



Network Newsletter

and

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Editorial

Ginger Rogers and the Climate System

There is a growing body of research focused on impacts of climate on society and the environment. Climate impacts research started with a small number of researchers studying weather and its impacts on agriculture, water, and fisheries, among other topics. The numbers of researchers have sharply increased, slowly at first in the 1980s, and more rapidly in the 1990s.

Since the end of the Cold War and a shift in focus to concerns about how human activities may be altering the atmosphere, thereby changing global climate, funding for research on the societal aspects of the climate system has also sharply increased around the globe, albeit from a relatively modest base. This has helped to improve the understanding of climate-society interactions. Despite the hollow cries of the climate skeptics, certain well-publicized climate processes have helped bring attention to the societal impacts that have influenced them (e.g., thinning of the ozone layer that protects human life from harmful UV radiation, or the likely impacts on global climate of increasing amounts of carbon dioxide released into the atmosphere).

As of today, though, there appears to be a lack of realization by the physical science community of the contributions to their research by the climate and climate-related impacts communities. This is obvious when one reviews physical science papers on climate issues; references to literature related to societal impacts research are usually missing.

This is not to say that we haven't come a long way since the mid-1970s in terms of recognition, but there is a long way to go. It requires following a difficult path, one that is largely psychological: i.e., how to get physical scientists to take more seriously social science and humanities contributions to climate-related research and the application of that research to societal needs. Part of the reason for this neglect is the "NIH" syndrome: "Not Invented Here." The social sciences have contributed greatly to the use of otherwise unused scientific research findings. It seems that when the scientific community is ready to deal with issues of societal concern (many of which were identified a decade or more ago), they embrace them, especially when espoused by "one of their own." This is not an attack on science, but rather a personal perception of the way the system works.

Here's where Ginger Rogers comes into the picture. Ginger Rogers was the dance partner of Fred Astaire, who was a famous dancer and film star of the 1930s, '40s, and '50s. They were a fantastic dance team. "Team" is the operative word here: admittedly, I do not have the facts in hand, but I would bet that he made a lot more money as part of the team than she did. It seems that he got the lion's share of attention and praise for his prowess on the dance floor. She was his partner but was not the center attraction.

A friend of Ginger Rogers once discussed the dance team in an interview and was asked about Astaire and the dance team. She put the relationship in the proper perspective when she said, "Gingers Rogers did everything that Fred Astaire did, but she had to do it in high heels and backwards." On reflection, it becomes clear that her task was much more difficult than his (not to belittle his role in the partnership). As far as I am concerned, she was the unsung heroine in this story.

Now back to climate impacts. It is my feeling, after spending years interacting with the physical sciences, that the societal aspects of climate system research have been the Ginger Rogers of climate research. We have raised issues for scientists to focus on. We have helped to make research findings usable by various elements of society. We have supported their efforts to receive adequate funding for their experiments in the field, in the laboratory, in space. We have helped to generate interest in society at large about their work. We have done all this as members of the climate research TEAM. We have done so with paltry resources, as well as under difficult conditions in distant and often remote areas. We have done so because we really do believe that societies can benefit from an improved understanding of climate-society interactions and the application of research to address societal issues. We do not seek fame or fortune. Many work for "bed and breakfast" in hostile environments.

What the climate-related social science research community does deserve is acceptance by and awareness of the physical science community of their contributions to climate science. Ginger Rogers deserved much more credit than she got, all the while making Fred Astaire look good. Physical scientists and policy makers need to recognize and support the activities of the social sciences and humanities in addressing climate-related issues. Without application, much scientific research could end up like the proverbial tree falling in the forest with no one around to hear it make a sound.

--Michael H. Glantz



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LET'S HEAR FROM YOU!!

This newsletter depends on YOUR input. Please send relevant information that comes across your desk, whether it is a news item, meeting, job opening, or publication, to the address on the back cover. Information to be included in the next newsletter must be received by **30 September 2004**. If you prefer to receive the newsletter on line, please let us know at www.esig.ucar.edu/newshp and you will be reminded when a new issue is released. Thanks again for your contributions!

RES NEPAL

The Resource and Environmental Conservation Society of Nepal (RES Nepal) is a nonprofit organization of professionals from various fields that aims to achieve integrated and sustainable natural resource management in the country and thereby contribute to socioeconomic development through the innovative research and development of natural resources in Nepal. RES Nepal conducts activities related to the wise use of natural resources, as well as implementation of community-based natural resource management, training, and workshops. The organization maintains a resource library, with published and unpublished reports on natural resource management, research methodology, training, gender issues, and other development issues. For more information, write to the Program Manager, RES Nepal, PO Box 14193, Kathmandu, Nepal.

ARCTIC CLIMATE IMPACT ASSESSMENT (ACIA)

More than 250 scientists and 6 circumpolar indigenous organizations have participated in ACIA. The goal of ACIA is to evaluate and synthesize knowledge on climate variability, climate change, and increased ultraviolet radiation and their consequences, in order to lead to useful and fundamental information for the nations of the Arctic region, their economies, resources, and peoples. Three major volumes are to be completed by the end of 2004. Scientists will coordinate closely with a similar regional assessment being conducted as part of the Intergovernmental Panel on Climate Change (IPCC). A full report is intended to be available for the ACIA International Scientific Symposium, to be held in November 2004 in Reykjavik, Iceland. The ACIA Secretariat is located at the International Arctic

Research Center at the University of Alaska Fairbanks. For more information, see the website at www.acia.uaf.edu or write to Prof. Gunter Weller, Executive Director, ACIA Secretariat, University of Alaska Fairbanks, PO Box 747740, Fairbanks, AK 99775-7740 USA; email gunter@gi.alaska.edu

PEW RESEARCH CENTER (PRC)

