No. 4 February 1993

Newsletter
Programmes - Agenda - News

- ETFRN - Board Meeting
- Cirad - Forêt
- ETFRN - Task Forces
The European Tropical Forest Research Network (ETFRN)

has been established in October 1991 in order to provide information and services to support research on tropical humid and dry forests. This includes all research areas related to the tropical forest environment. The aim of ETFRN is to increase the cooperation and concertation of research institutions, governments and industry of European and Tropical countries through well-targeted information management. ETFRN organizes and participates in workshops and seminars. It supports the users in exploiting existing funding sources and in establishing research cooperations. It will use and support the development of a Global Tropical Forestry Research Information System.

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Impressum

The ETFRN-Newsletter is a quarterly publication of the European Tropical Forest Research Network; free copies can be obtained from:

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c/o Arbeitsgemeinschaft Tropische und Subtropische Agrarforschung (ATSAF) e.V.
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5300 Bonn 3
Tel.: +49-228-4001 313
Fax: +49-228-4001 311

Editor: H. Freiberger
Editorial Coordination and Design: M. Reule
Editorial Assistant: A. Claßen
Organizations-Institutions Programmes

The World Rainforest Movement

The World Rainforest Movement (WRM) is an international network of citizen's groups campaigning to defend the rainforests. It is based in the Third World Network (TWN) and Asia Pacific Peoples Environment Network in Penang, Malaysia. The movement includes rainforest and ecological groups in forest countries such as Brazil, India, Malaysia, Thailand, Indonesia and the Philippines, as well as groups in Europe, North America, Japan and Australia.

The WRM runs a special programme to chart the forest peoples' response to the tropical forest crisis, based on securing the rights of those who live in and directly from the forests to directly control their lands and destinies.

This programme has four main goals:
1. to help create an effective global network of forest peoples.
2. to help prepare a charter of forest peoples' demands.
3. to document real and practical examples of community-based, sustainable forest management.
4. to counter top-down planning and official solutions to the deforestation crisis, which deny local people a decisive voice about resource use in their areas.

For a copy of the "Charter of the Indigenous-Tribal Peoples of the Tropical Forests" and for more information about how you can support their work you can write to:

World Rainforest Movement
Forest Peoples Programme
8 Chapel Row
Chadlington, OX7 3NA
England, U.K.
Tel: +44-60-87 66 91
Fax: +44-60-87 67 43

The Brazilian Agroforestry Network
REBRAF

Established in 1988, the Brazilian Agroforestry Network (REBRAF) is a non-profit, non-governmental organization, dedicated to promote agroforestry as a land use alternative. REBRAF's priorities are:

Agroforestry Training:

The planning and delivery of short-duration agroforestry training courses for small producers and extension agents, at the community level, constitutes REBRAF's main activity.

The first grassroot training course was carried out in September 1991. Since then, REBRAF delivers an average of one course every month, training approximately 30 small farmers and 10 professionals in each course. During these courses, most of the time is spent in the field.
Colaborating institutions include the German Technical, Economic and Social Cooperation Service (SACTES), the Brazilian Network for Alternative Agriculture (RedePTA), the Companhia Vale do Rio Doce, rural Labor Unions, Universities, and several local grassroots organizations.

**Agroforestry Development:**

Convinced that the effective implementation of agroforestry requires the participation of rural communities, REBRAF decided to act as a bridge between funding agencies and those communities.

Given the immense area of Brazil and its wide range of environmental and social conditions, REBRAF can play a crucial role in identifying appropriate projects and assisting in their design and implementation.

During the last three-and-a-half years (January 1989 - June 1992), REBRAF has assisted two community-based projects with agroforestry components: one in Ouro Preto do Oeste (Rondônia) and one in Paragominas (Pará). Initially supported by the Canadian Embassy, both projects have been upscaled: the one in Rondônia is now under the leadership of IPHAE, a local NGO, and the one in Pará has financial support from the Ford Foundation and the World Wildlife Fund. The two projects involve training activities, the establishment of small nurseries and demonstration plots, diversification and intensification of agricultural and tree crops, and direct marketing of farm products.

REBRAF has also provided short-term assistance to a number of other development projects in the Amazon, related to processing and marketing of forest products, recuperation of degraded soils, and viability of extractive reserves.

As result of the training courses, REBRAF supports programs for sustainable development, such as the ones in the Lower Tocantins in Pará, and Cocais in Maranhao.

**Documentation and Information:**

The dissemination of appropriate technical information is a crucial task in promoting agroforestry initiatives and public awareness. To accomplish this task REBRAF operates a network of people engaged in agroforestry throughout Brazil, and publishes a technical newsletter quarterly, which is distributed to approximately 1,000 readers.

REBRAF is expanding its Documentation and Information Unit, including the production and publication of illustrated booklets with appropriate information for small producers, based on the knowledge acquired during the courses and other selective sources of information.

For further information please contact:

REBRAF  
Rua visconde de Pirajá  
111/713 Ipanema  
22410-001 Rio de Janeiro  
Brasil  
Tel: + 55 21-5 21-78 96  
Fax: + 55 21-5 21-15 93
Amazon Cooperation Treaty - ACT

The Amazon Cooperation Treaty (ACT) was signed on July 3, 1978 by Bolivia, Brazil, Colombia, Ecuador, Guyana, Peru, Suriname and Venezuela, in order to "carry out efforts and joint actions to promote the harmonious development of their respective Amazonian territories so that these joint actions will produce equitable, mutually advantageous results, as well as the preservation of the environment and the conservation and rational use of those territories' natural resources". This basic objective embodies the concept that is now known as 'sustainable development'.

For implementation, the Treaty established several mechanisms:

1. Meetings of Ministers of Foreign Affairs, as a decision-making body that establishes the basic guidelines for common policy and evaluates the overall progress made in this process.

2. The Amazon Cooperation Council, comprising top-level diplomatic representatives to oversee compliance with the Treaty's objectives and purposes and with decisions made by the Meeting of Ministers.

3. The Secretariat of the Treaty, hosted on a pro tempore basis by the country in whose territory the next meeting of the Council is to be held, responsible for implementing the activities stipulated by the Treaty and those ordered by the Meeting of Foreign Affairs Ministers and by the Amazon Cooperation Council.

4. Special Commissions, as an operational level geared towards studying and promoting activities regarding specific problems or issues, of which there are currently six: environment, science and technology, indigenous affairs, health, transport, tourism and information. These programs and projects now constitute a mandate for the work to be done in these coming years. The top-priority projects have to do with processes for adoption of regional policies and strategies and with the corresponding national policies and strategies in substantial areas, and effective, ongoing application thereof.
health, transport, infrastructure and communications, and tourism.

The programs and projects are to be implemented through specific cooperation networks for each case, comprising public and private institutions selected by each country's sovereign decisions. The Secretariat of the Treaty and the Executive Secretariats of the Special Commissions coordinate and support activity implementation on a general basis, contributing to the coordination and direction that is handled, in each case, by an institution in a given country. Over one hundred public and private institutions in the eight Amazonian countries are involved in and committed to specific actions under ACT projects.

The International Community is reacting in accordance with the great priority that proper management of the Amazon region holds for the entire world. As of 1990, several organizations have been providing technical and financial support for various operations and projects, and discussions are under way with other organizations and countries that have shown interest in supporting the Treaty.

For further information please contact:
Tratado de Cooperación Amazonica
Secretaria Pro Tempore
Av. Amazonas 1188
5to. Piso
Quito
Ecuador

Tel: +5 93-2-54 04 55
Fax: +5 93-2-56 58 09

A 40-year-old French Organization in charge of tropical forestry and wood science, the CTFT (Centre Technique Forestier Tropical), recently changed its name and is now called CIRAD-Forêt. But job and people remain the same.

This new name better shows how a closer relationship is now possible, within CIRAD, between foresters and agronomists, and no doubt this new situation will benefit to those who cooperate with CIRAD.

Research Areas

CIRAD-Forêt carries out problem-oriented research in the following areas:

Forest Management

*Natural forest management, in humid Tropics. The question is: Which silviculture is possible to improve the commercial value of the natural forests, keep their biodiversity and contribute to their regeneration? A research network has been progressively created in the past 15 years in Côte d'Ivoire, Brazil, Central African Republic, French Guyana, Indonesia, Gabon.

