



Common Property News & Notes

International Association's First Conference a Success

The International Association for the Study of Common Property held its first annual conference at Duke University September 27 to 30, 1990. By any standard, this initial effort of a new organization was a thorough success. Over 210 persons paid the registration fees and participated in the conference, and nearly 100 papers were presented in 29 different sessions. While most of the participants were from the United States and Canada, a number of members from Africa, Asia, Europe and Latin America were able to participate. The New Delhi field office of the Ford Foundation assisted by funding travel expenses for several scholars from South Asia.

The sessions were as diverse as the membership, with topics ranging from specific case studies (Joint Management of Non-Arable Lands in India) to theory (Economic Theories of Cooperation: Equity, Efficiency, and Game Theory) to the futuristic (Space as an International Commons). A full list of the papers presented follows elsewhere in this issue and complete copies of the program are available from the organizing committee at Duke.

In addition to the contributed paper sessions, there were a number of useful plenary presentations. The opening session featured the following addresses; Daniel Bromley, "The Commons, Property and Common Property Regimes"; David Feeny, "Where do we go from here?: Implications for the Research Agenda"; Ronald Oakerson, "Analyzing the Commons: A Framework"; Elinor Ostrom "The Rudiments of a Theory of the Origins, Survival, and Performance of Common Property Institutions". Robert Bates, Director of the International Political Economy Program at Duke gave a keynote address on "The Role

of Institutions in Sustainable Development" and Elinor Ostrom presented her presidential address on the topic of "Crafting Institutions."

The association now has over 300 dues-paying members and, given the success of the conference at Duke, is clearly a going concern. Next year's meeting will be held in Winnipeg, Manitoba, Canada. A full announcement and call for papers is printed in the Announcements section of this issue.

Copies of the Conference Program which contains abstract of all the papers as well as full addresses of all authors are still available from the conference organizers. They request a payment of US\$10 from individuals who are not members of the International Association and \$5 from members to cover the costs of duplication and postage. For copies of the program or other information about the first annual meeting, contact:

Dr. Margaret McKean
Department of Political Science
Duke University
Durham, North Carolina, 27706, USA
Telephone: (919) 684-3164

In This Issue

CPR News & Notes	1
Announcements	4
Publications	10

Nepal Forestry Teachers

The following letter was received from a new organization in Nepal. "We have recently formed a Non-Governmental Organization (NGO) to establish and develop the interactions between several interdisciplinary group[s] to promote natural resources conservation, wildlife, watershed, multiple-use forest management, role of forestry in Nepalese economic development, environmental management and conservation, energy conservation, policy formulation, and community forest management.

"The objectives of this organization are:

- to promote interaction between interdisciplinary group[s] in Nepalese society.
- to make people aware about the problem of environment, forest and watershed degradation.
- to disseminate the endogenous forestry technology in Nepal.
- to establish linkages with other agencies in different parts of the world.

"In this group there are 44 members from different fields of forestry, agriculture and related natural resource conservation and management. We would like to establish a linkage with your organization to promote our interaction and understanding regarding these matters. This may be possible by sending us your publications, newsletters, leaflets, articles and any information regarding your organization."

Members who are interested in Nepalese resource questions or who may be able to contribute in some way to this group should contact the General Secretary at the following address:

Chiranjibi Prasad Upadhyaya
Institute of Forestry
P.O. Box 43, Pokhara
Kaski District
Gandaki Zone, NEPAL

Pilot Coastal Resources Management Project In Malaysia

Some of the most important common property resources for the world are coastal resources. There has been a lot of activity focused on improved management of such resources in Southeast Asia in recent years. Member C. Thomas submitted the following report on one such effort in Malaysia.

"The pilot Coastal Resources Management Project (CRMP) in Malaysia is part of the CRMP that is funded by the United States Aid for International Development (USAID) and coordinated by the International Center for Living and Aquatic Resources Management (ICLARM) in the ASEAN region. The coordinating ministry for the CRMP-Malaysia is the Ministry of Science, Technology and Environment and the in-country implementing agency is the Department of Fisheries.

The Common Property Research Network

The *Common Property Resource Digest* is the primary communication medium of the Common Property Resource Network. Funded with grants from the Ford Foundation and the Rockefeller Brothers Fund, the CPR Network seeks to disseminate information dealing with common property resources, their management, and policies related to their use. It also seeks to foster communication between professionals who work with common property resources; whether as policymakers, administrators, researchers, or educators. The ultimate goal of the network is to improve the conservation and wise use of these resources, and to improve the wellbeing of those people who depend on common property for their livelihood. Membership in the network is open to any individual or institution having an active professional interest in common property resources. At present, there is no charge for membership.

The *Common Property Resource Digest* is published and the CPR Network is administered by the Center for International Food and Agricultural Policy of the University of Minnesota. Facilities are provided by the Department of Agricultural and Applied Economics. Dr. C. Ford Runge is the project director and Edward D. Lotterman is the network administrator and *Digest* editor.

Functioning of the network depends on active participation by its members. Members are asked to report on their professional activities, as well as publications, conferences, and other items of interest. News items, announcements, publications for review, suggestions, and questions should be sent to the *Digest* editor at the following address:

Common Property Resource Digest
332e C.O.B.
1994 Buford Avenue
St. Paul MN 55108 U.S.A.
Tel: (612) 625-7019
FAX: (612) 625-6245

"The purpose of the CRMP-Malaysia is to develop an integrated management plan for sustainable development of the resources of the coastal zone in South Johor as the current method of sectorial management has resulted in conflicting usage of these resources. The CRM Plan seeks to furnish zonation plans delineating areas for compatible-uses, prohibition areas for incompatible uses and protected areas for unique and/or critical areas requiring special care. It also recommends resource-specific (i.e. for coastal forests, mangrove forest, fisheries, tourism, islands and marine park areas) and issue-specific (i.e. for coastal erosion, sand mining and water quality) management plans for sustainable management and development. The CRM Plan furthermore provides special area-specific plans for the critical/sensitive areas and develops the legislative and institutional framework for plan implementation.