As part of its commitment to inform the public with timely research, the Pew Charitable Trusts announced it is establishing a new nonprofit subsidiary to house all of the major information projects it supports. The new subsidiary will be called the Pew Research Center (PRC) and based in Washington, DC, USA, to bring together 7 Trusts-supported information projects: (1) Pew Research Center for People and the Press; (2) Project for Excellence in Journalism (expected to joint PRC by 2006); (3) Stateline.org; (4) Pew Internet and American Life Project; (5) Pew Forum on Religion and Public Life; (6) Pew Hispanic Center; and (7) Pew Global Attitudes Project. The new PRC became operational on 1 July 2004. The existing projects, currently in separate offices, are expected to move into common office space in December 2004. The PRC will maintain a strict commitment to independent, nonpartisan information and research. For more information, see the website at www.pewresearch.org or write to Pew Research Center for People and the Press, 1150 18th St., Suite 975, Washington, DC 20036 USA; email contact@pewresearch.org



UN MARKS 10-YEAR ANNIVERSARY OF UNCCD

17 June 2004 marked the tenth anniversary of the UN Convention to Combat Desertification (UNCCD), with the theme, "Social Dimensions of Desertification: Migration and Poverty." Desertification is a "creeping" land degradation process that happens all over the world. Drought and desertification cause people to leave their homes and migrate to areas with arable land to grow crops or raise livestock. Without access to sustainable land-use practices, most poor farmers cultivate marginal lands that are unable to sustain them. This constant pressure on the land causes even more degradation and

decline in food production that further aggravates the existing problems. Despite efforts to stop the process of desertification, the trends seems to be picking up speed, doubling its pace since the 1970s. The UNCCD World Day to Combat Desertification is part of the UN campaign to limit environmental deterioration. To commemorate this special anniversary, the UNCCD Secretariat has produced a publication highlighting the unique aspects and work of the Convention since its inception. The publication is available in English and French at the website at www.unccd.int

UNCCD, 2004: **Preserving our Common Ground: UNCCD Ten Years On**. Bonn: UNCCD. 24 pp.

ICIMOD ON EQUITY

ICIMOD (the International Centre for Integrated Mountain Development) recognizes that sustainable mountain development cannot be created without sustainable mountain societies, and therefore has established a new five-year program entitled, "Culture, Equity, Gender, and Governance (CEGG)". The focus of this program is to promote and enable an environment that enhances equity and empowers disadvantaged mountain people in the Hindu Kush Himalayas. Greater priority will be given during the next five years to the cultural and social dimensions of mountain development and to ensure that those concerns are reflected in all of ICIMOD's integrated programs. The *ICIMOD Newsletter* for Summer 2004 focuses on the theme of "Equity and Rights." For more information, see the website at www.icimod.org or write to ICIMOD, 4/80 Jawalakhel, GPO Box 3226, Kathmandu, Nepal; email icimod@icimod.org.np

IUCN'S RED LIST UPDATED

The IUCN (World Conservation Union), through its Species Survival Commission (SSC) continues to assess the conservation status of species, subspecies, varieties, and subpopulations on a global scale in order to highlight those threatened with extinction and therefore to promote their conservation. The IUCN maintains a "Red List" in a searchable database that aims to (1) identify and document those species most in need of conservation attention if global extinction rates are to be reduced, and (2) provide a global index of the state of degeneration of biodiversity. The Red List is being expanded beyond the ability of IUCN and SSC to achieve alone. Therefore, the Red List Program Agreement is now the IUCN (in particular its SSC), BirdLife International, the Center for Applied Biodiversity Science at Conservation International, and NatureServe. These Parties (known as the Red List Consortium) are working together to raise funds and oversee the work

plan in order to achieve the goals of the Red List Program. For more information, visit the Red List website at www.redlist.org to search the 2003 Red List of Threatened Species. The 2004 Red List will be released in November. Email: press@iucn.org

FIVE NEW WORLD HERITAGE SITES DESIGNATED

On 30 June 2004, the World Heritage Committee designated five new World Heritage sites during its 28th session in Suzhou, China. These include Ilulissat Icefjord (Denmark), the Tropical Rainforest heritage of Sumatra (Indonesia), the Natural System of Wrangel Island Reserve (Russian Federation), the Cape Floral Region Protected Areas of South Africa, and the Pitons Management Area (Saint Lucia). For the first time ever, two natural sites in the Arctic have been inscribed on the World Heritage List: Ilulissat Icefjord and Wrangel Island. The World Heritage List currently includes 759 properties (582 cultural, 154 natural, and 23 mixed cultural and natural) in 130 countries. More information on the World Heritage Convention and the List of sites can be found at whc.unesco.org or write to the IUCN (World Conservation Union) at www.iucn.org. One of IUCN's tasks is to evaluate the nominations of sites to be inscribed on the World Heritage List. Email press@iucn.org for more information. (See the Endangered List of World Heritage sites at whc.unesco.org/danglist.htm)

TYLER PRIZE AWARDED TO INDIAN AND LATIN AMERICAN GROUPS

Two educational institutions that train people in India and Latin America to be environmental stewards will share the 2004 Tyler Prize for Environmental Achievement. India's Barefoot College and the Red Latinoamericana de Botanica, a consortium active in six Latin American countries, were awarded the Prize for their significant environmental accomplishments. The Barefoot College addresses problems of drinking water, education of girls, health and sanitation, alternative power generation, as well as social awareness and the conservation of ecological systems in rural communities. The College benefits the poorest of the poor who have no alternatives. Learn more about the College at www.barefootcollege.org. Red Latino-americana de Botanica has graduate training centers in Argentina, Brazil, Chile, Costa Rica, Mexico, and Venezuela, that provide graduate-level training in the plant sciences, including ecology, to students throughout Latin America. For more information, see their website at www.uchile.cl/rlb and for more on the Tyler Prize for Environmental Achievement, administered by the University of Southern California, see www.usc.edu/dept/LAS/tylerprize/

UNU TO MARK ITS THIRTIETH ANNIVERSARY

The United Nations University (UNU) was established by the UN General Assembly in 1973, and its birthday is considered to be September 1, 1975, the day that operations began at its Tokyo headquarters. Among other ideas being considered to mark the thirtieth anniversary are the creation of an alumni association comprising UNU fellows, staff, and Governing Council members, as well as members of advisory boards of regional training centers and programs. The UNU will also document UNU "success stories," projects, and academic output and will also assess its impact on policy issues. The UNU's activities focus mainly on the areas of peace and governance, environment and sustainable development, and science and technology in relation to human welfare. The UNU newsletter is available free of charge at update.unu.edu or write to UNU, 53-70 Jingumae 5-chome, Shibuya-ku, Tokyo 150-8925, Japan; website www.unu.edu

