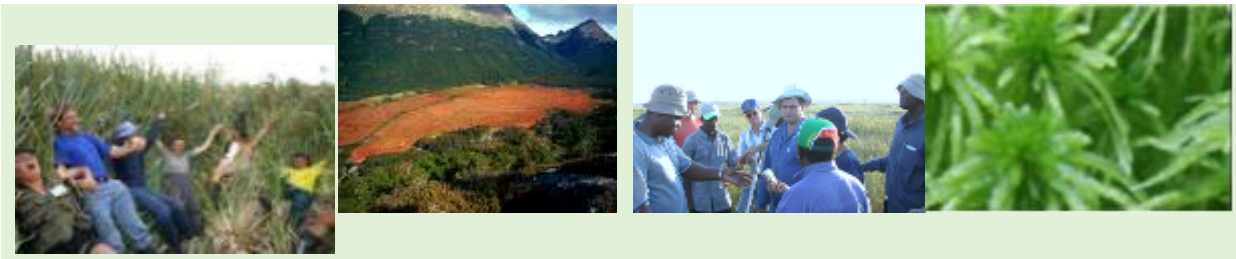


IMCG Bulletin: July 2017

Word from the Secretary-General

INTERNATIONAL MIRE CONSERVATION GROUP

www.imcg.net

Dear mire friends

This July Bulletin reaches you later than planned, as directly after the Russian Arctic Field Symposium the opportunity arose to do some peatland reconnaissance in the Democratic People's Republic of Korea, a country strongly underrepresented in the IMCG Global Peatland Database but without internet availability. As a kind of consolation for receiving the bulletin only now, find below a first picture of a North Korean peatland.

Pukkye Su peatland in the Democratic People's Republic of Korea, with local dominance of Trichophorum alpinum*. Photo: Hans Joosten.*

In this Bulletin some fresh impressions of the 2017 IMCG Arctic Field Symposium (more will follow in the August issue) and news items from all over the world. And, as always, a list with relevant recent peatland literature.

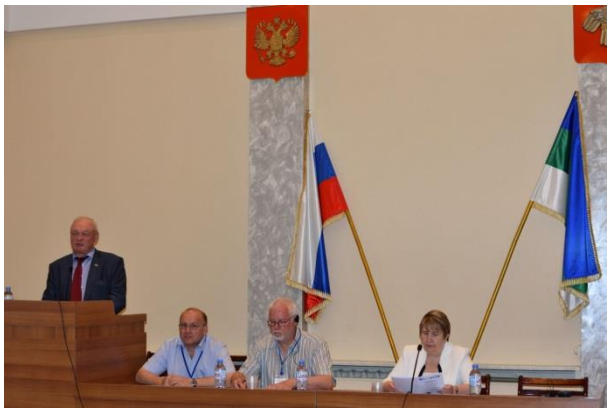
Keep on sharing your ideas and experiences with your fellow-IMCGers by sending news, photographs, papers and other contributions for the August Bulletin by September, 4, 2017 to Hans Joosten at joosten@uni-greifswald.de.

Peat plateau mires (flat palsas) in Yugyd va National Park (Komi Republic, RF). Photo: Hans Joosten.

IMCG News

Mire ecosystems of Northeast Europe - Ecological restoration in permafrost zone

The most important IMCG event of July was doubtlessly the International Field Symposium 'Mire ecosystems of Northeast Europe' and workshop 'Ecological restoration in permafrost zone' organized in Komi Republic and Nenets Autonomous Okrug in European Russia. A spectacular trip, with an initial 40 hours train voyage from Moscow to Inta, two enormous powerful Ural trucks guiding our way up the Polar Urals, another train bringing us overnight to Syktyvkar, the capital of Komi, a plane back to the Arctic in Naryan Mar, the capital of Nenets, a day-long boat tour on the Pechora river, and a helicopter that bought us up and down Cape Bolvansky in the Barents Sea to study polygon mires, polygonal peat plateau mires, and other remarkable permafrost features.



Scientific session "Mire ecosystems of North East Europe" (Inta, July 28). Left: Opening ceremony with (l to r) Alexander Popov, Federal Nature Management Komi Republic, Andrey Sirin, Institute of Forest Science RAS, Hans Joosten, IMCG and Svetlana Degtyova, Komi Research Centre. Right: Asbjørn Moen presenting the European Mires Book to Svetlana Degtyova. Photos: Michael Trepel.

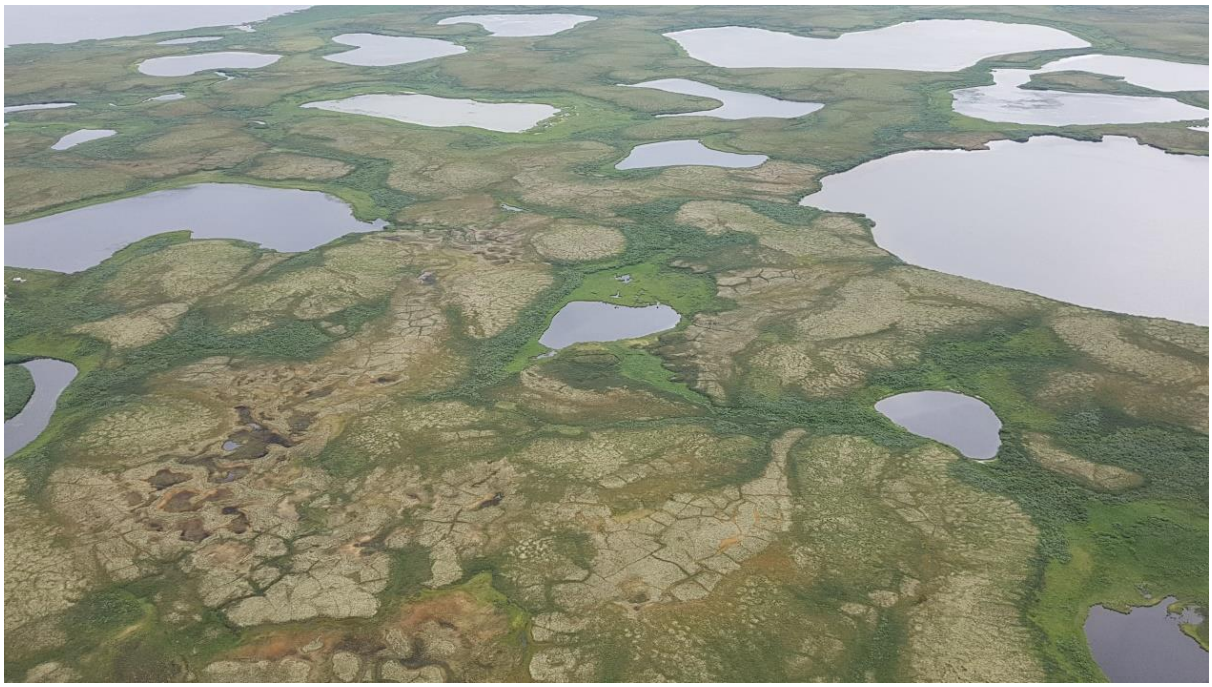
Field symposium in the European Russian Arctic

Shane Grundy (shane@bushdoctor.com.au)

Stunning landscapes, amazing peatlands and great organisation is how I will remember the European Russian Field Symposium. This was a trip that I will never forget. From the Yugyd-va National Park with its inspiring mountains and glacial valleys through to beauty of Cape Bolvansky on Russia's northern coastline. Amongst the beauty there is serious concern with the impacts of overgrazing in the Yugyd-va NP and the changes to permafrost levels in the Tundra. The pressures placed on this environment through resource exploration and extraction continues to degrade this special place.

The participants of this symposium have such vast knowledge of the natural environment and system functions, so eager to share and educate. I feel honoured to have spent my time with them in such awe inspiring landscapes. It was great to meet the restoration teams on the artic. They showed such enthusiasm for their projects. I enjoyed immensely discussing their restoration techniques and shared some of my experiences; keep up the great work team. The underfunding of restoration projects is again hampering the restoration outcomes of these disturbed areas, hopefully this can change to allow better restoration of areas that they have damaged.

The environmental disturbance and the warming of the artic through climate change are of grave concern.



Cape Bolvansky. Photo: Shane Grundy.

Mires and Peat

Find the journal online at http://mires-and-peat.net/. New papers published in July 2017 included

- Questioning ten common assumptions about peatlands. [University of Leeds Peat Club: K.L. Bacon, A.J. Baird, A. Blundell, M-A. Bourgault, P.J. Chapman, G. Dargie, G.P. Dooling, C. Gee, J. Holden, T. Kelly, K.A. McKendrick-Smith, P.J. Morris, A. Noble, S.M. Palmer, A. Quillet, G.T. Swindles, E.J. Watson & D.M. Young] Volume 19: Article 12. http://mires-and-peat.net/media/map19/map_19_12.pdf
- The effects of water management on the CO_2 uptake of Sphagnum moss in a reclaimed peatland. [C.M. Brown, M. Strack & J.S. Price]. Volume 20: Article 05. http://mires-and-peat.net/media/map20/map_20_05.pdf

Send your new manuscripts on any topic relating to mires, peatlands and peat to the Editor-in-Chief Olivia Bragg: o.m.bragg@dundee.ac.uk

IMCG in a spring mire in the Polar Urals (Komi Republic). Photo: Hans Joosten (with camera of Jürgen Nauber)

IMCG dropped in the Arctic tundra at Cape Bolvansky (Nenets Autonomous Republic). Photo: Hans Joosten.

News from the regions

Global

Baseline and Monitoring Methodology for Rewetting Drained Peatlands approved by VCS

John Couwenberg (couw@gmx.net)

On 17 July, the Verified Carbon Standard (VCS), the largest carbon standard on the voluntary market, approved and published a methodology for rewetting of drained temperate peatlands. The methodology is named 'VM0036 – Methodology for Rewetting Drained Temperate Peatlands'. A methodology is a technical document used by project developers to quantify the greenhouse gas benefits of their project. It also sets out requirements to determine project boundaries, set baselines and assess additionality. Criteria are included to determine whether a particular project is eligible to apply the methodology.

