



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 currently 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 conclusions of the IMCG Symposium 'Windfarms on Peatland' in Santiago de Compostela (Spain) April 2008, of which the first papers already have been published in our journal *Mires and Peat*.

This year is an important year for global peatland conservation. The first major result was that the Biodiversity Convention meeting in May in Bonn (Germany) adopted its Decision on Biodiversity and Climate Change in which she "Recognizes the importance of the conservation and sustainable use of the biodiversity of wetlands and, in particular, peatlands in addressing climate change and noting with appreciation the findings of the global Assessment on Peatlands, Biodiversity and Climate Change". The final version of this Assessment, with substantial input of IMCG members, can be downloaded from [www.imcg.net](http://www.imcg.net)

The next Ramsar Convention, which several IMCG members will attend, will meet 28 October- 4 November in South-Korea. In association we will try (like we did in Uganda 2005) to organize a Korean peatland excursion in the framework of the CCGAP. Also within Ramsar we see a renewed attention for peatlands. This will further be stimulated by the recent discovery that Ramsar (Iran) is actually surrounded by peatlands!

In December 2008 finally the Climate Convention will meet in Poland. Read about the latest achievements in and with these conventions in a review article of Tanja Minaeva et al. This article also evaluates aspects of the cooperation with IPS, an issue on the agenda of the IMCG General Assembly on September 16 in Kobuleti (Georgia). Find in this Newsletter also the other Assembly documents that will be regularly updated on our website. So keep an eye on that continuously refreshed and refreshing IMCG website: [www.imcg.net](http://www.imcg.net).

As always: for information, address changes, contributions and questions, contact us at the IMCG Secretariat.

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### A note from the Chair

Several members of the IMCG Main Board and dozens of IMCG members attended the International Peat Society Congress in Tullamore, Ireland in June. It was a chance for commonalities between the two organisations to be explored, while acknowledging that there will be some issues where agreement cannot be reached. IMCG members participated in all aspects of the congress – presentations, fieldtrips, commission meetings, congress dinner and two joint IMCG/IPS meetings.

The atmosphere of the joint IMCG/IPS meetings was more positive than our previous meeting in Sweden last year. (For detailed information about the joint IMCG/IPS meeting in Tullamore, see the minutes in this newsletter.) It was agreed that our joint journal, *Mires and Peat*, has been very successful for such a 'young' journal (with the inputs of Olivia Bragg and Michael Trepel appropriately acknowledged). It was also agreed that there were some areas where a joint approach was likely to be useful and successful – specifically a project to address the issues associated with tropical peatlands in south-east Asia.

However, it is also clear that there are some issues where it is unlikely that we will reach agreement – notably the presentation of peat as a renewable fuel

by IPS. There were several informal discussions about the issue, where it was emphasised that IMCG remains firmly opposed to this position – with the arguments outlined in a previous newsletter (2007/2). Unfortunately, some of the presentations made at Tullamore were very similar to the presentations made during our joint meeting in Sweden and did not address the criticisms made at that time (e.g. using a 300 year carbon life cycle when 100 years is the accepted norm; including carbon offsets – such as tree planting – as part of the life cycle). IMCG will continue to advocate that peat is not a renewable resource and cannot be classified as such. It was agreed that there has been an improvement in the relationship between IMCG and IPS and that another joint meeting will be held in June 2009.

The focus of this newsletter is preparation for the upcoming IMCG Congress and General Assembly in Georgia and Armenia. Remember, even if you cannot attend, you can have your say on issues and the future direction of IMCG by writing to us before the Congress.

I look forward to seeing some of you in Georgia,

Jennie Whinam

### Field symposium Georgia postponed!!!

In the last days the conflict around South-Ossetia has escalated rapidly. As always with such conflicts, it is difficult to get reliable information on what is exactly going on. And it is even more difficult to predict what is going to happen.

I have been informed that Russian airforce has just bombed Poti (port), the Baku-Tbilisi-Ceyhan pipeline (I do not know exactly where), and a military airbase near Tbilisi. The first two places are (very) close to planned IMCG excursion points and indicate that the conflict is not going to be limited to the territory of South-Ossetia. Apparently the Georgian oil infrastructure, a major object of our planned excursion, is target of the military conflict. Furthermore, it is reported that the war statute (emergency statute) has been declared for Georgia (which could imply that foreigners can not easily

enter the country) and that several airlines have stopped their flights to Georgia.

My estimation is that the conflict will not very rapidly quiet down, because the steps set, both from Georgian and Russian side, have been very grave, and that the region will need substantial time to come to rest again.

**Therefore, I decide and announce that the IMCG field symposium and congress in Georgia-Armenia is postponed to 2009.**

We will deal with the General Assembly issues by internet. More information will follow as soon as possible.

Hans Joosten, IMCG Secr.-Gen.,  
August 9, 2008.



*The city of Poti, seen from Lake Paleostomi*



*The Baku-Tibilisi-Ceyhan pipeline.*

## REGISTER

Please fill out the IMCG membership registration form.

Surf to <http://www.imcg.net> or contact the secretariat.

## IMCG General Assembly Agenda

The final agenda of the IMCG General Assembly on September 15, 2008 in Kobuleti (Georgia) is as follows:

1. Opening and Welcome
2. Minutes of the General Assembly of 22 July 2006 in Tammela, Finland
3. Biennial report on the state of affairs in the IMCG and on its policy
4. Balance sheet and the statement of profit and loss
5. IMCG Action Plan 2007 - 2010: progress and amendments
6. Working with(in) international conventions
7. Relation IMCG - IPS
8. Membership fee
9. Conference resolutions
10. Honorary membership
11. Election of the Main Board
12. Information on next biennial venue 2010 in Poland/Slovakia; Discussion c.q. agreement on biennial venue 2012; information on other venues
13. Any Other Business

Background papers available:

- The minutes of the General Assembly 2006 (Agenda point 2) can be found in IMCG Newsletter 2006/3.

This Newsletter contains the following documents:

- Ad Agenda point 3: The Biennial report 2006-2007
- Ad Agenda point 5: The Progress Report of the IMCG Action Plan 2007-2010
- Ad Agenda point 6: The contribution of Tanja Minaeva et al. "Peatlands in global conventions"
- Ad Agenda point 7: The contributions of Tanja Minaeva et al. "Peatlands in global conventions", Jennie Whinam "Collaboration between IMCG/IPS", the report of the "IPS-IMCG Brainstorming session Tullamore", and the letter of Hans Joosten to Donal Clarke
- Ad Agenda point 8: The Main Board proposes to continue to policy of a zero sum membership fee for the next two years
- Ad Agenda point 9: Draft resolutions on "Biofuels from peatlands" and "Stop traditional peat cutting in Irish bogs"
- Ad Agenda point 11: The text "Main Board" in this IMCG Newsletter.

## IMCG Biennial Report January 2006 – December 2007

This is the fourth Biennial Report of the International Mire Conservation Group. According to the IMCG constitution, adopted at the IMCG General Assembly in Quebec 2000, the IMCG Main Board shall present a biennial report on the state of affairs in the Society and on its policy at the biennial General Assembly. As – according to the IMCG constitution – the IMCG financial year is the calendar year, also the Biennial Report will cover two full calendar years.

This report concentrates on IMCG internal organisational issues. A detailed progress report with respect to the Action Plan 2007 – 2010 is presented separately.

### *1. General Assembly*

The IMCG General Assembly 2006 was held in Tammela (Finland, 27 July 2006). The draft minutes were published in IMCG Newsletter 2006-3. The three resolutions adopted during this General Assembly were sent to the relevant governments and institutions.

### *2 Main Board*

A Main Board (MB) consisting 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 Wolejko, and Meng Xianmin was installed at the 2006 General Assembly. As there were only 13 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 decided to co-opt two additional members namely Japie Buckle (South Africa) and Faizal Parish (Malaysia).

The Main Board had meetings in Finland on 22 and 25 July 2006 to prepare the General Assembly, the approaching IMCG-IPS (a.o. covering Baltic peat issues) and CCGAP meetings, and to discuss the possible candidates for the Executive Committee and the two vacant (co-opted) MB positions. Further communication amongst the Main Board took place via internet.

### *3 Executive Committee*

The election of the IMCG Executive Committee (EC) by the Main Board took place directly after the installation of the Main Board. The new Executive Committee consists of the same people in the same functions as in the previous 2 years: Jennie Whinam was elected chair, Hans Joosten secretary, Philippe Julve treasurer, and Tatiana Minaeva and Piet-Louis Grundling additional EC members.

In the reporting period the EC held no separate meetings. Regular personal exchange was achieved by the involvement of EC members in the meeting with IPS (June 2007) and the IPS Congress (June 2008). Regular contact was further maintained via internet.

#### 4. Secretariat

The secretariat consisted of the secretary-general Hans Joosten and his assistant John Couwenberg. The General Assembly 2006 made available a budget for support of the secretariat.

#### 5 Membership

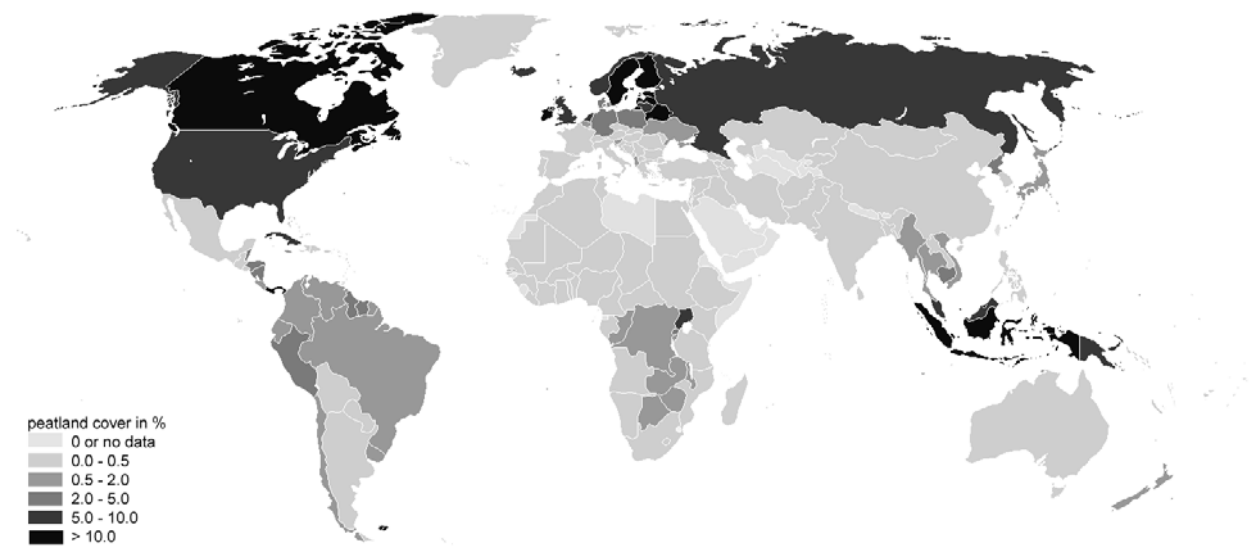
An overview of the development of membership in the period 2002 – 2006 is given in the IMCG Action Plan (2002 - 2006) Progress Report.

On 5 August 2008 IMCG had 491 registered members, including 20 supporters, from 59 countries of the World. This represents an increase of 81 members and an addition of 3 countries since the

previous biennial meeting in Finland (2006). The distribution of members by continent is as follows:

	2006	2008
Africa	60	69
Asia	17	20
Australia	20	21
Europe	289	341
North America	19	34
South America	5	5
Total	410	491

The data show that IMCG has succeeded in increasingly attracting members from outside “Western Europe”, but a European bias is still obvious.



Map showing peatland distribution according to countries



Map showing in green countries with IMCG members

The general assembly 2006 decided unanimously to confer honorary membership on Seppo Eurola,

Tatjana Jurkovskaya, Rauno Ruuijärvi and Michael Steiner.

## IMCG Action Plan 2007-2010 Progress Report

At the 2006 General Assembly in Tammela (Finland), IMCG adopted its Action Plan 2007 – 2010 (see its publication in IMCG Newsletter 2006-2 and the internet [www.imcg.net/imcgmiss.htm](http://www.imcg.net/imcgmiss.htm)). This is a report on the progress with respect to the IMCG Action Plan over the period 2006-2008.

IMCG is a network of experts with as main task the exchange of information, problems and ideas. The Action Plan is an analysis of the recent developments and urgent priorities of mire conservation. The developments in the past two years have shown that the analyses made in the Action Plan were realistic and complete.

IMCG has not much capacity to implement projects. The Action Plan should thus not be seen as a prescription, but as an invitation, a challenge to IMCG members to orientate and commit themselves. We do not have to label everything as an “IMCG activity”, more important is that we stimulate and support each other.

The Action Plan is divided into a series of aims regarding specific working fields. Where these fields are overlapping, we do not mention the tasks performed every time. More details on most issues can be found in the IMCG Newsletters 2006 – 2008

With respect to **wise use**: Copies of the **Wise Use book** were sent to all national libraries, and flyers to target university libraries. The book was also made fully available online in pdf format ([www.imcg.net](http://www.imcg.net)). Guidelines for the **practical application** of Wise Use are being developed by IPS. Comments were given on the draft of the document on peat extraction. Draft guidelines on peatland agriculture (prepared by Tomasz Brandyk), peatland forestry (Juhani Päivänen) and tropical peatlands (Jack Rieley) are (being) prepared. When the full suite of draft guidelines is ready, IMCG will decide whether if a basis exists for co-operation on the matter, and if this is agreed IPS and IMCG will work to finalise the guidelines.

With respect to the **maintenance and expansion of effective networks and partnerships**:

Our membership of the **European Habitats Forum** (EHF) was continued, performed by Richard Lindsay. On 26 July 2006 a special IMCG meeting on the IMCG work in the **Ramsar Convention** was held. in Finland

On 29 July 2006, the Ramsar Coordination Committee for Global Action on Peatlands (**CCGAP**) held a meeting to complete its implementation plan and to set up the necessary organisational bodies. The positive outcomes of this meeting were, however, not followed-up by sufficient concrete action and the installed executive committee never met.

Representatives of **IPS** and IMCG met in Espoo, Finland on 28 July 2006 to decide on forthcoming cooperation projects and to intensify the relationships between the two organisations. The 2007 IPS-IMCG meeting took place in three sessions between 26 and

28 June 2007 during the field trip organised by TorvForsk in Sweden. A major focus was the difference in approaches regarding the use of peat for energy and the fallacious assertion by IPS that peat is a renewable biofuel. IMCG expressed disappointment that although we had invested considerable resources in coming to the meeting prepared to debate the issue, this was not matched by the IPS attendance. In June 2008 brainstorming meetings between IMCG and IPS on future cooperation were held during the International Peat Congress in Tullamore (Ireland) (see this Newsletter).

With respect to **the identification and stimulation of synergies between international conventions** (e.g. Biodiversity-CBD, Ramsar, Climate-UNFCCC, Desertification-UNCCD), an important contribution was made by the publication and presentation of the Assessment on Peatlands, Biodiversity and Climate Change (available from [www.imcg.net](http://www.imcg.net)).

With respect to **research, expertise, and institutional capacity**: The **IMCG website** ‘[www.imcg.net](http://www.imcg.net)’ (webmaster Michael Trepel) is the main connection to our members. The website [www.imcg.net](http://www.imcg.net) was opened in January 2001 and since August 2002 the activities on the website have been monitored by webstats. In January 2007 the IMCG web pages had been visited more than 30,000 times, in August 2008 more than 45,000 times. Thus the site attracts more and more visitors. In summer 2007, the monthly number of visitors decreased slightly due to less frequent updating of information, but now visitor numbers are increasing again. Visitors come predominantly from Europe, North America and Asia. Visitors from Africa, Australia, and Central- and South America are clearly a minority. This spectrum of visitors reflects IMCG membership and past IMCG activities. Field symposia in South Africa and Tierra del Fuego, Argentina, led to an increase in the number of pages viewed from those areas. The visitor data are a good indicator that our efforts are visible to the mire conservation community.

At the same time, the data reveal that the main work lies on a small number of shoulders.

In the last two years the website has become increasingly important for addressing the issue of globally threatened peatlands. In two cases, the Rospuda river valley (Poland) and the Lewis Peatlands (Scotland) construction plans that would have destroyed these peatlands were abandoned. IMCG provided support to local nature conservationists not only by addressing the cases on the IMCG website, but also through letters to government representatives. As the current case of Burns Bog (Canada) shows, the need for this type of support will remain and probably even increase in future. We have to ensure that the projects we support and the information we post on the website is reliable, so please help us in that respect. We can



only remain effective if we remain factual and precise.

