IMCG Bulletin: March 2015

INTERNATIONAL MIRE CONSERVATION GROUP

www.imcg.net

Word from the Chair

Dear mire friends

Herewith the March 2015 IMCG 2015 Bulletin: Rather late than never. My apologies for you who have contributed to this issue for this late delivery. Winter is on its way in southern Africa and the field season kept independent consultants such as myself infield for extended periods of time out of the office.

We have once again an interesting issue with news from across the globe ranging from news from friends in the Azores to peat news snippets (among others) out of Europe, Indonesia, Rwanda and the USA.

Do you know your Main Board member? Read more about one of the IMCG stalwarts, Ab Grootjans, below. Ab is also featuring in the *Mires and Peat* section! And as always: please support our journal.

The IMCG network is only as strong as its members are active. We are keen to learn more about mire news in your district, country or region! Contributions for the IMCG Bulletin can be sent by 25 April 2015 to Piet-Louis Grundling - peatland@mweb.co.za.

Get to know your Main Board members:

Featuring Ab Grootjans

Ab is a professor in ecohydrology of wetlands at the Energy and Sustainability Research Institute Groningen (ESRIG), University of Groningen, The Netherlands.

He has 40 years' experience in peatlands focusing on ecohydrological approaches to nature conservation and restoration ecology on a habitat to landscape scale. He has worked globally and visited mires in most regions and continents except Antarctica!

Ab has been a member of the IMCG since 2001, an IMCG Main Board member since 2008, and is currently member of the Executive Committee. Ab currently resides in Haren, The Netherlands, with his wife Baps.

Mires and Peat

Olivia Bragg (o.m.bragg@dundee.ac.uk)

New articles in *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*).

Of note is that Ab Grootjans was recently accepted by both IPS and IMCG as Assistant Editor of Mires and Peat.

Members of the IPS and IMCG are urged to support Mires and Peat with their contributions as we need to maintain the publication rate that is required to qualify our very special journal for its place in *Web of Science* and the now very close objective of an Impact Factor.

Please help us to keep it there, by sending your next manuscript on any topic relating to mires, peatlands and peat to o.m.bragg@dundee.ac.uk.

News from our regions

Azores

Cândida Mendes (cmendes@uac.pt)

Wetrest project - Insular Wetland Restoration

Eduardo Dias, Cândida Mendes, Dinis Pereira & Diana Pereira

This is the first time that we (Investigators of Wetrest Project) have contributed to global wetland (especially peatland) knowledge in this IMCG bulletin. Hopefully it is the first of several contributions on our, very special, peatland formations. This project, financied by the Secretaria Regional da Ciência, Tecnologia e Equipamentos started in 2013 with 3 years duration, involving 7 investigators and several consultants, with the coordination of Eduardo Dias from Geva Group (Azores University).

In the Azores archipelago the peatlands area was around 350 km^2 of which 30% still persist, but of these more than 50% are degraded by grazing, the main threat to peatlands in these islands. Our main type of peatland is forested with *Juniperus brevifolia* (See Photo 1) but pure sphagnum formations are also very common in these islands (see an example in Photo 2,).

Photo 1. Forested peatland in Serra de Sta Barbara.

Photo 2. Bog in Central Plateau.

In the Ramsar area of Terceira, where the study will take place, these formations occupy 79% of the area. The importance of peatlands and their services is well known worldwide, but has not yet been validated for the Azores, despite of its particular features and the strong influence on the island environment.

The aim of the study is to create tools to restore peatlands to conditions of higher value for landscape stability and biodiversity. The natural dynamics we are studying and improving are associated with structural and functional diversity. It is therefore relevant to establish the relationships between the services provided to humans and nature (biodiversity, carbon storage, retention of water and nutrient cycling) for various types of peatlands and degrees of human intervention. This relationship will allow different approaches to landscape management in relation to the objectives, recruiting distinct methodologies of renaturalization. For more information visit:

http://eduardodias.com.pt/WETREST/English/eng.index/eng.index.html

Oceania

Bev Clarkson (Clarksonb@landcareresearch.co.nz)

New Zealand Ramsar Symposium 2015

Nearly 100 wetland management specialists assembled in Hamilton on 17-19 March for a symposium focussing on the Ramsar Convention, relating to wetlands of international importance. As three of New Zealand's six Ramsar sites are peatlands, many of presentations as well as the two fieldtrips focussed on mire research and management. The Wetland Symposium was organised jointly by the Department of Conservation's Arawai Kakariki Wetland Restoration Programme and the National Wetland Trust of New Zealand. The symposium featured several guest speakers, including Ramsar's Oceania secretariat representative Vainuupo Jungblut, who is based in Samoa.

The symposium gave delegates from major South Island wetlands including Awarua-Waituna (Southland), O Tu Wharekai (Ashburton) and Farewell Spit the opportunity to share experiences with their northern counterparts.

