IMCG Bulletin: October 2013

Word from the Chair

Dear mire friends

The year is drawing to and end – and IMCG members are planning to end the year at high note with excursions and a field symposium in Australia. Various symposia and meetings are planned for 2014 – read more about these events in this bulletin. The November bulletin will be a special issue brought to you from Fraser Island Australia.

Keep safe and enjoy all the news from all over!!

Please send any contributions for the IMCG Bulletin by the 20th of each month.

2014 IMCG General Assembly and Field Symposium: Belarus July 2014

The 2014 IMCG Field Symposium, Congress and General Assembly will be held in Belarus from 14-26 July 2014. The Field Symposium will visit the wide variety of pristine and degraded peatlands all over Belarus, look at the results of the recent large-scale rewetting projects and discuss the perspectives of the new management initiatives taken in connection to paludiculture.

The scientific congress and the IMCG General Assembly will be held directly subsequent to the Field Symposium. Costs for the total package will be around € 800.Block these dates; more information is to follow from Hans Joosten (joosten@uni-greifswald.de).

Mires and Peat: *the new Special Volume and other latest articles*

Special Volume (13): Reed as a Renewable Resource and Other Aspects of Paludiculture
Under the Guest Editorship of Wendelin Wichtmann and John Couwenberg, this volume (2013/14) arises from the international conference "*Reed as a Renewable Resource"*, held on 14–16 February 2013 at the University of Greifswald, Germany. The articles published so far are:

- The utilisation of reed (*Phragmites australis*): a review (J.F. Köbbing *et al.*) http://mires-and-peat.net/map13/map_13_01.htm
- Reed as a renewable resource and other aspects of paludiculture: (V. Huth *et al.*) http://mires-and-peat.net/map13/map_13_00.htm
- Regulation of reed (*Phragmites australis*) by water buffalo grazing: use in coastal conservation: (W. Sweers *et al.*) http://mires-and-peat.net/map13/map_13_03.htm
- Reed as a gasification fuel: a comparison with woody fuels: (S. Link *et al.*) http://mires-and-peat.net/map13/map_13_04.htm

- The effect of an exceptionally wet summer on methane effluxes from a 15-year re-wetted fen in north-east Germany: (V. Huth *et al.)* http://mires-and-peat.net/map13/map_13_02.htm

Volume 12 (2013)

- The hydrological and geochemical isolation of a freshwater bog within a saline fen in north-eastern Alberta (S.J. Scarlett and J.S. Price) http://mires-and-peat.net/map12/map_12_04.htm

Special Volume (11): Peatlands in Balance: a Taster of the 14th International Peat Congress

- The ability of contrasting ericaceous ecosystems to buffer nitrogen leaching (C.D. Field *et al.*)
-

Find these and more at http://www.mires-and-peat.net/

News received from IMCG Regions

Australia

The IMCG is having an excursion to Fraser Island from 26 to 29 November (with some members doing research till 8 December). The 2013 IMCG Australian field symposium kicks off on 1 December at Katoomba, Blue Mountains and ends in South-West National Park, Western Tasmanian Wilderness World Heritage Area.
We wish organisers and participants all well for these two events!

New Zealand News by Bev Clarkson (ClarksonB@landcareresearch.co.nz)
National Wetland Centre
The National Wetland Trust of New Zealand (NWT) http://www.wetlandtrust.org.nz/plans to build a state-of-the-art interpretation centre, with research and educational facilities, wetland gardens and heritage trails. It will be constructed at Lake Serpentine, a 39 ha site located 20 km of Hamilton, North Island. This initiative will assist in the Trust's aim to increase public knowledge, appreciation, protection and restoration of wetlands throughout New Zealand. The site has three main wetland types:

- Peat lake and margins
- Kahikatea (*Dacrycarpus dacrydioides*) semi-swamp forest
- Restiad bog (characterised by species in the angiosperm family Restionaceae).