The **IMCG Newsletter** (editors John Couwenberg and Hans Joosten) appeared four times in 2006 (with 28, 36, 48, and 20 pages), four times also in 2007 (with 26, 30, 40, and 48 pages), and twice so far in 2008 (37 and 38 pages). Starting with issue 2007-2 a series of special issues was produced covering focal topics in international mire conservation: 'Peat fuel and climate change' (2007-2), 'Peatlands and biofuels' (2007-3), 'Peatlands and wind energy' (2007-4), and 'Peatlands and extractive industries' (2008-1).

A **Field Symposium** was organized in Finland 13 – 23 July 2006 and an excursion guidebook ('Finland, Daughter of the Baltic') and a book about the nature in Finland ('Finland, land of mires') were prepared by the organizers Tapio Lindholm and Raimo Heikkilä with support of many Finnish mire friends. Olivier Olgiatti integrated his pictures and videos of the IMCG Tierra del Fuego Field Symposium 2005 into an impressive multimedia production, Ab Grootjans prepared a powerpoint presentation of the (hydro-)ecological insights gained during the associated excursion. Both contributions are available on the IMCG website

The following **scientific conferences** were (co-) organised by IMCG:

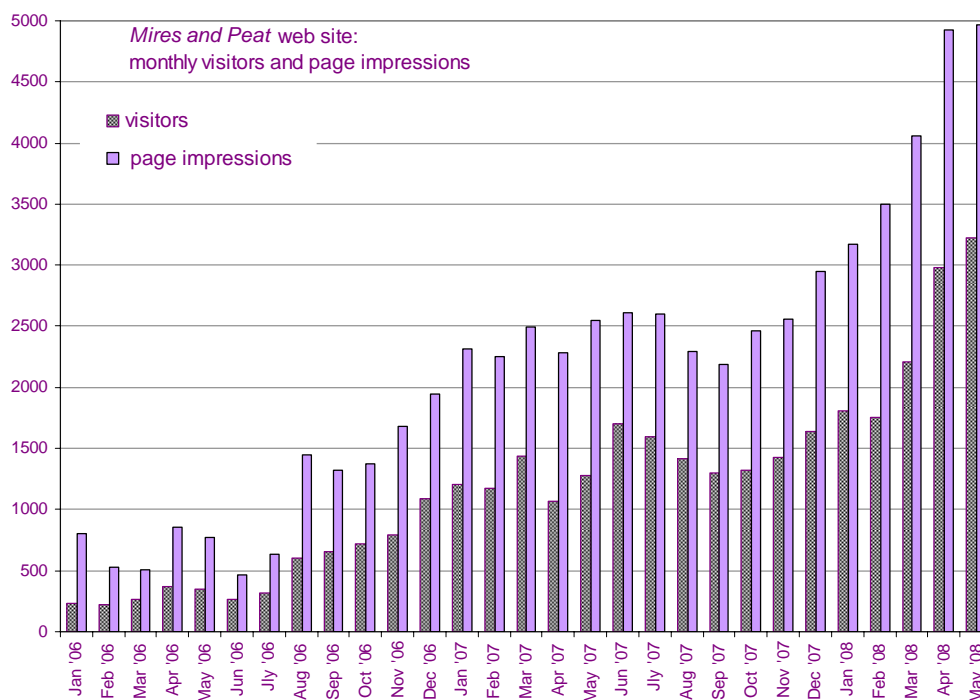
- July 24-26 2006: IMCG Conference Finland. Proceedings are in preparation.
- August 22-25, 2006 Greifswald (Germany): 5<sup>th</sup> European Conference on Ecological Restoration, resulting in the 'Greifswald Statement on Ecological Restoration'

- August 26-30, 2007 Khanty-Mansiysk, Russia: West Siberian peatlands and carbon cycle: past and present (Sergei Vasiliev Memorial Conference)
- October 8-11, 2007 Lamoura, France: Peat in horticulture and the rehabilitation of mires after peat extraction
- April 27 - May 02, 2008, Santiago de Compostela, Spain: IMCG Symposium on Windfarms on peatland.

Our joint (with IPS) international peer-reviewed journal **Mires and Peat** (editor-in-chief Olivia Bragg) went online on 01 January 2006 and was officially launched in Finland in July 2006 at the joint meeting of IPS and IMCG.

Volume 1 (2006) and Volume 2 (2007) contain six and nine papers respectively, and are closed. Volume 3 (2008) contains (at 01 August 2008) five papers. A concurrent Special Volume 4 (2008/9) devoted to *Wind Farms on Peatland* opened on 31 May 2008 and so far also contains five papers. Recent turn-around (submission to publication) times have been less than 100 days.

All individual papers continue to be downloaded (and hopefully read!) quite steadily. The frequency of visits to the journal's web site and the number of page impressions recorded has more than doubled (again) since the latter half of 2007, when visits averaged around 1,500 per month. In May 2008, there were 3,219 visitors and 4,970 page impressions (see Figure below). Flyers to promote the journal to potential authors and readers were distributed at several meetings, and Michael Trepel produced two innovative posters.



Following the IMCG-IPS meeting in Sweden (July 2007) a small **terminology** working group (managers Gerald Schmilewski/IPS and Andrey Sirin/IMCG) was appointed to develop definitions of some 10-20 peat(land) related concepts or words with policy implications that have caused misunderstandings.

With respect to **inventory and monitoring**: The **IMCG Global Peatland Database** was regularly updated by the secretariat, and the presentation of the data on the IMCG website (Africa and Asia) improved. As all data are not yet available on the internet, data were made available to several users on demand.

With respect to the **stimulation of peatland inventories**, new data were collected on the presence of peatlands in Southern Africa (see IMCG newsletters), Kenya (associated with the UNFCCC meeting in Nairobi), Chinese Altai (ECBP project), and Cyprus (see IMCG Newsletter). Important new inventory data became also available for Kalimantan and Papua (Indonesia) in the framework of ongoing projects.

Progress on the **book “Mires and peatlands of Europe”** was reported at the IMCG Congress in Finland, especially with respect to classification. Further progress has been hampered by health problems of one of the editors. Further attention is required.

The preparation and publication of **books** on the mires and peatlands of Southern Africa, Russia, and Tierra del Fuego has not yet seen substantial progress.

An important contribution to the development and publication of a unified and integral **overview of global mire types** and their global distribution was made by the (2005) publication of Michael Steiner's book *Mires from Siberia to Tierra del Fuego* incorporating a wide cross-section of the countries represented by IMCG members.

The propagation of **mire ecosystem diversity** was significantly boosted through the publication of the “Assessment on peatlands, biodiversity and climate change” (Parish et al. 2008), which has an extensive chapter on peatland biodiversity including ecosystem diversity. Ecosystem biodiversity was furthermore an explicit part of presentations made during side events of the Ramsar, Biodiversity and Climate Conventions.

With respect to **education and awareness**: The **IMCG flyer** “The future of peatlands is in conservation” was produced for promotional purposes in 2006 and widely distributed. The general IMCG information flyer was produced in a new version at the end of 2007 and widely made available for distribution. The IMCG flyer “Mires and peatlands in South Africa & Lesotho” produced by Rehana Dada on the occasion of the Ramsar Convention meeting in Uganda (November 2005) was distributed.

The beautiful **postcards** to promote mire conservation worldwide produced by Michael Trepel were widely distributed. The production of a new series was started in 2007 by a call for contributions. Contributions of many IMCG members were received and posted on the IMCG website.

The Ramsar/GAP **brochure**: “Peatlands. Do you care?” (2005) was reprinted and widely distributed.

With respect to **greenhouse gases**: During the UNFCCC COP12 2006 in Nairobi and COP13 in Bali, information booths and side events focussed on peatlands and their role in climate change. Wetlands International (WI) focussed on peatlands in South East Asia and the immense emissions of CO<sub>2</sub> 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 IMCG is also involved. During the SBSTA meeting on deforestation, Faizal Parish made a statement on behalf of GEC, WI, IMCG, and Wildlife Habitat Canada, highlighting the importance of peat swamp forests and other peatlands in relation to the reducing emissions from deforestation in developing countries (REDD).

New IPCC Guidelines for National Greenhouse Gas Inventories (that include emissions from peatlands under extraction) were prepared with involvement of IMCG members.

With respect to **counteracting unnecessary peatland destruction through energy politics**: **IMCG Newsletter specials** were prepared on peat fuel, biofuels, wind energy and oil/gas exploration/exploitation. An IMCG symposium on Peatlands and Windfarms was organized in Santiago de Compostela (2008, Spain).

The IMCG urged the Scottish Executive to refuse the application for a large wind farm on the Isle of Lewis (which it eventually did).

A first draft **Peatland Restoration Manual** was placed on the IMCG website for consultation and April 2008 delivered to the UNEPGEF project “Integrated management of peatlands for biodiversity and climate change”.

In August 2006, IMCG co-organized the European Conference on Ecological Restoration (Greifswald, Germany) which paid major attention to peatland restoration.

With respect to **diminishing threats to peatlands**: IMCG continued to plead for prevention of peat extraction from pristine mires and valuable peatlands, to combat the perverse argument of peat being a (slowly) renewable resource, to stimulate the development and use of sustainable alternatives for peat, and to prevent further reclamation and over-exploitation of remaining tropical peat swamp forests. This was done especially via the Newsletter.



## IMCG Main Board

At our General Assembly in Georgia we would have had to elect a new Main Board. In order to guarantee an effective democratic election process involving all members, nominations had to be submitted to the Secretariat before July 1st 2008, so that ballots and other General Assembly Documents could have been sent out in/with this Newsletter and would reach everybody in time.

As there were only 12 candidates for 15 Main Board positions, and in accordance with article 9.1 of the constitution, no voting is necessary and all candidates are included in the new Main Board.

Nomin. date	Name	Residence
080521	Ab Grootjans	Netherlands
080612	Hans Joosten	Germany
080612	Francis Müller	France
080612	Jennie Whinam	Tasmania
080612	Tatjana Minaeva	Russia
080612	Olivia Bragg	Scotland
080615	Piet-Louis Grundling	South-Africa
080616	Tapio Lindholm	Finland
080618	Rodolfo Iturraspe	Argentina
080618	Line Rochefort	Canada
080619	Leslaw Wolejko	Poland
080626	Faizal Parish	Malaysia

Congratulations to the new IMCG Main Board!

The Main Board may co-opt additional members to fill vacancies (article 9.4) up to a total of 15 members. The Main Board will discuss this in view of the goals set out in the Action Plan 2007-2010. Below some MB members introduce themselves:

### Olivia Bragg (Scotland)

I am an active 'semi-freelance' wetland ecohydrologist based in the UK, with a special interest in the hydrological management of bogs and experience of working on wider wetland issues in the context of the European Water Framework Directive; for more information see <http://www.dundee.ac.uk/geography/staff/bragg/>. In fulfilment of my specific commitments to the IMCG Action Plan over the last two years, I have continued to edit the developing internet journal Mires and Peat on behalf of IMCG and IPS, and helped to organise and deliver the symposium Wind Farms on Peatland which was hosted by our Spanish colleagues in Santiago de Compostela at the end of April this year. I have also made some small contributions to the Peatland Restoration Manual and the Assessment on Peatlands, Biodiversity and Climate Change (biodiversity chapter) and am a member of the recently established joint IMCG/IPS working group on terminology. At policy level I would like to see IMCG consider seriously the possibility of consolidating its position within Ramsar as a full IOP rather than just an Observer; and at practical/project

level that we should not completely forget the importance of water for and from mires, despite the fashionable focus on carbon. I am happy to stand for re-election to the IMCG Main Board, to continue to develop the journal and the wind farms/energy theme, and to contribute to other IMCG activities as and when appropriate.

### Ab Grootjans (Netherlands)

I am involved in the work of the IMCG since 2003 and I have participated in almost all IMCG field excursions ever since. I have worked on eco-hydrological problems in wetlands since 1976 and on restoration problems since 1990. I am a trained vegetation ecologist, but I like to work with scientist with a good geological, geochemical and hydrological training. I am an associate professor at the University of Groningen and I am also a visiting professor at the University of Nijmegen. My main interest is in landscape ecological analyses of damaged peatlands (how does a wetland work from a hydrological point of view, where are the waterlosses?).

As a member of the Main Board I would like to become active in setting up possibilities for short-term field studies by expert members of the IMCG in areas where important mires are threatened and where a quick-scan analysis of the problems are required. I would like to call it "a rapid deployment force" for mires. We will need financing and people who are willing to participate in such enterprises. I have become increasingly interested to spend more time on IMCG activities. In my new department (Department for Energy and Environmental studies in Groningen) I have more time to do so than in my former job at the Ecology Department. I am involved in various international projects on mire research in Poland, Slovakia, Tierra del Fuego and South Africa. Working on a higher IMCG profile in international conventions and organisations will not be my strongest point and I am rather critical on the relationships we have with IPS.

### Tapio Lindholm (Finland)

Tapio presented himself some time ago: You can find a more detailed introduction to his person in IMCG Newsletter 2005/01. He is still working at the Finnish Environment Institute (FEI), Finland's national centre for environmental research and development, which is also responsible for certain administrative tasks. FEI produces data on the state of the environment in Finland, recently including an assessment of EU Habitat types (see article by Kaakinen *et al.* elsewhere in this Newsletter).

### Tatiana Minaeva (Russia)

I have been active in the Russian Mire Society led by Marina Botch since 1989. In 1991, I organised one of traditional biennial field seminars of the society in the Central Forest Nature Reserve. There I heard about the IMCG network, which was at those times

restricted to one representative from our country. When IMCG started to spread as a wide network, I got the opportunity to join that pleasant community (1996). Since then I have been involved in many developments – symposia, discussions, etc. In 1997, I became part of the Working Group (the precursor of the Executive Committee) and took part in the discussions on the Constitution and organisational developments of IMCG. In Quebec the first official elections according to the new constitution took place and I was elected as EC Member.

As EC member I have taken part in the organisation of IMCG activities (day to day management, preparation of events and discussions, development of the IMCG Strategy, fundraising, informational networking etc.).

From 2005 to 2008 I was working for the Russian government as Head of Department of biodiversity and protected areas of the Federal Centre of Geoeological Systems of the Ministry of Nature Resources RF and at present I am back with Wetlands International in a shared role of peatlands projects coordinator of WI Russia Programme and WI Arctic Senior Technical Officer.

#### **Francis Müller (France)**

I have been active in IMCG since 2003, when I took charge of the French Mire Resource Centre (Pôle-relais Tourbières). I would like to enforce my engagement in IMCG by becoming a member of the Main Board, and by accepting to become the treasurer of IMCG.

Our team in Besançon has been involved in several projects with IMCG: after welcoming the 2002 IMCG excursion and congress (before I arrived to the Mire Resource Centre), we've continued exchange IMCG on the situation of mires in France. In autumn 2007, in cooperation with IMCG, we prepared a conference about peatland restoration and peat in horticulture, held in Lamoura (Jura). The conference was well-received by IMCG members joining us. In June 2008, we organized a French-German conference focusing on trees in mires.

Personally I have been involved in nature conservation since 1978. After graduating at the University of Nancy as a Pharmacy doctor, I began to work professionally for nature conservation in 1992, working first in "Conservatoire des Sites Naturels" in Lorraine, on different programmes, including inventories in two départements, European LIFE programmes on fish ponds, floodplains, bogs and dry grasslands, and since 2001 at the Federation of French Conservancies.

Now, as a director of the Mire Resource Centre, I have contacts with most French cases, sites and people engaged in mire conservation, and I intend to go on and develop the contacts with IMCG. We would like to develop some projects together with IMCG, like an 'INTERREG' programme on the mires in the Alps. Like each time since 2004, we will participate in the Georgia/Armenia meeting with a little French delegation.

As IMCG is registered under French law and has its official seat in France, it is good to have the treasurer in France. So, if you find confidence in me I will be pleased to join the executive committee as IMCG treasurer.

#### **Line Rochefort (Canada)**

Dear colleagues, this is a short note to let you know that I am interested to run for a second term as IMCG board member. Recently (May 1st 2008), I was granted a second term of funding (5 years) from the National Research Council under the title of senior chair of the Industrial Research Chair in Peatland Management. At the same time, I will continue to head the Peatland Ecology Research Group (web site: [www.gret-perg.ulaval.ca](http://www.gret-perg.ulaval.ca)), which is made up of a team of multidisciplinary researchers from across Canada. I am involved in research in the high arctic (polygon fen dynamic on Bylot Island), in Québec, New Brunswick and Alberta (peatland ecology and restoration) and in fen creation in northern Alberta (in the tar sand region).