Projects registering with VCS can use approved VCS methodologies, any methodology approved under the United Nations Clean Development Mechanism (CDM), and methodologies developed by the Climate Action Reserve (CAR) with the exception of their forest protocols. The methodology VM0036 outlines procedures to estimate the reduction of net greenhouse gas emissions resulting from project activities implemented to rewet drained peatlands in temperate climatic regions. It allows for the estimation of GHG emissions from drained and rewetted peatlands and also accounts for changes in carbon stocks in selected non-peat carbon pools. The scope of the methodology is essentially limited to project activities that aim at the rewetting of peatlands that have been drained for forestry, peat extraction or agriculture, but where these activities are not or no longer profitable. Post-rewetting land use is limited to forestry, agriculture, nature conservation/recreation, or activities limited to those aiming at GHG emission reductions, or a combination of these activities. The methodology uses ground vegetation composition and water table depth as proxies for peatland GHG emissions, known as the 'GEST' approach (GEST: Greenhouse gas Emission Site Type).

A VCS spokesperson expressed excitement to have the methodology approved under the VCS Program: 'It covers a project activity which we believe is quite underrepresented and has the potential to generate significant emission reductions and removals. We also appreciate the creative and flexible approach taken by the methodology, specifically the use of ground vegetation composition and water table depth as proxies for peatland GHG emissions.' The methodology has been developed for (but is not limited to) use in the Belarus Peatland Rewetting Project ("BPR Project"). It was authored by Silvestrum Climate Associates, The Netherlands and Greifswald University, Germany. Its development was funded by the Federal Ministry for the Environment, Nature Conservation, and Nuclear Safety (BMU), Germany, and supported by BirdLife Belarus (APB), Centre for International Migration (CIM), Germany, and the Royal Society for the Protection of Birds (RSPB), United Kingdom.

The methodology is the first to address emissions from temperate peatlands. Earlier methodologies were released that address tropical peatlands (VM0007, VM0027). VM0027 was explicitly developed to validate the REDD+ demonstration activity of WWF Germany taking place in the Sebangau National Park, located in Indonesia - Central Kalimantan. Whereas VM0027 is rather restrictive in the methods and proxies used to derive greenhouse gas fluxes, VM0007 is much more flexible. It provides a set of modules that can be put together to arrive at a fully functional methodology. Since 2015, VM0007 includes modules that address emissions from peat decomposition as well as fire. It is currently being applied in the Katingan Peatland Restoration and Conservation Project.

VM0036: http://database.v-c-s.org/methodologies/methodology-rewetting-drained-temperate-peatlands

Sebangau project: http://ifri.snre.umich.edu/redd/view/project.php?id=515

Katingan project: http://www.katinganproject.com

IMCG Field Symposium 2014 in a rewetted peatland in Belarus. Photo: Hans Joosten.

Rainforest Action Network responds to PepsiCo's Palm Oil Action Plan Progress Report

In April 2017, the Rainforest Action Network (RAN) released a report titled "Profits over People and the Planet, Not 'Performance with Purpose'; Exposing PepsiCo's Real Agenda" in which it revealed PepsiCo's connections to Conflict Palm Oil suppliers, which are driving deforestation, climate emissions, and human and labor rights abuses across Indonesia, Malaysia, and Latin America. PepsiCo reacted with a "Palm Oil Action Plan Progress Report", in which the food and beverage giant outlined its actions to address its use of Conflict Palm Oil in PepsiCo products. On August 4 Robin Averbeck, Senior Campaigner of RAN, responded to that report with the following statement: "Pepsico's latest "Palm Oil Action Plan Progress Report" is a masterful attempt to window dress its lack of progress in addressing the systemic environmental and human rights violations in its palm oil supply chain and in the operations of its joint venture partner Indofood. In the real world, forests continue to fall and workers continue to be exploited for the production of palm oil used in PepsiCo's products. "While PepsiCo openly acknowledges in its report that deforestation and labor rights violations are rampant in the palm oil industry, the company has once again failed to set a deadline to end these abuses in its own supply chains." RAN continues to call on PepsiCo to substantially invest its profits into ending the use of Conflict Palm Oil used in PepsiCo products sold worldwide; enforce an immediate moratorium on the destruction of forests and peatlands for palm oil; and play a positive role in securing land rights, improving livelihoods, and protecting forests and peatlands, including the critical Leuser Ecosystem in Sumatra.

https://www.commondreams.org/newswire/2017/08/04/rainforest-action-network-responds-pepsicos-release-palm-oil-action-plan

Further interesting reads:

- http://www.climatechange.ie/undiscovered-peatlands-might-be-the-most-important-thing-you-learn-about-today-heres-why/
- https://www.theguardian.com/environment/2017/jul/28/ultimate-bogs-how-saving-peatlands-could-help-save-the-planet
- http://www.atlasobscura.com/articles/save-the-peatlands-conservation-bogs
- https://www.minnpost.com/earth-journal/2017/08/peatlands-critical-carbon-banks-our-gridlocked-national-parks-and-more
- https://blog.cifor.org/50828/the-long-and-winding-road-to-sustainable-palm-oil?fnl=en

Africa

Democratic Republic of Congo

Is Norwegian money funding Congo deforestation and peat swamp destruction?

A recent report by conservation NGO Rainforest Foundation UK (RFUK) is criticizing Norway for funding a project which could result in the clearance of vast tracts of Congo rainforest and peat swamp forests and the release of billions of tons of carbon into the atmosphere. The report spotlights a project funded through Norway's Central Africa Forest Initiative (CAFI) that would increase the area comprised by logging concessions in the Democratic Republic of the Congo (DRC) by 20 million hectares. The project is part of the French Development Agency (AFD)'s Sustainable Forest Management Programme. RFUK's analysis found the concessions stand to include 10,000 km^2 of peat swamp, i.e. parts of world's largest known tropical peatland. Mapped for the first time earlier this year, this massive peat swamp comprises approximately 145,500 km^2 and could store some 30 billion metric tons of carbon.

Logging on swamplands is prohibited in the DRC. But RFUK contends the legislation does not define what constitutes a swamp, thus potentially creating a loophole for exploitation. "The likely new logging areas would substantially overlap areas of high carbon peatlands, placing an additional 2.8 Gt of carbon – or roughly 10.4 Gt of carbon dioxide – at increased risk of release to the atmosphere if these critical ecosystems are degraded and destroyed," RFUK writes in their report. "This is equivalent to nearly 200 years of Norway's current national annual greenhouse gas emissions." Further analysis by RFUK indicates illegal concessions currently comprise around five million hectares. The organization urges Norway to aim its attention at canceling and dismantling these concessions rather than funding the establishment of more.

"By refusing to insist that Congo's illegal concessions are shut down, it is encouraging impunity for law-breaking and bad forest governance," RFUK director Simon Counsell said in a statement. "Norway should now state that its funding for DRC's forestry projects will be halted until all illegal logging concessions have been cancelled."

Independent researcher Arnaud Labrousse commended the RFUK report as "excellent." Labrousse specializes in Central Africa forestry issues, and brought up additional concerns about an alleged award of a 10 million euro ($11.7 million) REDD+ contract by DRC's Kabila administration to French firm CERENE Services to map 1.5 million hectares of DRC forest. Under REDD+, developed countries provide financial incentives to developing countries to help them pay for forest management enhancement projects. Norway's CAFI is one of these projects – the largest-ever in Africa when it signed a letter of intent (LoI) for $200 million with DRC's Minister of Finance in April 2016.

Norway's Ministry of Climate and Environment says the report is overblown and the situation more complicated than RFUK contends. Per F. I. Pharo, director of the Government of Norway's International Climate and Forest Initiative, said an amended project proposal is under review and will not be accepted unless various conditions are met: "Among the key recommendations Norway has made to the program document is the importance that the program document should not conclude on important policy choices that should be the product of a thorough and inclusive process at country level." The Ministry explains that effective management of DRC forests is a "challenging task" due to weak governing capacity, structural deficiencies and continued instability from long periods of conflict. "Reform of DRC's commercial logging sector is one component of this program. RFUK is well aware that their allegations towards Norway and CAFI all relate to a project proposal that has been rejected by the technical committee of DRC's national REDD+ fund, in large measure due to concerns raised by Norway." In emails to Mongabay, Pharo said a revised version of the proposal has been submitted by the AFD and will be reviewed again by a technical committee in the coming weeks.

A governmental moratorium on new logging concessions has been in place in the DRC since 2002. According to the LoI between Norway and DRC, the conditions required for lifting it include the integration of REDD+ and sustainable development projects. Pharo said RFUK's analysis wrongly assumed that old concessions phased out prior to 2005 will be reestablished in the future. This is not likely to happen, he said, because many overlie swamp areas where logging is prohibited, logging areas can only be extended once the LoI's conditions have been met and, in the event these conditions are met, potential new logging areas will be defined via a "thorough consultative and targeted land use planning process."

"Provided that our comments are taken into account, we see this program as an opportunity to improve the forest management and governance in DRC," Pharo said. "Unlike the picture RFUK is drawing in its

communication, this is a broad program that will, among other things, support DRC to establish, through an inclusive process, a new forest policy, an action plan to combat illegal logging, strengthen the independent monitoring of the forest sector, strengthen the authorities' capacity to enforce their laws, testing different forest management models and supporting more sustainable forest management. In sum, the ambition is that the program will contribute to reduced emissions, not increased, as indicated by RFUK."

To illustrate the scale of the challenge, Chatham House's senior research fellow Alison Hoare points to own research estimating that 90 percent of logging in the DRC country was done illegally as of 2013. The study attributes most of this logging to small, informal operations that supply domestic and regional markets, and found the volume of harvesting had doubled over the previous six years as population and income levels increased. Satellite data from the University of Maryland show tree cover loss rates growing steadily over the past decade in the DRC, peaking at more than 1.3 million hectares (13,000 square kilometers) in 2014 before dipping back down to 928,000 hectares in 2015. Most of this loss occurred in and around primary forests. Hoare underlined the need for a sustainable forest sector in the DRC, one that will help alleviate poverty while meeting greenhouse gas emissions reduction targets. But she said that for this to be possible, the country's governance must significantly improve. She lauded Norway and CAFI's acknowledgment of this issue. "This has been clearly recognized by Norway, and the other CAFI partners, as reflected by the milestones set out in the LOI." "It is also very positive that Norway has highlighted the importance of the sequencing and the quality of the activities that it supports." But, Hoare cautioned, much work remains to be done if the DRC is going to meet the LoI's milestones set for the end of 2018.

https://news.mongabay.com/2017/07/is-norwegian-money-funding-congo-deforestation/

Deforestation in Gabon. Photo: Hans Joosten.

Is the forestry project of the French Development Agency threatening the peatlands of the DRC?