Several wetland 'gardens' representing other wetland types are planned to show visitors a range of wetland ecosystems from across New Zealand. These include:

- Estuary
- Braided river
- Geothermal wetland
- Alpine tarn
- Tussockland (*Chionochloarubra*)
- Treatment wetland / lowland sedgeland
- Cultural wetland (resources of significance to Maori)

As the New Zealand biota is highly susceptible to invasive mammals such as possums, rats, mustelids, cats and dogs, a predator-proof fence was completed in June 2013 to provide site security, and enable pest eradication and re-introduction of a range of native wildlife. The current priority is to raise funds to build the interpretation centre.

For further information contact Executive Officer, Karen Denyer, karen.denyer@wetlandtrust.org.nz

Lake Serpentine, site of the proposed national wetland interpretation centre. Photo: NWT

Canada

A symposium on ***Responsible management of peatlands and the implications of the industrial sector*** are scheduled from 19-20th February 2014 at Université Laval, Québec city, Canada. For more information visit: http://www.gret-perg.ulaval.ca/ . It will be chaired by Line Rochefort and Jonathan Price.

Africa

Who might visit your peatland?

We share mires with many special people as well. This colourful photograph from Anton Linström (wetearth@telkomsa.net) illustrates the interaction of local communities with mires in **Rwanda**: Laundry, fishing and transport by a dugout – *mires: provide more than just peat!*.

Have you any recent interesting visitors at a mire– please send us a photo: peatland@mweb.co.za?

South Africa honours its wetland community

The annual South African National Wetland Awards were awarded at the National Wetland Indaba held at Cape St Francis, South Africa on 22 October 2013. The awards event was hosted by the South African Wetland Society as part of the opening ceremony of the annual National Wetland Indaba. This prestigious event recognises outstanding contributions and achievements of those working in wetlands to showcase successful or innovative projects to the public. The awards are unique bronze wattled crane sculptures designed by sculptor Sarah Richards. The awards highlight achievements in: better management of wetlands through stewardship, development of skills for improved wetland management and conservation, as well as achievements in wetland scientific research.

The recipients of the 2013 awards were:

- Wetland Stewardship: this award is shared by Mr Craig Cowan and Mr Dough Woods for successful wetland rehabilitation projects (Dough played a key role in restoration work at the Ntsikeneni mire – a Ramsar site).
- Wetland Education and Skills Development: The Water Research Commission (represented by Mr Bonani Madikizela) for funding and publication of the Wet-Management Series
- Wetland Science and Research: Dr Heather for a range of wetland research projects and related scientific publications

The Deputy Minister of Water and Environmental Affairs, Ms Rejoice Thizwilondi Mabudafhasi, who opened the Indaba and handed out the awards to the recipients, was honoured with a Special National Award for furthering wetland conservation on the highest political levels in the past 14 year in South Africa. She is particularly concerned about the plight of peatlands and their communities in South Africa.

Photo: The Deputy Minister (middle) receiving the special award from Fred Ellery (IMCG Honorary member - right) after Piet-Louis Grundling (IMCG and SA Wetland Society Chair – left) made the announcement.

Photo: Pontso Pakkies

News from UK-Ireland by Olivia Bragg (o.m.bragg@dundee.ac.uk)

There have been so many conferences, symposia, workshops etc. on peatlands in these islands recently that everybody must have attended at least one meeting and been unable to get to everything. A highlight that I had to miss was the Irish Peat Society's Study Tour and Seminar in Killarney (14–16 October), which promised to be a great occasion, see http://www.floraculture.eu/?p=14453. If you were there and could write a few lines about it for next month's *IMCG Bulletin*, please get in touch! I did make it to the 2013 conference of the IUCN Peatland (Advocacy) Programme in York (10–12 September), which sold out well in advance and served *Bog Asphod Ale* this year. If you missed that and would like to catch up with what went on you can find presentations, workshop materials and posters at http://www.iucn-uk-peatlandprogramme.org/resources. Significant news that opened the final day was a Scottish Government decision to extend its new *Green Stimulus Peatland Restoration Project*, which aims 'to reduce carbon released into the atmosphere by helping to restore degraded peatlands'. Where Scotland goes, perhaps other governments will follow?