Just recently I have passed over the chair of Commission V of IPS to Catherine Farrell, so I will not be as involved with the board of IPS, leaving hopefully more time to be involved on the board of IMCG. I plan to be more effective in efforts to increase memberships and awareness about the necessity of mire conservation within North America. In Canada, our peatland resource and coverage statistics date from the 1970's (post first petrol crisis) but much is known within each province although no compilation exists. It is my intent to get each province involved with IMCG and improve our knowledge of Canadian peatland coverage through publications. Even though we know little about the extent of peatland coverage in northern Canada (NWT, Labrador, northern Ontario and Québec), we know much less about the rate of loss of peatlands in southern Canada. I hope to stimulate exchange of information between the different provinces (one has to know that the land in Canada is managed by the province and not at the national level) and make sure that in Canada a diversity of peatlands obtains a preservation status. Towards that aim, I would like to organise a one day IMCG workshop (and a day of excursion) in the second week of June 2011 in Québec city, Canada where hopefully some members of IMCG could come and meet with the different managers of the provinces or territories of Canada. A status on the peatlands of each territory of Canada could be reported in the IMCG Newsletter.

I wish you a good meeting in Georgia and Armenia – just wish I could be there also.

#### **Jennie Whinam (Tasmania, Australia)**

My interest in peatlands started when I was an undergraduate student at the Australian National University in Canberra, and continued with post-graduate studies in Tasmania, where the bulk of Australian Sphagnum peatlands occur and where there are large buttongrass moorlands.

For the past 18 years I have been Botanist/Senior Ecologist for the Tasmanian Wilderness World Heritage Area, where the bulk of Tasmanian peatlands occur. The primary focus of my work has been the conservation of plant communities and assessing environmental threats. My primary interests in peatlands are their ecology and conservation, particularly Sphagnum peatlands. I have also been involved in assessing the impacts of Sphagnum moss harvesting and peat mining, both resources used by the horticultural industry. I have undertaken conservation and reservation assessments of Sphagnum peatlands in south-eastern Australia and been the co-ordinator of two recent overviews - Australasian Sphagnum peatlands and Australasian peatlands. I have also undertaken research into sub-Antarctic peatlands, including the pool complexes of Heard Island, Sphagnum moss beds of Macquarie Island, the caldera peatlands of Ile Amsterdam and Sphagnum associated with 'hot ground' on Ile St Paul.

My first introduction to IMCG was when Line Rochefort invited me to participate in the Wetlands 2000 Event in Quebec - my first foray into international peatlands. I attended the IMCG symposium in France in 2002, where I was elected to the IMCG Main Board. I was elected to the position of Chairperson in South Africa (2004) and have participated in all the IMCG symposia since (South America, Finland), as well as co-chairing the

IMCG/IPS joint meetings in Sweden in 2007 and recently in Tullamore, Ireland. It has been exciting to participate in an organisation that is actively expanding its sphere of influence to outside Europe and to look at issues in countries where peatland science and conservation are much newer.

The position of IMCG Chairperson is challenging, varying from dealing with organisational issues, promoting peatland conservation internationally, ensuring IMCG is pro-active in emerging peatland issues and negotiating positive outcomes with the industry body IPS - which has been particularly challenging in relation to 'biofuels'. It is difficult to be an effective Chairperson in the first year, but it seems to me that IMCG is currently an effective international organisation promoting the values and conservation of peatland, at a time when they are under increasing pressure, especially climate change. As well as the direct impacts that climate change is having (and will increasingly have) on peatlands, short-sighted policy responses to alternative energy sources (notably biofuels and windfarms) pose increasing threats.

While I am keen to continue as IMCG Chairperson for a final term, I am not able to continue the level of financial contribution I have made since taking on the position. My further participation in international events is dependent on funding through either IMCG or other sources.



25 July 2008: Elias Ramezani (r.) and Hans Joosten coring Pay Hassal, the deepest known peat deposit (6.8m radicle and root peat + at least 5.2m of organic lake sediments) in Iran, 80 km SE of Ramsar (photo: Almut Spangenberg)

## Peatlands in Global Conventions: Status and Prospects<sup>1</sup>

by Tanja Minayeva<sup>a</sup>, Faizal Parish<sup>b</sup>, Hans Joosten<sup>c</sup>, Marcel Silvius<sup>d</sup> & Andrej Sirin<sup>e</sup>

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### Summary

The most effective way to promote peatland conservation and wise use is integration into national and international policy and legislation. This paper highlights the most significant achievements from the cooperation of IPS and IMCG with respect to the Ramsar Convention, the Biodiversity Convention (CBD) and the Climate Change Convention (UNFCCC).

### Introduction

Peatland conservation and wise use is an important precondition for sustainable development. This stand has been supported already over a decade by international organisations dealing with peat and peatlands, such as the International Peat Society (IPS), the International Mire Conservation Group (IMCG), Wetlands International (WI) and the Global Environment Centre (GEC). The most effective way to promote peatland conservation and wise use is integration into national and international policy and legislation. Essential mechanisms are decisions of global conventions as they stimulate and regulate the improvement of national policies. Since 1996 IPS and IMCG have effectively cooperated to promote peatland wise use and conservation within the Ramsar Convention, the Convention on Biodiversity, and the UN Climate Convention both via contracting parties (the countries) and via partner organizations to the Conventions (NGOs). This paper highlights the most significant achievements in this respect.

### The advantages of partnership

A key aspect in the process of addressing the international arena has been the long-lasting partnership for peatland conservation and wise use of IMCG and IPS (further: the Partnership) on the basis of dialogue and cooperation. The advantages of working with global conventions in partnership are obvious:

- a partnership representing stakeholders with disparate interests is more interesting for and better observed by the international conventions;
- the involvement of a wide range of experts from organisations with different views guarantees that a more comprehensive list of items can be brought to the agenda;
- the exchange of information improves the background knowledge for decision making;
- preparatory discussions allow to present well considered and more balanced positions;

- the organisational resources (human and material) are more effectively used by sharing and representation.

### The Ramsar convention on wetlands

The Ramsar Convention on Wetlands seems to be the most suitable and effective mechanism for implementing the principles of peatland wise use and conservation. Ramsar is the only convention with a clear mechanism for implementing the ecosystem approach by developing recommendations on wetlands management. The Convention's mission is "the conservation and wise use of all wetlands through local, regional and national actions and international cooperation, as a contribution towards achieving sustainable development throughout the world".



### Peatlands in the Ramsar Convention

Due to the joint activities of IPS and IMCG, the Ramsar Conference of Parties (COP) has in its recommendations and resolutions recognised peatlands as one of the most important wetland types: *COP 6 (1996): Recommendation VI.1* - encouraging further cooperation on wise use, sustainable development, and conservation of global peatlands; *COP 7 (1999): Recommendation VII.1* - "on the wise use of peatlands" with an annexed "draft global action plan for the wise use and management of peatlands"; *COP 8 (2002): Resolution VIII.3* on Climate Change and Wetlands: Impacts Adaptation and Mitigation - calls for managing wetlands adaptively in response to the impacts of global climate change; recognises the role of peatlands in mitigating impacts of climate change; *COP 8 (2002): Resolution VIII.11* on Additional guidance for identifying and designating under-represented wetland types as Wetlands of International Importance – addresses peatlands as underrepresented wetland type; *COP 8 (2002): Resolution VIII.17* – adopts the 'Guidelines for Global Action on Peatlands', calls for establishing a Coordinating Committee for Global Action on Peatlands (CCGAP) for implementing the action plan. Consequently, peatland issues have been integrated into Ramsar Convention tools and instruments: – *The New Guidelines for management planning for Ramsar sites and other wetlands* (adopted 2002) make specific reference to peatlands;

- The *Criteria for Identifying Wetlands of International Importance* (adopted 2005) identify peatlands as being underrepresented in the system of protected Ramsar sites;
- The *Strategic plan for 2002-2008* covers the mechanisms for the delivery of all three pillars of the Convention (Strategic Plan General Objectives 1-3) in peatland wise use and conservation;
- The *National report format triennium 2002-2005* included a special division on peatlands (point 3.2 on GAP implementation);
- The *National report format triennium 2005-2008* includes the indicator question: Has national action been taken to implement the Guidelines to Global Action on Peatlands (Res. VIII.17)?
- The *CCGAP mechanism* being a partnership for peatlands conservation and wise use.

*Ramsar Guidelines for Global Action on Peatlands (GGAP) (Resolution VIII.17)*

A framework for action on global, regional and national level, addressing needs in global coordination of actions within the following priorities:

- A. Knowledge of global resources
- B. Education and public awareness on peatlands
- C. Policy and legislative instruments
- D. Wise use of peatlands
- E. Research networks, regional centres of expertise, and institutional capacity
- F. International cooperation
- G. Implementation and support

The Guidelines define the main threats, problems, emerging issues and priorities for actions in peatland conservation and provide the relevant approaches and methods.

More about Ramsar and Peatlands:  
[www.ramsar.org/types\\_peatlands.htm](http://www.ramsar.org/types_peatlands.htm)

The Partnership has been working hard to promote the adoption of the Global Action Plan for Peatlands (GAPP) by the Ramsar Convention Conference of Contracting Parties (COP8, resolution VIII.17). The resolution also defined the instalment of the Coordination Committee for Global Action on Peatland (CCGAP) for monitoring GAPP implementation. CCGAP has the capacity 1) to provide the Contracting Parties (CPs) with technical information on peatlands and recommendations on peatland policy and management, and 2) to provide feedback from the Contracting Parties to implement these recommendations and policies.

The first opportunity has been used by launching within the Convention the book 'Wise Use of Mires and Peatlands' as a manual for decision makers (COP8) and the brochure 'Peatlands: Do You Care' as an education and public awareness tool (COP9). Anyway, this channel should be used regularly and more effectively, as the awareness of peatlands within the Ramsar community is still deficient.

*CCGAP deliverables to Ramsar Contracting Parties*

CCGAP and the involved organisations have developed several helpful documents addressing countries and global implementing agencies:

The *Wise use of mires and peatlands* (2002) provides a framework and background information on peatlands for decision makers.

The *Peatlands Wise Use Statement* (2002) provides a short overview of wise use principles related to peatlands in all convention languages and additionally in Finnish and Russian.

The brochure "*Peatlands – Do You Care*" (2005) explains the functions and values of peatlands and highlights emerging issues on peatlands

CCGAP provides the opportunity to submit a technical or informational paper on peatlands to each COP. The last ten years have clearly shown rapid changes – almost from year to year – in priorities and problems related to peatlands. The issues on top of the agenda today, such as peatlands and carbon storage, water management, permafrost conservation, peatlands and livelihood, were hardly discussed fifteen years ago. An 'informational paper' is the proper format to inform the CPs on the trends in peatland conservation during the three years between the COPs and to present a review of actual problems that have to be addressed by individual countries and globally. The Partnership with its broad overview has the capacity to highlight problems that are still invisible for regular wetlands managers.

*Emerging peatland issues identified by CCGAP to COP9*

- Climate change
- Biodiversity
- Water management
- Poverty
- Wise use

The latter function has not been used really effectively. The only feedback mechanism till now is the national reporting process. As a result of resolution VIII.17 a large division on peatlands has been included into the National Report format. Analyses of the National Reports from Europe and Asia for 2002-2005 gave a lot of information on peatland wise use policies and activities. The key problems identified for both regions are that 1) countries do not realise they have peatlands, 2) peatlands are not identified within existing Ramsar sites, even when they make up a significant part of them, 3) very few countries designate Ramsar sites especially for their peatland character, 4) no special management options exist for Ramsar sites with peatlands, and 5) only few countries have special policies including legislation on peatland wise use. As an example, Table 1 presents data from the Asian region.



Table 1: Peatland policies in Asian countries (source: Ramsar National Reports); <sup>1</sup>from Joosten & Clarke (2002) with corrections regarding China and Mongolia; \*no answer.

Contracting party	Peatlands % country area <sup>1)</sup>	National report information:		
		Relevance of peatlands to the country	Policy regarding peatlands	Peatland restoration projects
Indonesia	14,177	Inventory priority	In preparation, designated as underrepresented wetland type	Ongoing
Malaysia	7,581	Partly/in some cases	In preparation, designated as underrepresented wetland type	*
Cambodia	3,867	Not applicable		*
China	2,800	Inventory priority	In preparation, designated as underrepresented wetland type	Ongoing
Mongolia	1,700	Not applicable		*
Japan	0,529	Inventory priority	In preparation, designated as underrepresented wetland type	Ongoing
Viet Nam	0,301	Partly/in some cases	*	*
Bangladesh	0,203	Inventory priority	Designated need in policy, peatlands designated as underrepresented wetland type	*
Israel	0,182	Inventory priority		*
Thailand	0,097	Inventory priority	In preparation, designated as underrepresented wetland type	*
Myanmar	0,074	Not applicable	*	*
Sri Lanka	0,053	Partly/in some cases	*	*
Kyrgyz	0,050	Partly/in some cases	*	*
Philippines	0,033	Partly/in some cases	*	*
Iraq	0,023	Not applicable	*	*
Pakistan	0,013	Partly/in some cases	*	*
Azerbaijan	0,012	Partly/in some cases	Included in plan	*
Lebanon	0,010	Inventory priority	*	*
India	0,009	Inventory priority	*	*
Rep. of Korea	0,005	Partly/in some cases	Included in plan	*
Syrian	0,002	Not applicable	*	*
Jordan	0,001	Inventory priority	*	*
Nepal	0,001	Inventory priority	*	*
Iran	0,001	Partly/in some cases	*	*
Bahrain	0,001	Partly/in some cases	*	*
UAE	0,001	Not applicable	*	*
Tajikistan	0,001	Not applicable	*	*
Uzbekistan	0,001	Not applicable	*	*

Other feedback mechanisms between CCGAP and the countries are round tables, interviews and questionnaires during Ramsar meetings. The Peatlands round table during the Ramsar COP10 preparatory meeting in Bangkok (January 2008) demonstrated, that after a short explanation of what peatland is, the countries immediately provide large amounts of information on peatland management and related problems in their countries. 18 countries attended the meeting and 14 countries filled in the questionnaire in which they clearly expressed the urgent need for more policy, education, and scientific

study regarding peatlands, for peatland restoration, and for national and international funding. Peatland experts at such events can sensitize the countries for peatland problems and promote their wise use on the national level.

This shows that CCGAP as a body acting on behalf of the Ramsar Convention has a high potential to become a very effective instrument providing the IMCG-IPS Partnership access to the policy making processes of the over 150 countries that are Contracting Parties to the Ramsar Convention.



*Emerging peatland issues identified in the preparatory meetings to COP10*

The preparatory meetings for the European and Asian Regions identified several shared issues:

- Peat fires
- Peatlands and biofuel
- Peatlands and extractive industries
- Peatlands and water management
- Lack of basic knowledge and public awareness

In the meeting of the European Region specific attention was asked for:

- Climate change: peatlands role in mitigation and adaptation
- Arctic peatlands

The meeting for the Asian Region named the following issues:

- Climate change induced peatland degradation and losses, especially in highlands, drained and coastal areas
- Peatlands and water: highland peatlands as water sources, valley/coastal peatlands and flood mitigation
- Overgrazing of highland peatlands
- Impact of mining on highland peatlands

For the next Ramsar COP10 in Korea (November 2008) peatlands can be addressed in the following Resolutions, currently in preparation:

- The Ramsar Strategic Plan 2009-2014
- The Convention's Programme on communication, education, participation, and awareness (CEPA) 2009-2014
- Partnerships and synergies with Multilateral Environmental Agreements and other institutions
- Resolution on wetlands and extractive industries
- Wetlands and human health
- Climate change and wetlands
- Wetlands and 'biofuels'

For more information, see:

[http://ramsar.org/sc/37/key\\_sc37\\_agenda\\_papers.htm](http://ramsar.org/sc/37/key_sc37_agenda_papers.htm)

The Ramsar Convention cooperates with other conventions related to sustainable development and biodiversity conservation. This gives the Partnership opportunity for wider global outreach.

*The convention on biological biodiversity (CBD)*



Peatlands, as one of the key landscape components, play a significant role in biodiversity preservation, a fact that only recently was brought on the agenda of the Convention on Biological Diversity (CBD). This happened in 2004 by the adoption of CBD resolution VII/15, mentioning peatlands as valuable ecosystems as habitats and for carbon storage and sequestration.

The CBD has developed a number of valuable mechanisms for policy making and funding opportunities for best practice development and implementation. The strong side of the convention is the integration of technical information into decision making. This fact has been used by a team of peatland experts that produced the technical paper 'Global Assessment on Peatlands Biodiversity and Climate Change' with support of UNEP (for the full Assessment: <http://imcg.net/docum/pcb.htm>). The Assessment has been endorsed by the Convention's Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA) in July 2007 and recognized by CBD COP9 in its decision of Biodiversity and Climate Change in May 2008.

Peatland will thus also be considered by the new Ad-hoc Expert group on Biodiversity and Climate Change formed by CBD to give input to the UNFCCC Bali plan of action.