Prof. Simon Lewis, a co-author of the article on peatlands in the Congo Basin published in Nature earlier this year (http://www.nature.com/nature/journal/vaop/ncurrent/abs/nature21048.html), recently proposed to scientists working on tropical forests that they sign an open letter asking the Norwegian government, which finances most of the CAFI (Central Africa Forests Initiative) programme in the Democratic Republic of Congo (DRC), to reject the "sustainable forest management" project proposed by the French Development Agency, to be funded by the CAFI. The letter states: "The Norwegian government will decide in the coming weeks whether to fund a programme proposed by the French Development Agency (AFD), one of whose objectives is to revive and expand the industrial logging sector in the forests of DRC. The proposed programme would also involve

lifting the moratorium on the allocation of new logging concessions in DRC, which, due to forest governance failures, has been in place since 2002." Lewis is concerned that: "[T]he AFD proposal has not given adequate consideration to the potential damage of the program to DRC's peatlands. Indeed, it does not mention them." He then compares the situation of the Congolese Central Cuvette with the peatlands of Indonesia. The logging of Indonesian peatlands has led to serious forest fires with major human health, climate, and biodiversity impacts. These negative impacts have all been avoided, so far, in the Congo peatlands.

Alain Karsenty, an environmental economist and international consultant with extensive knowledge of land tenure, concessions, forest policies and practices in West & Central Africa and Madagascar, reacts as follows: "From what is known about the project submitted by the AFD, it contains provisions to accompany a possible lifting of the moratorium on the allocation of new forest concessions. This desire to lift the moratorium has been publicly mentioned several times by the Congolese authorities, but it has been deferred so far for diplomatic reasons, probably in connection with the CAFI programme. According to AFD's statements reported in a Le Monde article published on 26 June, the figures of 20 to 30 million hectares of concessions (there are about 11 million ha allocated today) are only projections of what might result from lifting the moratorium, not the project's objectives. …

Moreover, the proposed comparison with the destruction of the peatlands of Indonesia seems inappropriate. In Indonesia, many peatlands have been entirely cut down and drained to give way to intensive plantations of oil palms or pulpwood: "In Indonesia, peatland fires are mostly anthropogenic, started by local (indigenous) and immigrant farmers as part of small-scale land clearance activities, and also, on a much larger scale, by private companies and government agencies as the principal tool for clearing forest, before establishing crops." (Page et al. (2002). doi:10.1038/nature01131). Such a development is fortunately not relevant in the DRC, where the phenomenon of large-scale conversion of forests to intensive plantations has not been able to overcome the many obstacles linked to the lack of infrastructure and the "cost of doing business," which is particularly high in this country. Forest concessions in the DRC are characterized by highly selective exploitation of timber of high commercial value (due to the previously mentioned costs), with average harvests of two to four m^3/ha (a tree extracted every two to three ha). Forest concessions' areas are very large in the DRC, due to too low area fees (which are, moreover, poorly recovered), which do not encourage concessionaires to abandon the less productive parts of their permits. These concessions are exploited only partially, marshy areas (which often characterize peatlands during the rainy season) being avoided, not only because of the existing legal prohibition, but because of the technical difficulties of exploitation.

In the peatlands area of the Congolese basin mapped by S. Lewis and his colleagues, there appear to be at least three forest concessions in operation on the DRC side. What is the impact of these activities on peatlands? Honestly, we do not know, but one can doubt that the signatories of the petition know more. All that can be said is that the AFD project, and more generally the CAFI programme, aims to help the government to enforce existing laws and in particular to support forest management, which obliges concessionaires to take measures to protect sensitive areas such as peatlands (by putting them into conservation or protection zones). In this sense, the AFD project can only improve the situation if it succeeds in helping the Congolese administration to enforce regulatory standards on all concessions.

Some of the concerns expressed by Simon Lewis and his colleagues, however, seem justified. It is legitimate to question the possible impacts of logging, even of very low intensity, in this vast area of peatlands. This requires researchers to monitor forest dynamics in these areas. In the CAFI programme, a major effort will be made to support the government in preparing land use planning. It would be more appropriate to insist on the side of the CAFI programme that, as a precautionary measure and pending research results, the future land use plans to be developed by the Congolese stakeholders reserve the area of the Central Cuvette for non-extractive and non-industrial uses (neither forest concessions nor industrial plantations). Furthermore, the achievement of a participatory land use plan of the forested area of the DRC is one of the conditions for the lifting of the moratorium, as recalled clearly by this statement from the Norway's International Climate and Forest Initiative."

https://news.mongabay.com/2017/07/is-the-forestry-project-of-the-french-development-agency-threatening-the-peatlands-of-the-drc-commentary/

South Africa

New Protected Environment declared in South Africa

A visit to Dullstroom and its surrounding grasslands is on the bucket list of many birders. This beautiful area contains many "specials" such as the Lakenvlei peatland, which we visited during the 2004 IMCG Field Symposium meeting in South Africa, and a wide range of rare bird species such as Wattle Crane, Blue Crane, White-winged Flufftail, and Yellow-breasted Pipit. The presence of these iconic bird species is one of the reasons why BirdLife South Africa recognises this area as the Steenkampsberg Important Bird and Biodiversity Area (IBA) (see also IMCG Newsletter 2009/3&4: http://www.imcg.net/media/newsletter/nl0903.pdf). The Greater Lakenvlei Protected Environment falls within the Dullstroom tourism hub that provides a large number of local tourism-related jobs connected to the scenic beauty and outdoor activities in the area.

Celebrations were held on the 7 April 2017, as the Mpumalanga's Department of Agriculture, Rural Development, Land and Environmental Affairs (DARDLEA), declared the Greater Lakenvlei area a Protected Environment. This achievement was made possible through the collaborative efforts of Mpumalanga Tourism and Parks Agency (MTPA) and their NGO partners, the Endangered Wildlife Trust (EWT) and BirdLife South Africa. Legislation in South Africa makes provision for different categories of formal protection. Nature Reserves and National Parks are the top category and activities in these parks are strictly controlled by legislation. The second category is that of Protected Environment. Activities, such as farming practices, can continue in these areas, but other more destructive and unsustainable activities are prohibited. Through the development of Management Plans, each property is divided into zones, for example natural areas and degraded areas. Activities that take place in areas zoned as natural are then strictly controlled. Natural area zones, for example, do not allow over grazing and indiscriminate use of pesticides. A Management Plan has been developed for Greater Lakenvlei and will now be implemented. It is hoped that this declaration will encourage more people to visit this beautiful area and enjoy the natural beauty. This should lead to an increase in tourism related jobs and the long term conservation of the area. http://www.birdlife.org/africa/news/new-protected-environment-declared-south-africa-0

Asia

Fires and haze

The dry season has started in Southeast Asia, with hotspots appearing in several locations; not all of them on peatlands. However the number of peatland fires in Indonesia is increasing, triggering worries about the return of the 2015 haze. Most ASEAN Member States are still haze free, but preparations are being made to face the problem if it happens again. Indonesia has rehabilitated some of its peatlands and increased its preparation for the incidence of fires. Singapore has also committed to assist in rehabilitating peatlands in South Sumatera as a long-term support to prevent forest and land fires in the areas. Malaysia may add on the number of tube wells and watch towers in Sarawak. The former will help supply water for fire suppression and the latter to improve detection of fires before they spread. Let's hope that the preparations will successfully prevent and control the fires and prevent haze from occurring again this year.

- https://news.mongabay.com/2017/07/indonesia-blocks-major-artery-in-haze-causing-mega-rice-canal-network/
- http://www.aseanpeat.net/newsmaster.cfm?&menuid=11&action=view&retrieveid=4383
- http://www.aseanpeat.net/newsmaster.cfm?&menuid=11&action=view&retrieveid=4384
- http://www.aseanpeat.net/newsmaster.cfm?&menuid=11&action=view&retrieveid=4395
- http://www.thejakartapost.com/news/2017/08/03/efforts-ongoing-to-put-out-peat-fires-in-jambi.html
- http://www.straitstimes.com/asia/se-asia/282-hot-spots-detected-across-indonesia-on-sunday
- http://www.en.netralnews.com/news/currentnews/read/8963/growing.no.of.hotspots.in.indonesia.from.173.to.239
- http://www.thestar.com.my/news/nation/2017/08/07/johan-setia-peatfires-cause-of-klang-shah-alam-haze/
- http://www.thestar.com.my/news/nation/2017/08/07/johan-setia-peatfires-economic-issue/
- https://ensia.com/features/haze-free-indonesia/
- https://theconversation.com/people-palm-oil-pulp-and-planet-four-perspectives-on-indonesias-fire-stricken-peatlands-80004
- http://www.thejakartapost.com/academia/2017/08/11/editorial-desperately-fighting-fires.html
- https://www.voanews.com/a/indonesia-forest-fires-intractable-problem-despite-efforts/3982129.html
- http://www.straitstimes.com/asia/se-asia/palangkarayas-chances-appear-hazy
- https://news.mongabay.com/2017/08/indonesian-president-jokowis-first-real-test-begins-as-annual-fires-return/
- https://www.newdelhitimes.com/indonesia-forest-fires-intractable-problem-despite-efforts/

India

Supreme Court fines environment ministry for not following directions

On July 12, 2017, the Supreme Court of India has fined the environment ministry Rs 50,000 (€ 663) for not complying with its directions to notify revised rules to protect wetlands. The ministry was given June 30 as the deadline to identify and inventorise 201,503 wetlands across the country. In recent years, wetland use has been contested. Property developers have systematically occupied wetlands for housing projects and shopping malls in urban and peri-urban areas. When the ministry first made the draft wetland rules public in 2016, the indiscriminate use of wetlands was of foremost concern. Senior environmentalists like Manoj Mishra said the proposed rules were vague and would, in fact, encourage the ecologically destructive use of wetlands. As per the existing 2010 rules, activities such as setting up new industries, dumping waste and constructing permanent structures are prohibited on identified wetlands.

Disasters like the 2015 Chennai floods have emphasised the damage unregulated use of wetlands by the real estate sector can cause. Despite this, the sector has received exemptions from critical land use regulations. The sector's representative associations argued that their activities are "by nature non-polluting, non-hazardous, and environment friendly" and, therefore, should be exempted from regulation. They finally got their way on December 9, 2016, when the environment ministry exempted the building and construction sector from the requirement of environment clearance en masse.

http://indiatoday.intoday.in/story/environment-ministry-fined-supreme-court-protection-of-wetlands/1/1007472.html

Indonesia

Indonesia extends forest moratorium

The Indonesian government has extended a moratorium on issuing new licenses to land designed as forest and peatland for another two years, the presidential office said on July 25. The move is partly aimed at protecting the ecosystem, restoring peatland after forest fires, and reducing emissions resulting from forest fires during deforestation. President Joko Widodo has inked a presidential instruction on the extension of the moratorium: "I instruct to continue moratorium on awarding a new license for land designed as primary forest and peatland located in conservation forest, protected forest, and productive forest." The moratorium covers an area of over 66 million hectares across the vast archipelagic country. The Environment Minister Siti Nurbayasaid she wants to make the moratorium permanent.

