

NETWORK NEWSLETTER



Volume 17, Number 1

December 2001–February 2002

EDITORIAL

1.

Some Thoughts for People Who Fund Activities on CLIMATE, ENVIRONMENT, AND HEALTH ISSUES

What to Fund Amidst the Fads

2. Objective of this Editorial

- To encourage a search for understanding about why solutions to human and ecosystem health problems are known but not applied.
- To highlight the need for sustained funding support for problems that are seemingly difficult to resolve.
- To bring about real change by removing obstacles to implementing those solutions.

3. My Concern

- *Staying the Course:* There is a need to continue funding until a project's objectives have been realized (within reason).
- *Thinking Out of the Box:* There is a need to consider proposals that do not fit the funding program's structure, before rejecting them outright.
- *Thinking Upstream:* There is a need to look at the bigger picture, i.e., identify underlying issues that affect the way climate affects human and ecological health.

4. Today's Situation

- Societal aspects of climate variability have been of relatively low interest compared to climate change.
- Societies are still vulnerable to the health effects of climate variability and extremes.
- Many solutions are known but not applied.
- There are too few "round hole" programs that are willing to fund "square peg" ideas or seemingly intractable problems.

5. Researchers and funding agencies should consider:

- Climate variability and change issues are really "two sides of the same coin."
- Address why known solutions to climate-environment-health problems are not applied.
- Help societies identify ways to cope with slow-onset, incremental but cumulative (creeping) environmental problems.
- Create an Idea Bank for climate, environment, and health issues.
- Be flexible: consider "square peg" proposals.

6. Available Option

"Funding as usual" – we can't change that, **but**

- Make room for consideration of "out of the box" proposals.
- Don't shy away from seemingly intractable problems.
- Build capacity in the developing areas: Solving today's problems will go a long way toward addressing problems decades away.
- Beware of fads!

–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 **28 February 2002**. 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 for your input!

CORRECTION

In the last *Network Newsletter*, we inadvertently provided an incorrect link in our "Web Resources" section to the Experimental Climate Prediction Center. The correct URL is **ecpc.ucsd.edu**

GREENFREEZE

Three major Japanese refrigerator manufacturers (Matsushita, Toshiba, and Hitachi) announced in November 2001 that they will produce and sell "Greenfreeze" refrigerators in the Japanese market by January 2002. This name is given to refrigeration technology that does not rely on the use of ozone-depleting fluorocarbons, such as CFCs. Greenpeace developed the technology in 1992 and has been promoting it ever since. This technology is now dominant in the western European domestic refrigerator market, as well as in China, India, Indonesia, Australia, and Cuba. Greenpeace conducts public awareness campaigns, consumer advocacy, and lobbying in order to inform consumers about choices. For more information, please contact Cecilia Mercado, Information Officer, UNEP DTIE OzoneAction Program, Paris, France; tel: 331-4437-1456; email Cecilia.Mercado@unep.fr, or see the website at www.uneptie.org/ozonaction.html

CUBAN FILM WINS TOP PRIZE FROM UNEP

The UN Environment Programme (UNEP) awarded First Prize to "Relaciones Peligrosas" (Dangerous Relations), a 15-minute film produced by Pablo Massip Ginesta from Cuba. This Global Video Competition on Ozone Layer Protection was organized by UNEP's OzoneAction Program and is open to adults living in developing

countries that are part of the Montreal Protocol. The prize-winning film illustrates how peoples' desire for cold temperature storage and ways to keep themselves cool during the hot season led to the development of CFCs and, ultimately, to the depletion of the ozone layer. The winner was announced during the 13th Meeting of the Parties to the Montreal Protocol in Colombo, Sri Lanka. For more information, contact Rajendra Shende, Chief, UNEP/DTIE Energy and OzoneAction Unit, Tour Mirabeau, 39-43 quai André Citroën, Paris 75739 Cedex 15, France; tel: 33-1-4437-1450; fax: 33-1-4437-1474; web: www.uneptie.org/ozonaction



ASPEN PROGRAM

A new program has emerged as a result of Roger Pielke Jr.'s move from ESIG to the University of Colorado's Cooperative Institute for Research in Environmental Sciences (CIRES). ASPEN, the Atmospheric Sciences Policy Education and Network, is focused on weather policy research, education, and outreach. The ASPEN presently consists of the WeatherZine (an online newsletter), the Societal Aspects of Weather web portal, the online Use and Value of Weather and Climate Forecast Bibliography, the weather-policy email discussion group, and the Extreme Weather Sourcebook. In the near future, these activities will be enhanced and will introduce a range of new activities related to weather policy research, education, and outreach. Feedback is encouraged. Please contact Roger Pielke, Jr. at pielke@cires.colorado.edu or visit the website at sciencepolicy.colorado.edu

CLIMATE CHANGE AND THE GULF COAST REGION

The Gulf Coast region of the United States is rich in ecological resources, and it is upon these ecological resources that much of the region's economic wealth is built. Yet the stability of these resources is being threatened by many human activities, including human-induced climate change. The Union of Concerned Scientists (UCS) and the Ecological Society of America have released a report, *Confronting Climate Change in the Gulf Coast Region: Prospects for Sustaining Our Ecological Heritage*. A complete copy of the report can be downloaded in PDF format from the UCS website at www.ucsusa.org/environment/gulf.html. Five state-specific summaries and specially focused information on sea level rise and changing water resources are also available at this site. This study provides the region's

residents and policymakers with a scientific assessment of the likely impacts of climate change on the region's diverse natural and managed ecosystems. The report was written by 10 leading ecological scientists from the region. For more information, see the website or write to Susanne Moser, Global Environment Program, Union of Concerned Scientists, Two Brattle Square, Cambridge, MA 02238 USA.

SEA LEVEL RISE FORCES HOMELAND EVACUATION

According to Earth Policy Institute, the island country of Tuvalu (midway between Hawaii and Australia) has announced that it will abandon its homeland. During the twentieth century, global sea level rose by 20–30 cm, causing Tuvalu to experience lowland flooding. Saltwater intrusion is adversely affecting its drinking water and food production. Coastal erosion is gradually eating away at the nine islands that make up the country. After being rebuffed by Australia, the Tuvaluans asked New Zealand to accept its 11,000 citizens, but it has not agreed to do so. For more information on rising sea levels and Earth Policy, see the website at www.earth-policy.org or write to jlarsen@earth-policy.org

SEA LEVEL IN TUVALU: ITS PRESENT STATE

As part of the AusAID-sponsored South Pacific Sea Level and Climate Monitoring Project and in response to concerns raised by countries in the region over the potential impacts of an enhanced greenhouse effect on climate and sea levels in the South Pacific region, a SEAFRAME (**S**ea **L**evel **F**ine **R**esolution **A**coustic **M**easuring **E**quipment) gauge was installed in Funafuti, Tuvalu early in 1993. Based on the short-term sea level rise analysis performed by the National Tidal Facility Australia, for the 8 years of data return show a rate of 0.0 mm per year; i.e., no change in average sea level over this period of record. However, 25 years of data from a gauge installed by the Sea Level Center, University of Hawaii (which was discontinued after SEAFRAME was installed) support the 20–30 cm/century sea level rise, but the large swings of ENSO make it difficult to put a high level of confidence on this rate without longer time series.