**CONFERENCE OF THE PARTIES TO THE CONVENTION ON BIOLOGICAL DIVERSITY  
Ninth meeting Bonn, 19-30 May 2008**

**DECISION ON BIODIVERSITY AND CLIMATE CHANGE**

***A. Proposals for the integration of climate-change activities within the programmes of work of the Convention***

*The Conference of the Parties*

*Decides* that, in conducting future in depth reviews of the programmes of work of the Convention, climate change considerations should be integrated into each programme of work where relevant and appropriate, taking into account, *inter alia*, the Third and Fourth Assessment Reports of the Intergovernmental Panel on Climate Change, Technical Series No. 10 and No. 25 of the Convention on Biological Diversity and the global Assessment on Peatlands, Biodiversity and Climate Change.

...

***D. Summary of the findings of the global Assessment on Peatlands, Biodiversity and Climate Change***

*Recognizes* the importance of the conservation and sustainable use of the biodiversity of wetlands and, in particular, peatlands in addressing climate change and *noting with appreciation* the findings of the global Assessment on Peatlands, Biodiversity and Climate Change;

*Invites* the Global Environment Centre, subject to available resources, to translate into other United Nations languages, and further disseminate the global Assessment on Peatlands, Biodiversity and Climate Change;

*Encourages* Parties and other Governments to strengthen collaboration with the Ramsar Convention on Wetlands and promote the participation of interested organizations in the implementation of the Guidelines for Global Action on Peatlands and other actions, such as the ones listed in the global Assessment of Peatlands, Biodiversity and Climate Change, that could contribute to the conservation and sustainable use of peatlands;



### *The UN Framework Convention on Climate Change*

The UN Framework Convention on Climate Change (UNFCCC) has until now been slow in recognising peatlands as a significant factor of climate change on the one side and as a potential mitigating factor on the other. A first input into the Intergovernmental Panel for Climate Change (IPCC), the scientific body of UNFCCC, was the IPS-IMCG Position paper 'The role of peatlands in man-induced climate change' (the 'Freising Statement', 1999, [www.imcg.net/docum/freising.htm](http://www.imcg.net/docum/freising.htm)). At the moment only one official UNFCCC paper explicitly refers to peatlands as object of consideration: the chapter 'Wetlands' of the 2006 IPCC 'Guidelines for National Greenhouse Gas Inventories - Agriculture, Forestry and Other Land Use'. The latter urges UNFCCC to extend the items under consideration while addressing climate change. An expected key item is land management for climate change mitigation, not only with respect to greenhouse gas emissions, but mainly for managing the regional mesoclimate. In this context the recognition of the role of peatlands will increase.

The links between UNFCCC and peatlands will rapidly grow now that at the Bali Convention (COP13, December 2007) the role of degraded peatlands in global greenhouse gas emissions has become better exposed. At this COP the resolution 'Reducing Emissions from Deforestation in Developing countries: approaches to stimulate action' was adopted, a key item for the adopted Bali Road Map. The REDD resolution explicitly refers to forest carbon stocks, which include carbon stored in the associated forest soils. This is of particular importance, as peat swamp forests store large amounts of carbon in their peat soils. Healthy peat swamp forests actively sequester carbon, but when they are deforested and drained the soil based carbon is rapidly released through oxidation. In addition, the desiccated organic soils are extremely prone to fire. The enormous carbon emissions from degraded peat swamp forests provide sufficient reasons, justification and logic to prioritise the conservation and restoration of any degraded or deforested peatland area under REDD.

#### *Peat and REDD*

Peat swamp forests are clearly a target of the REDD resolution, but it has been a matter of discussion whether peat soils from deforested peat swamp forests fall under the REDD scheme. Forests are defined under the Kyoto Protocol as: "a minimum area of land of 0.05-1.0 ha with tree-crown cover (or equivalent stocking level) of more than 10-30 % with trees with the potential to reach a minimum height of 2-5 m at maturity in situ. A forest may consist either of closed forest formations where trees of various storey and undergrowth cover a high proportion of the ground or of open forest. Young natural stands and all

*plantations that have yet to reach a crown density of 10-30 % or tree height of 2-5 m are included under forest, as are areas normally forming part of the forest area that are temporarily un-stocked as a result of human intervention such as harvesting or natural causes but which are expected to revert to forest."* The REDD resolution specifically refers to forests and to forest carbon stocks, which includes the below-ground carbon such as peat carbon. The REDD resolution is also relevant for the soil-based carbon once the forest has been removed, as most of the degraded peat swamp constitutes "areas normally forming part of the forest area that are temporarily un-stocked as a result of human intervention such as harvesting or natural causes but which are expected to revert to forest". In addition, most deforested peatland areas have "Young natural stands [...] that have yet to reach a crown density of 10-30 % or tree height of 2-5 m". Deforested peatlands would not fall under REDD only when there is a clear government decision to convert the deforested area to agriculture. Conversion to a plantation would still categorise as a forest in accordance to the UNFCCC definition.

The growing attention for REDD has ignited private interest in stopping drainage and fire in the peat swamps in order to gain carbon credits.

Also the enormous risks (increased drainage) and chances (rewetting of drained peatlands) associated with 'biofuel' (see IMCG newsletter 2007-3) urge to pay more attention to peatlands and climate change. In this respect it is a severe defect that the recent (June 2008) IPCC Technical Paper on Climate Change and Water ([www.ipcc.ch/pdf/technical-papers/climate-change-water-en.pdf](http://www.ipcc.ch/pdf/technical-papers/climate-change-water-en.pdf)) hardly pays attention to peatlands and completely misses the important climatic feedback effects of these ecosystems.

### **CONFERENCE OF THE PARTIES TO THE UN FRAMEWORK CONVENTION ON CLIMATE CHANGE**

#### **DECISION -/CP.13: REDUCING EMISSIONS FROM DEFORESTATION IN DEVELOPING COUNTRIES: APPROACHES TO STIMULATE ACTION**

##### *The Conference of the Parties*

*Acknowledging* the contribution of the emissions from deforestation to global anthropogenic greenhouse gas emissions,

*Recognizing* the potential role of further actions to reduce emissions from deforestation and forest degradation in developing countries in helping to meet the ultimate objective of the Convention,

*Acknowledging* that forest degradation also leads to emissions, and needs to be addressed when reducing emissions from deforestation,

*Recognizing* that efforts and actions to reduce deforestation and to maintain and conserve forest carbon stocks in developing countries are already being taken, ...

1. *Invites* Parties to further strengthen and support ongoing efforts to reduce emissions from deforestation and forest degradation on a voluntary basis;

...

*Partnership – invitation for steps forward*

Other environmental issues associated with peatlands are expected to be raised within the global peatland community and to be addressed to countries on the national level in the near future. These include: the role of peatlands for water management, land degradation caused by improper peatland management, adaptation aspects related to climate change, peatlands and livelihoods including poverty reduction, and many others. All these items are on the initial stage of consideration and need input from specialists and politicians to be translated into the language of decision makers.

In the current world, the listed items are more and more under the control of large corporations. Consideration of those items by the global environmental conventions gives more opportunity to address these companies.

It is a great challenge for the Partnership of IMCG and IPS – inside and outside of the Ramsar CCGAP - to identify the most urgent priorities, to highlight them to experts, decision makers, including politicians and large corporations, and to propose solutions for these problems using the mechanisms of international conventions.

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### **Collaboration between IMCG and IPS**

*by Jennie Whinam*

There have been two formal joint IMCG/IPS meetings over the past year – June 2007 in Sweden and June 2008 in Tullamore, associated with the IPS Congress. Without going back over details (minutes and a summary of the Sweden meeting were published in an earlier IMCG Newsletter and minutes of the Tullamore meeting are in this Newsletter), I think it is fair to say that some positive progress has been made regarding collaboration between IMCG and IPS.

While IMCG and IPS will not (and cannot given their very different charters) agree on everything related to peatlands, it seems to some of us in both organisations that there are some peatland issues that will benefit from collaboration – such as the development of the Wise Use guidelines (prepared by Hans Joosten and Donal Clarke). The challenge arising from this successful collaboration is to ensure that wise use guidelines are now adopted and implemented to ensure wise use, not simply used to justify exploitation.

Another major successful IMCG/IPS joint venture is the scientific journal, *Mires and Peat*. As can be seen from Olivia Bragg's report in the previous newsletter, the rate of submission and publication is increasing steadily – and will continue to, with the support of IMCG and IPS members. *Mires & Peat* provides a valuable vehicle for timely presentation of issues relating to peatlands.

One suggestion made in Ireland for future collaboration between our two organisations, was the conservation, management and sustainable use of tropical peatlands in southeast Asia. There are already scientists from both organisations working in the region. A co-ordinated research, management and policy approach may lead to a more timely resolution of at least some of the issues threatening (in fact, currently destroying) these tropical peatlands. It is possible that one outcome could be a joint IMCG/IPS conservation management project in the region.

One notable area where there has not been agreement between the two organisations is the proposal by IPS to have peat listed as a renewable biofuel – see this and earlier IMCG newsletters detailing the reasons why peat cannot be considered 'renewable' and some of the refutations to the 300 year carbon cycle proposed by IPS. While this topic was to have been a focus of the joint meeting in Sweden last year, unfortunately none of the IPS experts were present to discuss the details of the IPS position nor to counter the IMCG arguments against their position, eloquently presented by Hans Joosten and John Couwenburg. Several of the presentations made at the IPS Congress in Tullamore indicate that IPS has yet to absorb, let alone address the criticisms that IMCG has made of their position. IMCG will continue to argue that peat can never be considered a renewable biofuel.

After the joint IMCG/IPS meeting in Tullamore, it was felt that some progress had been made to resolving some of the difficulties that had arisen previously and towards agreement on a major collaboration in southeast Asia. There was constructive dialogue between members of both our organisations present in Tullamore (many are members of both IMCG and IPS), and it was suggested that a further joint meeting be held in another 12 months' time. (Subject to other meetings/conferences scheduled around that time, I propose that the meeting be held in Germany in June 2009.) I feel that if we are to achieve successful collaboration with IPS in some areas, then this is the right time to move forward. The new President of IPS, Donal Clarke, has indicated a willingness to continue dialogue. I am committed to ensuring that we give this collaboration the necessary support to succeed. The interests of global mire conservation can only be enhanced by the two organisations working together where possible.

## IPS-IMCG Brainstorming session Tullamore

During the International Peat Congress in Tullamore, Ireland, representatives of IMCG and IPS met twice to discuss the relation between the organisations with special attention to future cooperation. Smaller meetings were convened between individual board members of both organisations to discuss sensitive issues and to prepare the larger discussion meetings. Here follows a general overview of the items discussed, based on the draft minutes, prepared by Susann Warnecke and Hans Joosten.

9 June 2008, 15:30 – 18:00h, Bridge Hotel

Chairs: Markku Mäkelä and Jennie Whinam

Attendants: Håkan Bjur, Olivia Bragg, Magnus Brandel, Donal Clarke, Herbert Diemont, Dmitriy Gogin, Björn Hånell, Gerry Hood, Kristina Holmgren, Hans Joosten, Valerijs Kozlovs, Markku Mäkelä, Tatiana Minaeva, Nikolay Pentin, Jack Rieley, Line Rochefort, Pirkko Selin, Jaakko Silpola, Marcel Silvius, Andrey Sirin, Anna Sycheva-Mikhailova, Michael Trepel, Susann Warnecke, Jennie Whinam, Jutta Zeitz

Mäkelä stressed that it is more important to look to the future than to the past. Whinam gave a short introduction on the aim and format of the meeting: a brainstorm of IPS and IMCG members on global issues that open perspectives for collaboration between the two global organisations.

She identified various global platforms to cooperate, including the Climate Convention, the Biodiversity Convention, the Desertification Convention, and the Ramsar Convention.

With respect to the Climate Convention (Kyoto) the meeting observed that:

- The next Conference of Parties will be in Nov 2008 in Poland
- In Poland post 2012 regulations (2<sup>nd</sup> commitment phase) will be central
- Common ground for IPS and IMCG could be
  - greenhouse gases and peat/peatlands
  - peatland restoration and climate
  - carbon trading

Joosten gave background information on the current Kyoto process and stressed that work has to be done in the coming time for peatland issues to be included into the next decisions of UNFCCC. Rieley indicated that the new IPS Climate Change book can be used to inform the decision makers. Silvius proposed that IPS and IMCG should seek expert status at the Convention. Perspectives for cooperation could be offsetting carbon emissions from peat industry by restoration of degraded peatlands. Diemont pointed out that a major problem is that the benefits (climate, biodiversity) are for the global level whereas the costs are for the local/regional level. He stressed that IPS has member organisations that work and have much experience on the regional level.

Rieley stressed that IPS has not much experience in lobbying to conventions. Initially IPS and IMCG have been working towards the Ramsar Convention, in the last years also (with other organisations) towards other conventions. Recently Ramsar has rediscovered the peatland issue, stimulated by the interests of other conventions in the peatland resource. The Poland CoP meeting in November is 'close' both geographically (easy reachable by IPS) and in time (very soon). IMCG and IPS should cooperate in this. Silvius explained that Wetlands International has in recent years been lobbying the conventions and would welcome stronger involvement of IPS and IMCG. Minaeva pointed at the importance of the conventions as mechanisms that are the basis for formulating national policies. Countries are parties to conventions and have to implement the decisions that the conventions take. Since the Ramsar Convention has adopted the Global Action Plan for Peatland (GAPP), 6 pages of peatland related questions have been included in the national report that every country has to make for Ramsar. This has made countries aware of peatlands and has stimulated developing policies for them. IMCG and IPS are the global peatland experts and both organizations should use their expert capacity to identify and foresee future problems, make peatland issues known to the global community, and combine regional and global work. An example is the biofuel issue, which started very enthusiastically but has led to immense problems with the destruction of tropical peatlands for oil palm plantations. Industry and conservation need each other because ecological problems can easily turn to economical problems for companies. To prevent the latter, real cooperation in concrete projects should take place, 'platforms' like conventions are not necessary for that; an example was the joint workshop in Tampere on the 'future of peatlands' trying to develop a vision on future economic development related to peatlands.

In preparation to Ramsar CoP10, a questionnaire was distributed among countries that participated in the Asian and European meetings on the implementation of the GAP on the national level. The results of that questionnaire (what was done, what do they want to do) could be presented to COP10 in Korea, e.g. in a side event. In Ramsar currently the draft resolutions 'wetlands and biofuel' and 'wetlands and extracting industries' are under discussion. These (may) concern peatland aspects. The drafts can be downloaded from the Ramsar website for comments. We should not forget that CCGAP as a powerful tool is still existing. It is a platform under which we always can come together and have access to the contracting parties. IPS/IMCG should consider how to use these tools.

Rieley observed that in the last years CCGAP and the Ramsar STRP had moved apart. He attended the STRP meeting in Gland last January where it appeared that the position of Ramsar has recently changed, especially because of the climate change

and biofuel issues. Peatlands have become very popular now but Ramsar lacks expert knowledge. This could be provided by IPS/IMCG, e.g. via the CC-book. Silvius confirmed that CCGAP/peatlands had not been central in Ramsar in recent years, but that since other conventions are increasingly focussing on peatlands, Ramsar has become interested again. Peatlands should be dealt with in Ramsar as a core item, not only as a side event. Brandel added that the Ramsar meeting in Stockholm had shown that climate change and biodiversity have to be dealt with simultaneously and that ways have to be found to tackle this. The IPS Climate Change book should be used for that.

According to Rieley cooperation should not only take place on the global level (conventions) but also on the national and EU level. Joint statements towards the EU are more effective than expressing opposite arguments as has been done in the past. Joosten acknowledged that peatland problems are indeed very different in different regions. He warned, however, the joint platform of IPS/IMCG against tangling up in too small local issues: the joint work must mainly be done on the global level.

Silvius pointed out that there is very limited interaction between industry, scientists and NGO's. There are many similar interests and areas for cooperation and it is important to tackle some problems together and bring them to the international level. An example of common interest is carbon offsetting. Wetlands International cooperates with BioX, a company interested in sustainable palm oil, to establish a Global Peatlands Fund to enable the private sector to get involved in peatland conservation, restoration and wise use by carbon trading (trade in Voluntary Emission Reductions, VERs)

Silpola noted that this links to the IPS ideas of peat and peatland certification. Funds could be combined with a certification plan, as a tool for companies to prove their conservation efforts. Diemont was sceptical about accrediting land use related carbon offsetting, because of the large uncertainties in land use related to human intervention (incl. social aspects). His experience is that certification does not work on those places where it is most urgently needed, cf. tropical timber and oil palm. He proposed IMCG and IPS to make a joint Policy Brief of 3-4 pages on Peatlands and Carbon.

Brandel mentioned that there are many issues to be discussed between IPS and IMCG (cf. Sweden). How to progress with that? Mäkelä proposed to use the IPS internet discussion forum for such discussions, Rieley, however, feared that people might not have enough time and interest for such online discussions. Also Whinam considered a discussion forum to be too time consuming and thought that discussions could better happen among key persons, as is happening with the terminology work and other special projects. Minaeva stressed that we should take

care that such discussions do not frustrate cooperation in general.