- http://news.xinhuanet.com/english/2017-07/25/c_136471785.htm
- https://www.agra-net.com/agra/world-ethanol-and-biofuels-report/biofuel-news/feedstocks/indonesia---environment-minister-wants-permanent-ban-on-licences-to-use-forest-land--1.htm
- http://www.thestar.com.my/business/business-news/2017/07/24/indonesia-environment-minister-wants-permanent-ban-on-licences-to-use-forest-land/

Indonesia to swap firms' peatlands

Indonesia will swap companies' lands on peatland with other productive areas, in order to protect and restore the country's peatlands. According to Secretary General of Environment and Forestry Ministry Bambang Hendroyono, the government has prepared over 900,000 hectares of productive land located beyond peatland area for the land-swap plan. The new lands would be given to firms which have submitted a plan of works to the ministry. The lands are located in Sumatra, Borneo, Celebes, Nusa Tenggara, Maluku and Papua province.

- http://news.xinhuanet.com/english/2017-07/13/c_136441619.htm
- http://www.thejakartapost.com/news/2017/07/14/land-swap-scheme-aims-protect-restore-peatlands.html
- http://www.greeners.co/berita/klhk-issues-land-swap-regulation-on-industrial-plantation-forest/
- https://www.pressreader.com/indonesia/the-jakarta-post/20170714/281608125477092
- https://news.mongabay.com/2017/08/land-swap-rule-among-indonesian-president-jokowis-latest-peat-reforms/

Peatland Restoration Agency signs MoU with South Sumatra province

On July 5th, Indonesia's Peatland Restoration Agency and South Sumatra provincial administration signed an agreement to develop, plan, and restore a total 848,325 hectares of peatlands in five districts of South Sumatra with between 2016 and 2020. Nazir Foead, head of the agency, said nine points in the MoU will ensure peats restoration in South Sumatra to be implemented and well-coordinated. The nine points include coordination

and planning, mapping peats hydrology, infrastructure construction, re-wetting peats and its facilities, managing burned peats, socialization and education, supervise in the construction, operation and maintenance in concession lands, research and development, and monitoring on restoration. The agency has conducted thorough planning for each Peatland Hydrology Ecosystem, divided into Peatland Restoration Lands. The aim is to ensure shared responsibility and knowledge. “To speed up restorations, [the agency] will set up other MoUs with remaining six provinces which are our working priorities,” Foead said. South Sumatra Governor Alex Noerdin said the MoU will bring benefits to restore the province’s land condition which was ravaged by fires in 2015 and burned down hundreds of thousands hectares. The state budget and regional budget, Noerdin added, would not be enough to restore those burned lands. “Support from donors to investors is needed,” he said adding the MoU will strengthen restoration efforts.
http://www.greeners.co/berita/peatland-restoration-agency-signs-mou-with-south-sumatra-province/

Indonesia advocates for continued palm oil production in meetings with EU

Indonesia has expressed concerns regarding the European Parliament’s resolution on palm oil and deforestation during meetings with delegations of the European Union and has urged a more comprehensive discussion on the issue. Indonesia reiterated its views at an ASEAN-EU meeting in Bangkok, Thailand, on Friday July 7th, that the steps taken by the European Parliament were based on inaccurate and unaccountable data.
In early April, the European Parliament adopted a resolution on palm oil and deforestation, which Indonesia subsequently criticized on the basis that it discriminates against local palm oil manufacturers and disregards the country’s recent efforts to introduce sustainable practices to the industry.
http://jakartaglobe.id/news/indonesia-advocates-continued-palm-oil-production-meetings-eu-reps/

Unilever suspends palm oil supplier following deforestation report

Unilever has suspended buying palm oil from Sawit Sumbermas Sarana (SSMS), after concluding the supplier had been in breach of its no deforestation, no peat, no exploitation policies.
http://www.foodnavigator.com/Business/Unilever-slaps-palm-oil-supplier-SMS-with-suspension-following-damning-deforestation-report

Oil palm: every second week a new leaf with a bunch of palm oil fruits. Photo: Hans Joosten.

Firms told to comply with peatland protection regulations

The Indonesian government is calling on industrial forest firms to comply with its peatland protection policy amid the increasing threat of forest fires in numerous regions in the country. "There is no compromise for their

obligation to comply with the regulations on peatland protection," Environment and Forestry Ministry secretary-general Bambang Hendroyono said in a statement on July 28th. Bambang said the government had set deadlines for industrial forest (HTI) concessionaires to immediately submit a revision of their work plans that had previously been rejected because, for example, it outlined a plan to cultivate in peatland areas intended for conservation. Ninety-nine HTI firms have submitted their revision proposals, according to the ministry's data. However, Bambang said that most of the proposals had yet to detail "work plans that were in line with the framework of peatland protection."

Under the 2017 Environment and Forestry Ministerial Regulation, the government will provide substitution land for HTI concessionaires whose concession areas are made up of 40 percent of protected peatland. The land swap scheme will be based on their revised work plans, which have to adhere to the government's plan to restore peatland areas. The revised work plans must detail HTI areas where there is peatland intended for conservation. Forest and peatland fires, meanwhile, have started in at least three provinces in Indonesia -- Aceh, Jambi and West Kalimantan -- in the past week.

http://www.thejakartapost.com/news/2017/07/28/firms-told-to-comply-with-peatland-protection-regulations.html

Interesting interview with Aida Greenbury

„Due to the current social and economic situation in Indonesia, and the sheer number of people that rely on these landscapes, we must ensure this forest and peatland remains profitable. We must make forest and peatland protection a profitable business for the people's welfare. Other than conventional ecotourism, what other innovative approaches are there? I'm a huge supporter of research on alternative species, paludiculture and the reintroduction of microbes and mycorrhiza to revive the soil and peat. However, this research is undertaken over the course of years, and to use the results for commercial purposes the trials for commercial scale must be undertaken in advance, otherwise there is simply too much risk. The roadmap must cover all of this, so we are talking about a roadmap covering at least the next 25 years. It's a massive opportunity, but also a huge and challenging project."

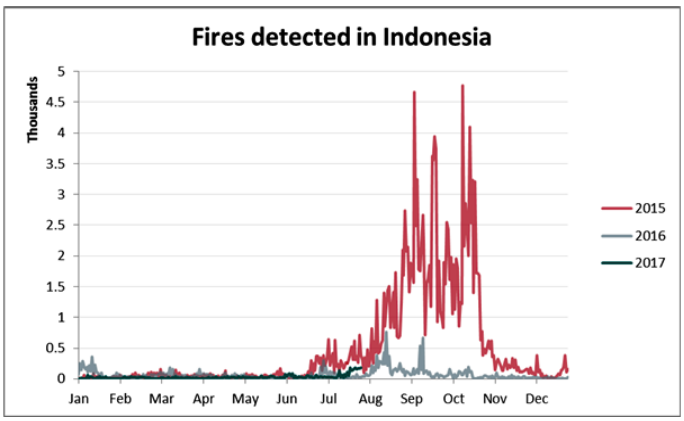
Read the full interview with Aida Greenbury, the woman who changed the land use policy of the largest peatland user in the world: Asian Pulp and Paper (APP), under

https://news.mongabay.com/2017/07/transforming-business-as-usual-in-indonesia-an-interview-with-aida-greenbury/

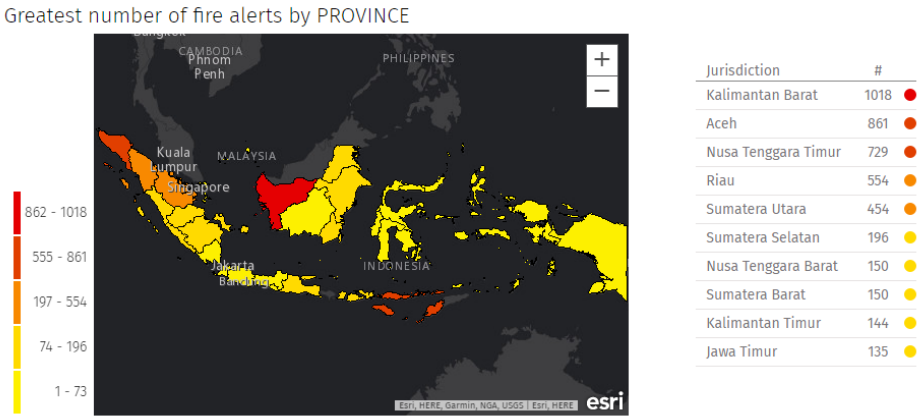
Water level regulation infrastructure in APP pulp plantation (Sumatra). Photo: Hans Joosten.

Indonesia prepares for 2017 fire season

There have been recent media reports of fire outbreaks in Indonesia and warnings of a tough dry season ahead. In response to the fires, the Indonesian Government has stepped up water bombing procedures with the Malaysian Government already offering assistance. At this stage, it is difficult to tell if there is cause for concern. From January to July this year, there were approximately six thousand fire alerts across Indonesia (only counting fires detected by the MODIS C6 instrument aboard the *Terra* and *Aqua* satellites), according to data taken from the US NASA Fire Information for Resource Management System (see Figure below). That is significantly less than the amount of fire alerts during the same periods in 2016 (11,393) and 2015 (19,440). It does not set the precedent for this year's fire season, however, given that the seasonal fires generally begin to pick up in mid- to late- August and peak during September through to October. For example, while there were only 8,047 more fire alerts from January to July 2015 than in the same months of 2016, the difference had quickly escalated to 145,040 by the end of October, making 2015 one of the worst fire seasons on record in Indonesia. A significant factor was the El Niño phenomenon, which resulted in significantly less rainfall from July to October than in previous years. Rainfall for the 2017 dry season, which so far has been at similar levels to 2016, will also play a significant role.



