



Network Newsletter

and

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Editorial

Hawks, Doves, Owls ... and Other Birds

A long time ago, I began to use the metaphor of birds to identify differing perspectives on the global warming issue. I used hawks, doves, and owls to make my point.

Hawks, at one end of the continuum, encompass those who believe that the signs of global warming are already evident (an apparent increase in record-setting extreme events, the hottest years of record occurring in the past twenty years or so, increasingly intense El Niño events, and so on).

The doves at the other end of the continuum are those who do not believe that human activities can lead to global warming. They might argue that the earth's system is too robust and is filled with feedback mechanisms that can override any effect of greenhouse gas emissions produced by human activities.

The owls take up the middle of the continuum. They are not as strongly convinced about global warming as are the extreme hawks or doves. They are aware that scientific uncertainties remain in the science of global warming.

Some owls are concerned that societies have the capability to permanently alter the chemical composition of the atmosphere and, therefore, the climate regime. They lean toward the hawks. Other owls are not convinced by existing research about human influences on climate but tend to believe that the human contribution to greenhouse gases in the atmosphere are relatively small, compared to naturally occurring gases; hence, it is not necessarily foreseeable that societies will alter the global climate in irreversible and life-threatening ways.

Alas. A new category has appeared on the horizon: the ostrich. In America, an ostrich is used to symbolize people who bury their head in the sand. Hence, there is no communicating with them when they are in such a mode.

It appears that there are governments, or at least government officials, who do not believe in the possibility that human activities can lead to adverse impacts on the global climate system by warming it up by several degrees Celsius. In fact, they tend to reject any information that challenges their own "cast in stone" views.

A draft of a recent report by the US Environmental Protection Agency (*EPA's Draft Report on the Environment 2003*, www.epa.gov/indicators/) on the state of the environment was reviewed and, in a way, censored by those in the present administration who are opposed to the "doom and gloom" scenarios related to global warming. As a result of this editing, references to the human impacts on the global climate were deleted, as were the references to the adverse impacts on human health of auto emissions and smokestack effluents.



But saying that the prospects of societal involvement in global warming of the atmosphere do not exist does not make it so. Disregarding on purpose the collective assessments of a large majority of scientists is not a refutation of those assessments. It is an "ignore-ance" of them (i.e., burying one's head in the sand).

All this has been done in full view of the media, the public, and those in other nations who do take global warming seriously, scientific uncertainties notwithstanding.

Hawks, doves, and owls talk to, or at least at each other, seeking to convince those who have not made up their minds about the likelihood of global warming. Ostriches seem not to care about the issue at all. True, funds are provided to reduce uncertainty. However, at the same time funds are being provided to scientists so that politicians can avoid having to make decisions based on existing scientific information and consensus. Ostriches are not a problem – unless they are in power.

--Michael H. Glantz



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 2003**. 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!

NOAA STRATEGIC PLAN FINALIZED

During Spring 2003, more than a thousand external and internal stakeholders from across the United States helped to shape NOAA's final Strategic Plan's goals, strategies, and performance measures for 2003–2008. Those goals as modified are to: (1) protect, restore, and manage the use of coastal and ocean resources through ecosystem-based management; (2) understand climate variability and change to enhance society's ability to plan and respond; (3) serve society's needs for weather and water information; and (4) support the nation's commerce with information for safe, efficient, and environmentally sound transportation. This final plan promises major improvements in NOAA's capability to serve all Americans in three critical areas: the environment, the economy, and public safety. See the Final Plan at www.osp.noaa.gov or write to NOAA Office of Strategic Planning, 1315 East-West Highway, Silver Spring, MD 20910; tel: 301-713-1622.

EUROPEAN UNION DRAFTS AGREEMENT ON ENVIRONMENT

The European Union (EU) presently consists of 15 member states, with a possible expansion to 25 in the next few months. The countries now in line to join the EU bring with them a wealth of natural resources. Preservation of these natural resources requires action in the candidate countries, as well as changes in the EU as a whole. The EU Environment Ministers signed a Directive on environmental liability in June 2003, based on the "polluter pays" principle. It establishes a framework to prevent or remedy environmental damage, requiring preventive action, at the expense of the

operator, when there is an imminent threat of damage. It covers industrial activities such as energy, production, and processing of heavy metals, the mineral industry, chemical industry, and waste management. For all other activities, the Directive applies only in cases of damage to protected species and natural habitats. For more information about the EU or the Directive, see the Europa website at europa.eu.int (in all EU languages).

THREE GORGES DAM BEGINS TO FILL

China's Three Gorges dam, the world's biggest hydroelectric project, is filling faster than expected. Engineers blocked the Yangtze River at the Three Gorges dam on 1 June 2003 and started the filling of the reservoir. The work began on the dam in 1993 and is due to finish in 2009. By that time, the dam will have 26 turbines, the largest in the world, pumping out 18,200 megawatts of electricity. Two generators will begin operation in August and two others in October. The controversial project displaced more than 1 million Chinese, but China says the dam is needed to tame the Yangtze, with floods that killed more than 300,000 people in the last century alone. China Online, an information network for China, contains a summary of the arguments in favor of and against the dam, as well as links to more information. See www.chinaonline.com or write to China Online, Inc., 900 N. Michigan Ave., Suite 2800, Chicago, IL 60611.

