

# Peatlands

*International*

issue 4.2017



IPS Jubilee Symposium 2018 in the Netherlands  
Impressive Baltic Peat Producers Forum 2017 in Riga  
Finnish Peat Day Seminar with Multiple Peat Use Theme  
1st Tropical Peatland Roundtable in Southeast Asia signs Jakarta Declaration  
International Conference on Climate Smart Agriculture on Organic Soils (CAOS)  
Developing International Collaborations to Address Fire and other Conservation Issues in Central Kalimantan  
"Second Harvest" – Peatland Art Exhibition in Newbridge, County Kildare, Ireland  
IPS Project on Forecasting China's Peat Demand



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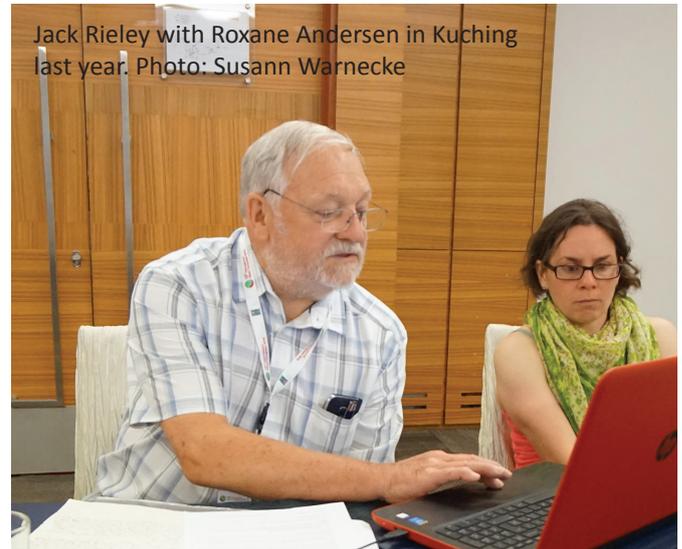
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# Editorial

In this 50th year since establishment of the IPS it is appropriate to consider what it has achieved, what it now does and what its prospects are for the future. The history of the IPS mirrors my personal peatland journey as I took up a position of lecturer in plant ecology at the University of Nottingham in September 1968. I became a member of the IPS soon afterwards and have remained so ever since.

Events leading to the formation of the IPS date back to the World Power Conference in 1950 at which it was proposed to hold an International Peat Symposium in Dublin in 1954 (later renamed the First International Peat Congress). Subsequently, at a meeting of national peat representatives in 1962 it was decided to hold another International Peat Congress in Leningrad in 1963. At this event it was agreed to establish an International Executive Committee for the future receipt and exchange of information on all aspects of peat science and technology at international level.

The closing session of this Congress passed unanimously a resolution calling for the formation of a permanent scientific and technical organisation for the study and utilisation of peat and peatlands and a roadmap leading to



formal establishment of the Society at the Third International Peat Congress in Quebec, Canada in 1968.

From the outset, the principal aim of the IPS has been to promote international contact and co-operation on all matters concerning the study and utilisation of mires, peatlands, peat and related materials to advance knowledge and understanding in the scientific, technical and economic fields. In these it has been very successful working through Scientific Commissions and Expert Working Groups. It was unique in promoting these aims at the time.

Throughout its existence the IPS has focused strongly on the acquisition, assessment and dissemination of scientific and technical information from the best international experts. It has done this consistently in an unbiased and transparent manner in the many international

Peatlands International is the global magazine of the International Peatland Society (IPS). It provides the almost 1,500 individual, institute and corporate members of the Society with up-to-date information on peat and peatland matters, reports and photos of conferences and workshops, background reports and publication reviews.

To serve all of our members, we provide always a good balance between economic, social and environmental points of view. To receive Peatlands International in your email every three months, visit [www.peatlands.org/join-us](http://www.peatlands.org/join-us) and sign up as a member or subscribe for € 60/year.

Peatlands International  
ISSN: 1455-8491

Publisher: International Peatland Society  
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Cover: Harris Gunawan introducing the Jakarta Declaration  
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conferences and congresses and national symposia and workshops it has sponsored. In this it has been assisted by its network of National Committees.

In its early years the IPS also established links with other organisations with an interest in peat and peatlands including UNESCO, the Food and Agriculture Organization of the United Nations (FAO), the International Union of Forest Research Organizations (IUFRO), the International Society for Horticultural Science (ISHS), the International Union of Soil Sciences (IUSS), the International Mire Conservation Group (IMCG) and the European Union Directorates of Agriculture, Energy and Environment. *Continues on page 6..*

Students after planting trees in degraded peatland in Central Kalimantan. Photo: Susann Warnecke



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# Editorial...



International Peatland Society

*[Continues from page 3]*

**T**hings changed in the early 1990s following the 1992 United Nations Conference on Environment and Development - the "Earth Summit" - held in Rio de Janeiro, Brazil.

This meeting of 172 countries established three new International Conventions, namely, Convention on Biological Diversity (CBD), Framework Convention on Climate Change (UNFCCC), and Convention to Combat Desertification (UNCCD).

The world of peatlands and peat was changing, and they were becoming an important part of the climate change debate because of their large carbon stores and greenhouse gas emissions following drainage and utilisation. This led to a change in direction of the IPS in response to the activities of environmental NGOs who were campaigning that the only use of peatlands and peat was to keep peat in the ground and maintain all peatlands in a waterlogged, intact condition.

Much more emphasis was being placed on peatland conservation than use of peatlands and peat which is a very one-sided point of view.



IPS delegates in Leningrad in 1962. Photo: IPS Archive

Many present-day nature conservationists view peatlands as sacred objects that must be protected in their entirety when they are dynamic ecosystems that have an origin, lifespan and demise, susceptible at all stages to environmental changes and pressures.

Peatlands do not accumulate peat and carbon for ever and are very sensitive to climate and changes to it. While there is much emphasis now on rewetting drained and degraded peatlands there is a high cost to society and it is still unproven how effective this will be in the long term and if it will be value for money.

The IPS recognises the problem of high greenhouse gas emissions from drained peatlands, especially those

used for agriculture and forestry, the relatively small total emissions from peat extraction industries in Europe and North America and the very high emissions from large scale deforestation and commercial peatland development in Southeast Asia.

However, the IPS and its network of National Committees and experts deal with scientifically obtained and verified facts.