Peatlands and Global Change: Guidelines for Mitigation by Conservation, Restoration and Sustainability: Call for Abstracts

Session SSS9.10 at the EGU General Assembly, 27 April to 02 May 2014, Vienna (Austria).

Convenor: Miguel Geraldes (Portugal) assisted by Antonio Martínez Cortizas (Spain) and Olivia Bragg (UK)

Peatlands and organic soils contain 30 percent of the world's soil carbon but only cover 3 percent of the Earth's land area, vulnerable to drainage, land-use change, and peat fires. They provide many important ecosystem services. Through conservation, restoration and better management, organic soils and peatlands can make a substantial contribution to enhance those services, e.g. to store carbon.

In this session we would especially like to discuss:

- peaty soil formation and weathering rates;
- total denudation rates including erosion processes;
- mineral formation and transformation rates;
- chronosequences; and
- soil-time-climate relationships, in both modern and palaeo-environmental contexts

To browse this and all other sessions, and to submit an abstract, go to:
http://meetingorganizer.copernicus.org/EGU2014/sessionprogramme
To find Session SSS9.10 (more quickly!) choose the topic groups: "*Soil System Sciences*", then "*Soil, Environment and Ecosystem Interactions".*

News from all over

UK: Pilot Peatland Code launched
The Payments for ecosystem services (PES) pilot project "Peatland carbon code" has launched a pilot phase Peatland Code, designed to pay for the restoration and re-wetting of degraded peatlands across the UK. A Final Report of the project describes research into the rationale and basis for the development of a UK Peatland Code. The Code was launched in September2013, at the start of an 18---month pilot phase of operation, in which the Code will be further developed. You can view the draft Code http://www.iucn-uk-peatlandprogramme.org/peatland-code and the final report to Defra http://randd.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&ProjectID=18642&FromSearch=Y&Publisher=1&SearchText=payments .

UK: IUCN Peatland Newsletter
The IUCN Peatland Programme September Newsletter 2013can be accessed under: http://www.iucn-uk-peatlandprogramme.org/resources

Funding boost for Scottish peatland habitats
The Scottish Government has announced that it will provide £15 million to support and protect peatland habitats. The money will go to restoration projects with funds being distributed over the next two years. Environment and Climate Change Minister Paul Wheelhouse said: "Our peatlands cover almost a fifth of Scotland and are key habitats for much of our wildlife. We also know that peatlands play a role in carbon capture helping reduce our greenhouse gas emissions and they can fulfill an important part in natural flood management as a means of slowing the flow of water downstream within a river catchment. If we continue to improve the condition of our peatlands and bogs, then our habitats will undoubtedly experience the benefit, as will our economy."This money will go towards vital work to preserve and safeguard Scotland's peatlands. There's already a lot of good work going on to restore them and it is important that we continue this trend."
For more information: http://www.snh.gov.uk/climate-change/what-snh-is-doing/green-stimulus-peatland-restoration/

Germany: the new MoorFutures 2.0
The MoorFutures standard was launched in 2011 to support peatland restoration by the issuance of carbon credits to suit specific regional conditions in the German federal state of Mecklenburg-Vorpommern. In a second phase (MoorFutures 2.0) the quantification of additional ecosystem services that benefit from peatland rewetting was pursued for the Polder Kieve, the worldwide first peatland rewetted solely by funds generated by selling carbon credits from peatland rewetting.

A new report describes the development and application of methods for quantifying water purification, evapotranspiration cooling, flood mitigation, groundwater retention and gains in mire typical biodiversity. Furthermore the report discusses the possibilities to apply standard and methodologies in other areas and countries.