CALL FOR PAPERS: SUSTAINABILITY SCIENCE

Sustainability Science: Practice & Policy is a forthcoming, peer-reviewed, open access electronic journal that makes full text papers freely and fully available to the public. It will be published as part of a government/private industry partnership between the National Biological Information Infrastructure (NBII) and CSA (Cambridge Scientific Abstracts). The e-journal will fill a gap in the literature by providing a forum for presenting empirical science, management and political policies, and field-tested practices with a cross-disciplinary approach. The first issue will be issued in Spring 2005, with a deadline for articles by 1 November 2004. At this time, two categories of submissions are being solicited: (1) articles examining nature/society interactions, geared toward sustainable solutions for practitioners and policymakers; and (2) review of research, trends, and approaches, written by experts who synthesize and critique current work and trends in specific aspects of sustainability. *Sustainability Science* editors will host original articles on case studies, research reports, and policy analysis, with an emphasis on the cross-disciplinary debate on topics such as sustainable agriculture, biodiversity, development, energy, fisheries, forestry, tourism, water resources, human dimensions, and ecosystem management. For more information, see the website at ejournal.nbii.org or write to USGS Biological Informatics Office, 302 National Center, Reston, VA 20192. More information on NBII is available at www.nbii.org or more on CSA is available at www.csa.com

COL. BRIAN A.O. WARD 1932–2004

Colonel Brian Ward passed away unexpectedly on 12 June 2004. After more than 20 years as an engineer in the British Army, he founded the Asian Disaster Preparedness Center (ADPC) in Bangkok, Thailand, in 1986. The ADPC is a regional resource center that works toward disaster reduction and sustainable development in Asia and the Pacific. After serving with the British Army, he worked for over ten years with the International Federation of Red Cross and Red Crescent Societies as delegate in several countries of Africa and Asia. His career spanned more than five decades in several related fields. In 1992, he retired from the ADPC as its first Director, but returned in 1998 to guide the transition of ADPC to the status of an independent foundation. At the time of his death, he was still energetically and enthusiastically involved as Director Emeritus, and member of the Board of Trustees, and Special Advisor to the Executive Director of ADPC. In recognition of his outstanding personal and professional contributions to disaster reduction, he was awarded the UN Sasakawa Certificate of Distinction in 2001. In loving memory of Col. Ward, the ADPC has created a memorial website to him at www.adpc.net/bward/



NEW PARTNERSHIP FOR SUSTAINABLE URBAN TRANSPORT

The Asian Development Bank (ADB) and the World Resources Institute (WRI) have announced their cooperation on a comprehensive program aimed at enhancing the environmental sustainability of transport and mobility throughout Asia. The program calls upon EMBARQ (The WRI Center for Transport and the Environment) to review existing experiences and capacities on sustainable transport in Asia, draw up a set of key indicators for three Asian cities, and develop a strategic framework to develop medium-term sustainable transport strategies. The program is called Partnership for Sustainable Urban Transport in Asia (PSUTA) and will be part of the business plan for the Clean Air Initiative for Asian Cities for 2004. The first two cities chosen are Hanoi, Vietnam, and Xian, China. The third city is still to be chosen. The first stage of the project

involves the development of key indicators of sustainable urban transport throughout Asia. These indicators will be the foundation of case studies, which will emphasize a quantitative analysis of factors affecting access to transportation, traffic safety, and air quality. The partnership will put forward a strategic framework to help cities throughout the region to develop an integrated sustainable transport plan for their particular transport situation. For more information, see the website at www.embarq.org/ or write to WRI at 10 G St. NE #800, Washington, DC 20002 USA.

IN SITU CONSERVATION OF WILD CROP RELATIVES

A new project recently launched brings together the biologically rich countries of Armenia, Bolivia, Madagascar, Sri Lanka, and Uzbekistan to improve key features of traditional crops by conserving their wild crop relatives. Researchers believe that the project, which is co-funded by the Global Environment Facility (GEF), the UN Environment Programme (UNEP), and the International Plant Genetic Resources (IPGR), will play its part in fighting hunger and will help to improve the livelihoods of farmers around the world. The project will pool existing information from a wide variety of sources on crop wild relatives in each of the five countries. An information exchange network will be set up, allowing scientists and breeders to pinpoint promising traits for improving crop production by conserving the rich genetic resources of those countries. Apart from UNEP, GEF, and IPGR, the other agencies involved are the Botanic Gardens Conservation International, the UN Food and Agriculture Organization, IUCN (World Conservation Union), UNEP's World Conservation Monitoring Centre, and ZADI, the German Center for Documentation and Information in Agriculture. For more information, please contact Eric Falt, Division of Communications and Public Information; email eric.falt@unep.org or Nick Nuttall, email nich.nuttall@unep.org or website at www.unep.org

TIEMPO GETS A NEW LOOK

Tiempo, a familiar bulletin on climate and development, has a new look. It has been redesigned, and the editorial team has been expanded to include Saleemul Huq, Hannah Reid, and Gerald Leach. Huq is the Director of the Climate Change Program at the International Institute for Environment and Development (IIED) in London and Chairman of the Bangladesh Centre for Advanced Studies in Dhaka, Bangladesh. He will take on the additional duties of being the lead editor of *Tiempo* and is soliciting articles, especially from Southern authors, on climate- and development-related issues. The overall aim of the journal continues to be to provide a voice to the South and provide accurate and timely

information reflecting Southern interests, as well as to promote mutual understanding between North and South. With increasing access to the Internet in the developing world, the *Tiempo* website aims to play a more important role, with a new central section, a weekly news magazine. For more information, please contact Saleemul Huq at saleemul.huq@iied.org or Hannah Reid (Hannah.reid@iied.org) or see the website for *Tiempo* at www.cru.uea.ac.uk/tiempo/