Efforts by the Indonesian Government to prevent burn offs before they begin could be seen as a factor behind the low fire count experienced so far this year. As noted by Centre for International Forestry Research (CIFOR) scientist Herry Purnomo, the Indonesian Government is undertaking a three-year scheme to prevent forest and land fires nationwide. In an interview with *Forest News*, Purnomo adds that the scheme aims to do this through strong laws and regulations, the empowerment of local communities, providing incentives not to burn the land, blocking canals to stop peatlands from being drained and the provision of firefighting training and equipment. There was some visible progress in 2016, when a moratorium on the conversion and clearing of peatland and primary forest was extended, the *Badan Restorasi Gambut* (Peatland Restoration Agency, or BRG) was established to monitor and restore peatland, and a sharp increase in the number of individuals arrested due to connections with forest fires was seen as the enforcement of tougher new laws introduced in 2014.



Map of fire alerts from July 23 to 30, 2017 across Indonesia. The provinces of West Kalimantan, Aceh, Riau and Jambi – located close to Malaysia and Singapore – are all on high alert. Source: Global Forest Watch

There are, however, a number of limitations to the current government initiatives. The peatland moratorium has had a negligible impact on the overall rate of fires since being introduced in 2011. Tougher laws on companies and individuals responsible for forest fires will have a negligible impact when constrained by a weak judicial system. The BRG, while a positive initiative, is also very limited in its ability to convince large companies and smallholders to give up their land for restoration. Indonesian farmers will continue to practice the slash-and-burn technique for land clearing for as long as there is no incentive to use alternative methods and little consequence for continuing the practice. Subsidising the use of alternative, less harmful methods could provide an incentive for farmers to abandon slash-and-burn.

Aside from the numerous health and economic costs associated with the seasonal fires in Indonesia, the government may be especially anxious about this year's fire season given the European Union (EU) resolution on palm oil and rainforest deforestation adopted in April 2017. As noted in a *Strategic Weekly Analysis*, the resolution threatens Indonesian palm oil exports by introducing strict standards on imports of the product into the EU. In 2016, Indonesia exported $2.7 billion worth of palm oil to EU countries, which made up fourteen per cent of total Indonesian palm oil exports. Despite dedicated lobbying by President Joko Widodo, Indonesian palm oil will struggle to meet the environmental standards required and a bad fire season this year may be enough to put the nail in the coffin for Indonesian palm oil exports to the EU.

http://www.futuredirections.org.au/publication/indonesia-prepares-2017-fire-season/

Hundreds of West Aceh residents suffered from acute respiratory infections

West Aceh Regency Health Office, Aceh Province, Sumatra, recorded as many as 241 residents affected by acute respiratory infections (ARI) by inhaling smoke from forest and land fires. Head of the Office, Dr. Zafril Luthfi, in Meulaboh, said on July 27, that the office has distributed more than 30,000 masks to the community in the area in the effort to prevent growing victims. Meanwhile, helicopters belonging to the National Disaster Management Agency (BNPB) conducted water bombing at the points of fire in Suak Raya Village and Lapang Village, Johan Pahlawan District, West Aceh District.

- http://www.en.netralnews.com/news/currentnews/read/8822/hundreds.of.west.aceh.residents.suffered.from.acute.respiratory.infections
- http://www.antaranews.com/en/news/112102/wildfires-destroyed-222-hectares-of-land-in-west-aceh

President to tighten issuance of permits for forest industry

Indonesian President Joko Widodo (Jokowi) revealed on August 2 that he will tighten requirements on the issuance of permits for the forest industry to protect natural resources and preserve the environment. "We should stop issuing any careless and irresponsible work permits to companies planning to operate in forest areas," Jokowi noted in his opening remarks during the celebration of Environmental Day 2017. Jokowi, who studied forestry in university, said there had to be "corrective action" to make breakthroughs in the management of forests. The harsh appraisal comes as the country faces a continuous threat from forest and peatland fires in numerous provinces. The National Institute of Aeronautics and Space (Lapan) revealed on July 30 that there were 239 hot spots in the country, mostly in West Kalimantan, Aceh and East Nusa Tenggara.

For peatland protection alone, the government has issued six regulations, including the latest one in July, which obliges industrial forest companies to exclude protected peatland from their concessions.

The president further pointed out that currently several protected forests and national parks were facing the threat of exploitation. The practice of encroaching into national parks cannot continue, he added, stressing that conservation areas and primary forests must be properly protected. According to the president, some companies appeared to exploit protected national parks to make way for plantations or industrial parks. "In accordance with their name, national parks are part of protected forests. However, the areas were gradually exploited, and now, hundreds and even thousands of hectares of our natural forests had been destroyed," the president remarked. In Tesso Nilo National Park in Riau, palm oil companies and farmers have been operating illegally, destroying more than half of the habitat of the park. Home to elephants and near-extinct Sumatran tigers, the park has a total area of 81,793 hectares, 54 per cent of which has been converted into settlements and oil palm plantations by firms and small-scale farmers.

In his speech, the president called for a reform for the management of peatland and forest areas that benefits both the environment and the economy. The main objective of granting permits for industries in forest areas is to improve the welfare of the people. "The problem now is that most communities living near industrial forests are poor. Hence, we should rethink whether the teakwood plantations had contributed to the people's well-

being?" the president rhetorically asked the audience. "Permit issuance must be correctly managed. Don't easily issue a permit. Stop that. I say, stop that," he said in a harsh tone.

- http://www.antaranews.com/en/news/112100/president-to-tighten-issuance-of-permits-for-forest-industry
- http://www.straitstimes.com/asia/se-asia/jokowi-issues-harsh-appraisal-of-forestry-reforms
- http://www.straitstimes.com/asia/se-asia/indonesian-president-joko-slams-lack-of-progress-in-reforming-forestry-sector

Post-fire peat swamp landscape in Sumatra. Photo: Hans Joosten.

282 hot spots detected across Indonesia

Indonesian satellites on Sunday morning August 6 picked up 282 hot spots - believed to be the highest number across the country this year - as the dry season continues. The worst hit province was West Kalimantan, where more than half of the hot spots were detected, said National Disaster Management Agency (BNPB) spokesman, Dr Sutopo Purwo Nugroho Five districts in the province - Kubu Raya, Ketapang, Sekadau, Melawi and Bengkayang - have declared a state of emergency to enable local authorities to access central government support, including military assistance, to put out the fires. Dr Sutopo also expressed concern that although 150 hot spots were detected across West Kalimantan, the number of fires there may be higher, as the satellites may not have passed over all the forest and land areas where fires could be burning. Other areas in Indonesia were also hit by forest fires, albeit not as badly as in 2015 when the burning of forest and peatland in Kalimantan and Sumatra produced a transboundary haze, which blanketed the region and led to record air pollution levels for months. Aside from those in West Kalimantan, the hot spots were spread across other provinces such as South Sumatra (23 hot spots), South Sulawesi (18), Riau (16) and East Nusa Tenggara (12). Dr Sutopo said the hot spots were spotted on private plantation land, community-owned land and in national parks, in hard-to-reach locations. "The areas burned are generally areas that are difficult to access and away from settlements, that is why (the fires) are difficult to extinguish," he added.

As of August 5, 18 helicopters have been deployed for fire-fighting operations in Riau, Jambi, South Sumatra, West Kalimantan and South Kalimantan. All five provinces are currently in a state of emergency. Indonesia's Environment and Forestry Minister Siti Nurbaya Bakar said that helicopters will deployed to put out fires over areas where there is limited road access. "If land access is difficult or shut down for a long time, then we will use water-bombings," she said. The dry season in Indonesia is forecast to end in September, at the earliest.

http://www.straitstimes.com/asia/se-asia/282-hot-spots-detected-across-indonesia-on-sunday

Burned peat swamp forest in Jambi, Sumatra. Photo: Hans Joosten.

Increasing commotion over Indonesian palm oil bill as legislators press on

A new palm oil bill is the latest battleground in the fight over how to regulate Indonesia's plantation sector in the wake of the 2015 fire and haze crisis. Legislators pushing the bill say it will help farmers and protect the nation's palm oil industry from foreign intervention. But critics say it is actually a plum deal for large corporations, as well as a means for vested interests to undermine peatland protection measures President Joko Widodo installed to prevent a repeat of the 2015 fires. The Indonesian Palm Oil Association (GAPKI) has expressed its support of the bill. The lobby group's leaders speak often of a conspiracy by Western soybean and rapeseed oil interests to undermine Indonesian palm oil for competitive purposes.

Firman Soebagyo, a member of House of Representatives Commission IV overseeing agriculture, plantations, fisheries, maritime affairs and food, is leading the deliberation on the bill. He frames it as needed to counter a foreign assault on Indonesian palm oil and ensure that the country's poorest citizens can prosper. As a result of public pressure, consumer goods giants like Unilever and processors of the oil such as Wilmar International have promised to purge their supply chains of deforestation, peatland conversion, land grabbing and labor abuses; but while some Indonesian officials support these policies, Soebagyo and others have worked to dismantle them. "We won't be lied to by developed countries that propagandize about palm oil harming the environment," Soebagyo said last year with regard to the bill. "We oppose this negative campaign, because palm oil is our future." President Jokowi's administration responded to a mounting public outcry over the bill when State Secretary Pratikno sent a letter to the agriculture minister outlining criticisms of the bill. And then, at a meeting with the House's Legislation Board, which is headed by Soebagyo, cabinet members questioned the need for the bill, since it overlaps with existing laws. Soebagyo replied that the ministers had not seen the latest draft of the bill, dated July 13, and that the House would press on.

Perhaps the greatest point of contention is that the bill cements the right of oil palm interests to operate on peat soil. The large-scale drainage of Indonesia's peat swamp regions by plantation firms is the chief cause of the fires that burn almost every year across the now-dried-out landscapes. After the 2015 disaster, President Jokowi declared a moratorium on peatland drainage. Industry groups and some government officials have spoken out against this and other measures on the grounds that they hurt investor confidence. Specifically, green groups point to an article of the bill that says plantations can exist on peat. While the stipulation is vague, critics argue it could be used to undermine attempts to keep plantation firms from expanding further into the nation's peatlands, at a time when many are pushing for them to be dislodged from peatlands they

already control. “This is a ‘rubber article’ — its interpretation is so wide, you can easily play around with it,” Greenpeace campaigner Annisa Rahmawati said in an interview. “It could be used to undermine the spirit of Jokowi’s commitment.”

Farmers need to be allowed to plant peat with oil palm, Soebagyo believes. “For peat, the only thing farmers with two or three hectares can really make money off of planting is oil palm,” he said. “If they’re not allowed to do that, how will they live? Are watermelon and pineapple really enough?” One of the bill’s selling points, according to Soebagyo, is that it obligates companies to form “partnerships” with farmers. In principle this is not new: oil palm firms have long been required to give the local community 20 percent of their land for smallholder cultivation. Companies typically ignore this mandate, with government officials failing to hold them accountable. “It’s rubbish,” Rahmawati said of the notion that the bill does anything more for farmers than existing legislation. “The laws aren’t the problem,” she added. “The problem is the implementation and enforcement of those laws.”

