

Presentation of plenary speakers

Please find also the presentation of the plenary speakers with their photos in the OSC2 Programme

Robert (Bob) Scholes

CSIR-Natural Resources and Environment) in Pretoria, South Africa

Prof Bob Scholes is a systems ecologist, employed by the Council for Scientific and Industrial Research (CSIR-Natural Resources and Environment) in Pretoria, South Africa since 1992. Prior to this, he taught at the University of the Witwatersrand (where he is currently an honorary professor) and was manager of the South African Savanna Biome Programme. His PhD was granted for work on tree-grass interactions in savannas. He currently studies the effects of human activities on the biosphere, and in particular on savannas in Africa. He has over thirty years of field experience in many parts of the world, and has published widely in the fields of savanna ecology and global change, including popular and scientific works. He has been involved in several high-profile environmental assessments, including the Intergovernmental Panel on Climate Change and the Millennium Ecosystem Assessment. He is or has been a member of several steering committees of international research programmes and observational initiatives. He currently chairs the Scientific Committee of the Group on Earth Observation Biodiversity Observing Network, is a Vice Chair of the Scientific Committee of DIVERSITAS and is a member of the steering committee of the new ICSU Programme on Ecosystem Change and Society. He is a Fellow of the CSIR, the Royal Society of South Africa, and the South African Academy.

Harold A. Mooney

Stanford University, USA

Harold A. Mooney holds the Paul S. Achilles Professorship in Environmental Biology at Stanford University, USA.

H. Mooney's research on the carbon balance of plants provided a theoretical framework for ecophysiological studies, and was instrumental in incorporating physiological understanding to studies of ecosystem processes. It also led research on interactions between plants and their biotic environment, and provided an objective measure for evaluating theories of plant-animal interaction. He currently studies the impacts of global change on terrestrial ecosystems, especially on productivity and biodiversity and invasion of non-indigenous plant species as well as the environmental, health and social impacts of global animal production systems.

H. Mooney is involved in many international activities designed to integrate diverse disciplines to advance ecology and ecosystem sustainability. He is one of the founding members of DIVERSITAS, and the current Chair of the Scientific Committee of DIVERSITAS, and recently co-chaired the Scientific Panel for the Millennium Ecosystem Assessment.

H. Mooney has published more than 450 scientific books, papers, and articles, thereby building bridges between various areas of ecology and exploring how ecologists can contribute to resolving global issues. He has served on many editorial boards and on advisory committees of funding agencies, universities, and national and international agencies.

H. Mooney was elected to the National Academy of Sciences, the American Academy of Arts and Sciences, the American Philosophical Society, and as an Honorary Member of the British Ecological Society. He has received the Eminent Ecologist Award and the Mercer

Award of the Ecological Society of America, Humboldt Senior Distinguished U.S. Scientist Award, the Max Planck Research Award, the Ecology Institute Prize for Terrestrial Ecology, the Nevada Medal Award, the Blue Planet Prize, the AIBS Distinguished Scientist Award, the Tyler Environmental Prize, the Margalef Prize and the BBVA Foundation Award for Knowledge Dissemination and Communication in Biodiversity Conservation.

Gretchen C. Daily

Stanford University, USA

Gretchen Daily is Bing Professor of Environmental Science in the Department of Biology at Stanford University, USA; Senior Fellow in the Woods Institute for the Environment; and Director of the Center for Conservation Biology. She is also Chair of The Natural Capital Project, a partnership among The Nature Conservancy, World Wildlife Fund, and Stanford University, whose goal is to align economic forces with conservation by mainstreaming the values of natural capital into decisions.

An ecologist by training, Daily's work spans scientific research, teaching, public education, and working with leaders to advance practical approaches to environmental challenges. Daily's scientific research is on biodiversity change; on the scope for harmonizing biodiversity conservation and agriculture; on quantifying the production and value of ecosystem services across landscapes; and on new policy and finance mechanisms for integrating the values of nature into major decisions. Her efforts span fundamental research and policy-oriented demonstration projects in Africa, Asia, Europe, Latin America, North America, and Oceania.

Daily works extensively with private landowners, economists, lawyers, business people, and government agencies to incorporate environmental issues into business practice and public policy.