"The Malaysian plan is unique in the ASEAN region as it is wholly developed by local expertise and its development was on a consensus basis between researchers, scientists, resource managers, administrators and policymakers. This cooperative effort involved over 60 personnel from 11 Federal departments, 14 state departments, 5 universities, 12 research teams and 2 project staff working diligently for a period of 5 years (1986-1990). The consensus plan development method used and the strong political support from the Johor state government, especially the Johor Chief Minister, ensures the successful implementation of the CRM Plan in South Johor. It is hoped that the success of this pilot project will result in the extension of coastal resources/area management planning to the other coastal areas in Malaysia as well."

C. Thomas, Scientific Officer
ASEAN-US CRMP, Malaysia
c/o Department of Fisheries
Jalan Sultan Salahuddin
50628 Kuala Lumpur, MALAYSIA

Forest Fires in the Chaco

While much attention has been focused on destruction of forests in the Amazon Basin, the following communication from northern Argentina demonstrates that these problems are not limited to the tropics.

"After about twenty months of fire, which destroyed more than 80,000 hectares of woodland, including its rich flora and fauna; the Forestry, Agriculture and Cattle Information Centre of the National University of the North East, wants to attract the attention of international governmental and non-governmental institutions and individuals so that they can help support a project to make a survey of the ecological problems caused by the fire as well as a final evaluation of the damage and possible solutions which can facilitate a certain degree of rehabilitation.

"In the recent past,, this area has also suffered the consequences of floods. The fire covered an area defined as *quebrachal* (*Schinopsis balansae*), consisting both of virgin forests and forests under exploitation. The soil in the latter may have suffered less calcination due to the partial clearing of trees and undergrowth. The director of forests in the province of Chaco stated that the basic elements of the ecological system have been damaged: flora, fauna and land. With regard to the flora, he said that virgin *quebrachales* which are irretrievable were lost and that in places where the vegetation was thicker, the earth must have suffered calcination from temperatures between 700 and 800 degrees centigrade, leaving it barren. Although ashes are to a certain extent beneficial for these lands, it will take a long time and a good amount of rain will have to fall to make them cultivable again. However rains are very scarce in this area, between 400 and 600mm annually.

"Mass media brought people's attention to the damage as well as the loss of human beings. The Department of Civil Defense and other official organizations worked on this, but it is not easy to find immediate solutions to these catastrophes because of lack of equipment and fire alarms to prevent and control fires. Some such fires are natural, but most are caused by irrational handling of natural resources. This time it seemed that the fire started with the burning of stubbles and some unwanted pastures by inhabitants of the area. Strong northern winds (above 30 or 40 km per hour) made fire burn more strongly. Finally, it got into the defenseless *quebracho* and carob tree woods (*Prosopis* sp.), burning furiously and persistently.

The Forestry, Agriculture and Cattle Information Centre, which leads this effort, wants to attract the attention of the international community; offering bonds of US\$ 50, 100, 500 and 1,000 until 31 December, 1990, after which income will be evaluated. We plan to begin activities on April 1, 1991, though contributions will be accepted all next year.

Our centre is nationally and internationally recognized as an official entity, founded in 1976. We have highly qualified people: we only ask the international community to help us."

Network members who are interested in temperate wet or dry forests or who may be able to indicate sources of assistance or financial support are urged to write to this group at the following address:

Julio E. Encinas, Director
Centra de Información Bioagropecuaria y Forestal
Universidad Nacional del Nordeste
Av. Las Heras 727
3500 - Resistencia, Chaco, ARGENTINA
Telephone: 0722-2-7764
Telex: 71-103 CIBAG AR

Announcements

Fellowships

Rockefeller Environmental Fellowships

The Rockefeller Foundation has established a new program of **Environmental Research Fellowships in International Agriculture**. Given the relevance of this program to the interests of many network members, the announcement is reprinted in its entirety.

"Objectives: The Foundation's primary objective through this program is to encourage creative and imaginative research aimed at integrating environmental and natural resource protection with mainline international agricultural research and development. Agriculture both causes and suffers from environmental degradation. Environmental concerns particularly relevant to agriculture include deforestation, the sustainability of production systems, soil erosion and loss of soil fertility, desertification, pollution from pesticides and other agricultural chemicals, adverse changes in the quantity and quality of water resources, loss of genetic diversity and wildlife habitats, and changes in the earth's atmosphere and climate. In too many locations, the natural resource base on which agricultural productivity depends is being rapidly and sometimes irreversibly degraded. Food deficit developing countries, however, do not have the luxury of lowering productivity. Agricultural technologies and practices are needed that meet the consumptive requirements of people while helping to preserve and restore the natural resource base and to protect the global environment.

"Host Centers: The fellowships provide stipend and research support for visiting scientists conducting environmental research at international agricultural research centers. The following centers have indicated their interest in participating in the program. Other centers will be considered appropriate as long as the program's objectives are met.

- International Rice Research Institute (IRRI), Philippines
- International Center for Maize and Wheat Improvement (CIMMYT), Mexico
- International Institute of Tropical Agriculture (IITA), Nigeria
- International Center for Tropical Agriculture (CIAT), Colombia
- International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), India
- International Potato Center (CIP), Peru
- Asian Vegetable Research and Development Center (AVRDC), Taiwan

"Eligibility: Fellowship awards are open to natural scientists and engineers from all parts of the globe having expertise and an established record of research

productivity in disciplines such as ecology, botany, zoology, resource management, wildlife protection, climatology, entomology, atmospheric sciences, microbiology and other environmentally oriented fields. Applicants must be qualified for an appointment as visiting scientist at the host center.