*Forest survey and mapping, using remote sensing combined with ground checking. Specific survey technologies have been developed, according to the various situations and purposes. The statistical design and biometrics change in lowland or
mountainous forest, in evergreen or in dry Sahelian forest.
* Planted forest. How to establish new tree stands on waste areas, how to produce timber, poles or fuelwood? Research is currently done, for example on Teak and Obeche for timber production, on Eucalyptus for pulpwood and fuelwood, on Acacia for several purposes, etc.

Biodiversity and Genetic Variability - Genetic Resources and Tree Improvement

* Genetic resources. Collection in the natural areas of distribution, evaluation of forest genetic resources, storage in cold room, study of biochemical diversity markers, multilocation comparative trials. More than 600 different species, 1500 provenances, 9000 seedlots are kept in the cold rooms and distributed for research purpose within the frame of CIRAD-Forêt cooperation.
* Tree improvement. Selection, breeding, vegetative propagation, manual pollinating and hybridization for some species, for instance in Congo, result in an increased productivity in planted forests - and in new problems for the researchers (clonal silviculture, clonal interaction).
* Root symbioses. A common ORSTOM - CIRAD-Forêt lab on "Biologie des symbioses forestières tropicales" (BSFT) makes research on the trees (Acacia, Casuarina, Eucalyptus) and their associated symbionts (Rhizobium, Frankia, Mycorrhiza). The symbioses are also studied through a number of field experimentations. BSFT is conducting research on four main areas:
- symbioses establishment,
- biochemical and molecular study of the Casuarina-Frankia symbiosis,
- improvement of the host plant productivity (in vitro culture, genetic, transformation),
- ecophysiology of nitrogen-fixing symbioses.

Agroforestry and Soils Conservation

* This research programme studies what is the need for trees in agricultural systems, and what is the right answer, according to each particular situation (land tenure conditions, expected benefit or production).
* Socio-economics, forestry laws, wood marketing.

Wood Technology

* Question-answer service to the timber industry. CIRAD-Forêt has been collecting for a long time information on wood properties (anatomical, physical, mechanical, etc.), on their preservation and process requirements.
* Relationship between growth conditions and wood properties.
* Wood energy, charcoal production.

Other Activities

In addition to these four research programmes, there are at CIRAD-Forêt headquarters a Library (50 000 references), a Biometrics Unit (research unit and service to the researchers), an Operation Bureau in charge of managing extra-core budget contracts, a Training Service in close rela-
CIRAD-Forêt publishes a quarterly journal created in 1947 whose name is "Bois et Forêts des Tropiques". It is distributed in many tropical countries, and sent to universities, wood industry managers, and forest administrations. It is written in French, with a full page summary in English for the main articles, and with French and English captions under illustrations.

Where CIRAD-Forêt Works

Over 150 researchers and technicians work in CIRAD-Forêt. Half of them are on duty overseas, in French speaking countries of Africa and the Indian Ocean, in South-East Asia (Indonesia, Malaysia, Thailand, Singapore), and in America (French Guyana). Complementary to the long term assignments, CIRAD-Forêt is also requested for short term consultancies.

The long established cooperation between CIRAD-Forêt and tropical countries works as an informal but effective international network in forestry research which sometimes got good results and also really contributes to an international friendship between tropical forestry scientists.

For further information please contact:

François Grison
CIRAD-Forêt
Avenue de la Belle Gabrielle 45 bis
94736 Nogent-sur-Marne cedex
Tel: +33-1-43 94 43 00
Fax: +33-1-43 94 43 29

Earthwatch is a charitable organisation and one of the world’s largest sources of non-governmental funding for field research. It was founded in Boston, USA in 1971 and opened its European office, Earthwatch Europe, in Oxford in 1990 in order to strengthen links with the research community at research institutions throughout Europe and the developing countries.

Earthwatch invites proposals for field research in its 1994/95 programme. Grants of £5,000 - £50,000 are available for field research in Earth, Life and Human Sciences.

The Centre for Field Research encourages proposals to conduct both basic and applied research. Earthwatch will provide funds and volunteers, in whole or in part, to mobilize approved projects. Proposals are welcome from scholars of any nation. Post-doctoral research is preferred. Preliminary proposals of 1 - 3 pages are suggested including research objectives, field dates, need for volunteers and estimated budget. Project proposals must include field work requiring the assistance of 2 - 3 week teams of volunteer assistants from Earthwatch.

Full proposals should be submitted twelve months before the project start date.
Approved projects are added to the Earthwatch programme six times per year. Preliminary proposals for the 1994 field season must be submitted by March 14th 1993.

Research Priorities for 1994 - 1995:

Multidisciplinary Research

* Studies that contribute to the development of more accurate models of climate change and its impacts on humankind and the biosphere.
* Studies that serve to ground truth data collected via geographic information systems and remote-sensing.
* Research in environmental archaeology concerned with human adaptation to changed environments in prehistoric and historic times and with the role of human kind in altering local environments.
* Investigations of the relationship between resource availability and distribution, human demographic patterns, migration, and environmental problems.
* Research that explores the potential of alternative energy sources, sustainable land and water use, and alternative agricultural systems.
* Research that integrates ecology and socio-economics.
* Studies that measure the economic values of non-consumptive uses of natural areas (eg. recreation) or that identify new or traditional sustainable uses of resources in threatened eco-systems (eg. ethnobotany).
* Studies of the influence of developed lands on adjacent natural communities.

* Studies that identify important linkages between the abiotic and biotic components of natural and managed eco-systems.
* Studies that identify biotic or abiotic indicators of habitat disturbance, declining biological diversity, or environmental contamination.
* Studies that contribute to successful restoration of degraded eco-systems.

Life Science Research

* Research that elucidates factors important to the persistence of rare species and the recovery of threatened species.
* Studies of the behaviour and ecology of species that threaten the integrity of natural eco-systems (eg. introduced species, pests, etc.).
* Comprehensive botanical surveys that advance our knowledge of plant taxonomy, ecology, and evolution.
* Floral and faunal inventories that, by documenting an area's biological diversity, demonstrate both the value and optimal approach to habitat conservation.
* Biological inventories that serve as baseline studies for monitoring the impacts of climate change, pollution, and land use patterns.

Humanities and Social Science Research

* Studies that probe questions about global food security.
* Studies that investigate women's health status in its social and economic context.
* Research aimed at conserving and understanding our cultural heritage including
rock art, architecture, ethnomusicology, folklore, and textiles.

* Research which investigates the relationship between rural livelihoods and the management of the natural resource base.
* Research which looks at poverty alleviation in the context of environmental change.
* Studies which investigate the social, economic and cultural values held by local communities for different aspects of their environment (e.g. forests).

**Physical Science Research**

* Investigations that focus on the transfer of chemicals, mass and energy within and between the atmospheric, geologic, marine, and hydrologic reservoirs of the whole-earth system.

For additional information on application procedures, eligibility or submission deadlines, please contact

Louise Henson
(Science Projects Negotiator)
Earthwatch Europe
Belsyre Court
57 Woodstock Road
Oxford OX2 6HU
United Kingdom

Tel: +44-8 65-31 16 00
Fax: +44-8 65-31 13 83

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**News**

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**2nd Board Meeting of ETFRN**

On 26th November 1992 the 2nd Board Meeting of ETFRN took place in Brussels at the premises of the Directorate General XII of the Commission of the European Communities. The main results of this meeting were:

**ETFRN/AGREP**

Also in future, AGREP should be supported by all ETFRN National Nodes, as far as tropical forestry research is concerned. Currently the discussion on technical questions of data-collection and data-processing within ETFRN and AGREP are being discussed. A first meeting was held in Paris on 14th December.

**ETFRN's Relation to Tropical Institutes**

ETFRN’s geographical field of activity and the corresponding institutes will remain limited to the dry and humid Tropics, although this is no dogma. The flow of information to and from tropical countries should be developed in three steps:

1. The European research institutions inform their employees in the Tropics on tasks and aims of ETFRN; the National Nodes will set up a list of all persons/institutions in tropical regions who are interested in ETFRN, and transmit this list to the Coordination Unit (C.U.) in order to send the ETFRN Newsletter to them.
2. The C.U. will establish a list of contacts between European institutions and institutions/projects in tropical regions.

3. The Network should invite those tropical forest research institutions mentioned in step 2 to participate in the Network through an active exchange of information between research institutions of the Tropics and EFRN.