STATUS OF THE KYOTO PROTOCOL

In order for the Kyoto Protocol to take effect, it must be ratified by at least 55 countries and the amount of greenhouse gas emissions by those countries should account for 55% or more of the emissions of all developed nations. If these two conditions are met, the Protocol will take effect 90 days after the date of confirmation by the UNFCCC (UN Framework Convention on Climate Change) Secretariat. According to the Secretariat, 110 countries have ratified the Kyoto Protocol, and emissions causing global warming total 43.9%. This means that the Kyoto Protocol can take effect if Russia ratifies, since its emissions account for 17% of the world's total, even if the United States, the world's largest polluter (36%), continues its refusal to ratify the Protocol. For more information, see the UNFCCC Kyoto Protocol website at unfccc.int/resource/convkp.html or write to UNFCCC, PO Box 260124, D-53175, Bonn, Germany.

WORLD REFUGEE DAY: UNHCR

Begun in 2001 by the UN High Commissioner for Refugees, 20 June 2003 marked the third annual remembrance of the world's refugees. This year's World Refugee Day was dedicated to the special plight of the young refugees around the world. More than 70 countries drew public attention to young refugees. Out of more than 20 million people estimated to be refugees today, 7 million are youngsters. The UNHCR wishes to accentuate the positive by celebrating their many strengths, their huge potential, and their capacity to help themselves and their communities. To learn more about how you can help to support these refugees through the UNHCR, or to find out what was held during the past three years on this day, see the website at www.unhcr.ch or write to UNHCR, Public Information Section, CP 2500, 1211 Genève 2 Dépôt, Switzerland.



GECAFS

GECAFS (Global Environmental Change and Food Systems) is an international research program involving a wide range of social, physical, and biological scientists who are determining strategies to cope with the impacts of global environmental change (GEC) on food and to analyze the environmental and societal consequences of adaptation. GEC will bring additional complications to the already difficult task of providing sufficient food to many sectors of society. GECAFS is being implemented in a proactive way, undertaking regional studies jointly designed by users, donors, and the global environmental change research community. An international Scientific Advisory Committee from the strategic-partner, science, and policy communities, along with the donor community, determines and prioritizes the research agenda. For more information, see the website at www.gecafs.org or write to GECAFS, NERC Centre for Ecology and Hydrology, Wallingford, OX10 8BB, UK. Email info@gecafs.org

CSD11

Meeting for the first time since the World Summit on Sustainable Development (WSSD) in September 2002, the United Nation's CSD (Commission on Sustainable Development) dedicated its eleventh session in May to organizing its future work. There will be two-year action-

oriented Implementation Cycles, which will include a Review Session in the first year, and a Policy Session in the second. For the 2004–2005 cycle, the CSD will focus on the themes of water, sanitation, and human settlements, while also giving priority attention to linkages with poverty eradication, changing unsustainable consumption and production patterns, and protecting and managing the natural resource base of economic and social development. The UN Division for Sustainable Development is responsible for implementation of the WSSD and Agenda 21. More information is available at www.un.org/esa/sustdev/ or contact the Division for Sustainable Development, Dept. of Economic and Social Affairs, Two UN Plaza, Room DC2-2220, New York, NY 10017; email dsd@un.org

PROJECT REVEL

The REVEL (Research and Education: Volcanoes, Exploration and Life) Project selected eight teachers in 2003 to conduct sea-going research for two weeks alongside an international team of scientists studying hydrothermal vents on the ocean floor. The teachers are participating in the Remotely Operated Vehicle Jason II operations to allow them to increase content knowledge, enhance teaching skills, transfer the experience to the classroom, assume leadership roles, and collaborate with a network of researchers and education professionals. The adventures of the teachers on the research vessel Thomas G. Thompson in the northeast Pacific Ocean are available on the project website at www.ocean.washington.edu/outreach/revel/ or email revel@ocean.washington.edu for more information.

DIALOGUE ON WATER AND CLIMATE

Following the Third World Water Forum held in Kyoto, Japan during March 2003, three activities are being planned by the Dialogue on Water and Climate (DWC): (1) the establishment of a Water and Climate Associated Program under the Global Water Partnership; (2) creation of a "Water and Climate Alliance" to continue to build bridges between the climate and water sectors and encourage capacity building to better cope with climate impacts; and (3) writing a "Call for Action" to draw together the recommendations and commitments from the Third World Water Forum. A special issue of the journal *Climatic Change* will be prepared based on the dialogues and thematic contributions of the Water Forum. For more information, see the DWC website at www.waterandclimate.org or write to Science Support Office, DWC, PO Box 47, 6700 AA Wageningen, The Netherlands.

BERLIN CONSERVATION INITIATIVE

After 55 years, and despite strong opposition from Japan, Norway, and Iceland, the member governments of the International Whaling Commission (IWC) have formalized the IWC's role as a conservation body through a new resolution, in addition to its role in the management of whaling. At the IWC's annual meeting in Berlin in June 2003, The Berlin Initiative was adopted, which makes it clear that the conservation of whales, without lethal exploitation, is the primary position and focus of the IWC and its committees and is favored by the majority of the IWC members. A special committee will be established to focus on IWC conservation issues, including small cetaceans, sanctuaries, incidental catch, and environmental threats. The IWC is currently the only global body to formally address all threats to the continued existence of all cetaceans. The entire text of the Berlin Initiative is available on line at the Humane Society of the US website at www.hsus.org/ace/19199. The IWC can be reached at The Red House, 135 Station Rd., Impington, Cambridge, UK CB4 9NP; email secretariat@iwcoffice.org