Nyawira Muthiga

Wildlife Conservation Society, Kenya

Dr. Muthiga is a marine biologist from Kenya who has dedicated the past twenty five years to the management and conservation of East African marine ecosystems through research, training and conservation management. Dr. Muthiga is the Coordinator of the Wildlife Conservation Society's Marine Programs in the Western Indian Ocean (WIO). She received her PhD from the University of Nairobi (Dept of Zoology; 1996) and MSc at Florida State University (Biological Oceanography; 1984).

Dr. Muthiga's research interests evolved from an early interest in mainly biological and ecological studies of sea urchins and their effects on coral reef community structure to an interest in the management of marine protected areas (MPAs) and their effectiveness. Her focus has evolved over the years to include alternative livelihoods for MPA dependent communities focusing on marine invertebrates. Dr. Muthiga also gained some experience in the Caribbean through research collaboration in Belize and Florida. Her work has appeared in many peer-reviewed publications such as Science, Coral Reefs and she has presented the findings of her work at numerous science and management conferences and fora.

In terms of her contribution to science and capacity building in East Africa, Dr. Muthiga has served as President of the Western Indian Ocean Marine Science Association (www.wiomsa.org) where she presided over the association's growth from 500 to the current 1200 members managing research and training projects in the 10 countries of the WIO region. She also participates in a wide variety of other professional initiatives, as well as supervising students at universities in the WIO and abroad.

Dr. Muthiga was one of two recipients of the National Geographic/Buffer award for achievements in Conservation in 2005 and was also conferred the Kenyan Presidential award, the Order of the Grand Warrior in 2005.

Pavan Sukhdev

UNEP-WCMC/Deutsche Bank London, UK-India

Pavan Sukhdev is the Project Leader for UNEP's "Green Economy" initiative, a major UNEP project suite to demonstrate that the greening of economies is not a burden on growth but rather a new engine for growth, employment, and the reduction of persistent poverty. Pavan is also Study Leader for the G8+5 commissioned report on The Economics of Ecosystems and Biodiversity ("TEEB"), a project he was appointed to lead in March 2008 by the EU Commission and Germany whilst still working full time at Deutsche Bank. TEEB's Interim Report was welcomed globally for its fresh economic outlook, showing the economic significance of the loss of nature's services, and connecting biodiversity and ecosystems with ethics, equity, and the alleviation of poverty.

As a career banker, Pavan Sukhdev continues to be Chairman of Deutsche Bank's Global Markets Centre Mumbai ("GMC Mumbai"), whilst on sabbatical from the Bank for two years to conduct his environmental projects "TEEB" and "Green Economy". GMC Mumbai is the division's dedicated global hub for "front-office off-shoring", a market first of its kind which he had founded in February 2006.

Until August 2008, he was the Head of Deutsche Bank's Global Markets business in India, including its Fixed Income and Equities divisions and GMC Mumbai. From 2006 to 2008, he led the build-out of Deutsche Bank's Global Markets presence in India into a veritable powerhouse, spanning capital markets origination, trading and sales, a fixed income primary dealership, a market-leading equities institutional brokerage, a newly formed Non-banking Finance Company and also GMC Mumbai.

Pavan pursues long-standing interests in environmental economics and in nature conservation through his work with the Green Indian States Trust (GIST) and other NGO's. GIST has researched, developed and published methodology and empirical work on preparing comprehensive 'Green Accounts' for India and its States, a first among developing countries.

Andrew Dobson

Princeton University, USA

Parasitic worms, bacteria and viruses are a constant feature of the daily lives of most 'healthy' populations of animal and plant species. My research is concerned with the ecology of infectious diseases and the conservation of endangered and threatened species.

My research focuses on the population and community ecology of infectious diseases in a variety of endangered and fragile ecosystems: the Serengeti in East Africa, the coastal salt marshes and grasslands of California; the forest fragments of Malaysia and Bangladesh, and the eye's of the finches in the back yards of New England. I also work on the interaction between climate variability and the transmission of malaria and cholera in India and Bangladesh. All of this research is sponsored by NIH, NSF or NOAA. Each study focuses on a different aspect of interactions between pathogens and their hosts that has allowed me to develop sections of a larger body of theory that deals with the role of infectious diseases in natural populations and communities. The theoretical work and its development are intimately tied to the empirical work, all of which is undertaken in collaboration with students, post-docs and colleagues at a variety of institutions.

