



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

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

Viktor Masing (†), Hugo Sjörs, and Richard Lindsay have been awarded honorary membership of IMCG.

Editorial

The last Newsletter before the 2004 South Africa IMCG General Assembly. Again with information on the meetings and with background information on the mires and peatlands of Africa. More information and contributions for the General Assembly will be posted in the coming weeks on the website that we especially established under www.imcg.net

Use your democratic rights and react and vote on all proposals that are made. You can do that by sending your ideas, comments, and feelings to the secretariat and we guarantee that they will be taken into account. Draft resolutions can be submitted to the secretariat until September 1st, reactions are welcome up till September 24.

Our next newsletter is planned for October 2004. Please send all your proposals, contributions, news, publications, etc. to us, and with your help we will again prepare an interesting Newsletter.

For information or other things, contact us at the IMCG Secretariat. Address updates should be sent to Jan Sliva (sliva@wzw.tum.de). In the meantime, keep an eye on the continuously refreshed and refreshing IMCG web-site.

John Couwenberg & Hans Joosten, The IMCG Secretariat
Botanical Institute, Grimmerstr. 88, D-17487 Greifswald (Germany)
fax: +49 3834 864114; e-mail: info@imcg.net

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General Assembly South Africa 2004

On the IMCG General Assembly on Sunday September 26 2004 in Paarl (Western Cape Province, South Africa) only a limited number of IMCG members can be present, and only limited time will be available. Therefore we will arrange the discussions and decisions largely by (e)mail, like we have done with the France 2002 General Assembly. Most of the Conference papers have already been made available on the web, please check regularly for updates: www.imcg.net/assembly2004

There will be voting on all agendapoints. Members who are not present at the General Assembly are requested to send their votes (and further comments) to arrive at the IMCG Secretariat before September 24, 2004.

The new IMCG Main Board

On our General Assembly (Congress) in South Africa 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 5 June 2004, so that ballots and other General Assembly Documents could have been sent out in/with this Newsletter and would reach everybody in time.

Eight candidates presented themselves in the previous Newsletter. We received four additional nominations:

Piet-Louis Grundling (South Africa)

I am willing to serve on the IMCG Main Board

I am at present working at the National Botanical Institute in South Africa in the Working for Wetlands Programme. Our main aim is to conserve wetlands in South Africa by raising awareness, wetland rehabilitation and research. Strong emphasis is put on job creation and capacity building. Nearly 25% of the wetlands under rehabilitation are mires.

The IMCG plays a major role at present to raise awareness on the importance of mires and peatlands not only globally, but also in southern Africa. I will see it as one of my tasks to continue with this important challenge and to support the IMCG objectives in general internationally.

The IMCG and its members need to go from strength to strength. There are a lot of mires (and people depending on them) that need us.

Groete

Piet-Louis

Technical Advisor - Central Region, Working for Wetlands, National Botanical Institute, Private Bag X101, Pretoria, 0001, South Africa

Tel: +27 12 804 3200

Fax: +27 12 804 3166

Cell: 083 231 3489

peatland@mweb.co.za / pgrundling@nbi.ac.za

www.nbi.ac.za

Philippe Julve (France)

Dr in Plant Ecology, expert-consultant in environment and lecturer at universities of Lille (northern France). At present member of IMCG's EC, acting as treasurer. Active in IMCG organization and planning since 1990. Has organized the IMCG registration as an association under the French law in 2001. Main organizer of the IMCG Symposium in France, July 2002. Active in mire conservation and mires studies in France, as a member of national mire committee. Responsible for two IMCG global projects.

I wish to stand candidate for the next IMCG main board.

Philippe Julve

HERMINE Recherches sur les Milieux Naturels, 159 rue Sadi Carnot, 59280 Armentières, France.

Tel/Fax : + 33 (0)3 20 35 86 97

philippe.julve@wanadoo.fr

<http://perso.wanadoo.fr/philippe.julve/>

Jan Sliva (Germany/Czech Republic)

Born: 1957, studied landscape ecology and landscape planning at the Mendel's University in Brno/Lednice (Czech Rep.). Since 1985 married, living and working in Germany, since 1990 at the Technische Universität München, Chair of Vegetation Ecology. There I have been active in peatland ecology and peatland restoration science from the start, and have been involved in the IMCG activities since about 1995. Since 2000, IMCG Executive Committee member and since 2002, IMCG Chairman. Within the last 14 years numerous research and restoration projects on peatlands both in Germany and overseas. Since 2000, increasing interest in peatlands in subtropics and tropics, esp. in southern Africa, where currently also several peatland- and wetlands-related projects are performed.

Address: WZW TUM, Vegetation Ecology, Am Hochanger 6, D-85350 Freising-Weihenstephan, Germany
Tel: +49 - 8161 - 713715
Fax: +49 - 8161 - 71 4143
email: sliva@wzw.tum.de

Meng Xianmin (China)

Professor of peat and mire research institute, Northeast normal university, P.R.China. Actively involved in peat and peatland research since 1982 when I graduated from Shenyang agricultural University. During two years of peat resource studies in the Shanjiang Plain, China, I visited almost every peatland in the region. The peat resource studies won me a national award in 1985. Since then, I began research on peatland ecosystems and peat use in agriculture. Under the support of the national natural scientific fund, I launched a project on microbial composition, dynamics, and function in organic matter transformation in peatlands.

In 1993-1995, I studied in Macaulay Land Use Research Institute in Scotland, UK as a visiting scholar. After returning to China, I was invited to be senior technical officer by the Wetlands International-Asia Pacific China Programme. During two years, I was involved in proposal preparation and implementation of wetland biodiversity conservation projects as well as in capacity building of the China Programme. In addition, I investigated shorebirds along the China east coast and trained in wetlands management. In 1998, I returned to the Changchun Institute of Geography, Chinese Academy of Sciences. Under the national 5-years plan fund, I developed a patent peat product called Compressed Integration Substrate (CIS), used for seedling propagation with eutrophic sedge peat. Often invited

by local governments, I train officers in charge of wetland management and design wetland monitoring plans for some wetland reserves. In August last year, I changed from Changchun Institute of Geography, Sinica Academia to the Institute of Peat and Peatlands, Northeast Normal University.

China is rich in peat resources and peatlands play an important role in social, economical, and environmental sustainable development and the China Central Government has to pay attention to peatlands conservation. Nevertheless, China also suffers from population pressure on its peat resources. China needs to find a way to balance the conservation and exploitation of its peat resource.

Contact address:

Mire research institute,
College of City and Environmental Sciences
Northeast Normal University
No. 138, Renmin Street, Changchun 130021
The People's Republic of China
Tel/Fax: 0086 431 5268072
mengxm371@nenu.edu.cn / mxm7949172@mail.jl.cn

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

Congratulations to the new IMCG Main Board!

The main board may co-opt additional members to fill vacancies (article 9.4). The main board will discuss this in view of the goals set out in the Strategy and Working Plan.

New IMCG Posters!

Peat is not renewable:

<http://www.ecology.uni-kiel.de/~michael/download/pos1.ppt>

The future of peatlands is in conservation:

<http://www.ecology.uni-kiel.de/~michael/download/pos2.ppt>

South-east Asian peatlands are burning away:

<http://www.ecology.uni-kiel.de/~michael/download/pos3.ppt>

IMCG Resolutions

The IMCG General Assembly in South Africa 2004 will again discuss and adopt resolutions. To streamline the procedure, IMCG members were requested to submit their draft resolution timely, i.e. as soon as possible, to the IMCG secretariat.

In the previous Newsletters we already presented various Draft Resolutions. Below is a further draft for a Poland Resolution. All Draft Resolutions along with the other Congress Papers can be found on the IMCG website: www.imcg.net

Further draft resolutions can be submitted until September 1, 2004, to the IMCG Secretariat: info@imcg.net

Also use this email address to express any disconsensus with the content or formulation of the resolutions up for adoption.

DRAFT IMCG resolution to Poland

To the Prime Minister of Poland
To the Minister of Environment of Poland
To the Minister of Infrastructure of Poland

The International Mire Conservation Group (IMCG) is a worldwide organisation of mire (peatland) specialists who have a particular interest in the conservation of peatland habitats. The IMCG willingly places its advice and expertise at the disposal of any government seeking to establish or maintain mire conservation programmes.

One of the most valuable wetlands in Poland is the mire in the Rospuda river valley in the Augustów Forest. The Rospuda valley contains fens with totally undisturbed water relations, which results in an existence of huge areas of open wetlands. The sedge-moss plant communities, covering over 100 ha are the most valuable habitat of the Rospuda valley. The vastness of the valley and the undisturbed water relations belong to the most precious qualities of this site. Its hydrological system bearing no signs of human disturbance guarantees the stable existence of unique habitats together with the plants and animals relying on them. Moreover, the valley is characterized by undisturbed landscape conditions and vegetation zonation.

The Rospuda valley should be regarded as a unique wetland complex of European importance. Its conservation needs are backed up by several international conventions ratified by Poland, in particular the Ramsar Convention (1987) and the EU Habitat Directive (1992). Many of the vegetation types occurring in the valley are habitats included in Annex I of the EU Habitats Directive, whose preservation is obligatory to the EU Member States. The Rospuda river valley deserves to be protected as a Natura 2000 site. Among vascular plants occurring in the valley 35 are legally protected, 14 species are noted in the Polish Red Data Book of Plants and 23 in the Polish "red list". Four species of plants are protected by the EU Habitats Directive. Moreover, the Rospuda valley is the only site in Poland where Musk Orchid *Herminium monorchis* occurs.

Although one of the most valuable mire complexes in Poland, the Rospuda valley has not received any important conservation status yet. The unique untransformed mire complex lying in the southern part of the valley is gravely threatened by irreversible destruction through plans to build the by-pass road of Augustów across it. Hydrological changes, which are unavoidable when a highway is built, will affect habitat conditions that would result in destroying vulnerable fen vegetation. Moreover, the road would cause landscape fragmentation, which is one of the major threats to endangered species.

Therefore, the IMCG requests the Prime Minister of Poland to show a political will to preserve the unique Rospuda valley as a national nature heritage and an important Polish contribution to United Europe.

Furthermore, the IMCG requests the Minister of Infrastructure of Poland to make a real effort and consider changing the decision concerning the route of the by-pass road of Augustów, irrespective of the costs connected with preparing the suitable documentation and purchasing the land. The IMCG suggests constructing the by-pass as far away as possible from the unique untransformed mires lying in the southern part of the valley.

Last but not least, the IMCG requests the Minister of Environment of Poland to support the conservation of the Rospuda valley and to approve the Rospuda valley as a Natura 2000 site.

