in coastal ecosystems through time. Johnson analyzes organic matter and/or biomarkers to study carbon and nutrient cycling in a couple of very important and very vulnerable coastal habitats in the Gulf of Maine--- eelgrass beds and salt marshes. She is particularly interested in determining long term records of ecosystem function (i.e., baseline conditions) of these two habitats to better understand ecosystem resilience.

Her primary research projects revolve around evaluating the role of anthropogenic influences on local, regional and global environments by reconstructing records of carbon cycling and environmental change through time. I measure the stable isotope composition of modern and ancient organic matter and collaborate with many scientists to study: (1) vegetation shifts in central and northern Australia to understand the complex interactions between human activity, animal extinction, vegetation, and climate over the last 60,000 years; (2) changes in the cycling of terrestrial carbon during periods of significant and rapid climate and sea level change in coastal Maine, the NE Siberian Arctic and the Australian tropics; (3) paleo-food web dynamics among humans and marine organisms in the Penobscot Bay, Gulf of Maine, through the last 5,000 years; and (4) modern food web dynamics and nutrient transfer in salt marshes, coastal Maine. She is also interested in the water quality of local watersheds, including phosphorus cycling in the Sabattus and Androscoggin River watersheds.

Bates College
Carnegie Science Hall, Room 214
Tel: +1 207-786-6062
Email: bjohnso3@bates.edu

Kairo James, Ph.D. – Laboratory of General Botany and Nature Management, Kenya Marine and Fisheries Research Institute



James Gitundu Kairo initiated his university career at the University of Nairobi and graduated his M.Sc.in 1995 with a thesis on the 'Artificial regeneration and sustainable yield management of mangrove forests in Gazi Bay (Kenya)' under supervision of Prof. Dirk Van Speybroeck. Ever since, he worked as a principal research officer for the Kenyan Marine and Fisheries Research Institute (KMFRI) in Mombasa on the same topic. In

1996 he started his Ph.D. with Prof. Dr. Nico Koedam as his promoter and focused on mangrove regeneration, restoration and management. His study sites covered different Kenyan mangrove forests anthropogenically disturbed to various extents such as in Kiunga Marine National Reserve, Mida Creek and Gazi Bay. He defended his Ph.D. in 2001 and was awarded a "greatest distinction". During his working period in mangroves James Kairo consulted with several national and international organizations, among them Kenya Forest Department, Kenya Wildlife Service and World Wild Fund for Nature. He was awarded a research grant by the African Academy of Sciences (1991/92) and by the Biodiversity Support Program, a USAID funded Consortium of the World Wide Fund for Nature (USA), Nature Conservancy and the World Resources Institute.

Kenya Marine and Fisheries Research Institute
P.O Box 81651 Mombasa
Kenya
Email: jkairo@recoscix.org
Tel: +25411475151/4
Fax: +25411475157

Kauffman, Boone - Research Ecologist, Climate Fire and C Cycle Sciences, USDA Forest Service



Dr. J. Boone Kauffman is a senior research ecologist with the Northern Research Station of the USDA Forest Service. Prior to this position he was Director of the Institute of Pacific Islands Forestry in Hilo, Hawaii and a professor of ecosystems ecology in the Department of Fisheries and Wildlife at Oregon State University. Dr. Kauffman's current research centers upon understanding the vulnerability of tropical wetlands and forests to climate change and the development of adaptation and mitigation strategies to climate change. His current research focus is on C dynamics, biodiversity, land use, and climate change implications for freshwater wetland and mangrove forests of the Asia Pacific and Latin America. These studies are located in Bangladesh, Micronesia, Palau, Indonesia, and Mexico. Dr. Kauffman has a lifelong research interest in ecosystems, disturbance, and restoration ecology in both tropical and temperate landscapes. In particular, his research has centered on the influences of natural disturbances and human perturbations on ecosystem structure and function; the global influences of deforestation, land use, and wildland fire on ecosystems; the influences of land use on riparian/wetland ecosystems; and ecological approaches to restoration. In addition to the locations above he has led research projects in tropical savannas, dry forests, and evergreen forests of Brazil, Mexico, Costa Rica, and Venezuela as well as in forests and grasslands of Africa, Guam, Hawaii, Oregon, Idaho, and California. Dr. Kauffman has authored over 250 scientific publications. He received his Ph.D. in Forest Ecology from the University of California, Berkeley. Boone currently lives in Durham, New Hampshire with his wife Dian, and their two boys Cimarron and Kenai.