My conservation work is focused upon the Serengeti region of Tanzania. While a significant emphasis has been upon the control of pathogens that can infect both wildlife and domestic species: rabies, rinderpest, brucellosis, I am also interested in the ecology and economics of land-use change, wildlife-human interactions and ecotourism. I am an active partner in the Serengeti BioComplexity Project, which provides a forum for everyone who works in the Serengeti to interact and develop ideas that can be more broadly applied to the conservation of East African grasslands.

Georgina Mace

Imperial College London, UK

Georgina Mace holds a Chair in Conservation Science at Imperial College London and is the Director of the Centre for Population Biology. She is Vice Chair of the Science Committee of DIVERSITAS and has long interests in the assessment of biodiversity status. Her work has included leading the development of criteria for listing species on IUCN's Red Lists of threatened species and co-ordinating biodiversity inputs to the Millennium Ecosystem Assessment.

Guy F Midgley

South African National Biodiversity Institute (SANBI), South-Africa

I trained as a plant physiologist and ecologist at the Universities of Stellenbosch (B.Sc.), UCT (M.Sc.), and Natal (Ph.D.), and have been employed as a research scientist by the South African National Biodiversity Institute (SANBI) or its predecessor Institutes since 1983. Starting out as a desert ecologist, I worked in the southern African Karoo ("desert") ecosystem in the 1980's, where the impacts of drought and thermal stress on plants formed the basis of my early work. Since then I gravitated towards research on climate change on plants, ecosystems and biodiversity as a whole, and more recently I have explored the development of adaptation strategies for conservation in collaboration with US-based NGO Conservation International.

I now lead SANBI's Climate Change research thrust, and contribute to the work of South Africa's National Climate Change Committee (NCCC); I also support negotiators at the UN Framework Convention on Climate Change, and I chair the South African Scientific Committee on Global Change (SASCGC). I am the author of more than 100 publications and book chapters. I was the co-lead author of the Ecosystems Chapter of the 4th Assessment Report of the IPCC, and a member of the large team that was co-awarded the Nobel Peace Prize shared with Al Gore in 2007, and I have been the lead author of several key policy-related reports to regional and national government. I recently co-authored a coffee table book with scientists of Conservation International called "A climate for life", illustrated by the international league of conservation photographers, and which translates the latest science on climate change for public consumption.

I have worked in several countries around the world as part of my research including Chile, Australia, USA, Germany, France, Botswana and Namibia, and I continue to collaborate with a range of scientists around the world engaged in global change research. I am a research fellow with Conservation International, and an honorary lecturer at the Universities of Cape Town and Witwatersrand.

George G. Brown

Brazilian Corporation for Agricultural Research (EMBRAPA), Brazil

George Gardner Brown obtained his MSc in crop and soil sciences at the University of Georgia (1993) and his PhD in life Sciences from the University of Paris VI (1999). Since 2001 he has been working as a researcher for the Brazilian Corporation for Agricultural Research (Embrapa), first at the soybean research station in Londrina (2001-2006), and then at the forestry research station near Curitiba (since 2006). Previous positions include: visiting research scientist at the Instituto de Ecología in Xalapa, Veracruz, Mexico (1995-2000) and long-term research cooperation with the Universidad Complutense de Madrid (1997-1999), as well as several consultancies with the FAO and the Tropical Soil Biology and Fertility (TSBF) Institute of CIAT (1999-2002).

George Brown has participated in more than 12 international projects in Latin America, Africa and Europe, published 40 papers in scientific journals, edited 3 books, and is author/co-author of 32 book chapters and more than 150 abstracts in national and international conferences. Published topics range from soil invertebrate biodiversity and conservation biology to the role of soil biota in soil fertility and plant production, and the effect of agricultural practices on soil fauna.

Current research interests include the role of soil biota (especially earthworms) in sustainable agriculture (focusing on no-tillage and organic agriculture), agroforestry and forestry, the use of biological indicators of soil quality and the assessment of soil biodiversity and derived ecosystem services in natural and agricultural ecosystems. George Brown is a member of the Scientific Committee of the DIVERSITAS agroBIODIVERSITY network. He was awarded the Francesco di Castri award for best presentation by a young scientist, in Oaxaca, Mexico at DIVERSITAS OSC1 (Nov 2005).