RISK MAPPING CONTEST

A risk map identifies the places and buildings of a community or a geographical zone that might be adversely affected by natural hazards, such as

hurricanes, earthquakes, tsunamis, floods, and so forth. The International Strategy for Disaster Reduction (ISDR) and the Pan-American Health Organization (PAHO) have announced a Risk Mapping Contest for local communities and children. The winners will receive grants toward disaster reduction projects in their schools and local communities. The winning maps will be published in a commemorative volume and will be exhibited. Please send Risk Maps by 31 December 2001 to UN Secretariat for ISDR, Palais Wilson, United Nations, 52 rue des Pâquis, 1201 Geneva, Switzerland, or to learn how to construct a Risk Map for your community, see the website at www.unisdr.org/unisdr/kidcorner.htm

SOARS AND NATIVE AMERICANS

SOARS (Significant Opportunities in Atmospheric Research and Science) is a program at the University Corporation for Atmospheric Research (UCAR) that is dedicated to increasing the number of African American, American Indian, and Hispanic/Latino students enrolled in masters and doctoral degree programs in the atmospheric and related sciences. In September 2001, two Native American protégés of SOARS won awards for their presentations at the September 2001 National Conference of the Society for Advancement of Chicanos and Native American in Science (SACNAS). Pauline Datulayta focused on the relationship between pollution distribution and atmospheric turbulence in the planetary boundary layer, and Theresa Jo Johnson won for her research on the vertical distribution of ozone over the Amazon rainforest by analyzing ozone profiles from a tethered balloon. For more information about SACNAS, see the website at www.sacnas.org and for more information on SOARS, see the website at www.ucar.edu/soars/

UNITAR UPDATE

The UN Institute for Training and Research (UNITAR) has recently taken steps to strengthen its training and capacity building programs in the field of environment. Two new Senior Program Coordinators have been appointed for Climate Change and Environmental Law. Coordination among the programs will be managed by an Environment Coordinator, which will rotate annually among the Program Coordinators. UNITAR's ongoing training and capacity building programs are now classified under four general substantive clusters: Chemicals and Waste Management, Climate Change, Environmental Law, and Environmental Information Systems and Decentralized Cooperation. For more information, see the website at www.unitar.org or write to UNITAR, Palais des Nations, CH-1211, Geneva 10, Switzerland; email info@unitar.org



HAPPY ANNIVERSARY TO U (NFCCC)

To commemorate the tenth anniversary of the UNFCCC (UN Framework Convention on Climate Change) in 2002, Entico Corporation in the United Kingdom, in collaboration with graphic designer Helmut Langer, has published a global multicultural, multimedia project in aid of the planet's environment through a special calendar, "Responding to Climate Change 2002." This calendar provides a visual reminder of the work achieved within the UNFCCC during the past ten years, and an electronic version will be available from the UNFCCC website after 3 December 2001. Each month will feature artwork from artists around the world, who will be "responding to climate change" through their art. Businesses and corporations were invited to sponsor each of the 12 months. For more information, contact James Ramsey at jr@entico.com or see the UNFCCC website at www.unfccc.org/calendar/index.html

DAVID PHILLIPS RECEIVES ORDER OF CANADA

David Phillips, Senior Climatologist with the Meteorological Service of Canada (MSC), has been appointed to the Order of Canada, the country's highest honor for lifetime achievement. The Order of Canada recognizes outstanding achievement and service in various fields of human endeavor. Dave is best known for his encyclopedic knowledge of Canada's weather and climate. He has a rare ability to communicate this knowledge with enthusiasm and in such a way that even the dullest statistics become fascinating and relevant to the listener. He will receive this appointment in an official ceremony. Contact him at David.Phillips@ec.gc.ca or see the website for the MSC at www.msc-smc.ec.gc.ca/

SURVEY ON THE "INFORMATION DIVIDE"

Evidence shows that a big gap exists in accessing scientific information between developed and developing countries. This "information divide" includes research articles, data, and forecasts, as well as difficulty in sharing information with colleagues around the world. A survey will attempt to quantify the scope of this problem in the fields of meteorology, climatology, hydrology, and the atmospheric sciences. The survey is part of a larger project to identify common concerns and problems among researchers, which aims to develop specific

proposals to remedy these problems. The survey is targeted at scientists working in the field from developing countries around the world, including researchers studying climate impacts, extreme events, or the social impacts of weather and climate. It is available as a few pages of text and will be collected until summer 2002. Results of the survey and recommendations will be available by late 2002. Copies of the survey are available on the Web at net.asp.ucar.edu/infoex or send an email to infosurvey@net.asp.ucar.edu. More information is available at the website, or to submit names of colleagues to contact. Write to Information Survey, ASP Program, NCAR, PO Box 3000, Boulder, CO 80307-3000 USA; fax: 1-303-497-1646.

ECOSYSTEM CHANGE AND PUBLIC HEALTH

Ecosystem Change and Public Health: A Global Perspective, edited by Joan Aron and Jonathan Patz, has earned a "Seal of Approval" from the NASA Earth Science Enterprise. NASA cites the book as an outstanding interdisciplinary text for upper-level undergraduate and graduate students in studying the connections between global change and public policy. It is the first textbook devoted to this emerging field, offering a global perspective on research methods and emphasizing empirical investigations of health outcomes in combination with integrated assessment for policy development. For more information or to order the book, see the website at www.jhupbooks.com/aron

Aron, J.L., and J.A. Patz (eds.), 2001: *Ecosystem Change and Public Health: A Global Perspective*. Baltimore, MD: Johns Hopkins University Press, 526 pp.

GHG EMISSIONS DOWN IN EUROPE

The European Environment Agency (EEA) has published a new report on greenhouse gas (GHG) emission trends in the European Union (EU) and its member states for the period 1990–99. The latest EU emissions inventory compiled by the EEA, published April 2001, showed a 4% decrease in GHG emissions during this period. The report provides considerable extra detail and analysis on the situation in each member state and economic sectors. A media information sheet summarizing the report's main findings, as well as the full report itself in English and French, can be downloaded from the EEA website at reports.eea.eu.int/ For more information, contact EEA Media Relations Manager Tony Carritt, Kongens Nytorv 6, 1050 Copenhagen K, Denmark.

COP7 MARRAKECH

The UN Framework Convention on Climate Change (UNFCCC) Seventh Conference of Parties (COP7) concluded in Marrakech, Morocco in early November 2001. The Marrakech Accords effectively complete the work under the Buenos Aires Plan of Action that was adopted at COP4 and set the stage for countries to ratify the Kyoto Protocol and bring it into force. Many representatives expressed the hope that this will be achieved by the time of the Johannesburg Summit, to be held in September 2002. The Conference adopted a Marrakech Ministerial Declaration providing input to the Summit. It emphasizes sustainable development and climate change, reaffirming development and poverty eradication as the overriding priorities of developing countries. A draft version of the Marrakech Accords and the Marrakech Declaration are available on line at www.unfccc.org



UPDATE ON JOHANNESBURG SUMMIT

UN Secretary-General Kofi Annan has designated Nitin Desai, Under-Secretary-General for Economic and Social Affairs, to head the World Summit for Sustainable Development to take place 2-11 September 2002 in Johannesburg, South Africa. As Secretary-General of the Summit, Desai will be responsible for building consensus among a broad coalition of governments, businesses, trade unions, non-governmental organizations and other major groups to develop measures to promote sustainable development, which is development that encompasses social and economic growth combined with environmental protection. The Secretary-General also named Jan Pronk, Netherlands Minister of Housing, Spatial Planning and the Environment, to serve as his Special Envoy to meet with political leaders at the highest levels to assess their view on the goals for the Johannesburg Summit in the light of recent events. For more information see the newly revised website at www.johannesburgsummit.org/

DOE'S WIND ENERGY EFFORT

The US Department of Energy's Bonneville Power Administration (BPA) is backing the largest wind project in the state of Oregon by agreeing to purchase the entire output of a wind project. BPA signed an agreement with SeaWest WindPower of San Diego, California, to buy the output of a project already under construction near

Condon, Oregon. By the middle of 2002, a total of 83 wind turbines will be generating power for about 6,350 people. The first stage of the 49.8-megawatt project is projected to be completed by the end of the 2001. BPA is an agency of the US Department of Energy that markets wholesale hydroelectric power primarily from the federal hydroelectric projects in the Columbia River Basin. For more information, see the SeaWest WindPower website at www.seawestwindpower.com or the US Department of Energy at www.energy.gov

MORE ON WIND

The American Wind Energy Association (AWEA) has advocated the development of wind energy as a reliable, environmentally superior energy alternative in the United States and around the world since 1974. AWEA has created wind energy information resources available free of charge, including a downloadable state-by-state database of current and planned wind power projects; and a Green Power database listing green power and green marketing products that have a wind power component. They also present a graphic slide show of wind power statistics, including a discussion of wind power technology, economics, and market. For more information, see the website at www.awea.org