IMCG International Mire Conservation Group IMPESA Tour

by Rehana Dada & Jacolette Adam

This year the IMCG Pre-Congress tour takes you to some of the most spectacular wetlands in southern Africa including Mfabeni, an active 45,000 year old mire in the Greater St Lucia Wetland Park and the De Mond Ramsar site on the southernmost tip of the African continent. Get a quick peek at South Africa's innovative and highly successful Working for Wetlands and Working for Water Programmes that alleviate poverty through labour-intensive wetland rehabilitation and alien plant eradication and get a suss on the unique problems South Africans face in protecting mires.

South Africa has few wetland systems, and mire-forming conditions are limited. Peat resources occur mainly in inter-dune and inter-river valleys. Only sixteen areas in South Africa have so far been identified as having the potential to support peatlands, but only coastal KwaZulu-Natal has been thoroughly researched.

However, with its diversity of species and its important geographical position, South Africa's wetlands play a critical role in biodiversity conservation. A number of endemic bird species associated with wetlands are found within South Africa's borders including highly isolated species such as wattled crane and white-winged flufftail. The country's wetlands host a number of palearctic migrants during the northern winter, some even from the Taimyr Peninsula, and provides the southern limits to a number of tropical species such as the pink backed Pelican, the dwarf bittern, and the openbilled stork.

You will need gumboots/waterboots and normal wetlands field equipment. Elephants, buffalo, hippo and crocodiles are likely to be present in some areas and we will be traveling through a malaria zone for about 3 days.

The fietrip starts with a dinner at the Rietvlei Nature reserve, a fairly large urban reserve just outside Pretoria that is known for its impressive rehabilitation of old peat mining sites. Peat extraction on the Highveld damaged a considerable area of mires and the negative impact is evident during floods, streams drying out during dry periods and a drastic decrease in water quality.

We spend our first morning exploring the Highveld karst fens in the rolling grasslands of Rietvlei and en route to the eastern escarpment plateau that afternoon, we stop at reed and sedge fens in grassveld biome and visit the Verloren Vallei Ramsar Site.

Verloren Vallei hosts all three crane species occurring in South Africa, blue, wattled and crowned crane, as well as blue and white bellied korhaan, purple gallinule, various snipes and the elusive white-winged flufftail that occurs in only a handful of sites in Africa. Various rare and endemic orchids are found in this area. It was designated a Ramsar Site partly because of its biodiversity and its role in the hydrological functioning of two economically and

hydrologically important rivers, the Olifants and the Crocodile. Both of these rivers flow through the recently established Great Limpopo Transfrontier Park and into Mozambique making the Verloren Vallei mire of truly international importance.

We stay overnight in the Dullstroom area which is home to over 50 species of ground orchid, and the next day we head towards Kosi Bay on the eastern seaboard, stopping at a subtropical swampforest and the Kosi Bay Ramsar Site. Please be warned, there are potentially dangerous animals in this region and the Greater St Lucia Wetland Park is a malaria zone.

Hippos, which are common in this area, play an interesting role in wetland ecosystems. When they modify their environment physically by creating paths and grazing lawn for their own benefit, they also benefit other animals by opening up water pathways for fish and trampling the tall, tough grasses that are unpalatable to grazing mammals.

The Kosi Bay tropical swamp forest mires are a rare and unique wetland type in southern Africa. Maputaland has several large-scale conservation areas of the highest ecological value and importance (with a considerable proportion of wetlands) where economic development is prohibited. Here the giant palm *Raphia australis*, on which the Palmtree Vulture is dependent, finds its natural southern limit. There are many rare and threatened species in the area and eight Red Data fish species have their largest known populations in the Kosi system.

But this region is also one of the worst in terms of poverty and the spread of HIV/AIDS. Adequate nutrition is of critical importance but cultivation in swamp forest is impacting negatively on wetland functioning and biodiversity in addition to the spread of invasive exotic plants and afforestation with exotic *Pinus* and *Eucalyptus* varieties. A conservation officer who has been working in this area for decades will give us an insight into his attempts to find the balance between conservation and human needs.

On Day 4, we visit both pristine mires and subsistence farming plots in swampforest interdune fens. We'll also get some time to enjoy coastal lakes and the warm Indian Ocean. The next day we travel to the heart of the Greater St Lucia Wetland Park, a Ramsar and World Heritage Site and en route we will visit Vasi Pan, a mire that recovered dramatically from devastation by afforestation.

Deep fissures developed and the potential fire hazard was enormous. The risk posed to the local people and their livestock proved severe. In May 1996, a routine controlled burn ignited the dry surface peat and it continued to burn until late 1997 despite extensive rains.

The rehabilitation of the wetland depended on the re-establishment of the principle hydrological processes without compromising the revenue generated by timber production. The recovery of Vasi Pan showed that dried peat lands can be restored quickly to

healthy systems when exotic timber plantations are removed from the catchment area of the wetland.

That evening, we enjoy the mangroves and estuarine wildlife along the St Lucia estuary on a relaxed sunset cruise. If you haven't encountered hippos by then, this will be your chance to see several, in addition to fish eagles, pied kingfishers and crocodiles.

The Greater St Lucia Wetland Park is an amalgamation of formally protected areas and includes coral reefs, estuaries, a marine reserve, lakes and mires, and leopard, elephant, buffalo, rhino, and hippos. It is one of the most important fish nurseries and adult feeding areas for marine fish, and fresh water flowing from the mires into the lake provides crucial refugia for fish species during periods of high salinity.

The 6th day of our tour takes us into the 45,000 year old active Mfabeni fen and swamp forests. We are spending the whole day on this wonderful mire, a paradise for peat corers and fauna and flora enthusiasts.

Mfabeni is one of the oldest known active peatlands in the world, and the thickest in South Africa. Its basal four layers were deposited during the Late Pleistocene and the top three layers are of Holocene age. It depends on perched aquifers in the coastal sand dunes just to the east of it. Mfabeni is unique in that it is linked to other distinct ecosystems, such as Lake St. Lucia, Lake Bangazi and the hydrophilic grasslands on the Eastern Shores. It contributes richly to the diversity of habitats of the Maputaland region. This mire is a dynamic ecosystem that at present is adapting, as in the past, to a changing environment.

On Day 7 we leave St Lucia in the early morning and head towards the Drakensberg/Ukahlamba-Maloti Mountain Range. We stop in at the Waterval Vley mire on the Great Drakensberg Escarpment, a spectacular active mire with three waterfalls flowing into it! This is the only peatland in southern Africa, and possibly in the world, with these features!

Waterval Vley is a bottom fen dominated by *Phragmites australis* and a *Carex* species. Little is known of its origin, development, and the extent of its contribution to the hydrological functions and balance of the area, or its contribution to biodiversity and habitat diversity. It has been a stable environment since the last Ice Age, and contains fossil pollen, fiber and other records of important scientific value concerning such matters as climatic change and ecological development of the Highveld. It supports 30 to 50 white-winged flufftails (about 20% of the estimated national population), crowned cranes and blue cranes in the surrounding grasslands. At one waterfall there is a breeding colony of bald ibis.

Part of this scenic percolation mire is destined to become a dam for a pump storage electricity scheme that will flood the waterfalls. We hope to hear from both the electricity company and activists who are opposed to it. We spend the night at Sterkfontein Dam, a water transfer dam linked to an existing pumped storage electricity generation scheme.

The next morning we have breakfast at the spectacular Golden Gate National Park, and then continue into the Kingdom of Lesotho to explore a mosaic of mires, wetlands, and streams in an ancient oxbow in the Mountain Kingdom. We spend all of the next day at the unique inter-bedded gravel and peat alluvial fan mires on the roof of Africa! Some of this area is pristine but part of it is impacted by the Lesotho Highland Development Water Transfer Scheme to South Africa.

Lesotho is a land-locked country with two distinct landscapes, the western Lowlands and the eastern Highlands. The Highlands are formed by the Drakensberg/Ukahlamba and Maloti mountain ranges, a high dissected plateau on average about 2500m above sea level with peaks rising to nearly 3500m and narrow, steep-sided river valleys. Highland catchments are characterized by high rainfall, temperate summers and long, cold winters.

Grasslands and shrub lands dominate highland vegetation and wetlands (alpine bogs, fens, restio and grass marshes) occur in all drainage lines. Biodiversity has changed through the loss of mires, reed meadows, and marshes, deteriorating rangelands, the loss of mammal and bird species through over-hunting and habitat invasion by humans as well as poor management practices.

From the Highlands we travel to Maseru, the capital of Lesotho, where you can choose to spend a day exploring the city or the foothills of the Maloti Mountains.

We spend the 20th of September, Day 11, traveling through a panorama of landscapes via the Karoo to Tsitsikamma on the southern seaboard. The karoo is a dry but fascinating landscape consisting of plains, ridges, and lowstanding koppies (hills). Day 12 takes us into the smallest but richest floral kingdom in the world, the Fynbos Floral Kingdom. Day 13 takes us along the Garden Route through a landscape of coast, forests, and lakes. We visit the Groenvlei Lake and mire and the Vankersvelvlei *Sphagnum*-dominated floating moor.

Vankersvel vlei is dated at 24 400 (\pm 450 BP) at a peat depth of 10,2 m. Pollen analysis enabled the reconstruction of the vegetation history and climate of the Southern Coastal Belt Eco-region over the past 24 000 years.

On the last day of our tour we explore the De Hoop Nature Reserve and Ramsar Site and travel to L'Agulhas, the southern-most point of the African continent, stopping briefly at some of the wetlands in the De Mond catchment before settling in at Paarl for the IMCG Symposium on the 24th & 25th and the General Assembly on the 26th.

De Hoop Nature Reserve on the southern Cape coast offers a pristine coastline, limestone hills, extensive dunes, the Potberg mountains and the De Hoop Vlei. For the most part the vlei is a 16km-long lake blocked off from the sea by coastal dunes, but its uniqueness lies in its partial location in a gorge. 50 of its 1500 fynbos plant species are endemic and its animal population includes the endangered bontebok

and Cape mountain zebra, as well as baboons, ostriches, eland, grey rhebuck, duiker, and steenbok. It is well-known to ornithologists, attracting a variety of birds throughout the year. This is an excellent whale-watching site and no doubt we'll have time to look out for the Southern Rights that swim north to calve in South Africa's warm waters.

If you think you might drag yourself away from the mountains and vineyards, please join us for the 2004 symposium. The theme is Management Challenges for Wetlands, Mires and Peatlands in the 21st Century.

After the IMCG congress on the 26th, you might choose to depart directly from Cape Town International Airport or travel the 16 hours back to Johannesburg by bus.

Field Conditions: Normal wetland field conditions and you will need normal footwear for wetlands. Some areas that we will explore are home to

potentially dangerous animals such as elephant, buffalo, hippo and crocodile. Malaria is present in Kosi Bay. Please consult your physician about prophylactics.

Registration: We still have a few places available and it is not too late to register! You are also welcome to still submit an abstract. Late registrations and abstracts will be accepted until the end of July.

Cost: Euro 1100

Transport to and from South Africa is not included. Pick-up from Johannesburg Airport.

Please contact Piet-Louis Grundling for a general invite and detailed programme.