Selection and Establishment of National Nodes
The choice of National Nodes is the task of the respective countries, depending on their decision. The C.U. will present first information on EFRN at half-day meetings with interested representatives of national tropical forest research institutions. One official Node per country is desirable. However, it is possible that on a national scale more than one Node is required. In this case the Board has to be informed and will decide and confirm the Nodes officially.

ETFRN Task Forces - Procedure
The procedure of the implementation of Task Forces is described in detail in an information leaflet which can be obtained from the C.U. or from the National Nodes.

In general, every Node and each of the Board members of EFRN has the possibility to propose Task Forces. Further criteria for Task Forces are:
- they should be of interest to the EEC,
- have a concrete objective and a clear written concept of 2 - 5 pages, presented by the initiator of the TF,
- have concrete expected results,
- should indicate the expected time frame and duration,
- preliminary budget and suggestions for funding should be made.

For further information please contact the Head of the ETFRN Coordination Unit.

Task Force "Sustainable Management of Tropical Forests"
An exploratory meeting on this Task Force took place in Brussels from 8th to 9th December 1992, where the current state of knowledge on sustainable management of tropical forests and eco-labelling has been collected and described.

29 European representatives from tropical-forest-research institutions, consultings, NGOs and the timber industry participated in the meeting. A smaller group of seven participants met directly after the exploratory meeting, and elaborated a first concept for a possible study on how this problem should be dealt with.

At a meeting in Bonn on 15th January the final proposal for this study is to be worked out, and should be presented as Task Force at the 2nd General Assembly of EFRN.

For further information please contact
Dr. Thomas Wollersen
CEC DG XII B-4
200, rue de la Loi
B-1049 Bruxelles

Tel: +32-2-2 95 09 27
Fax: +32-2-2 96 62 52
European Tropical Forest Research Network

Task Force "International Forest Research-Programme Amazonia/French Guyana (PIRFAG)"

Several European countries are already involved in tropical forestry research in Latin America. For a better regional efficiency and coherence, it would be useful to enhance the concertation between all these forestry research programmes. Strengthening these research programmes appears as a necessity, as well as an opportunity to prepare a common research programme in which all the European countries involved in forestry research in Amazonia will join their effort.

During a meeting of representatives from European tropical-forest-research institutions, on 1st to 2nd February, in Brussels, this proposal is to be discussed and precised.

Further information on the Task Force PIRFAG can be obtained from:

Jean-Pierre Troy
ECOFOR
Coordinateur du PIRFAG
15 Avenue du Maine
F-75015 Paris

Tel: +33-1-45 49 88 36
Tel: +33-1-45 49 88 37 (secrét.)
Fax: +33-1-45 49 88 39

Within the Network the following meetings are planned at ETRFN Nodes:

08.02.93 Dept. of Forest Ecology, Tropical Silviculture, University of Helsinki, Finland;
01.03.93 Prof. Dr. G. Glatzel, Universität für Bodenkultur, Peter-Jordan-Str. 82, A 1190 Vienna, Austria; Fax: +43-1-47 97 896
22.03.93 UK Tropical Forest Forum, United Kingdom.

For addresses of National Nodes of ETRFN see last page!

Kleinhans Fellowship: Research in Tropical Non-Timber Forest Products

The Kleinhans Fellowship is administered by the Rainforest Alliance, a non-profit organization dedicated to the conservation of tropical forest. This fellowship is part of the Rainforest Alliance's program to develop ecologically and socially sound alternatives to the economic practices that cause tropical forest destruction.

The purpose of this award is to promote research into practical means of managing and utilizing tropical forest resources without destroying the integrity of the forest ecosystem. The research should lead to the development of a product or marketing
# European Tropical Forest Research Network

## International Agenda: Conferences

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<th>Date</th>
<th>Title</th>
<th>Contact</th>
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<tbody>
<tr>
<td>Feb. 93</td>
<td><strong>07. - 10.</strong> Sustainable Forestry in Australia - Future Directions, Armidale/Australia</td>
<td>Mrs. Jean Seppelt, New England Conference Management, University of New England, NSW 2351, Australia; Tel: +61-67-73 21 54, Fax: +61-67-71 17 13</td>
</tr>
<tr>
<td></td>
<td><strong>16.</strong> IACGEC International Meeting on Global Environmental Change - GEC Data Management, London/United Kingdom</td>
<td>Royal Society of Arts (RSA), 6 - 8 John Adam St., London WC2N 6EZ, United Kingdom; Tel: +44-71-8 39 23 66</td>
</tr>
<tr>
<td></td>
<td><strong>17. - 20.</strong> Global Forest Conference: Beyond UNCED, Response to Agenda 21, Bandung/West Java/Indonesia</td>
<td>Dr. Nani Djaungsih, The Organizing Committee, Institute of Ecology, Padjadjaran University, Jalan Sekeko, Bandung 40132, West Java, Indonesia; Tel: +62-0 22-8 49 82, Fax: +62-0 22-43 32 08</td>
</tr>
<tr>
<td></td>
<td><strong>22. - 13.03.</strong> Life Zone Ecology, San Jose/Costa Rica</td>
<td>Ing. Raul Solorzano, Tropical Science Center, P.O. Box 8-3870-1000, San Jose, Costa Rica; Tel: +5 06-25 26 49, Fax: +5 06-53 49 63</td>
</tr>
<tr>
<td></td>
<td><strong>24. - 28.</strong> World Neem Conference, Bangalore/India</td>
<td>T.S. Subramaniam, Conference Secretariat, &quot;World Neem Conference&quot;, Agricultural Research Centre, ITC Ltd.-International Business Division, 7th Floor, Amrutha Topaz, Somajiguda, Hyderabad - 500 482, (A.P.) India; Tel: +91-8 42-21 06 61/21 01 62/21 18 24, Fax: +91-8 42-21 09 21</td>
</tr>
<tr>
<td>March 93</td>
<td><strong>02. - 06.</strong> Seminar on Forest Research Management in the Asia-Pacific, Dehra Dun/India</td>
<td>FAO, Regional Office for Asia and the Pacific (RAPA), Maliwan Mansion, Phra Atit Road, Bangkok 10200, Thailand; Tel: +6 62-2 81-78 44, Fax: +6 62-2 80 04 45, Telex: 82815 foodag th</td>
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<td></td>
<td><strong>09. - 12.</strong> International Symposium on System Analysis and Management Decisions in Forestry - Forest Management and Planning in a Competitive and Environmentally Conscious World, Santiago/Chile</td>
<td>J. Douglas Brodie, Dept. of Forest Management, Oregon State University, Corvallis, OR 97331, USA; Fax: +1-5 03-78 37-49 52</td>
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<td></td>
<td><strong>12.</strong> Energy, Carbon Dioxide and Forests, Edinburgh/UK</td>
<td>Edinburgh Centre for Tropical Forests, Darwin Building, University of Edinburgh, Mayfield Road, Edinburgh EH9 3JU, Scotland, U.K.; Tel: +4 4-31-6 62 07 52, Fax: +4 4-31-6 62 04 78</td>
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</tbody>
</table>
Towards Sustainable Environmental and Resource Management: Futures for Sub-Saharan Africa, Ghana
The United Nations University, Headquarters, 53 - 70, Jingumae 5-chome, Shibuya-ku, Tokyo 150, Japan; Fax: +81-3-34 99 28 28

April 93

04. - 08.
Mountain Cloud Forest Meeting, Honolulu/Hawaii/USA
Dr. Lawrence C. Hamilton, EAPI, East-West Center, 1777 East-West Road, Honolulu, Hawaii, 96848, USA

04. - 08.
25th International Symposium on Remote Sensing and Global Environmental Change, Graz/Austria
Dorothy M. Humphry, ERIM, P.O. Box 13 40 01, Ann Arbor MI 48113-4001, USA

05. - 09.
Soil Symposium on Greenhouse Gas Emissions and Carbon Sequestration, Columbus/Ohio/USA
State University, Fawcett Center for Tomorrow, Ohio, USA;
Tel: +1-7 03-2 35 90 18,
Fax: +1-7 03-2 35 90 46

09. - 17.
Joint Conference of the University Brunei Darussalam and the Royal Geographical Society on Tropical Rainforest Research: Current Issues, Brunei Darussalam
University Brunei Darussalam, Bandar Seri Begawan 3186, Brunei Darussalam;
Tel: +6 73-2-42 70 07,
Fax: +6 73-2-42 70 03,
Tlx: bu 2725