The IPS does not campaign nor does it advocate, but presents information in an unbiased and transparent manner so that sensible decisions and

recommendations can be made. That is why the IPS has repositioned itself recently, both internally and externally, to face current and emerging issues and problems at the international and



The IPS Executive Board meeting Ramsar representatives in Helsinki in 2016. Photo: Susann Warnecke



regional levels. The IPS has been associated with some international conventions and NGOs for a long time. For example, it has been an observer organisation to the Ramsar Scientific and Technical Review Panel (STRP) since 1999. More recently the Society has expanded its international links and activities by

- obtaining observer status on the UNFCCC,
- becoming a partner in the Global Peatland Initiative (GPI),
- joining the Global Landscape Forum (GLF),
- monitoring peatland-relevant matters of CBD,
- working in partnership with the Mitigation of Climate Change (MICCA) programme of FAO,
- applying for membership of the International Union for Conservation of Nature (IUCN),
- taking the lead in the formation of the Round

Table for Responsible Management of Tropical Peatland,

- commenting on proposals to the EU for tighter regulation of peatland and peat utilisation and
- sending representatives to almost every regional and international meeting at which peatland and peat policies are discussed and promoted.

There is a greater need for the IPS now than ever before because it provides the insight to and understanding of peatlands and their condition to promote their responsible management and use that will ensure their survival long into the future. However, to do this requires greater input and understanding from the entire IPS membership so offer your services and expertise now and join this exciting journey!

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*Professor Jack Rieley*

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# IPS Jubilee

# Symposium 2018 in the Netherlands

In 2018, the International Peatland Society (IPS) celebrates its 50th anniversary from 11th to 13th September. The Dutch National Committee of the IPS (Nederlands Veengenootschap) is organizing a symposium on the wise use of peatlands, as well as peat, past and future, along with specific topics that will attract experts from all around the world.

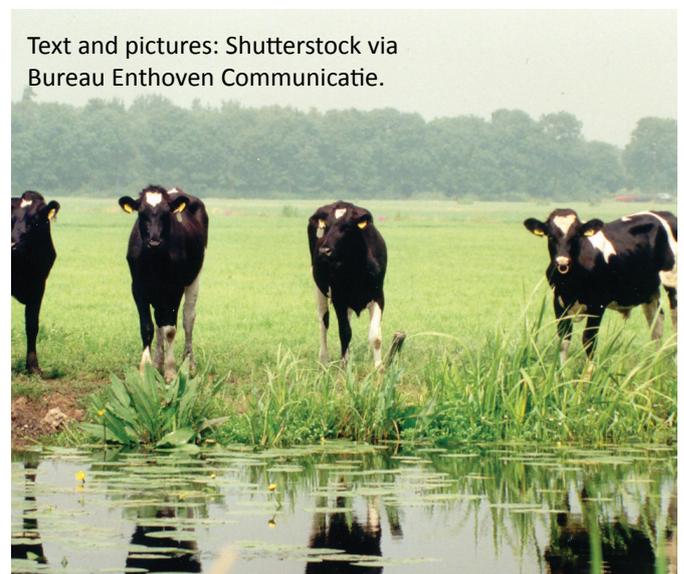
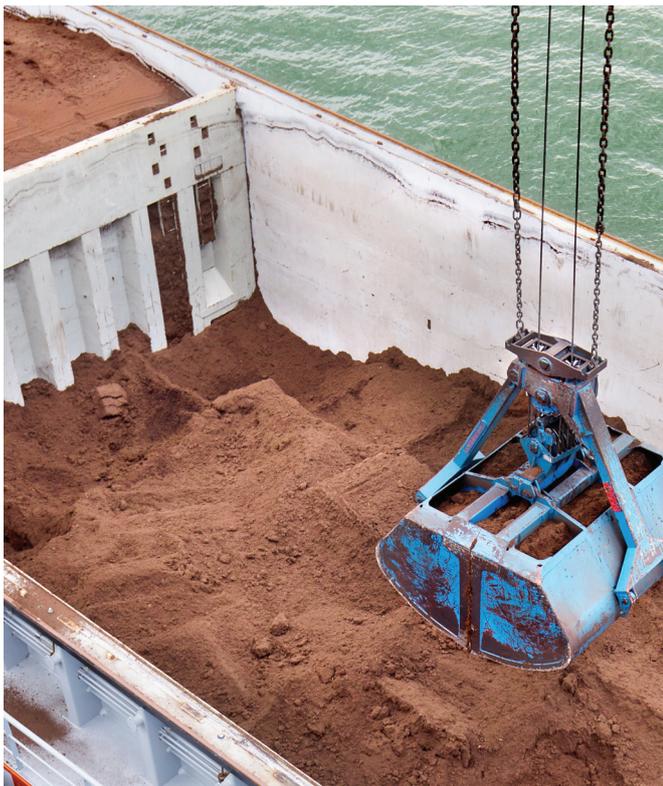
A grand gala evening will also be part of the programme. The symposium will be held in Rotterdam. The setting for this high-profile international jubilee symposium will be announced in January.

## Organizing committee

Thanja van Dongen is organizing and coordinating this symposium, supported by Guus van Berckel, Rens Jacobs, Anne Wolff, Jan van den Akker, Piet Cleveringa and Anne Jelle Schilstra. The organizers aim to bring together scientists, policymakers, regulators, NGO representatives and industry managers (peat harvesting, growing media and energy) to share the most recent scientific research and technical developments in the field of peatland use in agriculture, forestry and the peat industry.

## Programme

The organizing committee is currently working on a substantial programme, which will be announced

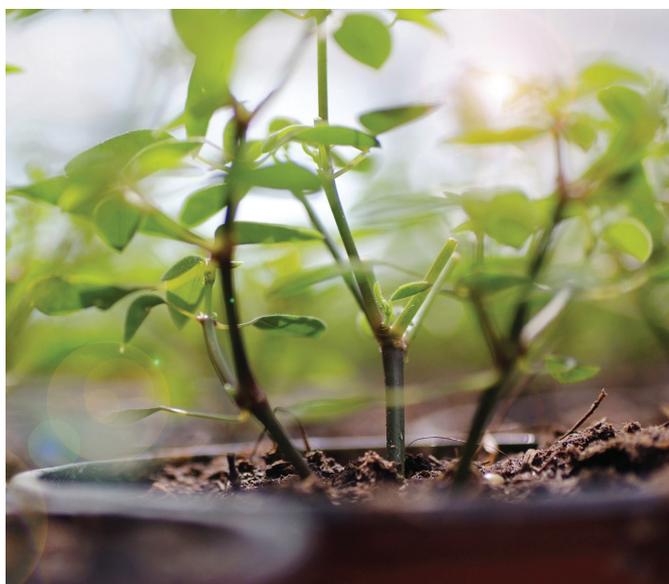


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in January. For now, the provisional programme is as follows:

- Opening of the jubilee symposium on Tuesday morning
- Four keynote speakers
- Excursions to high-tech horticulture production facilities and a flower auction
- ‘Lectures on the road’, which is an innovative concept for learning about and observing landscape history and the subsidence of drained peatlands
- Parallel sessions on environmental, social and economic aspects of peatlands and peat, including poster sessions
- 50th anniversary gala evening, dinner and dance
- Closure of the event on Thursday afternoon



This jubilee symposium is unique. Typical Dutch issues will receive extra attention, such as the subsidence of drained peatlands, CO<sub>2</sub> emissions, submerged drains and paludiculture, as well as subjects such as landscape history, the use of peat in horticulture, planning the worldwide demand for food production, and the future availability of peat.

## Registration

In January, it will be possible to register for this symposium. Interested people can pre-register without any obligation by sending their name to [secretaris@veengenootschap.nl](mailto:secretaris@veengenootschap.nl). When the programme is announced and the registration is opened, they will be the first to be informed.

## Call for papers

The organizing committee kindly asks relevant speakers to indicate their interest in presenting an oral presentation on Thursday, 13th September 2018, by submitting a preliminary title and two to five sentences describing the topic by email to Mr. Jan van den Akker at [JanJH.vandenAkker@wur.nl](mailto:JanJH.vandenAkker@wur.nl).

For general information, please email [secretaris@veengenootschap.nl](mailto:secretaris@veengenootschap.nl).

*See you in Rotterdam!*

# 1st Tropical Peatland Roundtable in Southeast Asia signs Jakarta Declaration

**T**he First Tropical Peatland Roundtable was held during 1-2 November 2017 in Jakarta at the Menara Peninsula Hotel. More than 60 participants, mainly from Indonesia and Japan, but also Finland, Germany, Canada, Singapore, the Netherlands and other countries attended the meeting, which was organized by the IPS in cooperation with Japan Peatland Society, the Indonesian Peatland Restoration Agency (BRG) and Hokkaido University.

The event started with keynote presentations addressing important issues of tropical peatlands, including climate impact, restoration efforts and

the involvement of local people. In addition, there were reports from researchers working in the field in the Tropics, peatland experts with much experience of boreal peatland management, and specialists on law enforcement and education.

Professor Mitsuru Osaki proposed an extensive management guide that would take into consideration experiences of all persons and institutions involved in responsible management of tropical peatland. This was followed with interest by the participants who readily gave their input to the subject matter presented. Introductory speeches were also given by Gerald





IPS President Gerald Schmilewski reading out the Jakarta Declaration with participants of the Round Table. Photo: Susann Warnecke

Schmilewski, IPS President, Nazir Foead, CEO of the Indonesian Peatland Restoration Agency, Pasi Kaskinen, Executive Vice-President of Finland University and Tuija Vähäkuopus, Geological Survey of Finland. Other presenters were Professor Harris Gunawan, University of Riau, Indonesia, Dr Hidenori Takahashi, University of Hokkaido, Japan and Mr Bernd Hofer, Chair of the IPS Peatlands and Environment Commission.

The interactive sessions were interrupted by delicious lunches and coffee breaks, and the participants had the opportunity to network during casual and friendly dinner settings in a

relaxed atmosphere. A special highlight was the open-air meeting with the two majors of Palangka Raya, Dr. H.M. Riban Satia and Dr. Ir. Mofit Saptono Subagio, who not only expressed their city's appreciation for the visitors but also joined in eating, singing and dancing towards the end of the evening. What a special experience!

On the second meeting day, intensive work was done to complete the "Jakarta Declaration on Responsible Management of Tropical Peatlands". This was a joint effort by all present and summarized in brief the goals and concrete steps to implement better practices for field work and



Meeting the Mayors of Palangka Raya, Dr. H.M. Riban Satia and Dr. Ir. Mofit Saptono Subagio. Photo: Susann Warnecke



Curious goat at smallholder farm. Photo: Susann Warnecke

policy formulation for the coming period. This is important to work towards the challenging goal of BRG to restore two million hectares of peatlands by 2020. The final version of the Declaration was agreed and signed by the representatives of BRG, IPS and Hokkaido University.

The experience of the theoretical sessions was enhanced by a field trip to Central Kalimantan during the 3rd and 4th day of the Round Table. About half of the participants headed by plane to Palangka Raya to see a growing city in the middle of mostly degraded peatland, livelihoods of local farmers and merchants, and to examine first-hand how peatland restoration has been implemented in practice so far.

We travelled by bus to six destinations. The first stop showed how a large canal will be closed by a concrete dam as previous wooden constructions did not withstand local peoples' desire to use the canal to commute between different areas. Also, we were shown typical medicinal plants that provide for example, health benefits to local women.

At the second stop, the group examined smaller channels that were partly blocked by wooden dams. Local children were always ready to show the visitors their surroundings and swimming arts. These children might be the researchers of the next generation, so it is important to educate people in the area about water and waste management and care and respect for their environment.

Next, we walked through peatland used for agriculture, including growing fruit (banana, dragon fruit, mango etc.), keeping goats and ducks, and growing fish in special ponds, called 'beje'. Local people are attempting to apply scientific findings to practical agriculture, but this will take time.

The tour included a visit to a fire watch tower, a presentation of fire fighting equipment, a stop at a nursery for local plants that can be used to restore burnt forest and degraded peatland and a walk into a small area of peat swamp forest, where precipitation, water level and greenhouse gas fluxes are measured, and where orangutans might appear from time to time. All was followed with interest, but also some sadness as clearly water



Peat swamp forest. Photo: Susann Warnecke

# “Jakarta Declaration” on Responsible Management of Tropical Peatland

Truly effective Tropical Peatland Restoration in Indonesia will require substantial development of an integrated peatland management system based on scientific and technical knowledge and information. Achieving this requires the establishment of an International Committee for Technical Consultation to facilitate Tropical Peatland Restoration Action.