IMCG - AFRIKA

Email:peatland@mweb.co.za

Tel/Fax: +27 12-804-3200 / 804-3166

Cell: +27 83-231-3489

Challenges for the IMCG in the conservation and management of mires and peatlands in Southern Africa (and other developing countries)

by Piet-Louis Grundling

The inhabitants of southern Africa and indeed the whole of Africa depend heavily on water derived from wetlands in general. Be it rural communities depending on water from the Kufue wetlands in Zambia, subsistence farmers in the swampforests of Mozambique, or the urban dwellers in the heavily populated and industrialised Gauteng province of South Africa tapping water from the Alpine mires of Lesotho via the Lesotho Highlands water transfer scheme.

Resource Exploitation

A sad fact of life in Africa, however, is that we are degrading and destroying these life support systems on which we depend for our own survival. Exploitation of natural resources is taking place at an alarming rate. However, this exploitation is not only restricted to urbanisation, industrialisation, or exports to the developed world. Overpopulation and a collapse of cultural values have led to the over exploitation of many of our natural resources on a subsistence level. Mires have not been excluded from this. It has been shown that historically subsistence agriculture (cultivation and grazing) on mires took place in a sustained and controlled manner in parts of southern Africa for centuries.

Unique features

It has been widely acknowledged that mires and peatlands are rare and unique features of the southern African landscape. Peatlands contribute to the rich diversity of wetlands in southern Africa. These range

from the dynamic papyrus fens in the Okavango Delta (the largest inland delta in the world), to the coastal tropical forested peatlands of Mosambique and South Africa, to the reed/sedge dominated percolation mires on the Highveld plateau in the southern African interior, and the Alpine fens and bogs of Lesotho. Although sensitive, these mires are also very robust and forgiving. Given limited use and time they have the ability to restore themselves to some extent with limited loss in functions. The current level of pressure is, however, proven to be fatal.

Solutions?

Is the picture sketched above too pessimistic? Perhaps – some people would say that the current demographics will solve population pressure. These include, amongst others, increased urbanisation in the region and mortality due to AIDS. Others would point out that the latest environmental legislation in South Africa (amongst others the internationally acclaimed National Water Act of 1998) and the formation of regional and international policies in partnerships, such as the Southern African Development Community and the New Partnership for African Development, would support the conservation and wise-use of natural resources.

Footprints

Nothing, however, could be further removed from the truth. Mortality due to AIDS must never be regarded as a solution for our environmental problems.

Population demographics are dynamic and it is only a matter of time before the human race will make up for the loss of life. Urbanisation might relieve some pressure on rural areas but the impact on mires near urban areas comes with an intensity of its own. The human footprints around urban areas are expanding all the time. For example, the footprint of the urban South African consumer is not only evident in the cultivated degraded peat swampforests of the Lowveld or Maputaland; or the desiccated mined fens of the Highveld, or the soon to be flooded Watervalvley at Braamhoek, but also in the trampled and eroded mires of Lesotho. The recent drought has exposed the vulnerability of peatlands to over exploitation of the aquifer they depend on. Uncontrolled and commercial afforestation in some catchments has had a highly negative effect on groundwater and wetlands alike.

The mires all have one thing in common: they are located in rural areas far from the urban hubs in southern Africa, but are all being degraded due to a demand for a range of mire related products ranging from fruit such as bananas, to peat, energy, and water.

Our role

The question needs to be asked if we as informed scientists or decision makers are making a difference. Our failure as scientists to quantify and promote the economic value of these mires and the goods and services they deliver and the government's lack of commitment and capacity in administering current laws and policies has steadily undermine the threshold of peatlands in southern Africa.

Our new legislation might mandate a major redistribution of costs and benefits in using aquatic ecosystem resources, but it is our current failure in achieving co-operative governance in implementing, monitoring, and enforcing legislation which has brought us to the brink of the final phase in the extinction of peatlands in southern Africa.

Can we still make a difference?

There are still areas with pristine mires on the sub-continent. There are still opportunities. The IMCG has initiated and supported various projects (IMPESA and Maputaland) in the region to promote awareness and the wise-use of mire. These projects have certainly being successful in raising the profile of mires on a local and even a regional level. However,

the IMCG has passed 2 resolutions during the last two General Assembly meeting (Canada, 2000 and France, 2002) dealing with some of these issues in South Africa and the reaction from the political sphere of the South African society was not very encouraging. Officials on local and provincial level need no convincing, but the political will lacks when it comes to national departments to take the necessary steps in ensuring the future of our mires

IMCG Resolutions

The role of the IMCG and the resolutions we pass needs to be re-evaluated. We need to consider that the dynamics in governments and sense of responsibility towards the environment differs substantially between developed and developing countries. One could use resolutions to call on the conscience of responsible governments in the developed world. They and their administrators understand the cultivated language and scientific arguments we use, but it seems that this is not what works in the developing world.

Another approach is needed. One that takes the direct dependency of rural communities on the resource into consideration. Or perhaps one where money does the talking, in other words goods and services are quantified in terms of monetary value. Or a bottom-up approach where projects are started at the community/local level, benefits from wise-use are visible, and the value of mires slowly percolates to the top. Or....?

We will have to reposition ourselves if we as the IMCG want to be an effective instrument outside the developed world. Can we still make a difference? I believe we can. Time is limited and the question we need to answer is how.

Ubuntu

Ultimately, it is the spirit of *ubuntu* (in unity and humility) between scientists, government, and society on which we will have to depend when we face the challenges to secure the future of these and other aquatic ecosystems.

Piet-Louis Grundling, Working for Wetlands Programme, National Botanical Institute, Private Bag X101, Pretoria, 0001, South Africa. Tel: +27 12 804 3200, Fax: +27 12 804 3166, Mobile: + 27 (0) 83 231 3489. E-mail: peatland@mweb.co.za.

REGISTER

Please fill out the IMCG membership registration form.

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

Peatlands on the Ugandan side of Mount Elgon

by René Dommain

If somebody asks you about Africa's nature you will probably think first of its large herds of wild animals. Peatlands are not the first things to come in mind, because peatlands are generally rare on the African continent.

The summits of the East African high mountains are some of the places in tropical Africa where peat formation is possible. Although peatlands are mentioned in most descriptions of these mountains (e.g. Hedberg 1964), we still have a poor knowledge of them. The existing studies on these mountain peatlands concern paleoecological research that describes vegetation development during the Pleistocene and Holocene. Landscape ecological studies into peatland development, conditions of peat formation, and hydrological functioning are so far lacking.

From 15th to 29th February 2004, I spent two weeks on Mt. Elgon, together with my co-worker and friend Mathias Rieck to study peatlands in the framework of the project "Landscape-ecological inventory of peatlands in the Ugandan part of Mount Elgon", a cooperation initiative of the University of Greifswald (Germany) and the Uganda Wildlife Authority (UWA)

Uganda is an East African country characterized by savannah covered plains, rifts, large lakes (e.g. Lake Victoria), and scattered high mountains. Except for the Rwenzori Range, these high mountains are volcanoes of Tertiary origin. Their formation relates to the development of the East African Rift Valley System (EARS).

A clear characteristic of the East-African mountains is the altitudinal vegetation zonation that reflects the changes in climatic conditions. At least seven mountains in East-Africa are high enough to exhibit the unique afroalpine vegetation belt (e.g. Kilimanjaro, Mt Kenya, Ethiopian Highlands). The term "afroalpine vegetation" describes plant communities that grow in the uppermost regions under conditions that Hedberg (1964) described as "winter every night and summer every day". Daily climate variations are typically larger than the yearly variations. Several morphological adaptations allow the typical plant species to survive under these harsh climate conditions. Peatlands are another characteristic of the afroalpine zone.

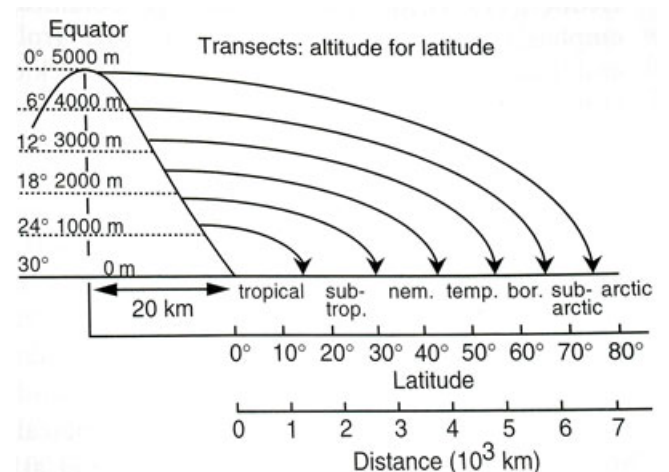
Mount Elgon

Mt. Elgon is the oldest and largest solitary volcano in East Africa. It reaches a height of 4321 m a.s.l. and covers an area of around 3500 km². The North-South extent is about 70 km, the East-West extent about 50 km. The border between Uganda and Kenya runs straight through Mt. Elgon.

The volcano is of Miocene origin (eruptions starting 22 Ma BP) and recently inactive. The eruption of

alkaline lava formed smoothly inclined flanks resulting in a shape and structure that is commonly called a shield volcano. Because of its slight slopes Mt. Elgon is rather easy to climb. An important feature of the volcano is its central caldera. After the magma had erupted from the sub-surface magma chamber, its roof collapsed causing the formation of an up to 400 meter deep and eight kilometre wide caldera. Before that mega-event, Mt. Elgon may have been the highest mountain of Africa. During the Pleistocene also Africa experienced lower temperatures and from the Late Glacial Maximum 18.000 BP up to 11.000 BP the highest mountains, also Elgon, were glaciated (Hamilton & Perrot 1978). Currently, glaciers are still occurring in the Rwenzori Mts, on Mt. Kenya, and on Mt. Kilimandjaro. The glaciers on Elgon have shaped its summit region substantially, resulting in typical glacial landforms, like U-shaped valleys, moraines, and denudated basins. Several palaeoecological studies offer insight into the vegetation development after deglaciation.

On the top of Mount Elgon night frosts are common, whereas the temperature at noon can reach more than 20 °C. With exception of a dry season between January and March and a shorter one in September, rainfall is regularly distributed over the year. From the foot of the mountain (with 1600 mm of annual precipitation) going upwards, precipitation first increases to decrease again to a mere 900mm/y at the



Altitude for latitude, over short elevational distances the climate across vast latitudinal distances is represented (from Körner 2003)

top (Wesche 2002). These altitudinal climatic differences are reflected in the distinct vegetation belts. In the Ugandan part of Mt. Elgon the area up to 2400 m consists of agricultural land (mainly for crop production of bananas, coffee, potatoes), followed by montane rainforest, a bamboo zone, a montane forest zone, the Ericaceous belt, and the afroalpine zone respectively.