18. - 22.
International Symposium/Workshop on the Management and Rehabilitation of Degraded Lands and Secondary Forests in Amazônia, Pará/Brazil
Dr. John A. Parrotta, c/o Dr. Peter L. Weaver, International Institute of Tropical Forestry, USDA Forest Service, Box 25000, Rio Piedras, PR 00928-2500, USA;
Tel: +1-8 09-7 66 53 35,
Fax: +1-8 09-7 66 63 02

19. - 22.
First International Symposium on the Biology of Adventitious Root Formation, Dallas/Texas/USA
Edith Franson, Executive Secretary, Rooting Symposium, USDA Forest Sciences Lab., Box 8 98, Rhinelander, Wisconsin 54501, USA;
Tel: +1-7 15-3 62 11 12,
Fax: +1-7 15-3 62 78 16

19. - 07.05.
Bufferzone Management for Protected Areas, Ciudad Colon/Costa Rica
James Barbok, University for Peace, P.O. Box 1 38, Ciudad Colon, Costa Rica, C.A.;
Tel: +5 06-49 15 11,
Fax: +5 06-49 19 29

May 93

06. - 07.
Biodiversity and Environment - Brazilian Themes for the Future, London/U.K.
The Executive Secretary, The Linnean Society, Burlington House, Piccadilly, London W1V 0LQ, United Kingdom

15. - 19.
Spatial Accuracy of Natural Resource Data Bases, Williamsburg/Virginia/USA
James L. Smith, Dept. of Forestry, 319 Cheatham Hall, Virginia Tech, Blacksburg, VA 24061-0324, USA;
Fax: +1-7 03-2 31-33 30

23. - 30.
Ecophysiology and Genetics of Trees and Forests in a Changing Environment, Viterbo/Italy
Technical Secretariat, Dept. of Forest Environment and Resources, DISAFRI, University of Tuscia, Via S. Camillo De Lellis, 01100 Viterbo, Italy; Fax: +39-7 61-25 73 89
### European Tropical Forest Research Network

#### June 93

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<tr>
<td>07. - 10.</td>
<td>Nutrient Uptake and Cycling in Forest Ecosystems, Halmstad/Sweden</td>
<td></td>
<td>Dr. L.O. Nilsson, Swedish University of Agricultural Sciences, Dept. of Ecology and Environmental Research, P.O. Box 70 02, 75007 Uppsala, Sweden; Tel: +46-18-67 25 48, Fax: +46-18-67 34 30</td>
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<tr>
<td>14. - 16.</td>
<td>Modern Methods for Estimating Tree Volume and Increment, Morgantown/W. Virginia/USA</td>
<td></td>
<td>Dr. Harry V. Want Jr., Div. of Forestry, West Virginia University, Morgantown, WV 26506, USA; Tel: +1-3 04-2 93 34 11, Fax: +1-3 04-2 93 24 41</td>
</tr>
<tr>
<td>14. - 17.</td>
<td>Conference on Growth and Yield Estimation from Successive Forest Inventories, Copenhagen/Denmark</td>
<td></td>
<td>Jerry Vanclay, Royal Veterinary and Agricultural University, Section of Forestry, 57 Thorvaldsenvej, 1871 Frederiksberg C. Denmark; Tel: +45-35 28 22 25, Fax: +45-31 35 78 33</td>
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<tr>
<td>15. - 19.</td>
<td>International Symposium on Genetic Conservation and Production of Tropical Forest Tree Seed, Chiang Mai/Thailand</td>
<td></td>
<td>Symposium Secretariat, ASEAN-Canada Forest Tree Seed Project, Muak-Lek, Saraburi 18180, Thailand; Tel: +66-36-34 13 05, Fax: +66-36-34 16 91</td>
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<tr>
<td>21. - 25.</td>
<td>Inventoring and Monitoring Techniques in the Context of Catastrophic Events, Pennsylvania/USA</td>
<td></td>
<td>Dr. Stephen Fairweather, School of Forest Resources, 101 Ferguson Building, The Pennsylvania State University, University Park, PA 16802, USA; Tel: +1-8 14-8 65-16 02</td>
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<tr>
<td>27. - 10.07.</td>
<td>International Seminar on Environmental Assessment and Management, Aberdeen/Scotland</td>
<td></td>
<td>Center for Environmental Management and Planning, 23 St Machar Dr, Old Aberdeen, Scotland 2AB 1RY, United Kingdom; Tel: +44-2 24 27 24 83, Fax: +44-2 24 48 76 58</td>
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#### July 93

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<tr>
<th>Date</th>
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<tbody>
<tr>
<td>06. - 08.</td>
<td>What is new in Tropical Phytogeography? Paris/France</td>
<td></td>
<td>Secretariat/Renseignements, Information, Laboratoire de Botanique Tropicale, Université Pierre et Marie Curie, 12 rue Cuvier, 75005 Paris, France; Tel: +33-1-44 27 65 27, Fax: +33-1-44 27 65 26</td>
</tr>
</tbody>
</table>
European Tropical Forest Research Network

Dr. Ashbindu Singh, UNEP/GRID, Sioux Falls, Eros Data Center S.T., South Dakota 57198, USA; Tel: +1-6 05-5 94 61 07; Fax: +1-6 05-5 94 65 89

18. - 23. Wind and wind-related damage to trees, Heriot-Watt University, Edinburgh/UK
C.P. Quine, Forestry Commission, Northern Research Station, Roslin, Midlothian EH25 9SY, Scotland, U.K.; Tel: +44-31-4 45 21 76, Fax: +44-31-4 45 51 24

Paul Rudall (Secretary), Royal Botanic Gardens, Kew, Richmond Surrey, TW9 3DS, U.K.

28. - 06.08. 6th International Congress of Plant Pathology, Montreal/Canada
Congress Secretariat, 6th International Congress of Plant Pathology, Attn. Mrs. Doris Ruer, National Research Council Canada, Ottawa, Ontario K1A 0R6, Canada; Tel: +6 13-9 93-92 28, Fax: +6 13-9 57-98 28, Tlx: 053-3145

Aug. 93

10. - 18. 8th International Conference on Root and Butt Rots, Sweden and Finland
Martin Johansson, Dept. of Forest Mycology and Pathology, Swedish University of Agricultural Sciences, P.O. Box 70 62, 75007 Uppsala, Sweden; Fax: +46-18-30 92 45

15. - 20. Biology and Control of Reproductive Processes in Forest Trees, Victoria/British Columbia/Canada
Dr. Stephen D. Ross, B.C. Ministry of Forests, Research Laboratory, 1320 Glyn Road, Victoria, B.C. V8W 3E7, Canada; Fax: +1-6 04-3 56 85 43

15. - 20. IUGB 21st Congress "Forests and Wildlife ... towards the 21st Century", Halifax/Canada
Dr. Ian D. Thompson, President, IUGB, c/o Forestry Canada, Box 6028, St. John's, Nfld. A1C 5X8, Canada

IGARSS '93 Secretariat, Mr. Natsuhiko Motomura, Remote Sensing Technology Center of Japan, 7-15-17 Roppongi, Minato-ku, Tokyo 106, Japan; Tel: +81-3-3403 17 61, Fax: +81-3-34 03 17 66