"Research Program: The research program to be conducted by the fellow will be developed jointly by the fellow and the host center. It should add a new dimension and bring new insights to ongoing research activities at the center's headquarters or one of its field locations. Appropriate research topics include but by no means are restricted to the following:

- Better methods for incorporating the goal of sustainability in crop improvement programs.
- Improved practices for conserving and restoring the productivity of soils and land resources.
- Development and adoption of integrated pest management for tropical agriculture.
- Innovative strategies for incorporating the principles of ecology and population biology in crop breeding.
- Agricultural practices that help protect forests, grasslands, and/or wetlands.
- Resolution of public health problems associated with irrigated agriculture.
- Assessing gas transfers to and from the atmosphere under various agricultural practices.

"Financial Arrangements: The duration of the fellowship will be a minimum of one and a maximum of two years. Funding will be shared between the Foundation and the host center. The Foundation will provide a stipend of \$3,000 per month, travel expenses to and from the host center, health insurance, and up to \$2,500 per month toward research expenses. The host center will provide research and housing facilities and contribute toward research expenses. The fellow is encouraged to seek supplemental support, such as sabbatical funding, to help meet salary and/or research costs if necessary.

"Application Procedure: There is no formal deadline for applications, but it is strongly urged that they be submitted at least six months before the requested starting date. Preliminary inquiries (including a curriculum vitae) may be submitted to determine the appropriateness of the research project and of the proposed institutional setting. The selection committee will consider only complete applications, which must include the following:

1. A written project proposal developed and submitted jointly by the candidate and the host center. The proposal should outline the research objectives, methods, and plan of work, and should discuss the project's relevance to environmental and natural resource protection.

2. A curriculum vitae and copies of recent relevant publications.
3. A letter from the host center's administration recommending the candidate and confirming that the center is willing to appoint the candidate as a visiting scientist and provide the facilities and services necessary to complete the research project.
4. Two letters of recommendation from established scientists familiar with the applicant's qualifications."

Applications and inquiries should be addressed to:

Environmental Research Fellowships in
International Agriculture
Agricultural Sciences Division
The Rockefeller Foundation
1133 Avenue of the Americas
New York, New York, 10036, USA

African Agriculture Fellowships

The Social Science Research Council and the American Council of Learned Societies Joint Committee on African Studies has announced the following program of fellowships on **African Agriculture: Crisis and Transformation**.

"Purpose: The project aims to promote interdisciplinary analysis - particularly involving natural and social scientists - of the agricultural crisis in sub-Saharan Africa. Through a fellowship program focused on a selected theme, the project seeks to develop new concepts and methods to analyze the biological, economic, social, and historical processes that affect agricultural performance in Africa. Fellowship support is provided for the development of research projects, the completion of small research projects, specialized training, and includes attendance at a yearly two-week workshop.

"Sponsorship: Fellowships are sponsored by the Joint Committee on African Studies of the SSRC/ACLS. Funds for the fellowships are provided by grants from the Ford Foundation and the Rockefeller Foundation. Fellowships are administered by the Subcommittee on African Agriculture of the joint committee.

"Workshop: A workshop will be held in the summer or fall of 1991 which all fellows must attend. This workshop, which will be hosted by an African institution, will include presentation of the results of commissioned research and overview papers on the fellowship theme, as well as presentations by past and current fellows. You must be willing to attend this workshop to accept a fellowship award.

"Working Paper Series: In 1990, the project initiated a Working Paper Series through which we could disseminate the work of the 65 researchers we have supported since the inception of the project. These papers will be distributed to libraries in Africa as well as the U.S. and Europe. Each new fellow will have

the opportunity to have their work reviewed and published in this new series.

"Fellowship Program Focus: Resource Conservation and "Ecological Vulnerability. The project's 1991 theme will build on our previous concern with sustainability of agricultural production systems in Africa, but will focus more specifically on resource conservation and ecological vulnerability.

With increasing concern with the degradation of the natural resources upon which African agriculture depends (soil, water, forests, etc.) social scientists are beginning to study resource conservation and the perception and rehabilitation of ecological vulnerability by both smallholders and agricultural planners. We solicit proposals for research on these topics informed strongly by: 1) historical perspectives; 2) an awareness of the social framework of resource conservation; and 3) concern with differential control and access to natural and other resources on the part of those who use these resources. Research on smallholders' knowledge of conservation and degradation, and how this has developed historically would be of particular relevance. Also eligible would be research on the colonial and post-colonial agricultural research centers approaches to resource conservation and its relevance to present efforts to plan ecologically sustainable production.

To illustrate our perspective, let us use the ongoing debate about the relationship of "poverty" to environmental degradation in Africa. Many argue that the poor in developing countries are increasingly forced to exploit their natural resources to the point of destruction. To make this argument, however, requires an understanding of what poverty is in different political, economic and environmental contexts - the historical and socially differentiated character of poverty - and to link this understanding to resource use and degradation.

"Substantive Areas: Applications will be accepted which address the following topics:

Research on conservation would include:

- strategies for resource conservation of natural resources in ecologically vulnerable regions for both smallholder farmers and large-scale agricultural enterprises whether private or public
- various, and perhaps competing, ideologies of conservation
- the role of various agricultural institutions and the models of knowledge they bring to bear on understanding conservation and implementing conservation strategies
- conservation efforts and problems in national parks or reserves, in communal or frontier areas
- indigenous techniques of conservation and ecological and economic change, including the linkages between Indigenous Technical Knowledge (ITK) and sustainability
- innovation and experimentation in smallholder conservation

- resettlement and conservation
- agricultural change, such as new cropping systems or intensification, and their impacts upon conservation.

"Studies which stratify actors by gender, class, property ownership, etc., are all relevant.

"Vulnerable ecological areas might include:

- regions with high pressure of population upon resources
- frontier areas such as desert edges
- peri-urban agricultural areas
- montane regions
- resettlement zones
- areas of long-term mechanization or chemical use.