ASPACO

ASPACO (Asia Pacific Cooperation for the Sustainable Use of Renewable Natural Resources in Biosphere Reserves and Similarly Managed Areas) was initiated in mid-2002 to strengthen the image of the Galapagos National Park (GNP) as the environmental authority for management of the Galapagos Archipelago; to raise awareness about the importance of the marine environment for the integrity of the reserve; and to motivate responsible and sustainable development of the GNP. It concluded with a forum carried out in Quito, Ecuador, which was transmitted to five cities in the country: Guayaquil (most populous city and economic capital), Manta (center of industrial fishing fleet operations), Puerto Ayora (in the Galapagos Islands), Loja and Riobamba (academic sectors of Sierra Central). The Galapagos Islands possess great biological diversity and have been recognized as a World Heritage Site. The ASPACO project had the objective of mitigating the environmental deterioration of the islands. Increasing population pressures, as well as pressure on fishing resources, endanger marine and terrestrial ecosystems. ASPACO is sponsored by the Man and the Biosphere Programme (MAB) at UNESCO (UN Educational, Scientific, and Cultural Organization). For more information on ASPACO, contact Miguel Clüsener-Godt, UNESCO, m.clusener-godt@unesco.org or write to UNESCO, Division of Ecological Sciences, 1, rue Miollis, 75732 Paris Cedex 15, France.

WESTERN U.S. DROUGHT: WORST IN 500 YEARS?

The drought in the U.S. West could be the most severe in 500 years, with effects in the Colorado River Basin worse than during the Dust Bowl of the 1930s. The Colorado River has been in a hydrologic drought for a decade, cutting an important source of water for millions across the west, including Southern California. The drought has produced the lowest flow in the Colorado River on record, with an adjusted annual average flow of only 5.4 million acre-feet at Lees Ferry, Arizona, during 2001–03. During the 1930s drought, the flow averaged about 10.2 million acre-feet. For more information on the drought, visit the Drought Monitoring Center at www.drought.unl.edu/dm/



ENSO = El Niño–Southern Oscillation

(www.esig.ucar.edu/signal)

CURRENT STATE OF THE TROPICAL PACIFIC

(From the Climate Prediction Center's *ENSO Diagnostic Discussion*) www.cpc.ncep.noaa.gov (as of 10 June 2004)

ENSO-neutral conditions are expected to continue during the next three months. Sea surface temperatures (SSTs) were warmer than average in the western and central equatorial Pacific (Nino3.4 and 4 regions) and cooler than average in the eastern equatorial Pacific (Nino3 and 1+2 regions). Slightly more than half of the statistical and coupled model forecasts indicate near-neutral conditions in the tropical Pacific through the northern summer and fall of 2004. The remaining forecasts indicate that El Niño conditions will develop within the next 3–6 months. Given the recent trends and observed oceanic and atmospheric patterns, it is more likely that ENSO-neutral conditions will continue for the next three months (through August 2004). There is considerable uncertainty about what will happen after August 2004.

MANGROVE FORESTS A HAVEN FOR FISH

A recent study in *Nature* has found a strong link between the productivity of coral reef fisheries and the health of nearby mangrove forests. Peter Mumby, the study's lead author, states that the research shows a direct link between mangroves and the number of fish on coral reefs, including several species that are heavily fished. Protecting mangroves in association with reefs will provide a much better return on investment than only protecting reefs in isolation. In the Americas, mangroves are being cleared at a rate faster than tropical rainforests. More than 35% of the world's mangroves are already gone. In addition, mangroves buffer the effects of storms, filter pollution, and provide critical habitats for many fish species.

Mumby, P.J. et al., 2004: Mangroves enhance the biomass of coral reef fish communities in the Caribbean. *Nature*, 427, 5 February, 533–536. www.nature.com/nature

COASTAL GTOS (C-GTOS)

The Coastal Panel of GTOS (Global Terrestrial Observing System) is putting finishing touches on its implementation plan, which was developed by a panel of experts through a series of three workshops beginning in the fall of 2002. The primary goal of C-GTOS is to detect, assess, and predict global and large-scale regional change associated with land-based, wetland, and freshwater ecosystems along the coasts. It complements the ongoing activities of the Coastal Ocean Observations Panel of GOOS (Global Ocean Observing System) and the Coastal Theme of IGOS (Integrated Global Observing Strategy). The plan focuses on a group of specific issues of global concern along the coast and identifies priority products that relate to these issues. Particular attention is given expansion of the capabilities of TEMS (Terrestrial Ecosystem Monitoring Sites), its representation with coastal sites, and the application of socioeconomic variables. For more information, contact the GTOS Secretariat at gtos@fao.org or visit the site at www.fao.org/gtos

EASILY UNDERSTOOD ENSO FORECASTS

The Australian Bureau of Meteorology's National Climate Centre (NCC) has created an easily understood El Niño and La Niña Forecasts page. A table summarizes the NCC's opinion regarding the outputs from various reputable ocean or coupled ocean-atmosphere forecasts models. NCC's interpretation may not necessarily be the same as the organizations producing the model output, so readers are encouraged to follow the links to the various institutions. The POAMA (Predictive Ocean Atmosphere Model for Australia) model, run at the Bureau of Meteorology, generates a new forecast every day for the following 8 months based on the latest observations. The most recent ensemble of POAMA model runs suggest that central to eastern equatorial Pacific temperatures will increase steadily over the coming months but remain below the El Niño threshold. See the website at www.bom.gov.au/climate/ahead/ENSO-summary.shtml

CRYOSAT

CryoSat will be the first satellite to be launched as part of the European Space Agency's Living Planet Program as part of the Earth Explorer Opportunity Missions. Due for launch at the end of this year, CryoSat will measure changes in the elevation of ice sheets and sea ice with unprecedented accuracy in order to determine whether or not the Earth's ice masses are thinning due to global warming. Scientists faced daunting challenges in performing the first of a series of 6 validation

experiments in support of the CryoSat mission, such as camping out for up to two months on the vast ice sheets in the Arctic to collect data. The validation experiments are crucial to ensuring that the mission runs smoothly and that the aims of the mission are achieved. The experiment included research scientists from more than 5 different countries and institutes to collect data that were conducted on the ground as well as from aircraft. To learn more about CryoSat, visit the Living Planet website at ESA at www.esa.int/export/esaLP/

REPORT ON COLD-WATER CORAL REEFS

The UN Environment Programme (UNEP) recently published a report with its World Conservation Monitoring Centre (WCMC) entitled "*Cold-Water Coral Reefs: Out of Sight – No Longer Out of Mind.*" Cold water corals are little known in comparison with their tropical cousins. For many years, research has focused largely on tropical, shallow-water corals found in areas such as the Maldives. Nonetheless, coral species building reefs in colder and usually deeper waters play an equally important role in sustaining the delicate balance of our marine ecosystems. The report indicates that these corals can be found in almost all of the world's oceans. Written by 5 international coral reef experts, the report was released during a two-day meeting convened by the International Coral Reef Initiative in Okinawa, Japan. Detailed leaflets explaining the report are available in English, French, and Spanish at the WCMC's website at www.unep-wcmc.org/

Freiwald, A., J.H. Fosså, A. Grehan, T. Koslow and J.M. Roberts,
2004: **Cold-Water Coral Reefs**. Cambridge, UK: UNEP World
Conservation Monitoring Centre.