MITCH

MITCH (**MIT**igation of **C**limate-induced natural **H**azards) is part of the European Union's Fifth Framework Program to support collaborative projects in the field of research, technology development, and demonstration for the period 1998–2002. The MITCH Concerted Action seeks to translate advances in the understanding, monitoring and forecasting, and management of climate-induced natural hazards risks by bringing together researchers, end users, and beneficiaries involved in the mitigation and management of floods, droughts, and landslides. MITCH provides a forum for discussion and debate and intends to assist hazard planning and management by disseminating state-of-the-art research. Three workshops are planned and an active website has been created for the exchange of views and evaluation. A primary focus of the Concerted Action will be on flood forecasting and warning, but it will also include a look at longer-term climate hazards, such as drought, and the possible impact of climate change on the frequency and magnitude of such hazards. To become involved or for more information, see the website at www.mitch-ec.net

YANGTZE RIVER FLOOD REDUCTION PLAN

A proposed project to reduce the risk of devastating floods on the Yangtze, Asia's largest river, has been submitted to the Secretariat of the Global Environment

Facility (GEF) for approval. The pilot phase of the project is expected to begin in December 2001 and the full project is scheduled to begin in May 2003. The Report of the UNEP (UN Environment Programme) Scoping Mission to the Yangtze River Basin identified three key environmental factors that significantly aggravate the impacts of heavy rains. These are (1) sharp declines in the water-retaining capacity of forests and grasslands due to deforestation and overgrazing; (2) decreases in water-storing capacity in the middle and lower reaches of the river due to the loss of lakes and wetlands; and (3) silting of the rivers and wetlands in the Yangtze Basin as a result of rising rates of erosion. A main thrust of the initiative is to create EFCAs (Ecosystem Functions Conservation Areas) in key sites, including the headwaters of the Yangtze and its tributaries, and along stretches deemed vital for flood control. Wetlands, lakes, and other important drainage and water-retaining features are to be restored. The EFCAs create new powers to prohibit environmentally damaging activities and population growth that exceeds the carrying capacity of the local environment. Poverty alleviation is another key part of the plan. For more information, contact Nick Nuttall, Head of Media Services, UNEP, Nairobi, Kenya; tel: 254-2-623084; email nick.nuttall@unep.org or see the website at www.unep.org

INTERNATIONAL YEAR OF FRESHWATER: 2003

At its 55th Session, the UN General Assembly designated 2003 as the International Year of Freshwater and encourages all Member States, the UN system, national and international organizations to increase awareness of the importance of freshwater and to promote action at the local, national, regional, and international levels. The Subcommittee on Water Resources of the Administrative Committee on Coordination will develop proposals for activities to be considered by the 56th General Assembly. For more information, see the website of the United Nations at www.un.org

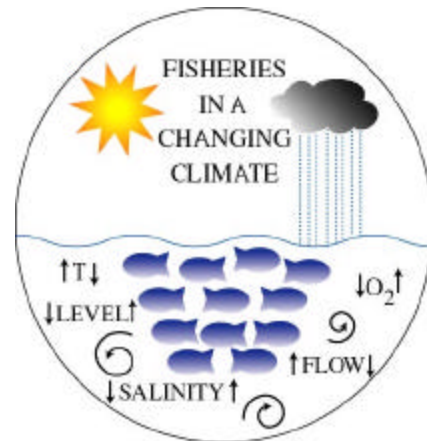
UNITED NATIONS AWARDED NOBEL PEACE PRIZE

The Norwegian Nobel Committee awarded the 2001 Nobel Peace Prize jointly to the United Nations and its Secretary-General, Kofi Annan. Citing their work for a better organized and more peaceful world, the Committee noted that the end of the Cold War had made it possible for the UN to perform more fully the part it was originally intended to play. In its press release, the Committee stated: "The UN has in its history achieved many successes and suffered many setbacks. Through this first Peace Prize to the UN as such, the Norwegian Nobel Committee wishes in its centenary year to

proclaim that the only negotiable route to global peace and cooperation goes by way of the United Nations."

AARHUS CONVENTION ENTERS INTO FORCE

The UNECE (UN Economic Commission for Europe) Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters – known as the Aarhus Convention after the Danish city where it was adopted in June 1998 – seeks to strengthen the role of members of the public and environmental organizations in protecting and improving the environment for the benefit of future generations. The Convention entered into force on 30 October 2001 where it was adopted by 39 countries and the European Community. Through its recognition of citizens' environmental rights to information, participation and justice, it aims to promote greater accountability and transparency in environmental matters. The Convention aims to (1) allow members of the public greater access to environmental information; (2) provide an opportunity for people to express their opinions and concerns on environmental matters; and (3) provide the public with access to review procedures when their rights to information and participation have been breached. For more information, contact Jeremy Wates, UNECE Environment and Human Settlements Division, Palais des Nations, office 332, CH-1200 Geneva 10, Switzerland; email jeremy.wates@unece.org or see the website at www.unece.org/env/pp



FISHERIES IN A CHANGING CLIMATE

The American Fisheries Society held a special symposium at their Annual Meeting in August 2001 focusing on the need to examine and seek scientific understanding of the effects of climate variability and climate change on fish, associated aquatic resources, and fishery dynamics. The symposium launched a multiyear collaborative initiative. The symposium talks were arranged according to four major themes: (1)

environmental changes as a result of climate change; (2) climate variability and fisheries; (3) fisheries modeling and climate change, and (4) climate change and fisheries: consequences and adaptations. For more information, see the website at www.fisheries.org/climate/climate_symposium.htm or contact the American Fisheries Society, 5410 Grosvenor Lane, Bethesda, MD 20814 USA.

Job Opportunities and Internships

A 2-year Mellon Postdoctoral Teaching Fellowship in Environment and Development is available at Carleton College in Northfield, Minnesota for a candidate who received a PhD less than 5 years ago. The appointment, which will begin in September 2002, involves half-time teaching and half-time for research and writing. Candidates with expertise and experience in Africa, Asia, or Latin America are especially encouraged to apply. Send a letter of application with a description of courses you might like to teach and research plans for the next 2 years, curriculum vitae, the names of 3 academic references and graduate transcripts to Search Committee, ENTS, Carleton College, One North College St., Northfield, MN 55057 USA.

The Johns Hopkins Institute for Policy Studies, Center for Civil Society Studies is seeking applications for the **International Fellows in Philanthropy Program** for the 2002–2003 academic year. Program participants are involved in studying or managing private, nonprofit, or philanthropic organizations outside the United States, or serve as government or corporate liaisons to the nonprofit sector. Non-US citizens with a university diploma and a high degree of fluency can apply by sending a statement of the specific project to be pursued or other intended goals, two letters of recommendation from nonprofit leaders and/or scholars, a resume or curriculum vitae, and a brief statement of career or educational plans. Fellows should indicate their intention to compete for either a Senior or Junior level position and should indicate other sources to which application is being made for full or partial support. For full details, visit www.jhu.edu/~philfellow/ or contact The International Fellows in Philanthropy Program, c/o Carol M. Wessner, Program Manager, International Fellows in Philanthropy Program, Institute for Policy Studies, The Johns Hopkins University, Wyman Park Building, 3400 N. Charles St., Baltimore, MD 21218 USA. The application deadline is 25 February 2001.