A German version of the report can be downloaded under:
http://www.bfn.de/fileadmin/MDB/documents/service/skript350.pdf
An English version will probably be available in December 2013.

Germany: Peatland research project "VIP" nominated for German Sustainability Award 2013
The peatland research project "Vorpommern Initiative Paludikultur" (VIP) of Greifswald University has been nominated for the German Sustainability Award, Europe's most prestigious award in the field of sustainable development.

The VIP-research project aims to develop and implement sustainable and productive utilization of rewetted peatlands: paludiculture (*palus* lat. swamp, *cultura* lat. cultivation), an alternative to conventional agriculture on drained organic soils. The currently widespread practice of draining peatlands for agriculture causes peat

oxidation with disastrous effects such as soil degradation, subsidence and disproportionally high greenhouse gas emissions. Farmers are confronted with high drainage costs, yields drop and ultimately productive land is lost. Paludiculture combines climate protection, preservation of land and production of renewable resources e.g. for energy.

Its promising and convincing concept earned VIP one of three nominations for the German Sustainability Award 2013. The final winner will be declared on 22 November in Düsseldorf with more than 2000 high profile guests attending. The German Sustainability award was established in 2008 and in 2012 outstanding research promoting "sustainability made in Germany" at national or international level was awarded for the first time.

For more information:
http://www.paludikultur.de/index.php?id=vip ; http://www.paludikultur.de/

Europe's largest onshore wind park set for Ireland
Plans have been unveiled to build a 1 GW onshore wind farm in the Irish midlands. Bordna Mona, the semi-state Irish energy company, intends to lodge a planning application by 2015 for the facility, which it claims will be the largest onshore wind farm in Europe, when completed. It will be based on peatland and cutaway bogs in the Offaly and North Leinster area. The $1.38bn (€1bn) project will provide wind energy to the British and European electricity markets and much of which would be on line by 2020.
http://www.powerengineeringint.com/articles/2013/10/europe-s-largest-onshore-wind-park-set-for-ireland.html

UNDP launches new project on Belarus' peatland conservation
A new project "Clima East: Conservation and Sustainable Management of Peatlands in Belarus for Reduction of Greenhouse Gas Emissions and Adaption of Peatland Ecosystems to Climate Change" will be implemented in Belarus' two largest fen peatlands – Zvanets and Sporovskoye. The four-year project will be financed (€1.49 million) by the EU and implemented by the United Nations Development Program. The project involves the harvesting, processing and use of biomass and the restoration of the hydrological regime of the peatlands.
http://news.belta.by/en/news/society?id=729298

USA report: comments requested
The US Environmental Protection Agency's Science Advisory Board (SAB) recently released the report "Connectivity of Streams and Wetlands to Downstream Waters: A Review and Synthesis of the Scientific Evidence". The report examines the effects that headwater and ephemeral streams and wetlands have on larger downstream waters. It will contribute to the scientific foundation for the role played by headwater and ephemeral streams and wetlands within watersheds and will inform future water resource policies and priorities, including pending Clean Water Act rulemaking defining which waters will be "Waters of the United States" protected under the 1972 Clean Water Act and related state laws.
For the full Connectivity Report, including Executive Summary and Literature Cited, click http://yosemite.epa.gov/sab/sabproduct.nsf/46963ceebabd621905256cae0053d5c6/7724357376745f48852579e60043e88c!OpenDocument .
For detailed directions for submitting oral and written comments, click http://www.gpo.gov/fdsys/pkg/FR-2013-09-24/pdf/2013-23198.pdf .

IPCC accepts Wetlands Supplement!
During the 37th Session of IPCC (14 - 18 October 2013) the Wetlands Supplement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories (2006 IPCC Guidelines) was accepted. This is an important step to implement peatland rewetting under the Kyoto protocol, as decided by the UNFCCC in 2012.