Mt. Elgon is the home of several tribes, who inhabit the lower slopes. In former times the “Elgonys” inhabited even the upper parts of the mountain, where they kept cattle. The Elgonys used to take fires into the Ericaceous and afroalpine zones to enlarge their pastures. During the Ugandan civil war in the 1980s they were resettled to the lower slopes as a nature conservation activity. That time was characterized by violent conflicts among different groups. Attacks on villages and tourists continue until these days.

In 1993, the Mount Elgon National Park, covering an area of 1100 km², was established on the Ugandan side, whereas on the Kenyan side a smaller National Park exists since 1967. In spite of the strong protection status, slash burning and wood and bamboo cutting are still wide-spread and some lower parts of the park have been taken into cultivation. This issue is not surprising, considering the population density of about 500 people/km² outside the national park.

Study of peatlands

Accompanied by two rangers and three porters, we climbed Mt. Elgon along the Saasa Trail on the western flank. Our primary goal was to search for peatlands and describe them from a landscape-ecological point of view. In particular we aimed at classifying the mires into the ecological and hydrogenetical mire typologies of Succow and Joosten (2001, see also Joosten & Clarke 2002). The field investigations included vegetation analysis and coring along transects in order to describe the peat types and their degree of humification (von Post scale) and to determine peat thickness. An assessment was made of the extent of every peatland, its geographical position and altitude, the topographical relief, and the surface profile of the peatlands. All noticeable human impact was noted. Peat samples of different depths were collected for future analyses of macrofossils and chemical parameters.

The main areas of study were the surroundings of the Saasa trail above an altitude of 3300 m and the inner part of the caldera. After three days of climbing we found the first wetland. In all we studied seven sites, four peatlands and three wetlands with only sparse peat deposits (a spring, a swamp, and the margins of a brook).

The wetlands of the Ericaceous belt (3400m – 3700m) have no peat or only very shallow peat deposits. The topsoil is rich in humus and below that we found clay. Such wetlands have a vegetation of *Cyperus* species with scattered Ericaceae shrubs (e.g. *Erica trimera*). Either they lay along streams and are influenced by floods or in depressions with interrupted drainage.

At the higher parts within the afroalpine vegetation belt two real peatlands were found at 3900 m. They are situated at the outer rim of the caldera in basins among hills. Both peatlands are connected to lakes, although the latter were nearly or completely dry at the period of study. The groundwater level of the peatlands was up to half a meter below the surface –

clearly caused by the dry weather conditions. The well decomposed sedge peats (H 5-7) underline the occurrence of fluctuating water levels. Clay below the up to two meter thick peat deposits prevents water losses. Probably during heavy rainfall these mires will be flooded. Therefore, I think that these peatlands can be classified as “water rise mires” sensu Joosten & Clarke (2002). The recent vegetation is dominated by the tussock forming sedge *Carex runssoroensis*, the main peat former of the Mt. Elgon mires. This species is endemic for the East African high mountains and grows both on wet and dry areas. Further conspicuous plants are typical afroalpine elements including the dwarf *Alchemilla johnstonii* on drier parts, the endemic Giant Lobelia *Lobelia deckenii* ssp. *elgonensis* in wet hollows, and particularly at the edge of the mires the impressive Giant Groundsel *Dendrosenecio elgonensis* ssp. *elgonensis*.



Carex-Dendrosenecio mire community near the outer rim of the Caldera (3900m)

At the 21st of February we climbed the Wagagai summit, with 4321 meter the highest point of Mount Elgon. From the top of that mountain we discovered large mires inside the caldera. The mires are located in denudation terraces on different levels. They are surrounded by the steep slopes of the caldera rim that are covered by amazing open woodlands of *Dendrosenecio elgonensis* ssp. *barbatipes*. The terraces result of the former activity of glaciers, that cut hollows in the lava layers of different resistance. Currently these depressions are filled with peat or lakes.

Within the time available, we could study two peatlands, which are located next to the Wagagai. The upper one, at an elevation of 4220 meter, has a size of 3,5 hectare and the lower one, at an altitude of 4150 meter, is at least 3 hectare large. Sloping fens connect the peat filled basins to each other. In contrast to the peatlands at the outer side of the caldera these mires were completely water logged (open water in hollows and small pools) and therefore certainly peat accumulating. The peat layers predominantly consist of slightly decomposed coarse sedge peat (H3-5), but radicle peat and - in one core - brownmoss peat are present as well. The peat

thickness of the upper mire varies between two and four meter deep, whereas the lower peatland is 7,10m thick. Also there, clay is present below the peat. Both peatlands are dominated by an open vegetation of *Carex runssoroensis*. Typical other plants are *Lobelia deckenii*, *Crassula granvikii*, and *Ranunculus volkensis* in hollows, whereas on drier parts especially *Alchemilla elgonensis* and *Deschampsia caespitosa* are growing. Brownmosses cover the ground in more



Brown moss community in a high altitude mire inside the Caldera (4220m)

or less clear hummocks and hollows. Sphagnum is totally absent. The sloping fens between the individual peatlands have a maximum depth of one meter of strongly humified (H 7-9) peat. The presence of streams along the sloping fens that interconnect the mires on various terraces indicate that these peatlands have sufficient water supply during the dry seasons. The less decomposed peats underline this. A possible reason of the clear hydrological distinction to the drier peatlands at the outer flanks can be found in the functioning of the caldera as a pool of cold air where at night condensation water supplies enough water to maintain a high water level in the basins. Another possibility is that the mires are fed by groundwater exfiltrating from cracks in the bedrock, because the uppermost part of Mount Elgon is geologically strongly disturbed. We have, however, no further evidence for that hypothesis and hydrogeological investigations would be necessary to test it. Because of lacking insight into the hydrological regime it is not possible to classify the caldera peatlands unambiguously. Perhaps, they are percolation mires because they are slightly sloping, perhaps they function according to the kettle hole principle and grow upward because precipitation of humus colloids from the peat seals off the mineral soil on the transition of mire and basin. This raises the drainage level and leads to higher water levels in the basins that result in peat growth and in humus precipitation on progressively higher levels (Gaudig et al. submitted). That these peatlands are bogs, as they are called in nearly every relevant publication is definitely a mistake. The absence of *Sphagnum*

species and of a dome shape disproves this interpretation.

Three main geological features facilitate mire development in the uppermost part of Mount Elgon. These include

- the occurrence of the caldera causing the a wetter climate in contrast to the outer flanks,
- the rim of the caldera next to the peatlands that functions as a catchment area,
- and the former glaciation that scooped out basins in the different rock layers that prevent water loss.

Peat formation outside the caldera is strongly influenced by dry periods which cause a high degree of humification. Consequently, the hydraulic storage coefficient of the peat is small (resulting a large water level fluctuations) and mire surface oscillation is restricted (Joosten & Clarke 2002). Therefore, the peat accumulation rates are very small and real peatlands are rare on the outer slopes of Mt. Elgon. They occur only in depressions where enough water is assembling during the rain season.



Terraced mires inside the caldera (>4000m). In the background, Kenya.

There is a clear relation between the distribution of peatlands and the vegetation zones. In contrast to what Hedberg (1964) states, peatlands on the Ugandan side of Mt. Elgon are restricted to the afroalpine zone and no genuine mire was found in the Ericaceous belt or at lower zones. The extreme climate conditions within the afroalpine zone especially the night frosts, are decisive in preventing fast microbial decay of dead plant material.

Further chemical analysis will reveal the ecological properties of the mires. Up to now only Rejmankova & Rejmanek (1995) conducted soil chemical investigations of peatlands and measured a C/N ratio of 16 and a pH of 6,15 in a Mount Elgon mire. According to Succow & Joosten (2001) this mire belongs to the eutrophic calcareous mire type.

A lot of work still needs to be done, but the first steps towards the understanding of these unique ecosystems on the East African high mountains have been made. Surely the harsh climatic conditions are deterrent for researchers. Nevertheless it was impressive for me to core while it was snowing on an African volcano at an altitude of over 4000 meter!

Use the chance to become acquainted with African mires by participating in the IMCG Field Symposium in Southern Africa!

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René Dommain

Botanical Institute Greifswald (Germany)

Email: rene.dommain@gmx.de

Musings on African Peatlands: the Niger delta

by Willem Smuts

From the Alpine meadows of the Ruwenzori's, Drakensberg and Atlas to spring and karst peats in the arid Kalahari or Sahara – peat in Africa is to be found in some unusual places. The African tropics are where the most expansive peatlands are to be found on the continent.

Casting an eye to central west Africa: the Congo Republic where swamp forests of 10,000 km² are not uncommon and floating papyrus islands approaching hectares in size and with peat bases of up to 1.8m are used by local fishing tribes to live on. Swamp forests of various types are common from northern Angola through Congo, Gabon Cameroon, Nigeria, Benin, Togo, Ghana, Cote d' Ivoire, Sierra Leone, Liberia and into Senegal. From Nigeria westward mires occur mostly in the coastal zone, i.e. within about 200 km of the coast. In west Africa peatlands range in size and type from the Niger Delta to the inter-dune or valley mires that may be as small as few hectares – examples of these are to be found in the Republic of Benin and will be discussed in subsequent articles.

The Niger Delta – world famous as the source that made the Federal Republic of Nigeria the 5th largest oil producer in the world today – is less well known for its magnificent expansive present-day tropical delta. These complex mires (papyrus meadows; *Raphia* forests; hardwood forests; etc.) are to the oil-world just a nuisance that ups the exploration and production cost of oil. To the indigenes the delta is a source of everything the need on a day-to-day basis – food, shelter and bartering resources.

Sadly this immense natural laboratory where studies of climate, weather, chemistry, sedimentation, ecology can teach us so much is virtually untouched from a research perspective. Expanding needs for more oil production and pressure from growing populations has severe implications for the future wellbeing of the delta. Oil spills and fires from sabotaged pipelines can have devastating effects on both environment and people alike. There are examples of entire villages and 1000's of hectares of surrounding swamp forest laid waste by such fires. Subsequent peat fires burn for many months unchecked until the next rainy season lifts water levels again. Rapid growing metropolises like Lagos (16 to 18 million people) also have an insatiable hunger for natural resources such as "bush-meat" and traditional medicines that has collectors and hunters employing more staff and severe methods ensuring quick and high volume returns on their efforts.

Whilst the Delta has significant potential as an eco-tourism destination there is precious little development in this direction yet. It is a well know fact that hungry people do not care for such considerations as the future of a particular natural resource whilst it can be used / eaten or sold for gain. Hopefully the Nigerian Government, the oil companies, and the people of the delta can come together and see beyond the "have and have not" problem causing the havoc in the delta and see the solution under their noses to solve that very problem.