WORLD DAY TO COMBAT DESERTIFICATION AND DROUGHT

17 June 2003 was the ninth anniversary of the adoption of the UN Convention to Combat Desertification (UNCCD). Celebrations were held in Hamburg, Germany and in various cities such as Tashkent, Uzbekistan, with in-depth discussions with experts in the field on political, economic, and scientific initiatives to fight desertification. In the past year, the Global Environment Facility (GEF) endorsed recommendations repeatedly made by governments for the GEF to become a financial mechanism of the Convention so that countries affected by desertification may apply directly to the GEF. This will help countries to replicate many already successful projects in order to fight both desertification and poverty. For more information, contact UNCCD Secretariat, PO Box 260129, Haus Carstanjen, D-53153 Bonn, Germany, website at www.unccd.int or email secretariat@unccd.int

SUSTAINABLE DEVELOPMENT COMMUNICATIONS NETWORK (SDCN)

The SDCN was established in 1998 as a result of the desire of a group of leading civil society organizations to take advantage of mutual interests, distinct geographies,

and diverse skills by collaborating on communications activities. The virtual organization functions as a knowledge network to inform broader audiences about sustainable development. The SDCN aims to build capacity among members to communicate sustainable development through new technologies and share the knowledge about how to use the Internet efficiently and effectively. Contact the SDCN c/o International Institute for Sustainable Development (IISD), 161 Portage Ave. E, 6th Floor, Winnipeg, MB R3B 0Y4, Canada; website www.sdcn.org; email twillard@iisd.ca

IN MEMORIAM

Professor **Thomas R. Odhiambo** died 26 May 2003 at the age of 72. Dr. Odhiambo, a Cambridge-educated entomologist from Kenya, founded the International Center for Insect Physiology and Ecology in 1967 at the University of Nairobi, where he taught. He was a pioneer in researching how to control insects without using synthetic chemicals. In 1987, he was one of two recipients of the Africa Prize for Leadership for the Sustainable End of Hunger, which is given by the Hunger Project. He also won the Albert Einstein Medal in 1979, among many other awards over the years. The author of more than 130 papers, he also wrote six children's books designed to educate, inspire, and entertain.

On 15 May 2003, **Manuel Jesus Flores Palomino** passed away at the age of 59 in Guayaquil, Ecuador. He was Scientific Advisor and Secretary of the Executive Council of IMARPE (Instituto del Mar del Peru) for 25 years. He was active in the negotiations leading to the United Nations Law of the Sea. He was a member of ERFEN (Estudio Regional del Fenómeno El Niño) in Peru from 1983 to 1997 and presided as President in 1996–97. Dr. Palomino was very active in the CPPS (Comisión Permanente del Pacífico Sur) from 1978 on, and served as Secretary from 1998 to 2002. He was the author of many scientific articles and monographs, and will be remembered for his tireless work in CPPS and IMARPE.

INDIAN ENVIRONMENT ONLINE

Indian Environment Online (IEO) is maintained by the Society for Environmental Information and Sustainable Development (SEISD) in New Delhi, India. IEO unites hundreds of organizations and individuals in India and is dedicated to providing extensive environmental information and news. IEO is maintained by SEISD

volunteers. IEO is presently attempting to update environment-related information for each Indian state in 12 different categories. They are soliciting cooperation to update the state-specific information, so that it will be more complete and helpful to users. If you have any information to add, please contact M. Tamil Selvan, SEISD, 7400, Sector-D, Pocket 7, Avenue-III, Vasant Kunj, New Delhi 110070, India; join free of charge on the website at indianenvironmentonline.net; email info@indianenvironmentonline.net

NEW DIRECTOR-GENERAL AT WHO

The World Health Organization (WHO) has selected Dr. Jong-Wook Lee from South Korea to succeed Dr. Gro Harlem Brundtland as Director-General. He is the first person from the Republic of Korea to head a United Nations agency. Dr. Lee announced that he would immediately expand and strengthen the Global Outbreak Alert and Response Network to identify and respond to disease outbreaks around the world. He has worked for the WHO in many capacities and in many countries for two decades and will take office and begin his five-year term on 21 July 2003.

ALDO LEOPOLD LEADERSHIP PROGRAM

Academic environmental scientists are a primary source of credible information on the state of the planet, and their knowledge is urgently required to develop sustainable policies and practices. To address this challenge, the Aldo Leopold Leadership Program provides communication and leadership training to environmental scientists and facilitates collaboration and networking among scientists and a broad range of decision-makers. The Program's mission is to help scientists develop effective outreach skills and to collaborate across disciplines and sectors. Each year, up to 20 mid-career academic environmental scientists in the United States will be selected as Fellows to participate in two intensive week-long training sessions. The Program was originally based at Oregon State University and moved in January 2003 to the New England Aquarium in Boston, Massachusetts. For more information, including information about applying for a fellowship, visit www.leopoldleadership.org or contact Marion Smith, Program Coordinator, email msmith@neaq.org

WORLD HERITAGE SITES AND THE OPEN INITIATIVE

At present, UNESCO (UN Educational, Scientific, and Cultural Organization) has documented 730 different sites on its World Heritage list – 563 of them cultural, 144 natural, and 23 both. It also maintains a “hot list” of endangered World Heritage sites. The Open Initiative partnership was signed in June 2003 between UNESCO and the European Space Agency (ESA) to use ESA satellites to help safeguard hundreds of these World Heritage sites. The idea of the Open Initiative is that data from space will be used to monitor these sites, alerting authorities to land-use changes that could place the sites in danger. The intention is to have other space agencies progressively join the new partnership and help developing nations monitor World Heritage sites on their territories more effectively. Requests to join the Open Initiative have come from the space agencies of the United States, India, Japan, Canada, and Brazil, among others. For more information, contact Peter Coles at p.coles@unesco.org or the World Heritage website at whc.unesco.org

