INTERNATIONAL MIRE CONSERVATION GROUP

NEWSLETTER

issue 2006/3, December 2006

The International Mire Conservation Group (IMCG) is an international network of specialists having a particular interest in mire and peatland conservation. The network encompasses a wide spectrum of expertise and interests, from research scientists to consultants, government agency specialists to peatland site managers. It operates largely through e-mail and newsletters, and holds regular workshops and symposia. For more information: consult the IMCG Website: http://www.imcg.net

IMCG has a Main Board of 15 people from various parts of the world that has to take decisions between congresses. Of these 15 an elected 5 constitute the IMCG Executive Committee that handles day-to-day affairs. The Executive Committee consists of a Chairman (Jennie Whinam), a Secretary General (Hans Joosten), a Treasurer (Philippe Julve), and 2 additional members (Tatiana Minaeva, Piet-Louis Grundling).

Seppo Eurola, Richard Lindsay, Viktor Masing (†), Rauno Ruuhijärvi, Hugo Sjörs, Michael Steiner and Tatiana Yurkovskaya have been awarded honorary membership of IMCG.

Editorial

This Newsletter contains the outcomes of this year's IMCG General Assembly in Finland: minutes of the most important meetings, resolutions (that raised a lot of attention!), and of course background information on our four new honorary members. In the coming month December the secretariat will organize the concrete elaboration of the many important tasks identified in the Action Plan 2007 – 2010. So: start thinking how you can contribute and contact the secretariat. And don't be suprised if the secretariat contacts you for a direct request.

The general assembly also installed the new Main Board and the Main Board has since also elected the new Executive Committee, that is not fully new, because it consists of the same people in the same functions as in the last 2 years.

The SER Conference on Ecological Restoration, in which IMCG showed strong presence and that had a major focus on peatlands, adopted a "Greifswald Statement on Ecological restoration" that we include in this Newsletter.

Furthermore you will find lots of news (please send us everything that is interesting!), short announcements of many relevant books (but we kept a pile in store for the next newsletter) and – as always – announcements on coming venues.

We plan to publish a next Newsletter at the end of December 2006. Please send all your discussion contributions, news, publications, etc. to us, and with your help we will again prepare an interesting X-mas Newsletter. Deadline for the next Newsletter is December 17 2006.

For information or other things, contact us at the IMCG Secretariat. Address updates should from now on also be sent to us. In the meantime, keep an eye on the continuously refreshed and refreshing IMCG web-site: http://www.imcg.net

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A note from the Chair

It's been a big year for IMCG. Following on from the success of the IMCG field symposium in Tierra del Fuego in November 2005, there was a successful and well attended field symposium and general assembly in Finland in July. As part of this symposium and general assembly, there were discussions about the IMCG Action Plan for 2007-10. General agreement was reached on the future direction of IMCG and building on this, specific actions will be compiled shortly by Hans Joosten and me. Several resolutions on peatland conservation were made and several press conferences/interviews were held during the field symposium. Four new IMCG Honorary Members were approved – all of whom have made outstanding contributions to peatland conservation (Finland, Russia and through IMCG) – Seppo Eurola, Rauno Ruuhijärvi, Steiner and Tatiana Yurkovskaya.
Following the IMCG field symposium, there was a joint IMCG/IPS meeting in Finland. There was much discussion about issues relating to 'wise use' of mires, future directions and possible further joint meetings or symposia. The new joint IMCG/IPS journal, Mires and Peat (Editor Olivia Bragg, Deputy Editor Jack Rieley) was launched at the meeting.
The election of Main Board members has been held and I congratulate the successful members, all of whom were re-elected (see Main Board list at end of newsletter). I also congratulate John Couwenberg who will now formally assist our hard working Secretary-General, Hans Joosten, with many of the administrative and support tasks required to increase the efficacy of IMCG.
There have been a couple of recent forums where IMCG has attended. Most notably, several of our members attended the UNFCCC meeting in Nairobi recently to promote mire conservation as part of the climate change deliberations.
I would like to take this opportunity to wish all IMCG members a peaceful and pleasant time over the Christmas-New Year period. Let's hope that 2007 is a good year for mire conservation.

With best wishes,
Jennie

IMCG Main Board Meeting

22 July 2006, Finland

Agenda

1) Opening and Welcome
2) IMCG Action Plan 2006 - 2010
3) Secretariat incl. personal support
4) Membership administration and membership fee
5) Balance sheet and the statement of profit and loss
6) Main Board cooptation
7) Executive Committee: nomination and strategy
8) Website, letterhead, business cards
9) Journal: progress report and launch
10) Conference resolutions: Ireland, Finland, and ????
11) Press conference and media release
12) Information on next venue 2008 in Georgia; agreement on venue 2010; proposals for venues: France (Peat extraction – peatland restoration), Central Europe, Spain, Central Asia, Polar Yakutia
13) Honorary membership
14) Ramsar STRP and CoCoGAP
15) Meeting IPS/IMCG: (participants: Jennie Whinam, Hans Joosten, Tanja Minaeva, Olivia Bragg, Leslaw Wolejko, Alma Wolejko, Rehana Dada, Agu Leivitz, Ab Grootjans, Faizal Parish

Present: Jennie Whinam, Lesław Wołejko, Asbjörn Moen, Tapio Lindholm, Michael Trepel, Olivia Bragg, Japie Buckle, Philippe Julve, Rodolfo Iturraspe, Hans Joosten

1) Opening

2) IMCG Action Plan 2007 – 2010.

Michael T. proposed to make a regional organisation of the actions, because different regions will have different priorities. Philippe announced the preparation of a French Action Plan. Leslaw thought the plan was too ambitious and that a prioritisation has to be made.
The procedure how to present the Action Plan at the General Assembly was discussed.

3) Secretarial support

The Main Board (MB) decided to facilitate support to the secretariat to strengthen the contact with and among the members (incl. Main Board members!). Special tasks are the delivery of the Action Plan and support to the Main Board.

4) Membership administration

John Couwenberg will take over the membership administration to enable Jan to concentrate on political work. The Main Board will propose to the General Assembly to continue the policy of zero membership fee. Raising of funds will be necessary, however.

The membership list has to be regularly checked on inactive members, e.g. on an annual or biannual basis.
The secretariat will check the possibilities of reducing the number of hardcopy Newsletters sent out. It will furthermore provide the Main Board members with letterheads and business cards.

5) Balance sheet
Philippe will prepare a new, readable and presentable overview.

6) Main Board cooptation
Ideas were exchanged about possible cooptation of candidates (2 positions). Preliminary proposals included members from South-Africa (because of the IMCG "chapter" founded there), Siberia (as large peatland area), Estonia (as representative for the Baltic States as a future "battle ground" between peat extraction and mire conservation).

7) Election of EC
The procedure of nomination and election of members of the Executive Committee will be organized by Michael T.

8) Website
The website works well. Things to improve include information on projects, the links, and the general design. We should use the website better to involve more members in the work of IMCG.

9) Journal
The journal "Mires and Peat" (http://www.mires-and-peat.net) has been online since January 2006 to test the system (and it works). A flyer has been prepared and will be distributed. New papers are needed. The journal will also include descriptive and inspirational papers that otherwise have difficulties to be published. "Problematic" issues can be placed in the Newsletter. A list of proposed associate editors will be send to the Main Board for confirmation. A promotion plan will be made.

10) Resolutions
The resolutions in preparation were discussed.

11) Press conference
The press conference on July 26 will be attended on behalf of IMCG by Jenny, Hans, Asbjörn, Ab and Tapio. It will express the feelings of IMCG after having seen the best Finnish mire sites and it will point at the international responsibility of Finland.

13) Honorary membership
Michael Steiner (founder of IMCG), Rauno Ruuijärvi (important for mire conservation in Finland and around), Seppo Eurola (organizer of the 1983 event, international mire science), and Tatjana Jurkovskaja (Russian mire conservation) will be proposed to the General Assembly as honorary members.

[Continuation Main Board Meeting 25 July 2006]
Present: Jennie, Leslaw, Asbjörn, Tapio, Michael T., Olivia, Japie, Philippe, Rodolfo, Hans J., Raimo Pajula, Agu, Mara Pakalne, Ab, Michael Steiner, Gert-Jan van Duinen, Hans Esselink, Tanja Minaeva

15) Meeting IPS/IMCG:
Baltic countries peat issues: Agu and Raimo explained the situation in Estonia. In 2005 a State Audit on sustainable peat production was made. It showed that 6 times more peat is extracted than is re-growing. There is insufficient attention to Environmental Impact Assessment (EIA) according to the EU law and no guarantee for environmental safety. Too little of the cut-over sites are restored: 8000–15000 ha are abandoned without restoration. There is little communication between the responsible ministries. Permissions have been given too easily. The report concludes:
– peat is not renewable
– drainage of new peatlands has to be stopped
– cut-over sites should be restored as wetlands
– there is no good overview.
The question is whether these ideas will be implemented.
On Latvia Mara reported that the National Programme includes the policy "no extraction from pristine peatlands". Licenses are given by the state. According to the law EIA is required in the neighbourhood of Natura 2000 sites before the start of extraction. At the moment there is a case where extraction is planned adjacent to a Natura 2000 site. Leslaw mentions the management plan of a Natura 2000 site should include threats like these. Tanja points at the new IPCC guidelines that will be accepted by the UNFCCC in Nairobi November 2006. These include greenhouse gas emissions from peat extraction sites. As a consequence states have to report from April 2007 the current peatland areas under extraction and the situation in 1990.
With respect to peat extraction the following position was decided:
– Not in pristine peatlands
– Not in sites that may impact pristine, Natura 2000 and potential Natura 20000 (and equivalent) sites
– Only in sites damaged before 1990, that have lost their characteristic species assemblage
– Stop promoting use of high quality peat for low-quality applications
– IMCG will develop a peatering-out strategy in the framework of its Action Plan.
– IMCG will not take initiatives with respect to peat certification.

13) Honorary membership (continued)
All four proposed persons will welcome the honorary membership with pleasure. Olivia has prepared a laudation for all four and she will coordinate the longer papers for the Newsletter. Jennie will present the small paragraphs during the General Assembly.

12) Next venues.
An invitation to the 2008 Field Symposium in Georgia will be presented to the General Assembly. To test the logistics Hans will make with his students a similar excursion in 2007 and will report back on this to the Main Board.
As possible 2010 venues are mentioned: the Baltics (because of the continued peat extraction threat), Central Europe (Poland/Slovakia, to discuss mires on climatic boundaries).
At the end of August 2007 a Sergei Vasiliev Memorial Conference will be organized in Khanti-Mansiisk (W.-Siberia) with as central theme the carbon balance of West-Siberia.
A request has been received from France to participate in the organisation of a congress on the rehabilitation of bogs after peat-cutting and about the market of growing media and peat in autumn 2007. More information is requested on this event, because of possible risks to be instrumentalised by the peat extraction lobby.
For 2007 also a proposal is made by Olivia and Spanish members to hold a meeting in Spain. It would be good to combine such regional meetings with a specific theme, e.g. the wind park problematic, that urgently needs to be discussed.
A venue in Yakutia could be planned for 2009 in association with two GEF projects coached there by Tanja and with the activities of Greifswald University. This event would focus on permafrost peatlands and climate change.

15) Meeting IPS/IMCG:
Joint scientific journal
Olivia presents the draft promotion plan that has been prepared by Michael T. and her. The launching of the journal will take place during the IPS/IMCG meeting.
Wise Use
Copies of the Wise Use books will be distributed to all national libraries.
Continuation of the wise use process could include economic evaluation before use (work out guidelines for that), the promotion of Sphagnum farming as an alternative to peat, the promotion of the use of recycled waste.

IMCG Meeting on working with Ramsar

26 July 2006, Finland

Present: Jennie, Tanja, Faizal, Andreas Grünig, Gert-Jan, Michael, Norman Donner, Karen Jenderedjian, Japie, Izo Matchutadze, Agu, Hans E., Francis Muller, Rehana, Hans

Issues we brainstormed on included:
- The propagation of peatlands within the Ramsar Convention
- The coordination of our work in the CoP, STRP, CCGAP etc.
- CCGAP and its possible expansion to a multiconvention coordination body.

Tanja presented an overview of the history of IMCG involvement in the Ramsar process via the first involvement on the Conference of Parties (CoP) in Brisbane, via the development of the Global Action Plan for Peatlands and the Wise Use Guidelines to our work within the Coordinating Committee for Global Action on Peatlands (CCGAP) and the peatland oriented side events during the Ramsar CoP in Kampala Uganda in November 2005. Tanja has been an active member of the Scientific and Technical Review Panel (STRP) of the Ramsar Convention in the period 2002 – 2005. At present Karen and Randy Milton are members and Tanja is an observer on personal title. IMCG has an official position as observer.

Michael proposed to have meetings in the region in time before the Conference of Parties (CoP) takes place, to become more effective through better preparation. Furthermore he pointed out that Ramsar is increasingly developing towards a water focussed convention. The main subject of the last CoP in Uganda was the role of large river basins. This makes it more difficult to bring in peatlands. IMCG should work on 1) bringing in new ideas, 2) streamlined with the river basin focus, 3) in time, i.e. during 2007.
Ideas were circulated. Andreas had the impression that IMCG has done hard work to bring peatlands under the attention of the Ramsar Convention and as soon as the attention was there, Ramsar wants to leave the issue aside again. The Ramsar Secretariat supports the CCGAP via the chairman work of Tobias Salathé, but apart from that does not really seem to be taken by the peatlands issue (in spite of their importance) because it is dealing with many other things.
Tanja replied that the Ramsar Secretariat also developed the country reporting system with respect to peatlands and made an analysis of peatland related issues in the country reports. She stressed that we should try and get peatlands into the working plan of the STRP because we can not do all the work ourselves.

Michael added that we must organize resolutions for the next CoP to get peatlands more explicitly in the working plan e.g. via the regional clubs of Europe and Asia. Important issues to address are 1) global change, 2) river basin management, 3) peat fires.
Francis asked whether the focus should be on the development of Ramsar resolutions or more on the implementation of the already existing ones.
According to Karen the position of IMCG (issues) is not that bad at all lately. We should keep in mind that peatlands is a cross-cutting issue that covers 20 Ramsar types. Furthermore we should keep in mind that Ramsar is a political organisation that has to keep its members happy, not an NGO that focuses on one issue. The next Ramsar STRP meeting will take place in February 2008, the next Standing Committee meetings in February 2007 and March 2008. In his opinion the standing committee is a much more powerful body to address. What we should do is:
- start today, don't wait until the next Ramsar event
- work on current Ramsar priorities: water, agriculture, health, inventory, and Communication, Education, and Public Awareness (CEPA)
- work more effectively in countries
- influence running preparations via countries and International Organization Partners (IOPs).
- register in the STRP forum

In his role of regional coordinator for Europe, Karen saw good possibilities to involve IMCG as experts and in that way to bring IMCG ideas into the Ramsar Convention.
Also Jennie pled to stay involved in the STRP under guidance of Karen and to focus on the priority points identified by the CCGAP:
- Promotion and implementation of wise use guidelines
- Tropical peat swamp forests
- River basin management
- Climate change, peatland degradation, and desertification

Hans proposed to use all possibilities in our role as STRP-observer but to select involvement strongly on the basis of the concrete issue and the available IMCG expertise.

Andreas brought forward the (well-funded) project of the European Space Agency ESA to monitor the Ramsar sites by satellite observation. Andreas has the impression that the project does not run optimally and proposes that IMCG should act. We decide to ask the STRP how the project proceeds and how we can use the results for IMCG, e.g. to assess the location and condition of the mires of the world. Andreas will make a draft for that letter. Depending on the answer IMCG will decide what to do.
With respect to the CCGAP, Faizal reports on its background and the status of the Implementation Plan that the CCGAP had to deliver to the Ramsar Convention.
The participation in CCGAP is dominated by IMCG, IPS and some countries, but the involvement of countries is limited. Ramsar thinks that CCGAP is not progressing enough. In the sidelines of the Ramsar CoP in Kampala the present CCGAP members discussed
- how to engage further and better in CCGAP
- the role of the secretariat that failed to provide sufficient continuity
- the lack of budget and the absence of a specific allocation of resources
- the sole financial sponsoring of materials and side events by IPS
- the expansion to a multi-conventional coordinating committee.

He stressed that expansion to a wider, multi-conventional body is only possible when the Ramsar CCGAP is effective, because otherwise it would worldwide expose the weakness of the peatland world. This means concretely:
- If Ramsar asks us to make an implementation plan (covering the next 10-15 years) we must deliver one.
- This must be done in the coming two years.
- If that works, it would allow a separate resolution.

The situation is now that CCGAP has not produced the goods and that it does not have a good lobby via the countries or the standing committee. Tanja stressed that we therefore need more involvement of the IMCG members, which has to be organised via the website, the newsletter, etc.
Faizal proposed to develop the implementation plan, starting from the conceptual level with a strategy, or better a strategy guidance. Then we have to engage the countries to learn what their plans are. The planning should be put on the regional level, because the global level is too large. Departing from the regional plans it will then be possible to come to national plans.
Andreas saw a good possibility in the ESA project to provide the countries with inventory data.

Minutes of the IMCG General Assembly

27 July 2006, Tammela Finland

Present: Ab Grootjans, Agu Leivits, Alma Szafnagel-Wołejko, Andreas Grünig, Arlette Laplace-Dolonde, Aulikko Laine, Asbjørn Moen, Bettina Holsten, Dierk Michaelis, Emma Ingelsson Alkbring, Eva Maria Steiner, Faizal Parish, Francis Muller, Gert-Jan van Duinen, Gert Michael Steiner, Guillaume Rancourt, Hans Esselink, Hans Joosten (IMCG secr.-gen., minutes), Heikki Simola, Izolda Matchutadze, Jennie Whinam (IMCG chair, chairperson), Jenny Schulz, Jamie Freeman, Karen Jenderedjan, Lesław Wołejko (IMCG MB), Mara Pakalne, Michael Trepel, Norman Donner, Olivia Bragg (IMCG MB), Olga Galanina, Philippe Julve (IMCG treasurer), Raimo Heikkilä, Rehana Dada, Remy Poliot, Sake van der Schaaf, Seppo Eurola, Simon Thibault, Tapani Salantaus, Tapio Lindholm (IMCG MB), Tatjana Minaeva (IMCG EC), Teemu Tahvanainen

1) Opening and Welcome by the chairperson

2) Minutes of the General Assembly of 26 September 2004 in Paarl (see IMCG Newsletter 2004/4): adopted

3) Balance sheet and the statement of profit and loss
The treasurer Philippe presents a short report. He proposes to put part of the money that is not immediately needed, on a long-term interest account. The report is accepted and seconded.

4) Biennial report on the state of affairs in the IMCG
The report on the delivery of the Action Plan 2002-2006 was discussed.
It was concluded that most planned actions were fully or partly completed. The following issues require further attention:
- Update IMCG Global Peatland Database
- The overview of the mire types of the World
- The book “Mires and peatlands of Europe”
- The book “Mires and peatlands of Southern Africa”
- The book “Peatlands of Tierra del Fuego”
- The mire fauna data base (what should it contain?)

Delivery of these actions will be transferred to the Action Plan 2007 – 2010. The data of the development of membership in the period 2002 – 2006 will be added to the IMCG Action Plan (2002 - 2006) Progress Report.
Not (fully) completed actions include:
- The IMCG expertise database including the facility for rapid expertise exchange by internet
- The instalment of a special fund to cover expertise provision for hot spots

With respect to the creation of this fund, it was proposed to use money from the capital for that purpose. It was decided to make that dependent on the strategic financial plan that has to be made.
It was noted that important progress had been made with respect to Ramsar, outreach materials, and the newly established scientific journal.

A report was given on the members’ meetings with respect to our work in the Ramsar Convention (see elsewhere in this newsletter) and on the preparatory discussions with respect to the IPS/IMCG joint meeting.
A short inventory round was made on the progress of peatland restoration after peat extraction in the various countries. Estonia reported that during Soviet Union after use was regulated by law. At the moment no resources are made available for restoration; only some scientific work takes place. Latvia reported that no serious work was done. In Russia restoration/reclamation legislation still exists but the content is difficult to understand from a modern perspective (e.g. plant forests). What is necessary is an environmentally good approach, i.e. rewetting and restoration, not recultivation. In Finland restoration is not included in licensing. On cutover sites the current fashion is the cultivation of energy plants. Phalaris is very rapidly spreading. In Germany an after-use plan is required and since the 1990s rewetting for nature conservation is practised. In America good examples of restoration attempts are available. Several members stressed that the peat industry and IPS is not sincere: it preaches wise use and restoration, but in practise little is happening with respect to restoration. And as far as restoration is happening, it happens on the costs of society. Peat extractors should show serious commitment and serious success with respect to restoration.
On the other hand, IMCG should formulate more clearly what acceptable ways of restoration are and which activities should not be adorned with the predicate “restoration”. The general opinion is that under “restoration” of cutover sites only should be meant the re-instalment of peat accumulating conditions. We should develop standards for restoration and after-use, and these standards should be high in case of eco-labelling. These criteria should include the loss of characteristic species, should focus on integral land use planning, and could differ from country to country. It was pointed out that the effect of peat extraction sites on greenhouse gas emissions is not assessed well in the new IPCC guidelines. The same accounts for the effects of rewetting.