Whinam proposed that the brainstorming ideas should now be discussed internally and transformed into real projects. Gogin stressed that compromises have to be found between the two organizations: it is important that IPS and IMCG agree to speak with a common voice to the public when it comes to peatlands issues

PART 2: 10 June 2008, 14:00 – 15:30h, Tullamore Court Hotel

Chairs Markku Mäkelä and Jennie Whinam

Attendants: Kaisu Aapala, Dagmar Balla, Hans-Georg Belka, Håkan Bjur, Olivia Bragg, Magnus Brandel, Donal Clarke, Isabel Frage Vila, Eduardo Garcia Rodeja, Gerry Hood, Hans Joosten, Björn Hånell, Bernd Hofer, Sigita Kantautiene, Marie Kofod-Hansen, Elve Lode, Lars Lundin, Tatiana Minaeva, Arvydan Nugaran, Hannu Salo, Gerald Schmilewski, Pirkko Selin, Jaakko Silpola, Andrey Sirin, Michael Trepel, Susann Warnecke, Jennie Whinam, Jutta Zeitz.

With a PPT presentation Olivia Bragg reported on the progress of the joint *scientific journal* Mires and peat. In future the journal will also publish book reviews. People have been asked to recommend M&P to Thomson for including the journal in the list of journals with an impact factor. A promotion flyer has been sent to the editorial board to distribute at international meetings; banners are available on the IPS and IMCG websites; a subscription system reminding when new articles are posted has been installed; publication of conference proceedings (e.g. SER Greifswald 1, Lamoura 3, Spain 9) has started; a new poster has been prepared. The number of page views is rising continuously, with e.g. 3000 visitors in May 2008; the first paper "Distribution of peatlands in Europe" has in total been downloaded 1,200 times. The second year showed a 50% increase in articles per issue compared to the first year. Volume 3 started in January 2008 and has now 5 articles; a special issue 4 on "Windfarms on Peatlands" is planned for 2008/2009. The publication circle for new paper takes about 100-300 days, but is steadily decreasing. A DOI identifying system for papers is wanted, but this involves costs. An impact factor is desired, but can only be applied for once in two years.

Joosten stressed that a scientific journal is our target and that therefore an impact factor is required. With respect to the costs involved, Bragg thought that possibly only a web form is necessary to apply for assessment of the journal. On the question of Bjur what the objectives / targets of an impact factor are, Bragg and Silpola answered that the impact factor has from the beginning been included in the plans for the journal and has been formulated as a goal in the original IPS/IMCG contract. Joosten explained that – next to being attractive for publication – official gremia (like IPCC) only accept information that has

been published in officially peer reviewed papers, i.e. in journals with an impact factor. Even the CC book will not be taken fully serious, because it has not such a standard. Everybody agreed that we should move forward to applying for an impact factor. Hood expressed that costs should not be a problem.

It was decided that Olivia Bragg will gather information on costs and rules and carry out the impact factor application after the completion of Volume 3.

Silpola asked how the journal can be used for proceedings of conference presentations, publications of abstracts and complete papers. Bragg pointed out that the papers should then be written before presentation at a conference. According to Joosten, the wind farm symposium had revealed several difficulties and risks in this respect. The process of peer reviewing, as an iterative process between authors, reviewers and editor, takes a lot of time, often more time than is available until the symposium. Furthermore not all symposium papers might be good enough for inclusion in the peer-reviewed journal, so that the journal cannot fully replace normal, non peer reviewed proceedings. Publishing a paper both in the journal *and* in the proceedings may lead to the situation that two papers with the same title but different content (changed after peer review) are published. This is very confusing and bibliographically undesirable.

Trepel had checked that DOI numbers cost about 100 € for 100 numbers. DOI numbering improves the chances for getting an impact factor. The numbers can also be used for other IPS and IMCG publication. Clarke thought that the financial matter can be discussed at the IPS Board meeting, but believed that such support has been decided on already.

Bragg pointed out that the position of editor was firstly accepted for a period of 5 years, but this period can be continued. There is a limit to how much work the editor can do, so with more papers submitted, sub-editors might have to be appointed, but then standards have to be taken care of. Higher numbers of incoming papers also improve the quality of the journal as more low-quality-papers can be rejected. Joosten stressed that a position of co-editor of a good journal is not only a burden to persons but also attractive, e.g. in their CV. If the work becomes too much, we can always consider transferring the journal to an outside professional editor. On the other hand IPS and IMCG should keep this important joint project in their own hands as long as possible. An option could be, if funds are the bottleneck, to let authors pay for the publication.

On behalf of both organisations, Whinam thanked Michael Trepel and Olivia Bragg for the important work done.

A report on the *Terminology group* was given by Gerald Schmilewski. The group was established following the IPS/IMCG meeting in Sweden in summer 2007 and consists of three persons from each organization under the leadership of Andrey Sirin and

Gerald Schmilewski and with Line Rochefort as secretary. The first meeting on Sunday 8 June in Tullamore has discussed some general rules: 1) as far as possible reference should be made to commonly used normal dictionaries, 2) words should be used in accordance with their etymological origin (e.g. the definition of a word should not be in contradiction with the meaning of a word from which the term is originally derived, 3) there should only be one term for one concept. The group plans to identify three categories of terms: 1) terms with a defined definition that is binding for both IPS and IMCG, 2) terms that should be avoided as they lead to confusion, 3) terms that should not be used at all (negative list). A list of 47 terms have been identified by the working group members, these were grouped into 7 subject categories. In the near future the group will discuss the terms and establish the definitions. The final word list will be published in Mires and Peat and these terms and their definitions should be obligatorily used in future papers of IMCG, IPS and M&P.

With respect to *CCGAP*, Hood and Clarke affirmed that IPS will be present at the Ramsar meeting in Korea, preferably together with IMCG. The targets, so Silpola, should be defined beforehand and set as high as possible. Minaeva underlined that we have to use the opportunities that the convention gives to us. The role of CCGAP is not the implementation of the GAP, but a continual mechanism of Ramsar to report what has been done by countries with respect to peatlands, e.g. on peat fires. There are several possibilities to consider: a side event, or a special peatland session. We can comment on resolutions (see yesterday's minutes) and ask for amendments via the countries or directly as observers. In side events, these amendments can be explained to country representatives. We must provide countries with ideas for the next triennium. Joosten agreed that CCGAP should report to the CoP on the achievements of the past three years and formulate the priorities for the next three years. Hood thought it good also to report on the current certification process, as management control / standards are also desired by Ramsar. Also peat fires are an extremely important topic.

Under the agenda point "additional issues" Bjur stressed that a fruitful progress in the collaboration between IPS and IMCG is very welcome. Communication should also happen between the meetings, to build trust among people. Is there a code of conduct? Clarke answered that in Sweden it was agreed to carry out certain actions only after consultation (within a certain time); this procedure was, however, not always followed. Joosten recalled that a memorandum of understanding between IMCG and IPS was discussed in the past. IMCG had not pursued it, because the general opinion within IMCG was that a good relation should exist in the practical collaboration, not in a paper memorandum. With respect to problems in/with certain countries (e.g.



Finland), he proposed that these are sorted out bilaterally between the parties involved. It would, for example, be useful to know which statements of IMCG are exactly contested by the Finnish Peat Society or Industry, because the current attitude of “general dissatisfaction” is too vague to work with.

It was decided that Joosten sends Clarke a note which items on peat and carbon should be sorted out in the promised IPS letter to IMCG. Finland will send IMCG a list with “pain points” with respect to IMCGs statements regarding Finland.



*Tatjana Minaeva shocked by the progressing devastation of the Clara Bog Nature Reserve*

Most shocking during the 2008 International Peat Congress excursions was the observation that peat extraction continues even in the most valuable bog reserves of Ireland. Here the example of the “best” midland bog of Ireland, Clara bog. Clara bog had been drained for peat extraction by Bord na Mona in the early 1980s. As a result of severe national and international pressure, the area was shortly after handed over to be protected as a nature reserve and the National Parks and Wildlife Service subsequently blocked the fresh ditches. During the 2008 Congress, Bord na Mona proudly presented Clara as the major example of its conservation commitment.

However: the bog keeps deteriorating and currently looks even worse than in 1986, the first time I saw it, just after the drains had been dug. In spite of its conservation status, ‘traditional, domestic, small-scale’ peat cutting – lately not with sleán but with digging machines – is allowed to proceed and

continues to eat its way into the bog dome. The uncontrolled ‘marginal’ peat extraction of the last 10 years has led to a drop in water level and a change of the bog macrorelief many hundreds of meters away from the actual cuttings. In this way Ireland has in the last decade already lost 30% of its most valuable raised bog vegetation. What kind of tradition is it that allows ruining a national heritage?

Still 20 years to go, before all will be lost..., before we must admit that Bord na Mona would have done better to destroy the site completely in the late 1980s. Then the world (and Ireland itself) would not have been fooled for 20 years by the false impression that Ireland takes its bog heritage seriously. And Bord na Mona could not have advertised a conservation commitment to a bog that in fact continues to be butchered beyond repair, albeit beyond their control. For peat’s sake: stop this lunacy!

HJ.

## Open letter to Donal Clarke

Dear Donal,

for more than a year progress in the 'peat – energy – climate' discussion between our organisations is awaiting a concrete reaction to our in-depth analysis of the IPS position. In our meetings in Tullamore you proposed to come with that reaction before the IMCG General Assembly in Georgia, where the cooperation between IPS and IMCG will be evaluated. To facilitate your reaction, I send you – as promised – a list of the main items to be sorted out.

Let it be clear: I (and I expect most IMCG members with me) do not consider burning peat *a priori* worse than burning other fuels. Which fuel is chosen in a specific situation depends on balancing all pros and cons of all options in a whole range of deliberations that we have explored in our Wise Use book.

The introduction of carbon taxes and carbon trading has altered competition between fuels used for energy generation. Our main problem in the debate is that (part of) IPS is (in your words) "resisting fiscal disadvantage" by ascribing benefits to peat combustion that it does not have. It thus tries to obstruct wise societal decision-making by willingly and knowingly distorting the facts.

What are the main issues whose continued propagation annoys IMCG the most?

The statement that from a climate point of view, peat should be regarded as fundamentally different from coal or oil.

This is done by stressing (in this respect irrelevant) similarities to 'biomass' ("renewable", "bio-") and differences to other 'fossil' fuels ("young", "uncompacted", "without fossils")

As the 'Assessment on Peatlands, Biodiversity and Climate Change' (that was fully endorsed by the last Convention of Parties of the Biodiversity Convention in Bonn in May 2008) clearly states (p. 103-104):

*"From a climatic point of view peat is clearly a 'fossil fuel', not a 'biofuel'.*

*Combustion of peat releases carbon from a long-term store. Without exploitation the peat carbon would remain in this store more or less indefinitely. Here lies the fundamental difference between 'biomass' fuels and 'fossil' fuels (like peat and coal). By burning biomass fuels (like wood and straw), organic material is oxidized that anyhow would have been oxidized by decay after the plant's death. In the case of biomass combustion, humans consume the energy, whereas in the case of natural decay, microbes consume the energy provided by oxidation. In both cases the same amount of CO<sub>2</sub> ends up in the atmosphere, only the pathways are different.*

*Fossil fuels, on the contrary, would – without exploitation – remain in the long-term store and not end up in the atmosphere as CO<sub>2</sub>. By burning peat, organic material that otherwise would have remained stored for thousands and thousands of years is*

*oxidized. This applies whether the peat is 10 or 1,000 or 100,000 years old. It is not age that determines whether something is 'fossil' or 'biomass', but the natural destiny of the material. Similar to coal, lignite or oil, the natural destiny of peat carbon is to remain stored."* [end quotation]

It is an established fact that combustion of peat leads to a larger CO<sub>2</sub> emission per unit of produced energy than combustion of coal, oil or gas. This is largely determined by inherent chemical properties that – without substantial energy losses – cannot be altered. However, not only the inherent properties of the fuel determine gross CO<sub>2</sub> emissions, but also the energy that is needed to

- collect, process and transport the fuel,
- restore the mined area,
- build, exploit, and dismantle the energy plant in which combustion is taking place,
- remove waste products (ashes),
- etc.

Correctly IPS therefore pleads to compare the energy efficiency of fuels by taking the entire 'life-cycle' into consideration.

The life-cycle-analyses that IPS and the energy peat industry present depart from premises and assumptions that are wrong and scientifically untenable, and that fallaciously play down the negative climate effect of peat combustion.

To specify:

IPS uses a *300 year time frame*, whereas 100 years is the internationally agreed standard. The greenhouse effect of different trace gases strongly depends on the time period for which it is determined. To be able to compare land use options with respect to the combined climate effect of different trace gases, a time period should be fixed. The world community (i.e. IPCC and UNFCCC with its Kyoto Protocol) have set this period at 100 years. After 100 years there is hardly any difference in radiative forcing between the proposed (fallacious) peat extraction scenarios and burning coal, however. Then simply to deviate from that accepted norm to accommodate the interests of the peat industry is disingenuous.

The 300 years stem from an incorrect understanding of climate change dynamics and from the arbitrary and scientifically unsupported assumption that this somehow represents the minimum age of fossil material and that younger organic material is biomass per definitionem. As the quotation from the 'Assessment on Peatlands, Biodiversity and Climate Change' above already explained, this is incorrect as not age is important, but destiny.

It could be argued that the 300 year period is taken to address long term effects of land use changes, but then IPCC provides a basis for calculations on a 500 year time frame. The argued 'benignity' of the IPS life cycle models would be even larger over such a

longer period. This is inconsequential, however, as the models themselves are faulty.

IPS presumes that *drained sites would retain the same global warming potential* over the entire 300 year period of the life cycle calculations. The life cycle models assume that the peat extracted for energy use (over a period of 15 years<sup>1</sup>) from presently drained sites would anyhow disappear by oxidation at the present day rate. This would, however, require that over a period of three centuries the drainage intensity is maintained (with increasing costs) and that no incentives or barriers develop (like carbon taxes) to reduce or halt these substantial emissions. Both these conditions are highly improbable and this approach thus makes a non-realistic claim on the future. To put it in carbon trading terms: your baseline is wrong.

IPS assumes that the effect on climate of a *short burst of CO<sub>2</sub> emissions is equal to long term lower level emissions* if the grand total of emissions is the same. To be precise, IPS assumes that the emission of X tons of CO<sub>2</sub> over a period of 15 years (resulting from peat extraction) has an equal effect on the climate as an emission of the same amount over a period of 300 years (resulting from agriculture). This is not true. In the next decades we must stabilize CO<sub>2</sub> emissions to the atmosphere on a low level to prevent disastrous changes in climate. To achieve this, annual emissions must be lowered as soon as possible. Peat extraction of a site and subsequent combustion will lead to an annual CO<sub>2</sub> flux to the atmosphere of X/15, whereas leaving it an agricultural field leads to an annual flux of (less than) X/300, i.e. 20 times smaller! Because of the long lifetime of CO<sub>2</sub> in the atmosphere, it is wrong from a climate change mitigation point of view to replace a long-lasting small flux (from peatland agriculture) with a short-lasting large flux (from peat combustion). Nobody is interested in the CO<sub>2</sub> emissions from agricultural peatland 300 years from now (if they would happen, see above): important for climate change mitigation is a sharp emission reduction in the next decades!

IPS includes the *'positive' climate effect of centuries of afteruse* after (some decades of) fuel peat extraction in its evaluation of said fuel peat. The emission offsets of biofuels cultivated on cutover peatlands for 285 years after peat extraction are used to calculate the emission factor of the peat burned during the 15 years of exploitation – again an unacceptable claim on the future.

Certainly biomass fuels help reduce fossil fuel consumption and under the right conditions (see IMCG-Newsletter 2007-3) they may help combat climate change. But what do three centuries of biomass cultivation on a cutover peatland (presuming this can be guaranteed in this rapidly changing world to begin with) have to do with the emission value of peat extracted and burned today?

The use of a (former) peatland after extraction has nothing to do with the *peat* that was extracted and burned, but everything with the *land* on which the peat was laying. In 'Wise Use-terms' it's not about the production function, but about the carrier function of the area. This is thus clearly an aspect that must fall outside the life-cycle-analysis of peat, in the same way as windmills placed on a cutover Irish bog are excluded from the emission factor of fuel peat, or solar panels placed in an Iranian desert are excluded from the emission factor of oil.