Another point of contention is corporate handouts. Previous drafts of the bill outlined a variety of tax breaks and duty relief schemes for palm oil investors; a coalition of NGOs decried that as “a corporate effort to drain state finances.” While those provisions were dialed back in the latest draft, it still mentions “fiscal incentives” to be provided by the state, suggesting that such measures could be laid out in implementing regulations to be issued by one or more ministries after the bill’s passage. New draft or not, the bill remains a problem, said Khalisah Khalid, head of campaigns at the Indonesian Forum for the Environment (Walhi), the country’s largest environmental pressure group and a member of the coalition. “They’re claiming they’re a big industry Indonesia should take pride in, but they’re always asking for privileges while there’s never been an improvement,” she said in an interview. The 2014 Plantation Law “already gives them many privileges.”

Indonesia recently introduced a major subsidy via the Crude Palm Oil Supporting Fund, which, along with an increase in the required rate for blending palm oil with diesel fuel, is meant to prop up domestic demand for the commodity. (The CPO Fund, as it is known, was also justified on the basis of helping small farmers, but last month the Oil Palm Smallholders Union (SPKS) sued its management body, claiming the fund has only been used to benefit large companies.) Of the financial measures offered in the palm oil bill, Gadjah Mada University professor Rimawan Pradiptyo said in February, “Such excessive incentives will trigger the expansion of oil palm plantations, which will affect the sustainability and diversity of our forests.”

Soebagyo replied to concerns about the bill fueling unsustainable land clearing by pointing to an article in the latest draft that obliges the government to draw up a masterplan for the industry. “We don’t have a blueprint and thus there’s no limit on how many hectares [plantations can expand].” The latest draft says nothing about a floor or ceiling for potential expansion, although such details could be stipulated in implementing regulations. It gives the government five years to create the masterplan.

The backlash against the bill is also about what it does not do. At a time when a huge number of oil palm firms are accused of grabbing indigenous lands, the bill says nothing about the need for companies to obtain free, prior and informed consent of communities before operating in their territory. At a time when reports of forced labor and other abusive practices are cropping up with increasing regularity, the bill says nothing about worker treatment. In the country’s easternmost region of Tanah Papua, where the industry is quickly expanding into some of Indonesia’s last best forests, civil society groups under the banner of the Papuan Coalition of Palm Oil Victims said lawmakers should be using their time to debate the long-awaited indigenous rights bill instead. “That’s much more important than this palm oil bill,” said John Gobay, a representative of the Meepago Tribal Council, one of the groups.

https://coconuts.co/jakarta/news/mounting-outcry-indonesian-palm-oil-bill-legislators-press/

82,000 ha of Papua’s peatlands to be restored

The Peatland Restoration Agency (BRG) has targeted to restore 82,000 hectares of peatlands in Papua that was damaged by fires three years ago. It will start with a total of 5,092 ha of peatlands in three villages — Kaliki, Sumber Mulya and Sumber Rejaki — across Kurik district, Merauke regency. “This weekend we will start studying a mapping of the villages,” BRG official Myrna A Safitri said on Tuesday, July 11. The agency previously recruited and trained facilitators to be assigned at the targeted villages to supervise and help integrate the restoration program into the subdistrict’s development plan. By 2018, 14,000 ha of Mappi regency’s peatlands are expected to be restored. Mappi Deputy Regent Ibnu Jaya Sahid welcomed the plan, saying the regency suffered from land fires in 2015, as a result of residents’ use of the slash-andburn method to clear land.

Papua is home to some 3.2 million ha of peatlands, of which 2.4 million ha, or 90 percent, are still intact. The Papua provincial administration's assistant overseeing people's wealth, economy and social division, Elia Loupatty, said the BRG needed to consider the socio-economic and cultural factors of each region before implementing the restoration program. She added that Papuans had long used fire to clear land, because they believed it made the land more fertile. A similar restoration program for Sumatra and Kalimantan, whose peatlands were already severely damaged, should not be applied in Papua, whose peatlands are largely intact, she said. Elia suggested taking the economy into consideration by, for example, turning peatlands into tourist destinations and building a bridge across them. "I think there are no peatlands in the world that have been turned into tourist attractions," Elia said.

Papua's peatlands are spread across its southern areas, in the regencies of Mimika, Asmat, Mappi, Merauke, Boven Digul and Mamberamo Raya. Papua Environment Agency head Noak Kapisa said Papua's peatlands were highly susceptible to damage, with the biggest threat coming from companies that have exploitation permits for the forest, mining and plantation sectors.

https://www.pressreader.com/indonesia/the-jakarta-post/20170712/281608125472580

Initial peat dune formation in drained peatland used for oil palm in Sabah, Malaysia. Photo: Hans Joosten

Malaysia

Minister Mah: "Difficult to conclude Free Trade Agreement with EU if palm oil continues to be discriminated"

Malaysia's free trade agreement talks with the European Union (EU) is not likely to conclude if palm oil continues to be discriminated with tariff and technical trade barriers, Plantation Industries and Commodities Minister Datuk Seri Mah Siew Keong said on July 17. "The EU is our biggest palm oil market. Last year, we exported RM10 billion worth of palm products to the EU. The EU is a very important trading partner," he told reporters after the ministry's open house celebration. "If the EU continues to discriminate against palm oil, I think it would be very difficult to conclude the free trade agreement. We don't want trade barriers to work against our palm oil exports," he said. Mah throws in his firm support to Malaysia's Minister of International Trade and Industry Datuk Seri Mustapa Mohamed's initiative to join hands with Indonesia's Trade Minister Enggartiasto Lukita to file a complaint with the World Trade Organisation (WTO) on the EU's discriminatory stance against palm oil. Mah attested the EU resolution on deforestation and the ongoing defamatory palm oil labelling by food companies and supermarket chains in Europe is hurting palm oil sales from Malaysia and

Indonesia. "Malaysia and Indonesia supplies around 60 million tonnes of palm oil or 86 per cent of global output. We must protect our rights," he said. "If we need to proceed to the WTO, we will because the livelihoods of some five million smallholders cultivating oil palms, in this region, is at stake," he added.
In the beginning of July, France Environment Minister Nicolas Hulot announced his country will close a window on usage of palm oil in biofuels. Hulot reportedly said France wants to stop "imported deforestation" and alleged Asia and Latin America's cultivation of oil palms and soyabean is not eco-friendly. Mah highlighted if France continues to insist on unfair measures against palm oil trade, Malaysia can and will take on reciprocal measures, too. "We also buy a lot of things from France. That is all I can say, for now. We do not want to fight out this trade war in the newspapers. I hope this can be settled amicably," Mah added.
https://www.nst.com.my/business/2017/07/258154/difficult-conclude-fta-eu-if-palm-oil-continues-be-discriminated-mah

Government's commitment for Sabah-wide certification could halt declining Orang Utan

Sabah's commitment to jurisdictional certification of its palm oil could be the answer for landscape level conservation of high conservation value (HCV) forests outside of protected areas in the Kinabatangan region.
A certified palm oil up to the Roundtable on Sustainable Palm Oil (RSPO) standard offers a solution, as the standard prohibits new planting of oil palm in such areas. "If these are strengthened, scaled up and embedded within broader legal and institutional frameworks, they could shift the trajectory of the oil palm in Borneo towards more responsible forms of production," said Ridge to Reef co-director Holly Jonas, who had taken part in the case study entitled, "Addressing the Impact of Large-Scale Oil Palm Plantations on Orang utan Conservation in Borneo: A Spatial, Legal and Political Economy Analysis". This report concluded that the window of opportunity to protect several key orangutan populations in their natural habitat would close in the near future if the business as usual scenario continues.
https://www.nst.com.my/news/nation/2017/08/264761/govts-commitment-sabah-wide-certification-could-halt-declining-orang-utan

Malaysia 'ready' to help Indonesia combat fires

Malaysia's Resources and Environment Minister Wan Junaidi Tuanku Jaafar has declared the country's willingness to help neighbouring Indonesia to extinguish forest fires. Fires have already been reported in the province of Aceh on the northern tip of Sumatra, close to Peninsular Malaysia. Speaking at a public event on Sunday, July 30, Wan said, "I have discussed it with Datuk Seri Shahidan Kassim, who oversees the Fire Department and the Special Malaysia Disaster Assistance and Rescue Team (SMART). "He has given the assurance they are ready at any time." In much of Indonesia, August and September are generally the hottest and driest months of the year. Wan Junaidi said he had met with the governors of Riau and Jambi – provinces in Sumatra whose economies are heavily reliant upon oil palm production – and that he intended to meet with the Aceh governor to discuss the matter.

- https://asiancorrespondent.com/2017/07/malaysia-ready-help-indonesia-combat-forest-fires-says-minister/#D0Daq1UrCmQK0liM.97
- https://cleanmalaysia.com/2017/08/01/malaysia-can-help-indonesia-tackle-forest-fires/

Australia

Coastal peatlands of subtropical Eastern Australia

The globally unique patterned fens and associated wetland communities of subtropical eastern Australia are relatively poorly studied, particularly in terms of carbon storage potential and long term response to a range of environmental factors (e.g. rising temperatures, increases in sea level, water extraction, urbanisation and alterations in fire regimes). These systems are an important component of the World Heritage listing for the iconic Fraser Island (largest sand island in the world). Patterned fens are generally associated with high northern latitudes or alpine regions but exist also in this sub-tropical setting. A new large project will investigate these wetland systems by focussing on an environmental gradient from the subtropics to the tropics in eastern Australia. The study sites will span an area from North Stradbroke Island (adjacent to Brisbane) to Byfield National Park (central Queensland).
In particular, this study will focus on peatland ecosystem dynamics and how climate impacts peatland extent and carbon accumulation. This will build on previous research that has focussed on sedimentology and palaeoecology of the patterned fens and will provide important information about how these World Heritage listed systems have responded to changes in the past and how they may respond to future climate change.

Furthermore, data from these peatlands will also be incorporated into maps and into models of peat distribution and accumulation for the last 1000 years, which will help to fill a large gap (coastal eastern Australia) in the global understanding of peatland ecosystem dynamics.
Full details on the project: http://www.exeter.ac.uk/studying/funding/award/?id=2667 or contact Dr Angela Gallego-Sala (Exeter) or Dr Patrick Moss (Queensland).