WIND FORCE 12

Over the last decade, wind has been the world's fastest-growing energy source. Rising from 4,800 megawatts (MW) of generating capacity in 1995 to 31,100 MW in 2002, it has increased more than six times. A record 6,868 MW was installed worldwide in 2002, increasing capacity by 28% in one year. *Wind Force 12* is a report from Greenpeace and the European Wind Energy Association (EWEA) that gives a blueprint to achieve 12% of the world's electricity from wind power by the year 2020. The study assessed the world's wind resources and geographical distribution; the level of electricity output required; the current status of the wind energy technology and market; and compared other emerging technologies to wind power. The impetus behind wind power expansion has come increasingly from the need to combat global climate change. Wind energy avoids the emission of carbon dioxide and also produces none of the other pollutants associated with either fossil fuel or nuclear generation. “Success stories” for wind energy can be seen in the experiences of Germany, Spain and Denmark in Europe, The US in the Americas, and India among the countries of the developing world. On the basis of recent trends, it is feasible that wind power can be expected to grow at an average rate for new annual installations of 25% per year 2002–2007. *Wind Force 12* can be downloaded in PDF format from EWEA's website at www.eweaa.org



ENSO = El Niño–Southern Oscillation

CURRENT STATE OF THE TROPICAL PACIFIC

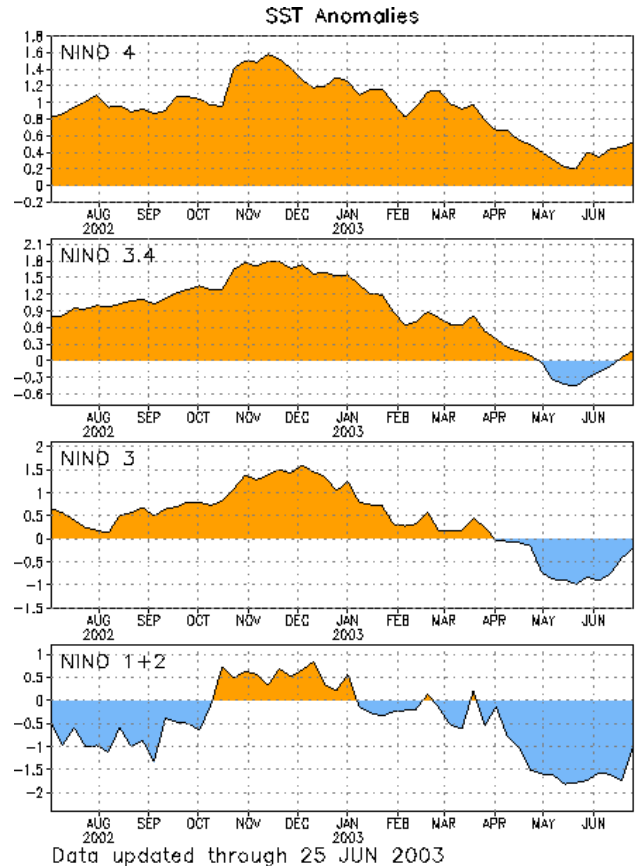
(From the Climate Prediction Center's *Climate Diagnostics Bulletin*)
www.cpc.ncep.noaa.gov (as of 12 June 2003)

Oceanic and atmospheric conditions in the tropical Pacific during May were consistent with a developing cold episode (La Niña). Negative sea surface temperature (SST) anomalies strengthened across the central and eastern equatorial Pacific during May, as significant decreases in SST anomalies occurred in all of the Niño regions. By early June, equatorial SSTs were near or below normal, with only a small area of residual positive SST anomalies west of the dateline. In recent months, the depth of the oceanic thermocline has steadily decreased across the central and eastern equatorial Pacific, and negative subsurface temperature departures have developed and intensified in the upper ocean of this region. These observed trends in oceanic and atmospheric variables indicate that a transition to La Niña is under way and that La Niña conditions are likely to develop over the next few months. Most statistical and coupled model forecasts indicate that either near-neutral or La Niña conditions will occur during the last half of 2003.

EI NIÑO AND HEALTH

The irregular occurrence of El Niño and La Niña events has implications for public health. On a global scale, the human impacts of natural disasters increase during El Niño and La Niña. The effect of ENSO on cholera risk in Bangladesh, and malaria epidemics in parts of South Asia and South America have been recognized. The strongest evidence of an association between ENSO and disease is provided by time-series analysis with data series that include more than one event. Health planners are used to dealing with spatial risk concepts, but they have little experience with temporal risk management. ENSO and seasonal climate forecasts might offer an opportunity to target scarce resources for epidemic control and disaster preparedness. Excerpted from the abstract for:

Kovats, R.S., Bouma, M.J., S. Hajat, E. Worrall, and A. Haines, 2003: El Niño and health. *The Lancet*, **361**, No. 9374, 14 June. Published online at image.thelancet.com/extras/02art5336web.pdf or see www.thelancet.com



CLIMATE PREDICTION CENTER/NCEP

The above graphic shows the SST anomalies in the 5 NINO regions in the equatorial Pacific as of 25 June 2003. NINO1+2 are off the coast of Peru, with the regions then moving progressively to the west in the equatorial Pacific. For more information, see the website at www.cpc.ncep.noaa.gov

EUROSION

EUROSION is a project commissioned by the General Directorate Environment of the European Commission, which will result in policy recommendations on how to manage coastal erosion in Europe in the most sustainable way. One-quarter of the European Union's coast is currently eroding, despite the development of a wide range of measures to protect shorelines. The prospect of further sea level rise due to climate change implies that coastal erosion is a growing concern. EUROSION is based on the assumption that coastal erosion can never be completely controlled but can be managed in an economical and sustainable way. A newsletter is available on the website for those interested in coastal erosion (planners, engineers, policy makers, and researchers). It will appear in six issues

over the project period from January 2002 through early 2004. For comments or contributions, contact Irene Lucius, EUCC, The Coastal Union, PO Box 11232, 2301 Leiden, The Netherlands; website, www.euroosion.org; email eucc@euroosion.org