Of course peat extraction from already drained peatlands is less harmful than peat extraction from pristine sites, also from a climate point of view. Therefore, if deemed necessary, peat extraction should indeed concentrate on degraded sites and stay away from pristine sites, all of which are of high value for conservation. But also fuel peat from already drained sites has a negative effect on climate and compared to other fossil fuels emissions are higher. The use of peat for fuel has no positive effect on climate whatsoever – not even as substitute for conventional fossil fuels – as IPS – using wrong life cycle analyses – wants decision-makers to believe. The relevant studies show that with correct assumptions the use of peat from agriculture or forestry drained peatlands still leads to higher CO<sub>2</sub> emissions than burning coal, oil or gas.

In a recent letter (23 May 2008) of IPS to IMCG, you admit that the letter to the European Union (that was the basis of our critical assessment) was biased "*in support of the peat industry, which represents one group of IPS members*". Instead of correcting that bias, IPS refused in the same letter to address the factual criticism because "*the Society is made up of a variety of constituencies, not just the peat industry*" and because "*any form of polemical response would be unrepresentative of the totality of its members.*"

I think that such inconsistent behaviour is unworthy of a global organisation as the International Peat Society – an organisation that, like the International Mire Conservation Group, has a global responsibility for the wise management of the peatlands of our planet.

I repeat it again, by quoting from the text that IPS fails to address already for a year: "IMCG acknowledges that peat extraction may be acceptable when a good balance and a fair trade-off have been made between the loss of peat, peatlands, and associated values on the one hand and the societal benefits on the other. Arriving at good decisions requires an open exchange of information, a good understanding of the facts, and a fair concept of distributional justice."

In a time in which cheap fuel and climate change are in the centre of global politics, we must be extremely careful to spread correct information and be open to discussion on these often complicated issues. As long as I am an executive of the International Mire Conservation Group, I will guarantee that that is the position that IMCG will take.

Hans Joosten

<sup>1</sup> figures from one concrete (Finnish) life-cycle-analysis. Mutatis mutandis the reasoning also applies for analyses that use other time frames.

## **DRAFT**

### **IMCG resolution for Ireland**

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 Batumi, Georgia in September 2008. At that Assembly the following resolution for Ireland was adopted.

IMCG notes that exploitation of peatlands for fuel has been underway in Ireland for 400 years. Today, traditional turf cutting, mechanical turf cutting and industrial peat extraction have accounted for a loss of 53% of the original area of peatlands in Ireland. This represents over half a million hectares of land.

IMCG shares concern over the rapid rate of habitat destruction that was until recently caused by the peat industry, supported and funded by the Government of Ireland. At the same time, IMCG recognises the Irish Government's negotiations with the peat industry after the introduction of the EU Habitats Directive. By 1999, agreements were made to cease industrial extraction on SACs. These negotiations were successful because of the low number of companies involved, the availability of funding and the willingness of the companies to engage in being compensated.

However, IMCG is disturbed by continued private turf cutting, which involves tens of thousands of individuals in at least 272 sites around the country. The "Cessation of Turf Cutting Scheme", introduced by the Government of Ireland in 1999 gave domestic cutters on 32 SAC's 10 years notice to cease cutting turf. The Cessation of Turf Cutting Scheme was later extended to include all raised bog SACs and raised bog NHAs. However, with the exception of the first 32 sites, no date has been given for the cessation of turf cutting on designated sites. Thus strong incentives are lacking to cease extraction at an overwhelming majority of 240 from 272 sites. In addition, increased mechanisation of private peat extraction has altered the meaning of "turbary rights" in the traditional sense to permit semi-industrial extraction. Semi-industrial commercial extraction is an abuse of turbary rights and as such is an activity that needs to be regulated through the planning process.

IMCG wishes to remind the Irish government that under Irish national legislation

- Natural Heritage Areas are designated and protected (Wildlife Act 2000 [Amendment]),
- turbary on all bogs is no longer regarded as an agricultural activity outside of planning control (Planning and Development Act 2000),

In addition, IMCG expresses deepest concern that under Irish national legislation

- peat extraction is exempt from the planning process when peat extraction is to be carried out in a new or extended area of less than 10 hectares or where peat is extracted in a new or extended area of 10 hectares or more, where the drainage of the bogland commenced prior to the coming into force of these regulations (Planning and Development Regulations 2001).

In light of all this, IMCG strongly urges the government of Ireland to

- immediately implement the cessation of turf cutting on all SACs and NHAs by the Minister of the Environment, Heritage and Local Government,
- strictly apply SAC and NHA designation rules to all peatland sites,
- reconsider the 10 ha threshold for exempted peat extraction under the Planning and Development Regulations 2001,
- give compulsory purchase powers to the National Parks and Wildlife Service to acquire all areas of turbary on peatland SACs and NHAs, with an appropriate budget and man power,
- implement and adequately fund Restorative management on SACs and NHAs affected by turf cutting,
- start a public awareness programme on the importance of the cessation of turf cutting on SACs and NHAs,
- start a nation wide campaign to erect SAC and NHA signs on designated sites and
- provide adequate financial and human resources to implement and monitor the cessation of turf cutting.

**DRAFT**  
**IMCG Resolution on biofuel crops**

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. In its Biennial General Assembly meeting in Batumi (Georgia, September 2008) the following resolution was adopted.

The rising levels of greenhouse gases in the atmosphere are changing the climate. The problem is caused by the mobilisation of long-term stored Carbon through the burning of fossil fuels and the destruction/reduction of the Earth's biomass (forests). To reduce the greenhouse gas emissions, society aims at replacing fossil fuels with renewable alternatives, including biomass fuels.

The IMCG notes with concern that such biomass fuels increasingly have been grown on drained peatland areas. Agriculture on peat soils typically requires drainage. In undrained peatlands the waterlogged peat soil remains under anaerobic conditions and decomposition is inhibited. Drainage leads to aeration of the soil and consequent decomposition of the peat. Associated emissions of CO<sub>2</sub> are substantial: in temperate and boreal areas annual emissions are typically over 20 tonnes of CO<sub>2</sub> per ha, in the tropics they may be well over 100 tonnes of CO<sub>2</sub> per ha. Factoring in peat losses, the emission factor of biofuels grown on drained peat soils invariably is larger than the emission factor of fossil fuels like natural gas, oil and coal. Growing biomass fuels on drained peat soils perversely increases greenhouse gas emissions to the atmosphere.

The IMCG further stresses that peatlands provide important water provision and regulation services, including flood prevention and water filtration. Moreover, peatlands support unique biodiversity on all levels. As one of the last remaining wildernesses, the biodiversity value of peatlands is growing. Furthermore, the cooling effect on local climate of peatlands plays an increasing role in adaptation to climate change. Drainage threatens these values and services.

International conventions increasingly acknowledge the globally important carbon storage and sequestration function of peatlands (Ramsar Convention 2002, 2005, Convention on Biodiversity February 2004, 2008, UN Framework Convention on Climate Change 2006, 2008). We urge the bodies addressed to prevent an expansion of biomass fuel crops grown on drained peatland sites.

**submit your**

**DRAFT RESOLUTIONS**

**Help making the Biennial meeting smooth and effective.**  
**Contact the secretariat.**

### Decision on Lewis wind farm

Plans by Lewis Windpower for a wind farm at Barvas Moor in Lewis have been refused consent on the grounds of incompatibility with European law.

Ministers have concluded that the proposed 181 turbine Lewis Wind Farm would have a serious impact on the Lewis Peatlands Special Protection Area, which is designated under the EU Birds Directive and protected under the EU Habitats Directive.

Energy Minister Jim Mather said he considered the application very carefully and listened to representations from the applicant, taken the views of Comhairle nan Eilean Siar and considered the 10,924 objections and 98 letters of support. He visited Stornoway and heard at first hand a range of deeply held views. His decision was supported by ecological advice and advice from the Scottish Environment Protection Agency and Scottish Natural Heritage.

European legislation requires a specific procedure to be followed when proposals which could potentially affect Special Protection Areas come forward. The Lewis Wind Farm would have significant adverse impacts on the Lewis Peatlands Special Protection Area, which is designated due to its high value for rare and endangered birds. The minister underlined that development of renewable energy in the Western Isles should be in harmony with its outstanding natural heritage. An action plan for sustainable development on the islands will be ready in the autumn.

The Scottish Government has set a target to produce 31 per cent of electricity demand from renewable sources by 2011, and 50 per cent by 2020. Any proposal to construct, extend or operate an onshore wind farm in Scotland with a generation capacity in excess of 50 Megawatts (MW) requires the consent of Scottish Ministers under Section 36 of the Electricity Act 1989. The Scottish Government's Energy Consents Unit is currently processing 35 renewable project applications - 27 wind farm and eight hydro projects.

In October 2004, Lewis Windpower, a consortium of AMEC and British Energy, applied to construct and operate 234 wind turbines with a generating capacity of 702 Megawatts at Barvas Moor and other locations in north Lewis, on land owned by the Stornoway Trust and the Galson and Barvas Estates.

In December 2006, Lewis Windpower amended the application which reduced the number of turbines to 181, and the generating capacity to 651 Megawatts.

The Lewis Peatlands Special Protection Area (SPA) is designated under the EC Birds Directive. The SPA designation relates to the protection of golden eagle, merlin, red throated diver, black throated diver, golden plover, dunlin and greenshank, and many of these birds will be immediately adjacent to the wind farm development.

Source: <http://www.scotland.gov.uk>

### Wind Farms on Peatland symposium, Santiago de Compostela, 27–30 April 2008

Establishing secure and sufficient supplies of renewable energy is an urgent environmental and economic priority for society worldwide. Given current technology and targets, it seems that this will require substantial expansion of onshore wind energy generation.

Despite the urgency, it is neither necessary nor desirable for wind farms to take priority over all other environmental considerations. There is a need to balance requirements for renewable energy against nature conservation interests, which vary regionally. The European Environmental Impact Assessment (EIA) mechanism is provided in recognition of this principle.

Peatlands are integrated systems of vegetation, peat soil and water, which means that EU legislative provision for their protection and management can be found within both the Habitats Directive and the Water Framework Directive. The soil protection strategies developed by some Member States in anticipation of a future Soils Directive are also relevant.

Although this framework provides justification for focus on peatland interests, current practice does not

take adequate account of the close interdependence between the peatland components that underlies their multiple environmental functions (e.g. in water regulation, carbon storage and soil conservation) as well as their value for biodiversity and heritage. Often the impacts are assessed on single components in isolation, neglecting the fact that peatlands are coherent ecological systems. Furthermore, significant gaps in scientific knowledge still prevent reliable quantification of peatland-related impacts. Action to rectify these deficiencies is afforded low priority due to low public awareness of the full environmental and cultural value of peatland.

The problems that have arisen in planning and developing wind farms on peatland highlight the flaws and gaps in the planning procedure. In order to avert unnecessary impacts on peatlands and their environmental functions, policy makers and developers need information and consultants need robust science-based tools. New and highly relevant information is now being generated rapidly as increasing numbers of wind farms are installed on peatland, but this information is not being shared efficiently so that mistakes are avoidably repeated.



The symposium Wind Farms on Peatland (Santiago de Compostela, 27–30 April 2008) was convened to address these issues. It was attended by a variety of wind farm and peatland stakeholders and students,

mostly from western Europe, but also from South America. During three days including a field excursion, the participants discussed and identified the following points of attention:



*Serra de Xistral (Galicia, Spain)*

#### *General*

There is a need to adjust the balance of focus in wind farm planning to give more attention to peatland issues. This includes, *inter alia*

- Minimising physical effects on peatland functioning.
- Better incorporating landscape visual aspects, as important peatland values are related to landscape openness, limitlessness, and the (increasingly rare) experience of wilderness and naturalness.
- Translating scientific knowledge and environmental goals into clear scenarios and recommendations for policy and practice. This might include expressing peatland values in monetary terms so that decision makers can understand them more clearly.
- Not, however, restricting valuation to mere monetary terms as this does not do full justice to conservation sites which, as essentially ‘sanctuaries,’ must function largely outside the ‘normal’ economically driven world.
- Addressing each concern at the appropriate regional level. One clear lesson of the symposium was that e.g. Scottish experience is not directly transferable to the Spanish situation due to differences in the policy and planning background as well as in the character and rarity of peatland.

- Establishing accurate and shared usage of language, definitions and terms.

#### *Science base*

The scientific knowledge of the impact of wind farms on peatland ecosystems has to be improved. This includes, *inter alia*:

- Articulating environmental values and goals on the basis of scientific knowledge.
- Identifying knowledge gaps and uncertainties.
- Developing and applying an inventory system for peatland functions, values, impacts etc. to catalogue the quality and condition of mire systems. This should also encompass less familiar functions of mires, e.g. as sinks for heavy metals and PAHs.
- Better quantifying carbon stores, carbon balances and hydrology.
- Acquiring better insight into the prospects for natural regeneration (e.g. by paludification) and restoration after decommissioning of wind farm infrastructure.

#### *Planning in practice*

Differences in policy and planning background as well as in the character and rarity of peatland prohibit giving detailed *a priori* solutions for all technical

problems. Nevertheless the impact of wind farms on the structure and functions of peatland habitat can be better estimated, prevented and mitigated by

- Appreciating effects on the whole system, rather than on isolated components only.
- Avoiding wind farm development on (near-)pristine and designated peatlands.
- Considering alternative locations such as agricultural land and cutover bogs, which are more robust habitats, or offshore.
- Taking into account tertiary and cumulative effects, such as potential future changes in land use following from the installation of access roads.
- Optimising design of wind farms and turbines.
- Improving project supervision (cf. Derrybrien!).
- Monitoring of sites before and after construction to collect (also long-term) information on impacts, successes and failures.
- Sharing experience (incomplete, good and bad) and transferring it to other sites and components, e.g. by establishing an (ideally internet-based) database of good/best practice.
- Expanding education and awareness raising.
- Taking appropriate measures for the conservation of at-risk areas (cf. Table 1)

#### *Tasks of IMCG*

This challenges IMCG to play a continuing role in promoting positive action and international collaboration on these issues. Suggested focal points for IMCG include:

- Preparing planning guidance for wind farms on peatland.
- Reviewing research priorities.
- Publishing a scientific paper in a high-impact journal.
- Sending a resolution to developers (e.g. the Scottish Renewables Forum) urging its members, especially for peatland sites, to share and use cumulative experience and to apply uniformly high standards of practice.

- Promoting/establishing an internet resource to collect information for sharing between developers.
- Sending a resolution to the Spanish government regarding future wind farm development affecting peatland in Spain.
- Taking initiatives to raise awareness and provide information to the general public.
- Promoting the organisation of a follow-up symposium involving the full spectrum of stakeholders; tentatively in Scotland 2010.

*Table 1: An example scheme for identifying adequate measures under various conditions.*

Level	Value & vulnerability	Instrument	Recommendation
National	High	Conservation designation	'No go' zones
Regional	Medium to low	Spatial planning guidelines	Avoid where possible
		Strategic locational guidance	Reflect nature's heterogeneity
Site-specific	Medium to low	Technical guidelines	'Best practice' for construction and for rehabilitation of degraded areas

A special volume of the journal *Mires and Peat* is published in conjunction with the "Wind Farms on Peatland" symposium. The special volume will contain the full peer-reviewed research papers together with review and synthesis items. At present already 5 papers are available at

**<http://www.mires-and-peat.net/>**

These draft conclusions were compiled by Olivia Bragg and Hans Joosten and are currently circulated amongst participants for comments and further inputs.

**Why not publish your next paper in *Mires and Peat*?!**

**<http://www.mires-and-peat.net>**

## Assessment of threatened mire habitat types in Finland completed

by Eero Kaakinen, Aira Kokko & Kaisu Aapala

The first assessment of threatened habitat types in Finland was carried out during 2005 – 2008 and the results were published at the beginning of June 2008. The project was co-ordinated by the Finnish Environment Institute (FEI / SYKE) and the assessment was conducted by seven expert groups including over 80 habitat specialists. The habitats were divided into seven main groups: The Baltic Sea and its coast, inland waters and shores, mires, forests, rocky habitats, traditional rural biotopes and the fell area. In the mire expert group there were experts from Ministry of the Environment, Finnish Environment Institute, Regional Environment Centres, Finnish Forest Research Institute, Natural Heritage Services of Metsähallitus, University of Helsinki and Geological Survey of Finland, as well as emeritus professors Rauno Ruuhijärvi and Seppo Eurola.

The method for the assessment was based on two main criteria. Criterion A relates to the change in the total area or number of occurrences of a given habitat type and Criterion B to their qualitative development. Red List Categories for the habitat types are: regionally extinct (RE), critically endangered (CR), endangered (EN), vulnerable (VU), near threatened (NT) and least concern (LC). The category data deficient (DD) is used for the habitat types of which Red List Category cannot be defined due to insufficient information.



All spruce mire site types are threatened in Finland. Dwarf shrub spruce mire, Mäntsälä, southern boreal vegetation zone. Photo: Seppo Tuominen.