USDA Forest Service
Northern Research Station
271 Mast Road
Durham, NH 03824
E-mail: boonekauffman@fs.fed.us

Kennedy Hilary, Ph.D. – Bangor University, School of Ocean Sciences



Hilary Kennedy is a Reader at Bangor University. She has an established stable isotope research group focused on the application of stable isotopes (C, N, O, and S) to indicate the source, reactivity and fate of organic matter and provide past and present day tracers of climatic and ecological change. She has been a principal investigator on numerous national and international research projects, where her research has focused on biogeochemical processes in open and coastal waters, with an emphasis on the production and fate of organic and inorganic carbon and the elucidation of novel carbon sinks. She has fieldwork experience working in Asian and European seagrass meadows and has a current

project in Qatar. Her publications on seagrasses relate to study of food webs, the provision of chemical indicators of environmental threats to, and stresses for, seagrass ecosystems, determination of carbon fluxes and quantification of carbon sinks. She also co-authored “Seagrasses” in “The management of natural coastal carbon sinks”. Eds D. d’A Laffoley and G. Grimsditch, IUCN.

School of Ocean Sciences, University of Wales-Bangor,
Menai Bridge, Anglesey. LL59 5AB
Tel: (01248) 382860
Fax: (01248) 716367
Email: h.a.kennedy@bangor.ac.uk

Kepel, Terry – Research member for Blue Carbon Project, Research and Development Agency for Marine Affairs & Fisheries, Ministry of Marine Affairs and Fisheries



Terry holds a Master’s Degree in Marine Science from Aarhus University in Denmark. She has worked in many areas of Indonesia, including Cenderawasih Bay and Seribu Islands. She has organized several research expeditions both as a member of the scientific research team and project coordinator. Terry is also an underwater marine photographer, and spends a significant amount of her time training and educating Indonesian youth on marine science.

Research and Development Center for Coastal & Marine Resources
Research and Development Agency for Marine Affairs & Fisheries
Ministry of Marine Affairs and Fisheries
Jl. Pasir Putih I, Ancol Timur
Jakarta Utara 13440, Indonesia
Phone: +62 21 64711672/583
Email: kepel@kcp.go.id; kepelterry@yahoo.com

Lovelock Catherine, Ph.D. –Professor, School of Biological Sciences, University of Queensland



Prof Lovelock has a PhD in Botany from James Cook University in Queensland. She held post doctoral fellowships at the Smithsonian Tropical Research Institute and the Smithsonian Environmental Research Center before joining UQ. Research in her lab is focused on the ecology and ecophysiology of coastal plant communities. She is particularly interested in the influence of environment, including global climate change on plant community productivity and diversity. She conducts experimental work over a wide range of coastal plant communities that includes mangroves, macroalgae and cyanobacterial mat communities. Some of her current research projects include assessment of how sea level and nutrient enrichment influences mangrove and salt marsh ecosystems, how mangroves mediate exchanges between the land and sea and how metabolism of coral reefs varies over latitude. She leads the Biodiversity Project of the South East Queensland Climate Adaptation Research Initiative.

School of Biological Sciences
University of Queensland
St Lucia QLD 4072, AUSTRALIA
Tel: +61 7 3365 2304
Fax: +61 7 3365 4755; Email: c.lovelock@uq.edu.au

Makarim, Salvienty, M.Sc – Researcher, Ministry of Marine Affairs and Fisheries.



Salvienty is currently a researcher in Physical Oceanography at the Research Center and Development for Marine and Coastal Resources within the Research and Development Agency for Marine Affairs and Fisheries of the Ministry of Marine Affairs and Fisheries.

She received her Bachelor's Degree from the University of Indonesia in Physics and her Masters in Science of Meteorology, Physical Oceanography, and Climate from Utrecht University in the Netherlands. She has extensive experience in ocean exploration.