UCAR Postdoctoral Fellowship Program at NRL. In cooperation with the Naval Research Laboratory (NRL), UCAR is seeking postdoctoral-level scientists interested in furthering their research and developing expertise in

new areas. Scientists who have recently received their PhD can work alongside experienced scientists at NRL's Marine Meteorology Division, located in Monterey, CA. This program offers two- to three-year postdoctoral fellowship appointments. Fellows will receive a fixed annual salary and benefits. Applications are accepted on a continuous basis and reviewed immediately. Appointments may commence at any time during the year. Send applications to UCAR/VSP, PO Box 3000, Boulder, CO 80307-3000 USA. Full text announcement and an on-line application are available to www.vsp.ucar.edu. For more information, call 1-303-497-8649 or send an email to vsp@ucar.edu. *UCAR is an Equal Opportunity/Affirmative Action Employer.*

Past Meetings

The **1st National Conference on Science, Policy and the Environment** was held 7–8 December 2000 in Washington, DC. The conference was sponsored by the National Council for Science and the Environment and was held at the National Academy of Sciences. The overarching theme of the recommendations of more than 450 participants is the need for this nation and the world community to achieve a level of sustainability that integrates three basic elements: economic security, ecological integrity, and social equity. Specific findings included: the breadth, depth, and diversity of the scientific specialties involved in successful environmental decisionmaking make interdisciplinary and multidisciplinary approaches essential; sound environmental decisionmaking is dependent on an effective interface between scientists and policymakers based on reliable and timely "translation" of information and views between the two communities; the integration of environmental knowledge, assessments, research, information, communication, and education is vital if our society is to achieve a requisite level of sustainability. For more information, contact Dr. David E. Blockstein, National Council for Science and the Environment, 1725 K St. NW, Suite 212, Washington, DC 20006-1401; tel: 1-202-530-5810; fax: 1-202-628-4311; email: David@NCSEonline.org; web: cnie.org/2000conference/

A workshop on the **Importance of Military Organizations in Stratospheric Ozone Protection and Climate Protection** was held 6–9 February 2001 in Brussels, Belgium. The meeting's objectives were to enhance military officials' understanding of the importance of the phaseout of the ozone-depleting substances and protection of the climate, including the implications of environmental risk on national prosperity and security. Other objectives included promoting commitment by military officials to implement internal ozone-depleting substances management and climate protection programs. For more information on this workshop, contact Rajendra Shende, Chief, UNEP DTIE

Energy and OzonAction Unit; tel: 33 1 44 37 14 50; fax: 33 1 44 37 14 74; email: ozonaction@unep.fr; web: www.uneptie.org/ozonaction/events/military/home.html

The **Conference on Equity and Global Climate Change** took place 17–18 April 2001 in Washington, DC, organized by the Pew Center on Global Climate Change. The meeting was attended by 320 participants, including senior politicians and government officials, climate researchers and academics, and representatives of intergovernmental and non-governmental organizations, business and industry. The conference aimed to explore how best to endure fair and reasonable actions by all countries in addressing climate change in a manner that would reflect the significant differences between countries in terms of their capacity to respond to climate change. Discussions and conclusions from the meeting are expected to contribute to an ongoing international dialog on equity issues aimed at producing a better understanding of equity concerns and solutions acceptable to all parties. For more information, contact Pew Center on Global Climate Change, 2101 Wilson Blvd., Suite 550, Arlington, VA 22201; tel: 1-703-516-4146; fax: 1-703-841-1422 or read the full report at www.pewclimate.org/events/spring_conf.cfm

The **Arctic Council Regional Conference on the Tenth Anniversary of the Arctic Environmental Protection Strategy** was held 11 June 2001 in Rovaniemi, Finnish Lapland. The conference was organized by the Arctic Council, which constitutes all Arctic countries – Canada, Denmark, Finland, Iceland, Norway, the Russian Federation, Sweden and the United States – as Members, and with Arctic indigenous peoples participating in the Council's work on a permanent basis. Conclusions from this conference will serve as a springboard for preparations for Arctic input to the Johannesburg Summit in 2002. Notable outcomes included a plan for Arctic states to encourage public-private sector dialog on utilizing natural resources in the region in an environmentally sustainable manner. The Arctic Council also launched a project to assess the environmental, social and economic consequences of climate variability and to study the change and effects of increased UV and UVB radiation in the Arctic. Arctic countries noted the threat to the region of Persistent Organic Pollutants (POPs) and heavy metals. The Council expressed its intent to support developing countries in their efforts to eliminate or reduce production and/or use of POPs and reduce the harmful effects of heavy metals on nature and human health. For more information, contact the Arctic Council Secretariat, Finnish Ministry for Foreign Affairs, Unit for Northern Dimension, PO Box 176, FIN-00161 Helsinki, Finland; tel 358 9 1341 6187; fax 358 9 1341 6120; web: www.iisd.ca/recent/recindex1.html

The **Joint Workshop on the Asia-Pacific Environmental Innovation Strategy Project and Millennium Ecosystem Assessment: Toward Innovative Environmental Strategies for Sustainable Development** took place 6–7 September 2001 in Tokyo, Japan. More than 80 experts from governments, the academic and scientific communities, and intergovernmental, regional and non-governmental organizations attended the meeting. The workshop's objective was to assist the development of an analytical framework and of other processes for monitoring and assessing ecosystems and policy options. Within this context, the workshop focused on identifying synergies and methodologies, specifically to address the critical issues unique to ecosystems in the Asia-Pacific region. The output of the workshop included a Chair's Summary incorporating the issues, proposals and recommendations made during the session. For more information, contact the APN Secretariat, 5th Floor, IHD Centre Building, 1-5-1 Wakinohama Kaigan Dori Chuo-ku, Kobe 651-0073 Japan; tel: 81-78-230-8017; fax: 81-78-230-8018 or for the full report, visit www.iisd.ca/recent/recindex1.html

Upcoming Meetings

The **2nd National Conference on Science, Policy and the Environment - Sustainable Communities: Science and Solutions** will be held 6–7 December 2001 in Washington, DC. Leading scientists and policymakers from around the world will join to discuss how science can contribute to solutions for achieving sustainable communities, locally and globally. A set of recommendations on how to advance and apply science for sustainable development will be produced for the upcoming World Summit for Sustainable Development in Johannesburg 2002. Some topics to be covered include sustainable urban and rural communities, sustainable designs and industries, societal and behavioral aspects, and indicators of sustainability. For more information, contact the National Council for Science and Environment, 1725 K St. NW, Suite 212, Washington, DC 20006-1401; tel: 1-202-530-5810; fax: 1-202-628-4311; email: conference@NCSEonline.org; web: cnie.org/NCSEconference/2001conference/

The **9th International Seminar on Central Asia and the Caucasus: The Caspian Sea: Prospects and Challenges** will be held 22–23 December 2001 in Tehran, Iran. Interested observers, academics, and researchers are invited to participate. Some of the topics that will be addressed include the Caspian region in the contemporary international system, the role of regional

cooperation in maintaining peace, stability and security in the Caspian zone, the political and security arrangements in the Caspian region, the legal and environmental status of the Caspian Sea, the evaluation of the socio-cultural developments in the countries of the Caspian region, and Iran and the Caspian Sea. For more information, contact the Center for Central Asia and the Caucasus Studies of Institute for Political and International Studies, Shahid Aghaie St. Shahid Bahonar Ave., PO Box 19395/1793, Tehran, Iran; tel: 9821-2802671-5; fax: 9821-2802649; email: ipis@dre-mfa.gov.ir; web: www.dre-mfa.gov.ir

The International Conference On Renewable Energy For Rural Development will be held *19–21 January 2002* in Dhaka, Bangladesh. It will consider the technical scope of power generation from offshore wind, waves, current and tidal schemes. The conference will also consider technologies for the medium- to long-term and will address technical challenges in developing renewable energy sources. For more information contact: A.K.M. Sadrul Islam, Convener; fax: 880-2-861-3046; e-mail: sadrul@me.buet.edu

Delhi Sustainable Development Summit 2002 (DSDS 2002): Ensuring Sustainable Livelihoods: Challenges for Governments, Corporates, and Civil Society at Rio+10 will be held *9–11 February 2002* in New Delhi, India. DSDS 2002 will be a forum for assimilating knowledge and directions for the benefit of the United Nation's World Summit on Sustainable Development (Johannesburg, September 2002). This will be a unique opportunity to assemble the finest minds concerned with sustainable development and protection of the planet. Leaders and thinkers could assist the Rio+10 process immeasurably. DSDS 2002 aims to recharge the political momentum and the enthusiasm of all involved in the Rio+10 process. For more information, contact The Summit Secretariat, TERI, Darbari Seth Block, Habitat Place, Lodhi Rd., New Delhi, 110 003 India; tel: +91-11-468-2100; fax: +91-11-468-2144; email: program@teri.res.in; web: www.teriin.org/dsds/