5) IMCG Action Plan 2006 - 2010
A short overview was given of the main tasks in the draft Action Plan and the discussion among members during the Field Symposium. Conclusions from the latter include:
- Keep in all issues for a full overview and as a challenge to the members
- Formulate clearer priorities, also short ↔ long-term
- Organize a more systematic input in the Ramsar process, also via countries
- Various proposals and offers of members for concrete action were received

It was stressed that IMCG is a loose network of experts with no own capacity to implement projects. IMCG's main task is to exchange information, problems and ideas. The Action Plan is such an overview of what members or groups of members commit themselves to do. We do not have to label everything as an "IMCG activity", more important is that we stimulate and support each other.
The Secretariat will approach the members directly for concrete actions (incl. deliverables, champions, year of delivery) and will prepare a first concrete overview in December 2006. As a „living" product it will be regularly updated.

6) Membership fee
The proposal to continue the policy of a "no-fee"-membership was unanimously accepted.

7) Election of the Main Board
As there were only 12 candidates for 15 Main Board positions, and in accordance with article 9.1 of the constitution, no voting was necessary and all candidates were included in the new Main Board. The Main Board 2004 – 2006 consists of Olivia Bragg, Piet-Louis Grundling, Rodolfo Iturraspe, Hans Joosten, Philippe Julve, Tapio Lindholm, Tatiana Minaeva, Asbjörn Moen, Line Rochefort, Jan Sliva, Jennie Whinam, Lesław Wołejko, and Meng Xianmin. The secretary-general informed on the outcome of preliminary discussions among the Main Board members present in South Africa on possible candidates for the positions in the Executive Committee and on proposals for cooptation of an additional two Main Board members.
The Assembly supports the proposal of the Main Board to make finances available for support of the secretariat.

8) Conference resolutions
The resolutions for Ireland, Russia and Finland were discussed and adopted.

9) Next venues
A presentation on and invitation to Georgia 2008 was presented by Izolda Matchutadze. The Assembly, on invitation of Karen Jenderedjan decided to extent the symposium to include a visit to Armenia.
The Assembly agreed the next biannual venue 2010 to be held in Central Europe, with as items: rich fens, mires and climate change, processes of political transition.
Information was given on other venues organized by or with involvement of IMCG:
2007: Spain, Portugal, Catalina, theme: windfarms
2007: End August: Khanti-Mansiisk (West-Siberia) Sergej Vasiliev Memorial: Theme: Carbon and Oil
2008: Faizal Parish proposes a meeting to be held on SE Asia
2009: Yakutia (Arctic NE Siberia), theme: permafrost peatlands and climate / Arctic Council

10) Nomination of Honorary Life Members
The general assembly decided unanimously to confer honorary membership on Seppo Eurola, Tatjana Jurkovskaya, Rauno Ruuijärvi, and Michael Steiner. See the laudatios elsewhere in this Newsletter.

11) Any Other Business
Heikki Simola, the President of the Finish Association for Nature Conservation, thanks IMCG for its presence in Finland, stressing that the Field Symposium and associated activities have been and will be very important for Finnish peatland conservation.

Discussions on the IMCG Action Plan

During the Finland event several meetings were held to discuss the draft Action Plan 2007 – 2010. Key issues mentioned include:
- the Action Plan should not be seen as a prescription, but as an invitation, a challenge to the members
- try to make a priority list
- distinguish between short-term and long-term actions
- keep all items in to provide members with an overview what is happening
- a more systematic work in the Ramsar Convention is required, in the Ramsar CCGAP, in the STRP, in the national arenas, but also in the 2009 CoP in South Korea

Concrete actions proposed include
- work towards a revision of the annexes of the EU Habitat Directive, both via the European Habitat Forum (of which IMCG is a member organisation) and via the countries, Interesse: Ema uit Slovakia!
- the compilation of a world map of peat energy plants
- the compilation of a world map of peat extraction

IPS-IMCG and CoCo-GAP Meetings in Espoo, Finland

Almost 30 representatives of IPS and IMCG, among them IMCG Chair Jennie Whinam, Secretary Generals Hans Joosten (IMCG) and Jaakko Silpola (IPS), and the 1st Vice President of IPS, Donal Clarke, met at in Espoo, Finland on 28 July 2006 to decide on forthcoming cooperation projects and to intensify the relationships between both organisations.

On 29 July, the Ramsar Coordination Committee for Global Action on Peatlands (CoCo-GAP) held a meeting at the same venue to complete its implementation plan and to set up the necessary organisational bodies. The peat and peatland experts used the final days of the IMCG Congress and Field Symposium to exchange ideas and agree on common goals for their future work, besides discussions during sauna, joint dinners and a walk at the Baltic Sea.

Discussion items at the IPS-IMCG meeting included further steps in promoting the concept of Wise Use and its practical application, the state of the Imnati mire in Georgia, the 1997 “shopping list”, the distribution of the brochure “Peatlands. Do you care?” as well as actions to avoid further peatland destruction in Southeast Asia and how IPS and IMCG should approach the Climate Change debate. Furthermore, the participants dealt with the outcome of the eco-labelling process for peat-containing growing media and a resolution of IMCG regarding the state of the peatlands in Finland. Last, but not least, the attendants heard reports on peatland management in Estonia and an introduction to the European Rural Platform. IPS and IMCG will hold their next joint meeting in connection with a symposium on Wise Use in Sweden in June/July 2007.

Minutes of the Joint IPS-IMCG Meeting 28 July 2006 Meripuisto, Espoo, Finland

Attendants: Hein Boon, RHP, NL; Olivia Bragg, University of Dundee, UK; Magnus Brandel, Swedish Peat Producers Association, Sweden; Tomasz Brandyk, University of Agriculture Warsaw, Poland; Donal Clarke, Irish Peat Society, Ireland; Rehana Dada, University of Kwazulu-Natal, South Africa; Herbert Diemont, Akerra, NL; Hans Esselink, University of Nijmegen, NL; Pat Fitzgerald, Bord na Móna, ireland; Ab Grootjans, University of Groningen, NL; Karen Jenderedjian, Ranisar STRP, Armenia; Hans Joosten, IMCG Secretary General, University of Greifswald, Germany/NL; Marie Kofod-Hansen, TorvForsk, Sweden; Riitta Korhonen, Geological Survey of Finland, Finland; Agu Leivits, SNCC, Estonia; Tatiana Minaeva, FCGS “Ecology“, Russia; Erki Niitlaan, Fstonian Peat Association, Estonia; Faizal Parish, GEC, Malaysia; Jack Rieley, University of Nottingham, UK; Tobias Sa1athé, Ramsar Secretariat, Switzerland; Gerald Schmilewski, Klasmann-Deilmann GmbH, Germany; Pirkko Selin, Vapo Oy, Finland; Jaakko Silpola, IPS Secretary General, Finland; Marcel Silvius, Wetlands International, NL; Jan Verhagen, Wageningen University, NL; Susann Warnecke, IPS Communications Manager, Finland/Germany; Jennie Whinam, Chairperson IMCG, Biodiversity Conservation Board, Tasmania; Alma Wolejko, Poland; Leslaw Wolejko, University of Szczeczin, Poland;

1. Election of Chair:
Jenne Whinam and Donal Clarke were elected joint Chairs.

2. Adoption of Agenda:
The proposed agenda was adopted with a number of additions.

3. Appointment of Secretary:
Susann Warnecke was appointed secretary. It was agreed minutes would be agreed before the end of the meeting.

4. Information on IMCG General Assembly, including adopted Action Plan 2006 — 2010:
A report was presented by Hans Joosten on the IMCG field symposium and General Assembly. He outlined resolutions adopted, with an emphasis on that related to Finland. This latter resolution was the subject of discussion during which differing views were put forward. He also reported on elections to IMCG offices, and the appointment of four honorary life members, including two Finnish scientists.

5. WUMP:
5.1 A general discussion took place on common and differing understandings of the Wise Use process. An exchange of views took place, and explanations were given, on terms used by different participants in the Wise Use discussions. lt was suggested in the course of the discussion that it might be helpful to have documents on implementation of the Wise Use principles, and case studies. lt was also suggested that a joint seminar on such matters would be useful.
Agreement was reached on a proposal by Magnus Brandel to hold a combined IMCG-IPS seminar and field trip in Sweden in June-July 2007. A draft programme will be circulated to both Boards. The next IMCG-TPS joint meeting will be held in conjunction with this seminar.

5.2 A discussion took place on the Future distribution and promotion of the remaining c. 500 copies of the book. It was agreed that the previous decision to distribute copies to national libraries would be implemented and that copies of the flyers would be distributed to target university libraries, the costs of distribution to be split between the two organisations. A small balance would be retained and divided between the two organisations. The book will be made available online in pdf format in addition to the proposed documents on implementation it was suggested that summary, or more accessible, versions of the book might be jointly prepared.

6. Guidelines for the practical application of Wise Use:
A document which had been developed by the IPS was introduced and target audiences explained. It was agreed that existing versions would be published on

the IPS website for discussion, including earlier drafts in Russian and French.

7. Joint Scientific Journal
A presentation on the new joint journal 'Mires and Peat' was given by Olivia Bragg. The draft marketing and promotion plan presented was approved. It was agreed that the editorial board would be approved as soon as possible by both Boards. It was agreed that the editor liaise with both secretariats to arrange the agreed funds transfers. The journal was then officially launched by the two organisations.

8. lmnati Mire. Georgia:
A joint letter from the two organisations to the authorities in Georgia was agreed.

9. 1997 Shopping List:
It was agreed that the two secretariats would review the 1997 'shopping list' and make recommendations to the two organisations.

10. Ramsar CC-GAP and the role of IPS and IMCG:
The background to cooperation on the CC-GAP was outlined and it was noted that a meeting would take place the following day.

11. "Peatlands. Do you care":
A proposal to reprint the booklet was not agreed as it was felt to be specific to the Ramsar COP. It was agreed to discuss the matter further at the CC-GAP and if no agreement is reached further discussions would take place on adapting the text to include wider audiences.

12. Eco-Labelling:
A discussion took place on this process, which had concluded: no decisions were taken. Parties agreed to try to avoid unnecessary offending words.

13. Baltic countries peat issues:
An outline was given on recent reports and events in Estonia. It was agreed that Herbert Diemont and Agu Leivits would exchange documents and report back.

14. Rural European Platform:
It was agreed that Herbert Diemont would provide information to both organisations on this programme which seeks to combine rural development, biodiversity and economic and social goals.

15. Climate Change:
An update was provided on recent developments and it was noted that further discussion would take place at the CC-GAP meeting. It was noted that these discussions would help to identify how IPS and IMCG can collaborate in this process. Information was provided on an IPS initiative in this area.

16. Tropical Peatlands:
Reference was made to the destruction of peatlands in the tropics, releasing large quantities of carbon into the atmosphere and destroying biodiversity. It was agreed that both organisations would collaborate in action to address the tragic problems affecting tropical peatlands, and that Faizal Parish and Jack Rieley would prepare proposals to the two organisations.

Signed Donal Clarke, Chair; Jennie Whinam, Chair; Hans Joosten, Secretary General IMCG; Jaakko Silpola, Secretary General IMCG

Minutes of the 5th CoCo-GAP Meeting, 29 July 2006, Espoo, Finland

Attendants: Hein Boon, IPS, RHP Foundation, Netherlands; Tomasz Brandyk, IPS, University of Agriculture Warsaw, Poland; Donal Clarke, IPS, Bord na Mona, Ireland; Rehana Dada, IMCG, University of Kwazulu-Natal, South Africa; Herbert Diemont, GPI, Alterra, Netherlands; Hans Esselink, IMCG, University of Nijmegen, Netherlands; Ab Grootjans, IMCG, University of Groningen, Netherlands; Karen Jenderedjian, IMCG, Ramsar STRP, Armenia; Hans Joosten, IMCG, Greifswald University, Germany; Riitta Korhonen, IPS, Geological Survey, Finland; Tatiana Minayeva, IMCG, Russian Federation; Faizal Parish, Global Environment Centre, Malaysia; Jack Rieley, IPS, University of Nottingham, UK; Tobias Salathe, Ramsar Convention Secretariat, Switzerland; Gerald Schmilewski, IPS, Klassmann-Dellmann Ltd, Germany; Pirkko Selin, IPS, Vapo Oy Ltd, Finland; Jaakko Silpola, IPS Secretary General, Finland; Marcel Silvius, GPI, Wetlands International, Netherlands; Jan Verhagen, Plant Research International, Netherlands; Susann Warnecke, IPS Secretariat, Finland.

Introduction
Tobias Salathé gave a brief explanation of the original idea of the Coordinating Committee on Global Action on Peatlands (CC-GAP), as a basis for the discussions of the meeting, summarizing the purpose of the CC-GAP as:
- bringing together main stakeholders,
- bringing together expertise,
- debating issues,
- defining global priorities,
- providing strategic guidance,
- proposing key activities,
- serving as lasting reference point,
- communicating with other sectors,
- informing other partners, and get them involved in financing projects.

CC-GAP has been functioning as an open-ended platform, involving a core group of individuals from different sectors and building on work of e.g. IPS ad IMCG. It has involved a slightly changing group of members and observers from governments (e.g. Netherlands, Canada, Belarus) and science agencies. So far four CC-GAP meetings were held in November 2003, June 2004, October 2004 and April 2005.
The CC-GAP produced an awareness brochure: *Peatlands, do you care?* which focused on the Ramsar COP9 (Uganda 2005) and was also used for the Subsidiary Body on Scientific, Technical and

Technological Advice to the Convention on Biological Diversity (CBD SBSTTA) and United Nations Framework Convention on Climate Change (UNFCCC) meetings in late 2005.
There is a need now for the CC-GAP to look ahead and develop strategic directions. It should become a permanent body, provide vision, global direction and guidance for peatland issues and projects worldwide.

Tobias presented the six recommendations that had been prepared for Ramsar COP9 and the five emerging issues included in the draft Implementation Plan:
- Peatlands and climate change
- Peatlands and biodiversity
- Peatlands and water
- Peatlands and poverty
- Peatlands wise use

The draft Implementation Plan needs to be further elaborated to meet the requirements for publication on the Ramsar website in the *Ramsar Technical Report* series. In addition, the nature of the document needs to be reconsidered. It was noted that the CC-GAP is still struggling to provide clear, common messages to the outside world; messages which need to be formulated in a straightforward way.

Tobias presented a number of other matters to consider during the meeting:
- how the CC-GAP should function and be composed,
- how to translate the CC-GAP's recommendations into concrete action,
- what global peatland platform is needed, how to develop and to establish it,
- how to link such a forward looking body with the achievements of the past (*Guidance* provided through Ramsar Resolution VIII.17, draft Implementation Plan and emerging issues).

Based on the outcomes of the IPS-IMGC meeting (see above), the following items were added to the agenda:
- discuss the context of the wise use approach,
- follow-up to the *Peatlands do you care?* brochure,
- discuss the priorities for tropical peatlands.

Faizal Parish mentioned that Wetlands International and GEC plan under their UNEP-GEF peatlands, biodiversity and climate change project a side event and workshop at the UNFCCC COP in Nairobi (see elsewhere in this Newsletter). He also mentioned that the CBD Secretariat acknowledged the project's assessment process and that they requested receiving a working document by December 2006.

Future of the CC-GAP, GPI and other mechanisms

Marcel Silvius sketched a vision for the further development of the CC-GAP as a multi-convention policy body – building on synergies between the Conventions (i.e. UNFCCC, UNCCD, CBD and Ramsar) in relation to peatland management. It would also act as a supervisory body for a renewed and expanded Global Peatland Initiative (GPI). Within this vision, the GPI would establish and manage a *Global Peatlands Fund*, building on the win-win-win-win options of addressing the huge implication of peatland degradation for climate change (UNFCCC), land degradation and water management (UNCCD, Ramsar), biodiversity conservation (CBD, Ramsar) and wise use & poverty reduction aspects (Ramsar Resolution IX.14). He showed these synergies and the impacts (and the relevance) of peatland degradation on the basis of the situation in South-East Asia, particularly Indonesia.

Coordination of activities of contracting parties by CC-GAP

Tatiana Minaeva stressed that coordinating and facilitating activities on *Global Action for Peatlands* should lead in individual countries to:
- the implementation of global initiatives and projects, and
- the start of nationally funded activities.

The CC-GAP was established by the parties of the Ramsar Convention for a particular purpose and with a specific agenda and needs to report back. This can be done during the Ramsar COPs, but also directly by the Secretariat.
Currently, information is made available mainly on the Web and through the parties' National Reports to the COPs; the latter, however, with very little information on peatlands. She therefore suggested that CC-GAP:
- distribute information and documents directly to Ramsar national focal points,
- ask countries for Peatlands Action Plans;
- become involved in Ramsar regional initiatives (e.g. MedWet, Mekong, Nordic-Baltic, Amur), helping to identify regional priorities and developing action lists for Ramsar regional meetings,
- stimulate countries to allocate their own funds for peatland issues outlined by the Convention,
- submit to GEF a shopping list for peatlands activities.

She outlined Ramsar's STRP as a possible partner for CC-GAP through:
- the identification of specific issues and experts from IPS and IMCG, and other relevant networks, to be engaged in relation to the STRP work plan,
- work in the framework of the Joint Work Plan between Ramsar and CBD.

The CC-GAP has been functioning for nearly three years now. It started with an analysis of the problems, but has not yet been able to identify many specific actions, nor to mobilize many actors, because it cannot really prescribe who needs to do what. This is seen as a fundamental obstacle to develop a detailed global implementation plan. The discussion

concluded therefore that the CC-GAP implementation plan should provide but a general framework for international, regional and local groups to identify, develop and launch their own actions, as different approaches are likely needed for different regions and situations. Also, CC-GAP guidance and advice may be more helpful at regional level than at global level only.
It was noted that the CC-GAP had only received very limited input from contracting parties. It therefore needs to identify how to increase the countries' involvement, and how to motivate and mobilize them.

Conclusions and Action Points

1. *Ramsar Technical Report on peatlands*
A draft will be circulated to the CC-GAP for comments and endorsement, prior to submission to the Ramsar editorial team (H. McKay, M. Finlayson & N. Davidson).

2. *Peatlands and their contribution to biodiversity and climate change*
Publication of the assessment by the UNEP-GEF project on peatlands, biodiversity and climate change in the Ramsar Technical Report series, also jointly with the CBD Technical Series could be envisaged.

3. *Invite other peatland stakeholders to participate in CC-GAP*
Marcel Silvius will draft a 4-page document to describe the mandate, the structure, the functioning and the goals of CC-GAP. This will be used to invite other, specific peatland stakeholders to participate in the CC-GAP. Everybody is requested to identify new peatland stakeholders to be invited.

4. *Side-Event (and/or workshop) on peatlands at the UNFCCC Conference of the Parties*
The Global Environment Centre and Wetlands International will prepare a side-event for the COP in Nairobi (early November 2006) where the UNEP-GEF project outcomes on peatlands, biodiversity and climate change will be presented.

5. *Working paper on peatlands for CBD SBSTTA*
A draft working paper for dissemination at the next meeting of the CBD SBSTTA shall be prepared and circulated to CC-GAP for comments and endorsement.

6. *Involvement of other Conventions*
An accrued effort to invite the secretariats of CBD, UNFCCC and UNCCD to participate in the work of CC-GAP needs to be made. The Ramsar Secretariat will liaise with these convention secretariats and identify Ramsar contracting parties able to support these liaisons actively.

7. *CC-GAP executive team*
It was decided to create an executive team of the CC-GAP to deal with inter-sessional, upcoming and priority issues, urgent short-term requirements, and to prepare meetings and their agendas in an efficient way. This team should consist of the representatives of the secretariats of the Ramsar Convention (Tobias, chair) and the Global Peatland Initiative (Herbert, Marcel) plus the secretary generals of IPS (Jaakko) and IMCG (Hans Joosten).

8. *Executive Team meeting*
This executive team shall meet in early autumn 2006 to deal with the action points listed above, including to finalize the draft text for the Ramsar Technical Report on peatlands, to finalize the draft 4-page information document on CC-GAP, to discuss and clarify the links between CC-GAP and GPI and common priority activities, and to discuss and clarify how to engage more the Ramsar contracting parties.

9. *Dissemination of information on CC-GAP*
IPS and IMCG will inform their respective memberships about the CC-GAP activities past, current and future, and make these minutes available to them.