HURRICANE ACTIVITY UPDATE MAY 2003

The upturn in Atlantic basin hurricane activity, which began in 1995, is expected to continue through 2003. W.M. Gray, P.J. Klotzbach, and C.W. Landsea issued an updated forecast on 30 May of Atlantic seasonal hurricane activity and US landfall strike probability. They anticipate an above-average number of Atlantic basin tropical cycles and an increased probability of US hurricane landfall. As of that date, they estimate about 8 hurricanes (average is 5.9), 14 named storms (average is 9.6), 70 named storm days (average is 49), 35 hurricane days (average is 24.5) and a Hurricane Destruction Potential of 100 (average is 71). They also anticipate that the near-neutral ENSO conditions will develop into La Niña conditions by August–September and be an important enhancing influence on 2003's hurricane activity. The forecast, as well as past forecasts and verifications, are available on the website at tropical.atmos.colostate.edu/forecasts/ or write to Dept. of Atmospheric Science, Colorado State University, Fort Collins, CO 80523; email barb@tutt.atmos.colostate.edu

MYSTERIOUS CLIMATE CYCLE

Climatologist Stefan Rahmstorf of the Potsdam Institute for Climate Impact Research (PIK) unveiled an intriguing clue to a climate cycle through a new study of Greenland ice core data, which point to an extremely regular cycle of 1,470 years duration. The existence of such a cycle had been noticed before, yet the high regularity revealed by the new analysis came as a surprise. The length of the cycle is maintained constant within a few percent of 1,470 years over a time interval of at least 35,000 years. Such regularity points strongly to an extraterrestrial origin of this cycle, perhaps an orbital cycle. The hunt is now on to find an orbital cycle with a period of 1,470 years, since no such cycle is known at present. He postulates that the so-called "little ice age" of the 16th–18th century may be the most recent cold phase of this cycle. Rahmstorf has published a paper on his findings. Email stefan.rahmstorf@pik-potsdam.de for more information or see his website at www.pik-potsdam.de/~stefan/

Rahmstorf, S., 2003: Timing of abrupt climate change: A precise clock. *Geophysical Research Letters*, **30**(10), 1510, doi:10.1029/2003GL017115.

POSTDOC ANNOUNCEMENT

The University of Hawaii (Honolulu) and the Secretariat of the Pacific Community (SPC, Noumea, New Caledonia) seek two postdoctoral scientists for a two-year project funded by the university's Pelagic Fisheries Research Program (PFRP). The project addresses ways to improve upon two classes of models: Advection Diffusion Reaction Models (ADRM) and Individual Based Models (IBMs) in modeling the spatial dynamics of tunas and other large pelagics from individual to ocean-basin scales. One position will work on adapting finite difference solutions of ADRMs to the new grid and the other position will help to develop the IBM methodology. Candidates must have completed a PhD in oceanography, marine ecology, fisheries science, or other relevant subjects with good computer programming skills. Further details may be obtained from PFRP Program Manager John Sibert (sibert@hawaii.edu) or Patrick Lehodey at SPC (patrickl@spc.int) or from the PFRP website at www.soest.hawaii.edu/PFRP/ and SPC website www.spc.int/OceanFish/

PAST MEETINGS

Second Biennial GEF International Waters Conference

When: 25–29 September 2002

Where: Dalian, China

Contact: GEF Secretariat, 1818 H Street, NW, Washington, DC 20433; tel: 1-202-473-0508; fax: 202-522-3240; email: secretariat@TheGEF.org; web: www.getf.org/iwc

Climate Prediction Assessment Workshop: Research and Applications on Use and Impacts

When: 28–30 October 2002

Where: Alexandria, Virginia

Contact: NOAA, Climate Services Division, Michael Brewer; email: michael.j.brewer@noaa.gov; web: www.nws.noaa.gov/om/csd/workshop/CPAW/

Global Mountain Summit

When: 29 October–1 November 2002

Where: Bishtek, Kyrgyzstan

Contact: Andrei Latsenia, UNEP Mountains Programme Coordinator; tel: +41-22-917-8273; fax: +41-22-917-8036; e-mail: iatsenia@unep.ch; web: www.globalmountainsummit.org/Home_Page.html

FAO Expert Consultation on Trade and Sustainable Forest Management - Impacts and Interaction

When: 3–5 February 2003

Where: Rome, Italy

Contact: Forestry Department, FAO, Viale delle Terme di Caracalla, 00100 Rome, Italy; web: www.iisd.ca/linkages/sd/tsfm

Workshop on Monitoring, Prediction & Warning of Tropical Cyclones and Monsoons

When: 25–28 February 2003

Where: New Delhi, India

Contact: Munmun Das Gupta, National Centre for Medium-Range Weather Forecasting, Mausam Bhavan Complex, Lodi Road, New Delhi-110 003, India; email: munmun@ncmrwf.gov.in; web: www.ncmrwf.gov.in

The Earth Technologies Forum and Exhibition

When: 22–24 April 2003

Where: Washington, DC

Contact: Earth Technologies Forum, 2111 Wilson Blvd., 8th Floor, Arlington, VA 22201; fax: 1-703-528-1734; email: earthforum@alcalde-fay.com; web: www.earthforum.com

35th International Liège Colloquium on Ocean Dynamics on “Dying and Dead Seas”