The supplementary methodological guidance introduces changes to the estimation and reporting of greenhouse gas fluxes according to the 2006 IPCC Guidelines in all land-use categories (Forest Land, Cropland, Grassland, Wetlands, Settlements, and Other Land), some sources of methane (CH_4) and nitrous oxide (N_2O)

emissions from managed land in the Agriculture, Forestry and Other Land Use (AFOLU) Sector, and CH_4 and N_2O emissions from wastewater treatment (Constructed Wetlands for Wastewater Treatment) in the Waste Sector.

The Wetlands Supplement is organized into the following chapters:

- Chapter 2: Drained Inland Organic Soils
- Chapter 3: Rewetted Organic Soils
- Chapter 4: Coastal Wetlands
- Chapter 5: Inland Wetland Mineral Soils
- Chapter 6: Constructed Wetlands for Wastewater Treatment
- Chapter 7: Cross-Cutting Issues and Reporting

In particular, Chapter 2 gives new guidance not contained in the 2006 IPCC Guidelines by providing methodologies and emission factors for: CH_4 emissions from drainage ditches, off-site CO_2 emissions associated with dissolved organic carbon (DOC) release from organic soils to drainage waters; and CO_2, CH_4 and CO emissions from peat fires.

The accepted Wetlands supplement can be found under:
http://www.ipcc.ch/meetings/session37/Doc_8b_Rev_2_Accepted_Report_Wetlands.pdf

Recent scientific publications: Peatland conservation

Every month a wealth of scientific papers are published, many of which have relevance for peatland management and mire conservation. In this new column we want to present the title and the URL of a selection of these papers. The selection does not aim at completeness and will inevitably be biased by the (wide…) interest of the compiler (Hans Joosten). If you want to share papers that you fear otherwise would be missed, please send title and URL to joosten@uni-greifswald.de

Factors affecting the re-vegetation of abandoned extracted peatlands in Estonia: a synthesis from field and greenhouse studies: http://www.kirj.ee/public/Ecology/2013/issue_3/ecol-2013-3-192-211.pdf
Evening methane emission pulses from a boreal wetland correspond to convective mixing in hollows: http://onlinelibrary.wiley.com/doi/10.1002/jgrg.20082/abstract
Gas exchange in wetlands with emergent vegetation: The effects of wind and thermal convection at the air-water interface: http://onlinelibrary.wiley.com/doi/10.1002/jgrg.20099/abstract
Invasion of Old World Phragmites australis in the New World: precipitation and temperature patterns combined with human influences redesign the invasive niche: http://onlinelibrary.wiley.com/doi/10.1111/gcb.12295/abstract
El Niño, the 2006 Indonesian peat fires, and the distribution of atmospheric methane: http://onlinelibrary.wiley.com/doi/10.1002/grl.50937/abstract
Island biogeography of tropical alpine floras: http://onlinelibrary.wiley.com/doi/10.1111/jbi.12212/abstract
Quantitative reconstruction of mid- to late-Holocene climate in NE China from peat cellulose stable oxygen and carbon isotope records and mechanistic models: http://hol.sagepub.com/cgi/content/abstract/23/11/1507
A palynological contribution to the environmental archaeology of a Mediterranean mountain wetland (North West Apennines, Italy): http://hol.sagepub.com/cgi/content/abstract/23/11/1517
Forest disturbance, arboriculture and the adoption of rice in the Kelabit Highlands of Sarawak, Malaysian Borneo: http://hol.sagepub.com/cgi/content/abstract/23/11/1528
Evidence of moist niches in the Bolivian Andes during the mid-Holocene arid period: http://hol.sagepub.com/cgi/content/abstract/23/11/1547
High-resolution palynology, climate change and human impact on a late Holocene peat bog on HaidaGwaii, British Columbia, Canada: http://hol.sagepub.com/cgi/content/abstract/23/11/1572