2nd meeting of the Ramsar Coordinating Committee for Global Action on Peatlands (CoCo-GAP)

On 6 June 2004 the Coordinating Committee for Global Action on Peatlands of the Ramsar Convention (CoCo-GAP) met for the second time (see IMCG-Newsletter 2003-4) in Tampere (Finland) in association with the "International Peat Congress". Discussions focussed mainly on the progress and gaps of the draft Implementation Plan for Global Action on Peatlands, the formulation of priority activities and programmes, and the concrete outputs to be produced for the Conference of Parties of the Ramsar Convention (CoP9, 7-15 November 2005, Kampala, Uganda).

According to Resolution VIII.17 (Valencia 2002), the CoP expects from the CoCo-GAP an Implementation Plan, a Progress Report, and Recommendations. In case of sufficient substance an additional resolution to Resolution VIII-17 can be considered.

Preparation of these outputs for COP9 should take into account the following opportunities and deadlines for intervention:

- The National Reports for CoP9 will include concrete peatland objectives and will be submitted to the Ramsar Bureau from 28 February 2005 onwards. These reports can provide important input to the progress report.
- Consultation with Ramsar Contracting Parties (CPs) can most easily take place through the Standing Committee. The Standing Committee of the Ramsar Convention that will prepare CoP9 will meet 6-11 June 2005 in Gland, Switzerland. Final inputs need therefore to be ready by early April 2005.
- Earlier input is possible through the Ramsar Scientific and Technical Review Panel (STRP), which meets in the first week of February 2005 (also in Gland). Our inputs for this should be available by 20 December 2004.

On short notice the Contracting Parties have to be informed on the establishment of the CoCo-GAP and on the Implementation Plan it is preparing.

Draft Resolution

It was agreed that the (draft) Resolution should highlight the most important issues, suggest

operational and institutional mechanisms (nationally/regionally), and emphasize the need for international cooperation and financing. We should try to be more specific than in the earlier resolution VIII-17 and make clear what the priority programmes/projects are that should be financed. Special attention has to be paid to the relation of Ramsar with other conventions related to peatlands.

The draft Resolution must list the major policy issues in a narrative introduction. It must identify basic issues and major problems, look at peatlands in the broader context of ecological and economic environment, and look for win-win situations and positive feed-back mechanisms. It should furthermore identify recommendations and urgency: What is required, by whom, why, how and when.

It was agreed that the first drafts will be prepared by 14 July, the second draft by 10 October, and the final draft by 20 December 2004.

The Implementation Plan will be added as an annex and will show the response to each of the priorities of the guidelines of Resolution VIII-17. The draft Implementation Plan for Global Action on Peatlands, that was prepared by the CoCo-GAP, was discussed. This document has still the format of a table and must be further complemented. The draft has to be made public and available to the Contracting Parties, as the CoCo-GAP members can not represent all stakeholders.

Side Event

In view of the value of the CoCo-GAP as a unique forum and partnership between industry, science, and the conservation sector, a peatland side event should be organised on CoP9. Kampala may probably offer less opportunity/possibility to organise side events at CoP9, and we should look into possibilities to arrange a side event immediately before the CoP or as a one-day meeting at the Global Biodiversity Forum as an alternative.

The next meeting of the CoCo-GAP will be organized in Wageningen, the Netherlands, October 11 and 12, 2004.

(based on the draft minutes prepared by Marcel Silvius)

12th International Peat Congress

by Greta Gaudig

More than 500 people from nearly 40 different countries participated at the excellently organized 12th International Peat Congress from 06-11 June 2004 in Tampere (Finland). The main theme "Wise use of peatlands" was presented by the keynote speakers Clayton Rubec, Hans Joosten, Sundari Ramakrishna, Jukka Laine, and Alexandr Balykov. This theme also determined the content of various other presentations and meetings. Altogether 143 lectures and 113 posters were presented in 2,5 days. "Tropical peat and peatlands" was the theme with most of the oral presentations (26) showing its relevance and exigency. Besides, considerable insight into a lot of large research projects (e.g. EUROPEAT, RECIPE) was provided. The 1360 pages proceedings of the Congress allow every Congress participant to read about all presentations. The conference backpack included also the IPS-DVD on "Wise Use of Mires and Peatlands" (see elsewhere in this Newsletter). At midweek of the Congress ten also excellently organized different field trips were offered and enjoyed by most of the Congress participants. Such a large Congress of course is used for important business and technical meetings which already started

on Sunday. To emphasise are the meetings of the working groups "Wise Use of Tropical peatlands" and "Sphagnum farming".

The large participation at the joint IPS/IMCG workshop and panel discussion on the last day of the Congress shows the need for discussion on "The future of peatlands". "The future of peatlands" will also be the theme of the next International Peat Congress in Tullamore, Ireland 2008.

New IPS-President Makku Makelä, Geological Survey of Finland, Espoo

As usual, the country that organizes the International Peat Congress provides the next IPS President. In Tampere Prof. Markku Mäkelä from the Geological Survey of Finland was called to duty as IPS-president until 2008. Within the Director's staff of the Geological Service Markku Mäkelä is responsible for International Services.

The theme of his PhD thesis (1974) was "A study of sulfur isotopes in the Outokumpu ore deposit".

It would be desirable that his first clumsy appearance is not representative for his entire career as IPS President.



Fig. 1. Großes Narunyomoor.

One of the first pictures taken of an African mire: The Great Narunyomire in then German East Africa (Tanganyika). The photograph was made during the palaeontological Tendaguru dinosaur expedition, led by Werner Janesch in 1909/1910. The mire measured 350 by 1000 metres and the maximum peat depth was only 1,5 m.

The DVD “Wise Use of Peatlands”: IPS exposed again as an extraction lobby

by Hans Joosten

With the publication of the DVD “Wise Use of Peatlands” on the occasion of the 12th International Peat Congress, the International Peat Society (IPS) has – again, see IMCG Newsletter 2004-2 – exposed itself as a unilateral peat extraction lobby and not the wide peatland organization that it claims to be. It illustrates that the organization still has not interiorised the principles of “wise use”.

In May 2002, a consortium of peat extraction industries from Canada, Finland, Ireland, Sweden, Germany, France, and the Netherlands decided to produce a professional DVD based on the IPS/IMCG book “Wise Use of mires and peatlands”. In the joint IMCG/IPS meeting of November 2003 (Amsterdam) IMCG confirmed that every interest group has the right to use the wise use idea with its own focus, but also expressed that it would be unacceptable if the IPS-Commission II associated industry-consortium would use the “wise use” concept in another, less subtle way than the joint IPS/IMCG book. The consortium (of which many representatives are members of the IPS Executive Committee) thereupon enabled IMCG to comment on the draft texts, which we have done – mostly under severest time pressure.

The result may be shown. It has become a highly professional DVD (costs € 160,000) with nice pictures and a lot of factual information on the functions and values of peat and peatlands. The DVD includes a 19 minutes long main documentary “Wise Use of Peatlands” and 8 shorter movies on “bog and peat development,” “extent and locations of peatlands,” “natural functions of peatlands,” “peat in horticulture,” “peat in energy production,” “peat production management,” “after use of peatlands,” and “wise use of peatlands.” The DVD furthermore contains a picture gallery with photos of peatland plants, peatlands, and peatland uses, and a lot of statistics from the IPS/IMCG Wise Use book. I will certainly use the DVD in my university course on peatland utilisation.

My main criticism, both as an IMCG representative and as an IPS member, does not primarily concern the content but most of all the labeling of the DVD. In the last days of DVD development, it was decided to present the DVD as an IPS product, not as the product of the peat extraction consortium. This decision was not supported by adequate decisions of the IPS Executive Committee, but unilaterally decided by the consortium members.

The largest part (14 minutes) of the 19 minutes lasting central documentary deals only about how peat is used for horticulture, energy, and other applications. This is understandable and fully justifiable for an industry CD but not for an IPS that claims to represent all aspects and interest with respect to peatlands worldwide. Other values of peatlands are indeed presented in the shorter movies of the CD but also there they remain underexposed in

comparison to the attention paid to peat extraction, uses of peat, and after use of cut-over peatlands. The “IPS” DVD now spreads the wrong impression that peat extraction is the major example of the wise use of peatlands and other functions and values of peatlands are of lower value. And the whole procedure shows that IPS is – next to financially dependent on the peat lobby – also overly industry minded and democratically underdeveloped. Not the IPS Executive Board of IPS decides how IPS exposes itself, but a group of peat extractors that “forget” that they also are IPS Executive Board members with other responsibilities.

The central documentary ends with the true words: “The challenge for all of us, from policy makers to land-use planners, from peatland users to peatland conservationists, really, all of us, is to apply wise use principles in the management and utilization of peatlands.”

Here the industry had been able to show that she really supports the wise use process by explaining what these wise use principles mean for her daily practise.

How does she balance the pros and cons of peat extraction? How will she assess the effects of peat extraction and combustion on all other functions of peatlands and the whole human environment? When will she start to use terms in a clear and consistent way, instead of using “renewable” and “biofuel” solely for fiscal propaganda purposes? How will she limit her interventions to the necessary minimum, instead of striving for expansion of peat use to applications for which environmentally less harmful alternatives are readily and abundantly available? How does she fill in the wise-use guideline to relocate activities to where they cause least impact, i.e. focusing on drained peatlands instead of opening up virgin mires? How will she prevent possible serious damage e.g. in terms of climate change and protected species?

How does she see her responsibility in solving the problems of the world? What is the concrete commitment of the industry? What does wise use mean for peat extraction? “Walter, where is the beef?”

With the DVD the industry has done a valuable job in making wise use thinking available to a larger public in an attractive way. She has, however, missed a nice chance of working out and presenting her own reference for wise use, for formulating peat extraction related wise use guidelines and indicators, and for demonstrating self-control and commitment.

With the IPS label of the DVD the IPS shows again that she is not (yet) a platform where different societal interests meet and exchange knowledge and ideas on the wisest use of peatlands. In contrast she illustrates that she speaks the words of the hand that feeds her. An unwise label for a wise use DVD...

Sphagnum farming

by Greta Gaudig

Because of severe anthropogenic exploitation, peat accumulating mires in Europe have only survived on less than half of their original area (in Germany only on 1%). In most countries of Western and Central Europe the stocks of slightly humified Sphagnum peat (white peat) are nearly depleted after centuries of agricultural use and peat extraction. To cover the demands, white peat is imported from Northern and Eastern Europe and Canada in increasing volumes. As the stocks will continue to decrease, and good alternatives are lacking, strategies have to be developed that ensure a lasting and sustainable supply of suitable raw material for composing substrates in professional horticulture.

This is furthermore required because the restoration of cut-over peatlands can only partly compensate for the conservation losses as a result of peat extraction. Various conservation values, including the archive value of bogs, their self regulation mechanisms, and the associated patterns, can not be restored or re-develop only over many centuries. This calls for a strict protection of remaining natural bogs.

One of the possibilities to deal with these problems is the sustainable cultivation of peat moss (*Sphagnum*) in order to replace fossil peat by fresh *Sphagnum* biomass. Potential areas for implementation include cut-over bogs, bogs that currently are in agricultural use, and the open water areas in abandoned lignite strip mines. The cultivation of *Sphagnum* will have major advantages for society and looks technically and economically feasible. Further research is, however, required.