When: 5–10 May 2003

Where: Liège, Belgium

Contact: J.C.J. Nihoul, University of Liège, G.H.E.R., Sart Tilman B5, B-4000 Liège, Belgium; tel: +32-4-366-3350; fax: +32-4-366-2355; email: j.nihoul@ulg.ac.be

Symposium on Environmental Law for Judges – Johannesburg Summit Next Steps: The Role of the Judiciary in the Implementation and Enforcement of Environmental Law

When: 9–10 May 2003

Where: Rome, Italy

Contact: Deirdre Exell Pirro, ICEF, Via dei Macci, 19, 50122 Firenze, Italy; tel/fax: 839 055 234 5567; email: pirro@mail.cosmos.it

4th SUSTAIN World Sustainable Energy Conference & Exhibition

When: 13–14 May 2003

Where: Amsterdam, Netherlands

Contact: Ecosecurities, Mauritskade 25, 2514 HD Den Haag, Netherlands; tel: +31 70 3654749; fax: +31 70 3656495; email: info@sustain2003.com; web: ecosecurities.com

NATO Workshop on “Desertification Problems in Central Asia and Its Regional Strategic Development”

When: 11–14 June 2003

Where: Samarkand, Uzbekistan

Contact: Frank Schrader, Co-Director, c/o Kristina Toderich, Workshop Secretariat, NATO ARW, Timur Malik St., 703000 Samarkand, Uzbekistan; email: Schrader_frank@t-online.de or desertification@mail.ru

UPCOMING MEETINGS

The **International Conference on The Impact of Global Environmental Problems on Continental and Coastal Marine Waters** will be held *16–18 July 2003* in Geneva, Switzerland. The purpose of the conference is to provide a forum for the presentation of original research and scientific overviews on major global environmental issues that have a direct or indirect impact on continental and coastal marine waters. Major topics are: impact of global climate change on water resources and the hydrological cycle including desertification; water-related environmental risk of global importance (prevention, assessment, monitoring, remediation); species invasions and their impact on aquatic ecosystems; and weathering and continental fluxes to the coastal ocean. For more information, contact Ms. Jenny Walker, Liquid Assets, Morawel, Glanmor Terrace, New Quay, Ceredigion UK SA45 9PS; email: morawel@tinyworld.co.uk; web: www.unige.ch/sciences/near

The **Fifth International Conference on Urban Climate** will be held *1–5 September 2003* in Lodz, Poland. This conference seeks to understand the nature of the atmosphere in built environments, and to apply such knowledge to the better design and operation of settlements. Topics of interest range from individual built elements (roofs, walls, roads) through whole buildings, to neighborhoods, entire cities and urban regions and their impacts on weather and climate at atmospheric scales up to those of global change. For more information, contact the Secretariat of ICUC-5, Department of Meteorology and Climatology, University of Lodz, Lipowa 81, Lodz 90-568, Poland; tel: +48-42-6376159; fax: +48-42-6376159; email: icuc5@geo.uni.lodz.pl; web: www.geo.uni.lodz.pl/~icuc5

The **International Conference of GIS and Remote Sensing in Hydrology, Water Resources and the Environment** will be held *16–19 September 2003* at the Three Gorges Dam site, Hubei Province, China. The objectives of the conference are to review and report the advancements of GIS and remote sensing applications in hydrology, water resources and environment; to share the experiences of scientists, engineers, NGOs and policy makers throughout the globe in the field of hydrology, water resources and environment; to provide a forum to discuss the technical, societal and economic aspects of the development of the Three Gorges Project and Yangtze River; to investigate the project and basin after the Three Gorges Reservoir has retained water; and to provide a platform to people from the industry to exhibit their hardware and software products in GIS and Remote Sensing technologies. For more information, contact the Chairman, LOC of ICGRHWE, c/o Prof. Yangbo Chen, Laboratory of Hydroinformatic Systems,

Department of Water Resources and Environment,
College of Geographical Sciences and Planning, Sun
Yat-Sen University, 135 Xingangxi Road, Guangzhou,
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The World System History and Global Environmental Change International Symposium will be held 19–22 September 2003 in Lund, Sweden. A central goal of the symposium will be to use recent progress in historical ecology, world systems theory, and other relevant fields to pursue an integrated framework for understanding the relations between ecosystems and world systems over time. The aim is to bring together key scholars from the social, historical, geographical and environmental sciences in an effort to broaden our view of the ecological dimension of global economic processes in a long-term, historical perspective. Please contact the conference secretariat Human Ecology Division, Lund University, Finngatan 16, 223 62 Lund, Sweden; email: christian.isendahl@humecol.lu.se; web: www.pages.unibe.ch/calendar/2003/lund.html

Oceans 2003: Celebrating the Past ... Teaming Toward the Future will be held 22–26 September 2003 in San Diego, California. The technical program of the conference offers five days of presentations and posters on Ocean Sciences, Oceanic Engineering and Marine Technology topics. Some of the topics that will be featured include marine resources, policy and education, physical and biological oceanography, information technology, remote sensing and applied ocean sciences. For more information, contact Ed Vergara, Oceans 2003, PO Box 84660, San Diego, CA, 92130-4660; tel/fax: 858-974-1951; email: evergara@oceans2003.org; web: www.oceans2003.com

The International Workshop On the Low-Frequency Modulation of ENSO will be held 23–25 September 2003 in Toulouse, France. This workshop brings together international scientists working on the physics of low frequency modulation of ENSO. The workshop will focus on recent progress in measuring, modeling, analyzing and understanding this low frequency modulation. This covers decade-to-interdecadal time-scales and possible anthropogenic influences. For more information, contact Joel Picaut, Laboratoire d'Etudes en Géophysique et Océanographie Spatiales (LEGOS), Observatoire Midi-Pyrénées (OMP), 14 avenue Edouard Belin, Toulouse, France; email: Joel.Picaut@cnes.fr; web: www.obs-mip.fr/actualites/workshop.htm