Postglacial spatiotemporal peatland initiation and lateral expansion dynamics in North America and northern Europe: http://hol.sagepub.com/cgi/content/abstract/23/11/1596
Fostering synergies between ecosystem services and biodiversity in conservation planning: A review: http://www.sciencedirect.com/science/article/pii/S000632071300205X
Defining the burden of proof in conservation: http://www.sciencedirect.com/science/article/pii/S0006320713002267
Hydrological modelling of the Iberá Wetlands in southeastern South America: http://www.sciencedirect.com/science/article/pii/S002216941300629X
A centennial-scale record of vegetation and climate variability from 312 to 240 ka (Marine Isotope Stages 9c–a, 8 and 7e) from TenaghiPhilippon, NE Greece: http://www.sciencedirect.com/science/article/pii/S0277379113003041
The record of hydroclimatic changes in the sediments of a kettle-hole in a young glacial landscape (north-central Poland): http://www.sciencedirect.com/science/article/pii/S1040618213007696
Latitudinal shifts in species interactions interfere with resistance of southern but not of northern bog-plant communities to experimental climate change: http://onlinelibrary.wiley.com/doi/10.1111/1365-2745.12158/abstract
Effectiveness of ditch blockage for restoring hydrologic and soil processes in mountain peatlands: http://onlinelibrary.wiley.com/doi/10.1111/rec.12053/abstract
Effect of nutrient enrichment on $\delta^{13}CH_4$ and the methane production pathway in the Florida Everglades: http://onlinelibrary.wiley.com/doi/10.1002/jgrg.20122/abstract
Effects of water level via controlling water chemistry on revegetation patterns after peat mining: http://link.springer.com/article/10.1007/s13157-013-0490-1
Effect of water management on interannual variation in bulk soil properties from the eastern coastal Everglades: http://link.springer.com/article/10.1007/s13157-013-0393-1
Soil organic carbon and its fractions in relation to degradation and restoration of wetlands on the Zoigê Plateau, China: http://link.springer.com/article/10.1007/s13157-013-0487-9
Recent trends in satellite vegetation index observations indicate decreasing vegetation biomass in the southeastern saline Everglades wetlands: http://link.springer.com/article/10.1007/s13157-013-0483-0
Above-ground net primary production from vascular plants shifts the balance towards organic matter accumulation in restored Sphagnum bogs: http://link.springer.com/article/10.1007/s13157-013-0438-5
Exchange of the greenhouse gases methane and nitrous oxide between the atmosphere and a temperate peatland in Central Europe: http://link.springer.com/article/10.1007/s13157-013-0448-3
Influence of surface water mineral nutrition on the plasticity of Sarracenia purpurea in Sphagnum fens, marl wetlands, and sand savannahs: http://link.springer.com/article/10.1007/s13157-013-0419-8
Increased methane emissions by an introduced Phragmites australis lineage under global change: http://link.springer.com/article/10.1007/s13157-013-0417-x
Evaluation of design-based sampling options for monitoring stream and wetland extent and distribution in California: http://link.springer.com/article/10.1007/s13157-013-0429-6
Oil palm plantations and transboundary haze: Patronage networks and land licensing in Indonesia's peatlands: http://link.springer.com/article/10.1007/s13157-013-0423-z
Comparing bird community composition among Boreal wetlands: Is wetland classification a missing piece of the habitat puzzle?:http://link.springer.com/article/10.1007/s13157-013-0421-1
Catastrophic dieback of Cyperus papyrus in response to geochemical changes in an east Mediterranean altered wetland: http://link.springer.com/article/10.1007/s13157-013-0434-9
A spatiotemporal remotely-sensed assessment of peat covered areas using airborne radiometrics: http://link.springer.com/chapter/10.1007/978-3-642-32408-6_52