For this purpose, the IPS (International Peatland Society), BRG (Peatland Restoration Agency, Indonesia) and JPS (Japan Peatland Society) organized the 1st “Tropical Peatland Roundtable” on the 1st and 2nd November 2017 in Jakarta, supported by JICA (Japan International Cooperation Agency), Norwegian Embassy, UNDP (United Nations Development Programme), and BRG.

**After two days of thorough discussion, a principal strategy of Responsible Management of Tropical Peatland was agreed. This includes five pillars of action:**

- **establish a “Tropical Peatland Center “**
- **organize an “ International Committee for Technical Consultation”**
- **develop an “Integrated Monitoring System”**
- **conduct a “Model Project” for responsible management**
- **achieve capacity building**

We release this “Jakarta Declaration” as a milestone for promoting action on “Responsible Management of Tropical Peatland”, also as a basis for bridging Indonesian stakeholders and the international community.

*Gerald Schmilewski, The President of the International Peatland Society (IPS)*

*Nazir Foad, The Head of Peatland Restoration Agency (BRG)*

*Mitsuru Osaki, The President of Japan Peatland Society (JPS)*



Planting ramin and other trees in burnt peatland. Photo: Susann Warnecke



The field trip to Central Kalimantan was one of the highlights of the Round Table. Photo: Susann Warnecke

levels had dropped during the last few years due to the drainage of the surroundings and the peat is drying out.

The destination was an area of burnt peatland where participants and a group of local students got the chance to plant trees, mostly ramin, together with a prepared name sign. This was done within the RePeat Project and exciting for most, especially as the ground was soft, wet and unpredictable. Quite a few of us got to know the nature of peatlands in and out of their shoes, pants and hands, and most did not know if they

should first take pictures, laugh, or help their fellow colleagues out of the unstable peat.

Nevertheless, all survived this part of the Round Table and at our last stop, we paid a quick visit to the Centre for International Cooperation in Sustainable Management of Tropical Peatland (CIMTROP), University of Palangka Raya.

CIMTROP was established by peatland researchers and activists Dr Bambang Setiadi, Dr Suwido Limin, Professor Jack Rieley and Dr Hidenori Takahashi in 1993 as a field research station and laboratory and



Colourful houses and boats at Kereng Bangkirai. Photo: Susann Warnecke

Quiz and interview with Indonesian students. Photo: Susann Warnecke



is of growing importance for restoration, education and science in the area.

After another night in Palangka Raya, the group evaluated the field trip experiences during a fourth theoretical session at our hotel. To many, the scientific presentations, maps and graphs made now more sense as they had seen many of the sites in nature.

Words of thanks were expressed to the local and foreign experts, the organisers and sponsors, after which our buses brought us to the banks of the Sabangau River at Kereng Bangkirai. What a colourful view to see the houses, boats and inhabitants near the harbour! All guests were equipped with life-jackets and guided to two wooden tourist boats that sailed us to the alive or burnt vegetation islands in the river.

It was interesting to hear about the impact of the villagers on the river and vice versa, about fishery and local trade and how massive fires are threatening this area. As an example, we saw a fire-damaged jetty and guard post and narrow-gauge “railway” at the edge of the river that marks the entrance to the CIMTROP Natural Laboratory which probably some IPS members have visited during its better days.

Nevertheless, the friendliness and optimism of the Indonesians gave us hope that education, science and rightly-applied financial and organizational

support will bear fruits and help to stabilise the area at least to some extent. Hopefully the Jakarta Resolution will be a step to achieve this goal. Much work is still needed, on scientific, practical and political levels. Let us all be part of that process in one way or another.

The Tropical Peatland Round Table was initiated by the IPS Executive Board at and after the International Peat Congress in 2016 in Kuching, Malaysia, which clearly showed that there is a growing need for more communication, exchange of information and responsible management practices in Southeast Asia.

Shortly afterwards, the Japan Peatland Society and BRG joined the efforts and the idea for a larger meeting in Indonesia was born. A memorandum of understanding was signed at the IPS Convention in Aberdeen in May 2017 and first invitations went out in autumn – ending up in an impressive event.

We hope that similar meetings can be organized in the future under the umbrella of IPS, also in other regions with tropical peatland.

*Susann Warnecke*

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# Impressive Baltic Peat Producers Forum 2017 in Riga

The 17th Baltic Peat Producers Forum was held in Riga, Latvia from 13th until 14th September 2017. This was the largest Baltic Peat Producers Forum in the history of the organization. The Forum gathered 302 participants from 16 countries, including peat industry representatives from various peat-producing countries, as well as regulation-makers and researchers who shared their experience and knowledge on peat- and peatland-related issues. During the Forum, there was a small exhibition in which 15 stands were displayed.

The conference addressed issues regarding legal frameworks, nature conservation and re-cultivation, as well as other issues regarding

scientific research related to peatlands, including work on GHG emissions. Representatives of the Latvian and Estonian ministries responsible for the peat industry presented their views on the development and management of the industry.

The event was also attended by the IPS, Growing Media Europe and Energy Peat Europe. The vision of these organizations regarding the current situation, current issues, issues to be solved and future development was addressed in this event.

Unlike other years, the situation in the field of peat extraction was considered not only in Latvia, Estonia and Lithuania, but also in Germany, the Netherlands, Finland and Sweden. Industry

representatives from these countries informed attendees about this year's season of peat extraction, the current issues in each country and their visions for the future.

The Forum was opened with an ice-breaking party held at the fibres factory of Pindstrup Latvia. Participants had the opportunity to become acquainted with the exhibits of the Baloži peat museum railway and to take a guided



Seminar of Baltic Peat Forum 2017.  
Photo: Reinis Oliņš

tour along the narrow-gauge railway. Railways of this type have survived in several peat extraction sites.

The Forum was closed with the Gala Dinner at the Riga Latvian Society House, and the organizing of the next Baltic Peat Producers Forum was handed to Estonia. BPF18 will be held in Estonia.

Positive feedback received both during the Forum and after it shows the importance of such an event and its necessity in the industry, and demonstrates that the Forum holds a key place amongst the peat industry events in Europe.

The organizers of the 2017 Forum once again express their gratitude to the general sponsor, Pindstrup, the gold sponsor, Klasmann-Deilmann, and silver sponsors Turftech International, Lachenmeier and Baltem.



Ride along the narrow gauge railway Baloži during the opening of BPF17.  
Photo: Reinis Oliņš

The organizers thank all sponsors of the 17th Baltic Peat Producers Forum.