Marbà, Núria, Ph.D. – Research Scientist of the Research Council of Spain at the Mediterranean Institute for Advanced Studies



She is a Research Scientist of the Research Council of Spain at the Mediterranean Institute for Advanced Studies, Mallorca Island, Spain. Her main research field is on seagrass and macroalgae ecology and global change. She has led and participated in projects on marine ecology, biodiversity and conservation involving research in coastal areas of Greenland, Europe (including Atlantic and Mediterranean regions), Australia, Caribbean, East Africa, SE Asia and India. Currently she participates in a seagrass working group (together with Carlos Duarte, Jim

Fourqrean and Hilary Kennedy) that recently estimated seagrass carbon sink capacity from seagrass community metabolic rates and sediment organic carbon sources. She has participated in previous Blue Carbon meetings (May 2010 in Paris; November 2010 in Durham).

Institut Mediterrani d'Estudis Avançats (UIB-CSIC)
Miquel Marquès 21
07190 Esporles (Illes Balears); Spain
E-mail: nmarba@imedea.uib-csic.es
Tel: +34 971611720; Mobile: +34 605322551
Fax: +34 971611761

Megonigal, Patrick, Ph.D. – Senior Scientist & Deputy Director, Smithsonian Environmental Research Center



Patrick Megonigal holds a Ph.D. in biogeochemistry from Duke University. He is a wetland ecologist and Senior Scientist at the Smithsonian Environmental Research Center, USA, and the principal investigator of the Biogeochemistry Laboratory. His major research interests concern wetland ecosystems, with an emphasis on the impacts of global change on carbon cycling. Dr. Megonigal was an Assistant Professor of Biology at George Mason University from 1996-2000 and President the Society of Wetland Scientists in 2007. His work on blue carbon includes participating in the US National Blue Ribbon Panel on Wetland Carbon Offsets and the Duke Nicholas Institute for Environmental Policy Solutions' Blue Carbon Science Workshop.

Smithsonian Environmental Research Center
647 Contees Wharf Road
Edgewater, MD 21037
Email: megonigalp@si.edu
Phone: 443-482-2346



Daniel Murdiyarso
Center for International Forestry Research
Jl. CIFOR, Situgede, Bogor 16115
Indonesia
Tel. +62 251 8622622 Fax +62 251 8622100
email: d.murdiyarso@cgiar.org

He is currently holding a position as Senior Scientist at the Center for International Forestry Research (CIFOR) and Professor at the Department of Geophysics and Meteorology, Bogor Agricultural University (IPB). Received his first degree in Forestry from IPB and a PhD from the Department of Meteorology, University of Reading, UK.

His research works are related to land-use change and biogeochemical cycles, climate change mitigation and adaptation. He has published a large number of articles in peer-reviewed journals and book chapters on these areas. He was a Technical Adviser for the World Bank on the development of BioCarbon Fund and Forest Carbon Partnership Facilities (FCPF). Dr Murdiyarso was a Convening Lead Author of the IPCC Third Assessment Report and the IPCC Special Report on Land-use, Land-use Change and Forestry in 2002 and Review Editor of the IPCC Fourth Assessment Report in 2007.

In 2000 he served the Government of Indonesia as Deputy Minister of Environment for two years, during which he was also the National Focal Point of the UNFCCC and CBD. Since 2002 Professor Murdiyarto is a member of the Indonesian Academy of Sciences.

Rahman, Faiz, Associate Professor – Department of Geography in Indiana University



Faiz Rahman is an Associate professor in the Department of Geography in Indiana University, Bloomington, IN, USA. His research focuses on ecosystem carbon fluxes and carbon balance. He uses hyperspectral remote sensing data from ground-based, airborne, and satellite sensors, and spatial modeling techniques, to estimate large area carbon balance and carbon budgets of different ecosystems. His research group is also involved in developing ecosystem carbon flux models that can be run using routinely available remote sensing data as inputs. Additionally, Faiz and his research group estimate the carbon budget of the Sundarbans mangrove forest along coastal areas of the Bay of Bengal using image data from NASA's Moderate Resolution Imaging Spectroradiometer (MODIS) sensor. In another study they explore the spatiotemporal patterns of mangrove deforestation along the Indonesian coastlines, and the socio-ecological drivers of these deforestation activities. The goal is to map the current condition and carbon contents of tropical mangroves, and quantify the carbon costs of mangrove deforestation.