Europe

Estonia

Estonian bogs return to the wild

Greenhouse gases leaking out of degraded Estonian peat bogs pump more carbon emissions into the atmosphere than all the country's cars and trucks combined. That's why environmentalists want to restore the bogs to the way they were before large-scale peat extraction began under Soviet rule. When peat is extracted and the bog dries out, bacteria go to work on organic materials, releasing CO_2 – 8 million metric tons of it every year in Estonia, National Geographic writes. Now EU funds are helping Estonian scientists to restore the old bogs. The target this year is to restore more than 20,000 hectares at 89 sites, project manager Juri-Ott Salm said. "Europe's commercial peat industry is watching Estonia's EU-sponsored bog restoration project with wary support," National Geographic says. Peat is widely used as a substrate in commercial horticulture, but the industry is being challenged by environmental groups, who say peat extraction contributes to global warming. Peat is also used as fuel for power plants in Finland, where critics say the practice is taking the luster from the country's clean, green reputation. But European peat's contribution to greenhouse gases pales in comparison to Southeast Asia, where vast tracts of tropical peatland have been degraded, Irish peat expert Donal Clarke told New York University's publication Scienceline.

- http://www.tol.org/client/article/27103-estonia-environment-bog-carbon-emissions-peat.html
- http://news.nationalgeographic.com/2017/08/estonia-reduces-carbon-emissions-planting-peat-bogs/

United Kingdom

Conservation work helps to protect precious moorland

Work to protect the iconic moorland of the Peak District and South Pennines is having a positive and statistically significant effect on the environment, research recently launched by The University of Manchester and the Moors for the Future Partnership has confirmed. The study brought together 12 years' worth of data, to evaluate how well efforts to improve the environmental health of the moors are working. The aim of the work is to return the moors to an active, healthy state by re-introducing native plants. It is thought that this work will increase the number of different plant species living there, raise the water table and keep water on the hills for longer. A wider range of plant species improves the health of the moor, and makes it better able to support animal life including rare moorland birds. Raising the water table makes peaty soil less vulnerable to devastating wildfire, and improved vegetation cover helps slow the flow of water off the hills, especially in high rainfall events. Monitoring of this work is essential, to make sure that the predicted changes and improvements are becoming a reality. The research was undertaken by the Moors for the Future Partnership in collaboration with academics from The University of Manchester. "This research, resulting from more than a decade of monitoring, shows that the conservation work we do has a substantial and statistically significant effect on returning blanket bog habitat to a healthy state," said Dr Mike Pilkington, Senior Research and Monitoring Officer at the Moors for the Future Partnership. "Healthy peatlands provide a wide range of benefits including a supply of good quality raw water for the water companies to process for millions of customers; a habitat for rare and beautiful plants and wildlife; a means of absorbing and slowing the flow of storm water, and a store of carbon. Unfortunately over hundreds of years, pollution (dating back to the industrial revolution) and wildfire has had a damaging impact to the services that peatlands provide."

- https://phys.org/news/2017-07-precious-moorland.html
- http://www.darlingtonandstocktontimes.co.uk/news/15467371.Wemmergill_Estate_is_first_to_sign_up_to_agreement_with_Natural_England_on_peatland_restoration/

Peatland degradation in the Pennines (UK). Photo: Hans Joosten.

Yorkshire grouse shooters team up with peatland restoration

Grouse shooting estates in three Yorkshire dales will sign up to long-term agreements with conservation groups aimed at driving a wholesale restoration of the region's upland peat resources. The Moorland Association, which represents grouse moor owners responsible for more than 1m acres of land, has brokered deals with Natural England to reduce the burning of heather, which increases bird populations but which climate experts say is a threat to protected peat bogs. The announcement, two days before the start of the grouse shooting season on the "Glorious Twelfth" of August, signals a move away from rotational burning towards a "traffic light" approach to management intervention when it is needed. The Wemmergill Estate near Barnard Castle is the first to sign a 25-year agreement with Natural England, with upland catchments in Swaledale, Arkengarthdale and Wensleydale set to follow. Yorkshire has nearly 70,000 hectares of upland peat soil, which is a valuable habitat for plant and animal species and is rich in carbon. Around 70 per cent of the UK's drinking water comes from the uplands. Three years ago, a report by Leeds University warned that managed heather burning had "a profound impact on the life support systems of the peatlands", harmed aquatic life and released large quantities of stored carbon dioxide into the atmosphere. The Moorland Association said the Yorkshire deals, which were still being negotiated, had been prioritised because of the amount of deep peat in the area. A spokesman for the organisation said: "Natural England, as the custodian of the English countryside, is keen to get all the people who are interested in the uplands working together. "Wemmergill is the first example of grouse moor owners, conservation bodies and environmental bodies coming together and realising that they have a lot more in common than they have that divides them." The association's director, Amanda Anderson, added: "The plans map out extensive and innovative work to provide tangible environmental and conservation benefits alongside viable grouse shooting operations." The environment minister, Thérèse Coffey, who visited Wemmergill, said "The UK's unique upland ecology must be safeguarded for future generations to enjoy. "This approach is helping to achieve this by highlighting the benefits that can be reaped from a variety of grouse moor management practices."

http://www.yorkshirepost.co.uk/news/environment/three-dales-next-in-line-for-peatland-deals-1-8694314

Call for ban on grouse shooting at start of season

Campaigners have staged a protest on Ilkley Moor calling for a ban on the annual tradition of grouse shooting.
It is the 'Glorious Twelfth' today which officially signifies the start of the season. Campaigners claim the sport damages wildlife and the environment. It has been taking place on the moors since 2008. Dozens of people

joined a two mile ramble across the moor which included a protest picnic. This is the last grouse shooting season under the present license and campaigners are calling on Bradford Council not to renew it. However, those in favour of grouse shooting generally say it brings many benefits.

"It is a great pity that those calling for a ban on shooting on the moor ignore the very substantial social, economic and environmental benefits that moorland management provides. The habitat is managed all year and there is only eight days shooting. It helps preserve and enhance precious heather habitat, protect it from wildfire and is at the forefront of the UK's peatland restoration. Management also benefits a wide range of bird species, many of them endangered like the glorious curlew. In addition, many people enjoy visiting the countryside to shoot with each day bringing a much needed boost to the local rural economy," so Amanda Anderson of the Moorland Association

http://www.itv.com/news/calendar/2017-08-12/protest-ramble-held-calling-for-ban-on-grouse-shooting/

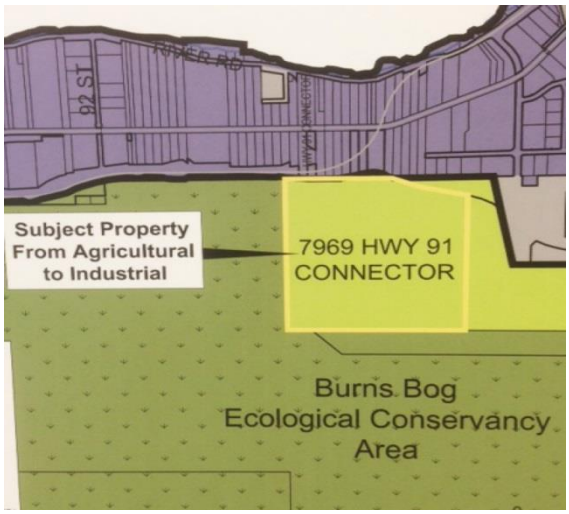
North America

Canada

MK Delta Lands gets approval for destruction of critical peatland habitat within Burns Bog

The MK Delta Lands development proposal to develop over 20 hectare of industrial space on a 62-hectare parcel in Burns Bog moved a step closer to reality following the Agricultural Land Commission's approval. The company says the site is ideally located for logistics or distribution centres. The proposal also includes transferring all the company's other land holdings (132.7 hectares) to the Corporation of Delta for conservation, including land east of Highway 91 where the company had originally sought to build housing.

The property where the company wants to build is zoned industrial but currently within the Agricultural Land Reserve, so it required an exclusion from the province.



The Burns Bog Conservation Society is opposed to the development, which still requires other approvals before it can go back to council for final approval. Several members of the Delta Farmers' Institute were also not convinced, describing the agricultural assessment of one parcel that would be handed to Delta as weak. They wanted assurance it would be available for farming, however, Delta had planned to add it to the ecological reserve. The land commission, whose ruling was dated last week, ruled against placing a restrictive covenant to not allow farming activity on that parcel. More Info: Eliza Olson: eliza@burnsbog.org

Greenland

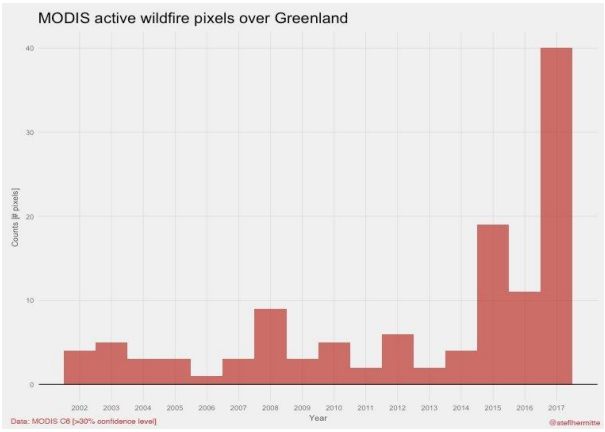
Peat fires on Greenland!

More than two weeks after they were first spotted, wildfires on the western coast of Greenland are still burning, worrying local residents and drawing the attention of scientists. The fires are roughly 90 miles northeast of the second-largest Greenlandic town, Sisimiut. There are currently three growing hot spots, according to an analysis of NASA data by Stef Lhermitte, an a ssistant professor of geoscience and remote sensing at Delft University of Technology in the Netherlands. Nina-Vivi Andersen, a reporter for Nanoq News in the capital, Nuuk, has lived in Greenland her whole life and says she has never heard of a wildfire there.