Delegates visited North Island Ramsar sites at Whangamarino, Kopuatai and Pokorokoro/Miranda wetlands during the symposium and heard talks from on-site speakers. It was an opportunity to learn about the Ramsar Convention and the criteria for wetlands for Ramsar status. As New Zealand has relatively few Ramsar wetlands compared with other countries, many delegates were inspired to initiate Ramsar applications for wetlands in their own region.

http://www.doc.govt.nz/news/media-releases/2015/waikato-hosts-wetland-symposium/

Lesotho

Piet-Louis Grundling (peatland@mweb.co.za)

Lesotho Highlands Phase 2: Polihali Dam – mires under threat?

In 1986 a treaty between Lesotho and South Africa instituted the bi-national Lesotho Highlands Water Project which diverts water from the Senqu River System in Lesotho to South Africa's economic hub, the water-stressed Gauteng region with cities such as Johannesburg and Pretoria. In 2003 Phase 1 of the project was completed (just before the 2004 IMCG visit to the mountain kingdom of Lesotho); but the cost to the environment was high.

It was evident during the 2004 visit that not only rivers and wetlands were drowned beneath the constructed Katse, Mohale and Muela Dams; scores of mountain mires were impacted by associated infrastructure development such as access roads and overgrazing as herds of livestock were forced into mountain catchments when valleys were flooded by the dams. Restoration efforts have been initiated but success has been varied and degradation continues. Of concern is the news that the South African government has recently approved Phase 2 of the project which entails the construction of the Polihali Dam, a transfer tunnel from Polihali Dam to the Katse Dam, advance infrastructure.

Erosion of a Lesotho Alpine Mire (http://www.plantzafrica.com/vegetation/vegimages/grasslandhorses.jpg)

Currently various environmental impact studies are underway and one can only but hope that wetland and peatland conservation will receive due recognition. Furthermore; the implementation of Phase 2 should make provision for the restoration of wetlands (including mires and peatlands) not only to be impacted by Phase 2 but also those degraded as a result of Phase 1. Read more on the Lesotho Highlands Water Project at http://www.tcta.co.za/Projects/Pages/LesothoHighlands.aspx

News from all over

Listed below is a list of news snippets collected by Hans Joosten and Piet-Louis Grundling. Please click on the related URL if you want to find out more on the related topic:

Burundi and Rwanda: What stalled the Gishoma Peat Power project? Wood and peat account for 94% of energy consumption in Burundi.
http://www.newtimes.co.rw/section/article/2015-03-04/186567/
http://www.nationsencyclopedia.com/Africa/Burundi-ENERGY-AND-POWER.html

Canada: Canadian Sphagnum Peat Moss Association Releases Industry Social Responsibility Report
http://www.prnewswire.com/news-releases/canadian-sphagnum-peat-moss-association-releases-industry-social-responsibility-report-300047614.html

Indonesia: Aceh government unveils protected area in beleaguered Tripa peat swamp
http://www.aseanpeat.net/newsmaster.cfm?&menuid=11&action=view&retrieveid=2445

Indonesia: Musim Mas, one of Indonesia's biggest traders in palm oil, has announced that it has joined the Indonesian Palm Oil Pledge, according to Greenpeace
http://www.aseanpeat.net/newsmaster.cfm?&menuid=11&action=view&retrieveid=2446

Indonesia: Indonesia's president Jokowi Vows to Protect Peatlands
http://knowledge.agriculturemachinerybusiness.com/AsianAgricultureNew_70_10823_1.html

Ireland: Bord na Móna look at Westmeath sites for windfarms
http://www.westmeathexaminer.ie/news/roundup/articles/2015/03/12/4036301-bord-na-mna-look-at-westmeath-sites-for-windfarms/

Netherlands: The Verified Carbon Standard (VCS) has approved a comprehensive carbon accounting methodology for REDD+ projects in tropical peatswamp forests
http://www.wetlands.org/News/Pressreleases/tabid/60/ID/4110/PRESS-RELEASE-VCS-releases-robust-accounting-framework-for-REDD-Projects-in-Tropical-Peatswamps.aspx

Sumatra: APRIL suspends contractor after environmentalists expose ongoing peatswamp deforestation
http://www.eco-business.com/news/april-suspends-contractor-after-environmentalists-expose-ongoing-deforestation/

Sweden: Hidden greenhouse emissions revealed in new Board of Agriculture report: restore drained peatlands
http://phys.org/news/2015-03-hidden-greenhouse-emissions-revealed-board.html

United Kingdom: Peatland conservation project is a world leader in carbon offsetting schemes
http://www.westernmorningnews.co.uk/Peatland-conservation-project-world-leader-carbon/story-26253523-detail/story.html

United States of America: Science Group Issues 2015 Scorecard of Iconic Brands Contributing to Deforestation
http://www.ucsusa.org/palm-oil-scorecard-0483#.VSqIC5PCfs0