Sep. 93

01. - 03. Asia-Pacific Symposium on Mangrove Ecosystems, Hong Kong
Ms Linda Yam, Conference Secretariat, Research Center, The HK University of Science and Technology, Clear Water Bay, Kowloon, Hong Kong; Tel: +8 52-3 58 69 10, Fax: +8 52-3 58 13 34, E-mail: RCL@UY@USTH.K.BITNET
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<tr>
<th>Date</th>
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<tr>
<td>12. - 16.</td>
<td>3rd International Symposium on Plant-Soil Interactions at Low pH, Brisbane/Australia</td>
<td>Low pH Symposium, Australian Convention and Travel Services Pty Ltd., GPO Box 22 00, Canberra, ACT 2601, Australia; Tel: +61-6-2 57 32 99, Fax: +61-6-2 57 32 56</td>
</tr>
<tr>
<td>13. - 18.</td>
<td>14th Commonwealth Forestry Conference: &quot;People, the Environment and Forestry - Conflict or Harmony&quot;, Kuala Lumpur/Malaysia</td>
<td>The Secretary General CFC-14, Forestry Department Headquarters, Peninsular Malaysia, Jalan Sultan Salahuddin, 50660 Kuala Lumpur, Malaysia; Tel: +60-3-2 98 82 44, Fax: +60-3-2 92 56 57</td>
</tr>
<tr>
<td>19. - 24.</td>
<td>Australasian Forestry and the Global Environment, Queensland/Australia</td>
<td>Peter Francis, IFA 93 Conference Convener, GPO Box 16 97, Brisbane, Qld. 4001, Australia; Tel: +61-7-2 34 01 05, Fax: +61-7-2 34 12 00</td>
</tr>
<tr>
<td>19. - 25.</td>
<td>International Wildlife Management Congress, San José/Costa Rica</td>
<td>Tom Bandolin, IWMC Secretariat, The Wildlife Society, 5410 Grosvenor Lane, Bethesda, Maryland 20814-2197, USA; Tel: +1-3 01-8 97 97 70, Fax: +1-3-01-5 30 24 71</td>
</tr>
<tr>
<td>20. - 24.</td>
<td>Fifth Symposium of the Silviculture in Latin America, Campeche/Mexico</td>
<td>Dr. Aurelio Fierros, contact via: G. De Las Salas, WL S1.07 - 09, CONIF, Parque la Florida, AP 09 16 76/09 51 53, Bogotá, Colombia; Fax: +57-1-2 13 92 19</td>
</tr>
</tbody>
</table>

**Oct. 93**

| 19. - 22. | Site Classification and Evaluation, Clermont-Ferrand/France | Walter Kilian, Forstliche Bundesversuchsanstalt, Seekendorff-Gudendorf-Weg 8, 1131 Wien, Austria; Tel: +43-1-8 78 38-2 03, Fax: +43-1-8 77 59 07 |
| 25. - 29. | Behaviour, Population Dynamics, and Control of Forest Insects, Koloa/Kauai/Hawaii | Dr. Thomas L. Payne, Dept. of Entomology, Virginia Polytechnic Institute and State University, 216 Price Hall, Blacksburg, VA 24061, USA; Tel: +1-7 03-2 31 63 41, Fax: +1-7 03-9 82 60 50 |

**Nov. 93**

<p>| 08. - 12. | Global Environmental Movement Initiative 1993: the 3rd Green Step, Indonesia | Organising Committee, POCE '93, Environment Building, Jalan Kramat IV No. 8, Jakarta Pusat 10420, Indonesia |</p>
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<tr>
<th>Date</th>
<th>Event</th>
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<tr>
<td>Sep. 94</td>
<td>Water Issues in Forests Today, Can- berra/Australia</td>
<td></td>
<td>International Symposium on Forest Hydrology, c/o ACTS, GPO Box 22 00, Canberra ACT 2601, Australia; Tel: +61-6-2 57 32 99, Fax: +61-6-2 57 32 56</td>
</tr>
<tr>
<td>Oct. 94</td>
<td>Inventory and Management of the Boreal Forests, Anchorage/Alaska/ USA</td>
<td></td>
<td>Mr. Vernon J. LaBau, USDA Forest Service, Forestry Sciences Lab., 201 E. 9th Ave., Suite 303, Anchorage, AK 99501, USA; Tel: +1-9 07-2 71 25 85</td>
</tr>
<tr>
<td>Aug. 95</td>
<td>Resources and Environmental Monitoring, Rio de Janeiro/Brazil</td>
<td></td>
<td>Roberto Pereira da Cunha, INPE, P.O. Box 5 15, 12201 Sao Jose dos Campos, Brazil</td>
</tr>
<tr>
<td>Aug. 95</td>
<td>20th IUFRO World Congress, Tampe- re/Finland</td>
<td></td>
<td>Prof. Risto Seppälä, Finnish Forest Research Institute, Unioninkatu 40 A, 00170 Helsinki, Finland; Tel: +3 58-0-85 70 51, Fax: +3 58-0-62 53 08</td>
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**International Agenda: Workshops**

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<tr>
<td>Jan. 93</td>
<td>Regional Workshop on Policy and Legislation in Community Forestry, Bangkok/Thailand</td>
<td></td>
<td>Director, RECOFTC, Kasetsart University Bangkok 109000, Thailand; Tel: +66-25 79 01 06, Fax: +66-25 61 48 80, Tlx: 21957 recoftc th</td>
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<tr>
<td>May 93</td>
<td>NFT International Workshop on Rosewood: Multipurpose and High Value Timber Nitrogen Fixing Tree, Hetauda/Nepal</td>
<td></td>
<td>James Roshetko, NFTA, 1010 Holomua Road, Paia, Hawaii 96779, USA</td>
</tr>
<tr>
<td></td>
<td>Ecophysiology and Genetics of Trees and Forests in a Changing Environment - a IUFRO Workshop, Viterbo/Italy</td>
<td></td>
<td>Technical Secretariat, Department of Forest Environment and Resources, DISAFRI, University of Tuscia, Via S. Camillo De Lellis, 01100 Viterbo, Italy; Tel: +39-7 61-25 74 03, Fax: +39-7 61-25 73 89</td>
</tr>
<tr>
<td>Sept. 93</td>
<td>International Workshop: Advances in Tree Development Control and Biotechnology, Beijing/China</td>
<td></td>
<td>Mr. Wang Shasheng, P.O. Box 29, Beijing Forestry University, Beijing, P.R. China</td>
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# European Tropical Forest Research Network

## International Agenda: Training Courses

**March 93**

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<tr>
<td>01. - 17.</td>
<td>Program Course: Enhancing the Value of Tropical Forests through Non-Timber Products and Services, Ciudad Colon/Costa Rica</td>
<td>Gerardo Budowski, University for Peace, P.O. Box 1 38, 6100 Ciudad Colón, Costa Rica; Tel: +5 06-49 15 11, Fax: +5 06-49 19 29</td>
</tr>
<tr>
<td>01. - 11.04.</td>
<td>IV Curso Intensivo Internacional de Silvicultura y Manejo de Bosques Naturales Tropicales, Turrialba/Costa Rica</td>
<td>Coordinador de Capacitacion, 7170 CATIE, Turrialba, Costa Rica</td>
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**May 93**

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<tr>
<td>31. - 19.06.</td>
<td>Arboles y Sostenibilidad: Aspectos Biologicos, Economicos y Sociales, Costa Rica</td>
<td>Rolain Borel, University for Peace, P.O. Box 1 38, 6100 Ciudad Colón, Costa Rica; Tel: +5 06-49 15 11, Fax: +5 06-49 19 29</td>
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**June 93**

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<th>Date</th>
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<tr>
<td>07. - 08.10.</td>
<td>6th Certificate Course in Community Forestry, Thailand</td>
<td>Dr. Somsak Sukwong, Director, Regional Community Forestry Training Center, Kasetsart University, Bangkok 10900, Thailand; Tel: +6 62-5 79 01 08, Fax: +6 62-5 61 48 80</td>
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**July 93**

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<th>Date</th>
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<tr>
<td>01. - 24.09.</td>
<td>Tropical Forest Management, Edinburgh/United Kingdom</td>
<td>Edith Field, Tropag Courses, UnivEd Technologies Ltd, 16 Buccleuch Place, Edinburgh EG8 9LN, Scotland, UK; Tel: +44-31-6 50 34 73, Fax: +44-31-6 50 34 74</td>
</tr>
<tr>
<td>01. - 24.09.</td>
<td>Tropical Agroforestry, Edinburgh/United Kingdom</td>
<td>Edith Field, Tropag Courses, UnivEd Technologies Ltd, 16 Buccleuch Place, Edinburgh EG8 9LN, Scotland, UK; Tel: +44-31-6 50 34 73, Fax: +44-31-6 50 34 74</td>
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**Aug. 93**

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<tr>
<td>03. - June 94</td>
<td>Postgraduate Courses in Forest Survey (11 months), The Netherlands</td>
<td>Mrs. A. Scheggetman, ITC Student Registration Office, P.O. Box 6, 7500 AA Enschede, The Netherlands; Tel: +31-53 87 44 44, Fax: +31-53 87 44 44</td>
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</table>
European Tropical Forest Research Network

Aug. 93

first week

Postgraduate Diploma Course in Forestry and Rural Development - New Approaches and Survey Techniques (9 months), The Netherlands

Mrs. A. Scheggetman, ITC Student Registration Office, P.O. Box 6, 7500 AA Enschede, The Netherlands; Tel: +31-53 87 44 44, Fax: +31-53 87 44 00

Sept. 93

05. - 11.12.