Four new Honorary Life Members of IMCG

by Asbjørn Moen

The ten-day excursion from the north to the south of Finland in July 2006 provided a unique opportunity not only to experience the full local and regional range of boreal mire variety within the format of the IMCG field symposium, but also to benefit from the results of the wide-ranging studies that have been carried out by scientists from Finland and the neighbouring part of Russia. It was especially significant for us because it was a return to the original roots of IMCG. We marked this important occasion by conferring Honorary Life Membership on four eminent mire ecologists who have all made unique contributions towards the unforgettable experience of Finland 2006. They are: Seppo Eurola, Professor Emeritus of Plant Ecology at the University of Oulu (Finland); Tatiana Yurkovskaya of the Komarov Botanical Institute, St Petersburg (Russia); Rauno Ruuhijärvi, Professor Emeritus of Plant Ecology at Helsinki University, (Finland); and Michael Steiner, Ao. Univ. Professor at the University of Vienna (Austria).

Three of our new Honorary Members were born in 1930, and have contributed significantly to the impressive body of knowledge on mire biodiversity that provides the basis for the Finnish mire protection plan. One of them also unwittingly prepared the 'seedbed' from which IMCG germinated and gave us the prototype for our field symposia. The fourth is a founder member who played a most significant role in establishing the ethos, activities and international standing of IMCG; and at the same time, as a lone national expert, worked persistently through decades towards establishing mires firmly within the nature conservation agenda of his own country.

In this newsletter we give short accounts of the lives and contributions of all four of our new Honorary Life Members.

New IMCG Honorary Life Members Rauno Ruuhijärvi (left), Tatiana Yurkovskaya and Seppo Eurola (right) on Uchebnoe Mire in Karelia, 01 September 2005.This photograph was taken during a field symposium celebrating their shared 75th birthday year, which was led by Oleg Kuznetsov and organised jointly by the Karelian Research Centre, The Russian Academy of Sciences and the Finnish Environment Institute. Photo: Asbjørn Moen.

Tatiana Yurkovskaya

by Olga Galanina

Tatiana was born on 4 September 1930 in Leningrad (now St Petersburg). Her father was a doctor of medicine and her mother was a teacher. During the Great Patriotic War (1941–1945, part of the Second World War), the Children's Home where her mother worked was evacuated to Sverdlovsk in the Ural. Of course, having left Leningrad, the family found they could not return until the end of 1944.

Tatiana graduated from school in 1948. She passed the exams and continued her studies at the Faculty of Biology, Leningrad University. The head of the Geobotany Department was Alexander Shennikov, whose personality and enthusiasm for the subject so impressed Tatiana that she decided to become a geobotanist.

For the practical studies timetabled at the end of the second year of the course, she went to the Nature Reserve "Лес на Ворскле" (Forest on Vorskla river) in central Russia, where she made her first vegetation relevés under the leadership of Ilya Blumental. According to Tatiana it was there, whilst studying an alder swamp in the forest-steppe zone, that the idea of becoming a mire researcher first came to her.

Tatiana was a lucky student. Not only was her Geobotany course delivered by Shennikov in person, but also there were opportunities to attend courses in mire science by Yvonne Bogdanowskaya-Guiheneuf and later Alexander Nitsenko, which she grasped. In 1952 she completed a practical project in Karelia under the supervision of the well-known Russian mire researcher Elena Galkina. This trip greatly influenced her future; she took up a PhD position at the Biology Institute of the Karelian Research Centre in Petrozavodsk immediately after university.

Tatiana's family did not interfere in her career decisions. However, when she graduated from the University in 1953, they made her a gift. It was the diploma work of her maternal grandfather (V. Kazansky), which was based on data he collected during an expedition to study forest drainage in Polesie.

Tatiana defended her candidate thesis Mire Landscapes of Central Karelia in 1959. After the three-year PhD appointment, she remained in Karelia for more than ten years, working on mire inventory and vegetation mapping at the Laboratory of Mire Science and Melioration (now the Laboratory of Mire Ecosystems headed by Oleg Kuznetsov). During this period Tatiana visited almost all of the mires in Karelia. She investigated paludified forests and the influence of drainage on mire vegetation; but typology and geography of mire massifs, vegetation classification and bryoflora became the main objectives of her studies. A fruitful co-operation with the Karelian mire researcher Galina Elina began in 1963 with a study of mires near the White Sea coast, and together they began to prepare a mire vegetation map for Karelia.

In 1968, Victor Sochava – a leading Russian geobotanist-cartographer who later became an academician – invited Tatiana to work at the Institute of Geography in Irkutsk, Siberia. However Tatiana preferred to accept a position at the Komarov Botanical Institute in Leningrad. She joined the Department of Geography and Vegetation mapping, where she still works now.

Tatiana has since been involved in many research projects on small-scale vegetation mapping. She has studied not only mires, but also forest vegetation in Karelia, Moscow, Kalinin and Arkhangelsk Regions and the Komi Republic. During the 1970s she delivered some lecture courses at Kaliningrad University, including one on vegetation mapping; and later she prepared a course in mire science for students at Leningrad University.

In Russia, the two scientific degree levels are 'candidate' – equivalent to 'PhD' – and 'doctor', which is higher. Tatiana defended her second thesis – her doctor's dissertation – in 1986. In this, she formulated her approach to the typology of mire massifs in the European part of the USSR and developed principles for mapping them.

She has participated in several large mapping projects, and is a co-author of the maps Vegetation Map of European Part of Russia (1979), Map of Potential Vegetation of Central and Eastern Europe (1996), Vegetation Zones of Russia and Neighbouring Territories (1999) and many others. She also has been involved in international vegetation mapping projects, for example The Map of the Natural Vegetation of Europe (2000). Her monograph Geography and Cartography of Mire Vegetation of the European part of Russia and Neighbouring Territories was published in 1992.

From the time when she first joined the Komarov Botanical Institute, Tatiana collaborated closely with Marina Botch, her classmate from University days. Both Tatiana and Marina had first become interested in mires as undergraduates, and both eventually chose Mire Science (Telmatology) as their main research field. From 1971, Marina led the mire research group of the Russian Botanical Society, and Tatiana was its Secretary. Together they organised the monthly meetings with presentations on different topics in mire science as well as field symposia throughout the former Soviet Union. In February 1998 a special meeting was devoted to the centenary of Elena Galkina, whom Tatiana and Marina regarded as their 'Teacher in Mires'. Thus their active collaboration continued until just before Marina's death in March 1998.

I remember that sometimes, late in the evening when the normal working day was over, Marina Botch visited the Department of Geography and Vegetation Mapping. She would go straight to the office of Tatiana Yurkovskaya, Head of Department. And when she started to speak, calling "Tania", I was momentarily surprised to hear such a soft tone from Marina, who was sometimes sharp and strict.

Marina was the active Russian representative to IMCG when participation was effectively limited to one person per country so that we could fit into our symposium venues (all of them were buses). However, Marina introduced Tatiana when it was possible, and Tatiana attended part of the biennial symposium in Norway (1994), and the field symposium in the Solovetskie Islands (1997). She has since continued her association with IMCG, contributing to our workshops in Poland (2000) and Austria (2001); and of course she was a 'delegate of honour' at the biennial symposium in Finland (2006), where she delivered her presentation Mires on the Map of Russia.

Tatiana was Head of the Department of Geography and Vegetation Mapping from 1989 until February 2006. In this role she actively promoted the application of cartographic methods to vegetation science. Nowadays she continues to maintain the traditions of classical Russian mire science, spending much of her time teaching and encouraging PhD students and other young mire researchers, as well as reviewing dissertations and publications including the Russian Botanical Journal. In 2000 she became Chairman of the mire group of the Russian Botanical Society.

Tatiana is a scientific consultant to the Moscow experts of Wetlands International (Russia) and has contributed a review for the book Wetlands in Russia (2000), which describes the sites proposed for inclusion in the national Ramsar list. She is also a member of the International Association of Geobotanists (IAVS).

Tatiana's wide knowledge, along with her legacy of more than 200 authored and co-authored publications so far, provide a substantial foundation for further development of our understanding of mires and for nature conservation planning.

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Rauno Ruuhijärvi

by Raimo Heikkilä, Tapio Lindholm and Pekka Salminen

Rauno was born in 1930. Because his school years were during wartime, he used to hike in the forests and mires of Southern Ostrobothnia in western Finland; but after the war he was able to explore Lapland. He also participated in forest management work during school summer holidays. These activities stimulated him to study Botany, Zoology, Geography and Geology when he entered Helsinki University in 1951. He completed his Master's degree, with Botany as the main subject, in 1956; and received a Licentiate's degree in 1957. His dissertation work on the vegetation and regionality of mires in northern Finland was carried out within the Regionality of Principal Finnish Nature Habitats project led by Professor Aarno Kalela, son of A.K. Cajander. The ideas were developed during the summers of 1958-60, when there were long expeditions to the vast aapamires on the sites of the planned Lokka and Porttipahta water reservoirs in Lapland. Professor Risto Tuomikoski was also an important influence. Rauno spent four summers collecting data for the dissertation and defended it in 1960.

Rauno worked as a lecturer in the Department of Botany at Helsinki University from the mid-1950s. Here, the almost ten free research summers he had spent with Finnish nature provided experience and material for a lifetime of work in research, education and nature conservation. He realised the importance of nature conservation when large scale ditching of mires for forestry began at the end of the 1950s and large aapamires were drowned by water reservoirs in the 1960s. He was nominated as a Professor of Plant Ecology in 1963. He then started to teach plant ecology in Helsinki and to lead summer field courses at Lammi Biological Station, where he was Principal for over 30 years. He now spent every summer with his family at Lammi, and research expeditions were seldom possible. Instead, he began to develop and lead research projects in aquatic, mire and forest ecology which produced tens of dissertations, licentiate and master's theses. At the end of the 1960s he began to teach nature conservation and environmental protection at the university, and this continued up to his retirement. In connection with this work he co-authored and edited, with ornithologist and mire conservationist Urpo Häyrinen, a two-volume textbook of environmental protection which was published in 1983 and 1984.

Rauno played key roles in the establishment of universities in Jyväskylä and Joensuu and in the renovation of academic studies during the 1960s and 1970s. When the Academy of Finland's Commission of Environmental Sciences was established, he was appointed as its first Chairman and so was able to organise and greatly promote research in environmental sciences during his six years of office up to 1989. In the years leading up to his retirement in 1995 he also acted as Dean of the Faculty of Mathematical and Nature Sciences at Helsinki University. Retirement was not, however, the end of Rauno´s activities in nature conservation and academic discussions.

His voluntary work in nature conservation had begun in 1958–60 when he was Secretary and Fieldwork Leader of the Finnish Nature Conservation Association's research group for water reservoir areas in the River Kemijoki basin in Lapland. At that time it was not yet possible to oppose the reservoir plans, but the group was able to collect data about the nature destroyed by the reservoirs. Rauno undertook the next task of making conservation plans when he was Chairman of the mire conservation committee of the Finnish Nature Conservation Association and Finnish Peatland Society in 1965–72. The 1950s regional studies of Finnish mires and data from more than 1,000 mires provided the scientific basis for the work. Numerous people contributed to the field inventories, but most of the work was done by Urpo Häyrinen, who was Secretary and Field Assistant to the group. Most of the conservation plans were made for state land, and the National Board of Forestry accepted most of the proposals and decided to establish the first mire reserves.

When nature conservation became the responsibility of the Ministry of Agriculture and Forestry in 1972, conservation planning moved to official committees, but the work continued. Rauno served on more than 30 committees and working groups dealing with nature conservation and environmental protection for the Ministries of Agriculture and Forestry, Environment (established in 1983) and Trade and Industry, as well as for the government as a whole.

During the 1970s it became evident that nature conservation cannot be promoted effectively without strong public support. In particular, proposals for new National Parks were strongly opposed by forestry organisations and by the Ministry of Agriculture and Forestry. In this atmosphere, Rauno became Chairman of the Finnish Nature Conservation Association in 1978 and held the position for 12 years. During this period the Association became a large and remarkably influential nationwide NGO whose opinions were taken seriously by government and Parliament. Key tasks that were undertaken during Rauno's chairmanship were co-organising Environment Year 1980 with 150 other NGOs, fighting for the establishment of the Ministry of the Environment, influencing Parliament and legislation, establishing National Parks, protecting the river Ounasjoki and other watercourses from the building of hydroelectric power stations, fighting for the protection of Vuotos Mires in northern Finland and re-organising the National Board of Waters – now the Finnish Environment Institute – to add environment and nature conservation issues to its sphere of responsibility. All this demanded good organising skills and ability in co-operation with administration and other NGOs such as WWF.

Rauno was invited to join the nature conservation working group of the Finnish-Soviet Committee for Science and Technology in 1978, and continued this work to become Chairman of the Finnish part of the Russian-Finnish Nature Conservation Committee under the Ministry of the Environment in 1985–2002. He has made tens of expeditions to different parts of the Soviet Union, and later Russia, in this role. He played a key role in the planning and establishment of Paanajärvi and Vodlozero National Parks and the Finnish-Russian Friendship Nature Reserve. The Green Belt along the Finnish-Russian border is also one of his ideas, and this is widely accepted, although it will still take some time to fully realise it. Nature conservation in Russia is challenging because the scale is totally different from that in western Europe – this is the only place that really large intact areas and true old-growth forests can be found.

Rauno Ruuhijärvi has received numerous awards for his work for science and nature conservation, e.g. the UNEP Global 500 Award (1988) and numerous awards from Finnish scientific foundations and WWF. He has been nominated as an honorary Doctor of Joensuu University and honorary Chairman of the Finnish Nature Conservation Association. He is also an honorary member, with Seppo Eurola, of the Finnish Peatland Society.

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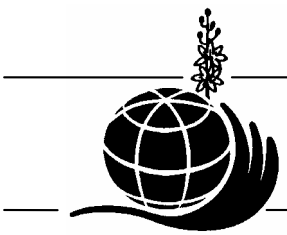


INTERNATIONAL MIRE CONSERVATION GROUP

Seppo Eurola

by Antti Huttunen

Seppo was born in 1930 in the parish of Suojärvi ("mire lake"), which is now in the Russian part of Karelia. He escaped to western Finland on the first day of the Winter War (1939–40) and eventually settled in Lappeenranta in south-eastern Finland. He worked as a biologist preparing national forest inventories before entering Helsinki University to study systematic geobotany, and became a high school teacher after graduating. However, his interest in mires – and order – soon led him to return to the university and choose the classification of mire vegetation in southern Finland as the topic for his doctoral thesis, which was completed in 1962. At the same time his colleague Rauno Ruuhijärvi was making a similar study in northern Finland. The pair of extensive and frequently cited monographs on raised bogs and aapa mires that was published as a result still forms the essential foundation of paludology in Finland.

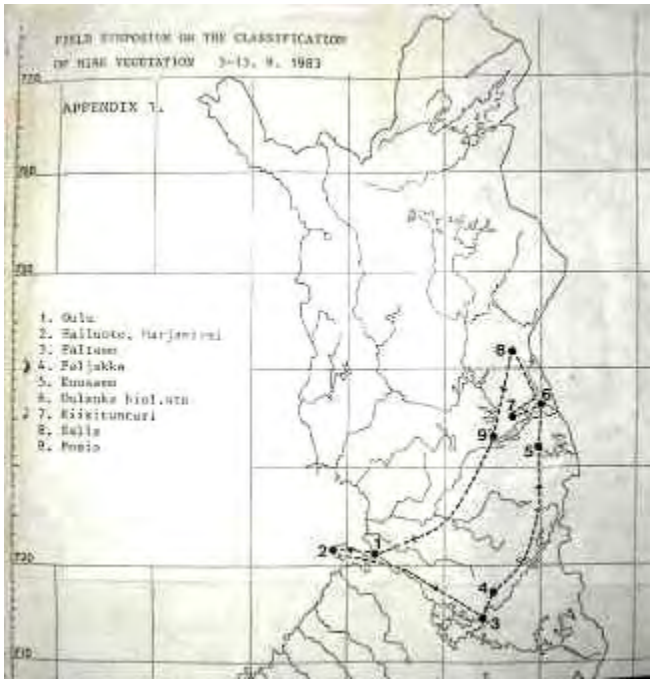
Although most of his experience was of the south, Seppo then moved northwards into the aapa mire zone to start work as an associate professor at Oulu University. There he continued to study plant ecology, working for example on flood meadows and cryologic seasonality in mires.

Apart from the secrets of mires, Seppo's interests include arctic-alpine environments. He spent one-and-a-half years as a professor at Tromsö University in northern Norway, during which time he made research excursions to destinations including Spitsbergen and Greenland. Later he focused on Kilpisjärvi in the north-western corner of Finland where he researched the phytogeography of mires, seed germination, snow algae, ecological effects of snow, soil biology, ecology of mountain birch, and patterns in oroarctic vegetation.

Seppo has a special characteristic – the ability to see order in chaos. This is why it was very much he, assisted by younger co-workers, who created a mire classification system in which the old Cajanderian site types were arranged along meaningful ecological gradients. In 1983 – the 25th anniversary year of the University of Oulu – Seppo arranged an international field symposium in Hailuoto-Kuusamo, northern Finland, to share his insights. Outside the official programme, many of the mire experts who attended expressed their concern about mire conservation, and it was with deep enthusiasm that the idea of IMCG was formulated. The atmosphere of the key moment was later described by Richard Lindsay as follows:

"The beginnings of this process seemed so innocent, so innocuous, in the form of a letter inviting various peatland scientists to Finland – specifically to Oulu – in the autumn of 1983 for a field symposium about peatland vegetation. The event was the brainchild of Seppo Eurola and Antti Huttunen of Oulu University, and they succeeded in bringing together an impressive array of peatland specialists from around the world… It is impossible for any delegate there to forget the profoundly emotional experience of listening to Asbjørn Moen's rendition of his own spontaneous composition – Oulanka-joki (Oulanka River) – with its remarkably variable number of verses, its free-form time signature and astonishingly easy-to-learn lyrics (and now part of IMCG legend)."

Seppo's activities at Oulu University are reflected by the list of 122 authored and co-authored academic publications that was produced over a period of 44 years. He created what was essentially a mire team around him. With its help, he continued with mire studies, e.g. on functional strategies of mires and evaluation of the profitability of peatland drainage for forestry. He demonstrated conclusively that a substantial proportion of mire drainage was unprofitable, and this led to some heated discussions – until Seppo's view was more or less accepted. In the 1980s, he led an extensive assessment of the state of mires in Finland, which showed clearly that man's utilisation of mires had impaired their biodiversity. This led to considerable extensions of mire nature reserves when the Natura 2000 programme was implemented during the 1990s.



Reproduction of the delegates' map showing the route travelled during the Field Symposium on Classification of Mire Vegetation organised by Seppo Eurola in September 1983. The 24 delegates met in Oulu before travelling north-eastwards across Finland to Oulanka, where the idea of IMCG was conceived. IMCG owes special gratitude to Seppo not only for bringing the group together, but also because all of the subsequent biennial IMCG field symposia have followed the format of this original meeting.

Apart from his achievements in science and conservation, Seppo is an excellent teacher. His skills and wide experience flourish especially fruitfully in his popular and well-planned but demanding field courses. His human and often humorous touch is also widely known amongst his assistants and students. Many of Seppo's former students are now themselves

distinguished members of universities, research establishments and environmental institutions.
Seppo belongs to several scientific associations, and has received a number of awards and honorary titles that acknowledge his wide-ranging achievements, e.g. in science, university teaching and nature conservation research. Although he is now retired and regards himself as "a gardener and hobby-farmer in his hacienda", Seppo is still an active 'older brother' to many research projects; and only recently the Finnish Environment Institute found itself once more in need of his skills in reading Nature, and so engaged him as Expert Advisor on Mire and Oroarctic Issues.

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Gert Michael Steiner

by Olivia Bragg

Michael was born at 09:30 on 29 March 1949. His mother always remembered that it was a sunny day. The place was Vienna, which has remained his home throughout school, university and his subsequent career. His PhD thesis focused on mineral pathways, vacuole and phytoplasma changes in Chenopodium album growing under different nutrient deficiency conditions. On finishing this work, he was bored with laboratory science and in 1974 applied to work in plant ecology with Professor Gustav Wendelberger. He got the job and quite soon, more or less by accident, became involved in assisting his professor with a mire conservation project. He found the topic so interesting that he decided to do more work on mires, and began to investigate the physiology of mire plants. He soon realised that very little was known about Austrian mires, and the idea of making a national mire inventory began to develop in his mind. Two years later, he proposed the project to his professor, who liked the idea and used his connections to promote it at government level. It was approved in 1977, and Michael and colleagues spent the next three years travelling around Austria mapping mires. The first results, which included a typology of mires and catalogue of sites but no further information on their vegetation, was published in 1982. It was Kamil Rybníček who insisted that the vegetation should be fully described, and it took eight more years to carry out vegetation surveys on all the mires that had been identified.
Michael participated in the 1983 Field Symposium on Classification of Mire Vegetation led by Seppo Eurola in Finland where the idea of IMCG was conceived. The shared vision was that it should be a network of friends working in mire conservation, often alone in their own countries, who would try to help each other and at the same time promote the conservation of mires. It was Michael, along with Richard Lindsay and Christer Göransson, who carried the idea forward into reality. In 1984 Michael invited the group to meet again in Austria, where IMCG was established with Hugo Sjörs as Chairman. Every two years there would be a field symposium in a different country. The 1986 symposium, instigated by Richard Lindsay, was in Scotland. Thereafter the group continued with Richard (Chairman) and Michael (Secretary) facilitating all of its activities including the biennial symposia in Sweden, Ireland, Switzerland, Norway, Japan, Latvia, and finally Canada where IMCG was officially constituted in 2000. Thus, Michael's keystone role in developing

IMCG ran on in the background of the next 16 years of his career.