An international conference entitled **Biotechnology and Sustainable Development: Voices of the South and the North** will be held *16–20 March 2002* in Alexandria, Egypt. Egypt is inviting leaders from the developing and industrialized world: leaders in science, government, NGOs, the media, farmers groups, philanthropy, academia, the private sector and the civil society. The event should cover the multifaceted dimensions of the biotechnology debate: the scientific, ethical, and safety issues as well as the regulatory, trade and economic issues. Representation from the ministries of agriculture, environment, health, education, scientific research, foreign affairs and international economy and trade will come together. Some of the topics that will be covered include safety issues, ethical issues, economics,

intellectual property rights, and regulatory regimes. For more information, contact the Executive Secretariat, 116 El-Horreya Ave., Bab Sharqi. Alexandria, PO Box 138 El-Mansheya, Egypt; tel: 203-4876024; fax: 203-4876001; email: egybio2001@hotmail.com; web: www.egyptbiotech2001.com

The 2002 Earth Technologies Forum: The Conference on Climate Change and Ozone Protection

will be held *25–27 March 2002* in Washington, DC. The conference is sponsored by the International Climate Change Partnership (ICCP) and the Alliance for Responsible Atmospheric Policy, in cooperation with US, Canadian, Netherlands, and Australian agencies as well as several UN agencies. The forum provides information on two of the biggest environmental issues affecting industry today: climate change and stratospheric ozone protection. Technology development and dissemination are critical for industry's response to these environmental problems. The conference will discuss current technologies and efforts to bring them into the marketplace. For more information, contact Earth Technologies Forum, 2111 Wilson Boulevard, 8th Floor, Arlington, VA 22201; tel: 1-703-807-4052; fax: 1-703-528-1734; email: info@earthforum.com; web: www.earthforum.com

The International Conference on Climate Change and the Built Environment will be held *8–9 April 2002* in Manchester, United Kingdom. This conference will bring together researchers, designers and regulators to exchange information and ideas from their own countries on dealing with the great challenge of climate change and its effects on buildings, their occupants and sustainability. Topics include: climate change scenarios and implications of interest to building designers, regulations and design criteria relating to weather data and climate change, Kyoto Protocol implications for the built environment, and how each country is dealing with climate change relating to the built environment. For more information, contact H. McCaffery, Dept. of Civil and Construction Engineering, UMIST, PO Box 88, Manchester M60 1QD, United Kingdom; tel: 44 161 200 4252; web: www.umist.ac.uk

The International Conference on Drought Mitigation and Prevention of Land Desertification

will be held *21–24 April 2002* in Bled, Slovenia. The conference will address the various aspects of drought mitigation and prevention of land desertification in the Central and Eastern European (CEE) regions. The status of national drought mitigation strategies will be explored through invited country reports. The impacts of drought on the environment and economies will also be discussed. Themes of the conference include the impact of climate change, national strategies to mitigate drought and international cooperation for solving common drought problems. For more information, contact the secretariat

at the Slovenian National Committee of ICID, c/o IZVOR, Preradoviceva 44, 1000 Ljubljana, Slovenia; tel: 386-1-2317-913; fax: 386-1-433-5104; email: sdno-sincid@guest.arnes.si

Climate Variability and Change and their Health Effects in the Caribbean will be held *20–21 May 2002* in Bridgetown, Barbados. The conference is sponsored by the Pan-American Health Organization (PAHO) and the World Health Organization under the auspices of the Interagency Network on Climate and Human Health. The conference is divided into 5 parts: (1) climate variability and climate change; (2) health status in the Caribbean region; (3) and (4) linkages between climate and human health, Parts I and II; and (5) public health policies and strategies for adaptation to climate variability and change. Registration begins January 2002 on the PAHO website at www.cpc.paho.org

The **2nd International Meeting on Mountain Ecosystems: The Tropical Mountains toward 2020: Water, Life, Production** will be held *5–7 June 2002* in Huaraz, Peru. The conference seeks to collect the perspective that mountain communities of Peru have about challenges and actions for the mountains toward the year 2020 and to analyze the current and future scenarios of mountain populations and environments, especially the risks associated with climatic changes, as well as society and economy trends in mountainous regions. The organizers hope to propose long-term alliances within the lines of policy or specific actions that the mountains require from national and local government, and from the society in general in order to raise the issue that mountains continue to be the source of water, life and production systems. For more information, contact Maria Cecilia Rozas, Coordinator of NWGME, Ministry of Foreign Affairs, Lima, Peru; email: mrozas@ree.gob.pe

A conference entitled **Allocating and Managing Water for a Sustainable Future: Lessons from Around the World** will be held *11–14 June 2002* in Boulder, CO. The purpose of the conference is to examine innovative water allocation laws, policies, and institutions from around the world that provide lessons for sustainable water management. Sessions will focus on innovative legal and institutional developments and lessons that can be transferred across different regions, countries, cultures, economies and water systems. International speakers and case studies will be drawn from world regions that share the American West's challenges of managing uncertain and variable water supplies. Sessions will be held on the role of markets and policy: lessons in water allocation and use; integrating environmental, cultural and other values; and transboundary water conflicts and cooperation. For more information, contact the Natural Resources Law Center, University of Colorado Law School, Boulder, CO 80309-

0401; tel: 1-303-492-1286; email: nrlc@spot.colorado.edu; web: www.colorado.edu/Law/NRLC/

The **12th European Conference and Technology Exhibition on Biomass for Energy Industry and Climate Protection** will be held *17–21 June 2002* in Amsterdam, The Netherlands. Topics at this conference include biomass resources, research and development of bioenergy conversion technology resources, demonstration and market implementation of bioenergy in the heat, electricity and transportation sector, products and climate protection, strategy, and policy issues and biomass in the developing world. For more information, contact Energy Transport Agriculture (ETA), Biomass Conference 2002, Piazza Savonarola 10, I-50132 Florence, Italy; tel: 39 055 500 21 74; fax: 39 055 57 34 25; email: eta.fi@etaflorence.it; web: www.etaflorence.it

Managing Shared Waters: Towards Sustainable Transboundary Coastal Ecosystems will be held *24–28 June 2002* in Hamilton, Ontario, Canada. The meeting will bring together representatives from major stakeholder groups engaged in the management of transboundary coastal waters, who are seeking practical, positive and integrated solutions to coastal issues. The conference is aimed at a target audience that includes representatives from government, academia, business, NGOs, indigenous peoples, women and youth. The main objectives are to evaluate international capacity, to equip members of coastal communities, to examine real-life applications of transboundary coastal ocean management through examples, and to produce a report that summarizes the results of the conference including recommendations and strategies to improve international capacity to manage sustainable transboundary coastal ecosystems. For more information, contact Managing Shared Waters, Pollution Probe, 402-625 Church Street, Toronto, Ontario, M4Y 2G1 Canada; tel: 1-416-926-1907; fax: 1-416-926-1601; email: managing.shared.waters@pollutionprobe.org; web: www.pollutionprobe.org/managing.shared.waters/