International Course on the Design of Community Forestry, Wageningen/Netherlands

International Agricultural Centre (IAC), P.O. Box 88, Lawickse Allee 11, 6700 AB Wageningen, The Netherlands; Tel: +31-83 70-9 01 11, Fax: +31-83 70-1 85 52

27. - 22.10.

First International Course in Plant Tissue Culture, Maroochy Horticultural Research Station/Queensland/Australia

Director General, Attn. C. Searle, International Consultancies, Dept. of Primary Industries, Queensland, GPO Box 46, Brisbane Old 4001, Australia; Tel: +61-7-2 39 33 02, Fax: +61-7-2 21 38 96

second half of 1993

International Training Course on Application of Remote Sensing and Geographic Information Systems in Managing Tropical Forests and Conserving Natural Resources in Southeast Asia (4 weeks), Malaysia

Food and Agriculture development Centre (ZEL) of the German Foundation for International Development (DSE), Wielinger Str. 52, W-8133 Feldafing, Germany; Fax: +49-0 81 57-3 82 27

Nov. 93

04. - 14.12

International Training Course on Rural Development in Tropical and Subtropical Zones, Germany

Food and Agriculture development Centre (ZEL) of the German Foundation for International Development (DSE), Wielinger Str. 52, W-8133 Feldafing, Germany; Fax: +49-0 81 57-3 82 27

May 94

02. - 27.

First International Course in Tropical and Subtropical Nematology, Brisbane/Queensland/Australia

Director General, Attn. C. Searle, International Consultancies, Dept. of Primary Industries, Queensland, GPO Box 46, Brisbane Old 4001, Australia; Tel: +61-7-2 39 33 02, Fax: +61-7-2 21 38 96

02. - 10.06.

International Short Course in Land Use Management for Tropical Agriculture, Brisbane/Queensland/Australia

Director General, Attn. C. Searle, International Consultancies, Dept. of Primary Industries, Queensland, GPO Box 46, Brisbane Old 4001, Australia; Tel: +61-7-2 39 33 02, Fax: +61-7-2 21 38 96
technique that can provide incomes for families or small groups living in or near tropical forest areas.

The ideal results of the research would be an economically viable strategy that encourages sustainable resource extraction from tropical forests. This small-scale extraction could supply food, fuel, fodder, fiber, medicinals or other products for which there is (or could be developed) a domestic and/or foreign market. Research concerning products that encourage the reforestation of denuded areas would also be eligible. The strategy might make use of several products grown or extracted in sequence and be part of an income-producing addition to subsistence activities. The research could build on the knowledge of native forest inhabitants and should prove useful to those same people. At the end of the project, a thoroughly documented paper suitable for publication is expected.

Research involving any tropical forest type, wet or dry, anywhere in the world, is eligible. Anyone with a master’s degree in forestry, ecology, environmental science or appropriate related fields may apply; doctoral candidates or post-doctoral researchers preferred. Applicants may substitute relevant experience for degrees. The fellowship provides a grant of US$ 15,000 per year, for two years.

The applications will be judged on the merits of the proposal and on the qualifications of the candidate. Can the research be carried out as proposed? Does the investigator appear to have the necessary skills and experience to bring the research to a fruitful conclusion? Is the proposal practical and does it have commercial potential? Will it help provide a livelihood for tropical forest inhabitants, without causing the destruction of the forest? If it is site-specific, can the methodology be adapted by people in other countries? Is it new and entrepreneurial? Will it be useful to someone with no business experience and with little or no venture capital? Judging will be done by a panel of forestry products experts and tropical conservationists.

There is no official application form. Proposals must be in English and should not exceed five typed pages in length. Additional pages should be used for an abstract, a review of the relevant literature, an approximate budget, references, figures, appendices, a copy of the candidate’s curriculum vitae or resume, and at least two letters of recommendation. If possible, please send three copies of the entire application.

The fellowship will begin in September 1993. Completed applications, including all letters of reference, must be received at the Rainforest Alliance office by 5:00 p.m., February 1, 1993. Applications should be sent to:

Rainforest Alliance,
Kleinhans Fellowship
270 Lafayette Street
Suite 512
New York
N.Y. 10012
USA
The Scottish Hardwood Charter has the pleasure to announce a seminar which will be held in Brussels from 18 - 19 March, 1993 for discussing the practical actions that can be implemented by the timber trade and industry to promote sustainable forest management, in particular in the Tropics. The seminar is sponsored by the Commission of the European Communities and the Swiss Government. It is primarily targeted towards senior company executives of the timber sector and governmental officials in Europe.

The subjects to be discussed include:
- sustainable management at the level of the forest concession;
- voluntary certification and environmental labelling for timber products;
- the market in Europe for 'green' timber products;
- European Eco-Labelling for timber products;
- the subject of promoting a trade in sustainably produced timber;
- the projects implemented in Europe for introducing a label/certificate on timber products and the potential for coordinating these initiatives at the European level; and
- partnerships between industry, governments and environmental organisations for promoting a rapid transition towards sustainable forestry, in view of attaining ITTO’s year 2000 target.

The speakers will include senior executives of the timber trade and woodworking industries, representatives of environmental organisations, governmental officials and representatives of the Commission of the European Communities.

Invitations and additional information on this seminar can be obtained from:

Mr. Jean-Pierre Kiekens
Managing Director
Environmental Strategies Europe
Chaussée de Wavre, 1517-P
1160 Bruxelles
Belgique
Tel: +32-2-6 75 36 68
Fax: +32-2-6 75 37 05

Forest resource appraisals on a global basis are a part of FAO’s mandate. The present assessment for the reference year 1990 was launched in March 1989 to provide reliable and globally consistent information on the current state of the tropical forest cover and recent trends of deforestation and forest degradation.

The assessment is being carried out in two complementary phases: (I) compilation of existing national survey data brought to the reference year 1990 through an adjustment function; and (II) monitoring of tropical forest cover and its changes using remote sensing in a global sample survey framework. Statistical data are compiled at sub-national and national level and main-
tained in a databank called Forest Resources Information System (FORIS). The man-forest interaction is being analyzed using a Geographic Information System (GIS) and modelling techniques. The system includes several important layers of information such as vegetation types, ecolfloristic zones and population distribution at sub-national level. The Project is being implemented through cooperative efforts with many international and national institutions. Workshops are important means to disseminate the Project methodology and findings.

This report presents an overview of preliminary results from phase (I) for 12 geographic sub-regions and six ecological zones. At 1990 forest area at a global tropical level is estimated at about 1.7 billion ha (approx. 36% of the land area). Total population is 2.46 billion inhabitants with an average density of 51 inh./km². The largest extent of forest is in Latin America (840 million ha: 31% of land area). Among the ecological zones, the tropical rainforests constitute the biggest portion with 38% (655 million ha) and 14% (252 million ha) respectively, the rest being 10% (178 million ha) in the high/montane zone.

Deforestation during 1981-1990 is observed to be 16.9 million ha annually at a global level (annual rate of change: -0.9%). In Latin America the rate is -0.9% (equalling an area of 8.3 million ha), -1.2% (3.6 million ha) in Asia and -0.8% (5.0 million ha) in Africa. Higher rates than the average are found in the moist and hill/montane zones and, from geographical point of view, in Central America & Mexico, Continental South East Asia and West Africa. Annually 7.3 million hectares of forests are deforested in the moist forest zone, 4.9 million ha in the tropical rainforest zone and around 2 million ha each in the dry and hill/montane zone.

The reported plantation area in the Tropics is 43.9 million ha (2.5% of the total forest area) with a distribution of 8.6 million ha in Latin America, 32.2 million ha in Asia and 3.0 million ha in Africa. The net plantation area is estimated at 30.7 million ha (70% of the reported area). Annually planted area is reported to be 2.6 million ha and the estimated net area 1.8 million ha.

A survey on protected areas (IUCN categories I-V) in the tropics was conducted in cooperation with the World Conservation Monitoring Centre. Protected areas which may not be completely forested are estimated to cover 266 million ha constituting 5.4% of the land area. Forest management for wood production has been found to be limited to very few countries covering an area of approx. 60 million ha (3.5% of total forest area). Little progress seems to have been made in this respect in the past decade.

Another important finding of the Project lies in the fact that very few countries have reliable forest resources data on a nationwide basis.