Michael spent 1985 as a guest scientist with Klaus Dierssen's group in Kiel (Germany), and thus gained a thorough grounding in the traditional vegetation classification methods of the central European school. He then sought out Michael Succow in Greifswald, learning his approach to mire typology and successfully adapting it for the alpine situation. These two elements formed the basis of his habilitation work on the vegetation of alpine mires, which was published in 1992 as the Austrian Mire Conservation Inventory.

The thorough knowledge that he had built up during the vegetation mapping work led Michael to realise that there was an urgent need for mire regeneration in Austria. In 1990, he made contact with Hugh Ingram's research group in Scotland and began to learn about mire ecohydrology and its relevance to developing a practical basis for mire restoration. His evaluation of the important raised mire at Pürgschachen for WWF incorporated a collaboration with Olivia Bragg to build up an understanding of the site's ecohydrology which was supported by Christian Ginzler's thorough calibration measurements and led to two publications. Michael also co-operated with Andreas Grünig on mire restoration and monitoring in Switzerland. From 1998 to 2000, he was a consistent contributor to the Darwin Initiative Peatland Biodiversity Programme, which provided him with annual updates on both the techniques and the mistakes of the increasingly active mire restoration effort in Scotland. All of this experience prepared him for the moment when the opportunity came for Austrian mires – from a slightly unexpected direction – and it was Michael who both recognised and seized it.

Mire rehabilitation in Austria began at Michael's instigation through a collaboration with one of his former students who was working for WWF and the Federal Forestry Service Öbf, which was newly privatised and had thus acquired a new legal obligation to engage in nature conservation work. Michael suggested that the foresters should conserve the damaged mires that, from the days of compiling the inventory, he knew they now owned. He eventually prepared plans for the rehabilitation of 25 of their mires. Some needed only fencing to exclude stock, whilst for others it would be necessary to block ditches that were much steeper than any that had been closed by damming before. Michael worked out how to do the job, oversaw its conduct, and made sure that there was a legacy. Austrian foresters now proudly manage six new Ramsar sites incorporating – and designated because of – mires that they have restored. Moreover, there is an increasing demand for their services as mire rehabilitation contractors to the nature conservation sector because, having noted the success of Michael's approach and techniques, four of Austria's nine county administrations have so far begun new mire restoration programmes.

IMCG Finland 2006: Michael Steiner and his wife Eva remain constant figures at the biennial IMCG field symposia, Michael having missed only one of these events ever. Photo: O. Bragg.

Although Michael's professional energies have now been diverted towards personnel issues associated with a major revision of employment conditions at the university, it is difficult to work out which of his former activities this job has replaced. With the calm charisma that is his hallmark, he still teaches his rigorous approach to phytosociology at undergraduate level. He also regularly develops new mire restoration plans, and represents Austria at meetings of the Ramsar Convention. Most recently, Michael has completed a book describing Mires from Siberia to Tierra del Fuego which incorporates articles from a wide cross-section of the countries represented by IMCG members; and he will soon appear in a television documentary giving an

extended account of Austrian mires and the rehabilitation programme that he set in motion.
We are now honoured to receive Michael as a Life Member of IMCG, in recognition of his far-reaching contributions to the organisation and to mire conservation both in Austria and at global level. It is especially appropriate that this was confirmed as IMCG came 'full-circle', returning to Finland 23 years after it all began at 'Oulanka 1983'.

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IMCG Resolutions

The IMCG General Assembly in Finland 2006 adopted several resolutions.

Resolutions for Ireland, Russia and Finland can be found below

IMCG resolution for Ireland 2006

The International Mire Conservation Group (IMCG) is a worldwide organisation of mire (peatland) specialists who have a particular interest in the conservation of peatland habitats. IMCG recognises the peatlands of Ireland as being among the most important wetland sites remaining in North–West Europe. The IMCG held its 12th biennial General Assembly in Tammela, Finland in July 2006. At that Assembly the following resolution for Ireland was adopted.

The IMCG acknowledges that the Irish Government has progressed in their conservation of peatlands since our last resolution in 1990. This includes the completion of a national blanket bog survey and evaluation, a national survey of raised bog Natural Heritage Areas (NHAs), the provision of legal protection for the Irish raised and blanket bog NHAs and the adoption of approximately 225 peatland sites as part of the Natura 2000 Network.

However, despite this progress, there are a number of issues that the IMCG feel require the urgent attention of the Irish Government.

1. Fens (alkaline mires) in Ireland are highly threatened ecosystems and are being damaged by drainage and infilling for either agricultural or development purposes. The IMCG urges the Government of the Republic of Ireland and particularly the Department of the Environment, Heritage and Local Government to urgently make an inventory of un-drained, actively peat-sequestering fens in the Republic of Ireland. The objectives of this survey should include:
- to identify the distribution of fen habitats throughout the Republic of Ireland and to assess the conservation significance of each site, including the 67 sites that were identified by the IPCC in the Irish Fen Inventory (2000)
- to identify habitat sites for species threatened in the European Union
- to immediately and effectively protect these peatlands (including their hydrological catchment areas) as Natural Heritage Areas
- to select a representative sample of these peatlands as Special Areas of Conservation in a European context.

2. Ireland has the most significant area of raised and blanket bog habitat in North-west Europe. Sites of conservation importance have been designated as Special Areas of Conservation (SACs) and Natural Heritage Areas (NHAs). Current Government and EU Policy permit the practice of turf cutting (turbary rights) on designated sites, which is affecting the hydrological integrity of each mire system. The IMCG calls on the Government of the Republic of Ireland and the European Union to immediately ban the practice of peat extraction on all peatland sites of conservation importance.
The IMCG furthermore urges the Irish Government to draft and implement restoration plans for all peatland sites of conservation importance.

3. The Renewable Energy Policy of the Irish Government threatens upland blanket mires by regarding wind farm construction as sustainable development within these sensitive habitats. The IMCG urges the Government of the Republic of Ireland and particularly the Department of the Environment, Heritage and Local Government to encourage the construction of wind farms away from sensitive upland blanket bog areas.

IMCG resolution for Russia 2006

The International Mire Conservation Group (IMCG) is a worldwide organisation of mire (peatland) specialists who have a particular interest in the conservation of peatland habitats. The IMCG held its 12th biennial General Assembly in Tammela, Finland in July 2006, attended by members from 21 countries and 6 continents, including 8 participants from the Russian Federation.
IMCG is aware that the Russian Federation has the largest area of peatlands in the world containing a great diversity of mire types.
IMCG recognizes:

- the significant input of Russian science to the global knowledge on mires and peatlands,
- the significant achievements in mire protection within the well developed system on Strict Nature Reserves (Zapovedniks) and National Parks,
- the strictly enforced and environmentally friendly forest, water and land use legislation, especially the designation of mires as water objects and providing forest protected zones in river sources and around mires, and
- the recent adoption by the Russian Federation of the Peatlands Action Plan, as well as input by the country into promotion of peatlands in the Ramsar process.

At the same time IMCG expresses concern about the new tendency of the Russian policy makers to allow the non-sustainable exploitation of mires and peatlands rather than actively promoting conservation and the wise use of these valuable natural assets. Evidence of this tendency includes: current attempts to amend legislation giving the opportunity to misuse mires; serious losses of protected areas at the regional and local level; active lobbying by the peat industry to allow large-scale development of peat extraction; mismanagement of abandoned peatlands, resulting in extended peat fires in 1999, 2000 and 2002.

We stress that the excellent background information for mire wise use available from Russian mire scientific schools is not being used by decision makers and funding for research activities has significantly declined.

To avoid moving backwards in mire conservation, IMCG calls for several specific actions to be adopted in the environment policy of the Russian Federation:

- To sustain existing environmentally friendly legislation which is the background for the current good status of Russian peatlands;
- To maintain and secure the developed system of protected areas in Russia, especially on regional and local levels, where 20 million hectares of mires are currently preserved;
- To promote an integrative approach to mire ecosystems management as part of river basins, especially taking in account the achievements of Russian mire hydrological science;
- To introduce environmentally friendly management of abandoned peatlands, excluding peat fires and other activities that negatively affect the ecosystems;
- To introduce rewetting and restoration of mires after use;
- To minimize the impact of oil and gas industry development on the unique mire ecosystems;
- To prioritise conservation efforts to mires vulnerable to climate change – in permafrost areas, steppe and forest steppe zones;
- To designate peat as non-renewable energy resource;
- To avoid the overexploitation of peat by foreign companies especially on the western borders;
- To promote peat free horticultural products;
- To promote, extend, disseminate and apply on practical level the unique knowledge of Russian mire science;
- To promote and develop transboundary cooperation in mire conservation;
- As a Contracting Party to the main biodiversity related conventions as well as to the UNFCCC and its Kyoto protocol, to promote peatland conservation and actively use convention mechanisms to achieve this.

IMCG resolution for Finland 2006

The International Mire Conservation Group (IMCG) is a worldwide organisation of mire (peatland) specialists who have a particular interest in the conservation of peatland habitats. The IMCG held its 12th biennial General Assembly in Tammela, Finland in July 2006. At that Assembly the following resolution for Finland was adopted.

The IMCG is extremely impressed by the variation in the mires of Finland. With peatlands covering 30% of its area, Finland is one of the most important peatland countries in the world. In particular the aapa mires illustrate the surface patterning resulting from the complex and long-term interactions between plants, water, snow, ice and peat. The Finnish-Saami terms "aapa" and "palsa" have been adopted internationally to describe specific mire types. Finnish mire scientists have substantially contributed to global understanding of peatlands. In recognition of this important role, the IMCG has conferred honorary membership on two distinguished Finnish mire scientists and conservationists Seppo Eurola and Rauno Ruuhijärvi.

And last but not least IMCG has enjoyed the extensive areas of protected mires and the impressive interpretation facilities that are so necessary to convey the values of mires to the national population and foreign visitors.

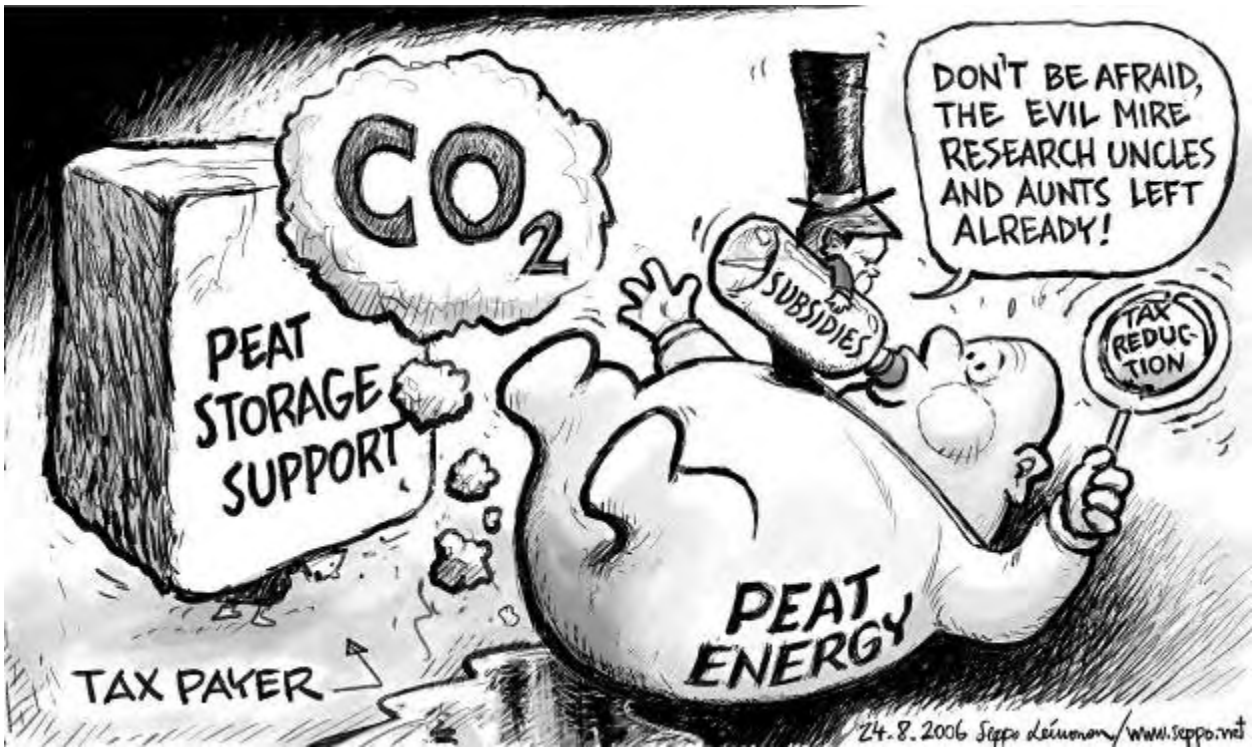
We have, however, also observed issues of concern.

- The IMCG is shocked that so many Finnish mires have been irreversibly destroyed by drainage for forestry, agriculture and peat extraction. The national statistics of the condition of the peatlands give a biased impression. In contrast to our expectations raised by a figure of 30 % of remaining pristine mires, we did not experience pristine mire landscapes - not even in National Parks, where traces of former (and persisting) drainage are evident.
  The IMCG strongly urges the local and national governments of Finland to meet their international responsibility and to protect and conserve the remaining pristine peatland ecosystems. This includes the cessation of drainage and peat extraction in intact mire sites and the abandoning of current and planned groundwater extraction that may affect these sites.
- None of the Parks we have visited covers the complete hydrological system, so that present and future conflicts with competing land use outside the park boundaries are inevitable. To our amazement we observed, for example, how groundwater extraction sites are situated or planned in (e.g Kauhaneva) or directly adjacent (e.g. Olvassuo) to groundwater-dependent peatland national parks and reserves.
  Finland should urgently revise the boundaries of its protected areas to enable the restoration and protection of the natural hydrologic systems. This will require a substantial increase in eco-hydrological landscape analyses and research.
- Finland should improve its recognition of the ecosystem services that pristine mires provide, along with their consequent economic value. These include biodiversity conservation, water regulation, carbon storage, the provision of palaeo-ecological archives, opportunities to experience wilderness, preservation of human heritage and the satisfaction of recreational needs, such as wild berry collection. By continuous neglect of these services, Finland progressively destroys the integrity of its country. Many of these values are irreversibly destroyed by peatland drainage, cannot be restored and often cannot be substituted. Conserving intact mires is therefore much more cost-effective than restoration of drained mires.
  The IMCG noted that current Finnish environmental legislation does not give sufficient emphasis to protection of mires.
  We request Finland to modernize and update its environmental legislation so that the full range of peatland ecosystem services will be duly considered in decision making.
- Mire and peatland destruction in Finland is facilitated by the misleading argument of peat being a "(slowly) renewable biofuel". There is no scientific basis to the claim that burning peat contributes any less to climate change than other fossil fuels. Peat grows so slowly that its rate of renewal is – like that of coal and lignite – irrelevant for society.
  Equally wrong is the argument of sustainable peat mining by pointing at accumulation elsewhere. Peat accumulation elsewhere cannot compensate for the losses of ecosystem destruction at a valuable site.
  We ask Finland to take note of the statement of the Global Environmental Facility (GEF) to the IMCG (April 13, 2005): "We share your concern about the preservation of peatlands. Not only are they not renewable on a societal time scale; their low rate of renewal is also too slow to be relevant for the objective of climate change mitigation. As a matter of general policy, we therefore do not endorse peat as a renewable energy resource. … We will pay heed that in the further development of this project and the GEF renewables portfolio, peat will be excluded from the support of the GEF. Unfortunately, however, this might not influence the definitions and terminology that governments are using for their national legislation, as we are a country driven mechanism, but it will ensure that GEF resources are not used for promoting peat."

The IMCG requests the Finnish government to refrain from using (and internationally promoting) misleading labels such as "slowly renewable biofuel" as it obstructs a factual exchange of information and prevents wise decision making.

- **The IMCG urges Finland to rapidly develop and implement an energy strategy - based on truly sustainable resources - that includes:**
  - phasing-out of fuel peat mining by the year 2025
  - the prevention of peat mining in areas that have a high conservation value
  - an immediate end to peat mining in those areas
    - that can easily be restored, or
    - that are important for the protection of high conservation value areas or provide key ecological services
  - a restriction of the remaining peat mining activities solely to deposits that had already lost their ecological values before 1990, such as old forestry drainage sites or abandoned agricultural fields on peat soil.

The 2006 IMCG field symposium in Finland will stimulate further international interest in research, education and conservation management of this globally important resource. The IMCG feels privileged to have had the opportunity to see such a historically important area for peatland research and thanks the Finnish Environment administration and the symposium organizers for their much-valued support. The IMCG would like to work with the Finnish Government to ensure that this resource is conserved for future generations.



This cartoon shows the minister of trade and industry of Finland, Mauri Pekkarinen, feeding peat energy. The minister supports a policy to regard peat as renewable biofuel. The "evil mire research uncles and aunts" refers to the IMCG Assembly and Field Symposium.

There are more environmental cartoons on Seppo Leinonen's website www.seppo.net.

Proceedings of the 12th IMCG Symposium – Call for papers

Scientific articles as well as technical reports dealing with mire conservation are welcome. The articles should be written in English. Linguistic revision will be arranged by the editors. Manuscripts should be sent by e-mail to the editors Tapio Lindholm and Raimo Heikillä: Tapio.lindholm@ymparisto.fi and raimo.heikkila@ymparisto.fi
If you have large files, e.g. photos, please take into account that our mailbox does not accept attachments exceeding altogether 5 MB in one message. So, if you have many large attachments, please send them in separate messages. You can reduce the size of the files using zip packing.
Each article will be reviewed.

Manuscripts should follow this sequence:
Title
Full names of authors
Affiliation, postal address and e-mail address

Example:
Nature and degradation of polygon mires in NE Yakutia (NE Siberia)
Norman Donner, Merten Minke, Pim de Klerk & Hans Joosten
Institute of Botany and Landscape Ecology, Greifswald University, Grimmer Strasse 88, D-17487 Greifswald, Germany
E-mail: norman.donner@web.de, MertenChristian@gmx.de, pimdeklerk@web.de, joosten@uni-greifswald.de

Introduction
Materials and methods (when applicable)
Results
Discussion
Acknowledgements
References
Tables
Figure legends
Figures

The maximum length of articles is 10 pages (Times Roman 12 pt, single-spaced, 2,5 cm margins in all directions) including figures, tables and references. The deadline for submitting manuscripts is 31st January, 2007.
The text should be in .rtf file format without any formatting. Do not hyphenate, indent, justify or use any other special features. Please separate paragraphs and chapters with one empty line between them.
Tables should be sent as separate files in .rtf format using tabs to separate columns, and without using the table options of word processors. The figures can be printed in colours. The graphs should be in vector format (.eps), or high resolution (minimum 600 dpi) .jpg or .gif format. Photos are welcome, and they should be in .tif format (minimum resolution 300 dpi) or .jpg format (minimum resolution 600 dpi). If you are uncertain about the figures, please consult the editors.
Text references should be written in the text as follows: Cajander (1913), (Юрковская 1975), Päivänen & al. (1993) (if more than two authors) or (Eurola & Kaakinen 1979, Tahvanainen & Tuomaala 2003), in chronological order. The references in the reference list should be in alphabetical order with the journal names unabbreviated.
Give titles of papers cited in the language in which they have been written, but include the name of an English (or other 'congress language') abstract/summary, if available. If there is no such abstract/summary, please give an English translation of the title in brackets [ ]. Please do not transliterate the names of authors, titles of publications or names of journals. If several works by the same author are cited, please order the references as follows:
Author: chronologically
Author & coauthor: alphabetically according to coauthor, then chronologically.
Author et al. (several coauthors): chronologically.

Examples:
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The Greifswald Statement on Ecological Restoration

The 5th European Conference on Ecological Restoration (Greifswald, 21– 25 August 2006) convened to explore the challenges of land use changes by exchanging knowledge and experience on the ecological, economical, and ethical dimensions of Ecological Restoration. The Conference was attended by over 400 experts from 47 countries and 5 continents.

