IMCG Bulletin: March 2016

INTERNATIONAL MIRE CONSERVATION GROUP

www.imcg.net

Word from the Chair

Dear mire friends

Just a short note from me to wish our friends in the North a beautiful spring. Here in the Southern Hemisphere the severe drought continues in places south as southern Africa but at least the days are cooler. The impact of the drought will be more noticeable in our wetlands as our winters are mostly drier and local communities and farmers will depend more than ever this winter on them for water and fodder.

Are severe weather events impacting on mires in your region or country? Please provide us with a short contribution and a few photos describing the impact.

Please send your April contribution by 6 May 2016 to Piet-Louis Grundling at peatland@mweb.co.za.

Mires and Peat

Mires and Peat is the open-access peer reviewed journal of IMCG and the International Peat Society (IPS). Find it online at http://mires-and-peat.net/ and in the *Thomson Master Journal List* (*Web of Science*) – **2014 Impact Factor 0.806**.

Recent articles include:

1. **Summertime greenhouse gas fluxes from an urban bog undergoing restoration through rewetting** (A. Christen, R.S. Jassal, T.A. Black, N.J. Grant, I. Hawthorne, M.S. Johnson, S.-C. Lee and M. Merkens) [Volume 17 Article 03]
2. **Greenhouse gas emission factors associated with rewetting of organic soils** (D. Wilson, D. Blain, J. Couwenberg, C.D. Evans, D. Murdiyarso, S.E. Page, F. Renou-Wilson, J.O. Rieley, A. Sirin, M. Strack and E.-S. Tuittila) [Volume 17 Article 04]
3. **Spontaneous revegetation of cutaway fens: can it result in valuable habitats?** (A. Priede, A. Mežaka, L. Dobkeviča and L. Grīnberga) [Volume 18 Article 06]
4. **Loss of the soil carbon storage function of drained forested peatlands** (C. Wüst-Galley, E. Mössinger and J. Leifeld) [Volume 18 Article 07]

Send your new manuscripts on **any topic** relating to mires, peatlands and peat to the Editor-in-Chief o.m.bragg@dundee.ac.uk, for:
Please send **ALL SUBMISSIONS**, whether for a special volume or a standard volume, to the Editor-in-Chief o.m.bragg@dundee.ac.uk in the first instance, for:

- friendly editorial management by eminent peatland specialists (O.M. Bragg, R.S. Clymo, S.N.P. Glatzel, A.P. Grootjans, P.M. Jones and J.O. Rieley);
- minimal publication delays (the average turnaround time from submission to publication is currently less than 230 days); and
- free global exposure of your work in an ISI/IF journal.

News from our regions

New Zealand news

Bev Clarkson: Clarksonb@landcareresearch.co.nz

The summer 2016 edition of *Wet and Wild*, newsletter of the National Wetland Trust, is now available. It summarises recent government initiatives to manage freshwater ecosystems within environmental limits to improve water quality. These reforms recognise the key role of wetlands (via protection, restoration, and creation) in keeping downstream rivers and lakes clean and healthy. The 2014 National Policy Statement for Freshwater Management (NPS-FM) sets out the objectives and policies for freshwater management, and guidance, measures (attributes) and tipping points will be developed over the next couple of years to protect the significant values of all wetlands. The newsletter also features two mires in northern South Island: Mangarakau Mire, a nationally important wetland to visit; and Mapua Wetland a restoration project of the local primary school community.

Presentations and workshop pdfs from the recent 2016 National Wetland Restoration Symposium have been posted on the National Wetland Trust website (pdfs).

Scotland

Daisy Whytock: daisy.whytock@ea-cei.org.uk

East Ayrshire Coalfield Environment Initiative: peatland enhancement programme

Since 2013, the East Ayrshire Coalfield Environment Initiative (CEI) have been improving raised and blanket mire habitat in the Coalfields through the Nature Network and EcoCo LIFE (LIFE13 BIO/UK/000428) projects. To date, the projects have delivered 350 hectares of habitat enhancement work across four sites, with more in the pipeline for 2016-17. The CEI have employed a range of enhancement techniques, including constructing peat and plastic piling dams, trench bunds, removing forestry and clearing scrub. CEI staff, partners and our team of volunteers are helping to survey habitat across the coalfields area, monitoring our enhancement sites and collecting hundreds of biological records.

The CEI has worked with partners the RSPB over several years to enhance the blanket mire habitat within the Airds Moss RSPB reserve. Airds Moss is designated as being of international importance, both for its blanket mire habitat and the bird species that can be found there including hen harrier and golden plover. There have been no less than 5 phases of enhancement work carried out (the first three phases were complete by RSPB), with a sixth phase completed in February 2016.