"Commissioned Research and Overview Papers:

Certain researchers, who are chosen through a separate process from the normal fellowship competition, are commissioned to undertake specific research projects or write research overview papers whose topics are predetermined by the subcommittee. In order to increase our network of interested and capable scholars for these roles, we give here a preliminary description of topics under consideration for 1991. Those interested are welcome to contact us by letter as soon as possible.

"Possible topics for research overview papers include:

- a critical overview of the relationship between "poverty" and environmental degradation in Africa
- an overview of the effects of structural adjustment policies on environmental policy
- a discussion of conservation issues in specific zones such as in areas of resettlement or in communal areas.

"Possible topics for commissioned research topics include:

- a history of an agricultural research station, such as the Moor Plantation in Nigeria, emphasizing the models of knowledge the institution employed in understanding conservation and implementing conservation strategies
- a comparative study of vulnerable ecological regions within Africa (i.e., montane areas, peri-urban areas or tropical forest) or with other regions (i.e., Amazonia)
- a historical study of the development of a local system of knowledge (Indigenous Technical Knowledge) about conservation and ecological vulnerability.

"Financial Support and Fellowship Period: The typical award provides up to \$15,000 per proposal for support of activities and attendance at the workshop during a period of 3 to 12 months. Funds are provided for maintenance expenses directly related to sponsored activities. Funds cannot be used to replace fellows' salaries or to purchase large-capital items (vehicles, computers, etc.)

"Eligibility: The fellowship program is open to:

- recent degree recipients (minimum of Master's degree or equivalent)
- mid-career scholars in universities or research institutes
- professionals in government posts (e.g., ministries of agriculture) or other applied settings.

"Individual Applications may be submitted by nationals of sub-Saharan African countries.

"Team Applications may be submitted by groups of African researchers or groups that include both African and non-African researchers.

"The project welcomes applications from researchers in all relevant disciplines and particularly encourages collaborative proposals involving natural and social scientists, however all proposals must incorporate some analysis of social science issues. The project cannot entertain proposals that focus exclusively on natural science and technical aspects of the agricultural crisis.

"Application Procedures: A complete application consists of:

1. Application Cover Sheet and Information Sheet(s): The application cover sheet must be requested from the project and be completed and returned with the other application materials. The information sheet must also be completed, and for team applications, a copy of the information sheet is required from each member of the team.
2. A proposal (in English or French) of not more than 10 typewritten, double-spaced pages. The proposal must:
 - state the research problem to be addressed and its significance, and explain how the proposed research will contribute to existing knowledge on the topic
 - state how the research problem relates to the project's current theme
 - describe the activity for which fellowship support is being requested and explain how the activity will contribute to or facilitate the applicant's research
 - provide a detailed statement of the methods to be used, and the types and sources of data to be examined.
3. Statement of Intent: For team applications, each member must submit a letter which states an intent to participate in the project and describes his or her responsibilities and activities within the project.
4. Budget: A budget with details on estimated expenses for each activity proposed for support. For team applications, the budget must indicate the allocation of funds among team members according to their activities.
5. Statement of Institutional Support: A statement from each institution with which project members are affiliated, assuring continued approval of the proposed activity throughout the fellowship period.

6. Letters of Reference: Two letters of reference for each person who will participate in the project: one from a member of the institution with which the applicant is affiliated; one from someone outside the institution who is familiar with the applicant's work.

7. Curriculum Vitae: A current curriculum vitae for each person associated with the project.

"Application Deadlines and Selection of Fellows:

One cohort of fellows will be selected in 1991. The application deadline is December 31, 1990 for awards in April. Only those applications that include all of the required materials and are received by the deadline will be considered by the Subcommittee on African Agriculture. Complete applications should be sent to:

Project on African Agriculture
Social Science Research Council
605 Third Avenue
New York, New York 10158 U.S.A.
Telephone: (212) 661-0280
Fax: (212) 370-7896"

Wilson Fellowships

The Woodrow Wilson International Center for Scholars awards approximately 40 residential fellowships each year for advanced research in the humanities and social sciences. Men and women from any country and from a wide variety of backgrounds may apply. Applicants must hold a doctorate or have equivalent professional accomplishments. Fellowships are normally for an academic year, although a few are available for shorter or longer periods, with a minimum of four months and a maximum of twelve. The average yearly stipend is approximately \$36,000; in no case can the Center's stipend exceed \$50,000. Limited funds make it desirable for most applicants to seek supplementary sources of funding such as sabbatical support or grants from other sources. Travel expenses for Fellows, spouses, and dependent children are provided. The application deadline is October 1 of each year. For application materials write to:

Fellowships Office
Woodrow Wilson Center
Washington, D.C. 20560, USA

Positions

Woods Hole Social Scientists

The Marine Policy Center, a multi-disciplinary social science research group, seeks applicants for social scientists at the Assistant and Associate levels to conduct research on problems relating to marine resources, ocean uses and role of scientific information in policy process. With Center resources, social scientists will help develop research programs and raise supporting funds.

Ph.D. or equivalent degree and demonstrated ability to devise and complete high-quality independent research required. Fields of law, international relations, law and economics, science policy, economics of technological change, natural resources, and/or conservation/environmental management are preferred, but strong applications from other relevant fields are welcome.

Statements of interest, vitae, and names of three references should be forwarded to:

Personnel Manager
Box 54PF
Woods Hole Oceanographic Institute
Woods Hole, Massachusetts, 02543, USA

Calls for Papers

Common Property Conference

The Second Annual Meeting of the International Association for the Study of Common Property will be held September 26-29, 1991 in Winnipeg, Canada. This international, interdisciplinary conference is being organized by the Association with the cooperation of:

Environment Canada
Indian and Northern Affairs Canada
International Development Research Centre (IDRC)
Unesco Canada/MAB (Man in the Biosphere)
Program
University of Manitoba

The goals of the conference are the exchange of knowledge among diverse disciplines, areas, and resource types; the mutual exchange of practical experience; and the study of institutional arrangements for the sustainable use of the commons.