The Forest Resource Assessment 1990, initiated by the United Nations Economic Commission for Europe (UN-ECE) and the Food and Agriculture Organization (FAO), has now published "The Forest Resources of the Temperate Zones, General Forest Resource Information". It contains two parts covering the basic forest resource data and the files of the 36 countries participating in the assessment by making their data available based on the detailed enquiry sent to all countries of the UN/ECE region.

The publication responds to the growing public interest in the situation of the temperate zone forests as well as to the needs of policy-makers, managers, researchers and others concerned with forestry, the forest products sector, ecology and sustainable development of natural resources.

The assessment on the forest resources of the temperate zones had been carried out in the framework of the activities of the Joint FAO/ECE Working Party on Forest Economics and Statistics, a subsidiary body of the FAO European Forestry Commission and the UN-ECE Timber Committee. It is part of the Global Forest Resource Assessment which also covers the tropical zones.

The assessment covers the member countries of the ECE region (Europe, the former USSR and North America) and three other industrialized temperate-zone countries (Australia, Japan and New Zealand). Forests and other wooded land in this region comprise over half of the world's total and is estimated at 2.06 billion (thousand million) hectares.

39% of the temperate zone are forests and other wooded land. Of the remaining area, 1.82 billion ha or 34% are estimated to be agricultural land, 27% (1.45 billion ha) falling into other categories.

Out of the total area classified as forest and other wooded land, 46% is located in the countries of the former USSR and 36% in North America. Europe's share is about 9%.

The share of forest and other wooded land of individual countries varies considerably between regions, ranging from 68% and 60% in Japan and the Nordic countries respectively to less than 20% in Australia and New Zealand and less than 10% in some countries of north-western Europe.

Of a total growing stock of 112 billion m³ o.b. (with bark) in exploitable temperate zones forests, 75.5 billion or almost exactly 2/3 are coniferous and 36.5 billion or 1/3 are are broadleaved. Fellings in these regions in 1990 totalled 1.86 billion m³ with bark, of which 40% in North America. In almost all countries the fellings were reported to be below the net annual increment. In the temperate-zone forests area, standing volume and annual increment have grown compared with the results from the assessment carried out in 1980 and previous ones.

The continuing expansion of the temperate forest resource potential is one of the main findings of the present Assessment.
Readers of this study will find the wide range of basic forest resource data on land use classification, types of forest, species groups, ownership and management status, standing volume and growing stock, woody biomass, annual increment and much more. The country by country presentation in Part II of the publication gives indepth and specific information on the individual national forest resources.

Volume II of the Assessment with the title "Benefits and Functions of the Forest" is being prepared. It will complete the picture of the present day forest resource of temperate zones, their potential for multiple use and sustainable development.

Further information on the UN-ECE/FAO Forest Resource Assessment 1990 (Temperate Zones) may be obtained from: ECE/FAO Agriculture and Timber Division Palais des Nations CH-1211 Geneva 10 (Switzerland)

(from the Press Release ECE/TIMBER/8, 19.10.92)

**Symposium: Degraded Lands and Secondary Forests in Amazonia**

The International Institute of Tropical Forestry (USDA Forest Service) and the Centro de Pesquisa Agroflorestal da Amazonia (EMBRAPA/CPATU) are organizing a 5-day symposium/workshop on the management and rehabilitation of degraded lands and secondary forests in Amazonia. This event will be held in Santarém, Pará (Brazil) during April 18 - 22, 1993, and will have three principal aims:

1. To facilitate the exchange of knowledge and experience relevant to the management of altered forest lands in the Amazon region;
2. To assess the current state-of-knowledge in the fields of forest ecosystem rehabilitation and secondary forest management and to identify priority research areas;
3. To identify regional and international institutional capabilities and commitments to research and development in these fields and to provide opportunities for networking among research institutions, development agencies, and nongovernmental organizations.

The symposium/workshop will include invited papers and poster presentations and discussions relevant to the long-term utilization and management of altered Amazonian landscapes. Technical sessions will focus on biophysical and socio-economic aspects of shifting cultivation systems, secondary forest management, and the rehabilitation of degraded pastures, minelands and derelict lands associated with hydroelectric facilities. The program will include a one-day field visit to selected secondary forest management at the Belterra Experimental Station and agroforestry research sites adjacent to the Tapajós National Forest.

This event is open to researchers in the biophysical and social sciences, land managers, representatives of local, regional, national and international agencies and
non-governmental organizations, universities, and institutions concerned with the sustainable utilization of Amazonia’s altered forest ecosystems and degraded agricultural landscapes. The official languages for this event will be Portuguese and Spanish.

For further information please contact:
Dr. John A. Parrotta
c/o Dr. Peter L. Weaver
International Institute of Tropical Forestry
USDA Forest Service
Box 25000
Rio Piedras
PR 00928-2500
USA
Fax: +1-8 09-7 66 63 02


This report is the outcome of a meeting held in Bonn on 1st and 2nd November 1991; it was a workshop organized under the auspices of the European Tropical Forest Research Network (ETFRN).

It contains submitted papers and the results of two days intensive discussions amongst a group of scientists from different European countries and from Brazil, coming from different disciplines and involved in research in the Amazon region. Four major issues of importance are covered: ecological potential, human living conditions, soil fertility and aquatic systems in the Amazon region.

The Proceedings of the workshop can be obtained from the ETFRN Coordination Unit
c/o ATSAF e.V.
Hans-Böckler-Str. 5
W-5300 Bonn 3
Germany
Tel: +49-2 28-40 01-3 20
Fax: +49-2 28-40 01-3 11
ITTO and the Future


The main purpose of this study is to assess possible future international mechanisms related to (tropical) forests with emphasis on the International Tropical Timber Agreement (ITTA) and Organisation (ITTO). The ITTA and ITTO are the focus of this study, because the ITTA will terminate on 31st March 1994, and discussions are current on a possible follow-up.

In the absence of any formal critical review of the performance of ITTO, the study has relied heavily on existing documents, supplemented and reinforced by soliciting the opinions of many people who have been closely associated with the development of the Agreement and the Organization. The high response rate to requests for submissions in a very short period (70 per cent) indicates the significance of the issues connected to ITTO.

Chapter 1 analyses the history of the ITTA and the internal evolution of ITTO since 1983. It includes a brief description of ITTO structures and mechanisms.

Chapter 2 considers the changes that have taken place during the life of ITTO in the international context within which it has worked: the condition of the forest; attitudes to the forest; the evolving timber trade context; the significance for ITTO of other international agreements and initiatives, especially the Tropical Forest Action Programme (TFAP) and the various outcomes ofUNCED - notably Agenda 21 and Forest Principles.

Chapter 3 analyses the extent to which ITTO’s past goals, performance and achievements have or have not contributed to sustainable development as defined at UNCED and in other recent international fora.

Chapter 4 examines the extent to which ITTO’s present mandate, structure, financing, resources of money and manpower, and modes of operation have helped or hindered its pursuit of sustainable development within its field of competence.

Chapter 5 presents the various possible future options which have arisen from the preceding analysis. These are:

1. Allow ITTO to lapse.
2. Continue with the unamended Agreement, either: (a) with no changes in operational mechanisms; or (b) with such changes as can be carried out without amending the text of the Agreement.
3. Modify the Agreement and operational mechanisms. There any many alternatives within this option; these are mainly characterized by the relative breadth of mandate.

This workshop brought together scientists and development workers, primarily those working in the West Africa region, to:
- review past and present research findings on *Faidherbia albida*;
- discuss development issues and "lessons learned" from past and present;
- list research priorities for the future;
- promote collaboration between research and development programs.

These proceedings summarize the state of knowledge on the species and provide a comprehensive list of ongoing research. Papers are divided into sessions on: botany and distribution, uses, genetics, provenance trials, and vegetative propagation, site effects, silviculture, and rhizosphere, and development issues. Recommendations from Working Groups for future research and multidisciplinary linkages are included.


Remote sensing and geographical information systems are being increasingly used in the management of the earth’s resources. Indeed in many cases these technologies represent the only realistic way in which to gather and process data concerning our environment. This book for the first time combines a review of the theory and applications of both these key technologies. The applications, mainly concerned with the management of renewable resources in developing countries, cover subjects such as agricultural production forecasting, hydrology and operational rainfall estimation, alongside major global environmental issues such as monitoring tropical deforestation. However, many of the concepts introduced in these case studies equally apply to resource management and environmental monitoring in regions other than the developing world. Combined with an extensive and up-to-date bibliography this makes the book valuable to graduate and post-graduate students, and governmental and non-governmental planners and environmental scientists alike.
A package of self-teaching materials in basic statistics for foresters ForStat, prepared for the SPDC by the Applied Statistics Research Unit of the University of Kent, UK, has been tested successfully and is now ready for distribution.