ARGO UPDATE

Argo is a global array of 3,000 free-drifting floats that will measure the temperature and salinity of the upper 2,000 meters of the global ocean. This will allow, for the first time, continuous monitoring of the temperature, salinity, and velocity of the upper ocean, with all data being relayed and made publicly available within hours after collection. Argo deployments began in 2000, and by the middle of 2004, the array is over 40% complete. The tally of floats as of 5 July 2004 is 1,270. The floats are

contributed by many countries, but all data are freely available. Argo is a major contributor to the World Climate Research Programme's (WCRP) Climate Variability and Predictability Experiment (CLIVAR) project, and to the Global Ocean Data Assimilation Experiment (GODAE). Argo is intended to improve understanding of the ocean's role in climate, as well as spawning a large range of ocean applications. The page is available at www.argo.ucsd.edu/

WESTERN INDIAN OCEAN POLLUTION PROJECT

A three-year-long project aimed at cutting pollution in the Western Indian Ocean will be funded by the Global Environment Facility (GEF) and the Government of Norway in order to help 8 East African countries devise action plans to curb sewage, chemicals, and other pollutants coming from the land into the region's rivers and coastal waters. The Western Indian Ocean is one of the richest in wildlife, with important mangrove forests, seagrass beds, and coral reefs. The new \$11 million-dollar project, which is being implemented by UNEP, will strengthen pollution laws, regulations, and cooperation regionally and nationally. The project was announced at the Fourth Conference of the Parties to the Nairobi Convention, and fits into the wider issue of the UN's Millennium Development Goals (MDGs) as they relate to poverty eradication, provision of drinking water, and the reduction of hunger. For more information, contact UNEP's Division of Communications and Public Information, Eric Falt, at eric.falt@unep.org

JOB OPPORTUNITY

UCAR Visiting Scientist position at the National Ocean Service. The position will support NOAA's National Ocean Service (NOS) in Silver Spring, Maryland, and will be responsible for assisting in the enhancement, operations, and maintenance of a growing suite of operational coastal and estuarine numerical oceanographic forecast model systems. Primary responsibility will include assistance in transferring the Great Lakes Forecast Systems (New York Harbor, Chesapeake Bay, and Galveston Bay), and assistance in transitioning future systems to operations. The Operational Forecast Systems provide the nation's users with accurate, reliable, and timely operational model predictions of water levels, currents, and other critical coastal and oceanographic parameters for ports, estuaries, the coastal ocean, and the Great Lakes. Candidates must have a BS or an MS in oceanography, meteorology, atmospheric sciences, physical sciences, coastal engineering, hydrology, computer sciences, or related field. See website at www.vsp.ucar.edu for further details and application mailing address.

PAST MEETINGS

UNESCAP-ADPC Forum on Natural Disaster Reduction

When: 8 October 2003
Where: Bangkok, Thailand
Contact: UNESCAP Rajadamnern Nok Avenue; Bangkok 10200 Thailand; Tel: 66-2-288-1234; Fax: 66-2-288-1000; www.unescap.org

Asian International Conference on Total Disaster Risk Management (TDRM)

When: 2-4 December 2003
Where: Kobe, Japan
Contact: Asian Disaster Reduction Center (ADRC); Email: rep@adrc.or.jp; Fax: 81-78-262-5546; www.adrc.or.jp/publications/TDRM2003Dec/top.htm

Asian Conference on Disaster Reduction 2004

When: 4-6 February 2004
Where: Siem Reap, Cambodia
Contact: Emergency and Humanitarian Action- WHO. Abdul Razzak Al Sanhoury St., Cairo 11371, Egypt; Tel: (202) 670 25 35; Fax: (202) 670 24 92; Email: EHA@emro.who.int; www.emro.who.int/eha/archivedmeetings.htm

International Forum on Partnerships for Sustainable Development

When: 4-6 March 2004
Where: FAO Headquarters in Rome, Italy
Contact: Mrs. Gloria Visconti; Italian Ministry for the Environment and Territory; Division for Environmental Research and Development; Via Cristoforo Colombo, 44 00147 - Roma, Italia; Tel +39 06 5722 8121; Fax +39 06 5722 8180; Email: visconti.gloria@minambiente.it; www.minambiente.it/Sito/home.asp

The Extraordinary Meeting of the Parties to the Montreal Protocol on Substances That Deplete the Ozone Layer (EXMOP)

When: 24-26 March 2004
Where: Montreal, Canada.
Contact: UNEP Ozone Secretariat, Kenya, Nairobi; Fax: 254-20-62-469; www.unep.org/ozone/Events/7Bi_events_meeting2004.asp

World Climate Research Programme: The Regional-Scale Climate Modeling Workshop - High-Resolution Climate Modeling: Assessment, Added Value and Applications

When: 29 March–2 April 2004
Where: Lund, Sweden
Contact: Geobiosphere Science Centre; Lund University, Sölvegatan 12; 223 62 Lund, Sweden. Marie Vandewalle, Email: Marie.Vandewalle@nateko.lu.se; www.necc.nu/RCMworkshop/index.htm

Workshop on Geoscience Education and Cyberinfrastructure

When: 18-20 April 2004
Where: Boulder, Colorado
contact: Mike Wright, DLESE Program Center, Email mwright@ucar.edu; www.dpc.ucar.edu/projects/geoinfo/