*Ingrīda Krīgere*

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Opening party of 17th Baltic Peat Forum at Pindstrup. Photo: Reinis Oliņš

# More than 60 Peat and Peatland Experts at the International Conference on Climate Smart Agriculture on Organic Soils (CAOS)

**C**ontrolled drainage and active water management might be climate smart options for agricultural production on organic soils under current and future climatic conditions.

CAOS is an EU-financed research project, which aims to distribute knowledge of how active peatland management under wet conditions can improve the productivity of biomass, yield stability and quality, trafficability, and soil and water quality, while providing greenhouse gas (GHG) mitigation and thus resilience to climate change.

Hosted by the Swedish project team, the CAOS conference was held at the Swedish University of Agricultural Sciences (SLU) in Uppsala from 23-24 November 2017.

Attendees included experts from the other project teams, such as those of Denmark, Estonia, Finland, Germany and the Netherlands, as well as colleagues from Canada, Norway, Poland, New Zealand, Switzerland and the UK. Delegates from the project's advisory board (Wetterskip Fryslân and the Swedish Board of Agriculture) also participated.



The venue was located at the SLU's newly constructed 'Ulls hus' on its Ultuna Campus. Photo: Joakim Hermansson

Peatlands store a major share of the world's soil organic carbon. Many European peatlands have been drained and cultivated in previous centuries. This has fostered land peat mineralization and surface subsidence. Therefore, drained organic soils, which represent a large source of GHG emissions,



# CAOS

Climate Smart Agriculture  
on Organic Soils

are at high risk of being degraded and lost. At the conference, we discussed options for maintaining production on organic soils, while reducing GHG emissions and buffering climate change.

The meeting sought to exchange current research results both from the natural and the social sciences.

Brief speeches of welcome were given by the conference chairs Kerstin Berglund and Örjan Berglund. The conference was divided into five sessions with 22 oral presentations covering



Researchers being entertained or made to contemplate by the magician Johan Ståhl.

Photo: Sabine Jordan

the following topics: water management; soil management and nutrient leaching; economy and policy; biomass adapted to wet conditions and GHG emissions. Twenty-one posters covered all the topics of the conference.

During the conference dinner, the magician Johan Ståhl baffled the gathering of researchers – the tricks were beyond their imagination, even though they carefully followed every magical movements. Another highlight of the conference dinner was a performance by the Swedish nyckelharpa quartet 'Harpya', who played traditional Swedish folk music. Some of the arrangements were accompanied by Örjan Berglund, who played the violin.

The proceedings of the CAOS conference are available at <https://pub.epsilon.slu.se/14739/>. For more information, please visit [www.caos-project.eu](http://www.caos-project.eu).



Kerstin Berglund and Örjan Berglund open the poster session. Photo: Sabine Jordan

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# Finnish Peat Day Seminar with Multiple Peat Use Theme

The traditional “Turvepäivä”, the Bioenergy Association of Finland’s Peat Day, attracted some 70 participants to Hotel Tornii in Tampere on 13th November 2017. The afternoon seminar highlighted different peat uses, from animal bedding to more traditional horticultural and energy.

In Finland, energy peat production provides a solid foundation to new peat products and the diversification of peatland use. This was clearly brought up in the opening words of Mr Jussi Laitinen, CEO of Tampere Power Utility.

The declining trend in energy peat production, in particular, was reflected in recent statistics collected by the Bioenergy Association. Due to low demand and feed-in tariffs for renewables, peat has especially suffered in energy-efficient

combined heat and power generation. Total peat production barely achieved 11 million m<sup>3</sup> in 2017 of which 1.6 million m<sup>3</sup> was for growing media and bedding, while the rest was for energy equalling about 8.4 TWh.

The declining production figures are a mirror of the shrinking earnings in terms of supply. Graphs demonstrating this phenomenon were shown by Mr Simo Jaakkola, Deputy CEO of the Finnish Contractors Union. Chair of Finnish SME Peat Producers, Ms Hanna Haavikko, backed his claims, adding that rising environmental monitoring costs and decreasing peat prices will lead to an unbearable situation very soon.

Professor Hannu Ilvesniemi from the Natural Resources Institute Finland envisioned a much brighter future for peat and peatlands: new



Always worth a visit - Tampere City. Photo: Susann Warnecke

products are in the pipeline, while sphagnum moss has been underutilized in Finland. Woody plants will be used intensively and plants from wetlands have to be considered much more for the benefit of mankind. Finland should maintain its competitive edge in the wise use of peatlands.

A new version of Energy Peat Quality Requirements was produced for the seminar. The author, Principal Scientist Ms Eija Alakangas from VTT Technology Research Institute, presented the main changes, such as the inclusion of the recent LCP/BREF document (Large Combustion Plants / Best Available Techniques REFerence) to the previous iteration from 2006.

A highly interesting new scope was presented by Ms Hanna Hamina from the Finnish Poultry Association. The high scores for Finland in poultry health, especially feet conditions, are the result of quality management, which involves the use of peat as top bedding material. Peat as a litter material is part of the Finnish broiler production system which ensures good health and welfare for the animals and high quality meat products for consumers. The annual peat consumption of around 80,000 m<sup>3</sup> is well justified and of high value.

New peat production technology and methods were introduced by Production Manager Mr Tomi Koivula from Vapo and CEO Mr Juhani Lehti from Peatmax Ltd. Smaller areas, shallow peat layers, increasing transportation distances and environmental aspects continuously pose new challenges to developers. Meanwhile, the extraction of peat and moss for new purposes offers special incentives to research and development units. The