We, the Conference delegates, concur with the conclusions of the Millennium Ecosystem Assessment 2005, which states:

Over the past 50 years, humans have changed ecosystems more rapidly and extensively than in any comparable period of time in human history. These changes have contributed to substantial net gains in human well-being and economic development, but these gains have been achieved at growing costs in the form of the degradation of many ecosystem services, increased risks of nonlinear changes, and the exacerbation of poverty for some groups of people. These problems, unless addressed, will substantially diminish the benefits that future generations obtain from ecosystems and increase conflict potential.

More and more the factor restraining economic development is remaining natural capital, not manufactured capital as it used to be. Economic logic says to invest in the limiting factor.

We are convinced that the only way to realize sustainable economic development and to enhance the well-being of people is to reverse the process of degradation and ensuing loss in ecosystem goods and services through the investment in the restoration of natural capital. This includes

- the restoration/rehabilitation of degraded natural and anthropogenic ecosystems and their capacity to provide useful goods and services,
- the implementation of ecologically sustainable utilization of natural resources, and
- appropriate investments to capture long-term economic returns.

Increasing socio-economic demands for energy, water, food, raw material, and recreation, may lead to new and increasing ecosystem degradation. Our experience shows that the restoration of degraded ecosystems is often difficult, slow, costly and sometimes impossible. Therefore, all efforts should be made to prevent further ecosystem degradation.

Moreover, the restoration of existing degraded ecosystems will augment natural capital and enable safeguarding of future societal needs. Restoration[1] should

- consider all forms of scientific, indigenous and local knowledge and experience
- treat the causes rather than the symptoms
- recognize the linkages within the larger landscape
- emphasize process repair over structural replacement
- allow sufficient time for self-generating processes to resume
- take existing values (incl. archeological and cultural values) into account
- include short-term evaluation and long-term monitoring to allow adaptive management and to acquire new knowledge.

Our experience also shows that the success of ecosystem restoration often depends more on social, economic, and cultural constraints than on eco-technical know-how. This implies to

- inform all stakeholders on the full range of alternatives, opportunities, costs and benefits offered by restoration. Scientists have a duty to inform and educate
- empower all stakeholders in planning, decision making, implementation, evaluation and monitoring
- take a pro-poor approach in developing countries to break through the vicious cycle of social-environmental degradation
- provide short-term benefits leading to the acceptance of longer-term objectives
- involve imagination to capture the public heart
- bring about a cultural shift by embedding restoration into daily cultural practices.

Key problems that require the integration of social, economic and environmental aspects into restoration practice include peatland degradation of Southeast-Asia, desertification in Central Asia, transformation in Central and Eastern Europe, and rural developments in Western Europe. It is essential to invest more in interdisciplinary approaches

The collaboration between economists and ecologists is a prerequisite to incorporate knowledge and awareness of the value of natural capital into daily activities. We urge ecologists to learn from economists, and economists from ecologists.

Finance mechanisms (such as the Clean Development Mechanism [CDM] and Bio-rights) based on the opportunity costs of maintaining ecosystem goods and services should be made available for ecological restoration.

In view of the gigantic carbon emissions from degraded peatland and the lack of resources to address this urgent issue, we demand an immediate eligibility under the Clean Development Mechanism for support to peatland restoration measures.

To address one of the biggest and most burning environmental disasters of our age in terms of Carbon emission, land degradation, biodiversity loss and poverty, particularly in relation to peatland degradation in Southeast Asia, we call for the establishment of a Global Peatlands Fund.

We furthermore call upon society's leaders to achieve a radical paradigm shift and to help usher in a new era built upon twin conceptual pillars: Economics in

[1] See also "Ecological Restoration – a Means of Conserving Biodiversity and Sustaining Livelihoods" (2004) published by the Society for Ecological Restoration International and the IUCN Commission on Ecosystem Management.

which nature matters and ecology in which people matter.
Essential to bring about the necessary change is public awareness, government and policy support at all levels and in all contexts, in both developed and developing countries. We urge governments, multi-national institutions and the private sector to actively seek innovative markets, legislation and institutional mechanisms to this end, and to enter into the long-term commitments required.
We recommend improved collaboration between the conservation conventions and other policy platforms (e.g. the United Nations Conventions on Climate Change [UNFCCC], on Combating Desertification [UNCCD], and on Biological Diversity [CBD], the Ramsar Convention on Wetlands, the UN Commission on Sustainable Development, and the World Water Forum) to build on their synergies, strengthen the global mandate for ecological restoration and optimize the use of human and financial resources.
Only by stopping degradation and restoring existing degraded ecosystems we will be able to achieve the necessary integration of the United Nations Millennium Development Goals 1 and 7 on poverty reduction and environmental sustainability, and to carry as much as possible of the world's ecological riches through the pressures of the 21st century into what we must all hope will be a stable and sustainable world beyond.

Greifswald, 25 August 2006.

Peatlands at the UNFCCC

From 6 - 17 November 2006 the 12th Conference of Parties (COP) to the United Nations Framework Convention on Climate Change (UNFCCC) was held in Nairobi, Kenya.
At the meeting of the Subsidiary Body for Scientific and Technological Advice (SBSTA) the secretariat issued updated guidelines for the greenhouse gas emission country reports. These "Guidelines for the preparation of national communications by Parties included in Annex I to the Convention, Part I: UNFCCC reporting guidelines on annual inventories" give a detailed tabulated overview of the emissions countries have to report to the convention including emissions related to land use, land-use change and forestry (LULUCF). Peat is included in the section on emissions from the energy sector, where it is listed with other solid fossil fuels like coal and anthracite. Peatlands and wetlands with organic soils are mentioned in the LULUCF sections.
http://unfccc.int/resource/docs/2006/sbsta/eng/09.pdf

During the COP in Nairobi, there were two information booths focussing on peatlands and their role in climate change. Furthermore two side events were organised. Wetlands International focussed on peatlands in South East Asia and the immense emissions of CO_2 caused by drainage and fires. The Global Environment Centre (GEC) gave more general information on peatlands, biodiversity and climate and promoted the findings of the UNEP-GEF project "Integrated management of peatlands for biodiversity and climate change" in which also IMCG is involved. Key findings of the Assessment on Peatland Biodiversity and Climate Change, which is carried out as part of the project, were distributed (http://tinyurl.com/ydcegg).
The side events drew about one hundred attendants each; the booths were well visited throughout the week.

On Saturday 11 November an all day Workshop on peatland biodiversity and climate change was organised by the GEC and attended by more than 40 participants. The workshop dealt with the follow-up of the UNEP-GEF project. The potential of a voluntary Carbon avoidance scheme was discussed as a possible finance mechanism for peatland restoration projects, mainly in relation to SE-Asian peat swamp forests. Furthermore, there was a brain storm session on possible follow-up projects that yielded many ideas, particularly also for East-Africa where peatlands play an important role in water retention.

During the SBSTA meeting on deforestation, GEC made an intervention to stress the importance of tropical peatlands with respect to CO_2 emissions related to forest degradation. The Indonesian delegation had already pointed at the problem during the SBSTA session. The text of the GEC intervention follows.

Statement to UNFCCC SBSTA on 6th November 2006 Regarding SBSTA Agenda item 5 Reducing Emissions from Deforestation in Developing Countries.

I am making this statement on behalf of an international partnership on peatlands and climate change including Global Environment Centre, Wetlands International, International Mire Conservation Group and Wildlife Habitat Canada. I would like to highlight the issue of the importance of peat swamp forests and other peatlands in relation to the issue of reducing emissions from deforestation in developing countries
Globally Peatlands are the largest carbon store in the terrestrial biosphere (with storage of at least 550 Gt C

even though they only cover 3% of the land area. Over 60 million ha of peatlands, storing over 80 GtC, are found in more than 100 developing countries with the largest area in SE Asia, but also occur in Africa and Latin America and elsewhere in Asia More than 75% of these are forested.

Emissions from degradation of forested peatlands in developing countries is estimated to be at least 2 GT/annum and is the largest single source of emissions from deforestation globally. This is equivalent to more than 10% of global GHG emissions from Annex 1 Parties. Tropical peatlands may store 3000-6000 tC/ha compared to 300 tC/ha for tropical rainforest and 100-200 tC/ha for other forest types. Thus it may be very effective to focus efforts to reduce emissions on these concentrated carbon stores.

Degradation of tropical peatlands also cause major social, economic and health problems. Fires in peatlands in Se Asia degraded over 3 million ha of peatlands in recent years. Every year there are extensive fires as well as degradation due to drainage. These fires have caused extreme economic, social and environmental impacts – estimated to exceed US$9 billion in 97-98 alone. The smoke cloud from the fires covered an area of 5000 by 3000km for up to six months – causing over 500,000 people to seek hospital treatment and schools and factories to close.

To address this problem the 10 ASEAN countries intend to adopt (in four days time) on 9th November 2006 an ASEAN Peatland Management Strategy (2006-2020) to guide actions for sustainable management of peatlands over the next 15 years. However additional resources are needed to assist the implementation of these activities. A major opportunity would be to channel climate change funding to prevent peatland degradation in SE Asia.

Conference of Parties of the Ramsar Convention on Wetlands and Convention of Biological Diversity (CBD) have already adopted specific decisions to encourage their 180 parties to take urgent steps to maintain or restore peatlands in view of their key role in carbon storage and sequestration.

In the Report of the Workshop on Reducing Emissions from Deforestation in Developing Countries held in August 2006, the importance of a focus on peat swamp forests was highlighted by the expert from Malaysia.

Protection as well as restoration and sustainable use of peatland forest is a very cost effective measure for CO2 emission reduction.

We therefore strongly urge that within any decision related to reduction of emissions from deforestation the parties to UNFCCC include specific reference to:

Placing special priority on peat forests within any mechanism established to reduce emissions from deforestation.

Inclusion of peatlands as a specific topic in the proposed second workshop in 2007

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Besides the SBSTA intervention, three press releases were issued, two dealing with carbon emissions from Indonesian peat swamp forests and one with the UNEP-GEF assessment on peatland biodiversity and climate change.

Shocking climate impact of wetland destruction in Indonesia

2006-11-02 – Press Release

Wetlands International and Delft Hydraulics present shocking information on climate change caused by wetland destruction in Indonesia. Huge areas of wet peatland forests are drained and logged. Drainage starts a rapid process of decomposition, made worse by annual peat fires that last for months. Together they contribute large amounts of carbon dioxide to the atmosphere. Recently calculated emissions of greenhouse gases unexpectedly reveal that Indonesia has the third largest emissions of the world.

These figures that change the global picture on greenhouse gas emissions will be presented at the UN-climate Conference in Nairobi, Tuesday the 7th of November 2006.

The NGO Wetlands International and the Dutch research institute and specialist consultancy Delft Hydraulics have investigated the destruction of peatlands in Indonesia. Through the whole country, areas with peat were mapped, their status monitored and emissions of greenhouse gases investigated. The shocking outcomes reveal a global problem.

Over the last decades, a silent disaster has been taking place in Indonesia and is increasing in magnitude.

The marshy areas of South-east Asia used to be covered with millions of hectares of dense lowland rainforest. In the soaking wet soil, plant material decomposed very slowly. Over thousands of years, a thick layer of peat was formed, storing carbon equivalent to 100 years of current global fossil fuel use. Of these forests, only small patches remain intact; virtually none are unaffected. The global demand for hardwood, paper pulp and palm oil and local economic development are the driving forces behind the destruction. Areas are drained to enable logging of the swampy rainforest. After clearance, the drainage is intensified to a depth of 70 centimetres or more, to enable commercial production such as for palm oil.

Normally, peat is soaking wet and will not burn. Through drainage, the peat dries, starts decomposing, and emitting carbon dioxide. In the tropics this process takes place very rapidly and is often accelerated by fires. In Indonesia these fires cover millions of hectares and can last for weeks, sometimes even months, burning thick layers of peat over large areas.

New research shows the enormous impact of peatland degradation on climate change. Annually, in Indonesia 2000 million tonne of CO_2 is emitted; 600 million tonne is caused by decomposition of dry peat (a process that will continue until all peat has

disappeared) and 1400 million tonnes is lost through the annual fires.
These amounts change the global picture concerning carbon emissions. In the ranking of countries based on their total CO_2 emissions, Indonesia comes 21st. However, if peatland emissions are included, Indonesia is ranked third. The country emits more than India, more than Russia, and several times more than the UK or Germany. It emits more than all the efforts of western countries to reduce greenhouse gases under the Kyoto Protocol.
Emissions of peatlands are currently not calculated in official statistics. Therefore preventing these emissions does not count as a reduction of a country's emission; unlike investments in industry. This means that the current Kyoto climate treaty does not provide any incentives for action. Wetlands International calls for the global donor community to assist Indonesia in addressing this problem.

UN-FCCC fails to address emissions from wetland destruction

10-11-2006 – Press release

Scientists and NGO's fear that the current United Nations Convention on Climate Change (UNFCCC) will fail to recognize that destruction of peatlands leads to huge emissions of carbon dioxide. Wetlands International and the Global Environment Centre call on the UNFCCC to create global incentives for stopping this destruction.
New research by Wetlands International, Delft Hydraulics and others shows the enormous impact of the peatland degradation in South-east Asia on carbon dioxide emissions. Annually, in Indonesia alone 2 billion tonnes of carbon dioxide is emitted from the peatlands: 600 million tonnes is caused by oxidation caused by drainage and 1.4 billion tonnes is caused by fires.
Despite this new evidence, the UN-climate Conference in Nairobi will probably not recognize this issue as a priority. The current Clean Development Mechanism does not address this urgent issue. Discussions on avoiding emissions from deforestation in developing countries may lead to a new avenue for saving the remaining peatland forests - but is likely to take years to develop and will not address the problems in the already deforested peatlands. Thus the climate treaty currently doesn't provide any incentives for the required immediate action.
Local demands for economic development and poverty reduction as well as the global demand for hardwood, paper pulp and palm oil are the driving forces behind the destruction. Palm oil production is increasingly driven by the global demand for biofuels. The EU now requires substitution of 5% of fossil fuels for transport by biofuels. Indonesia and Malaysia currently produce over 80% of the world's palm oil with one-quarter of oil palm plantations located on peat soils. They have recently announced that they will expand their plantation area and set aside 40% of their production for biofuel.
However, the production of 1 tonne palm oil on peat results in the release of about 20 tonne of carbon dioxide. Ironically the substitution of fossil fuels by these "biofuels" is thus increasing green house gas emissions.
Moreover, the related land-use changes are destroying some of the last remaining tropical rainforests. Therefore development of oil palm and pulpwood plantations on peat should be avoided. In addition improved water management needs to be applied to reduce emissions from existing plantations on peat.
A report on emissions from Indonesia's peatlands can be found here: http://tinyurl.com/y2kqpu

Peatland degradation has major impact on global climate, a new study shows

10-11-2006 – press release

Peatlands are the most efficient terrestrial system in storing carbon, but large scale peatland degradation is causing massive emissions, loss of biodiversity and socio-economic impacts. Addressing peatland degradation can thus make a major contribution to climate change mitigation, nature conservation and human welfare.
According to the interim findings of the global Assessment on Peatlands Biodiversity and Climate Change released at the UNFCCC COP12, peatlands cover 3% of the land area but are the top long-term carbon stores in the terrestrial biosphere. They store more than 550 billion tonnes of carbon. This is equivalent to 30% of all global soil carbon, 75% of all atmospheric carbon and twice as much carbon as the biomass of the worlds forests. Peatlands are a concentrated form of carbon – storing up to 10 times more carbon per ha than other terrestrial ecosystems.
Degradation of peatlands is a major growing source of human-induced emissions. Carbon dioxide emissions from peatland drainage, fires and exploitation are thought to be at least 3 billion tonnes per year or more than 15% of the 1990 emissions from the Annex 1 Parties to the UNFCCC.
Peatland degradation affects millions of people around the world. Drainage and fires in peatland rainforests in SE Asian jeopardizes the health and livelihood of millions of people through formation of smoke clouds smothering five countries in the region. Degradation of mountain peatlands in the Himalayas, Andes and Africa affects the water supply and agriculture lands of hundreds of millions of people.
A range of options for integrated management of peatlands have been identified which can solve or substantially reduce the problems. These range from protection of remaining peatlands, better water management for agriculture, improved forestry and livestock practices on peatlands and effective prevention and control of peatland fires. Peatland issues also need to be better integrated into the global environmental conventions and policy platforms

dealing with climate change, biodiversity, water, land degradation and sustainable development.
The preparation of the assessment is being coordinated by an international team of peatland, biodiversity and climate change specialists in the period 2005-2007. It is being supported through the UNEP-GEF project on Integrated Management of Peatlands for Biodiversity and Climate Change which is being implemented by Wetlands International and the Global Environment Centre. The final report from the Assessment is due in March 2007.

The interim findings are available on www.peat-portal.net

New IPCC Guidelines

On a related note, the new IPCC Guidelines for National Greenhouse Gas Inventories (that include emissions from peatlands under extraction) can be downloaded from:
www.ipcc-nggip.iges.or.jp/public/2006gl/index.htm

Issue Based Modules

Concrete implementation of biodiversity related conventions and international agreements remains a huge challenge. Often several environmental agreements deal with the same topic and it requires significant effort to translate international initiatives to national actions.
UNEP, with the assistance of the Belgian Development Cooperation, and in cooperation with UNEP-WCMC and IUCN, has developed so called Issue-Based Modules to assist in the implementation of biodiversity related conventions.
The project aims to support a more coherent implementation of different international obligations by providing more structured information on these obligations.
In consultation with the Secretariats of the five global biodiversity-related conventions (Ramsar Convention on Wetlands, World Heritage Convention (WHC), Convention on International Trade in Endangered Species (CITES), Convention on Migratory Species (CMS), Convention on Biological Diversity (CBD)), four priority cross-cutting issues were identified as issues of common concern to all five conventions. Those are: Climate Change, Inland Water, Invasive Alien Species and Sustainable Use. A fifth module on Protected Areas will be developed in 2007.
A selection of both global and regional agreements with regard to those four topics were analyzed and integrated to prove the concept. The modules provide structured information on the four issues by identifying and grouping implementation requirements under different agreements. They are based on existing articles, decisions, recommendations and resolutions and do not impose extra requirements on Parties. They will be updated regularly to reflect relevant decisions taken at the governing bodies of the conventions.
To provide easy access to a large amount of information and to facilitate the distribution and use of the modules, a website was developed. This website will contain the four modules as well as the text of the articles, decisions, recommendations and resolutions that are referred to in the modules. It will also provide users with some background information on the reviewed agreements to increase mutual understanding among experts of the different agreements.
To ensure that the modules are being built in the way that best reflects the needs and experiences at the implementation level, pilot countries are closely involved in both the development and implementation of the modules. To date, eight pilot countries representing two regions – Africa and Europe – have joint the project. At a later stage the project will be extended to other Latin America and Asia.
A Steering Committee has been established to guide the project and to promote the modules. It is composed of representatives of the pilot countries, the five secretariat conventions as well as relevant UN bodies, such as UNDP, UNEP and GEF.
In addition, a peer review process has been put into place in order to ensure the practicability and usefulness of the tools. So far, two peer reviews have been carried out which have provided useful feedback of experts and practitioners at different levels.
The official launch of the website is planned for 2007. The name of the modules may be changed to either “Eco-Modules” or “TEMATIC”, and the website address will be changed accordingly (either to www.unep.org/ecomodules or www.unep.org/tematic).

The current version of the modules can be visited at:
http://svs-unepibmdb.net
Comments are welcome and can be submitted to
comments@svs-unepibmdb.net

PeatNet

PeatNet is an acronym standing for the Peatland Ecosystem Analysis and Training NETwork. PeatNet is an international, interdisciplinary collaboration among researchers, students, and professionals working in northern peatland ecosystems. The central question is how the structure and function of northern peatland ecosystems respond to climate change and human/natural disturbances over past, present and future time scales.

The goals of the network are to encourage and foster interactions among scientists at various stages in their careers, and to enhance the education and training of the next generation of peatland ecosystem ecologists.

For more information surf to the PeatNet Web site: www.peatnet.siu.edu.

Wetlands and poverty reduction project

Healthy wetlands often play a crucial role in poverty reduction. Unfortunately, this is hardly considered by the developing sector, or by the conservation sector. This project wants to change this situation.
The aim of the project is to increase the ability of the development sector to take into account the values of wetlands in their planning and activities, while also influencing the conservation and environment sector to consider the necessity of poverty reduction and socio-economic development into their planning and actions.
The project is financed by the Dutch Ministry of Foreign Affairs' Directorate-General for International Cooperation (DGIS) and is coordinated by Wetlands International. It works on a global level, for instance by informing decisionmakers at international governmental conventions; and also on a regional or national level within countries in five regions: West Africa, East Africa, Southern Africa, Asia and Latin America.
The project's activities are concentrated in four main areas:
Policy development
On an international level, the project will make sure that policies, strategies and mechanisms aimed at structural poverty reduction recognise the importance of sustainable wetland management. Furthermore, national poverty reduction policies, sustainable development strategies and planning processes will also be influenced to enhance sustainable wetland management practices.