Gerry McAuley of RSPB Scotland said “this has been a fantastic project to restore the blanket bog in a location where much of much of this extremely valuable habitat has been destroyed, damaged or is under constant threat. We are extremely grateful to CEI for their hard work on our behalf and this has been a great example of partnership working at its best.”

The CEI also run an education programme and will be taking local school pupils onto Airds Moss in 2016 to learn about the habitat and the amazing wildlife found there. We will also continue to monitor water levels, vegetation and wildlife at our enhancement sites with the help of our team of volunteers. The East Ayrshire Coalfield Environment Initiative (CEI) is a partnership between local authority and conservation bodies, working together to enhance, conserve and promote the environment in East Ayrshire. The CEI’s habitat enhancement

work is kindly supported by Scottish Natural Heritage, the Scottish Environmental Protection Agency, East Ayrshire Council, and with the contribution of the LIFE+ financial instrument of the European Community.

A biological survey in the Airds Moss

Blanket bog restoration: blocking of drains

Brussels

Franziska Tanneberger: tanne@uni-greifswald.de

Integrate peatlands into EU policies: Workshop on better solutions to manage peatlands in the EU framework

A few months after conclusion of the Paris agreement on Climate Change, a workshop in Brussels on 19th April 2016 addresses the importance of peatlands and organic soils in the European Union and its Member States for biodiversity and climate change. "Peatland ecosystems are still suffering from the Cinderella syndrome", Professor Hans Joosten, Greifswald University stated. "They contain disproportionally more organic carbon than all other terrestrial ecosystems and emit enormous amounts of CO2 when drained." Furthermore, they provide habitats for specially adapted and rare species strictly protected by the EU's bird and habitat directives. And yet, when it comes to policymaking – climate policymaking, in particular – peatlands remain largely out of sight. This leads to poor protection and conservation.

Within the project '*Peatlands in the EU Regulatory Environment*' the Michael Succow Foundation, Partner in the Greifswald Mire Centre (GMC), and Silvestrum have assessed the impact of EU law — on the environment, agriculture, and energy — on peatlands and organic soils in Member States, with special emphasis on case studies for Poland and Estonia. They brought together senior officers from the EU Commission, Member States' governments, NGOs, research institutes and cooperates to call for joint action to better integrate peatland management and conservation into EU policies as instruments to improve their status across Member States.

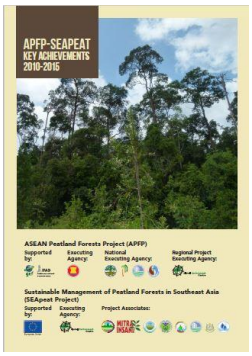
Delegates at the EU policy workshop

Southeast Asia

Noor Azura Ahmad: azura@gec.org.my

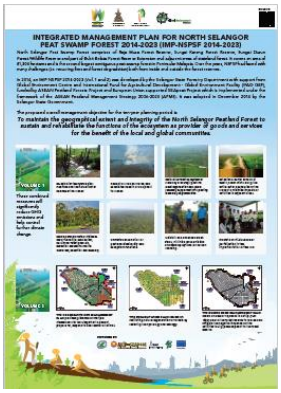
APFP-SEApeat Key Achievements

The APFP and SEApeat projects were two peatland conservation and sustainable management projects in Southeast Asia, involving all 10 ASEAN countries in a bid to improve the protection of existing peatlands in the region. Supported by GEF/IFAD and EU respectively, they were completed recently, in 2014 and 2015. The key achievements of the two interrelated projects have been documented in a booklet which can be downloaded via http://www.aseanpeat.net/view_file.cfm?fileid=540.



Posters for download

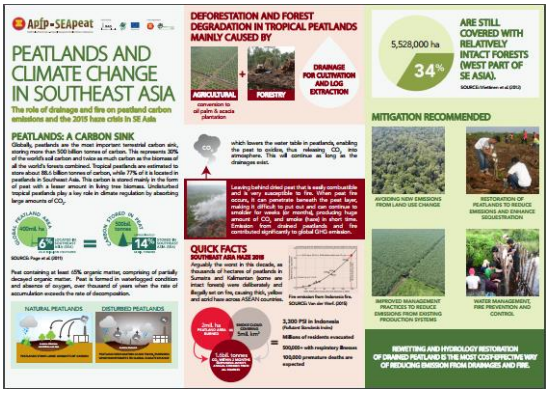
New posters are available for download from ASEANpeat Resource Page:



IMP for North Selangor Peat Swamp Forest 2014-2023 (3.85MB)

Newly Discovered Mangrove Peat in Koh Kong, Cambodia (3.58MB)

Best Management Practices for Communities Living on Peatlands (5.9 MB)



Peatlands and Climate Change in Southeast Asia (1.69MB)

News snippets

Collated by Hand Joosten: joosten@uni-greifswald.de

New Structure for the IPS

The Executive Board of the International Peatland Society IPS decided on a new IPS structure involving the replacement of the existing ten commissions with three commissions on environmental, economic and social topics, and the appointment of a senior executive charged with acquiring funds for projects and representing the IPS at meetings of international bodies and conventions. The three commissions will be supported by expert groups and project groups, and chairs/coordinators will be appointed by the Executive Board in August. The transition period to a project-oriented Society will take approximately two years.