Influence of artificial channels on the source and extent of saline water intrusion in the wind tide dominated wetlands of the southern Albemarle estuarine system (USA): http://link.springer.com/article/10.1007/s12665-013-2834-9
Distribution patterns and environmental correlates of water mites (Hydrachnidia, Acari) in peatland microhabitats: http://link.springer.com/article/10.1007/s10493-013-9692-8
To what extent do food preferences explain the trophic position of heterotrophic and mixotrophic microbial consumers in a Sphagnum peatland?:http://link.springer.com/article/10.1007/s00248-013-0262-8
Ecology of testate amoebae in peatlands of central China and development of a transfer function for paleohydrological reconstruction: http://link.springer.com/article/10.1007/s10933-013-9726-6
Diurnal dynamics of the microbial loop in peatlands: structure, function and relationship to environmental parameters: http://link.springer.com/article/10.1007/s10750-013-1582-x
How wetlands affect floods: http://link.springer.com/article/10.1007/s13157-013-0473-2
Shoreabalangeran and Dyerapolyphylla (syn. Dyeralowii) as tropical peat swamp forest restoration transplant species: effects of mycorrhizae and level of disturbance: http://link.springer.com/article/10.1007/s11273-013-9302-x
Carbon sequestration in freshwater wetlands in Costa Rica and Botswana: http://link.springer.com/article/10.1007/s10533-012-9819-8
Vegetation controls methane emissions in a coastal brackish fen: http://link.springer.com/article/10.1007/s11273-013-9304-8
Home-range use and activity patterns of the Red Langur (Presbytis rubicunda) in Sabangautropical peat-swamp forest, Central Kalimantan, Indonesian Borneo: http://link.springer.com/article/10.1007/s10764-013-9715-7
Spatial and temporal variability of dissolved organic matter quantity and composition in an oligotrophic subtropical coastal wetland: http://link.springer.com/article/10.1007/s10533-013-9826-4
Comparisons of wetland and drainage lake influences on stream dissolved carbon concentrations and yields in a north temperate lake-rich region: http://link.springer.com/article/10.1007/s00027-013-0305-8
From economic to environmental sustainability: the forest management debate in 20th century Finland and Sweden: http://link.springer.com/article/10.1007/s10668-013-9442-4
Nutrient resorption of two evergreen shrubs in response to long-term fertilization in a bog: http://link.springer.com/article/10.1007/s00442-013-2784-7
Reducing emissions from land use in Indonesia: motivation, policy instruments and expected funding streams: http://link.springer.com/article/10.1007/s11027-013-9502-y
Evaluation of wireless sensor networks (WSNs) for remote wetland monitoring: design and initial results: http://link.springer.com/article/10.1007/s10661-013-3424-8
Methane emissions and production potentials of forest swamp wetlands in the eastern Great Xing'an Mountains, Northeast China: http://link.springer.com/article/10.1007/s00267-013-0161-2
Nitrogen, phosphorus, carbon, and suspended solids loads from forest clear-cutting and site preparation: Long-term paired catchment studies from Eastern Finland: http://link.springer.com/article/10.1007/s13280-013-0439-x
Quantifying climate change mitigation potential in the United States Great Plains wetlands for three greenhouse gas emission scenarios: http://link.springer.com/article/10.1007/s11027-013-9500-0
The growth and nutrients status of conifers on ash-treated cutaway peatland: http://link.springer.com/article/10.1007/s00468-013-0929-2
Species richness and rarity of crane flies (Diptera, Tipuloidea) in a boreal mire: http://link.springer.com/article/10.1007/s10841-013-9593-5
Waterlogging under simulated late-winter conditions had little impact on the physiology and growth of Norway spruce seedlings: http://link.springer.com/article/10.1007/s13595-013-0325-5