ILEAPS: Integrated Land Ecosystem - Atmosphere Processes Study will be held 29 September–3 October 2003 in Helsinki, Finland. This conference will focus on the processes of land – atmosphere exchange of energy and matter, emphasizing feedbacks and interactions between these two components of the Earth System. It

will address these processes at all scales, from the local to regional to continental to the global scale. The conference will be an important step towards the development of a new international research project of IGBP, with the overall goal to provide understanding of how interacting physical, chemical and biological processes transport and transform energy and matter through the land-atmosphere interface. It is designed to summarize the current scientific knowledge in this area and to discuss the research agenda for the coming years. For more information, contact Almut Arneth, Max Planck Institute for Meteorology, Bundesstr. 55, 20146 Hamburg, Germany; tel: 0049 (0) 40 41173 132; fax: 0049 (0) 40 41173 430; email: arneth@dkrz.de; web: www.atm.helsinki.fi/ILEAPS

The International Conference on Sustainability Indicators and Intelligent Decisions will be held 9–11 October 2003 in Vilnius, Lithuania. It will provide a forum for the presentation and discussion of recent work on sustainability methodology and practice, tracking links for knowledge-based and economic technologies. The conference should be of interest to scientists, managers, economists, sociologists, engineers and professionals working in the area of sustainable development and related fields. The scope of the conference is to encourage and facilitate interdisciplinary communications, laying emphasis on those areas that will give the most benefit for the appreciation of state-of-the-art sustainability methodology, and tracking links for knowledge-based and economic technologies. For more information, contact SIID 2003, Institute of Mathematics and Informatics, Akademijos st 4, Vilnius LT-2600, Lithuania; fax: +3705 2729209; tel: +3705 2109323; email: SIID2003@ktl.mii.lt ; web: www.mii.lt/SIID-2003

Achieving Climate Predictability using Paleoclimate Data will be held 11–16 October 2003 in San Feliu de Guixols, Spain. This conference is the second of a series with the goal to bring together two communities working on problems of climate dynamics closer. Two large international programs, WCRP (World Climate Research Programme) and IGBP (International Geosphere and Biosphere Programme) have two core projects that are concerned with climate variability and dynamics. These are WCRP's CLIVAR (Climate Variability and Predictability) and IGBP's PAGES (Past Global Changes). The conference focuses on natural climate variability in the North Atlantic region on time scales from decades to centuries. Recent advances in the high-resolution reconstruction of climate changes from paleoclimatic records enable us to obtain a better understanding of the temporal and spatial characteristics of decadal to centennial time scales. For more information, contact Dr. Josip Hendekovic or Rachid Adghoughi; ESF, 1 quai, Lezay-Marnesia, 67080 Strasbourg, France; Tel: +33-388-76-7135; fax: +33-

388-36-6987; email: radghoughi@esf.org; web: www.esf.org/euresco/03/lc03170

The **International Conference on Eco-Restoration** will be held *14–21 October 2003* in Dehradun and New Delhi, India. The main objectives of the conference are to review existing knowledge on ecological, socio-economic and environmental dimensions of degradation of land and water resources; to document eco-restoration approaches with case studies; to review current policies and programs related to eco-restoration of degraded environments; to provide a sound scientific basis for developing an appropriate policy framework for eco-restoration; and to identify areas of interdisciplinary research relevant to eco-restoration of land and water resources. For more information, contact the conference secretary at email: secretary@nieindia.org; web: www.nieindia.org/Conference/conf03.htm

The **2003 Open Meeting Human Dimensions of Global Environmental Change: Taking Stock and Moving Forward** will be held *16–18 October 2003* in Montreal, Canada. The conference is organized around the following three themes: transitions and change: how does the view that the world is made up of complex coupled systems influence our research? Governance, markets, and ethics: what do we know about the institutions that mediate between human behavior and global change? Poverty and security: how does global change affect those already vulnerable and how does it increase the vulnerability of others. For more information, contact McGill School of Environment, 3534 University Street, Montreal, Quebec H3A 2A7, Canada; tel: +1 514-398-4306; fax +1 514-398-1643; email: info.mse@mcgill.ca; web: sedac.ciesin.columbia.edu/openmeeting/

The **30th Pacem in Maribus: A Year after Johannesburg: Ocean Governance and Sustainable Development, Ocean and Coasts: a Glimpse into the Future** will be held *27–31 October 2003* in Kiev, Ukraine. The conference will focus on a wide variety of marine and coastal issues, ocean governance and ocean and coastal sustainable development in the light of the World Summit on Sustainable Development. The purpose of PIM 2003 will be to inform about current objectives, constraints and trends of ocean and coastal resources management and conservation, address emerging environmental issues, problems of safety and security of the human activity at sea, and perspectives of education and training in Ocean related field. Topics include: emerging environmental threats, climate change, disaster preparedness, coastal management and education and training. For more information, contact Dr. V.N.Radchenko, IOI-Ukraine, Nakhimov str. 2, Sevastopol, 99011, Ukraine; tel: 380-692-545249; fax: 380-692-555477; email: radalpin@ibss.iuf.net; web: www.30pim.sevinfo.net