26th Conference on Hurricanes and Tropical Meteorology

When: 3-7 May 2004
Where: Miami, Florida
Contact: Claudia Gorski, American Meteorological Society; 45 Beacon St.; Boston, MA 02108-3693; Tel: 617-227-2426 ext. 305; Email: cgorski@ametsoc.org; www.ametsoc.org/meet/fainst/26hurr.html

2nd Annual Brussels Climate Change Conference

When: 11-12 May 2004
Where: Brussels, Belgium
Contact: EU Conferences Ltd; Festival Drive; Ebbw Vale; NP23 8XF; Wales; UK; Telephone: +44 1495 300012; Tel/Fax: +44 1495 309372; Email: info@euconferences.com; www.euconferences.com/index2.htm

The International Conference for Renewable Energies

When: 1-4 June 2004
Where: Bonn, Germany
Contact: Secretariat of the International Conference for Renewable Energies, Bonn 2004; Postfach 5180; 65726 Eschborn; Germany; Tel: 49-(0)6196-794404; Fax +49-(0)6196-794405; Email info@renewables2004.de; www.renewables2004.de/

Communicating Urgency, Facilitating Social Change: New Strategies for Climate Change

When: 9-11 June 2004
Where: Boulder, Colorado
Contact: ESIG/ NCAR Lisa Dilling ldilling@ucar.edu. Susi Moser smoser@ucar.edu; www.esig.ucar.edu/changeworkshop/

First Annual Climate Change Program & Energy Commission Meeting on "Intercomparison of California Climate Simulations"

When: 9-11 June 2004
Where: Sacramento, California
Contact: Ms. M. Jones, Tel: 916-653-1195; Email: Majones@energy.state.ca.us; www.energy.ca.gov/global_climate_change/2004_conference/index.html

The 57th Canadian Water Resources Association Conference - Water and Climate Change: Knowledge for Better Adaptation

When: 16-18 June 2004
Where: Montreal, Canada
Contact: Ouranos; 550 Sherbrooke Street West, 19th

floor; Montréal, (Québec), H3A 1B9; Tel: 514 282-6464;
 Fax: 514 282-7131; Email: acrh@ouranos.ca;
www.ouranos.ca/acrh/

UPCOMING MEETINGS

The meeting on **Climate Change and Forest Genetics** will be held *26–29 July 2004* in Kelowna, B.C., Canada. The meeting is open to anyone interested in the fields of tree improvement or forest genetics. The meeting will address the potentially immense impacts of climate change on forests and the role of climate change in species and population distributions, as well as new approaches to forest genetics research and practice. New research tools (e.g., modeling techniques, experimental approaches, analytical methods and GIS) and new considerations (climate variability, changing environments, and greater uncertainty) will be discussed. For more information contact Diane Douglas by phone ((250) 356-6327); e-mail: Diane.Douglas@gems9.gov.bc.ca; www.for.gov.bc.ca/hti/ctia/

The **Urban Flood Mitigation (UFM) Course** will be held *28 August–3 September 2004* in Manila, Philippines. Sponsors: Asian Disaster Preparedness Center (ADCP), ITC Netherlands. This course will focus on urban flood mitigation issues, specifically on the impact of floods and structural and non-structural interventions available to mitigate urban impact with the goal of integrating GIS applications to these issues. For more information contact ADCP, P.O.Box 4, Klong Luang, Pathumthani 12120, Thailand; tel:(66-2) 516-5900-10; e-mail: audmp@adpc.net; www.adpc.net

The **Climate Change in High Latitudes Conference** will be held *1-3 September 2004* in Bergen, Norway. The conference will commemorate the centenary of Vilhelm Bjerknes' programmatic publication in 1904 that paved the way for modern meteorology and many applications in practical weather forecasting. The conference is being organized to enhance understanding of the climate system and climate change in polar and sub-polar regions through major discussions with world-class scientists and selected contributions. For more information contact Beatriz Balino by phone (+47 55 58 98 04), fax (+47 55 58 43 30); e-mail: conference2004@bjerknes.uib.no; www.bjerknes.uib.no/conference2004/

The conference on **Flood Risk Assessments** will be held *7-8 September 2004* in Bath, UK. Sponsor: Institute of Mathematics and its Applications. Recent flooding events such as occurred in April 2000 and subsequently in many European countries, have heightened the general public awareness of the limitations of existing flood defense infrastructures. This conference will provide a forum for engineers, mathematicians, and statisticians to exchange views on new developments in

mathematical and statistical techniques applicable for assessing flood risk. Abstract submissions are due January 31, 2004, and should be electronically submitted to conferences@ima.org.uk. Paper submissions may be sent to Lucy Nye, The Institute of Mathematics and its Applications, Catherine Richards House, 16 Nelson Street, Southend-on-Sea, Essex SS1 1EF UK; tel: +44 1702 354020; www.ima.org.uk/mathematics/flood.htm

The **6th Plinius Conference: Mediterranean Storms – Catching Storms in the Mediterranean Sea** will be held *17-24 October 2004* on board of the Mediterranean Shipping Cruises –MSC vessel "Opera" in the Mediterranean Sea. The objective is to provide an interdisciplinary forum for the discussion of the present state of knowledge on Mediterranean storms, considering their meteorological, hydrological and geological aspects and their effects on mountain and hill slopes, river networks and coastal areas. Topics will include windstorms, floods, flash floods, slow and fast moving landslides, coastal erosion and sedimentation. Presentations addressing the issue of "uncertainty" in observations (e.g., precipitation measurement), in modelling meteorological, hydrological and geological process, and its propagation in applications, are particularly welcomed. Presentations concerning an extreme event of the geographical area, in which the ship will be positioned during the conference, are especially appreciated and solicited. For more information contact the EGU Office; c/o Plinius; Max-Planck-Straße 13; D-37191 Katlenburg-Lindau; Germany; Tel: +49-5556-1440; Fax: +49-5556-4709; Email: egu@copernicus.org; www.copernicus.org/EGU/topconf/plc6/index.htm