The overexploitation or degradation of common property (common pool) resources is a universal problem. The nature and scope of the issue are widely recognized among resource scientists and managers. The International Association for the Study of Common Property is devoted to understanding and improving the management of these resources.

Association members work in various resource sectors including fish and wildlife, forestry, grazing lands, and water. Members are scholars, government officials, resource managers and development consultants - all with a shared interest in understanding common property management in order to avert "tragedies of the commons".

Relevant subject areas for the conference include:

- agricultural and resource economics
- anthropology of development;
- rural sociology
- applied ecology and resource management
- development planning
- environmental planning
- ecological economics
- economic geography

- environmental and forest history
- experimental economics
- institutional economics
- game theory and the evolution of cooperation
- international environmental cooperation
- political science and public choice
- public policy
- social psychology and social traps.

Topics for symposia, individual papers and panels include:

- Alternatives in establishing property rights over commons
- Incentives and disincentives for commons management
- Co-management and local level management case studies
- Community-based economic development in isolated communities
- Designing viable institutions for common property management
- Integrating traditional knowledge with resource science
- Global and international commons problems
- Local participation and conservation planning
- Management of coastal, small-scale fisheries
- Methods for commons management for multiple use
- Resource sustainability in small island ecosystems
- Regional development for sustainability and equity
- Sustainable and equitable development
- Valuation of common property resources
- Volunteer environmental stewardship.

Symposium proposals and paper abstracts are due by March 31 st.

For more information, write to the program committee chair:

Dr. Fikret Berkes
 Brock University
 St. Catharines, Ontario L2S 3A1, Canada
 Telephone: (416) 688-5550/3291
 Fax: (416) 682-9020 or 688-2789

Economic Value of Wilderness

A consortium of forestry and environmental groups is organizing a **National Conference on the Economic Value of Wilderness**. The conference will be held at Jackson, Wyoming, USA, May 9-11, 1991. The text of the announcement and call for papers follows.

"Initial Announcement: Wilderness is an integral part of the nation's system of federal land. Since 1964 the National Wilderness Preservation System has grown to 91 million acres in size and is used for recreational, scenic, scientific, educational, conservation and historical purposes, in addition to other nonconforming uses such as grazing. The extent and economic value of wilderness use, and the effects that wilderness designation and management have on

local and national economies are of considerable public interest and deserve further examination.

"You are cordially invited to participate in the National Conference on the Economic Value of Wilderness in Jackson, Wyoming in May 1991. Conference co-sponsors are the Society of American Foresters' Wilderness Management Working Group, the U.S. Department of Agriculture Forest Service Southeast Experiment Station, Bureau of Land Management, Wilderness Society, Sierra Club, American Wildlands, University of Georgia, Colorado State University and International Wilderness Leadership Foundation.

The objectives of the conference are:

- to improve knowledge of direct and indirect economic value, supply and demand, and other benefits and costs of wilderness uses
- to improve knowledge of the effects of wilderness designation and management on the economic stability of surrounding communities
- to improve understanding of the capabilities and alternatives to economic measures of wilderness values.

"Call for Papers and Posters: Papers and posters on different aspects of the economic value of wilderness are now being invited for presentation at the conference and/or publication in the conference proceedings. Topics include:

- conforming wilderness use with commensurable value (including non-motorized and undeveloped recreation, scenic, water and wildlife)
- nonconforming wilderness use with commensurable value (including grazing, mining, and commercial outfitting)
- conforming wilderness use with incommensurable or intangible value (including biodiversity, science, cultural, human development, and spiritual)
- foregone public land use with commensurable value (including timber, minerals, oil, and gas, and motorized and developed recreation)
- role of economics in wilderness decision-making (including designation, planning and management functions)
- alternatives to economics in valuing wilderness (including quantitative and qualitative valuation and decision-making methods.)

"Preferred subject areas for the above include:

- supply and demand projections for wilderness resource outputs
- benefits and costs of producing wilderness resource outputs
- social and environmental implications of producing wilderness resource outputs
- wilderness designation and management implications of producing wilderness resource outputs

- assessment of economic and alternative methodologies to value wilderness resource outputs
- needed research in any of the above subjects.

"Submission Procedures & Information:

"Abstracts of proposed papers and posters for the conference may be submitted until November 30, 1990. Abstracts should be limited to 500 words or less and should clearly indicate for which topic the paper or poster is to be considered. Two copies of each abstract are requested. Notification of acceptance will be by January 25, 1991. Authors are not limited to one proposed paper or poster."

All abstracts and inquiries about the conference should be directed to:

National Conference on the Economic Value of Wilderness
 c/o Claire Paine
 Southeast Forest Experiment Station
 Forestry Sciences Lab
 Carlton Street
 Athens, Georgia 30602, USA
 Telephone: (404) 546-2451
 Fax: (404) 546-2478

Western Social Science

The Resource and Public Land Use Section of the Western Social Science Association has issued a call for papers for their annual meeting to be held April 24-27 in Reno, Nevada, USA. An extract from the announcement follows.

"The Resources and Land Use sessions of the WSSA are important in that they bring together many of the social sciences and natural resource disciplines. Professionals from economics, political science, sociology, environmental psychology, as well as human ecology, natural resources, and recreation will participate in the Section."

"This year we are interested in the topics listed below:

- society and natural resources
- human ecology of resources and land use
- natural resources recreation
- natural resource negotiations and decisions
- recreation and instream flows
- natural resource law and policy
- public perceptions of resource and land use."