News from Indonesia

Indonesia's President Joko Widodo has set up the Peatland Restoration agency to restore about 2 million hectares of peatland damaged by fires. The peatland fires of 2015 cost Indonesia $16 billion, according to the government. Click here to read more.

Drainage canal blocking in Sumatra and Kalimantan that Asia Pulp & Paper Group (APP) supported by Deltares is now undertaking aims to reduce fire risk and enhance conservation of remaining natural forest in and around its concessions. In total 7,500 blocks are planned across all concession areas that supply to APP with 3,500 already completed since October 2015. The unit cost of a block is between 380 -500 $. Click here to read more.

The government of Norway announced that it would continue its environmental funding partnership with Indonesia, allocating $50 million to support the Peatland Restoration Agency. Click hear to read more.

The USA allocated $30 million grant to restore and protect Indonesia's peat land areas. Click here to read more.

Indonesia begins pilot project to restore damaged peatlands: http://www.channelnewsasia.com/news/asiapacific/indonesia-begins-pilot/2672056.html

Peatland conservation relevant papers March 2016

Collected by Hans Joosten: joosten@uni-greifswald.de

1. Periodicities in mid- to late-Holocene peatland hydrology identified from Swedish and Lithuanian tree-ring data: http://ac.els-cdn.com/S027737911630052X/1-s2.0-S027737911630052X-main.pdf?_tid=997639fe-e79d-11e5-a24d-00000aab0f26&acdnat=1457710157_f96b5487ec6f64910f1167d13080b5c7

2. Land cover distribution in the peatlands of Peninsular Malaysia, Sumatra and Borneo in 2015 with changes since 1990: http://www.sciencedirect.com/science/article/pii/S2351989415300470

3. Isotopic insights into methane production, oxidation, and emissions in Arctic polygon tundra: http://onlinelibrary.wiley.com/doi/10.1111/gcb.13281/abstract?campaign=wolacceptedarticle

4. Near-neutral carbon dioxide balance at a seminatural, temperate bog ecosystem: http://onlinelibrary.wiley.com/doi/10.1002/2015JG003195/abstract?campaign=woletoc

5. Disentangling the effects of drought, salinity, and sulfate on baldcypress growth in a coastal plain restored wetland: http://onlinelibrary.wiley.com/doi/10.1111/rec.12349/abstract?campaign=wolearlyview

6. Yield, fermentation kinetics and the role of quality properties of thatching reed (*Phragmites australis*) during discontinuous anaerobic fermentation: http://www.sciencedirect.com/science/article/pii/S0926669015306336

7. Provenances and properties of thatching reed (*Phragmites australis*): http://literatur.thuenen.de/digbib_extern/dn056466.pdf

8. Climate and peat type in relation to the spatial variation of the peatland carbon mass in the Hudson Bay Lowlands, Canada: http://onlinelibrary.wiley.com/doi/10.1002/2015JG002938/abstract?campaign=wolacceptedarticle

9. Direct and indirect effects of glaciers on aquatic biodiversity in high Andean peatlands: http://onlinelibrary.wiley.com/doi/10.1111/gcb.13310/abstract?campaign=wolacceptedarticle

10. Gross primary production controls the subsequent winter CO2 exchange in a boreal peatland: http://onlinelibrary.wiley.com/doi/10.1111/gcb.13308/abstract?campaign=wolacceptedarticle

11. Commercial viability of paludiculture: A comparison of harvesting reeds for biogas production, direct combustion, and thatching: http://www.sciencedirect.com/science/article/pii/S0925857416301677

12. Soil iron content as a predictor of carbon and nutrient mobilization in rewetted fens: http://journals.plos.org/plosone/article/asset?id=10.1371%2Fjournal.pone.0153166.PDF

13. Peatlands, forests and the climate architecture: Setting incentives through markets and enhanced accounting: https://www.umweltbundesamt.de/sites/default/files/medien/378/publikationen/climate_change_14_2016_peatlands_forests_and_the_climate_architecture.pdf

Quiz: This photo is from a Russian mire– can you guess from which part of Russia? Tip: This mire is linked to a river system.

The February quiz photo was from Fraser Island just south of the Great Barrier Reef, Australia