The **Workshop and Forum Global Environmental Change Institute on Globalisation and Food Systems** will be held *24 October 2004–6 November 2004* at the Mesoamerican Institute of the National University of Costa Rica in Nicoya, Costa Rica. The Institute will focus on interactions between processes of Globalization and global environmental change, and the implications of these interactions for food systems and food security. For more information contact Inter-American Institute for Global Change Research (IAI); Tel: +55-12-3945-6856; Fax: +55-12-3941-4410; email: i2004-geci@dir.iai.int; www.institutes.iai.int/2004GECI.htm

The **Climate Change and Business Conference and Expo 2004** will be held *3–5 November 2004* in Auckland, New Zealand. This international conference will consider the linkages between business and climate change. Based on the assumption that "climate change is big business and will remain so whether or not the Kyoto Protocol enters into force," the meeting will include discussions on business opportunities and on improving companies' bottom line performance by reducing energy

costs and emissions. The conference is supported by the Australian and New Zealand governments, and is being co-organized by business and union groups, as well as the Pew Center on Global Climate Change. For more information, contact The Conference Company Limited; tel: 64-9-360-1240; fax: 64-9-360-1242; e-mail: secretariat@climateandbusiness.com; web: www.climateandbusiness.com

The Backyards and Beyond: 2004 Wildland/Urban Interface Fire Education Conference will be held *4-6 November 2004* in Denver, Colorado. Sponsor: National Wildfire Coordinating Group (NWCG) Wildland/Urban Interface Working Team. This conference offers a forum for discussion and education in wildland/urban interface assessment, planning, safety, fire suppression, mitigation, resources, and best practices for bringing together diverse interests to develop and implement local solutions. It will introduce audiences to wildland/urban interface techniques and resources, as well as provide continuing education for those already involved. Conference details can be found at Conference Management Solutions, 310 West College Avenue, Tallahassee, FL 32301 (attention: W/UI Education Conference); (850) 222-2383; www.firewise.org/2004conference/index.htm

The 2nd International Symposium on Transboundary Waters Management will be held *16-19 November 2004* in Tuscon, Arizona. This Second Symposium will build on the review and analysis of transboundary basins and aquifer management issues that were identified in November 2002 in Monterrey. Topics ranging from quantity and water quality management, impacts of climate fluctuations, building flexibility and robustness into compacts, and improved sharing of data will be considered. Market-based allocation approaches, ecological conservation, and the need for greater hydrologic literacy among decision makers also will be included, in view of their relevance in the international and interstate water resources arena. For more information contact: Rannie Fox, SAHRA; Tel: 520-626-6974; Email: rannie@sahra.arizona.edu; Internet: www.sahra.arizona.edu/twm

The Coping with Risks Due to Natural Hazards in the 21st Century Conference will be held *28 November–3 December 2004* in Ascona, Switzerland. Sponsor: Swiss Natural Hazards Competence Center. Risks due to natural hazards have continuously increased during the last decades. To address this situation there is a prioritized need for integrated risk management strategies including prevention, intervention, recovery, and insurance measures. This workshop will also focus on those aspects in risk management related to understanding risk perception, risk aversion, acceptable levels of risk and risk dialog. Information is available

from Centro Stefano Franscini, Monte Verità, Via Collina, CH-6612 Ascona, Switzerland; www.cenat.ch/index.php

The 7th Asian Fisheries Forum will be held *30 November–4 December 2004* in Penang, Malaysia. The Asian Fisheries Society endeavors to make the 7th Forum the largest fisheries event in Asia, in terms of the number of participants and impact. Working on the theme of "New Dimensions and Challenges in Asian Fisheries in the 21st Century," the status of Asian fisheries will be elevated to a new level, providing ideas and solutions to overcome the inherent and unique challenges in Asian fisheries and generating technical advancement in tandem with global development. The Conference will include special symposia, plenary sessions, technical sessions, plus five post-conference field visits. Forum topics will cover all related issues such as technology needs, participation of the poor, aquatic ecosystem health, and management of small-scale fisheries. For more information, contact the Secretariat, 7th Asian Fisheries Forum, School of Biological Sciences, University Sains Malaysia, 11800 Minden, Penang, Malaysia; tel: 60-4- 6533888 ext. 3961; fax: 60-4- 6565125; email: 7aff2004@usm.my; web: www.usm.my/7AFF2004

Small Islands, Big Stakes: Facing Major Challenges, Island Nations Seek Stronger Support from the World Community will be held *10–14 January 2005* in Mauritius. Small island nations will soon have a rare opportunity to present their case to the international community, to seek partnerships and innovative ways to help them address their most vital challenges. Island nations -- from the Caribbean, the Mediterranean and South China Seas, and the Pacific, Atlantic and Indian Ocean regions - will join with donor and other countries from, at the United Nations International Meeting to Review the Implementation of the Programme of Action for the Sustainable Development of Small Island Developing States. For the forty-plus small island nations, the Mauritius meeting has big stakes, as they tackle serious threats and seek ways to boost and support their efforts to achieve sustainable development and to improve their inhabitants' lives. For more information contact Small Island Developing States Unit, Division for Sustainable Development, Department of Economic and Social Affairs, Room DC2-2088, United Nations, New York, NY 10017, USA; mauritius2004@sidsnet.org; www.un.org/smallislands2005/

The Second World Conference on Disaster Reduction will be held *18–22 January 2005* in Kobe-Hyogo, Japan. ISDR Secretariat, in collaboration with several partner organizations, is currently engaged in the ten-year review of disaster reduction activities since the first World Conference on Natural Disaster Reduction, which took place in Yokohama, Japan in 1994. The overall objective of the Second World Conference on

Disaster Reduction is to increase the commitment for implementation of disaster risk reduction at all levels and in particular its integration into development planning processes. The review process will culminate in the Second World Conference on Disaster Reduction to be held in Kobe, Hyogo, on 18-22 January 2005. For more information contact: Helena Molin Valdes, Senior Officer, International Strategy for Disaster Reduction; tel: +41-22-917-2776; fax: +41-22-917-0563; e-mail: molinvaldes@un.org; Internet: www.unisdr.org