The mire expert group assessed all open and forested peat forming habitats; both mires site types and mire complex types, as well as succession series of the land uplift coast. The red listing of habitat types was carried out both on the national level, and on the regional level for the southern (hemiboreal, southern and middle boreal vegetation zones) and northern (northern boreal vegetation zone) sub-regions.

According to the results (Kaakinen et al. 2008a, 2008b) the state of Finnish mire habitat types is alarming, especially in the hemiboreal, southern and middle boreal zones. About half of the mire site types and mire complex types assessed are threatened in the entire country (Red List Categories CR, EN or VU). The proportion of threatened mire site types is highest among rich fens, spruce mires, spruce-birch fens and rich spruce-birch fens.

Mire habitat types are much more threatened regionally in the southern sub-region than in the northern sub-region. That is because of more intensive utilization of mires in the southern and middle parts of Finland. Drainage has been quite intensive also in the southern parts of northern boreal zone, however. In the southern sub-region only two mire site types were classified LC, least concern: *Sphagnum fuscum* bogs and ridge-hollow pine bogs. All other mire site types were classified as threatened or near threatened (NT). All mire complex types are threatened or near threatened, and mire succession series of the land uplift are critically endangered. In northern Finland the proportion of threatened mire site types is clearly lower. Rich fens, rich spruce-birch fens, rich pine fens and spruce mires have suffered most, and most of them are near threatened (NT) in the northern boreal zone.

In Finland, forestry drainage is the largest threat to mire habitats. Agricultural use has reduced the mire area particularly in southern Finland, but also locally in northern Finland in areas with rich fens and fertile spruce mires. Industrial peat harvesting has expanded from the 1970s onwards and regionally it has had major impacts on mire biodiversity. Other reasons for deterioration of mires are e.g. water engineering and regulation, construction (incl. road networks), tree loggings and soil treatment in undrained forested mires as well as groundwater extraction.

Although mire conservation has progressed and the drainage of pristine mires for forestry is not any more supported by the state, there are still many threats to mires. Particularly the maintenance of old ditches can destroy mire margin habitats as well as the hydrology of undrained mire habitats. Moreover, undrained forested mire habitats are used for forestry and virgin mires are still drained for peat extraction. There are plans to inundate large mire areas for hydro-electricity threatening even protected mires. Building and infrastructure projects may harm, destroy or fragment mires. Groundwater extraction threatens spring mires and other groundwater fed fens. Long-distance effects of drainage and other land use activities may have a negative impact on undrained mires.

Some of the rich fens were formerly used as pastures, which kept them open and more diverse. Abandonment now threatens this diversity in many of the smaller rich fens especially in southern Finland.

Climate change mainly affects northern mires with permafrost formations.

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The report (in Finnish) can be found at:

<http://www.ymparisto.fi/default.asp?contentid=283838&lan=fi>

Summary in English:

<http://www.ymparisto.fi/default.asp?contentid=284498&lan=en>

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### News from IPS

#### Donal Clarke new President of IPS

At the Annual Assembly of the IPS on 13 June 2008, it was the task of the official National Representatives to elect members for six open positions on the IPS Executive Board. The new IPS Executive Board comprises:

- President: Donal Clarke, Ireland
- 1st Vice President: Björn Hånell, Sweden
- 2nd Vice President: Tomasz Brandyk, Poland
- Ordinary Board members: Dmitriy Gogin (Russia), Satu Helynen (Finland) and Paul Short (Canada)

In addition, Håkan Bjur (Sweden), Valerijs Kozlovs (Latvia) and Jutta Zeitz (Germany) will remain on the Executive Board until the end of their term in 2010.

#### Peatland Certification Plan

At the International Peat Congress, IPS presented a plan for a Certification Scheme for Sustainable Management of Peatlands (SPM). The plan was developed by the certification company INDUFOR at the request of IPS. A special concern of IPS in this matter are tropical peatlands which annually release enormous amounts of greenhouse gases due. IMCG supports IPS in its concern, but wishes to point out that emphasis on tropical peatlands should not be

diminished to an attempt to point the finger at a developing country at the other end of the world while continuing primitive, unsustainable and destructive peatland use in the ‘developed’ countries.

A certification scheme would set generally accepted criteria for ecological, social, economical, climate and other impacts on peatlands affected by human activities. The complete plan, an introducing power point presentation as well as all annexes can be downloaded at the IPS website [www.peatsociety.org](http://www.peatsociety.org). Comments can be sent to Jaakko Silpola: [jaakko.silpola@peatsociety.org](mailto:jaakko.silpola@peatsociety.org)

#### Michiel Gerding and Catherine Farrell new IPS Commission Chairs

During their meetings in Tullamore, two IPS Commissions elected new Chairs who were later approved by the IPS Executive Board. Dr Catherine Farrell from Ireland will chair Commission V on “After-use of Cut-over and Disturbed Peatlands”, while Dr Michiel Gerding from the Netherlands will coordinate the activities of Commission VIII on “Cultural Aspects of Peat and Peatlands”. In addition, the first steps are being taken to form a Commission dealing with Tropical Peatlands.



## Regional News

### News from Ireland: Peat cutting continues

Active (peat-forming) raised bog is facing extinction in Ireland today. Only 0.6% of active raised bog remains and these 2,000 hectares are seriously under threat from turf cutting. The Irish Peatland Conservation Council (IPCC) is calling on Minister John Gormley to get tough on turf cutting and bring it to a stop on all Special Areas of Conservation (SACs) and Natural Heritage Areas (NHAs).

Whereas all active raised bogs in Ireland are protected as SACs or NHAs, small scale turf cutting is allowed to continue within these designated peatlands. In the last ten years over a third of active raised bog (1,000 ha) has been lost as a direct result of turf cutting taking place within conserved peatlands.

It is of vital importance that all turf cutting in protected SACs and NHAs ceases immediately if we are to save active raised bog in Ireland from extinction.

Source: IPCC

### EU court decision on Derrybrien

The European Court of Justice has ruled against Ireland in a case involving a wind farm project in Co Galway where a landslide dislodged 450,000 cubic metres of peat over a 32km area, polluting a river in 2003 (see IMCG Newsletter 2007/4).

The court said that a proper environmental impact assessment (EIA) should have been carried out before the project proceeded. This ruling relates to the Derrybrien wind farm project, the biggest ever wind farm in Ireland at the time and one of the largest in Europe.

The ruling covers other cases where an EIA was done only after works began. The court ruled that retention permission can be applied only in exceptional circumstances and argued in effect that the application of Irish law was too loose.

Source: RTE

### News from England: Wetland Vision

Wetland Vision sets out a 50-year vision for England's freshwater wetlands. It will show where new wetlands could be created and current wetlands restored. The idea is to make space for water in the countryside, help people and wildlife adapt to a changing climate, protect natural heritage and reap the many benefits that wetlands can provide. Large areas of wetlands are to be restored as part of the initiative. Wetlands were once a common feature of the UK countryside, but most have been drained, dried and developed out of existence. A map showing the extent of prehistoric wetlands has been drawn up to help to identify the best places to re-establish them. A second map shows the quantity of wetland habitat surviving today and areas

where they can best be recreated over the next 50 years.

The Wetland Vision partnership joins forces of conservation groups and government agencies. It includes bodies such as Natural England and The Wildlife Trusts. The aim is to reverse the loss of 90 per cent of freshwater wetlands that were in England when William the Conqueror invaded.

Up to £2 million a year will be spent over the next three years by Natural England, aiming among others at the West Midlands, the fens of South Lincolnshire, and the peatlands of the Humberhead Levels.

Much of the wetland restoration will be based on achievements at the Great Fen Project in Cambridgeshire, which provides a blueprint on how to restore the habitat while balancing the needs and demands of neighbouring interests, notably farms. Work is under way there to form a 3,700-hectare fen between Huntingdon and Peterborough. It incorporates land that boasted the largest lake in England outside Cumbria until it was drained in the 19th century - today it has dried out so much that the land lies more than 4m lower than less than a century ago.

Sources: [www.timesonline.co.uk](http://www.timesonline.co.uk)  
[www.wetlandvision.org.uk](http://www.wetlandvision.org.uk) (for more information)

### News from the EU: Consultation Habitat Directive

The EU25 Member States have reported on the conservation status of all the species and habitats listed in the annexes of the Habitat Directive. The member state assessments as well as regional assessments are available for public view and consultation through the internet. To participate in this process, please surf to:

<http://biodiversity.eionet.europa.eu/article17>

### News from Belarus: Peatland rewetting

The project site "Bartenikha" (Minsk region) is among the first sites to be rewetted in the framework of the UNDG-GEF project "Renaturalization and Sustainable Management of Peatlands in Belarus to Combat Land Degradation, Ensure Conservation of Globally Valuable Biodiversity and Mitigate Climate Change". During a field workshop held in June, water retention and regulation facilities were presented to representatives of the Ministry of Forestry of Belarus (owner of the project sites) and to the public in general.

Before restoration the "Bartenikha" site looked like a drained 'peat desert', but after the measures the water level is close to the surface even through the summer. In this respect the risk of peat fires at the project site is minimal. The rising water level has supported

expansion of typical mire vegetation. Cotton Grass and Reed are covering the project site, but also various kinds of sedge and moss species are expanding.

Rewetting is of great importance for the avifauna biodiversity of the region. During the first year after rising water levels, different species of birds such as gray crane, snipe, plover, marsh harrier, lesser spotted eagle, crane and sedge warbler have already appeared at the site. The area is furthermore of great importance as a feeding ground for mammals like wild boar, elk and roe.

The Project aims to restore 17 drained and degraded peatlands with a total area of over 40 000 ha, to reduce the incidence of peatlands fires, to create conditions for flora and fauna restoration and to reduce CO<sub>2</sub> emissions to the atmosphere.

For More information contact  
Elena Goloubovskaya: [peatlands@tut.by](mailto:peatlands@tut.by)  
[www.peatlands.by](http://www.peatlands.by)

#### **News from Belarus & Ukraine: transboundary Ramsar site**

The Ministry of Natural Resources and Environmental Protection of the Republic of Belarus has significantly extended the boundaries of the Prostyr Ramsar site (designated in 2005), from 6,800 to 9,500 hectares. At the same time Belarus has nominated Prostyr as part of a new Transboundary Ramsar Site named "Stokhid-Pripyat-Prostyr". The government of Ukraine has notified that the Ramsar sites Pripyat River Floodplains (1995) and Stokhid River Floodplains (1995) would also be part of this new transboundary site. In effect this is a cooperative management arrangement and does not alter the legal status for the Ramsar sites involved.

Source: [www.ramsar.org](http://www.ramsar.org)

#### **News from Ukraine:**

##### **River works threaten Aquatic Warbler**

More than 80 % of Ukrainian Aquatic Warblers breeds in the Pripyat valley. Most of the territory is strictly protected by national and international legislation. Nevertheless, there is a serious threat for Aquatic Warbler habitats in the Pripyat valley. The approved flood abatement program "Ecology-2010" in fact is a hidden drainage project of the peatlands along the river has already caused severe ecological damage.

Between 2004 and 2007 the Pripyat river-bed was deepened in several stages. This has resulted in lowered water levels more than 1 km from the river. Water levels have dropped to 0,5-1,0 m below surface in large parts of the peatlands.

In May and June 2008 level of water in the Pripyat floodplains was the highest in recent years, yet some parts of the peatland still had low water levels. The number of singing male Aquatic Warblers has decreased significantly since works began from well over 400 in 2004 to about 100 in 2008.

For more information contact [polud@izan.kiev.ua](mailto:polud@izan.kiev.ua)

#### **News from Rwanda: peat for cement**

The (only) Rwandan cement factory Cimerwa plans to use peat as a source of energy to lower the cost of fuel, which currently accounts for 60 percent of its total expenses. Rwanda's peat reserves are estimated at 155m tonnes, 1/3 of which is deemed exploitable.

Sites envisaged for extraction are located at Gishoma (Cyangugu, ca 500,000t) and at Busoro (Rural Kigali, ca 1,000,000t).

Besides energy peat for the cement factory the idea is to supply charcoal from peat to the urban households near Busoro, thus replacing wood charcoal. Before the civil war, a project on such peat charcoal had just been started, but has not been relaunched.

Considering the mass of charcoal used by the citizens of Kigali (300,000t per year, to be multiplied by 10 to arrive at the volume of wood) this solution could reduce significantly the amount of wood consumed by the capital, but at the expense of fossil peat.

#### **News from Indonesia: rejection of haze pact**

Indonesia is likely to continue and reject a Southeast Asian pact designed to fight cross-border smoke caused by forests fires. The 10-member Association of Southeast Asian Nations (ASEAN) approved the Agreement on Transboundary Haze Pollution in 2002 and Indonesia, where most of the fires occur, is the only country that has not ratified it, drawing criticism from its neighbors affected by the annual haze. The agreement calls for a regional coordinating centre to help mobilize resources to fight the fires, often triggered by slash-and-burn practices by farmers, timber and plantation companies. Ratifying the pact would subject Indonesia to binding obligations, which include introducing legislation and measures to promote a zero-burning policy.

Forestry Minister Malam Sambat Kaban said Indonesia had made great progress in curbing forest fires and did not need a regional haze pact.

Source: Reuters

#### **News from Columbia: new páramos Ramsar site**

Colombia has designated Sistema Lacustre de Chingaza (4,058 hectares, 04°30'N 073°45'W), part of the Chingaza National Natural Park in the central highlands, as its fourth Wetland of International Importance. The site is a complex of lagoons and wetlands that supply water to the capital city, Bogotá. Located in the Northern Colombian Andes between 3,050 and 3,950m a.s.l., the region supports one of the wettest páramos of the country.

Source: [www.ramsar.org](http://www.ramsar.org)



### **News from Ecuador: new peatland Ramsar site**

Ecuador has designated its 13th Wetland of International Importance: Complejo Llanganati (30,355 hectares, 01°06'S 078°21'W) is a complex of lagoons of glacial origin, situated between 2,960m and 4,571m a.s.l. and fed by rivers and seasonal floods, as well as swamps and extensive peatlands. The complex is an important source of water for the populated areas. The complex belongs to the Tropical Andes Hotspot, said to be the most species rich region of the planet. The site is listed under IUCN Management Category II (National Park) and became a BirdLife International 'Important Bird Area' in 2005.

Source: [www.ramsar.org](http://www.ramsar.org)

### **News from the USA: Everglades Reservoir**

Construction continues on a reservoir bigger than Manhattan designed to revive the Everglades wetlands. Decades of flood-control projects have dried the Everglades. Now the world's largest aboveground manmade reservoir is being built to restore water flow to the wetlands. Construction began in 2007 and is set to end in 2010.

The Everglades wetlands once covered more than 16,000 km<sup>2</sup>, but they have shrunk by half, replaced with homes and farms and a 3200-km grid of drainage canals. The reservoir, estimated to cost up to \$800 million, is the largest and most expensive part of a state and federal restoration effort.

Most man-made reservoirs are built in canyons or valleys and use a natural water source such as a river to fill in behind a dam. This one will stand on its own, contained within earth-and-concrete walls much like an aboveground swimming pool larger than many cities. Planners hope to double its size eventually.

Currently, canals quickly direct overflow into the ocean to keep from inundating 5 million people who have settled in the area. The large reservoir is designed to store up to 240 million m<sup>3</sup> of water that is diverted into the Everglades at various times to mimic a more natural flow.

The Natural Resources Defense Council has sued over the reservoir, claiming the state has not legally committed itself to using the water primarily for

Everglades restoration. The state insists 80 percent of the water will be for environmental purposes, but critics fear that without a legally binding agreement, the water could be sent elsewhere for agriculture or development.

The costs of the large scale restoration efforts are supposed to be split 50-50 by the federal government and the state. But Congress has yet to allocate its share and many aspects of the work have been delayed. Meanwhile, the price tag keeps rising.

Source: AP

### **News from Canada: Ontario protects boreal region**

The government of Ontario will extend permanent protection to at least 225,000 square kilometers of the Far North Boreal region under its Far North Planning Initiative. Mining and logging will be permitted in the protected area, but only under strict regulations and providing that local Aboriginal communities approve.

The government will work with all northern communities and resource industries to create a broad plan for sustainable development, including an interconnected network of conservation lands across the Far North.

The Northern Boreal region makes up 43 percent of Ontario's land mass, but it is home to just 24,000 people living in 36 communities. Preservation will help ensure Ontario's biodiversity, including polar bears, wolves, and caribou.

Permanently protecting these lands will furthermore help a world wrestling with the effects of climate change, as they are a globally significant carbon sink. The forests and peat lands in the Far North store about 97 billion metric tonnes of CO<sub>2</sub> and are said to absorb around 12.5 million additional tonnes each year.

Preserving these lands also protects the core cultural connection of the Aboriginal people who live there, their connection to the land, clean water and abundant hunting and fishing.

Of course, as reported in previous IMCG Newsletters, at the same time Ontario is looking into using peat as a source of energy...