The wind direction has largely blown smoke toward the island's ice sheet and away from communities, including the international airport at Kangerlussuaq, where travelers said they could smell the smoke last week. But while the wind direction is good news in the short term, it may spell danger in the long term, says Jessica McCarty, an assistant professor of geography at Miami University in Ohio. "The [thing] that I'm concerned about for Greenland is the black carbon," she says, "You can think of it as the part of smoke that's black. The

soot. And when black carbon deposits on ice — something that's very dark in color on something that's very white — that then speeds up the melting of the Greenland ice sheet." McCarty has been studying satellite and other data about the Greenland fires for weeks now and notes that the area appears to be home to mostly low vegetation like moss on rocks, with no trees or tall grasses. She says all signs point to this being a peat fire. "[Peat] is a good fuel source," she explains. "When peat burns, the flames don't run across the landscape quickly the way they do in grass or forest fires. Instead, peat fires smolder down into the ground, so the boundaries change more slowly and they can burn for a very long time. Some peat fires have been known to persist through winter months, smoldering away under the snow.

- http://www.npr.org/sections/thetwo-way/2017/08/15/543406558/greenland-is-still-burning-but-the-smoke-may-be-the-real-problem
- http://www.sueddeutsche.de/wissen/oekologie-feuer-und-eis-1.3623499#redirectedFromLandingpage
- https://thinkprogress.org/a-rare-and-unusual-wildfire-has-hit-greenland-heres-why-thats-terrifying-2de794570798/
- http://www.npr.org/sections/thetwo-way/2017/08/08/542305822/photos-a-massive-wildfire-is-now-blazing-in-greenland
- http://www.gizmodo.co.uk/2017/08/theres-a-freakishly-large-fire-blazing-across-western-greenland/



Hotspots in Greenland 2002-2017 (Stef Lhermitte)

Fire in Betula nana*. Photo: Hans Joosten.*

Peatland conservation relevant papers July 2017

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

1. Peatland management & rehabilitation in Southeast Asia: Moving from conflict to collaboration: http://www.siiaonline.org/wp-content/uploads/2017/06/SIIA-Special-Report-Peatland-23062017.pdf
2. Wetlands International Annual Review and Accounts 2016 summary: https://www.wetlands.org/download/12633/ Full Text: https://www.wetlands.org/download/12629/
3. Permafrost thaw: Methane origins: http://www.nature.com/nclimate/journal/v7/n7/full/nclimate3333.html
4. Aquatic export of young dissolved and gaseous carbon from a pristine boreal fen: implications for peat carbon stock stability: http://onlinelibrary.wiley.com/doi/10.1111/gcb.13815/abstract?campaign=wolacceptedarticle
5. Vegetation history since the last glacial maximum in the Ozarkhighlands (USA): A new record from Cupola Pond, Missouri: http://www.sciencedirect.com/science/article/pii/S0277379116304309
6. The effects of *Eriophorum vaginatum* on N_2O fluxes at a restored, extracted peatland: http://www.sciencedirect.com/science/article/pii/S0925857417303348
7. Long-term vegetation dynamics and land-use history: Providing a baseline for conservation strategies in protected Alnus glutinosa swamp woodlands: http://www.sciencedirect.com/science/article/pii/S0378112716301396
8. On the classification of seawater intrusion: http://www.sciencedirect.com/science/article/pii/S0022169416308010
9. Groundwater salinity patterns along the coast of the Western Netherlands and the application of cone penetration tests: http://www.sciencedirect.com/science/article/pii/S002216941730241X
10. Spatially explicit estimates of forest carbon emissions, mitigation costs and REDD+ opportunities in Indonesia: http://iopscience.iop.org/article/10.1088/1748-9326/aa6656
11. Rate of warming affects temperature sensitivity of anaerobic peat decomposition and greenhouse gas production: http://onlinelibrary.wiley.com/doi/10.1111/gcb.13839/abstract
12. Spatial evaluation of Indonesia's 2015 fire affected area and estimated carbon emissions using Sentinel-1: http://onlinelibrary.wiley.com/doi/10.1111/gcb.13841/abstract

13. Holocene peatland development and vegetation changes in the Zoige Basin, eastern Tibetan Plateau: http://engine.scichina.com/publisher/scp/journal/SCES/doi/10.1007/s11430-017-9086-5?slug=abstract
14. Predicting vascular plant diversity in anthropogenic peatlands: Comparison of modeling methods with free satellite data: http://www.mdpi.com/2072-4292/9/7/681
15. Source apportionment and health risk assessment among specific age groups during haze and non-haze episodes in Kuala Lumpur, Malaysia: http://www.sciencedirect.com/science/article/pii/S0048969717312536
16. Amount and stability of recent and aged plant residues in degrading peatland soils: http://www.sciencedirect.com/science/article/pii/S0038071716303753
17. Radial oxygen loss by the cushion plant *Eriocaulon schimperi* prevents methane emissions from an East-African mountain mire: http://onlinelibrary.wiley.com/doi/10.1111/plb.12586/abstract
18. Dynamic Carboniferous tropical forests: new views of plant function and potential for physiological forcing of climate: http://onlinelibrary.wiley.com/doi/10.1111/nph.14700/abstract
19. Quantity and chemistry of water-extractable organic matter in surface horizons of Arctic soils under different types of tundra vegetation – A case study from the Fuglebergsletta coastal plain (SW Spitsbergen): http://www.sciencedirect.com/science/article/pii/S001670611730383X
20. Mid-late Holocene climate variations in southeast China inferred by the intermountain peat records from Fujian, China: http://www.sciencedirect.com/science/article/pii/S1040618216303573
21. Distributions of "bomb ^{14}C", biogeochemistry and elemental concentration in Hani mire peat profiles, NE China: Implications of environmental change: http://www.sciencedirect.com/science/article/pii/S1040618216314057
22. Holocene climate reconstruction based on herbaceous phytolith indices from an AMS ^{14}C-dated peat profile in the Changbai Mountains, northeast China: http://www.sciencedirect.com/science/article/pii/S1040618216303214
23. The roots of pollen analysis: the road to Lennart von Post: https://link.springer.com/article/10.1007/s00334-017-0626-y
24. High-resolution digital mapping of soil organic carbon in permafrost terrain using machine-learning: A case study in a sub-Arctic peatland environment: https://www.biogeosciences-discuss.net/bg-2017-323/
25. Records of East Asian monsoon activities in Northeastern China since 15.6 ka, based on grain size analysis of peaty sediments in the Changbai Mountains: http://www.sciencedirect.com/science/article/pii/S1040618216302877
26. Freshwater ecosystems could become the biggest losers of the Paris Agreement: http://onlinelibrary.wiley.com/doi/10.1111/gcb.13655/abstract
27. Criteria comparison for classifying peatland vegetation types using in situ hyperspectral measurements: http://www.mdpi.com/2072-4292/9/7/748
28. Hydrological processes and permafrost regulate magnitude, source and chemical characteristics of dissolved organic carbon export in a peatland catchment of northeastern China: https://www.hydrol-earth-syst-sci-discuss.net/hess-2017-412/
29. High-resolution digital mapping of soil organic carbon in permafrost terrain using machine-learning: A case study in a sub-Arctic peatland environment: https://www.biogeosciences-discuss.net/bg-2017-323/bg-2017-323.pdf
30. Tropical peat decomposability expressed through physical, chemical and biological properties under varying land management intensities: https://doi.org/10.14214/df.237
31. Behind the stability of boreal bog carbon: Compositional and functional variation of vegetation across temporal and spatial scales: https://doi.org/10.14214/df.240
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33. The initiation and development of small peat-forming ecosystems adjacent to lakes in the north central Canadian low arctic during the Holocene: http://onlinelibrary.wiley.com/doi/10.1002/2016JG003662/abstract
34. Spatio-temporal variability in biogenic gas dynamics in a subtropical peat soil at the laboratory scale is revealed using high resolution ground penetrating radar: http://onlinelibrary.wiley.com/doi/10.1002/2016JG003714/abstract
35. The final meltdown of dead-ice at the Holocene Thermal Maximum (8500–7400 cal. yr BP) in western Latvia, eastern Baltic: http://journals.sagepub.com/doi/abs/10.1177/0959683616683255
36. Assessing the value of UAV photogrammetry for characterizing terrain in complex peatlands: http://www.mdpi.com/2072-4292/9/7/715
37. Freeze-thaw cycles simultaneously decrease peatland photosynthetic carbon uptake and ecosystem respiration: http://www.borenv.net/BER/pdfs/ber22/ber22-267-276.pdf

38. A 7000-year history of coastal environmental changes from Mexico's Pacific coast: A multi-proxy record from Laguna Mitla, Guerrero: http://journals.sagepub.com/doi/abs/10.1177/0959683616687379
39. A six thousand-year record of climate and land-use change from Mediterranean seagrass mats: http://onlinelibrary.wiley.com/doi/10.1111/1365-2745.12741/abstract
40. Biological Flora of the British Isles: *Serratula tinctoria*: http://onlinelibrary.wiley.com/doi/10.1111/1365-2745.12824/abstract
41. Spatial variations in the surface water chemistry of subtropical peatlands (Central China) linked to anthropogenic pressures: http://www.mdpi.com/2073-4441/9/7/505
42. Understanding the Southeast Asian haze: http://iopscience.iop.org/article/10.1088/1748-9326/aa75d5/pdf
43. Implementing northern peatlands in a global land surface model: description and evaluation in the ORCHIDEE high latitude version model (ORC-HL-PEAT): http://www.readcube.com/articles/10.5194/gmd-2017-141
44. Prescribed burning, atmospheric pollution and grazing effects on peatland vegetation composition: http://onlinelibrary.wiley.com/doi/10.1111/1365-2664.12994/abstract
45. Holocene development and permafrost history in sub-arctic peatlands in Tavvavuoma, northern Sweden: http://onlinelibrary.wiley.com/doi/10.1111/bor.12276/abstract
46. Extreme precipitation and long-term precipitation changes in a Central European sedge-grass marsh in the context of flood occurrence: http://www.tandfonline.com/doi/full/10.1080/02626667.2017.1353217
47. Delineation of peatland lagg boundaries from airborne LiDAR: http://onlinelibrary.wiley.com/doi/10.1002/2017JG003835/abstract
48. Soil thermal dynamics, snow cover, and frozen depth under five temperature treatments in an ombrotrophic bog: Constrained forecast with data assimilation: http://onlinelibrary.wiley.com/doi/10.1002/2016JG003725/abstract
49. Adding stable carbon isotopes improves model representation of the role of microbial communities in peatland methane cycling: http://onlinelibrary.wiley.com/doi/10.1002/2016MS000817/abstract
50. Nitrogen fixation by *Alnus* species boosts soil nitrous oxide emissions: http://onlinelibrary.wiley.com/doi/10.1111/ejss.12457/abstract

Polygonal peat plateau mire at Cape Bolvansky (Nenets Autonomous public, RF). Photo: Hans Joosten.