Proposals for individual presentations or panels are due by December 3. Such proposals need only include a title for the paper, presentation or panel, names and professional affiliations of all authors and a brief description of the research. Formal abstracts will be required early in 1991. Contact:

Jonathan Taylor or Nina Burkardt
 WSSA
 c/o U.S. Fish and Wildlife Service
 National Ecology Research Center
 4512 McMurray Avenue
 Fort Collins, Colorado, 80525-3400, USA
 Telephone: (303)226-9445
 Fax: (303) 226-9230

Conferences

IUFRO - Forest History

The International Union of Forestry Research Organizations subject group on forest history plans to hold a meeting in Freiburg, Germany, September 2-7, 1991. The announced theme is "**History of Small-Scale Forestry - History of Peasant Forestry**". The deadline for paper and poster proposals has passed, but anyone interested in this topic is urged to contact the conference organizers for more details.

Prof. Dr. H. Brandl
 Forstliche Versuchs und Forschungsanstalt
 Baden-Württemberg
 Abt. Betriebswirtschaft
 Wonnhaldestrasse 4
 D-7800 Freiburg i.Br. GERMANY
 Telephone: 0761-4018-262

CPR Publications

Conference Papers

Listed below are the titles and authors of all papers presented at the first annual meeting of the International Association for the Study of Common Property held at Duke University September 27-30, 1990. A complete set of abstracts is contained in the conference program, a limited number of which are still available. The papers themselves are not available from the conference organizers nor from the *Digest*, but may be available from the authors.

The Management of Common Property in a Mexican Indian Pueblo, James M. Acheson, (Anthropology), University of Maine.

An Analysis of Decision-Making Arrangements among Migrant Shepherds in India: The Case of the Raikas, Arun Agrawal, (Political Science), Duke University.

Managing Fisheries Resources in the Sea of Japan: National Interest, International Cooperation, and Common Property, Tsuneo Akaha, (Political Science), Monterey Institute of International Studies.

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Fishermen, Landscapes and Resources on the New Jersey Coast, John Sinton, (Land-use and Resource Planning), Stockton State College.

Property Rights In Fisheries Resource Allocation: A Human Ecology Perspective from Southeast Asia, Mike Skladany, (Sociology), Michigan State University.

Solutions to the "Tragedy of the Commons:" Sea Urchin Management in St. Lucia, West Indies, Allan H. Smith, (Biology), Carribbean Natural Resources Institute; Fikret Berkes, (Environmental Studies), Brock University.

The Strategy of the Commons: Transformations in the Meaning and Management of Communally Held Resources on Vella Lavella Island, Solomon Islands, Jody (Lamaduri) Solow, (Human Geography), Cambridge University.

The Suppression of Common Property in Latin America, Douglas Southgate, (Resource Economics), Ohio State University; Peter May, Food and Agricultural Organization of the United Nations.

Common Property Rights: From Swiss Grazing to Global Environmental Change, Glenn G. Stevenson, (Resource Economics), Oak Ridge National Laboratory.

Institutional Arrangements for Development Investment in Common Property Resources, William Stewart, (Forestry and National Resources Management), University of California at Berkeley.

From Common Property to International Commons: Lessons and Implications, Steve Stroman, (Political Science), Duke University.

Tenure and Strategies in African Livestock Development, Brent Swallow, (Agricultural Economics), Land Tenure Center, University of Wisconsin.

Common Property and Community Formation: The Origins of Self-Governing Villages in Late Medieval Japan, 1300-1500, Kristina KadeTroost, (History), Harvard University.

Farming the Edge of the Sea: The Sustainable Development of the Dutch Mussel Fishery, Rob Van Ginkel, (Anthropology), University of Amsterdam.

The State versus Subsistence in Alaska, John Wiener, (Geography), University of Colorado.

When are Common Property Institutions Efficient?, James Wilson, (Resource Economics), University of Maine.

The Commons in American Homeowners Associations: Levels of Sociocultural Integration, Honggang Yang, (Anthropology), University of South Florida.

Farmer-Managed Irrigation Systems: How Sustainable?, Robert Yoder, (Agricultural

Engineering), International Irrigation Management Institute, Kathmandu.

Designing the Marine Commons: Deep Sea Raft Fisheries and Island Royalties in Indonesia's Makassar Strait, Charles Zerner, (Law and Environmental Policy), Food and Agricultural Organization of the United Nations.

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Dr. Margaret McKean
Department of Political Science
Duke University
Durham, North Carolina, 27706, USA
Telephone: (919) 684-3164
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Temperate Mountain Forests

Member Martin Price at the National Center for Atmospheric Research in Boulder, Colorado recently published an article entitled "Temperate Mountain Forests: Common-Pool Resources with Changing, Multiple Outputs for Changing Communities" in the *Natural Resources Journal*. The abstract and excerpts from the paper itself follow.

"Abstract: This paper broadens the concept of common-pool resources with reference to forests, which supply many joint products whose relative importance to different communities has changed over time. Case studies refer to forests in the Swiss Alps and Colorado Rocky Mountains (USA). For each region, two levels of analysis are developed. These concentrate on outputs of wood, recreation and protection from natural hazards, and consider: 1) policy development for the two regions and a study area within each; and 2) the changing supply of forest products from the study areas within the context of changing policies and demands on the forests."

The treatment of common-pool resources as providing limited outputs to well-defined communities undoubtedly simplifies analysis and modelling. However, the use of every resource is ecologically and economically tied to the use of other resources, so that no resource should be considered in isolation. In addition, historical changes in the relative importance of a resource's joint products are ignored. These products may continue to be supplied to an easily-defined community over long periods of time. Alternatively, the community of users may change over time and vary between outputs. The objective of this paper is to broaden the concept of common-pool resources with reference to temperate mountain forests, which may supply joint products whose relative importance to many communities has changed over time. The case studies are drawn from the forests of two temperate mountain regions, the Alps and the Rocky Mountains."