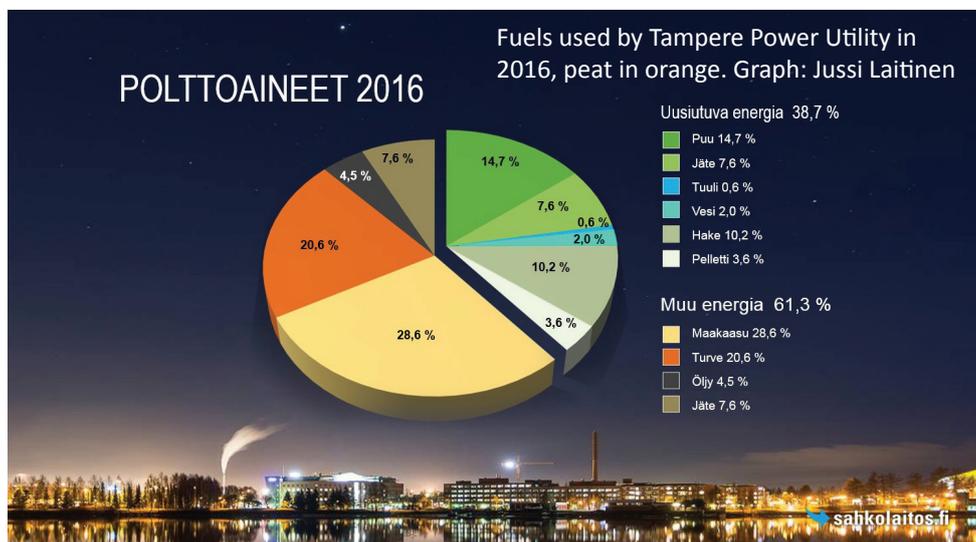
Finnish chicken in peat bedding. Photo: Hanna Hamina

wide utilization of unmanned aerial vehicles, or drones, for various purposes in peat extraction and environmental monitoring has been a breakthrough this year.

Finally, the Peat Branch's communications and public relations were highlighted by Ms Miia Välikorpi, Communication Manager of the Bioenergy Association. Against the backdrop of new parliamentary elections taking place after only one year, a number of actions was presented, which could create a more favourable environment for the utilization of peat in Finland.

*Hannu Salo*

Bioenergy Association of Finland & IPS Expert Group for Growing Media and Energy  
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# Developing International Collaborations to Address Fire and other Conservation Issues in Central Kalimantan, Indonesia

**P**eatland mismanagement and associated forest fires are a crucial conservation concern in Indonesian Borneo (Kalimantan). This is especially true during dry years, such as 2015, when a strong El Niño event led to particularly dry conditions.

From August to November 2015, MODIS satellites detected over 50,000 fire hotspots in Kalimantan, with 53% on peatland. Recent estimates indicate these fires burnt over 22,000 km<sup>2</sup> of land in Kalimantan – an area larger than Israel –, releasing

an estimated 0.45 Gt CO<sub>2</sub>e (Lohberger et al., 2017). The toxic haze produced from peat fires is a major public health hazard, with an estimated 69 million people persistently exposed to unhealthy pollutant levels arising from these fires during 2015, leading to 11,880 premature mortalities in Equatorial Asia (Crippa et al., 2016).

The World Bank estimates that the economic cost of the 2015 Indonesian fires was at least USD 16.1 billion, equivalent to 1.9% of Indonesia's 2015 GDP and 34% of GDP for Central Kalimantan.



Workshop delegates arriving at the Indonesian Embassy in London and meeting the Minister Councillor (Mr. Vitto Tahar, top row, second from left) and First Secretary (Mr. Bonifacius Riwi Wijayanto, bottom row, first on left) of Economic Affairs. Photo: Susan Cheyne, Borneo Nature Foundation.

These forests' rich biodiversity, including many of the largest remaining populations of the critically endangered Bornean orangutan, is also gravely threatened by forest loss and fragmentation associated with these fires.

As highlighted in the previous issue of PI (Setiadi, 2017), the need to protect and restore Indonesia's peatlands is now urgent. With this in mind, the Borneo Nature Foundation (BNF) and University of Exeter (UoE) recently brought together over 30 scientists and Indonesian government representatives, to discuss challenges and opportunities relating to peat fire and other conservation issues in Central Kalimantan.

Delegates attending the two-day meeting at the UoE's Cornwall Campus included representatives of BNF, UoE, the Indonesian Peat Restoration Agency (BRG), Natural Resources Conservation Agency (BKSDA) and Sebangau National Park (BTNS), who were joined by scientists from six European universities, plus the University of Palangka Raya and University Muhammadiyah Palangka Raya (UMP) in Central Kalimantan.

Prior to the meeting, representatives from BNF plus the workshop's ten Indonesian delegates visited the Embassy of the Republic of Indonesia in London, where they met the Ambassador to the UK, Deputy Chief of Mission, plus Minister Counsellor and First Secretary of Economic Affairs. This provided an opportunity to outline to these officials the conservation challenges facing Kalimantan's peatlands and the opportunities for collaborations to address these challenges that we aimed to create through this workshop.

The workshop began with 1.5 days of stimulating presentations, during which delegates described



Degraded peatland in Central Kalimantan. Photo: Susann Warnecke

advances in understanding of ecological, physical and social issues related to fire, forests and biodiversity conservation in Central Kalimantan. The talks were headlined by Dr Alue Dohong, Deputy for Construction, Operation and Maintenance of the BRG, who outlined the agency's "3Rs Approach" to peatland restoration: Rewetting of peatland (R1), Revegetation of bare peatlands (R2), and Revitalization of local livelihoods (R3).

This was followed by an insightful presentation on the tropical peatland fire dynamic by Prof. Susan Page (University Leicester), who highlighted the need to accept that peatland resilience to fire at the landscape scale has altered and that land management practices must adapt accordingly.

Five BNF presentations focused on outlining the conservation issues faced, the importance of these for primate and felid populations, plus fish and fishers in the region, and rural livelihood strategies and adaptation to fire.

Presentations by nine UoE researchers highlighted a diverse array of techniques that are or may potentially be employed to further research and conservation efforts in the region, providing much potential stimulus for developing future research collaborations.



Workshop delegates at the University of Exeter's Cornwall Campus in UK. Photo: Jake McPherson

Dr Lydia Cole (Rezatec) provided an important contextual palaeoecological perspective on tropical peatland burning and Laura D'Arcy (ZSL) described the role of partnerships in protecting peatlands. This was built on by Rudy Priyanto (BRG), who outlined collaborative efforts to restore Central Kalimantan's peatlands, plus Dr Ici Kulu (UPT LLG CIMTROP), Anggodo (BTNS) and Siti Maimunah (UMP), who described ongoing conservation efforts in the Natural Laboratory of Peat-swamp Forest, Sebangau National Park and Mungku Baru Education Forest, respectively.

Adib Gunawan (BKSDA) focused on orangutan rescue and release efforts, with Prof. Serge Wich (Liverpool John Moores University) outlined the utility of drones to support wildlife surveys and peatland conservation, and Dr Caroline Upton (University Leicester) highlighted the need for interdisciplinary thinking in relation to peatland conservation, including incorporating social science, arts and humanities into research and policy making.