Email: farahman@indiana.edu

Ralph, Peter J., Professor - Executive Director, Plant Functional Biology and Climate Change Cluster (C3), University of Technology Sydney



Professor Ralph's research over the past 13 years has been innovative and original, advancing knowledge of the physiological limitations of photosynthetic marine organisms. He has played a key role in the application of chlorophyll a fluorometry to marine botany and is widely regarded as a world leader in this field. His early research during the late 1990's established much of the understanding of seagrass photobiology, gas exchange and stress response; he then applied his knowledge to corals, where he has unravelled the complex interactions of the endosymbiotic microalgae within coral tissue. He has published over 90 scientific publications covering photosynthetic responses of sea-ice algae, seagrasses, phytoplankton, macroalgae, as well as terrestrial plants.

Ralph is an associate editor of the journal *Marine Biology* and review editor of *Marine Ecology Progress Series*. He has been a panel member for the Australian Research Council Future Fellow Selection Committee. For the past 10 years, he has headed the Aquatic Processes Group which currently includes two Adjunct Professors, one Senior Research Fellow, six

Research Fellows, a Laboratory Manager, 8 PhD students, three Honours and two Research Assistants. As Executive Director of a research institute (C3), he leads a team of 35 academic staff, who supervise over 30 PhD students.

Plant Functional Biology and Climate Change Cluster (C3), University of Technology Sydney
PO Box 123 Broadway 2007 NSW Australia

Email: peter.ralph@uts.edu.au

<http://datasearch2.uts.edu.au/c3/members/detail.cfm?StaffID=514>

Saintilan, Neil, Ph.D. – Principal Research Scientist, CSIRO and NSW Office of Environment and Heritage



Dr Neil Saintilan is a Principal Research Scientist conjointly between CSIRO and the NSW Office of Environment and Heritage, where he also leads the Rivers and Wetlands Unit. His PhD research investigated variation in mangrove distribution and biomass within estuaries, and included the estimation of below-ground biomass for a range of species across environmental gradients. Subsequent research in coastal wetlands has included the installation of Surface Elevation Tables (SET's) across 16 sites in SE Australia. The SET allows the measurement of sediment and organic matter accumulation in tidal wetlands. Recent publications have highlighted the role of below-ground processes in controlling surface

elevation trends in mangrove and saltmarsh environments in the region. Dr Saintilan is the editor of two recent books with CSIRO Publishing; *Australian Saltmarsh Ecology* and *Ecosystem Response Modelling in the Murray Darling Basin*.

Email: neil.saintilan@environment.nsw.gov.au

OBSERVERS

Fitzgerald, Claire, MSc – GIS analyst, UNEP-WCMC



Claire Fitzgerald is a GIS analyst in the Marine Assessment and Decision Support programme at the UNEP World Conservation Monitoring Centre (UNEP-WCMC), based in Cambridge, United Kingdom.

Her work building important habitat datasets supports the development of online data resources, resources which provide access to a range of critical habitat data important for multilateral environmental agreements and conventions as they relate to marine and coastal biodiversity. Claire has an MSc in Applied Remote Sensing and GIS and a BSc in Marine Science, and has worked on both marine and terrestrial applications of remote sensing and GIS for biodiversity conservation.

Claire Fitzgerald
GIS Analyst
Marine Assessment & Decision Support
Programme UNEP World Conservation Monitoring Centre
219 Huntingdon Road
Cambridge CB3 0DL

United Kingdom
Telephone: +44 (0) 1223 814614
Email: ClaireFitzgerald@unep-wcmc.org

Lawrance, Anissa – Director, TierraMar Consulting



With a diverse background in environmental science, coastal and marine natural resource management (NRM) and conservation, environmental communication, chartered accounting and risk management, Anissa has over 20 years experience in developing and communicating strategic solutions and managing people, projects and businesses towards sustainability. She is currently assisting UNEP/GRID-Arendal to develop and deliver its Blue Carbon program across Asia Pacific.

As the Director of TierraMar Consulting, Anissa has worked to build the capacity of NRM and conservation program delivery agents to achieve better outcome across Asia Pacific. This work has included strategic assistance to develop national conservation and NRM frameworks, program development, implementation and assessment and the review of onground conservation and NRM projects.