"In sum, it is crucial that local communities support the management of adjacent forests. While these forests are also important to national communities, the future of local communities is most clearly tied to the future of these forests. Future legislation and policies for their management should recognize that these forests provide a wide range of public goods and that, since their structure has been strongly influenced by human activities, continued human intervention in natural ecological processes is essential for the forests to continue to provide these joint products."

Price, Martin, Temperate Mountain Forests: Common-Pool Resources with Changing Multiple Outputs for Changing Communities" in *Natural Resources Journal*, Volume 30, Summer 1990.

Commons' Policy in Rajasthan

In "Commons' Policy as Process: The Case of Rajasthan, 1955-1985", Rita Brara "argues that the act of translating what were common grazinglands by usage into a legal, written record through a settlement in Rajasthan led to distortions that militated against the interests of those who were dependent on its produce. Since the settlements were between unequals in political power, the juridical land-use categories grafted on common lands often became impositions. Also, the provisions of four interconnected acts that have a bearing on the subject are often mutually inconsistent. And the pre-eminence of the state in determining land-use is neither supported by principles of jurisprudence nor warranted by the commitment to help the landless."

This article includes an examination of twelve legal cases from Rajasthan to arrive at some inferences. The following description of the legal processes of recognition of rights will be familiar to people who have worked in many other countries or situations.

"The 'record' of usage was not a politically neutral activity. How prior common lands were classified in the 'record' was itself manipulated. The social context was one in which 'proof of possessing private *khatedari* rights on village commons came to assume more significance than the fact of existing rights in common over those tracts. Those who later judged conflicting claims, however, could see no alternative to 'proof than the 'record' itself."

"Instead of realizing that enlightened policy could entail a greater appreciation of customary rights, the state tried to be progressive by the allotment of lands carved out of the commons. The pre-eminence of the state, justified by progressive legislation *vis-a-vis* cultivated lands that was celebrated as land reform was counter-productive and regressive when carried over, as the spirit of the times, to the question of the commons."

Brara, Rita, "Commons' Policy as Process: The Case of Rajasthan, 1955-1985" in *Economic and Political Weekly*, (New Delhi), October 7, 1989.

Given the limited circulation of this periodical outside of India, interested individuals should contact the author:

Rita Brara
Institute of Development Studies
B-118, Mangal Marg
Bapu Nagar
Jaipur, 302-017, INDIA

Environmental Risk and the World Economy

Ford Runge examines relationships between health, the environment, and world trade in a recent article. "Health and the environment are no longer purely matters of domestic policy. In the 1980s air pollution, acid rain, and global warming became major items on the international agenda. That shift reflects growing recognition of the global impact of economic development and the rising problem of international "externalities," as hazards spill over national borders and affect the oceans, air, and climate.

"But just as health risks flow through the world's physical environment, so they also flow through the world economy and threaten to disrupt it. Risk tends to move to countries with the least regulation, in some cases because the advanced economies are directly exporting to the less advanced various products and production methods no longer considered safe at home. Ironically, the higher the advanced countries set their regulatory standards, the more they create incentives for a kind of 'environmental arbitrage,' that is, for making a profit by producing goods cheaply where regulation is lax and selling them dearly where regulation is strict. Some regulatory differences exist among countries at the same stage of development, but in the world as a whole, the flow of environmental and health risks runs from the advanced North to the developing nations of the South."

Runge, C. Ford, "Environmental Risk and the World Economy", in *The American Prospect*, Vol. 1, No. 1 (March 1990).

The American Prospect is a new journal dealing with U.S. public policy issues. For more information contact:

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Sustainable Development in Canada

Network members are generally well aware of the importance of well-defined rules in property rights regimes and in resource management. A recent report produced by the Canadian Bar Association (CBA) explicitly reviews legal alternatives or innovations which might foster sustainable development in Canada. The report was produced by a special committee created by the CBA in 1989 to draft a Sustainable Development Action Plan.

"According to John Jennings, CBA president, The Committee's report identifies important areas where federal leadership and direction is urgently required and suggests ways in which the goal of sustainable development could be achieved. It puts forward a difficult and possibly controversial agenda for the future, but one that must be seriously considered if Canadians are going to ensure the well-being of future generations."

The volume includes a 25 page introduction outlining key issues followed by some 30 pages of specific "Proposed Recommendations for Federal Environmental Law Reform." The bulk of the book contains the following 22 background papers supporting the proposed changes.

1. "The Environment, Sustainable Development and the Limits of Constitutional Jurisdiction", H. Scott Fairley
2. "Principles of Environmental Assessment at the Federal Level", Roger Cotton and Glen Bell
3. "Public Access to Environmental Justice", Franklin Gertler, Paul Muldoon, and Marcia Valiante
4. "The Nuclear Liability Act: Nuclear Power Versus Legal Rights", David Poch
5. "Spending Green: Federal Expenditure Reform and Sustainable Development", Ted Schrecker
6. "Reducing Solid Waste", Steven Shrybman
7. "Toward a National Pollution Prevention Strategy: Principles for Reform to Address the Problem of Toxic Contamination of the Canadian Environment", Paul Muldoon
8. "Federal Pesticide Regulation", Toby Vigod
9. "The International Regulation of Atmospheric Pollution", Moira L. McConnell
10. "Sustainable Development and Marine Environmental Protection", Moira L. McConnell and David VanderZwaag
11. "Water Diversion/Exports and Sustainable Development", J. Owen Saunders
12. "International Water Resources: Canada-United States of America", Charles B. Bourne
13. "Federal Law Reform Proposals for Sustainable Forestry", Monique Ross
14. "International Regulation of Fisheries", Richard Paisley
15. "The Federal Government's Role in the Protection of Endangered Species", Ronald I. Orenstein
16. "Migratory Birds", Andrew R. Thompson and Nancy A. Morgan
17. "Sustainable Development in Canada's North", Stephen D. Hazell
18. "International Law Reform and the Protection of the Arctic", Nigel Bankes
19. "International Regulation of the Antarctic", Maurice Copithorne and Deborah Overholt

20. "The Rule of Law and Sustainable Development", Linda F. Duncan

21. "The New International Environmental Protection Law: The Enforcement Role of the International Court of Justice", Edward McWhinney

22. "Tanker Traffic and Oil Spills", David Anderson."