Partnerships and demonstration projects
Policy improvement is not enough. What also matters is what happens on the ground. The Wetlands and Poverty Reduction project will feature five pilot projects in Africa and Asia, where local partnerships will demonstrate how poverty reduction can be achieved through the wise use of wetlands.
These projects, all aimed at poverty reduction in wetland areas, will demonstrate concrete and local partnerships between (poverty reduction agencies) development organisations and environmental organisations.
Lessons learned from these demonstration projects will be used to show other organisations and agencies involved in wetland policy and strategy development, how sustainable livelihoods and poverty alleviation (poverty reduction and sustainable development) can simultaneously be achieved, and how inter-sector partnerships can work.
The projects are managed by local partners, governmental and non governmental. The following projects are now conducted:
- Kimana Wetland System in Southern Kenya
- Greater St. Lucia Wetland Park in Kwa Zulu-Natal, South Africa
- Chimu and Simlemba wetlands in Zambia and Malawi
- Inner Niger Delta in Mali
- Berbak Sembilang in Sumatra, Indonesia

Part of the partnership development is a seed funding facility; details on this can be found elsewhere in this Newsletter.

Training and capacity building
To make these partnerships and demonstration projects long lasting, and to provide fertile ground for sustainable policies, it is important that local technical capacity is created – not only awareness and understanding of wetlands functions, values and their socio-economic importance, but also skills in wetland management, planning and conservation and in wetland policy development.

Awareness and outreach
Awareness and outreach activities cross-cut all of the Project's activities and are essential to promote a collaborative approach, stimulate discussion, share lessons learned, and stimulate new partnerships.

For more information surf to:
www.wetlands.org/WPRP

Wetlands and Poverty Reduction Project: Seed funding facility

Wetlands International's Wetlands and Poverty Reduction Project will support partnerships to prepare project proposals that address poverty-environment issues in wetlands.

The Wetlands and Poverty Reduction Project (WPRP) is a 4-year project that aims to influence policy and practice at all levels to enhance the recognition of the interconnection between human well-being and wetland management. Through activities focused on local demonstration, capacity building and awareness-raising, the WPRP will contribute to the wise-use of wetlands and poverty reduction. Over the next 2.5 years, the WPRP's Seed Funding Facility will make €350,000 available to support partnership processes in Africa, Asia and Latin America. Additional details on the Wetlands and Poverty Reduction Project are available from Wetlands International's website at www.wetlands.org/WPRP.

The Seed Funding Facility will provide funds to support conservation and development/aid organizations to work together and engage with local and regional actors in the development of project proposals that address wetlands-poverty issues. Supporting these processes and partnerships will result in up to 20 new project proposals being submitted to donors (i.e. bi-lateral and multi-lateral development agencies, conservation and/or development NGOs, private foundations and/or the corporate sector) for future funding consideration.

The Seed Funding Facility will not fund projects only the development of project proposals.

The maximum amount that can be requested from the Seed Funding Facility is €25.000. The maximum amount under the Seed Funding Facility will be granted only in exceptional cases. To be eligible for consideration under the Seed Funding Facility, project concepts must meet the following minimum criteria:

1. Partnership: Project concepts must be submitted by a collaborative partnership involving organizations from the development/aid and conservation sectors.
2. Issue and focus: Project concepts must combine a pro-poor ecosystem-based approach that focuses on sustainable livelihoods and address the critical links between wetlands, water and poverty.
3. Local participation and gender: The partnership must integrate and work directly with local people taking special account of the needs of women, the vulnerable and other minority groups.
4. Influencing policy: Project concepts must indicate how they intend to influence policy processes and achieve policy change at the local and regional levels.
5. Eligibility: The Seed Funding Facility welcomes project concepts from any country in Africa, Asia and Latin America on the DAC1 List of Aid Recipients.

Project concepts should be submitted in English, have a maximum of 5 pages, address the criteria mentioned above and follow the structure outlined here: http://tinyurl.com/y7qzum

World Wetlands Day

2 February each year is World Wetlands Day. It marks the date of the signing of the Convention on Wetlands on 2 February 1971, in the Iranian city of Ramsar on the shores of the Caspian Sea. Each year, government agencies, NGOs, and groups of citizens at all levels of the community have taken advantage of the opportunity to undertake actions aimed at raising public awareness of wetland values and benefits in general and the Ramsar Convention in particular. From 1997 to 2006, the Convention's Web site has posted reports from more than 90 countries of WWD activities of all sizes and shapes, from lectures and seminars, nature walks, children's art contests, sampan races, and community clean-up days, to radio and television interviews and letters to newspapers, to the launch of new wetland policies, new Ramsar sites, and new programmes at the national level.

The focus for World Wetlands Day 2007 is on wetlands and fisheries in recognition of:

- the needs of the one billion people who rely on fish as their primary source of animal protein;
- the state of the world''s fisheries where 75% of commercially important marine and most inland water fish stocks are either currently overfished or being fished at their biological limit, and where the effects of unsustainable aquaculture practices on wetland ecosystems are of growing concern;
- the important role that inland and coastal wetlands play in supporting fish and fisheries at all levels, from large-scale, commercial fisheries to subsistence fishers, and from wild, capture fisheries to farmed fish; the critical role that coastal wetlands play as spawning and nursery areas for many marine species; and the urgent need for effective management of fisheries and the wetland ecosystems that support them;
- the adoption in November 2005 by the Ramsar Convention of a resolution and annexed guidelines on the conservation, production and sustainable use of fisheries which commits the 153 Contracting Parties to the Convention to playing their role in establishing and maintaining sustainable fisheries in wetlands.

For more information surf to:
http://www.ramsar.org/wwd/7/wwd2007_index.htm

Regional News

News from the EU
Natura 2000

WWF and its partner network across Europe have taken a close look at how serious the EU Member states take nature conservation - not in words, but in deeds. This is the first time that the implementation of Natura 2000 – EU's cornerstone of biodiversity work - has been evaluated.

80 experts from 29 countries (EU-25, Romania, Bulgaria, Croatia, Turkey), representing 19 organisations, have participated in the survey. Overall, the 25 EU Member States made good progress and the results throw a positive light on Europe's decisionmakers. Implementation of Natura 2000 seems to work best in Germany. Other countries in the top league are the Netherlands, Estonia and Lithuania. Cyprus is at the bottom of the list and Greece and Belgium trail behind too.

A 4-pages brochure based on the report can be downloaded from:
http://assets.panda.org/downloads/brochure_n2k_report_2006.pdf

The complete PDF version of the report can be downloaded at:
http://assets.panda.org/downloads/natura_2000__wwf_report_2006.pdf

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News from the UK
Trees felled and peatlands restored

Scottish Natural Heritage (SNH) has awarded £135,000 to the Royal Society for the Protection of Birds (RSPB) to remove a conifer plantation from Altnabreac in Caithness because of its damaging impact on the underlying blanket bog.

During the 1970s and 1980s, non-native trees were planted in a tax loophole created under the Thatcher government. Until 1988, any investment in woodland could be written off against personal income tax. The loophole was closed after pressure from environmental groups, concerned that the peatlands were being destroyed.

The 150 ha forest block now being cleared was planted in the 1980s. Drains were cut into the deep peat prior to tree planting. In addition to the damage caused by the drainage, the growing trees dry out and further damage the peatland habitat.

World Bog Snorkelling Champion

On 28 August 2006, the World Bog Snorkelling Championship celebrated its 21st anniversary. Hundreds of visitors watched curiously in Llanwrtyd Wells in Wales, UK, how the some 100 competitors paddled forth and back in the 60 m ditch in the Waen Rhydd peatland. A final "bog-off" between two participants brought the title to Haydon Pitchforth from Leeds who swam the distance in 1:41 min.

Source: http://llanwrtyd-wells.powys.org.uk/bog.html

Great Fen Project

Woodwalton Fen, one of the UK's oldest nature reserves, is part of a landmark scheme to restore some 3,000 hectares of arable farmland to wildlife habitats. Known as The Great Fen Project, it aims to regenerate a large tract of land between Woodwalton and Holme Fen, a sister reserve, a stone's throw from the A1 Road. It's a huge undertaking, expected to take half a century to complete.

The area between the two reserves is, at the moment, almost entirely arable farmland. It has to be artificially drained; much is below sea level, because the underlying peat has shrunk dramatically in recent decades. (One of the driving concerns behind the project is climate change.)

As the land is restored, drainage can be discontinued and replaced with wetland management. The arable land is treated with various chemicals, such as pesticide and fertiliser, which filter into the ground water - and thus impact on fen reserves.

But the scheme is not just about wildlife conservation, it's about boosting the local economy. The Great Fen will be a serious visitor attraction; increasing the tourist trade will provide other enterprise opportunities and, in turn, jobs for local people. It is an important means of diversification for a largely farming community.

At the moment, Woodwalton Fen attracts around 5,000 visitors a year; that's 12.5% of the number who visit Wicken Fen. Until three years ago, entry to the reserve was by permit only and most visitors were serious naturalists. But, since the permit scheme ended, more and more local people have come to visit.

The Great Fen Project is a partnership between Natural England (English Nature as was), the Environment Agency, Huntingdon District Council and the Cambridgeshire Wildlife Trust. It was launched in 2001. In the last five years, around £6 million has been raised and spent or allocated on the project. Altogether, the scheme is expected to cost in the region of £20 million.

Of the 3,000 hectares of arable farmland which the project plans to regenerate, 110 have been acquired - soon to be followed by another 180. The plan is not just to buy up land, but also develop good relationships with surrounding farmers and encourage them to diversify the use of their land.

Source: CEN News

News from Ireland
Dutch-Irish bog exhibition

When you lose something it is a sad day. That is the story of peatland conservation in The Netherlands. The Dutch were the first country to use up all of their peatlands. Dutch researchers coming to Ireland over twenty-five years ago saw a similar trend here and they were the first to shout "STOP". And so a conservation campaign to protect Ireland's bogs began. This exhibition, prepared by the Irish Peatland Conservation Council, is about the Irish and Dutch partnership in bog conservation, bog art and bog research over the last twenty-five years. The exhibition entitled the Dutch and Irish Bog Story will be open to the public from the 8th of November in both the ENFO Centre, 17 St. Andrew's Street, Dublin 2 and the Bog of Allen Nature Centre, Lullymore, Rathangan, Co. Kildare.

> "The preservation of Ireland's boglands is a matter that goes to the heart of many Dutch people, especially because so much in our country has been lost".
>
> Her Royal Highness
> Queen Beatrix of The Netherlands, 1990.

Not only did the Dutch shout stop, the Dutch put their money where their mouths were and largely through the inspiration of Matthijs Schouten, the "Father of Peatland Conservation", they raised enough funds to purchase three peatlands in Ireland: Scragh Bog, Co. Westmeath, Cummeragh River Bog, Co. Kerry and Clochar na gCon, Co. Galway. The Dutch then handed these peatlands over to the Irish nation as a gift.

The exhibition consists of ten panels about the Dutch and Irish conservationists, art and peatland culture in the two countries. There will be workshops running for school children for the duration of the exhibition in ENFO. The Irish Peatland Conservation Council are constructing a nature of bogs garden in the ENFO centre. This will be one of the highlights of the exhibition for the enjoyment of the public.

Ancient Book of Psalms discovered in bog

An ancient Psalter or Book of Psalms, the Irish equivalent to the Dead Sea Scrolls recently was uncovered by a bulldozer in a bog in the south Midlands of Ireland. The book testifies to the high achievements of Early Christian civilisation. It is impossible to say how it ended up in the bog. It may have been lost in transit or dumped after a raid, possibly some twelve hundred years ago.

Extensive fragments of the Early Christian Psalter, written on vellum, were recovered from the bog in July. The manuscript was brought to the Irish National Museum's conservation laboratory. The pages appear to be those of a slim, large format book with a wraparound vellum or leather cover from which the book block has slipped.

Fragment of Psalm 83 (84), photo AP

The book was found open on Psalm 83 (84), the extent to which other Psalms or additional texts are preserved will be determined by a team of experts probably operating over a long time in the Museum laboratory trying to pry the pages apart.

This is the first discovery of an Irish Early Medieval manuscript in two centuries. Initial impressions place the composition date of the manuscript at about 800 AD. How soon after this date it was lost we may never know.

Bord na Móna acquires power station

Bord na Móna has agreed terms with E.ON UK to purchase all of the shares of Edenderry Power. It is anticipated that the transaction will be completed by the end of December 2006.

Edenderry Power operates a 120 megawatt peat fired electricity generating station in Co. Offaly for which Bord na Móna is the sole peat supplier. Commissioned in 2000, the station has a remaining operational life of at least 25 years. While it is currently fuelled solely by peat, its technical design will facilitate co-fuelling with bio-mass and help meet the need for diversity of fuels within the electricity generating sector, as highlighted in the recent government Green Paper "Towards A Sustainable Energy Future for Ireland".

Bord na Móna sees the acquisition as an important step in its expansion into the Power Generation and Waste Management sectors. The power plant will give the Bord na Móna Group the opportunity to pursue its objective of co-fuelling the station with bio-mass, a renewable indigenous fuel source.

Bord na Móna says it is committed to building a substantial presence in the Power Generation sector of Ireland with a major focus on indigenous, sustainable and renewable energy sources. The Group is also committed to developing through emerging technologies such as hydrogen and solar energy. Bord na Móna is already a major shareholder in the first commercial Wind Farm in Ireland and has full planning for a large 320MW Wind Farm in County Mayo.

News from The Netherlands
Peat in Horticulture

The IPS International Symposium on "Peat in Horticulture – Peat in the Stranglehold of Interest Groups" in Amsterdam on 30 October 2006 was attended by about 100 participants from a broad range of countries. Presentations were given on the influence of solar activity on climate change, the activities of the IPS Climate Change Working Group and on legal requirements for peat production in Germany, Finland, Sweden, the United Kingdom, the Baltic States and Canada. Other topics dealt with were the objectives for and achievements of the restoration of peatlands, the question as to whether or not the horticultural use of peat is Wise Use, the EUEcolabel for Growing Media and the "peatering out" campaign in the UK. The proceedings of the conference can be obtained from: leo.schipper@nevema.nl.

News from Finland
Cotton grass against oil pollution

Cotton grass fibre is oleophilic and hydrophobic, which means it absorbs oil but is water repellent. Absorption tests have shown that the absorption capacity of cotton grass fibre is two or three times better than that of synthetic materials. Cotton grass fibre is also far more environmentally friendly than the materials currently in use. The sorbents available are usually made of oil-based polypropylene and become hazardous waste after use, whereas cotton grass fibre and the oil it absorbs can easily be burnt or composted, left for ordinary soil microbes to decompose. If there is a need to accelerate the decomposition, the microbes' performance can be boosted by suitable nutrients or using an electric current to warm up the waste.

Tank tests have shown that cotton grass fibre helps the survival of organisms after diesel spills – both in warm waters and in test conditions simulating winter. Plankton, mussels and other creatures fare well even if a used, dirty cotton grass mat is left in the water to wait for the gradual degrading of the oil.

Cotton grass fibre is not the solution for accidents in which thousands of tonnes are spilled, although it can support the clean-up operations after the worst catastrophes. It can be used as the sole method in small and medium-sized accidents and deliberate spills.

Source: www.helsinki.fi/uh/2-2006/juttu2.shtml

Peat for Energy

Two recent legislation announcements of the Finnish Council of State will strengthen the status of peat in Finnish energy production. According to one of the announcements, the Maintenance and Supply Security Centre of the state would support the extra storage of energy peat in reserve stocks by paying subsidies to the suppliers. This system would apply to a maximum of 12 million m3 of peat. A second announcement concerns the use of peat and hard coal in condensate power plants. When electricity demand rises, the new support system would encourage peat power plants to start electricity production before co-fired power plants are run up. The Parliament of Finland will deal with these regulations in autumn. Peat producers and power stations expect that the new legislation could still be applied in this year's production. The aim of these measurements is to ensure the energy and heating supply in Finland by strengthening peat as local fuel, decreasing the weather dependence of the sector and to safeguard employment especially in rural areas.

Source: IPS Peat News

Peat Day

Turveteollisuusliitto, the Association of Finnish Peat Industries, held its traditional Peat Day (Turvepäivä) on 23 October 2006 in Tampere, Finland. The event offered a dozen of presentations on current topics to the 115 attendants. In connection with the Peat Day, AFPI announced also that the hot and dry summer 2006 has broken all records in peat extraction; 40 million cubic metres of peat were cut on the 60,000 hectares of the 550 Finnish peat extraction areas. This is more than 150% of the targets.

News from Ukraine
Canal threatens Danube Delta

A huge Ukrainian ship canal project slicing through the Danube Delta threatens serious damage to wildlife in one of Europe's most prized wetlands. The canal would destroy nesting and feeding sites for unique bird colonies and spawning and nursery areas for fish important to economies in both Ukraine and Romania, it said.

The region, the second largest river delta in Europe after that of the Volga, is a major annual gathering point for millions of migratory birds. It is also home to Europe's largest pelican colony and several endangered fish species, rich in unique plant life, and includes a U.N. World Natural Heritage Site.

The Bystroe Canal project has sparked tensions between Ukraine and Romania, which share the Delta, and drawn sharp criticism from the European Union and environmental groups. Ukraine, which says the canal will give a boost to the depressed economy on its side of the border, began dredging and construction work in 2004 without formally notifying Romania.

Romania asked the U.N.'s Economic Commission for Europe (ECE) to set up a study the same year. Under the convention, Ukraine will have to discuss the project with inhabitants of the Delta and non-governmental organisations. Ukrainian environmentalists have been among the most vociferous opponents of the scheme.

The recently published report said dredging for the canal, aimed at linking the Danube and the Black Sea, would destroy flood plain areas and pollute marine waters with spoil dumped at sea. Maintenance and shipping traffic once the canal was in operation could make recovery difficult.
The Espoo Convention has no provision for sanctions if a signatory violates it. This is the first case since it went into effect in 1996 that has reached dispute stage. It has a constraining effect and no country would want to be seen openly breaking it.

Source: Reuters

News from Russia
Putin calls for use of local energy

President Putin has called on local Russian governments to make use of local energy sources like coal and peat. At the occasion of the opening of a gas pipeline between Sachalin, Komsomolsk (Amur) and Chabarowsk, Putin stressed that it would be unacceptable to have the entire country depend on gas alone.
In recent years the Russian government has propagated the use of local energy sources, including peat, to support export of oil and gas.

News from Malaysia
Rain Forests Destroyed for Palm Oil

Malaysia has pledged to preserve its tropical rain forests despite efforts to expand palm oil cultivation for lucrative bio-fuel projects. Claims by U.S. and European environment groups that thousands of hectares of primary forest have been cleared to make way for new plantations are false, according to the Malaysian Ministry for Plantation Industries and Commodities. Current palm oil cultivation supposedly is only carried out in existing plantations and farms.
Malaysia, the world's biggest palm oil producer, has been working to promote fuel blended with palm oil as an alternative to traditional fuel. Global interest in alternative energy sources has increased amid escalating crude oil prices.
But Western activists warn that the palm oil industry in Malaysia and neighboring Indonesia – coupled with rampant logging activities – has been destroying large tracts of forests and encroaching on the habitats of endangered species.

Source: Associated Press

News from Indonesia
Forest fire prevention

WWF and other NGOs are calling on the Indonesian government to stop granting concessions for forest conversion and land clearing on peatlands. The major factor responsible for this year's forest fires in Indonesia is a result of forest conversion, mainly on peat soil sites.
Monitoring conducted in July found that 56% of fire hotspots detected in Riau were located on peatlands. In the same period, nearly 30% of the hotspots detected in West Kalimantan were situated on peat soil. Once lit, it is very difficult to extinguish fires on peatlands.
Environmental NGOs are calling on the government to bring the perpetrators of forest and land fires to court and impose effective sanctions, particularly for those allegedly involved in repeat incidents.
Inadequate legislation is also believed to be a factor hampering the authorities from properly prosecuting offenders.
Besides halting new land clearing on peatlands and sustainably managing the land, companies are also urged to rehabilitate or restore areas that had been cleared.

Sumatran tiger on brink of extinction

The Sumatran tiger (*Panthera Tigris Sunatrae*) is found only on the Indonesian island of Sumatra in habitat that ranges from lowland forest to sub mountain and mountain forest including peat swamp forests. The species is on the brink of extinction because of uncontrolable poaching and illegal logging. According to the Tiger Information Center and the World Wildlife Fund there are no more than 500 tigers left in the wild with some estimates considerably lower.
Sumatra has undergone much agricultural growth and as a result, tiger habitats had become fragmented with about 400 tigers inhabiting five national parks and two game reserves. The largest population of about 110 tigers lives in Gunung Leuser National Park. Another 100 live in unprotected areas that will soon be lost to agriculture. Sumatran tigers in the Way Kambas National Park (TNWK) in Lampung province today number not more than 50. The tigers that live in unprotected areas are very vulnerable to poaching as well as the killing of problem animals that come in contact with villagers encroaching ont he animal's habitat.
Javanese tigers (*Panthera Tigris Sondaicus*) and Balinese tigers (*Panthera Tigris Balica*) became extinct at the end of 1970s.