Addressing Difficult Issues in the UN Convention on the Law of the Sea (UNCLOS) will be held *28–30 October 2003* in Monaco, Principality of Monaco. This combination of tutorial and plenary sessions will explore problems related to geodesy, hydrography, and marine geoscience that may affect the interpretation and application of the Law of the Sea. The format of the conference will vary from previous meetings in that it will open with a series of tutorial sessions before proceeding to plenary sessions. The tutorial sessions will be of an introductory nature, and will review current practice and problems. The plenary sessions will feature presentations that deal with new developments and emerging issues. Preference in the selection of presentations for the plenary sessions will be given to interdisciplinary papers that discuss interactions between law and science, but this will not preclude consideration of papers that focus primarily on one or the other discipline. For more information, contact Ron Macnab, email: ron.macnab@ns.sympatico.ca; web: www.gmat.unsw.edu.au/ablos/#ABLOS'03

The **Arctic Climate System Study (ACSYS) Final Conference** will be held *11–14 November 2003* in St. Petersburg, Russia. To celebrate ten years of progress in World Climate Research Programme (WCRP) research on the Arctic climate system and its role in global climate, ACSYS will hold its final scientific conference. The conference will draw together advances in our understanding of the Arctic climate system made over the last decade and examine the challenges for future research. Topics include the state of the arctic climate system; observing the arctic climate system; process studies and modeling; and interactions with the global climate system. For more information, contact Chad Dick or Tordis Villinger, International ACSYS/CLiC Project Office, Norwegian Polar Institute, Polar Environmental Centre, N-9295 Tromsø, Norway; tel: +47 77 75 05 00; fax: +47 77 75 05 01; email: acsys@npolar.no; web: acsys.npolar.no/meetings/final/conf.htm

The **First International Young Scientists Global Change Conference** will be held *16–19 November 2003* in Trieste, Italy. The conference offers a prestigious platform for young scientists to present their research findings to leading scientists in the field. It is intended to stimulate competition, encourage excellence, reward outstanding performance, and encourage the development of personal and institutional networks. For more information, contact Kristy Ross, Climatology Research Group, University of the Witwatersrand, South Africa; fax: +27 11 717 6535; email: kristy@crg.bpb.wits.ac.za; web: www.ictp.trieste.it/%7etwas/YS_START_2003_announce.html

North-South Analysis of Global Change Impact on Watersheds will be held *1–3 March 2004* in Bonn,

Germany. The main objective of the conference is to analyze the challenges that are encountered in the integrated assessment and management of water resources in large river basins. By bringing together scientists and managers from North and South, it is expected that the present international research efforts concerning water related issues can be translated into practical methods and coherent approaches. The following themes will be addressed explicitly: data, stakeholders, scaling, integration, and policy. For more information, contact Nick van de Giesen, Center for Development Research, Bonn University, Walter-Flex-Str. 3, D-53113 Bonn, Germany; email: nick@uni-bonn.de; web: www.zef.de/watershed2004

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WEBSITES OF INTEREST

www.gesis.org/en/data_service/eurobarometer/

Eurobarometers are public opinion surveys conducted on behalf of the European Commission at least two times a year in all member states of the European Union. Since the early seventies they have provided regular monitoring of social and political attitudes in Europe.

people-press.org

The Pew Center for the People & the Press is an independent opinion research group that studies attitudes toward the press, politics, and public policy issues. They are best known for US national surveys that measure public attentiveness to major news stories, and for polling that charts trends in values and fundamental political and social attitudes.

www.arkive.org

ARKive is a not-for-profit initiative of The Wildscreen Trust. It is the Noah's Ark for the Internet era: a centralised digital library of films, photographs and associated recordings of species, accessible to all via the world wide web.

sdgateway.net

The Sustainable Development Communications Network (SDCN) is a group of leading civil society organizations seeking to accelerate the implementation of sustainable development through broader, integrated information and communications about what we know.

www.interdok.com

InterDok Corporation provides a service that bridges the gap between supply and demand for available published literature produced from specialized conferences and symposia in the science and technology communities. It contains a Directory of Published Proceedings, an Acquisitions Service, and a Meetings Index.

www.educationcentral.org/stormy/StormSampler.htm

The Storm Sampler lets you sample important aspects of storms: hurricanes, tornadoes, winter storms, super storms, and weather events.

[ww2010.atmos.uiuc.edu/\(Gh\)/guides/mtr/hurr/hurtrack/htrack2.html](http://ww2010.atmos.uiuc.edu/(Gh)/guides/mtr/hurr/hurtrack/htrack2.html)

This viewer is an interactive track of every Atlantic Tropical Cyclone and Hurricane since 1990. You can view specific hurricanes and once the track is displayed, you can control the track and view data concerning the storm for each time interval.

chiex.net/in_the_news.htm

CHIEX is an online climate and health forum for information exchange. It provides news, updates and announcement and stimulates discussion on topics related to climate and health.

www.geographynetwork.com/home.html

The Geography Network is a global network of geographic information users and providers. It provides the infrastructure needed to support the sharing of geographic information among data providers, service providers, and users around the world.

www.ace.mmu.ac.uk/Resources/gcc/contents.html

This website contains the Global Climate Change Student Guide, written by Joe Buchdahl, a comprehensive work for geology, geography and environmental science students studying climate change. It includes chapters on: the climate system; causes of climate change; empirical observation and climatic reconstruction; climate modeling; and palaeo- and contemporary climate change.

www.newscentralasia.com

A news agency (News Central Asia) has been launched from Central Asia, focused on unbiased reporting on current events in Turkmenistan, Uzbekistan, Kazakhstan, Tajikistan, Kyrgyzstan, Azerbaijan, Iran, Afghanistan, and Pakistan as part of Greater Central Asia. Political and economic development in Russia will also be covered.

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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