Source: Environment News Service

## New and recent Journals/Newsletters/Books/Reports/Websites

### Ramsar Sites Information Service

The Ramsar Sites Information Service, which is operated by Wetlands International and based on the Ramsar Sites Database also maintained by WI, has a new easier-to-use organization and 'look', and a new address: <http://ramsar.wetlands.org/>.

### Economics of biodiversity

The German Federal Ministry for the Environment and the European Commission, with the support of several other partners, have jointly initiated preparatory work for a global study on 'The Economics of Ecosystems & Biodiversity (TEEB)'. Mr Pavan Sukhdev, Managing Director and Head of Deutsche Bank's Global Markets business in India, and a Founder-Director of the 'Green Accounting for Indian States Project' (an initiative of the Green Indian States Trust (GIST) to set up an economic valuation and national accounting framework to measure sustainability for India) was recently appointed as the independent Study Leader. He is assisted in his task by an Advisory Board, which consists of prominent experts.

The study will evaluate the costs of the loss of biodiversity and the associated decline in ecosystem services worldwide, and compare them with the costs of effective conservation and sustainable use. It is intended that it will sharpen awareness of the value of biodiversity and ecosystem services and facilitate the development of cost-effective policy responses, notably by preparing a 'valuation toolkit'.

The work is divided in two phases. Preliminary findings from the first phase have been presented by Minister Gabriel, Commissioner Dimas and Mr Pavan Sukhdev at the High-Level Segment of the Ninth Conference of the Parties to the Convention on Biological Diversity (CBD COP-9) in Bonn, Germany, in May 2008, in the form of an interim report (pdf, ~8MB: [http://ec.europa.eu/environment/nature/biodiversity/economics/pdf/teeb\\_report.pdf](http://ec.europa.eu/environment/nature/biodiversity/economics/pdf/teeb_report.pdf)

The second, more substantial, phase of the study will run into 2009, and its final results will be presented at CBD COP-10 in 2010.

Various organisations have contributed to the preparatory phase of this project with resources, studies, or expertise and contributions have also been received from individual experts. A list with links to the main studies contracted by the European Commission and the German Ministry for the Environment and provided by partners can be found here:

[http://ec.europa.eu/environment/nature/biodiversity/economics/index\\_en.htm](http://ec.europa.eu/environment/nature/biodiversity/economics/index_en.htm).

### Paal, J. (ed.), 2008. Viisteist aastat Eesti turbaliitu. Vali Press, Tartu, 152 p.

Book published at the occasion of the 15th anniversary of the Estonian Peat Association (EPA). With a history of the use of peat and peatlands and mire conservation in Estonia, and the history of EPA

and the Estonian peat industry in the last 15 years. For more information contact Jaanus Paal: [jaanus.paal@ut.ee](mailto:jaanus.paal@ut.ee)

### Schmatzler, B. 2008. Regenland Fotografien. Moorlandschaften in Niedersachsen nach Torfabbau. Schmatzler, Burgwedel, 144 p.

Book with photographs of cut-over peatland landscapes in Northwest-Germany with introductions (in German) by Gerfried Caspers, Hartmut Falkenberg and Eckhard Schmatzler.

### Uosukainen, H. & Pihlaja, K. 2008. Peat in balneology and therapy. Terraviva, Kle (Finland), 96 p.

Dr. Harry Uosukainen and Prof. Dr. Kalevi Pihlaja have published an English translation of their book on "Peat in Balneology and Therapy". The book gives a history of peat baths, a review of peat research, its chemistry, quality requirements, the effects of peat therapy, treatment targets, cosmetrical applications and forms of peat therapy. For more information contact Terraviva Oy:

[tva.fi@hotmail.com](mailto:tva.fi@hotmail.com)

### Greenpeace (2008) Hidden carbon liability of Indonesia palm oil. Greenpeace, Amsterdam. 84p.

This report highlights the urgent need for an immediate moratorium on deforestation and peatland clearance in Indonesia. The report focuses on Unilever, which shares major institutional investors with other leading corporations including Nestle, Procter & Gamble and Kraft. Not only do these corporations share investors, they also share growing carbon liability within their raw material supply chains through the expansion in the palm oil sector in Indonesia.

Unilever recently has called for an immediate moratorium on deforestation and peatland clearance. While Unilever's position as largest palm oil consumer in the world is strong, the report shows how, unless its call for a halt to deforestation is supported by companies like Nestle, Procter & Gamble and Kraft, the palm oil industry will continue to present a massive carbon liability over the coming years.

This report uses Unilever's palm oil supply chains as a case study to help quantify the carbon liability and collateral risks associated with the Indonesian palm oil sector. It shows how, by buying palm oil from suppliers who account for more than one-third of Indonesia's palm oil production, Unilever and its competitors are increasing their potential carbon liability and thus leaving investors exposed to potentially significant levels of hidden risk, compromising long-term financial and brand stability. The report can be downloaded here (14MB PDF): <http://tinyurl.com/65ddhg>

**Strack, M. (2008) Peatlands and Climate Change. IPS. 223 p., 22€**

This book was prepared by an IPS Working Group on Peatlands and Climate Change and provides “a summary of available knowledge to help the IPS and others understand the role of peatlands and peat within the current context of global climate change.” Paper copies can be purchased through the IPS: <http://www.peatociety.org> – a PDF version is available from the IPS site free of charge.

IMCG was asked to referee the book after completion of the chapter texts. As such a book is only as good as its executive summary, we focussed on that, also because of time constraints (we only got a few days to comment on the draft). Sadly not much if anything was done to follow up on our critique. Even a simple editorial remark, like our suggestion to write “...emissions caused by peat decomposition of drained peatlands” instead of “... emissions caused by decomposition of drained peatlands” (p.19) – not the peatlands are decomposing but the peat! – was not followed up. Both the Executive Summary as well as the Summary for Policy Makers remain riddled with half-truths hidden in inappropriate formulations or wrong use of terms and concepts.

The executive summary correctly states that forestry on drained peat soils is concentrated in northern areas (p.10, #12). This is followed by a blanket statement that the climate impact of forestry on drained peatlands is lower than of agriculture, which may be the case for the northern areas, but does not apply in such general terms to e.g. temperate continental areas.

Also the statement that with respect to forestry on drained peatlands, increased biomass and primary production contributes to the soil carbon store through increased litter production (p.10, #12) should have been put in perspective by adding that this litter is of different quality than ‘litter’ from undisturbed sites and that it decomposes faster, both because of its quality and the more suitable conditions for decomposition. The current statement in the book is not ‘wrong’, but paints the picture rosier than it is.

After another round of our arguments, the same old fallacies remain in IPS argumentation in favour of extracting peat: “Using peat from peatlands that are large greenhouse gas sources, climatic impact of peat utilisation chain (*sic!*) can be significantly reduced. Examples of such peat resources are cultivated peatlands and forestry drained peatlands” (p.12, #27). As we have repeatedly made clear, this statement is wrong for two reasons:

i) It departs from the presumption that the peat being extracted would anyhow disappear by oxidation. With an annual oxidation of several millimetres, a 2 m thick peat deposit would take – say – 600 years to disappear. This would, however, require that the drainage facilities are maintained over these six centuries and that no incentives will develop (e.g. carbon taxes) to reduce or stop these emissions. Both these conditions are improbable and therefore this

approach makes a non-realistic (and insolent!) claim on the future.

ii) It departs from the presumption that an emission of  $x$  tons over 30 years has an equal effect on the climate as an emission of the same amount of  $\text{CO}_2$  over 600 years. This is of course not true. In order to prevent catastrophic changes to the climate, the concentration of  $\text{CO}_2$  in the atmosphere must be stabilised in the next 50 years, by *decreasing* annual emissions. Peat extraction of a site will lead to an annual  $\text{CO}_2$  flux to the atmosphere of  $x/30$ , whereas leaving it an agricultural field or a drained forest leads to an annual flux of  $x/600$ , i.e. 20 times smaller! From a climate change mitigation point of view it is wrong to exchange a long-lasting small flux (peatland agriculture) for a short-lasting large flux. Nobody is interested in the  $\text{CO}_2$  emissions from agricultural peatlands that happen after 600 years (if they would happen, see i): what is important what happens in the next decades.

The presentation in chapter 5 of the book is therefore incorrect. Moreover, the presentation in that chapter of scenarios covering 300 years is inconsistent with the correct statement in the same chapter that “weight should be given to the consideration of a time span of 100 years or less” (p. 111).

It is repeatedly stated that drainage decreases  $\text{CH}_4$  effluxes (cf. p.10, #11; p.11, #16). Whereas this may be so for the fields as such, it certainly does not apply to drainage ditches that may be heavy emitters of methane, both in extraction and agricultural fields, as well as in peatland forests. Where the pristine situation has low methane emissions (like in dwarf shrub pine bogs – ryams) drainage may even lead to an increase in methane emissions. The general statement in table 0.1 that all land use involving drainage reduces methane emissions is therefore not absolutely true.

Furthermore, it should have been more explicitly mentioned that the emissions from natural, undrained mires are not anthropogenic and therefore changes in these emissions cannot be accounted under UNFCCC and Kyoto. Referring to these natural emissions in scenarios to promote alteration of natural systems (i.e. drainage) for climate change mitigation is perverse.

Also with respect to rewetting of drained peatlands (p. 20/21) the erroneous impression is given that rewetting will *always* lead to an initial increase in GHG emissions because of a methane pulse caused by flooding of easily degradable plant material. Whereas such methane pulses indeed occur, at least for the temperate zone evidence has shown that the combined effect of  $\text{CO}_2$  emission decrease and  $\text{CH}_4$  emission increase after rewetting will result in a net-decrease of GHG-emissions (Couwenberg et al. unpubl.). If  $\text{N}_2\text{O}$  emissions are also taken into account, the emission reduction after rewetting (rewetting results in an absolute stop of  $\text{N}_2\text{O}$  emissions) is likely to be (much) higher.

Whereas the statement on 20% decrease of  $\text{CO}_2$  emissions depending on water level is defensible

when it first appears on page 10 (#11) – where it is placed in a context that allows to see the statement as applying to drained, agriculturally used peatlands only – it becomes a lie without such a context as it is presented on page 16.

An additional, albeit minor, nuisance is the continued use of “production” for the destructive activity of peat extraction. Also a sentence like “For agricultural use, fens and raised bogs have to be drained in order to regulate the air and water conditions in the soil to meet the requirements of cultivated or pasture plants” (p.15), *completely* ignoring the possibility of wet agriculture, seems sadly symptomatic of the IPS as a club of destructive hunter-gatherers who have not yet seen the light of true sustainable use and who lack a true grasp of the climate change problem beyond it presenting an opportunity to twist some facts, convince some politicians and earn some more money.

Luckily a book like this is usually better than its executive summary and the chapter authors provide a wealth of interesting information. It's just that every time when “life-cycles” are mentioned throughout the book, it becomes too obvious why this book was written: to twist some facts, convince some politicians and earn some more money. JC

**Cagampan, J.P. & Strack, M. (2008) Peatland disturbance and climate change: What is the role of Canada's horticultural peat industry? Report, Univ. of Calgary. 14 p.**

The CSPMA commissioned a report to identify the role of Canada's horticulture peat industry. The report concludes that Canadian peat horticulture emissions amount to 0.89 Mt CO<sub>2</sub>-eq, which is small compared to total Canadian emissions (721 Mt) or to global peat-related emissions (~3Gt).

The number 0.89 Mt CO<sub>2</sub>-eq was established by Cleary et al. (2005) and involves only emissions from peat decomposition (71%), land use change (15%), transport (10%) and processing (4%). Emissions from decomposition are based on an assumed 5% annual decay rate (applied to the cumulative extracted amount of peat since 1941), which seems on the low side. The total amount of Canadian horticultural peat sold annually is about 10 million m<sup>3</sup>. Assuming a dry weight of 100 kg m<sup>-3</sup>, a C content of 55%, 2Mt CO<sub>2</sub> will end up in the atmosphere within a few years.

Moreover, all these numbers are from 1999/2000 and almost a decade old by now. From 1990 to 2000, the area of cutover peatlands in Canada as well as associated emissions doubled without showing signs of slower increase in the late 1990s. So it would have been appropriate to address the age of the data and possible trends.

To remark that “The peat horticultural industry in Canada represents relatively small emissions compared to total peatland disturbances globally [0.03%]” is rather disingenuous. It's like stating that Canada's cement industry is only responsible for 0.02% of total global fossil fuel consumption. That

doesn't make the cement industry any cleaner. Should we refrain from using energy efficient light bulbs because on a global scale half a dozen bulbs in my house are not going to have an effect?

Peat extraction turns a natural CO<sub>2</sub> sink into a source. Peat is not renewable on economically viable timescales and peat extraction is not sustainable and can be avoided. Growing peatmoss on peatmoss-farms to harvest and use as substrate seems a viable option and investing in such a setup would be much more future-oriented than commissioning a study to show that business as usual is not really harming our planet. It is harming our planet as it is destructive and not sustainable.

For more information: [cspma@peatmoss.com](mailto:cspma@peatmoss.com)

Cleary, J., Roulet, N.T., Moore, T.R. 2005. Greenhouse Gas Emissions from Canadian Peat Extraction, 1990-2000: A Life-cycle Analysis. *Ambio*, Vol. 34, No.6.

**Uryu, Y. et al. 2008. Deforestation, forest degradation, biodiversity loss and CO<sub>2</sub> emissions in Riau, Sumatra, Indonesia. WWF Indonesia Technical Report, Jakarta, Indonesia. 80p.**

This WWF study found that in central Sumatra's Riau Province 4.2 million hectares of tropical forests and peat swamp have been cleared in the last 25 years. Forest loss and degradation and peat decomposition and fires caused average annual emissions of 220Mt CO<sub>2</sub>.

Riau was chosen for the study because it is home to vast peatlands estimated to hold Southeast Asia's largest store of carbon, and contains some of the most critical habitat for Sumatran elephants and tigers. According to the report the Riau Sumatran Elephant population saw an 84% decline; the Riau Sumatran Tiger population declined by 70%. Of both species there are about 200 individuals left in Riau.

Riau has Indonesia's highest deforestation rate, substantially driven by the operations of global paper giants Asia Pulp & Paper (APP) and Asia Pacific Resources International Holdings Limited (APRIL).

At last December's Bali Climate Change Conference, the Indonesian minister of Forestry pledged to provide incentives to stop unsustainable forestry practices and protect Indonesia's forests. The governor of Riau province has also made a public commitment to protect the province's remaining forest.

Some of the CO<sub>2</sub> emission figures quoted from literature certainly refer to respiration only and do not address (often substantial) uptake of CO<sub>2</sub> in assimilation. This leads to emissions from natural, undrained peat swamp forests being as high as those of deep-drained croplands. A thorough review of emission data from drained Indonesian peatlands, scrutinising measurement methods and identifying the actual fluxes being measured, has yet to be carried out

A PDF of the study can be downloaded here:

<http://tinyurl.com/5orbtq>

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## UPCOMING EVENTS

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

### **International Symposium and Workshop on Tropical Peatland**

*19. - 22. August 2008, Kuching, Sarawak, Malaysia*

for more information read call for papers:

[www.imcg.net/docum/08/TropicalPeatlands08.pdf](http://www.imcg.net/docum/08/TropicalPeatlands08.pdf)

### **4th International Meeting on the Biology of Sphagnum**

*2 - 11 August 2008, southern Alaska*

For more information:

<http://www.biology.duke.edu/herbarium/alaska.html>

### **IMCG Field Symposium and Congress**

*31 August – 16 September 2008, Georgia/Armenia*

For more information see elsewhere in this and previous IMCG Newsletters

### **6th European Conference on Ecological Restoration**

Towards a sustainable future for European Ecosystems – Providing restoration guidelines for Natura 2000 habitats and species.

*8. -12. September 2008, Ghent, Belgium*

for more information visit:

<http://www.ser.org/europe/conference2008.asp>

### **International Interdisciplinary conference on Predictions for Hydrology, Ecology, and Water Resources Management**

*15.-18. September 2008, Prague / Czech Republic*

for more information go to

<http://www.natur.cuni.cz/hydropredict2008/>

### **Wetlands 2008: Wetlands and Global Climate Change**

*15. -19. September 2008, Portland, Oregon*

for more information visit:

[www.aswm.org/calendar/wetlands2008/index.htm](http://www.aswm.org/calendar/wetlands2008/index.htm)

### **10th Ramsar CoP**

Healthy Wetlands, Healthy People

*28 Oct - 4 Nov 2008, Changwon, Republic of Korea,*

For more information: [www.ramsar.org](http://www.ramsar.org)

### **Implementing environmental water allocations**

*23 – 26 February 2009, Port Elizabeth, South-Africa*

For more information: [ewa.innercirclestudios.co.za/](http://ewa.innercirclestudios.co.za/)

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