In Finland, Canada, and Germany plant cultivation experiments with different parts of fresh Sphagnum biomass were already performed with positive results. Whereas in Canada the Peatland Ecology Research Group (PERG), sponsored by the Canadian peat industry, tests the practical introduction and management of *Sphagnum* in the field, in Germany

the optimization of growth conditions for maximal annual crop of *Sphagnum* is being investigated intensively in the laboratory. The German governmental Agency of Renewable Resources (FNR) has recognized the potential of *Sphagnum* farming and finances a three year research project "Peat moss as a renewable resource" initiated by the University of Greifswald in cooperation with the Institute of Soil Technology in Bremen and the German peat industry.

These initiatives are only the beginning for the realisation of *Sphagnum* farming. Before large-scale *Sphagnum* farming can be successfully introduced, much research still has to be done, preferably by consortia of administrative and research institutions and the peat industry. A cooperation of all interested countries will furthermore accelerate the implementation.

Call for EU cooperation in Sphagnum farming

At the IPS Congress in Tampere (06.-11.06.2004) Markku Haukioja (Biolan Oy) and Jukka Huttunen (Kasvutaito) both from the Finish peat industry invited to an open meeting about *Sphagnum* farming and about 20 interested persons from research institutions and the peat industry from 8 different countries participated. Finland, Canada, and Germany presented their activities with respect to *Sphagnum* farming.

To consolidate all interested institutions and companies and to coordinate the activities in different countries a workshop is planned at the end of this year to develop a joint EU *Sphagnum* farming project.

Herewith we call upon all parties who feel up to invest into the future. For more information and registration contact Greta Gaudig: gaudig@uni-greifswald.de

IMCG Newsletter now also available in HTML

Surf to www.imcg.net to read the Newsletter online.

Fast access and better on-screen readability

The Ramsar Wetland Conservation Award

The Ramsar Wetland Conservation Award for actions that have significantly contributed to long-term conservation and sustainable use of wetlands was established in 1996 in order to recognise and honour the contributions of individuals, organisations, and governments around the world towards promoting the conservation and wise use of wetlands. It was awarded for the first time at the 7th Meeting of the Conference of the Parties, in 1999, and for the second time at the 8th Meeting, in 2002. The third awards will be conferred at the 9th COP, in Kampala, Uganda, November 2005.

The 2005 Awards will be made in the three categories of management, science, and education, and as in the past each will be accompanied by the Evian Special Prize of US\$ 10,000, courtesy of the Danone Group (France).

Nominations are encouraged of persons, government or non-government organisations, that have taken initiatives which have contributed significantly to the long-term conservation and sustainable use of wetlands, especially those initiatives which might serve as inspirational and practical examples for others.

Nominations should reach the Secretariat of the Convention on Wetlands by 31 October 2004 at the latest, using the form attached or available upon request from the Ramsar Secretariat or on the Ramsar Web site. The Standing Committee will select the three winning individuals or organisations and the Award will be presented at the opening ceremony of the 9th Meeting of the Conference of the Contracting Parties (Kampala, Uganda), on 8 November 2005.

http://ramsar.org/key_awards_index.htm

Regional News

News from Rwanda Rwanda to join Ramsar

In the Official Gazette of the Republic of Rwanda, 1 March 2004, the government has posted its authorization for the ratification of the Ramsar Convention: "Under article one of the law n° 37/2003 of 29/12/2003, the President; the Parliament and the Senate of Rwanda have authorized the ratification of the Ramsar Convention of February 2, 1971 on wetlands of international importance. Article 2 of the same law indicates that the law comes into force on the date of its publication in the Official Gazette of the Republic of Rwanda and becomes effective in accordance with article 10 of the Protocol mentioned in article one of this law."

Rwanda has chosen its first Ramsar Site and is rapidly progressing towards joining the Ramsar family.

Source: www.ramsar.org

News from Lesotho Lesotho to join Ramsar

In its celebration of World Wetlands Day 2004, Lesotho's Ministry of Natural Resources, Water Affairs, Wetland Unit together with Lesotho National University, IUCN ROSA, national NGOs and other bodies concerning with nature gathered in a seminar at the Lesotho National Convention Centre on 2 February to mark Lesotho's commitment to nature conservation at the national and global levels. The

Lesotho population also took part in the celebration and expressed itself in different activities of the workshop. H.E. Minister of Natural Resources, Mr. Monyane Moleleki, H.E. Minister of Tourism Environment and Culture, H.E. Assistant Minister of Justice, Ms. Lebohang Nts'inyi, Human Rights, Law and Constitutional Affairs, Ms. Mpeo Mahase attended the seminar. Through this event, a declaration to join the Ramsar Convention was made and the documents related to Lesotho's accession to the Convention were signed. The Letseng-la-Letsie wetland was announced to be Lesotho's first Ramsar site.

Source: www.ramsar.org

News from China targets for wetland conservation for 2010, 2020 and 2030

The Ramsar Convention Implementation Office (State Forestry Administration) has recently formulated China's National Wetland Conservation Programme for 2002-2030, jointly working with the National Commission of Development and Reform, Ministry of Finance, Ministry of Science and Technology, Ministry of Land Resources, Ministry of Agriculture, Ministry of Water Resources, Ministry of Construction, State Environment Protection Administration, and the State Oceanic Administration.

Targets have been set for the near future, middle term and long term as follows:

Near Future (before 2010):

- Development of national facilitation mechanism and management system (including monitoring, CEPA) for wetlands;
- Stop and reverse the degradation of wetland ecosystems;
- Effective conservation of key wetlands;
- Development of facilities/institutions for 225 wetland reserves, including designation of 30 new Ramsar sites.
- Restoring at least 1.1 million ha wetlands;
- Development of pilot demonstration for wise use of wetlands in 23 sites.

Middle term (2010-2020)

- Consolidate wetland reserve networks, establish and improve legislation, institutional setting for wetlands, research and monitoring system;
- Effective conservation of 60% of natural wetlands;
- Development of facilities /institutions for 175 wetland reserves, including 120 new wetland reserves, designation of 30 new Ramsar sites;
- Restoring 190,000 ha wetlands;
- Development of pilot demonstration for wise use of wetlands in 18 sites.

Long-term (2020-2030)

- Development of a functioning legal, administrative system for wetland conservation and wise use;
- Effective conservation of 90% of nature wetlands;
- Up to 2030, number of wetland reserves reaches 713, including 80 Ramsar sites;
- Restoring 1.4 million ha wetlands;
- Firmly establish 53 demonstration sites, for the wise use and conservation

Source: www.ramsar.org

News from Chile Bad guys survey peatlands

A survey on the potential and possible commercial deposits of peat in Magallanes Region, Tierra del Fuego and adjoining islands was contracted by the Minerals Department of the regional government in extreme south Chile.

Apparently the company began working last January and is expected to deliver a first report next February. The field work, analyzing depth and quality of the peat deposits, is complemented with air and satellite photography.

The February report should give an idea of the areas with peat, estimated volume of deposits, and the type of peat.

According to the Punta Arenas press, contractors have already covered 60 to 70% of the areas marked for surveying including Navarino, Dawson and Riesco islands, and the Brunswick peninsula.

There are three options considered for the peat deposits in the area: agriculture; industry, particularly cosmetics, and fuel.

News from Canada Peatland restoration fund

Most peat extractors in Canada have already agreed on a voluntary basis to restore or reclaim their cut-over bogs, but now a fund shall ensure it really happens. After nearly 3 years of negotiations between the industry and the government peat extractors in New Brunswick (Canada) have established a fund to cover the costs of restoration. It will apply to all peatlands that are leased from the government.

Starting from 2006 peat companies will pay into the fund – up to a sum of \$750 CAN per hectare.

After completing a partial restoration or reclamation (even when extraction stops) companies can withdraw \$375 CAN per hectare and as soon the restoration project satisfied the government they get the last \$375 CAN.

(Source: IPS)

News from Ireland: Sensitive Blanket Bog in SAC Saved

An Bord Pleanála decided to refuse planning permission to two separate windfarms within the Boleybrack Mountain Special Area of Conservation (SAC site code: 2032), an internationally protected peatland in County Leitrim. This decision comes two years after the IPCC objected to one of these proposed windfarms and highlighted concerns to Leitrim County Council. The area was later designated as a Special Area of Conservation (SAC) and still the County Council ignored their responsibility to protect the bog. They gave planning permission to Airtricity Developments (Ireland) Limited to develop a windfarm of 31 turbines and to Stewart Hydro Limited to develop a windfarm of 12 turbines, both of which were located within Boleybrack Mountain SAC.

The IPCC submitted objections to these decisions to An Bord Pleanála based on a number of issues, including the incompatibility of developing windfarms on such a fragile and sensitive habitat.

In its reasons for refusal, An Bord Pleanála stated that the site of the proposed windfarm of 31 turbines “hosts extensive priority habitat designated under the EU Habitats Directive, namely upland blanket bog” and that the proposed development “would have a significant adverse environmental impact on the natural habitats of the area.”

Boleybrack Mountain SAC in County Leitrim is one of the most intact, wild expanses of upland blanket bog left in Ireland. It comprises a rich diversity of

habitats, and is dominated by active mountain blanket bog and wet heath. Active mountain blanket bog is listed as a priority habitat on the EU Habitats Directive, which means that this habitat is threatened in the European context and that Ireland has an international responsibility to conserve it adequately. The windfarms were also appealed by Action for Sustainable Energy and An Taisce.

New address for IPCC

After 21st June IPCC's new address is
Bog of Allen Nature Centre,
Lullymore, Rathangan,
Co. Kildare, Ireland
www.ipcc.ie
bogs@ipcc.ie

News from Belarus: Alexander Kozulin receives Marsh Award for Bird Conservation

Our fellow IMCG member Dr Alexander Kozulin has been awarded the Marsh Trust Award for Bird Conservation for his work to save the fen mires of Belarus, home to the core population of the Aquatic Warbler, Europe's rarest songbird.

The aquatic warbler is a star species for Belarus. It features on the country's national postage stamps and is the emblem of APB, the BirdLife International partner for Belarus. But it is also a globally threatened species.

In the 20th century, most wetlands with breeding aquatic warblers were drained, causing significant problems for the species. Recent conservation work, led by Alexander Kozulin, offers a brighter future thanks to successful and ongoing efforts to save the fen mires of Belarus that they rely on.

The aquatic warbler passes through many European countries on its way to its wintering grounds in Africa. These countries (including Senegal) are signatories to a Memorandum of Understanding and an Action Plan setting out an ambitious research and conservation programme for aquatic warblers. Belarus, for example, plans to restore 40,000 hectares of drained peatland.

Alexander Kozulin: "The story of the aquatic warbler is a nice example of how much can be achieved when people from different countries and organisations join together with one noble goal: to protect nature."