Source: www.antara.co.id/en/seenws/?id=15755

Fire

Fires, primarily set by palm oil companies, are burning out of control in Indonesian Borneo and on the island of Sumatra, sending a choking haze over Singapore, Malaysia, Thailand and as far away as Guam, 3,600 kilometers to the east. Schools and airports in the region have been closed, and people advised to stay indoors.
Annual fires are intentionally set in Indonesia to clear forestland for agriculture before the rainy season begins in November. This year's fires are the worst in a decade due to drier than normal conditions.

The fires now have nearly reached the level they did in 1997-98, when they cost the region an estimated US$9 billion in disruptions to air travel and other business activities, and wiped out a third of the existing population of orangutans.

Indonesia has the highest number of threatened species of mammals in the world, around 146, according to IUCN-World Conservation Union. Among these is the Asian elephant, with an estimated 50,000 remaining in the wild, plus another 10,000 in captivity. Their habitat is in danger from widespread human encroachment, and now from the wildfires as well. This year, the fires have destroyed orangutan habitat and forced the animals out of the rainforest. Orangutans flee the burning forest in search of food and safety, often into nearby palm oil plantations, where they are beaten by humans.

Source: ENS
See also: http://www.haze-online.or.id
http://www.wwf.or.id/fire
www.peat-portal.net

News from SE Asia
10th ASEAN Ministerial Meeting on the Environment

Ministers responsible for environment from the ten ASEAN Member Countries held their formal 10th ASEAN Ministerial Meeting on the Environment in Cebu, the Philippines on 10th November, 2006. The Ministers reviewed regional cooperation on a number of environmental activities in particular those related activities in the Vientiane Action Programme 2006-2010. The Ministers welcomed the sustainable development approach of the VAP which stresses that ASEAN's social and environmental agenda is linked inextricably with the economic and security pillars of the ASEAN Community, and resolved to work towards an environmentally sustainable ASEAN Community.

The Ministers adopted the Cebu Resolution on Sustainable Development.

The Ministers launched the Third ASEAN State of the Environment Report 2006 which highlights the environmental conditions of the region, challenges faced and actions being taken to address them. The Ministers expressed the hope that the report would help all parties to better appreciate regional environmental issues and foster greater collaboration.

In the light of the recent haze episode in the region, the Ministers discussed at length the transboundary haze pollution issue. The First Meeting of the Sub-Regional Ministerial Steering Committee (MSC) on Transboundary Haze Pollution held on 9 November 2006 endorsed its Terms of Reference and Indonesia's Plan of Action in Dealing with Transboundary Haze Pollution. Indonesia will chair the MSC for the first two years. The MSC also agreed with Indonesia's proposal that Member Countries of the MSC may, through the Central Government of Indonesia, wish to adopt one or more fire-prone districts/regencies for enhancing capacity to deal with land and forest fires.

The MSC also recognised the urgency and importance of following up on the Regional Workshop in Jakarta on 2 November, 2006 by organising a high-level international conference in December 2006 in Indonesia to generate support and partnership for the implementation of the PoA.

The Ministers expressed their full support and commitment to the effective operations of the recently established ASEAN Centre for Biodiversity, hosted by the Philippines. The Ministers also agreed to expedite the signing of the ASEAN Framework Agreement on access to, and fair and equitable sharing of benefits arising from the utilization of, biological and genetic resources, and to promote further listing of ASEAN Heritage Parks, in order to sustainably manage the rich biological resources of the region.

The Ministers also recognized the importance of strengthening national efforts and regional cooperation for effective environmental law enforcement, to address issues such as illegal trade in wildlife. As for illegal logging, there is a need for effective enforcement of forestry law and other related laws, where appropriate.

Website (URL) http://www.haze-online.or.id

News from North America
Mercury from burning peatlands

Researchers at Michigan State University, the U.S. Geological Survey, the National Center for Atmospheric Research, and the Canadian Forest Service find that wildfires, which are becoming more frequent and intense, are unleashing sequestered mercury at levels up to 15 times greater than previously calculated.

Normal atmospheric conditions naturally carry the mercury emitted from burning fossil fuel and other industry northward, where it eventually settles on land or water surfaces. The cold, wet soils of the boreal forest region in Alaska and northern Canada have been efficient in retaining, or sequestering, mercury.

Peatlands have been storing mercury from the atmosphere since well before and during the Industrial Revolution, locking it in peat where it's not causing any biological harm, away from the food web.

In addition to industrial activity, climate change also appears to be disrupting the mercury cycle. Increasingly, northern wetlands are drying out. Forest fires are burning more frequently, more intensely, and later in the season, making peatlands more vulnerable to fire.

Turetsky MR, Harden JW, Friedli HR, Flannigan M, Payne N, Crock J, & Radke L. 2006. Wildfires threaten mercury stocks in northern soils. Geophysical Research Letters, Volume 33.6

News from Canada
Research Chair extended to 2013

Members of the Canadian Sphagnum Peat Moss Association CSPMA have approved a recommendation from the Board of Directors that the Association and its members continue to fund research into wise after-use of harvested peatlands. The Chair, which was established in 2003, is led by Dr. Line Rochefort and her colleagues of the Peatland Ecology Research Group. This will extend the current chair, due to end in 2008, to 2013.

News from USA
Everglades Restoration

Delays plague the 30-year plan to restore Florida's Everglades and the cost of the massive effort continues to increase. A new report finds the price tag for the plan is nearing $11 billion - $2.5 billion more than Congress authorized - and casts further doubt on the federal government's commitment to the world's largest ecosystem restoration effort.

The report is the first in series of reports mandated by Congress to measure progress of the restoration effort, known as the Comprehensive Everglades Restoration Plan (CERP).

Much of the Everglades has been drained or paved during the past 50 years - the world renowned "River of Grass" is less than half its original size. The ecosystem has been ravaged by agricultural pollution, invasive species and inhibited natural water flows caused by Army Corps projects and subsequent development.

Announced in 1999 by federal and state officials, CERP aims to restore 1 million ha of the ecosystem while ensuring clean and reliable water supplies and providing flood control.

The plan includes more than 40 major projects and is expected to take more than three decades to complete. It was originally estimated to cost $8.2 billion - a figure that has already grown to $10.9 billion because of inflation, program coordination expenses, and changes in the scope of the restoration. On top of that, a number of components have been delayed.

Although some of the delays were tied to scientific and technical uncertainties that need to be addressed, budget shortfalls and unnecessary dispute over "scientific unknowns" were identified as the major concerns with the pace of the restoration effort. Of particular concern are delays in efforts to re-establish historical water flows in Everglades National Park and the Water Conservation Areas to its north.

The failure to acquire much of the land considered pivotal to restoring the ecosystem is related to the continuing increase in cost of real estate in South Florida.

The federal government is supposed to fund half the cost of the plan, with Florida state and local governments paying the other half. But planned federal spending from 2005 through 2009 is expected to account for only 21 percent of the total during that period.

If federal spending does not increase, projects directed toward the federal government's primary interests, such as restoration of the national park, will continue to lag behind.

Source: ENS

Water for the Everglades

The Everglades need more water which Lake Okeechobee can provide. But the water from the lake is polluted by surrounding farms, ranches and development. Letting it flow straight into the Everglades would hurt more than help.

Federal engineers now propose to build a $1 billion 30-mile pipeline across and underneath the Everglades. The pipeline, buried in a canal already scheduled to be filled in, would deliver lake water directly to western Miami-Dade County canals, where it would be used to recharge wellfields, leaving the sensitive sawgrass marshes untouched.

The Everglades, meanwhile, would get water filtered through 15000 ha of marshes in western Palm Beach County, which can filter agricultural runoff but can't handle the more intense concentrations of contaminants from the lake.

While stressing the pipeline remains only a concept, the U.S. Army Corps of Engineers is pitching the new plumbing job as "a bold idea" with benefits beyond the Everglades -- from steady supply of water for Miami-Dade and Broward counties to easing the stress on the Lake Okeechobee levee to cleaner rivers and estuaries on both sides of the state.

Questions remain of course, particularly with respect to the southern end of the pipeline, where water with high levels of phosphorous and nitrogen could wind up in Miami-Dade's canals, drinking water and, eventually, Biscayne Bay.

The price of the 30 mile pipeline is estimated to amount to $1.5 billion.

Source: Miami Herald

Sewage to restore New Orleans swamps

Millions of litres of treated sewage will be pumped into the swamps around New Orleans to restore them and help protect the city from disasters like Hurricane Katrina. The treated waste will help stimulate the growth of the region's vanishing cypress swamps, which provide a natural buffer for deadly Gulf of Mexico hurricanes.

The US$40 million project will divert treated wastewater from New Orleans and St Bernard Parish to an area east of New Orleans, where saltwater intrusion has destroyed what was once an expansive cypress forest. The project targets restoring 4,000 hectares of eroding wetlands in the area.

The treated sewage will help push out the salt water that was swept into the swamps and ensure the right balance of nutrients and fresh water.

The effluent will also stimulate the growth of new cypress trees which could reach a height of 30 feet (nine meters) in a decade.
The plan to use sewage to rebuild the coastal swamps is one of many proposals designed to address the state's rapidly diminishing coastline, where wildlife-rich estuaries and marshlands on the gulf and near the mouth of the Mississippi River have been sinking at a rate of some 6,200 ha per year since the 1930s.
Intense oil and gas exploration, logging, levees built to constrain the Mississippi's natural flooding and an extensive network of navigation canals have contributed to decades of coastal erosion.
Scientists and environmental activists say wetland loss exacerbated the damage caused by last year's storms, and that coastal restoration must be a key element in making the area safer from hurricanes.
U.S. federal legislation approved before the 2005 hurricanes allocated US$530 million over four years to help Louisiana ameliorate coastal erosion. A restoration plan that includes waste water assimilation, river diversion projects, barrier island protection and marsh restoration using piped-in sediment deposits is expected to be unveiled by the end of 2006.
Louisiana has also sued the federal Minerals Management Service that oversees oil and gas exploration in the Gulf of Mexico for allegedly using outdated coastal erosion data when it put vast tracts of offshore exploration leases up for bid earlier this year. The state wants a greater share of the US$7 billion in royalties from those leases to fund coastal restoration.
Federal government money needed for restoration is still not flowing as most of the billions of dollars committed after Katrina largely went to patching the holes in the levee system.

Source: AFP

News from Uganda
New Ramsar sites

Uganda has added nine new sites to the Ramsar List of Wetlands of International Importance. Spread around the country, the sites contribute a variety of wetland types to the total area of Ramsar sites, going from Uganda's largest tract of swamp forest to extensive papyrus tracts and an impressive waterfall system.
The site Lake Bisina Wetland System (Kumi, Katakwi, Soroti; 54,229 ha; 01°43'N 033°54'E) consists of a shallow lake associated with a thin strip of fringing papyrus swamp.
Lake Nakuwa Wetland System (Kamuli, Pallisa, Soroti; 91,150 ha; 01°15'N 033°31'E) is a permanent wetland associated with a number of satellite lakes and dense papyrus peatlands. In addition to supporting the Sitatunga and the Nile Crocodile, the system and its satellite lakes contain the most diverse cichlid species assemblage and a number of non-cichlid species no longer found in the large lakes of Kyoga and Victoria. The wetland plays an important role in flood prevention, water purification and groundwater recharge. It is one of the remaining pristine wetland areas in Uganda due to its remoteness and sparse population in the immediate catchment, and it offers employment to a number of fishermen. The papyrus is used for making mats, thatching, and crafts. The potential threats to fish species diversity include human exploitation, collection of ornamental fish for export, degradation of the fish habitat, spread of the Nile Perch, and water hyacinth. Papyrus over-harvesting and land reclamation for agriculture also constitute a threat.
The Lutembe Bay Wetland System (Wakiso; 98 ha; 00°10'N 032°34'E) is situated at the mouth of Lake Victoria's Murchison Bay. This shallow area is almost completely cut-off from the main body of Lake Victoria by a papyrus island. The site supports globally threatened species of birds, endangered Cichlid fish, and over 100 butterfly species, including three rare ones. The system plays an important hydrological role, with the swamps surrounding the Murchison Bay acting as natural filters for silt, sediments and excess nutrients in surface run-off, wastewaters from industries, and sewage from Kampala City. Lutembe Bay is being reclaimed and decimated for horticultural activities and the surrounding highly populated areas have been strongly affected by commercial and industrial development, urban wastewater, and conversion to agricultural land. A number of NGOs have been conducting conservation education activities in and around Lutembe, with the Uganda Wildlife Education Center (UWEC) only about 5 km from the bay.
Mabamba Bay Wetland System (Wakiso, Mpigi; 2,424 ha; 00°07'N 032°21'E) consists of an extensive marsh stretching through a narrow and long bay fringed with papyrus towards the main body of Lake Victoria. The site supports an average of close to 190,000 birds and is part of the wetland system which hosts approximately 38% of the global population of the Blue Swallow (*Hirundo atrocaerulea*), as well as the globally-threatened Papyrus Yellow Warbler and other birds of global conservation concern. The site supports a lucrative fisheries activity and is a source of fish for home consumption and commercial use, as well as of raw material for local crafts, building materials, water for domestic and livestock use, and non-wood products. The proliferation of flower farms along the shores of Lake Victoria and the use of agrochemicals is likely to have an impact.
The Nabajjuzi Wetland System (Masaka, Sembabule, Mpigi; 1,753 ha; 00°46'S 031°41'E) is a long narrow stretch of swamp from the periphery of Masaka to the major Katonga River system. It provides a spawning ground for mudfish and lungfish, and supports globally threatened bird species and the endangered Sitatunga. The site lies in traditional Buddu county of Buganda Kingdom, and some of the flora and fauna are closely associated with cultural norms and traditions, especially the totems. There is thus considerable cultural attachment of the surrounding

areas to the wetland, which also plays an important role in stabilizing the banks of River Nabajjuzi, groundwater recharge, flood control and as a natural filter for silt and sediments in the runoff. The wetland is the source of water supply for nearby townships and provides fish, clay, papyrus, medicine and game meat (Sitatunga). Over the past 20 years there has been increased commercialisation of the resource products and some of the surrounding areas have been built up into trading centres and small towns, causing increased demand for resources. Water pollution from a tannery adjacent to the wetland is a big threat.

The Sango Bay-Musambwa Island-Kagera Wetland System (SAMUKA; Masaka, Rakai; 55,110 ha; 00°55'S 031°46'E) presents a mosaic of wetland types including the biggest tract of swamp forest in Uganda, papyrus swamps, herbaceous swamps interspersed with palms and seasonally flooded grasslands, sandy, rocky and forest shores, and three rocky islets about 3 km offshore in the Sango Bay. The area lies in the transition between the East and West African vegetation zones. The system is a source of fish to the people of the area, of medicinal plants, of grazing and of raw materials for building and making crafts including luxurious sofa chairs and mattresses. Tourism has been developed on Musambwa Island. Relatively inaccessible, Sango Bay forests have had no immediate threats; however, as overexploitation of resources and grazing depletes the rest of the landscape, forest reserves become the immediate retreat for the surrounding communities. The site contains Stone Age artifacts, internationally known as the Sangoan industry, which dates to about 200,000 years ago.

News from South Africa
Krom River project

Between 1 and 5 August the Langkloof area (Cape Province) received 250-500mm of rain and as can be expected in these steep-sided, long narrow valleys, a vast volume of water cascaded down the rivers, resulting in a raging flood by August 4th. By the 10th the flood water had subsided and the damage was evident. The floods had resulted in heavy loss of life and property. The Krom River, which drains the valley between the Tsitsikamma and Suuranys Mountain ranges, was not spared.

The flood control value of wetlands dominated by the endemic wetland plant palmiet (*Prionium serratum*) was highly visible. Palmiet lived up to its reputation as the “superglue of wetlands in the Cape”, slowing the velocity and destructive potential of the floodwaters and efficiently trapping sediment coming off the mountains. The wetlands proved crucial for reducing further damage downstream.

The Krom River previously contained some of the largest valley floor fen peat basins in South Africa. However, it is estimated that 50% of these have been lost as a result of degradation and weakening of the ecological system by alien vegetation infestation and destructive human activities such as ploughing in the floodplain. The catchment, which supplies about 40% of Nelson Mandela Bay water, has been the focus of extensive wetland rehabilitation activities since 2001 and 10 structures were built to combat erosion gullies that threatened the remaining palmiet peat basins.

The structures accomplished their purpose and the two main wetland basins have emerged from the floods largely unscathed. Of the 10 structures, the four at the very top of the valley were undamaged but all the structures in the central part of the valley sustained some level of damage. Amazingly, those that remained least affected were the gabion structures - bent and twisted by the force of the water but still standing. Concrete did not fare well.

The story is very different for the rest of the valley. Every part of the floodplain and riparian zone where wetland vegetation had been removed in previous years has been ripped out. The river has changed its course in many places, the edges of old fields have been carved out and erosion has eaten into the river banks. Large volumes of sandy sediment have been dumped from tributaries onto fields, and all the dirt roads are badly damaged.

From: The Gumboot
South African Wetlands Newsletter August 2006

New and recent Journals/Newsletters/Books/Reports

IPS. 2006. Mires and Peatlands: Guidelines for the Practical Application of Wise Use. Consultation Draft

Donal Clarke, co-author of the "Wise Use of Mires and Peatlands" book, has drafted a new version of the IPS "Mires and Peatlands: Guidelines for the Practical Application of Wise Use" (July 2006).

The 18-page guide is aimed at company employees dealing with decisions on peatland exploitation, land use planners at government and community level, environment agencies as well as all others involved in peatland decisions who would like to have more practical advice on how to implement the Wise Use principles. In addition to the general guide, it is planned to develop such guidelines for peat extraction, peatlands in agriculture, horticulture and forestry, for tropical peatlands and possibly other applications. The general consultation draft can be downloaded at:

http://www.peatsociety.org/index.php?id=40.

Comments should be sent to donalcke@indigo.ie.

Van Duzer, C. 2006. Addenda to Floating Islands: A Global Bibliography. 47 p. PDF download.

The Addenda to Chet Van Duzer's Floating Islands: A Global Bibliography contain almost 200 new citations on all aspects of the subject. They include material on floating islands that formed since the publication of book, historical descriptions of several floating islands that no longer exist, and important new references on floating islands seen at sea and on the dispersal of species on floating islands.

The entries are annotated and cross-referenced, and are followed by a geographical and thematic index. The book also includes an account of the author's visit to the intermittent floating island in Derwentwater, Cumbria, England, as well as sixteen photographs of floating islands around the world.

For a limited time, Cantor Press is making the Addenda available for free! To download the 1.8 MB PDF file of the book, surf to:

http://cantorpress.com/floatingislandsaddenda/FI%20Addenda.pdf

Takakai F., Morishita T., Hashikodo Y., Darung U., Kuramochi K., Dohong S., Limin S.H. & Hatano R. 2006. Effects of agricultural land-use change and forest fire on N2O emission from tropical peatlands, Central Kalimantan, Indonesia. Soil Science and Plant Nutrition 52: 662

Nitrous oxide (N2O) fluxes from tropical peatland soils were measured at a grassland, three croplands, a natural forest, a burned forest and a regenerated forest in Central Kalimantan, Indonesia. Only croplands received fertilization (665–1278 kg N ha^{-1} $year^{-1}$). Mean annual N2O emissions from croplands were 21–131 kg N ha^{-1} $year^{-1}$ in 2002–2003 and 52–259 kg N ha^{-1} $year^{-1}$ in 2003–2004, and were significantly higher than the emissions from other comparable sites. Cropland N_2O emissions were among the highest values reported from cultivated tropical, temperate and boreal organic soils. Mean annual N_2O emissions were 7.1 (2002–2003) and 23 (2003–2004) kg N ha^{-1} $year^{-1}$ from grassland, and were significantly higher than in natural, regenerated and burned forests (0.62, 0.40 and 0.97 kg N ha^{-1} $year^{-1}$ in 2002–2003 and 4.4, 4.0 and 1.5 kg N ha^{-1} $year^{-1}$ in 2003–2004, respectively). Annual N_2O emissions did not differ significantly between forests in 2002–2003, but were significantly lower in burned forest in 2003–2004. Annual N_2O emission was significantly correlated between years. Regression analysis revealed that annual N_2O emissions in 2003–2004 were 1.9-fold the corresponding 2002–2003 value (annual precipitation of 2339 and 1994 mm, respectively). N_2O fluxes were higher during the rainy season than during the dry season at all sites except the regenerated forest. N_2O fluxes in cropland and grassland were significantly lower when the water-filled pore space (WFPS) was less than 60–70%, and increased with an increase in soil NO_3–N concentration when WFPS exceeded this threshold. Thus, changes in soil moisture were important in controlling seasonal changes in N_2O emission. Results suggest that changing land use from forestry to agriculture will increase N_2O production. The effect of forest fires on N_2O emission from these soils was not clear.