Inspired by the lessons learned during these talks, the workshop culminated in a round-table discussion, during which delegates identified key challenges for effective peatland and forest

conservation in Central Kalimantan. This was structured around the BRG's 3R's approach, plus a fourth R nominated for inclusion by delegates: Reducing fire.

The focus on challenges was born through the realisation that, without understanding the challenges faced in different areas and their inter-connectivity, any proposed conservation solutions may fail through encountering (or even increasing) previously unidentified challenges/problems in other areas. For example, efforts to replant native tree species in degraded peat areas (Revegetation) may fail if hydrological restoration is unachievable (Rewetting), owing to non/incomplete canal closure because of perceived essential uses for local transport (Revitalisation).

Through this approach, delegates identified a total 81 (!) challenges to effective peatland and forest conservation in Kalimantan, most of which spanned across more than one of the 4R's. For example, with regards to Revegetation, one challenge identified was a lack of clarity and subsequent conflicts over land ownership/tenure in many areas, which also creates challenges in relation to Rewetting, Revitalisation and Reducing fire.

One major underlying challenge identified, which cuts across the 4R's, is the currently limited scientific knowledge relating to many of the 81 "proximate" challenges identified. An important perceived factor identified behind this was limited capacity within institutions in Kalimantan to lead internationally excellent research and innovation projects to assess the impacts of fire and other conservation threats, identify and test novel solutions to these threats, and accurately measure the effectiveness of protection and restoration efforts.

Recognising this – and in a strong show of optimism –, delegates agreed to work together to overcome this underlying challenge (and in the process hopefully many of the proximate challenges identified) through developing and strengthening partnerships between the international scientists present and their institutions, and those of the delegation from Central Kalimantan.

It is our fervent hope that this increased level of collaboration will help us better understand the hugely complex nature of fire and other threats in Kalimantan, strengthen the capacity of Indonesian academic and government institutions, and ultimately increase our ability to conserve these valuable ecosystems.

The book of abstracts from this workshop is available through the following links in both English (<http://ow.ly/NkF830hlcP2>) and Bahasa Indonesia (<http://ow.ly/FQNN30hlcUM>). Further outputs relating to this workshop will be posted on the Borneo Nature Foundation website in due course, [www.borneonaturefoundation.org](http://www.borneonaturefoundation.org).

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# “Second Harvest” – Peatland Art Exhibition in Newbridge, County Kildare, Ireland

In August 2010 I retired after 34 years employment with Bord na Mona and since then I have maintained many links with friends and former colleagues in the peat industry.

In recent years I have become very interested in the study of our town’s local history and I am a member and treasurer of the Newbridge Local History Group. ([www.newbridgehistory.org](http://www.newbridgehistory.org))

I have taken particular interest in the history of Bord na Mona and presented a number of talks on the industrial and social impact of the Company in Ireland since its foundation in 1946.



Annette McCormack



This year, our local Riverbank Arts Centre in Newbridge organised a programme to encourage community groups to engage with art in various ways. Members of our Local History Group were presented with the opportunity and the challenge of organising and curating an art exhibition in the Riverbank Gallery, and six of us volunteered to take on this project.

We started in June with a “blank canvas” and were given complete freedom to choose:

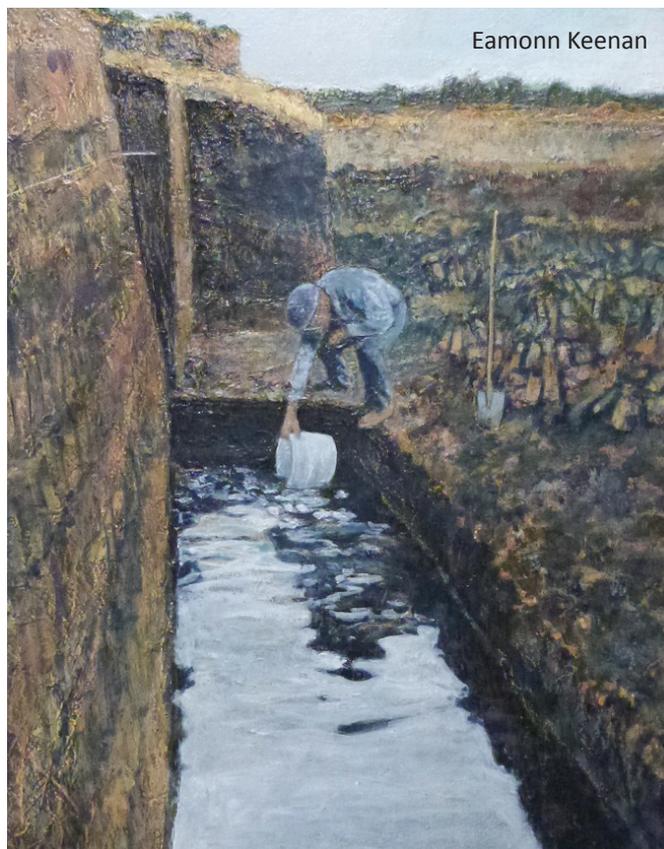


- The Theme for the Exhibition.
- Artistic media to be displayed (paint, sculpture, photo, audio, etc)
- The exhibition format and layout.

As we began contacting and speaking to a number of local artists, we realised how much of their work had been inspired by and influenced by their living and working in the proximity of bogs and peatlands.

Thus we decided to adopt this as our theme and we selected “Second Harvest” as the exhibition title, to describe the artistic harvest that we are able to glean from the inspiration of peatlands.

Through constructive dialogue with the artists and sculptors we were able to assemble a diverse and impressive exhibition of artworks representing materials and ideas that have arisen from communities living and working close to and as part of the peatland environment.



Eamonn Keenan



Brian O'Loughlin



Overview of the exhibition.  
Photos: Pat Byrne

The exhibition ran from August 25th to September 15th, 2017 and was considered a great success, both by participating artists and by the many visitors to the gallery.

*Pat Byrne*

Retired Quality Manager  
Bord na Mona, Horticulture  
byrnepe@gmail.com

# IPS Project on Forecasting China's Peat Demand

**R**ecently, the IPS started a new project on forecasting the demand for peat in China. Two Dutch students from Groningen University, who will conduct the research, arrived in China on 12 November 2017. Here is their first report:

“After a quick introductory course on the agricultural market of the Netherlands and Germany, we arrived in Beijing, China, on Saturday, complete with freshly obtained knowledge about peat use practices in Western Europe. Upon arrival, we set out to get a Chinese SIM card, which proved more troublesome than we had hoped for. With a little improvisation, we finally gained access to the Internet.