Source <http://www.rspb.org.uk/>

News from Belarus, Poland, and Ukraine: transboundary reserve

On 17-18 June 2004, the Man and the Biosphere Programme (MaB) of UNESCO invited national

experts for a working meeting concerning the establishment of a Polesie transboundary Biosphere Reserve (BR) and regional ecological network in the Polesie region shared between Belarus, Poland and Ukraine.

In 2002, the Transboundary Biosphere Reserve (BR) for Polesie was set up with the adoption of the West Polesie BR in eastern Poland, adjacent to the Shatskiy BR in Ukraine's northwestern corner. Now, the newly nominated Pribuzhskoye-Polesie BR along the Bug river floodplain in adjacent Belarus needs to be incorporated into a true Transboundary Biosphere Reserve. National experts from the Belarus Academy of Sciences, the Polish Academy of Sciences, and the Ukrainian Academy of Sciences outlined the areas that still need to be incorporated into the trilateral BR and discussed the need for zonation into the categories: core conservation zone, buffer zone, and transition zone for sustainable development. The country experts also made detailed proposals on future work, including the creation of a trilateral Steering Committee and of an advisory Scientific Council, likely to have their first meeting in autumn 2004.

The wider Polesie region contains some of Europe's richest natural treasures, in the North the large Bialowieza / Belavezhskaia Pushcha forest and swamps, shared by Poland and Belarus, with the last wild roaming European bison, or the unique Pripyat floodplain, Europe's "Amazonia," shared between Belarus and Ukraine, with its spectacular spring floods. The three countries have already designated a number of Wetlands of International Importance (or Ramsar Sites) in this region, which forms an important node in linking the drainage basins of the Baltic and Black Seas. Thus, quite some time was devoted to discussing the extent of existing ecological corridors and identifying those in need of rehabilitation.

Four (of the seven) existing Ramsar Sites in Belarus are situated close to the proposed Biosphere Reserve: Mid-Pripyat State Landscape Zakaznik, Zvanets Fen Mire, Olmany Mires Zakaznik, and Sporovsky Biological Reserve. To the east, Pripyatski National Park and Prostyr Zakaznik in the Pripyat floodplain, the Bieloie Fishfarm, and the Polesie Zapovednik (as part of the programme for rehabilitation of Chernobyl-affected areas in Belarus) could easily be included into a regional ecological network and would fulfil the criteria for Ramsar designation.

Poland is about to designate Poleski National Park as a Ramsar Site with its calcareous mires, marshes and peatlands, situated in the core zone of the West Polesie BR. Further north, Biebrza National Park was designated as a Ramsar Site in 1995, covering parts of the Biebrza floodplain, and Narwianski National Park, covering parts of the Narew floodplain, is in the process of designation. The Bug River forms the border between the three countries – parts of its floodplains, shared between Poland and Ukraine and further downstream between Poland and Belarus,

need to be included into the Trilateral Biosphere Reserve and should be designated as Ramsar Sites.

In Ukraine, Shatsk Lakes Ramsar Site is part of the existing Shatskiy BR. Two other existing Ramsar Sites, Pripjat and Stokhid River Floodplains further east, are ideally situated to be included in an ecological network for the Polesie area. They should form transboundary Ramsar Sites with areas downstream on the Belarus side. The Perebrody Peatlands, further east, for which Ramsar designation is under way, form a hydrological unit with the Olmany Mires Ramsar Site in Belarus. Thus, a transboundary Ramsar Site will soon be established. Polissia Mires is another Ukrainian Ramsar Site currently in the process of designation, situated further east along the border with Belarus.

This trilateral area, with three Biosphere Reserves, eight existing, and four Ramsar Sites in the process of designation, plus another four major wetland sites in the wider surroundings, is definitely an important European region for wetland conservation and sustainable development.

Tobias Salathé

Source: www.ramsar.org

News from the EU Conference Biodiversity and the EU

The Stakeholders' Conference Biodiversity and the EU - Sustaining Life, Sustaining Livelihoods was held in Malahide, Ireland 25-27 May 2004. On the occasion, the Countdown to 2010 initiative was launched.

The main objective of the Malahide conference was to give a clear signal that biodiversity loss is still an important issue and something has to be done about it. A Countdown concept was presented referring to all actions needed to get to the target of halting biodiversity loss in 2010. The text provides an overview of all the actions required on EU and national level to achieve by 2010, and to remind politicians and the commission about their responsibilities.

Several members of the European Habitatat Forum (EHF) were present at the meeting, including Birdlife, EEB, IUCN, Eurosite and Europarc.

Five workshops struggled about some texts, which in the end resulted in a list of objectives and targets: A

message from Malahide. Obviously this is a message for the new EU commissioner, when Walström leaves. For more info: www.countdown2010.net

Continuation of the LIFE Nature Programme

At present, the EU is discussing the shape of the new 'Financial Instrument for the Environment'. In an open letter, a number of European nature conservation organisations, many of which are members of the European Habitats Forum, have requested the continuation of the LIFE Nature programme after 2006.

The LIFE programme has been one of the most successful EU instruments for protecting and enhancing the environment. LIFE Nature has directly assisted the implementation of the Birds and Habitats Directives, particularly by supporting the management of the Natura 2000 network of protected areas and building support for these Directives at a local level in the communities directly concerned.

Over recent years, non-governmental organisations have been involved in a variety of innovative nature conservation projects across Europe such as wetland protection and projects to demonstrate environmentally-friendly farming practices in the Ebro Delta, the conservation of the Bearded Vulture in Spain, France and Greece and urgent conservation management for the Capercaillie in Scotland. LIFE funds have also played a crucial role in the implementation of Species Action Plans, primarily to conserve globally threatened birds.

Without such a LIFE fund, numerous habitats such as wetlands, bogs, many heathlands, salt pans, and marine habitats, would suffer from a lack of funding, because these habitats are not generally eligible for Rural Development or Structural Funds. Furthermore, conservation actions needed to implement the Species Action Plans for birds, which are currently a priority for funding under LIFE Nature, as well as actions for priority species under the Habitats Directive, would lose out.

The open letter urges to make provision for the continuation of the LIFE Nature fund, or a directly comparable instrument, after 2006. This is vital to ensure that species and habitats of European importance are safeguarded for future generations.

REGISTER

Please fill out the IMCG membership registration form.

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

New and recent Journals/Newsletters/Books/Reports

Ramsar Convention Handbooks for the Conservation and Wise Use of Wetlands

The 2nd edition of the Ramsar Handbooks including Guidelines adopted by the 7th and 8th Conferences of the Parties is now available.

This series of Handbooks has been prepared by the Secretariat following the 7th and 8th Meetings of the Conference of the Contracting Parties (COP7 and COP8) held in San José, Costa Rica, in May 1999 and Valencia, Spain, in November 2002. The guidelines adopted at those COPs have been prepared as a series of handbooks to assist those with an interest in, or directly involved with, implementation of the Convention at the international, regional, national, subnational and local levels.

The handbooks have been prepared in the three working languages of the Convention (English, French and Spanish) and incorporate, in addition to the guidelines adopted by the Parties, relevant material from other sources and from case studies designed to illustrate key aspects of the guidelines. Material that has been officially adopted by the COP is clearly distinguishable from that which has been added for context. The full text of most case studies can be found on the Web site of the Convention at http://ramsar.org/wurc_index.htm.

The Ramsar Convention promotes an integrated package of actions to ensure the conservation and wise use of wetlands. In recognition of these integrated approaches, the reader will find that within each handbook there are numerous signposts or cross-references to others in the series.

The handbooks can be downloaded from http://www.ramsar.org/lib_handbooks_e.htm

Source: www.ramsar.org

Revenge, C. and Y. Kura. 2003. Status and Trends of Biodiversity of Inland Water Ecosystems. Secretariat of the Convention on Biological Diversity, Montreal, Technical Series no. 11.

The Secretariat of the Convention on Biological Diversity (CBD) published this 120-page report with financial assistance by the Dutch Ministry of Foreign Affairs (DGIS). The report is broken into the following sections: the condition of and threats to inland water ecosystems; a review of inland water species richness, distribution and conservation status; inland water ecosystems and habitats identified as high conservation priority; and data gaps and information needs.

Included as well is a review of 18 other ongoing assessments of water resources and inland water biodiversity, including those by IUCN, BirdLife, WWF, the Millennium Ecosystem Assessment, CGIAR, LakeNet and others. This project was administered by Wetlands International and the Ramsar Convention Secretariat, and peer reviewed by

experts from the CBD and Ramsar secretariats, Wetlands International, and others. To find the publication on the web in PDF format go to: www.biodiv.org/doc/publications/cbd-ts-11.pdf.

To order a hard copy go to the CBD website: www.biodiv.org/

Stroud, D.A., Davidson, N.C., West, R., Scott, D.A., Haanstra, L., Thorup, O., Ganter, B. & Delany, S. (compilers) on behalf of the International Wader Study Group 2004. Status of migratory wader populations in Africa and Western Eurasia in the 1990s. International Wader Studies 15: 1-259.

The International Wader Study Group published its major review of the status of 131 populations of 55 species of migratory waders (shorebirds) in Africa and Western Eurasia in its occasional series International Wader Studies. For the East Atlantic Flyway, the review updates the assessment made by Cor Smit & Theunis Piersma in the 1980s and which was published in 1989. For other flyway systems in Africa and Western Eurasia, the review provides the first systematic population reviews. The publication contains accounts for each of the species and their populations, summarising current knowledge of population status and trends. Extensive analyses consider thematic, taxonomic and geographic status and issues. The 259 page review and supporting data can be found on WSG's web-site www.waderstudygroup.org

Lappi, S. & K. A. Byrne 2003. IEA Bioenergy Task 38 – Case Study. Greenhouse Gas Budgets of Peat Use for Energy in Ireland. Forest Ecosystem Research Group, Department of Environmental Resource Management, University College Dublin, 50 pp.

Peatlands in Ireland have accumulated large amounts of carbon from the atmosphere since the last ice age. In their natural state, peatlands act as sinks of carbon dioxide, but sources of methane. In Ireland, four million tonnes of peat is extracted annually to produce 6% of the total primary energy requirement. The combustion of peat generates greenhouse gas emissions, mainly carbon dioxide. These emissions accounted for 5.7% of the total greenhouse gas emissions in Ireland in 2001. In addition to the emissions from peat combustion, other stages of peat use contribute to the total greenhouse gas balance of peat use for energy. Peat production fields emit large amounts of carbon dioxide, but methane losses are much less significant compared to undrained peatland. Construction of lifecycle analysis of peat use for energy in Ireland would provide information of the contribution of peat use for energy to the

national greenhouse gas balance as well as the possibility to compare the greenhouse gas balance of the peat lifecycle to that of other energy sources. Such an analysis requires more information than is presently available on greenhouse gas fluxes of undisturbed raised bogs, peat production fields and industrial cutaway peatlands under different after-use management regimes.