The **7th Western Pacific Geophysics Meeting** will be held *9–12 July 2002* in Wellington, New Zealand. This meeting is intended to serve the needs of geophysicists interested in studies in the western Pacific region, but papers on all related aspects of geophysical sciences are encouraged. The meeting will be organized similar to the American Geophysical Union's annual meetings held in the United States. The Western Pacific Geophysics Meeting is open to geophysicists worldwide. Some of the themes of the meeting include climate change and variability and implications for the Antarctic and Pacific, and the impacts and prediction of space weather. For additional information, contact AGU Meetings Dept., 2002 Western Pacific Geophysics Meeting, 2000 Florida Avenue, NW, Washington, DC 20009; tel: 1-202-462-6900 or 1-800-966-2481; fax: 1-202-328-0566; email:

meetinginfo@agu.org; web:
www.agu.org/meetings/wp02top.html

Energy, Climate, Environment and Water: Issues and Opportunities for Irrigation and Drainage is the theme of a conference to be held *10–13 July 2002* in San Luis Obispo, California. The conference is sponsored by the US Committee on Irrigation and Drainage and the Environmental and Water Resources Institute of American Society of Civil Engineers. The Irrigation Training and Research Center, California Polytechnic State University will be the Co-Sponsor. Irrigators are facing new challenges as competition for water supplies, coupled with significant increases in energy costs and environmental considerations, threaten the economic viability of irrigation. Climate changes, whether natural or as a result of human activity, are providing additional concerns. The conference will provide a forum to discuss and evaluate these issues, with a focus on the technology being applied to meet the challenges. Topics include: Global Warming/Climate Change, Impacts of Climate Change on Water Supply and Demand Projections, and Changes in Cropping Patterns. For more information, contact USCID, 1616 17th St, #483, Denver, CO 80202 USA; tel: 1-303-628-5430; fax: 1-303-628-5431; email: stephens@uscid.org; web: www.uscid.org/~uscid

The **3rd International Conference on Water Resources and Environment Research (ICWRER): Water Quantity and Quality Aspects in Modeling and Management of Ecosystem** will be held *22–25 July 2002* in Dresden, Germany. The aim of the conference is to encourage and facilitate the interdisciplinary communication among scientists, engineers and professionals working in the fields of ecological systems, sustainable management, development of water resources and the conservation of natural systems. The involved physical, biological, chemical and technical processes and their complex interaction in the natural and urban aquatic systems is the domain the ICWRER wants to stimulate and promote for further research. For further information, contact the conference secretariat, Cathleen Schimmek and Gisela Schöler, Institute of Hydrology and Meteorology, Dresden University of Technology, Wuerzburger Str. 46, D-01187 Dresden, Germany; tel: 49-351-463-33931; fax: 49-351-463-37162; email: icwrer2002@mailbox.tu-dresden.de; web: www.tu-dresden.de/fghihm/normal/2nd-Announc-2.htm

The **Swiss National Centre of Competence in Research (NCCR) Climate Summer School: Climate Variability, Predictability and Climate Risks** will be held *7–14 September 2002* in Grindelwald, Switzerland. The NCCR Climate invites young scientists to join leading climate researchers for keynote lectures, workshops and poster sessions on the occasion of the first NCCR Climate Summer School 2002. The topics

covered will include past climate variability and extreme events of the last 1000 years, future climate: predictability of extreme climate events and seasonal forecasts, numerical modeling, analysis and diagnosis, impacts of climate change and extreme events on natural and socio-economic systems, and climate risk assessment and economic dimensions of climate change. The summer school is open to young researchers (PhD students and post-docs) worldwide. Application deadline is December 15. For more information, contact NCCR Climate, University of Bern, Erlachstrasse 9a, CH-3012 Bern, Switzerland; tel: 41-31-631-31-45; fax: 41-31-631-43-38; email: nccr-climate@giub.unibe.ch; web: www.nccr-climate.unibe.ch

The **4th International Conference on Environmental Problems in Coastal Regions** will be held *16–18 September 2002* in Rhodes, Greece. Coastal Environment 2002 will address the subjects of monitoring, analysis, and modeling of coastal regions including, air and ground phenomena. The fourth in this international series, the conference will focus on topics that need to be recognized in order to prevent, alleviate, or minimize environmental problems, allowing for a balanced use of the coastal regions as a common resource around the world. The conference will be of interest to government officials, academics and researchers involved in the important field of environmental quality. For more information, contact Gabriella Cossutta, Conference Secretariat, Coastal Environment 2002, Wessex Institute of Technology, Ashurst Lodge, Ashurst, Southampton, SO40 7AA, UK; tel: 44 238 029 3223; fax: 44 238 029 2853; email: gcossutta@wessex.ac.uk; web: www.wessex.ac.uk/conferences/2002/coastal02/

Recent Publications

Books

Adger, W.N., P.M. Kelly, and N.H. Ninh (Eds.), 2001: **Living with Environmental Change: Social Vulnerability, Adaptation and Resilience in Vietnam**. Routledge, UK Head Office, 11 New Fetter Lane, London EC4P 4EE, UK; tel: 44-207-583-9855; fx: 44-207-842-2298; web: www.routledge.com

Aragón, L.E., 2001: **Ciência e Educação Superior na Amazônia: Desafios e Oportunidades de Cooperação Internacional**. Sede Institucional da Unamaz, Avenida Conselheiro Furtado, 2007, Creamção, Caixa Postal 558, 66.040-100 Belém, Pará, Brazil; tel: 55-91-224-3641; fx: 55-91-224-2055; web: www.amazon.com.br/~unamaz/unamaz.htm

Barry, R.G. and A.M. Carleton, 2001: **Synoptic and Dynamic Climatology**. Routledge, UK Head Office, 11 New Fetter Lane, London EC4P 4EE, UK; tel: 44-207-583-9855; fx: 44-207-842-2298; web: www.routledge.com; in the US, contact www.routledge-ny.com

Boardman, R., 2001: **The Political Economy of Nature: Environmental Debates and the Social Sciences**. Macmillan Direct Customer Services, Houndmills, Basingstoke RG21 6XS, UK; tel: 44-125-630-2699; fx: 44-125-636-4733; web: www.palgrave.com

Brown, L., 2001: **Eco-Economy: Building an Economy for the Earth**. Earth Policy Institute, 1350 Connecticut Ave., NW, Suite 403, Washington, DC 20036; tel: 1-202-496-9290; fx: 1-202-496-9325; web: www.earth-policy.org

Brown, N., 2001: **History and Climate Change**. Routledge, UK Head Office, 11 New Fetter Lane, London EC4P 4EE, UK; tel: 44-207-583-9855; fx: 44-207-842-2298; web: www.routledge.com

Bush, D.M., et al., 2001: **Living on the Edge of the Gulf: The West Florida and Alabama Coast**. Books Fulfillment, Duke University Press, Box 90660, Durham, NC 27708-0660 USA; tel: (toll-free inside USA) 1-888-651-0122; fx: 1-919-688-2615; web: www.dukeupress.edu

Changnon, S.A., 2001: **Thunderstorms Across the Nation: An Atlas of Storms, Hail, and Their Damages in the 20th Century**. National Climatic Data Center, 151 Patton Ave., Asheville, NC 28801-5001, USA; tel: 1-828-271-4800; fx: 1-828-271-4876; web: lwf.ncdc.noaa.gov/oa/about/ncdccontacts.html

Flint, R.W. and W.L. Houser, 2001: **Living a Sustainable Lifestyle for Our Children's Children**. Authors Choice Press through Universe.com, Inc., 5220 S 16th, Suite 200, Lincoln, NE 68512 USA; web: www.iuniverse.com/marketplace/bookstore

Glantz, M.H. (Ed.), 2001: **Once Burned, Twice Shy? Lessons Learned from the 1997-98 El Niño**. Tokyo: UN University Press. Available from jan@ucar.edu (in Western Hemisphere) or adeel@hq.unu.edu (other).