“Then came the next obstacle: finding our way through Beijing with Baidu, Baidu maps and WeChat, the Chinese versions of Google, Google maps and WhatsApp. With kind help from Prof. Meng of the Northeast Normal University, we managed to visit the Mutianyu part of the Great Wall, Tiananmen Square and the Forbidden City – all in one day!”

“On our third day, we visited Mrs. Xu Jian Wei, an officer in the Beijing Municipality Agricultural Department. She gave us a great deal of information on the current situation of the usage in vegetable plant nurseries.

She also advised us on which areas to focus in order to shed more light on the demand for peat in China. We will use this newly gathered

information to reformulate more specific questions, which we will bring this to Shandong, where the National Peat Congress takes place later this week.”

The outcome of the study will be presented at the 50th anniversary IPS Convention next year to be held in Rotterdam on 11-13 September 2018.

*Jetse Derks,  
Wim Yang Schoemaker  
& Guus van Berckel*

Member of the IPS Executive Board  
Chair of IPS Commission Peatlands & Economy  
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www.griendtsveen.de



# IPS Executive Board Elections 2018

The Annual Assembly of the IPS will elect new members of the Executive Board next year in Rotterdam, 10-14 September 2018. The following **6 positions** will be vacant:

## President

Gerald Schmilewski, Germany 2016 - 2020 continues

## 1st Vice President

Guus van Berckel, the Netherlands 2016 - 2020 continues

## 2nd Vice President

Samu Valpola, Finland 2016 - 2020 continues

## Ordinary EB members

Moritz Böcking, Germany 2014 - 2018 VACANT

Erki Niitlaan, Estonia 2014 - 2018 VACANT

Claes Rülcker, Sweden 2014 - 2018 VACANT

Jack Rieley, United Kingdom 2016 - 2018 VACANT (2 year term)

Donal Clarke, Ireland 2016 - 2020 continues

Paul Short, Canada 2016 - 2020 continues

New person 1 4 year term VACANT

New person 2 4 year term VACANT

**Nominations can be sent by all National Committees until 28 February 2018 to [ips@peatlands.org](mailto:ips@peatlands.org).**



## Jubilee Symposium

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- landscape history;
- the use of peat in horticulture;
- planning of worldwide demand for food production;
- future availability of peat
- and more.

# Peat and Peatland Events

CBD 10th Meeting of the Ad Hoc Working Group  
on Article 8(j) and Related Provisions (WG8J 10)  
Montreal, Canada  
13 - 16 December 2017  
[www.cbd.int](http://www.cbd.int)

Global Landscapes Forum  
Bonn, Germany  
19 - 20 December 2017  
[www.globalpeatlands.org](http://www.globalpeatlands.org)

Ramsar STRP21  
Gland, Switzerland  
15 - 19 January 2018  
[www.ramsar.org](http://www.ramsar.org)

Industry Member Meeting (invited persons)  
Espoo, Finland  
31 January 2018

2nd Finnish Peatland Day  
Helsinki, Finland  
2 February 2018  
[www.suoseura.fi](http://www.suoseura.fi)

Commission & Expert Group Meeting  
Amsterdam, the Netherlands  
6-7 February 2018 (to be confirmed)

24th GRET PERG Symposium  
Université Laval  
Québec City, Canada  
15 February 2018  
[www.gret-perg.ulaval.ca](http://www.gret-perg.ulaval.ca)

9th European Ramsar Meeting (ERM9)  
Olomouc, Czech Republic  
19 - 23 March 2018  
[www.ramsar.org](http://www.ramsar.org)

Executive Board Meeting  
16 - 17 April 2018  
Vilnius, Lithuania

Indonesian National Committee  
Annual Meeting + International Seminar  
Jakarta/Bogor/Denpasar  
April 2018

German National Committee  
17th Seminar „Moor und Torf“  
Zeven, Germany  
April 2018  
[www.dgmt-ev.de](http://www.dgmt-ev.de)

EGU General Assembly 2018 in Vienna  
Vienna, Austria  
8 - 13 April 2018  
<http://meetingorganizer.copernicus.org/EGU2018>

German National Committee  
Mire Conservation in Lower Saxony  
Alfred Toepfer Akademie für Naturschutz in  
cooperation with DGMT  
Schneverdingen, Germany  
18 - 19 June 2018  
[www.dgmt-ev.de](http://www.dgmt-ev.de)

5th European Conference on Permafrost (EUCOP)  
Permafrost peatlands in a changing climate – past,  
present and uncertain future  
Chamonix, France  
23 June - 1 July 2018  
<https://eucop2018.sciencesconf.org>

CBD Subsidiary Body on Scientific, Technical and  
Technological Advice  
2 - 7 July 2018  
[www.cbd.int](http://www.cbd.int)

**50th IPS Anniversary Jubilee Event**  
**Rotterdam, Netherlands**  
**11 - 13 September 2018**  
**“Peatlands: past, present and future”**  
**[www.facebook.com/events/660268460850156](https://www.facebook.com/events/660268460850156)**  
**[www.veengenootschap.nl](http://www.veengenootschap.nl)**

16th International Peatland Congress  
Tallinn, Estonia  
16 - 19 June 2020  
[www.turbaliit.ee](http://www.turbaliit.ee)

More at: [www.peatlands.org/events](http://www.peatlands.org/events)



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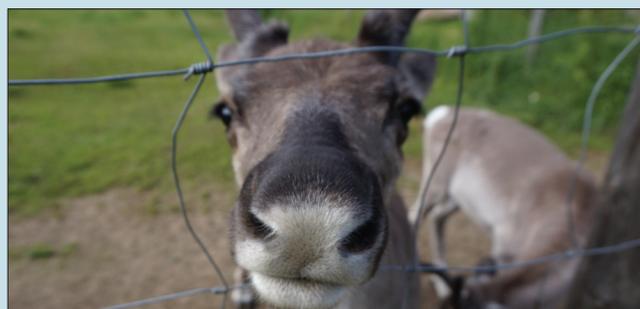
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More information on the IPS  
Convention 2018 in Rotterdam



Your article here :)  
Merry Christmas to all IPS  
members and friends!