Over 1000 pages of materials are divided into 6 modules ranging from an introduction to statistics to sampling to relationships between variables and linear regression. Each module is self-contained with exercises and self-evaluation procedures.

The package, which costs US$ 100 plus shipping charges, can be obtained from:
SPDC/IUFRO
Secendorff-Gudent-Weg 8
A-1131 Vienna/Austria
Fax: +43-1-8 77 01 51


The work comprises the proceedings of the Oxford Conference on Tropical Forests which was held in Oxford from 30 March to 1 April 1992. The proceedings include 16 papers of invited speakers and 7 voluntary papers as well as the conclusions and recommendations of the various workshop groups.

One of the major outcomes of the conference was the understanding that there is no simple solution to the problem of tropical deforestation, the whole environment, the political and social environment has to change for the tropical forest problem to be adequately addressed. There won’t be any rapid changes. There are certain factors that are outside the forestry sector and control of foresters. Firstly, there has to be agricultural intensification in the tropics, there are simply too many people for any other option to work. Secondly, there has to be employment creation and wealth generation, because the conditions under which the people of most tropical countries live should not be tolerated in the twenty-first century. Forests should be amongst the resources mobilised to create employment and generate wealth, and this can reduce the need for land to be cleared to expand agriculture.

Forest institutions and forest departments need to change. In particular they are going to have to learn to work in partnership and not dictate to forest peoples how those people should live.

Forest departments must shift their focus away from timber. There are many other products that are so much more important. In changing, though, they must not reinvent wheels; there is a considerable body of existing knowledge which must be
mobilised and applied. There is need for more research, but also a great need to apply very much better the knowledge that already exists.

Foresters in general should have a much broader vision than they have tended to have in the past, but should not attain this at the expense of the loss of focus on their technical expertise.


The papers included in these Proceedings were submitted by participants or prepared by invitation for the Second International Symposium on Integrated Land Use Management for Tropical Agriculture, held in Queensland, Australia, from 15 to 25 September 1992.

The symposium was aimed at senior managers, particularly those involved in developing strategies for sustainable agricultural production, land management policy formulation and the implementation of land use programs. While technical solutions may still be required to overcome land use problems, this symposium was essentially not about the latest research but about the implications of that research and its application in land management. It also incor-

porated the added dimensions of politics, economics, environmental concerns and social/cultural needs.

The proceedings are structured as follows:
- Setting the perspective - an introduction to the objectives of the symposium and the goals of the Land Use Managers Network
- Submitted papers - presentation and discussion of submitted papers by participants
- Production or protection. The issues - a panel discussion following presentation of four invited papers by representatives of the World Wide Fund for Nature, National Parks and Wildlife Service, the mining industry and experienced graingrower/grazers on the need for different perspectives on land use
- Case studies - invited papers on four major land use programs from Brazil, Indonesia, India and Ethiopia
- Planning and managing - presentations on a range of methods available to collect and evaluate data for land use planning, and to gain acceptance for programs from everyone from government to the community
- Field tour - a two-day field tour of south-east Queensland to see at first hand, some aspects of land use management and the ways that the associated problems has been dealt with.

The final part contains all significant outcomes of the discussions at the workshop and any recommendations of the plenary session.

(from the foreword)
Changing Tropical Forests


The International Union of Forestry Research Organizations (IUFRO) formed a Forest History Group in 1961. In 1981 the Forest History Group formed a tropical subgroup, which sponsored its first conference in Canberra, Australia, in 1988. This tropical conference in San José was the second, quickly followed by the third in Honolulu, and plans are evolving for a fourth in Africa. These four conferences will make both the tropical regions and the Southern Hemisphere an active part of the IUFRO Forest History Group.

The twenty-three papers included in these proceedings range in scope and geography from broad overviews to detailed accounts of specific sites. Some investigators reported on forest conditions, others on grasslands, and still others on the people and institutions that caused change. All in fact dealt with change - change through time and change brought about by different causes. Ecosystems are not static but are changing through natural forces or through human intervention. This conference and its predecessor in Australia and its successors in Hawaii and Africa look at these changes.

Vacancy Announcements

University of Oxford Coordinator for the Continuing Education Programme in Forestry

The Institute requires a progressive natural resource manager, preferably with developing country experience, to coordinate and contribute to its programme of continuing education in short, non-degree courses. The appointee will need a flair for organization and social interaction, and an understanding of issues concerning professional forestry. He or she is likely to have a postgraduate qualification with specialization in some aspects of forest science or management, and will be required to contribute to the Institute's other activities. The post is full-time and initially for three years; opportunities for overseas travel are likely to arise.

The successful applicant will be required to be in position by April 1993.
Research Officer: Salary scale RSII £18,576 - £24,736 pa
The University is an Equal Opportunities Employer.

Applications, together with a C.V. and the name and addresses of three referees, should be sent to the

Head of Administration
Dept. of Plant Sciences
South Parks Road
UK-Oxford OX1 3RB
The following organizations act as National Nodes to the EUROPEAN TROPICAL FOREST RESEARCH NETWORK:

Belgium:

Denmark:
* NFNA, Danish State Forestry, Tree Improvement Station, Krogerupvej 21, DK-3050 Humlebæk. Tel: +45-49-19 02 14, Fax: +45-49-18 00 16, contact: L. Graudal

France:
* CIRAD-Forêt, 45 bis, Avenue de la Belle Gabrielle, F-94736 Nogent/Marne cedex. Tel: +33-1-43 94 43 62, Fax: +33-1-43 94 43 29, contact: F. Grison

Germany:
* ETFRN Coordination Unit: c/o ATSAF, Hans-Böckler-Str.5, D-W-5300 Bonn 3. Tel: +49-2 88 40 01-3 13, Fax: +49-2 88 40 01-3 11, contact: H. Freiberg

* Theodor-Boveri-Institut, Biozentrum der Universität, Lehrstuhl für Zoologie III, Am Hubland, W-8700 Würzburg. Tel: +49-9 31-8 88 43 51, Fax: +49-9 31-1 78 49, contact: K. Linsenmair

Greece:
* Directorate of Forest Resource Development, Section of Forest Research, Ippokratous St. 3, GR-10164 Athens. Tel: +30-1-3 62 12 90, Fax: +30-1-3 60 71 38, contact: N. Efthiathidis

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Portugal:
* Tropical Forestry Center, Tapada da Ajuda, P-1300 Lisbon. Tel: +3 51-13 97 32 06, Fax: +3 51-13 97 31 63, contact: R.M. de A. Sardinha

Spain:
* CICYT, Calle Rosario Pino 14-16, E-28020 Madrid. Tel: +34-1-5 77 00 98, Fax: +34-1-5 71 57 81, contact: J. A. Muñoz Delgado

United Kingdom:
* UK Tropical Forest Forum, c/o Royal Botanic Gardens, Kew, Richmond, UK-Surrey TW9 3AE. Tel: +44-81-3 32 62 99, Fax: +44-81-3 32 62 94, contact: J. Thornback

* Natural Resources Institute, Central Avenue, Chatham Maritime, UK-Kent ME4 4TB. Tel: +44-6 34-88 00 88, Fax: +44-6 34-88 00 96, contact: I. Hunter

International Organisations:
* Commission of the European Communities, (DG XII/G-4), Rue de la Loi 200, B-1049 Brussel. Tel: +32-2-2 95 09 27, Fax: +32-2-2 96 62 52, contact: T. Wollersen

* CTA, Postbus 380, NL-6700 AJ Wageningen. Tel: +31-83 80-6 04 00, Fax: +31-83 80-3 10 52, contact: T.M. Narain

* IUFRO SPDC, Seckendorff-Gudert-Weg 8, A-1131 Wien. Tel: +43-1-8 77 01 51, Fax: +43-1-8 77 93 55, contact: L. F. Riley

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* University of Helsinki, Dept. of Forest Ecology, Tropical Silviculture, Viikin koetila 20, SF-00014 University of Helsinki. Tel: +3 58-0-7 08 56 43, Fax: +3 58-0-7 08 56 46, contact: J. Kuusipalo