Godrej, D., 2001: **The No-Nonsense Guide to Climate Change**. Verso, 6 Meard St., London W1F 0EG, UK; tel: 44-171-437-3546; fx: 44-171-734-0059; web: www.versobooks.com

Hillel, D., 1994: **Rivers of Eden: The Struggle for Water and the Quest for Peace in the Middle East**. Contact Oxford University Press, 198 Madison Ave., New York, NY 10016 USA; tel: 1-212-726-6000; fx: 1-

212-726-6440; email: custserv@oup-usa.org; web: www.oup-usa.org

IJGEI (International Journal of Global Environmental Issues), 2001: Special issue devoted to **Interactions between Climate Change and Sustainable Development**, volume 1(2). Web: www.inderscience.com

Jochem, E., J. Sathaye, and D. Bouille (Eds.), 2001: **Society, Behaviour, and Climate Change Mitigation**. Kluwer Academic Publishers, PO Box 17, 3300 AA Dordrecht, The Netherlands; tel: 31-78-639-2392; fx: 31-78-639-2254; web: www.wkap.nl

Jones, P.D., A.E.J. Ogilvie, T.D. Davies, and K.R. Briffa, 2001: **History and Climate: Memories of the Future?** Climatic Research Unit, University of East Anglia, Norwich NR4 7TJ, UK; tel: 44-1603-592722; fx: 44-1603-507784; web: www.cru.uea.ac.uk

Mathews, M., 2001: **India – Facts and Figures**. Sterling Publishers at: www.indian.subnet.dk

Miller, C. and P.N. Edwards (Eds.), 2001: **Changing the Atmosphere: Expert Knowledge and Environmental Governance**. The MIT Press, 5 Cambridge Center, Cambridge, MA 02142-1493, USA; tel: 1-617-258-0564; fx: 1-617-253-1709; web: mitpress.mit.edu

Miller, K.A., G.R. Munro, T.L. Dorman, R. McKelvey, and P. Tyedmers, 2001: **The 1999 Pacific Salmon Agreement: A Sustainable Solution to the Management Game?** Occasional Paper # 47. Canadian-American Center, University of Maine, 154 College Ave., Orono, ME 04473-1591, USA; tel: 1-207-581-4220; web: www.umaine.edu/canam

Odum, H.T. and E.C. Odum, 2001: **A Prosperous Way Down: Principles and Policies**. 4100 28th Ave., NW, Norman, OK 73069-8218, USA; web: www.upcolorado.com

Sampson, R.N., R.D. Atkinson, and J.W. Lewis (Eds.), 2000: **Mapping Wildfire Hazards and Risks**. Food Products Press/Haworth Press, Inc., 10 Alice St., Binghamton, NY 13904-1580; tel: (US/Canada) 1-800-429-6784, (outside US/Canada) 1-607-722-5857; web: www.HaworthPress.com

Shackley, S., J. Kersey, R. Wilby, and P. Fleming, 2001: **Changing by Degrees: The Potential Impacts of Climate Change in the East Midlands**. Ashgate Publishing Direct Sales, Bookpoint Ltd., 130 Milton Park, Abingdon, Oxon, OX14 4SB, UK; tel: 44-1235-827730; fx: 44-1235-400454; email: orders@bookpoint.co.uk

Siedler, G., J. Church, and J. Gould, 2001: **Ocean Circulation and Climate: Observing and Modeling the Global Ocean**. Academic Press, Inc., Order Fulfillment Dept., 6277 Sea Harbor Dr., Orlando, FL 32887; tel: 1-407-345-3800; fx: 1-407-345-4060; email: ap@acad.com; outside US, Academic Press, Inc., Customer Services Dept., Footh Cray High St., Sidcup, Kent, DA14 5HP, UK, web: www.apcatalog.com

Steele, J.H., K.K. Turekian, and S.A. Thorpe (Eds.), 2001: **Encyclopedia of Ocean Sciences**. Six-volume set with online version. Academic Press, Inc., Order Fulfillment Dept., 6277 Sea Harbor Dr., Orlando, FL 32887; tel: 1-407-345-3800; fx: 1-407-345-4060; email: ap@acad.com; web: www.apcatalog.com

TERI (Tata Energy Research Institute), 2001: **TERI Energy Data Directory & Yearbook (TEDDY) 2000/2001**. TERI, Information Dissemination Svcs., Darbari Seth Block, Habitat Pl., Lodhi Rd., New Delhi, India 110 003; tel: 91-11-468-2100; fx: 91-11-468-2144; web: www.teriin.org

University of Arizona, 2001: **Environmental Toxicology: Risk Assessment and Environmental Remediation. Toxicología Ambiental**. Southwest Hazardous Waste Program, College of Pharmacy, University of Arizona, PO Box 210207, Tucson, AZ 85721-0207, USA; tel: 1-520-626-6696; fx: 1-520-626-2466; web: superfund.pharmacy.arizona.edu

Vogt, J.V. and F. Somma, 2000: **Drought and Drought Mitigation in Europe: Advances in Natural and Technological Hazards Research, Vol. 14**. Kluwer Academic Publishers, PO Box 17, 3300 AA Dordrecht, The Netherlands; tel: 31-78-639-2392; fx: 31-78-639-2254; web: www.wkap.nl

Reports

Adaptation and Impacts Research Group (AIRG), 2000: **Annual Report 1999-2000**. AIRG, 4905 Dufferin St., Downsview, Ont. M3H 5T4, Canada; tel: 1-416-739-4436; fx: 1-416-739-4297; web: www.msc-smc.ec.gc.ca/airg

Bass, S. et al., 2000: **Rural Livelihoods and Carbon Management, IIED Natural Resource Issues Paper No. 1**. International Institute for Environment and Development (IIED), 3 Endsleigh St., London WC1H 0DD, UK; tel: 44-20-7388-2117; fx: 44-20-7388-2826; web: www.iied.org/bookshop

Berdowski, J.J.M. et al., 2001: **Sources, Regional Scaling and Validation of Methane Emissions from the Netherlands and Northwest Europe**, No. 410 200 084. Dutch National Research Programme, Antonie van Leeuwenhoeklaan 9, PO Box 1, 3720 BA Bilthoven, The

Netherlands; tel: 31-30-2742970; fx: 31-30-2744436; web: www.nop.nl

Burton, I. and M. van Aalst, 1999: **Come Hell or High Water: Integrating Climate Change Vulnerability and Adaptation into Bank Work**, Paper No. 72. Environment Dept., World Bank, 1818 H St., NW, Room MC-5-126, Washington, DC 20433; tel: 1-703-661-1580; fx: 1-703-661-1501; web: www.worldbank.org/publications

Denier van der Gon, H. et al, 2001: **Upscaling and Downscaling of Regional Methane Sources – Rice Agriculture as a Case Study**, No. 410 200 070. Dutch National Research Programme, Antonie van Leeuwenhoeklaan 9, PO Box 1, 3720 BA Bilthoven, The Netherlands; tel: 31-30-2742970; fx: 31-30-2744436; web: www.nop.nl

Dourojeanni, A., 2001: **Water Management at the River Basin Level: Challenges in Latin America**, report LC/L.1583-P, Serie Recursos Naturales e Infraestructura No. 29; web: ajouravlev@eclac.cl

IFRCRCS (International Federation of Red Cross and Red Crescent Societies), 2001: **World Disasters Report 2001**. Kumarian Press Inc., 1294 Blue Hills Ave., Bloomfield, CT 06002, USA; tel: 1-860-243-2098; fx: 1-860-243-2867; web: www.kpbooks.com; outside the US, Eurospan, 3 Henrietta St., Covent Garden, London WC2E 8LU, UK; tel: 44-20-7240-0856; fx: 44-20-7379-0609; web: www.eurospan.co.uk

Munich Re, Research and Development Geoscience Research Group, 2001: **Topics: Annual Review of Natural Catastrophes 2000**. Munich Re, Königstrasse 107, D-80791, Munich, Germany; tel: 49-89-3891-5291; fx: 49-89-3891-5696; web: www.munichre.com

Nonhebel, S. and H.C. Moll, 2001: **Evaluation of Options for Reduction of Greenhouse Gas Emissions by Changes in Household Consumption Patterns**, No. 410 200 059. Dutch National Research Programme, Antonie van Leeuwenhoeklaan 9, PO Box 1, 3720 BA Bilthoven, The Netherlands; tel: 31-30-2742970; fx: 31-30-2744436; web: www.nop.nl

Ranganathan, J., D. Moorcroft, J. Koch, P. Bhatia, 2001: **The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard**. World Resources Institute, 10 G St. NE, Suite 800, Washington, DC 20002; tel: 1-202-729-7600; fx: 1-202-729-7610; web: www.wri.org