Morgan-Jones W., Poole JS & Goodall R. 2005. Characterisation of Hydrological Protection Zones at the Margins of Designated Lowland Raised Peat Bog Sites JNCC Report Series 365. 87 p. Joint Nature Conservation Committee. £10.00

Staff designating lowland raised bogs as Sites of Special Scientific Interest (SSSIs) will be familiar with the guidance provided within the JNCCs Guidelines for the selection of biological SSSIs. It includes paragraphs on the inclusion of all land judged necessary to provide and maintain the hydrological functions needed to conserve the special features of the site. It wisely goes on to suggest that in some circumstances it may be necessary to seek expert hydrological advice prior to deciding the boundary of a candidate SSSI.

The approach described in this report provides generic guidance on which land around a bog is likely to be necessary to maintain these hydrological functions. While it cannot substitute for a site-specific study such as a detailed water budget it assists greatly in making the judgement, and reduces the need for expert hydrological advice.

The work is not just forced on SSSI boundaries, but also provides a steer on which land needs to be managed in a way that is sympathetic to the needs of the raised bog it surrounds. Similarly, it should assist in making sure that agri-environment schemes are

correctly targeted on the land most of benefit, in supporting the bog, and in creating new fen or reedbed around its edge, and for what is required under Water Level Management Plans.

Wieder RK. & Vitt DH. (eds). 2006 Boreal Peatland Ecosystems. Ecological Studies 188 434 p. Springer. €159

This volume adopts an ecosystems approach to understanding boreal peatlands. It focuses on biogeochemical patterns and processes, production, decomposition, and peat accumulation, and provides additional information on animal and fungal diversity. A recurring theme is the legacy of boreal peatlands as impressive accumulators of carbon as peat over millennia. This carbon legacy is under threat from a wide diversity of disturbances, including wildfire, ongoing climate change, the changing chemistry of atmospheric deposition, and continuing resource exploitation. The volume is of interest to peatland researchers and resource managers, as well as to graduate students in ecosystem science.

Batzer DP & Sharitz RR. (eds). 2007. Ecology of Freshwater and Estuarine Wetlands. 640p. California University Press. $73

Designed as a textbook, this volume is an up-to-date, authoritative, and accessible survey in ecology of freshwater and estuarine wetlands. It addressed the physical environment, geomorphology, biogeo-chemistry, soils, and hydrology of both freshwater and estuarine wetlands. Syntheses review how hydrology and chemistry constrain wetlands plants and animals. In addition, contributors document the strategies employed by plants, animals, and bacteria to cope with stress. Focusing on the ecology of key organisms, each chapter is relevant to wetland regulation and assessment, wetland restoration, how flood pulses control the ecology of most wetland complexes, and how human regulation of flood pulses threatens wetland biotic integrity.

Martini IP, Martinez Cortizas A & Chesworth W. (eds). 2006. Peatlands. Series: Developments In Earth Surface Processes 9. 608p. Elsevier. €148

In the past two decades there has been considerable work on global climatic change and its effect on the ecosphere, as well as on local and global environmental changes triggered by human activities. From the tropics to the Arctic, peatlands have developed under various geological conditions, and they provide good records of global and local changes since the Late Pleistocene.

The objectives of the book are to analyze topics such as geological evolution of major peatlands basins; peatlands as self sustaining ecosystems; chemical environment of peatlands: water and peat chemistry; peatlands as archives of environmental changes; influence of peatlands on atmosphere: circular complex interactions; remote sensing studies of peatlands; peatlands as a resource; peatlands degradation, restoration, plus more.

Dugan P. 2005. Philip's Guide to Wetlands. 304p. Philip's. €15

For many years, the ecology of marshes, estuaries, floodplains, lagoons, swamps and bogs were ignored by naturalists, but in the past few decades they have been recognized as supporting an exceptionally rich diversity of species. Many wetlands throughout the world have now been opened to the public as nature reserves, generating a wide number of visitors and increasing interest from bird-watchers and ecologists. Well known examples are the mangrove swamps of Belize; the Florida Everglades; the Camargue in Provence; Lake Nakuru in Kenya; Australia's Kakadu National Park, and Ellesmere Lake in New Zealand.

This book covers the many aspects of the study of wetlands in a single, portable volume. It begins by defining wetlands, and describes the many different ways in which they function as environments and habitats both for wildlife and for people. The economic importance of wetlands is given particular attention. The author then explains how plants and animals are adapted to survive in wetlands and describes the extraordinary diversity of life found within their boundaries. The loss of wetland environments, particularly to agriculture, is examined, together with the harm to biodiversity that this causes. Ways in which wetlands may be conserved are discussed.

An extensive atlas section maps the location of wetland environments around the world and the topography of wetland regions, and provides descriptions of important and characteristic features.

Van der Valk AG. 2006. The Biology of Freshwater Wetlands. 173p. Oxford University Press. £55.00

This introduction to freshwater wetlands describes those abiotic features of wetlands that make them unique as a habitat and examines in detail the adaptations, distributions, and interactions of various organisms (microbes, invertebrates, plants, and vertebrates) that collectively form wetland ecosystems. All kinds of freshwater wetlands are covered including lacustrine, palustrine, riverine and tidal forms. The management, conservation and restoration of wetlands are also covered.

Rydin H. & Jeglum JK. 2006. The Biology of Peatlands. 392p. Oxford University Press. HC £60.00, SC£27.50

The Biology of Peatlands provides a comprehensive overview of peatland ecosystems. Coverage is international although there is a focus on boreal and north temperate peatlands. As well as thoroughly referencing the latest research, the authors expose a rich older literature where an immense repository of natural history has accumulated.

The book begins with an overview of the main peatland types (marsh, swamp, fen and bog), which provides the basis for a deeper understanding of the subject. Chapters then follow on the diversity of the entire range of biota present (microbes, invertebrates, plants, and vertebrates), together with their specific adaptations to peatland habitats. Detailed coverage is devoted to the moss genus *Sphagnum*, one of the most important functional plant groups in northern peatlands. Throughout the book, the interactions between organisms and environmental conditions (especially wetness, availability of oxygen, and pH) are stressed. In the study of peatland biology, it is essential to learn about peat itself and how its accumulation reflects the history and development of peatland over centuries and millennia. The book therefore contains chapters on the physical and chemical characteristics of peat, the role of peat as an archive of past vegetation and climate, and peatland succession and development. Several other key factors and processes are then examined including hydrology, nutrient cycling, light, and temperature. The authors describe the intriguing patterns and landforms characteristic of peatlands in different parts of the world, together with theories on how they have developed. The role of peatlands as sources or sinks for atmospheric carbon dioxide and methane, and their influence on climatic change, is also outlined. A final chapter considers peatland management, conservation and restoration issues.

Evans MG. & Warburton J. 2007. The Geomorphology of Upland Peat – Erosion, Form and Landscape. 288p. Blackwell. £65.00

Erosion of upland blanket peat is recognized as a major environmental problem, degrading habitats, leading to loss of amenity, and water-colouration problems and increased sedimentation in reservoirs. Despite the scale of the problem relatively little process based work has been done on the geomorphology of eroding blanket peat. This new study will present the most detailed work to date on the nature of the processes controlling peat erosion and on the nature of the sediment budget of eroding peatlands. Although the focus in the book falls on upland Britain (which has 8 per cent of the world's total resource of blanket peat), the authors recognize the international dimension of the problem and make wide-ranging comparisons.

Moore PD. 2006. Tundra. 240p. Facts on File. €41

The geography and geology of tundra habitats have many physical and climatic constraints. Yet while species diversity is low, ecosystems still exist in this environment. Much of the megafauna that we are familiar with-such as wooly mammoths and giant elk-inhabited tundra environments, and much of what we know of early human activity took place in this harsh ecosystem. Tundra presents a thorough overview of the tundra habitat-past, present, and future. Unique qualities of life, such as slow-growing dwarf trees and animals exhibiting large bodies and small ears, are described and discussed in the context of adaptation and survival strategy. The history and prehistory of tundra are also explored.

Past and present exploitation of tundra ecosystems is diverse. There is abundant mineral, gas, and oil wealth in these areas, and ecotourism and winter sports are abundant. As use of tundra ecosystems expands, problems connected with climate change, waste disposal, and other threats to the ecosystem must be addressed.

Moore PD. 2006. Wetlands. 240p. Facts on File. €41

Where do wetland habitats occur on the planet? What factors control their distribution? What threats impact these areas, and how much conservation effort is necessary? In a clear and concise format, Wetlands explores the answers to these questions and much more. Beginning with a general overview of the geography and geology of wetlands-including lakes, ponds, pothole mires, marshes, temperate and tropical swamps, and bogs-this volume helps readers visualize this natural habitat. Exploring ecosystems, biodiversity, subjects such as decomposition and fossils, and the history and prehistory of this biome, Wetlands provides an accessible introduction to the many aspects of wetland habitats throughout the world.

Today wetlands are often used as water storage systems and as agents for the control of floods. This volume discusses the necessity for conservation of these areas, including techniques used to protect existing wetlands and ways of rehabilitating those already damaged by human activity.

McLean IA. 2005. Water from the Moors: The Life and Works of Joseph Foord. 188p. North York Moors National Parks Information. £17.95

This book published by the National Park Authority explores the eighteenth century water races that transformed the landscape of the North York Moors and the lives of the people living there.

70 miles (115km) of gravity fed water races cross the North York Moors and have provided running water to farms and villages for over 200 years. Although they have long since been abandoned, they remain a striking feature of the moors and are frequently used by walkers to effortlessly climb the Tabular Hills.

Water from the Moors: The Life and Works of Joseph Foord draws upon original archive material and archaeology to tell the story of the water races. How were they built and how did they work? Who made them and what was their impact on the local community?

The Wildlife Trusts' Water Policy Team. 2005. Wetland Restoration Manual. 660p. Distributed by NHBS. £45.00

The Wildlife Trusts' definitive work on wetland restoration, creation and management, this 16-chapter, 660-page, ring-bound manual contains all the information you will need as a conservation professional to work effectively on wetland projects.

The manual contains guidance on: the background to wetland issues; water-level control; physical works; the main UK wetland habitat types, their protection and restoration; post-industrial land opportunities for wetlands; invasive species; survey and monitoring; and canals.

The following first tranche chapters were produced in 2001: Introduction to wetlands, The first steps for wetland restoration, Water-level control, Land forming, Reedbeds, Wet woodland, Post-industrial land, Survey and monitoring

The following second tranche chapters have just been completed in 2005 and added: Fens, Lowland wet grasslands, Bogs, Lowland wet heathlands, Standing open water, Rivers and streams, Invasive species, Canals

Developed by The Wildlife Trusts with partners across the UK, the manual gives clear guidance based on expert advice, using real-life case studies to demonstrate cases of good practice. The Manual was generously funded through Biffaward, Severn Trent Water and The Waterways Trust.

Murdiyarso D & Herawati H (eds). 2005. Carbon Forestry: Who will benefit? Proceedings of Workshop on Carbon Sequestration and Sustainable Livelihoods.

Proceeding of a workshop on Carbon Sequestration and Sustainable Livelihoods held in Bogor (Indonesia) on 16-17 February 2005. The event was among those recognized by the United Nations Framework Convention on Climate Change (UNFCCC) secretariat that marked the entry into force of the Kyoto Protocol on 16 February 2005.

The proceedings is a collection of the lessons learned from a number of case studies ranging from small to large scale projects, from community-based to corporate operations, and from development to conservation activities. Although most projects are still in their infancy stage and many more lessons to be learned it was generally agreed that bundling climate change and community development projects is a strategic approach to support sustainable livelihoods. Some emerging applied research and policy responses were identified and need further elaboration.

The book includes several chapters on peat swamp forests.

To download the PDF document surf to:
http://www.cifor.cgiar.org/publications/pdf_files/Books/BMurdiyarso0501.pdf

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http://www.cifor.cgiar.org/Publications/

Verhoeven JTA, Beltman B, Bobbink R & Whigham DF (eds). 2006. Wetlands and Natural Resource Management 350p. Springer. €137

Together with its companion volume Wetlands: Functioning, Biodiversity Conservation, and Restoration, this volume gives a broad and well-integrated overview of recent major scientific results in wetland science and their applications in natural resource management issues.

After an introduction to the field, 13 chapters contributed by internationally known experts summarize the state of the art on their particular subject. The chapters are divided into the following four sections:

- The Role of Wetlands for Integrated Water Resources Management: Putting Theory into Practice
- Wetland Science for Environmental Management
- Wetland Biogeochemistry
- Wetlands and Climate Change Worldwide

Lavoie, M., D. Paré, N. Fenton, K. Taylor, A. Groot, and N. Foster. 2005. Paludification and forest management in the Northern Clay Section: a literature review. Lake Abitibi Model Forest Technical Report No.1. 75 p.

This review considers controlling or preventing peat formation or initiation in relation to forestry in the Clay Belt region.

The Clay Belt region of Québec and Ontario supports a large forest resource and forest industry. In black spruce-feathermoss forests on the Clay Belt, tree growth problems have been observed due to paludification. Drainage and fertilization are generally considered as good techniques to control paludification and to improve tree productivity. On the other hand, site preparation (mechanical and prescribed burning) or drainage followed by burning may more efficiently control paludification at a lower monetary cost.

Available under:
http://www.lamf.net/Products/reports/Lavoie%20Paludification%20For%20Publication%20final.pdf

Bobbink R, Beltman B, Verhoeven JTA & Whigham DF (eds). 2006. Wetlands: Functioning, Biodiversity Conservation, and Restoration. 300p. Springer. €125

Together with its companion volume Wetlands and Natural Resource Management, this volume gives a broad and well-integrated overview of recent major scientific results in wetland science and their applications in natural resource management issues.

After an introduction into the field, 12 chapters contributed by internationally known experts summarize the state of the art on a particular subject. They are divided into the following three sections:

- Functioning of Plants and Animals in Wetlands
- Conservation and Management of Wetlands
- Wetland Restoration and Creation

Van der Grift, E.A. 2005. Natuurverbinding Weerribben-Wieden – Advies voor ontsnipperende maatregelen bij de N333. Alterra-rapport 1232, 88 p. (in Dutch)

Ideas for nature connections accross a road in between the fen reserves Weerribben and Wieden in the Netherlands.
Download from:
www2.alterra.wur.nl/Webdocs/PDFFiles/Alterrarapporten/AlterraRapport1232.pdf

Nauta, A. B., Bielecka, J. & Querner, E. P. 2005. Hydrological model of the Lower Biebrza Basin; using the model as a management tool. Alterra-rapport 1179, 62 p.

This report presents a groundwater model which can be used for predicting consequences of different land use management options in the Lower Biebrza area (Poland).
Two different scenarios were modelled. The first scenario considered the natural vegetation succession of the peatlands. The second scenario considers a man-made approach, and was designed to check which changes in groundwater levels could be expected by blocking the existing drainage system on the Biebrza riverbanks. The study shows that with regard to the impact on wetland conditions, the first scenario leads to negative changes in simulated groundwater levels while the second scenario leads to positive changes.
Download from:
www2.alterra.wur.nl/Webdocs/PDFFiles/Alterrarapporten/AlterraRapport1179.pdf

Wijdeven, S.M.J., van der Meer, P.J., Chai, F.Y.C., Tan, S., Mohizah M. & Liam, D. 2004. Sustainable management of Peat Swamp Forest of Sarawak with special reference to Ramin (Gonystylus bancanus). Development of a monitoring system. Alterra-rapport 1123, 40 p.

Peat swamp forests in Sarawak are valuable in terms of timber and biodiversity, but heavily degraded. In order to assess the current status potential developments and possible management interventions, an adequate monitoring system is necessary. In this study a new monitoring system is proposed based on an evaluation of the current system. Adjustments include the monitoring of all woody species in all size classes, the monitoring of standing and fallen dead wood and the monitoring of environmental factors such as hydrology and peat depth. Moreover, the protection and monitoring of primary, undisturbed peat swamp forest is of paramount importance in the light of conservation of biodiversity and the design and evaluation of management interventions.
Download from:
www2.alterra.wur.nl/Webdocs/PDFFiles/Alterrarapporten/AlterraRapport1123.pdf

Valuing wetlands: Guidance for valuing the benefits derived from wetland ecosystem services. Ramsar/CBD. 50p.

The Ramsar Convention has long recognized the importance of wetland economic valuation in contributing to well-informed planning and decision-making, and in 1997 the Secretariat published "Economic valuation of wetlands: A guide for policy makers and planners" by Barbier, Acreman, and Knowler. But economic valuation of ecosystems is a rapidly developing discipline, and there are now many different methods available for undertaking different aspects and purposes of wetland valuation. In order to assist Contracting Parties in having economic valuation information better available for decision-making on wetlands, Ramsar's COP8 (Valencia, 2002) requested the STRP to prepare guidance on practical methods for wetland valuation.
The resulting report, the preparation of which has been led by Rudolf de Groot and Mishka Stuip of Wageningen University and the Foundation for Sustainable Development (FSD) in the Netherlands, provides this guidance and updates information from the 1997 book.
"Valuing wetlands: Guidance for valuing the benefits derived from wetland ecosystem services" is now available in a 50-page PDF (1.6MB), published jointly as Ramsar Technical Report No. 3 and as No. 27 in the Convention on Biological Diversity's CBD Technical Series. You can download it at http://ramsar.org/lib/lib_rtr03.pdf

The 1997 Barbier/Acreman/Knowler book is still available in HTML and PDF from the Ramsar Web site, http://ramsar.org/lib/lib_valuation_e.htm and http://ramsar.org/lib/lib_valuation_e.pdf.

Ramsar Handbooks for the Wise Use of Wetlands

The guidelines on various matters adopted by the Parties at Ramsar COPs have been prepared as a series of handbooks to assist those with an interest in, or directly involved with, implementation of the Convention at the international, regional, national, subnational or local levels.
The Handbooks of the 3rd edition are being posted on the Ramsar website as they are completed: http://www.ramsar.org/lib/lib_handbooks2006_e.htm
For those volumes that are not yet finalized, the reader may wish to consult the analogous volumes from the 2nd edition, published in 2004: http://www.ramsar.org/lib/lib_handbooks_e.htm

Global and Planetary Change. Volume 54, Issues 3-4, Pages 209-304

Special issue on peatlands as records of global environmental changes, edited by A. Martínez Cortizas, P. Martini, H. Biester, W. Chesworth and C. Barbante. For more information surf to:
www.sciencedirect.com/science/journal/092181

Journal of Hydrology. Volume 331, Issues 1-2, Pages 1-370

Special issue titled: Water Resources in Regional Development - The Okavango River. Edited by Dominic R. Kniveton and Martin C. Todd
For more information surf to:
www.sciencedirect.com/science/journal/00221694

New Brunswick Peat Industry Review

The First Semester Peat Industry Statistics for 2006 are available at the New Brunswick Department of Natural Resources website. For further information, surf to: http://www.gnb.ca/0078/minerals/Peat-e.asp

National Wetland Strategy Chile.

Approved in December 2005 by the Ministerial Council of CONAMA, the "National Strategy for the Conservation and Wise Use of Wetlands in Chile" constitutes a very important step for Chile, and the culmination of the multisectoral effort initiated by Ramsar project SGF/97/CHL/1. Recognizing wetland ecosystems as critical in concentrating biodiversity and significantly influencing the quality of life of the population, this Strategy lays down a series of specific objectives and lines of action that should promote the sustainable and participatory management of wetlands within its territory.
A copy of the document can be downloaded here: http://www.sinia.cl/1292/article-35208.html

IMCG Main Board

UPCOMING EVENTS

See for additional and up-to-date information: http://www.imcg.net/imcgdia.htm

Interdisciplinary Symposium on Carbon in Peatlands
15-18 April 2007, Wageningen, the Netherlands
for more information visit:
http://www.peatnet.siu.edu/CC07MainPage.html

SWS-Europe, 2nd Annual Meeting
31. May - 03. June 2007, Trebon, Czech Republic
for more information visit http://www.enki.cz

IALE World Congress: 25 years Landscape Ecology: Scientific Principles in Practice
08-12 July 2007, Wageningen, The Netherlands
for more information visit http://www.iale2007.com

Biannual Confernce of the German Peat Society
20-23 July 2007, Bad Muskau, Germany
for more information visit www.dgmtev.de

Monitoring the Effectiveness of Nature Conservation Programmes
03-06 September 2007, Birmensdorf, Switzerland
for more information visit:
http://www.wsl.ch/event_07/monitoring/

WETPOL 2007 – 2nd International Symposium on Wetland Pollutant Dynamics and Control
16-20 September 2007, Tartu, Estonia
for more information visit:
http://www.geo.ut.ee/wetpol2007

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