Anissa has previously held leadership positions in a number of Australian conservation NGOs where she was focused on improving the sustainability of Australian fisheries and coastal habitats. In these roles she provided effective policy advice and delivered industry, government and community partnerships, as well effective large scale strategic education, communication and onground coastal habitat conservation and rehabilitation programs. She has been a key driving force and strategist in coastal and marine conservation in Australia for many years. In 2007 she became a Churchill Fellow with the prestigious Winston Churchill Memorial Trust, looking at how other countries are engaging the fishing industry in marine spatial planning and how marine ecosystem based management is being applied to coastal ecosystems. She has held senior positions in a number of leading international consulting and professional services firms where she provided expertise in environmental, business, operational and technological risk management, systems and process design and control, and strategic planning and management. Anissa has worked across nearly every industry sector and with all types of organisations from blue chip companies to government departments both nationally and internationally in this capacity.

Email: anissa@tierramar.com.au

Mills, Craig – Head of Informatics, United Nations Environment Programme World Conservation Monitoring Centre

Craig is the head of the informatics team at UNEP-WCMC. In the last 4 years he has led and developed large biodiversity informatics projects related to collecting global biodiversity and protected areas data. Prior to this he spent 6 years as a marine researcher at CEFAS modeling North Atlantic fish and fisheries distributions. His interest in this meeting focuses mostly on looking at the systems needed to collect marine habitat data at the global scale.

Email: Craig.mills@unep-wcmc.org

Wood, Louisa – Head of Marine Assessment and Decision Support Programme at United Nations Environment Programme

Louisa Wood is the Head of the Marine Assessment and Decision Support Programme at UNEP-WCMC. The MADS Programme at WCMC has a primary focus on building collaborative partnerships and innovative technologies to transform the rate of improvement of coastal ecosystem data for decision-making.

Louisa has a PhD in Geography from the University of British Columbia, Canada, and 10 years of experience working on a variety of marine conservation, fisheries, and marine protected area (MPA) projects, spanning a range of issues including; marine ecology and mapping; illegal, unregulated and unreported (IUU) fisheries; capacity building; MPA monitoring, planning, and compliance; and spatial decision support. These projects have ranged in focus from local (Seychelles, Canada, UK) to global (IUU fisheries, MPAs). Louisa also has an MSc in Tropical Coastal Management from the University of Newcastle Upon Tyne, and a BA(Hons) in Zoology from the University of Cambridge, and has published numerous reports and peer-reviewed publications. She has been a Board Member of the Pacific Marine Analysis and Research Association (PacMARA) since 2007, a member of the IUCN World Commission on Protected Areas since 2006, and recently joined the Steering Committee for the Global Islands Partnership (GLISPA). She has also done work for IABIN (Inter American Biodiversity Information Network), WWF, DFO (Fisheries and Oceans, Canada), and Pew Charitable Trusts.

Prior to working for UNEP-WCMC, Louisa worked for IUCN's Global Marine Programme, in collaboration with Google and partners on the development of a global layer of MPAs for inclusion in 'Oceans in Google Earth'. This is a product that cross-cuts the needs for better scientific information and better communication to a global public to support more information about the value and importance of effective marine resource management and conservation. It also sought to embrace the role that innovative technologies and research techniques can play in achieving greater understanding, planning, assessment, and management of biodiversity and human use of the ocean, and to integrate this knowledge with policies operating at multiple scales. These principles underpin much of the work undertaken by UNEP-WCMC to enhance accessibility and improvement of core data for decision-making.

Email: Louisa.Wood@unep-wcmc.org

COORDINATORS

Dorothee Herr – Marine Program Officer, Global Marine and Polar Programme IUCN
Dorothee Herr joined IUCN's Global Marine and Polar Programme as a Marine Program Officer beginning of 2009. Despite being native of land locked Luxembourg, Dorothee is particularly interested in policy processes on ocean and climate change. In her capacity at IUCN Dorothee is following in particular the current UNFCCC negotiations and working towards including marine and coastal issues more centrally into the international climate change policy debate. She is active in a wide range of marine related climate change topics and initiatives, including

on ocean warming and ocean acidification as well as on nature-based solutions to climate change adaptation and mitigation. Dorothée is also the lead author of IUCN's publication on The Ocean and Climate Change. Tools and Guidelines for Action and has contributed to several recent publications and articles related to "blue carbon".