Canadian Bar Association, *Sustainable Development In Canada: Options for Law Reform*. Ottawa, CBA, 1990. 316 pp. ISBN 0-920742-11-4. Price not stated.

The report is available in both English and French from:

Canadian Bar Association
Suite 902, 50 O'Connor Street
Ottawa, Ontario, K1P 6L2, CANADA

Property Rights and Public Choice in Water Districts

Michael Rosen recently completed a Ph.D. dissertation in Agricultural Economics at the University of California at Davis on *Property Rights and Public Choice in Water Districts: An Application to Water Markets*. The abstract follows.

"A hot topic among resource economists is the subject of water markets. 'Water Markets' can refer to water trades, water transfers, water exchanges, water banks, or any other idea to save or create water by treating water as an economic good.

"Based on the results from my research I estimate that in the Imperial Valley of California the net gain from a water market could approach ten percent of the total net income from farm operations.

The Imperial Valley is an irrigated agricultural area near the border of Mexico. The Valley is 400,000 acres in size and diverts 2.5 million acre-feet of water from the Colorado River. After five years of negotiations the Valley recently concluded a water transfer of 100,000 acre-feet to the urban areas of Southern California.

"I use a model of the water district as a common property resource to analyze why the response in the Imperial Valley to water markets has been less enthusiastic than economists might expect. The water rights of the water district are the ability to divert a fixed quantity of water each year. The rights in the Imperial Valley are held as joint property. The water district entity acts as the trustee of the property for the members of the water district.

To cut back water use and free up water for transfer, the water market requires either that the district invest in conservation projects or that farmers idle land or shift their crop mix. Funds are received in exchange for the water transfer to pay for the investment projects or to be paid directly to farmers. Common property water rights do not provide direct incentives for farmers to participate in the water market. The water market may be the external policy

shock that provides the impetus to shift from common property to private property. Private property would consist of apportioning the water rights among the land owners according to the assessed valuation of land.

"But common property may be difficult to dislodge so that private property rights cannot evolve. Privatization can occur with little discord when there is equal uncertainty about the effects of privatizing the resource and equal abilities among the players. The conditions of equal uncertainty and equal ability do not exist in the Imperial Valley.

"I use farm-level survey data and programming models to estimate how farmers will respond to the water market. My results indicate that the members of the district can be divided into two groups. One group contains farmers who are land owner-operators and farmers who rent land and grow high-risk high-income vegetable crops. This group favors the switch to private property, no investment in conservation projects, and the direct payment to farmers of the water market funds. The other group contains farmers who rent land and grow low-risk low-income field crops. This group favors retaining common property and the use of the water market funds to finance the conservation projects.

"The tragedy of the commons is usually depicted as the depletion of a common property resource. The depletion occurs because too little capital is invested in protecting or maintaining the resource. The tragedy of the commons for the water district is a twist on the usual view. The water resource itself cannot be depleted since it is replenishable. The depletable resource is the capital received from the water transfer. The benefits may be dissipated through less-than-optimal group decisions in managing the water resource. The investment of capital into the water delivery system may be seen as the only alternative to dealing with the switch to private property. The tragedy of the commons for the water district is the investment of too much capital into the water delivery system. I estimate that the investment plans currently proposed for the Imperial Valley will dissipate almost all of the net gains from the water market.

The discord caused by the switch to private property may block the full enactment of the water market and limit the ultimate amount of water that can be created or saved. I conclude that the tragedy of the commons may be introduced into the water district from the initiation of the water market."

The author can be contacted at the following address:

Dr. Michael D. Rosen
Department of Agricultural Economics
Voorhies Hall
University of California, Davis
Davis, California, 95616, USA
Telephone: (916) 923-0890

Farmer Innovation and Agricultural Research

Editor's Note: Robert Chambers is known to many members of the Network as one of the more provocative and articulate critics of many development project strategies. Along with two other co-editors, he has produced a new book that has been recommended by more than one network member as something that should be read by anyone involved in agricultural, rural or resource components of development activities. While I have not yet gotten a copy of the book, the following extract from the publishers flyer is said to be a fair description of the book's contents.

"*Farmer First* presents a new approach for agricultural research. Starting with farmers' own innovation, contributions from the agricultural and social sciences, ecology, economics and geography make the case for a farmer-first mode to complement conventional procedures for research and transfer of technology.

The successes of the green revolution have been largely limited to irrigated and well-watered environments. Elsewhere, in rainfed, fragile and difficult environments, where hundreds of millions of poor families seek their living, the performance of agricultural research has been disappointing. Poverty, population projections, deforestation and environmental degradation together point to the need for sustainable increases in production in these areas. The challenge is to find more effective ways to serve their complex, diverse and risk-prone small farming systems.

The theme of *Farmer First* is that much of the problem lies in the processes of generating and transferring technology, and much of the solution lies with the farmers. In the farmer-first mode, analysis, choice and experimentation are mainly by farmers themselves. Outsider professionals act as catalysts and consultants. The package of practices of the green revolution is replaced by a basket of choices."

Chambers, Robert; Arnold Pacey and Lori Ann Thrupp *Farmer First: Farmer Innovation and Agricultural Research* Bootstrap Press, New York, 1990. 238 pp. ISBN 0-942850-16-5. US\$23.50 (hardcover) \$12.50 (paperback)

Bootstrap Press is the publishing arm of the Intermediate Technology Development Group of North America and its publications are also generally available from Intermediate Technology Publications in London.

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New York, New York, 10017, USA
Telephone: 212-953-6920