Schellnhuber, H.-J., et al., 2001: **World in Transition: New Structures for Global Environment Policy**. Earthscan Publications Ltd, 120 Pentonville Road, London N1 9JN, UK; tel: 44-20-7278-0433; fx: 44-20-

7278-1142; web: www.earthscan.co.uk; available on line at: www.wbgu.de/WBGU/wbgu_jg2000_engl.pdf

US EPA (US Environmental Protection Agency), 2001: **Key Source Category Analysis for the Inventory of U.S. Greenhouse Emissions and Sinks: 1990-1999**. Office of Air and Radiation, Atmospheric Programs, 6204N, USEPA Hq., Ariel Rios Bldg., 1200 Pennsylvania Ave., NW, Washington, DC 20460 USA; tel: 1-202-564-0492; email: gillenwater.michael@epa.gov; on line at: www.epa.gov/globalwarming/publications/emissions/Key-Source_90-99.pdf

van Harmelen, A.K. et al., 2001: **Building Bridges, Raising Dikes**, No. 410 200 065. Dutch National Research Programme, Antonie van Leeuwenhoeklaan 9, PO Box 1, 3720 BA Bilthoven, The Netherlands; tel: 31-30-2742970; fx: 31-30-2744436; web: www.nop.nl

van der Meer, P.J., K. Kramer, and M.T. van Wijk, 2001: **Climate Change and Forest Ecosystem Dynamics**, Report No: 410 200 069. Dutch National Research Programme (same as above).

Vörösmarty, C.J. et al., 2001: **The Hydrologic Cycle and its Role in Arctic and Global Environmental Change: A Rationale and Strategy for Synthesis Study**. Arctic Research Consortium of the U.S. (ARCUS), 3535 College Rd., Suite 101, Fairbanks, AK 99709-3710 USA, tel: 1-907-474-1600; fx: 1-907-474-1604; web: www.arcus.org/ARCSS/hydro/

WRI (World Resources Institute) and Aspen Institute Initiative for Social Innovation through Business, 2001: **Beyond Grey Pinstripes 2001: Preparing MBAs for Social and Environmental Stewardship**. WRI, 10 G St. N.E., Suite 800, Washington, DC 20002; tel: 1-202-729-7600; fx: 1-202-729-7610; web: www.wristore.com

Articles

Boer, G.J., G.M. Flato, M.C. Reader, and D. Ramsden, 2000: Transient climate change simulation with greenhouse gases and aerosol forcing: Projected climate to the twenty-first century. *Climate Dynamics*, **165**, 427–450.

Cairns, Jr., J., 2001: Ethics in environmental politics and sustainable use of the planet. *Ethics in Science and Environmental Politics*, June 26, 38–45. Available on line at: www.esep.de/articles/esep/2001/editorial3.pdf

Cairns, Jr., J., 2001: Editorial: Exceptionalism and globalism. *Ethics in Science and Environmental Politics*, March 27, 33-37. Available on line at: www.esep.de/articles/esep/2001/editorial2.pdf

Cairns, Jr., J., 2001: Topics for public debate: Immigration, sustainability, and the precautionary principle. *The Social Contract*, **11**(4), 239–248.

Cairns, Jr., J. and S.E. Palmer, 2001: Restoration of urban waterways and vacant areas: The first steps toward sustainability. *SUSTAIN*, **4**, 30–32.

Curriero, F.C., J.A. Patz, J.B. Rose, and S. Lele, 2001: The association between extreme precipitation and waterborne disease outbreaks in the United States, 1948-1994. *American Journal of Public Health*, **91**(8), 1194–1199.

da Silva, F.J., 1999: A predição climática e os modelos matemáticos empregados. *Ciências e Tecnologia*, **1**(2), 69–74. (In Portuguese.)

Downton, M.W. and R.A. Pielke, Jr., 2001: Discretion without accountability: Politics, flood damage, and climate. *Natural Hazards Review*, **2**(4), 157–166. On line at www.colorado.edu/hazards/o/maro01/maro01a.htm#politics

Hulme, M., R. Doherty, T. Ngara, M. New, and D. Lister, 2001: African climate change: 1900-2100. *Climate Research*, **17**, 145–168.

O'Lear, S., 2001: Azerbaijan: Territorial issues and internal challenges in mid-2001. *Post Soviet Geography and Economics*, **42**(4), 305–312.

Wang, G.L. and E.A.B. Eltahir, 2000: Ecosystem dynamics and the Sahel drought. *Geophysical Research Letters*, **27**, 795–798.

CD-ROM and Video

Moore, P., 2001: **Trees are the Answer** is a documentary by Greenpeace co-founder, Dr. Patrick Moore. On line at: www.woodpromotion.net or through www.forestinformation.com

Spot Image Corporation, 2001: **Spot Vegetation CD**. For further information, contact Rich Danby, Spot Image Corporation, 1897 Preston White Dr., Reston, VA 20191-4368, USA; 1-703-715-3126; fx: 1-703-648-1813; email: danby@spot.com

WRI (World Resources Institute) and ISCENCES, 2001: **TerraViva! World Resources**, CD-ROM covering more than 400 database variables. Hopkins Fulfillment Service, PO Box 50370, Baltimore, MD 21211-4370; tel: (in US) 1-800-822-0504; (outside US) 1-410-516-6998; fx: 1-410-516-6998; web: www.wristore.com

Web sites of Interest



kapis1.wkap.nl/kaphtml.htm/GLOB3

The entire third issue of *Global Change and Human Health* is available on line at this site.

eelink.net/~asilwildlife/bib.shtml

The latest version of a searchable bibliography on the impacts of climate change on flora and fauna species, ecosystems, and agricultural resources is on this website, with many new additions. The bibliography now has more than 3300 citations, encompassing peer-reviewed and gray literature.

www.populationenvironmentresearch.org

The Population-Environment Research Network seeks to advance academic research on population and the environment by promoting on-line scientific exchange among researchers from social and natural science disciplines worldwide.

www.usgs.gov/hurricanes/stormsites.html

The US Geological Survey consolidated the links to its sites related to hurricanes and coastal storms on this page.

www.climateark.org

The Climate Ark is dedicated to promoting public policy that addresses global climate change through reductions in carbon dioxide and other emissions, energy conservation, renewable energy sources and ending deforestation.

nsidc.org

The new site of the National Snow and Ice Data Center, which monitors sea ice concentrations and snow extent using near-real time satellite imagery.

www.mcbup.com/research_registers/emh/sponsors.asp

This site holds one of the world's largest registers of research projects on the environment.

www.lifeonline.org/debate

Here is your chance to speak out on what the Johannesburg Summit 2002 should be trying to achieve. Join the online debate on this site.

www.devnetjobs.org/

This site contains a comprehensive list of development jobs in Asia, Africa, Latin America, Europe, and the United States. All information can be accessed by anyone at no cost.

www.envindia.com/

A comprehensive web directory and search engine for India-related links. Organizations from around the world who are linked to India are invited to add their links.

www.heifer.org

Looking for an unusual gift? Heifer Project International gives the gift of animals to needy families worldwide. This organization helps people become self reliant by providing heifers, goats, rabbits, and more. Buy a heifer today!

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.

NETWORK NEWSLETTER

tel: 1-303-497-8134; fax: 1-303-497-8125
E-mail: jan@ucar.edu
www.esig.ucar.edu/newshp

The Newsletter is compiled and published by the Environmental and Societal Impacts Group of the National Center for Atmospheric Research (NCAR) with support from the National Oceanic and Atmospheric Administration's (NOAA) Office of Global Programs. NCAR is sponsored by the National Science Foundation.

Michael H. Glantz Editor
D. Jan Stewart Managing Editor
Anne Oman Associate Editor
Jan Hopper Associate Editor

Please send the Newsletter to:

Please discontinue sending Newsletter

Change of Address:

Name _____

Affiliation _____

Address _____

Please print or type, make sure address is complete

**Network Newsletter
Environmental and Societal Impacts Group
NCAR
PO Box 3000
Boulder, CO 80307-3000**

<p>NON-PROFIT ORGANIZATION U.S. Postage PAID Boulder, Colorado Permit No. 558</p>
--