Low carbon emission development strategies for Jambi, Indonesia: simulation and trade-off analysis using the FALLOW model: http://link.springer.com/article/10.1007/s11027-013-9485-8
Humification degree of peat and its implications for Holocene climate change in Hani peatland, Northeast China: http://link.springer.com/article/10.1007/s11631-013-0649-8
Permafrost distribution drives soil organic matter stability in a subarctic palsa peatland: http://link.springer.com/article/10.1007/s10021-013-9652-5
Biomass yield and greenhouse gas emissions from a drained fen peatland cultivated with Reed Canary Grass under different harvest and fertilizer regimes: http://link.springer.com/article/10.1007/s12155-013-9316-5
Dissolved organic carbon and total dissolved nitrogen production by boreal soils and litter: the role of flooding, oxygen concentration, and temperature: http://link.springer.com/article/10.1007/s10533-013-9903-8
Long-term water table manipulations alter peatland gaseous carbon fluxes in Northern Michigan: http://link.springer.com/article/10.1007/s11273-013-9320-8
Reviewing the carbon cycle dynamics and carbon sequestration potential of Cyperus papyrus L. wetlands in tropical Africa: http://link.springer.com/article/10.1007/s11273-013-9314-6
Open top chambers and infrared lamps: A comparison of heating efficacy and CO_2/CH_4dynamics in a northern Michigan peatland: http://link.springer.com/article/10.1007/s10021-013-9646-3
Greenhouse gas emissions from southward transplanted wetlands during freezing-thawing periods in Northeast China: http://link.springer.com/article/10.1007/s13157-013-0463-4
Snow cover manipulation effects on microbial community structure and soil chemistry in a mountain bog: http://link.springer.com/article/10.1007/s11104-012-1547-2
Farm-level assessment of CO_2 and N_2O emissions in Lower Saxony and comparison of implementation potentials for mitigation measures in Germany and England: http://link.springer.com/article/10.1007/s10113-012-0364-8
Mitigation of greenhouse gas emissions from an abandoned Baltic peat extraction area by growing reed canary grass: life-cycle assessment: http://link.springer.com/article/10.1007/s10113-012-0355-9
Actinobacteria community structure in the peat profile of boreal bogs follows a variation in the microtopographical gradient similar to vegetation: http://link.springer.com/article/10.1007/s11104-012-1546-3
Soil–solution partitioning of DOC in acid organic soils: results from a UK field acidification and alkalization experiment: http://onlinelibrary.wiley.com/doi/10.1111/ejss.12089/abstract
Effects of permafrost thaw on carbon emissions under aerobic and anaerobic environments in the Great Hing'an Mountains, China: http://www.sciencedirect.com/science/article/pii/S0048969713011212
Macrophyte loss drives decadal change in benthic invertebrates in peatland drainage ditches: http://onlinelibrary.wiley.com/doi/10.1111/fwb.12252/abstract
Autumn warming reduces the CO2 sink of a black spruce forest in interior Alaska based on a nine-year eddy covariance measurement: http://onlinelibrary.wiley.com/doi/10.1111/gcb.12434/abstract
Salinity affects microbial activity and soil organic matter content in tidal wetlands: http://onlinelibrary.wiley.com/doi/10.1111/gcb.12431/abstract
Parks versus payments: reconciling divergent policy responses to biodiversity loss and climate change from tropical deforestation: http://iopscience.iop.org/1748-9326/8/3/034028/article
The effects of fire on the thermal stability of permafrost in lowland and upland black spruce forests of interior Alaska in a changing climate: http://iopscience.iop.org/1748-9326/8/3/035030/article
Multi-decadal degradation and persistence of permafrost in the Alaska Highway corridor, northwest Canada: http://iopscience.iop.org/1748-9326/8/4/045013

Retrieval of the surface evapotranspiration patterns in the alpine grassland–wetland ecosystem applying SEBAL model in the source region of the Yellow River, China:
http://www.sciencedirect.com/science/article/pii/S030438001300433X

Please send your contribution to the **IMCG Bulletin** by the 20th of each month.