The **37th International Liège Colloquium on Ocean Dynamics** will be held 2–6 May 2005 in Liege. The focus of the Colloquium will be gas transfer at water surfaces. Discussions will identify the most critical future conceptual and experimental improvements. Topics of relevance to the Colloquium include: (1) Laboratory and/or field measurements of air-water transfer of gas, heat, vapor and particles using various approaches (mass balance of natural, anthropogenic or deliberate tracers and micro-meteorological methods); (2) recent technical improvements in measurements of the air-water gas gradients; (3) physical and biogeochemical processes controlling air-water gas gradients at different temporal and spatial scales, with particular emphasis on climatic feedbacks; (4) budgets of gas transfer at the regional and global scale (including open oceanic, coastal and fresh water realms). For information contact Alberto Vieira Borges, alberto.borges@ulg.ac.be; modb.oce.ulg.ac.be/colloquium/2005.html

The **Thirteenth International Conference on Modelling, Monitoring and Management of Air Pollution** will be held 16–18 May 2005 in Cordoba, Spain. The goal of this conference is to bring together researchers who are active in the study of air contaminants and to exchange information through the presentation and discussion of papers dealing with the wide variety of topics described on the enquiry form. Case study papers are encouraged, particularly those discussing the evaluation of proposed emission techniques and strategies. Papers of a more theoretical nature, dealing with advanced mathematical and computational methods, will also be within the scope of the conference. For more information contact Rachel Green, Senior Conference Coordinator, Air Pollution 2005, Wessex Institute of Technology, Ashurst Lodge, Ashurst, Southampton, SO40 7AA, Telephone: 44 (0) 238 029 3223, Fax: 44 (0) 238 029 2853, Email: rgreen@wessex.ac.uk

The **Symposium on Climate Variability and Sub-Arctic Marine Ecosystems** will be held 16–20 May 2005 in Victoria, B.C., Canada. Sub-Arctic seas support extraordinarily rich marine resources, which provide food and wealth to local communities. These seas include: the Okhotsk Sea, Oyashio shelf region, Bering Sea, Hudson Bay, Newfoundland/Labrador shelves, Gulf of

St. Lawrence, Greenland shelves, Iceland regions, the Nordic Seas and the Barents Sea. These seas share several features in common: seasonal ice cover, freshwater from ice-melt and runoff, dramatic seasonality, reduced sunlight and low biodiversity. Recently, changes in species abundance or distribution have been observed within several Sub-Arctic marine ecosystems. A symposium on climate effects on the Sub-Arctic marine ecosystems is timely because these recent changes appear to correlate with fluctuations in the physical environment and because of the growing concern about anthropogenically induced climate change. Also, several new national programs in Sub-Arctic seas have recently been initiated, e.g. Bering Ecosystem Study (BEST), Effects of North Atlantic Climate Variability on the Barents Sea Ecosystem (ECOBEE) and the Oyashio-pollock project in Japan. Additionally, a new GLOBEC regional program, Ecosystem Studies of Sub-Arctic Seas (ESSAS), is in the planning stage. This symposium offers the opportunity to influence the implementation plans of ESSAS and BEST through 1-day workshops at the beginning (BEST) and end (ESSAS) of the symposium. For more information contact George Hunt, glhunt@uci.edu or GLOBEC IPO, globec@pml.ac.uk; Internet: www.pml.ac.uk/globec/main.htm

The **Second International Conference on Sustainable Planning & Development** will be held 12-14 September 2005 in Bologna, Italy. The Conference will address the subjects of sustainable planning and regional development in an integrated way as well as in accordance with the principles of sustainability. It has become apparent that planners, environmentalists, architects, engineers, policy makers and economists have to work together in order to ensure that planning and development can meet our present needs without compromising the ability of future generations. The conference will be of interest to planners, environmentalists, engineers, architects, ecologists, economists, policy makers and other government officials, researchers and academics involved in the field of sustainability. For more information contact: Katie Banham, Conference Secretariat, SPD 2005, Wessex Institute of Technology, Ashurst Lodge, Ashurst, Southampton, SO40 7AA, Telephone: 44 (0) 238 029 3223, Fax: 44 (0) 238 029 2853, Email: kbanham@wessex.ac.uk

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WEBSITES OF INTEREST

www.ucar.edu

The National Center for Atmospheric Research (NCAR), University Corporation for Atmospheric Research (UCAR), and the UCAR Office of Programs (UOP) have completed a major revision of their website.

sealevel.jpl.nasa.gov

Ocean Surface Topography from Space site shows a brand-new interactive module; societal benefits of ocean altimetry data, and explore the research and operational uses of tandem altimeter fields.

www.incore.ulst.ac.uk

INCORE is an international center of excellence for the study of peace and conflict. Its vision is of a world with an increased understanding of the causes of conflict, improved methods of resolving conflict without recourse to violent means, and advanced reconciliation processes.

www.americanrivers.org

America's rivers and streams are becoming more polluted every year. This website lists America's Most Endangered Rivers of 2004.

www.thirdworldcentre.org

The Third World Centre for Water Management is an independent policy-oriented think tank. Based in Mexico, its work now spans 18 countries. Its analyses of policies, programs, projects, and development are based on accurate scientific methodologies. The website provides an analysis of why many popular ideas of today are not implementable.

www.apan-info.net

The Asia Pacific Area Network (APAN) network website gives comprehensive and timely links to articles, websites, and programs of interest to the region.

www.einnews.com/news

EIN News has dramatically expanded its services during the first quarter of 2004. Over 3,000 unique geopolitical news sections are now available to choose from. Expanded areas include a wide range of major industries covering all countries and every US state.

chiex.net

The Climate and Health Information Exchange (CHIEX) contains links to diagnostics and prediction of climate variability and human health impacts in the tropical Americas. Visit "In the News," reports, and discussion forums.

www.insnet.org

The InterNetwork for Sustainability (INSnet) is a nonprofit informal network to support sustainable development. Its main goal is to create awareness for the comprehensive character of sustainable development by giving easy access to relevant information.

www.grida.no/environmenttimes/pov2/

The Poverty and Environment Times highlights recent research, ongoing projects and events, and suggestions for policy action. It contains original maps and graphics, as well as contributions from authors all over the world.

The NETWORK NEWSLETTER is intended for those interested and involved in climate-related impact assessment. It is hoped that it will serve to foster a growing network by keeping the community up to date on the many activities in this wide and varied field. Your involvement in supplying relevant information is essential to the success of this endeavor.

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