Dorothée holds a MSc in Environmental Change and Management from the University of Oxford, UK and a Diploma in Geography from the University of Heidelberg, Germany. Dorothée has broad experience within the private sector, government agencies and NGOs having worked amongst others at the Luxembourg Ministry of the Environment, Greenpeace and the International Network for Studies in Technology, Environment, Alternatives, Development (CEPS/INSTEAD).

Pidgeon, Emily, Ph.D. – Senior Director, Marine Climate Change Program, Conservation International



Dr Emily Pidgeon is the Director of Conservation International's Marine Climate Change Program which is focused on solutions for coastal and marine adaptation to climate change and on developing marine based approaches for mitigation through "Blue Carbon".

Dr Pidgeon has a broad background in marine sciences. After completing her Ph.D. in environmental engineering at Stanford University, she was a research scientist working on coastal oceanography problems at the Scripps Institution of Oceanography in San Diego, California. Dr. Pidgeon has also worked in the Oil and Gas industry and as a consultant addressing pollutant

issues in coastal waters.

At CI, Dr Pidgeon's primary focus is integrating ocean sciences into effective conservation strategies and field implementation. This particularly includes addressing the impacts of climate change on coastal and ocean communities and environments.

Conservation International
2011 Crystal Drive, Suite 500
Arlington, VA, 22202 USA
Tel: +1 703-341-2481
Fax: +1 703-892-0826
Email: epidgeon@conservation.org

Telszewski, Maciej Ph.D. – Deputy Project Director, International Ocean Carbon Coordination Project, UNESCO



Maciej Telszewski was born in Wejherowo, Poland and received his Masters in Physical Oceanography from the University of Gdansk, Gdansk, Poland. He then moved to Norwich, UK where he received his PhD from the School of Environmental Sciences at the University of East Anglia (UEA). Maciej's area of expertise extended to marine carbon cycling with special interest in the surface ocean – lower atmosphere fluxes. His project was part of the EU CarboOcean initiative with field research conducted in close collaboration with the UK SOLAS. After a short postdoc at UEA, he moved to Japan to work with the National Institute for Environmental Studies. His work there

concentrated on combining satellite and reanalysis data with *in situ* measurements in order to parameterize climate-related measurements including sea surface, pCO₂, and DMS. Maciej was also responsible for designing and conducting field campaigns (TA, DIC and pCO₂ measurements along the hydrographic sections), computing basin-wide to global maps of investigated parameters using neural statistics, self-organizing maps and other computational methods. He was also investigating feedbacks between oceans and climate. Recently Maciej was appointed as the Assistant Project Director of the International Ocean Carbon Coordination Project at UNESCO-IOC, Paris, France where he uses his expertise to help coordinate marine carbon cycle science at the international level.

International Ocean Carbon Coordination Project
Intergovernmental Oceanographic Commission of UNESCO
1, rue Miollis, 75732 Paris CEDEX 15, France
Phone: +33 1.45.68.39.39
Email: m.telszewski@unesco.org
<http://www.ioccp.org/>

Tamelander, Jerker, Manager, Oceans and Climate Change, IUCN Global Marine and Polar Programme



Jerker leads activities addressing the impacts of greenhouse gas emissions on oceans, dependent industries and communities. The programme focuses on finding nature-based solutions to climate change, including mitigation through preserving and enhancing natural carbon stocks, and development and implementation of approaches to increasing socio-ecological resilience and adaptive capacity. He also works on spatial planning, development of resilient MPA networks, and addressing Invasive Alien Species (IAS) in the marine environment. Jerker has an MSc in Marine Biology and has worked in international marine research and policy collaborations for 15 years, based at the Finnish Institute of Marine Research, the United Nations Environment Programme and IUCN.

IUCN Global Marine and Polar Programme
Rue Mauverney 28, 1196 Gland
Switzerland
Tel: +41 22 999 0240
Fax: +41 22 999 0025
Email: jerker.tamelander@iucn.org