Peat is the least carbon efficient fossil fuel producing more CO₂ emissions per energy unit than oil, natural gas or coal. The net emissions from a peat burning power plant could be reduced significantly by replacing part of the peat with biomass fuels.

Potential sources of biomass are forest residues, purpose grown energy crops, sawmill residues and recovered wood. The price of generating electricity by biomass is currently not competitive compared to the price of fossil fuels in Ireland. However, the energy markets may be subject to change in the future as a result of the effects of carbon taxation and the emission trading scheme increasing the attractiveness of biomass as an energy source.

Replacing part of the peat with recovered wood in the Edenderry power plant, which is the first of the new peat burning fluidised bed plants in Ireland, could potentially reduce the greenhouse gas emissions from the combustion process by 8-36%.

However, due to information gaps, the greenhouse gas balances of the whole lifecycles of co-firing recovered wood with peat and sole combustion of peat can only be compared qualitatively.

Available under:

www.irish-energy.ie/uploads/documents/upload/publications/IEA_Bioenergy_Agreement_Task_38_Case_Study.pdf

Environment-Friendly Use of Forest and Wetland Ecosystems: World Trends and Belarus Experience. 2003. UNDP-GEF publication. 189 p.

This report covers the conservation of mires and peatlands from a global and a Belarus perspective. Each of the two parts of this publication first considers world trends and best practices in the use of forests and peatlands. On that background, the publication then looks into how forests and peatlands are managed in Belarus.

Overview of the state and changes in the condition of the world forests and peatlands are presented in detail. For the description of forests, a recent FAO study is used, while the peatlands section builds heavily on the IMCG/IPS Wise Use of Mires and Peatlands book. Drawing from the work of the IMCG and IPS, the new UNDP-GEF publication brings examples of the leading methods of peat use in economy, its conservation and peatland restoration. It discusses aspects of peatland interdependence with climate and biological diversity, as well as the place

of peatlands in international environmental agreements.

Belarus has a lot to learn from the world experience on peatland use and conservation. In fact, Belarus has more area covered by peatlands (over 14 percent of the country) than most other countries in the region, and thus peat is an invaluable resource both for the economy, as well as for the environment. Unwise peatland use in the past has brought about widespread degradation, and restoration of peatlands as a way to stabilize micro-climate and preserve biodiversity are high on the agenda of the Government, as well as the international community active in Belarus. A 3 million dollar project on peatland restoration has been prepared recently by UNDP, Government and local NGO BirdLife Belarus, and will be considered by the GEF by the end of 2004.

Maxim Vergeichik, Program Associate on Environment, UNDP Belarus

Publications of the Peatland Ecology Research Group

The Peatland Ecology Research Group of the University of Laval has made many of their publications available as PDF downloads:

http://www.gret-perg.ulaval.ca/en_publications.html

Archive für Naturschutz und Landschaftsforschung. Vol 43, Heft 2.

This issue of the "Archives of Nature Conservation and Landscape Research" presents the outcome of a project in which the use was studied of *Phragmites* reed from fen areas rewetted with communal waste water. The articles cover the following topics:

- Growth, productivity, Nitrogen balance, and genetic diversity of the reed vegetation
- Water budget and geohydrologic situation of the fen area
- Impact on ground and surface water quality
- Effect of the rewetting on the nutrient dynamics
- Economic aspects

(in German)

For more information: <http://www.archivnatur.de/>

Or René Fronczek: fronczek@uni-greifswald.de

WetKit

WetKit is a Web-based tool kit designed to streamline access to practical tools that can help Canadians better understand and manage wetlands. WetKit showcases a wealth of wetland tools and explains how each one can help conserve wetlands and benefit. WetKit also helps users to find the tool they need, and to access that tool quickly and easily. Surf to: <http://www.wetkit.net>

IMCG Main Board

Chairman

Jan Sliva (Germany, Czech Republic)
 Technische Universitaet Muenchen, Department of Ecology, Chair of Vegetation Ecology;
 Am Hochanger 6,
 D-85350 Freising-Weihestephan, Germany;
 Tel.: + 49(0)8161 713715 / Fax: 714143
 sliva@wzw.tum.de
<http://www.weihestephan.de/vegoek/index.html>

Secretary General

Hans Joosten (Germany, Netherlands)
 Botanical Institute,
 Grimmerstr. 88,
 D-17487 Greifswald, Germany;
 Tel.: + 49 (0)3834 864128/ Fax: 864114
 joosten@uni-greifswald.de
<http://www.uni-greifswald.de/~palaeo/>

Treasurer

Philippe Julve (France)
 HERMINE Recherches sur les Milieux Naturels
 159 rue Sadi Carnot,
 59280 Armentières, France.
 Tel. + fax : + 33 (0)3 20 35 86 97
 philippe.julve@wanadoo.fr
<http://perso.wanadoo.fr/philippe.julve/>

Additional Executive Committee Member

Stuart Brooks (Scotland)
 Scottish Wildlife Trust, Cramond House, Kirk
 Cramond, Cramond Glebe Road,
 Edinburgh, EH4 6NS United Kingdom;
 Tel: +44 (0)131 312 4743 / Fax: 312 8705
 sbrooks@swt.org.uk
<http://www.swt.org.uk/>

Additional Executive Committee Member

Tatiana Minaeva (Russia)
 Wetlands International Russia Programme,
 Nikoloyamskaya Ulitsa, 19, strn.3,
 Moscow 109240 Russia;
 Tel.: + 7 095 7270939 / Fax: + 7 095 7270938
 tminaeva@wwf.ru
<http://www.peatlands.ru/>

Remaining Main Board Members

Olivia Bragg (UK)
 Geography Department, The University,
 Dundee DD1 4HN, UK;
 Tel: +44 (0)1382 345116 / Fax: +44 (0)1382 344434
 o.m.bragg@dundee.ac.uk

Piet-Louis Grundling (South-Africa)

IMCG Africa, Ihlaphosi Enviro Services cc,
 P.O. Box 912924, Silvertown 0127, South Africa;
 Tel/Fax: + 27 12808 5342
 peatland@mweb.co.za

Ronald Hofstetter MB (USA)

Department of Biology, Cox Science Center, Rm.
 259, University of Miami,
 Coral Gables, FL 33124, USA;
 Tel.: + 1 305 2846500 / Fax: + 1 305 2843039
 rhofstet@umiami.ir.miami.edu

Rodolfo Iturraspe (Tierra del Fuego, Argentina)

Alem 634, (9410) Ushuaia, Tierra del Fuego,
 Argentina;
 rodolfoiturraspe@yahoo.com
 iturraspe@tdfuego.com
<http://www.geocities.com/riturraspe>

Elena Lapshina (West-Siberia)

Department of Botany, Tomsk State University 36
 Lenin Prospekt,
 Tomsk 634050 Russia;
 Tel.: + 7 3822 410690;
 edlapshina@hotmail.com, ed@uriit.ru

Tapio Lindholm

Finnish Environment Intitute – Nature Unit
 P.O. Box 140
 Fin-00251 Helsinki, Finland
 Tel.: +358 9 4030 0729 / Fax: +358 9 4030 0791
 Tapio.Lindholm@ymparisto.fi

Barry G. Warner (Canada)

University of Waterloo, Wetlands Research Centre,
 Environmental Study Building, Waterloo,
 Ontario N2L 3G1 Canada;
 Tel.: + 1 519 8884567 / Fax: +1 519 7460658;
 bwarner@watserv1.uwaterloo.ca
<http://sciborg.uwaterloo.ca/biology/bwarner/>

Jennie Whinam (Australia)

Nature Conservation Branch
 Dept of Primary Industries, Water & Environment
 GPO Box 44; Hobart TAS 7001
 Tel.: +61 3 62 336160 / Fax: +61 3 62 333477
<http://www.parks.tas.gov.au/index.html>
 jennie.whinam@dpiwe.tas.gov.au

Leslaw Wolejko (Poland)

Botany Dept., Akad. Rolnicza,
 ul. Slowackiego 17, 71-434 Szczecin, Poland;
 Tel.: +48 91 4250252
 botanika@agro.ar.szczecin.pl or ales@asternet.pl

Meng Xianmin (China)

Mire research institute,
 College of City and Environmental Sciences
 Northeast Normal University
 No.5268, Renmin Street, Changchun 130021
 The People's Republic of China
 Tel/Fax: 0086 431 5268072
 mengxm371@nenu.edu.cn / mxm7949172@mail.jl.cn

UPCOMING EVENTS

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

The 7th INTECOL international wetlands conference

25 - 30 July 2004, Utrecht, The Netherlands

for more information visit

<http://www.bio.uu.nl/intecol/>

32nd International Geological Congress

20 - 28 August 2004, Florence, Italy

The congress hosts a symposium entitled "Peatlands: basin evolution and depository of records on global environmental and climatic changes"

for more information have a look at <http://www.32igc.org/> or contact Peter Martini pmartini@uoguelph.ca

Biodiversity of Euro-Asia Continental Wetlands

6-8 September 2004, Ulanbaator, Mongolia

For more information, surf to:

http://ramsar.org/w.n.mongolia_conference1.htm

4th European Conference on the Conservation of Wild Plants

17 - 20 th September 2004, Valencia, Spain

For more information surf to:

<http://www.nerium.net/plantaeuropa/main.htm>

IMCG Field Symposium and General assembly in South Africa

12-26 September 2004

For more information and registration form see previous IMCG Newsletters or surf to the IMCG Homepage.

Anthropogenic influence on wetlands biodiversity and sustainable management of wetlands

23-25 September 2004, Narew National Park, Poland

For more information se previous Newsletter or contact: m.jarecka@levis.sggw.waw.pl

Workshop Dissemination of ecological knowledge and practical experiences for sound planning and management in raised bogs and sea dunes

5-8 October 2004, Nijmegen, The Netherlands

The aim of the first workshop is to get an overview of practical experiences and problems encountered in LIFE-Nature and related conservation and restoration projects in raised bogs and sea dunes in the various European countries. During presentations, workshops, and two field excursions managers of nature reserves, policy makers, and scientists of different disciplines will discuss long term effects of threats (e.g. increased nitrogen deposition, drainage, and fragmentation) on these vulnerable systems, as well as current ecological knowledge, perspectives, and solutions to nature management problems. The concept of the planning and management decision tree and guidelines approach to be worked out in this LIFE Co-op project will be discussed.

For more information, contact Gert-Jan van Duinen duinen@sci.kun.nl

Coastal Ecosystems of West Africa (Biological Diversity - Resources - Conservation)

15-16 February 2005, Brussels, Belgium

For more information contact prcm@iucn.org or download the announcement:

www.imcg.net/docum/wa05.doc

IMCG Field Symposium in Tierra del Fuego

16-25 November 2005, Tierra del Fuego (Argentina)

See IMCG Newsletter 2004-1.

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