United States of America: KFC, Pizza Hut & Taco Bell Commit to Deforestation-Free Palm Oil. Who's Next?
http://www.huffingtonpost.com/elliott-negin/palm-oil-kfc-pizza-hut-taco-bell_b_6989532.html
United States of America: The Association of State Wetland Managers will host a Restoration webinar on the topic of *Peat Land Restoration (*editor's note: Peat Land = Peatland?)
http://www.aswm.org/news/webcasts-a-presentations/8068-webinar-peat-land-restoration

Peatland conservation relevant papers

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

1. Higher recent peat C accumulation than that during the Holocene on the Zoige Plateau: http://www.sciencedirect.com/science/article/pii/S0277379115000499
2. Late Pleistocene–Holocene vegetation and Indian summer monsoon record from the Lahaul, Northwest Himalaya, India: http://www.sciencedirect.com/science/article/pii/S0277379115000566
3. The uncertain climate footprint of wetlands under human pressure: http://www.pnas.org/content/early/2015/03/19/1416267112.abstract
4. Historic hay cutting dates from Sweden 1873–1951 and their implications for conservation management of species-rich meadows: http://www.sciencedirect.com/science/article/pii/S0006320715000336
5. Identifying multiscale zonation and assessing the relative importance of polygon geomorphology on carbon fluxes in an Arctic tundra ecosystem: http://onlinelibrary.wiley.com/doi/10.1002/2014JG002799/abstract?campaign=wolacceptedarticle
6. Forest dynamics and tip-up pools drive pulses of high carbon accumulation rates in a tropical peat dome in Borneo (Southeast Asia): http://onlinelibrary.wiley.com/doi/10.1002/2014JG002796/abstract?campaign=wolacceptedarticle
7. The relative importance of methanogenesis in the decomposition of organic matter in northern peatlands: http://onlinelibrary.wiley.com/doi/10.1002/2014JG002797/abstract?campaign=woletoc
8. Three decades of vegetation changes in peatlands isolated in an agricultural landscape: http://onlinelibrary.wiley.com/doi/10.1111/avsc.12142/abstract?campaign=woletoc
9. Small wetlands are critical for safeguarding rare and threatened plant species: http://onlinelibrary.wiley.com/doi/10.1111/avsc.12144/abstract?campaign=woletoc
10. Peatland initiation and carbon dynamics in northeast China: links to Holocene climate variability: http://onlinelibrary.wiley.com/doi/10.1111/bor.12116/abstract?campaign=wolearlyview
11. Sphagnum farming: the promised land for peat bog species?: http://link.springer.com/article/10.1007%2Fs10531-015-0922-8
12. Measuring the efficiency of fen restoration on carabid beetles and vascular plants: a case study from north-eastern Germany: http://onlinelibrary.wiley.com/doi/10.1111/rec.12203/abstract?campaign=wolearlyview
13. Climate change and the permafrost carbon feedback: http://www.nature.com/nature/journal/v520/n7546/abs/nature14338.html
14. Global estimates of boreal forest carbon stocks and flux: http://www.sciencedirect.com/science/article/pii/S0921818115000429
15. Environmental drivers for regeneration of *Mauritia flexuosa* L.f. in Colombian Amazonian swamp forest: http://www.sciencedirect.com/science/article/pii/S0304377015000133
16. Detecting the effects of water regime on wetland plant communities: Which plant indicator groups perform best?: http://www.sciencedirect.com/science/article/pii/S0304377015000157
17. Estimating global natural wetland methane emissions using process modelling: spatio-temporal patterns and contributions to atmospheric methane fluctuations: http://onlinelibrary.wiley.com/doi/10.1111/geb.12307/abstract?campaign=wolearlyview
18. Estimating annual soil carbon loss in agricultural peatland soils using a nitrogen budget approach: http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0121432

19. Hydrological controls on deep burning in a northern forested peatland: http://onlinelibrary.wiley.com/doi/10.1002/hyp.10440/full
20. GHG mitigation of agricultural peatlands requires coherent policies: http://www.tandfonline.com/doi/abs/10.1080/14693062.2015.1022854#.VSqKMJPCfs0
21. Impacts of land use change on peatland degradation: a review: http://www.ajol.info/index.php/ejesm/article/view/114108
22. Interpretation of the paleoclimate environment using large plant fossil of peatland in Pyeongtaek, Central Korea: http://www.envecojournal.org/journal/article.php?code=19712
23. Geophysical mapping of palsa peatland permafrost: http://www.the-cryosphere.net/9/465/2015/tc-9-465-2015.html
24. Can boreal peatlands with pools be net sinks for CO_2: http://iopscience.iop.org/1748-9326/10/3/035002/pdf/1748-9326_10_3_035002.pdf
25. Vegetation management with fire modifies peatland soil thermal regime: http://www.sciencedirect.com/science/article/pii/S0301479715001127

Please send your contribution to the IMCG Bulletin by the 25th of each month: peatland@mweb.co.za