

Peatlands

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Welcome back to Ireland!

Colloquy on the Peatland Experience

Tullamore
9 - 12 June 2015

[www.peatsociety.org/
tullamore2015](http://www.peatsociety.org/tullamore2015)

Tell us and others, what are you doing right now?

Here in Finland, where the IPS Secretariat is located, it is deepest autumn now. The trees are covered in bright colours, but the evenings are also getting shorter, with less light every day. You can remember the hot summer, take a refreshing walk or use the chilly weather outside for paperwork. Take a look at mire excursion photos from the last three months; cheer up with a salad grown in peat; maybe even smell a peat fire (depending on where you are) - or just enjoy your flat, heated with local energy obtained partly from peat. It is, indeed, amazing how that material appears in so many parts of our lives, although people hardly know about it.

In any case, let us take a look back at the last few weeks. IPS held its Annual Meetings in connection with the International Peat Technology Symposium in Riga at the end of August. More than 200 old and new colleagues participated, and it was good to see familiar faces, but also to hear about new aspects of technology, horticulture and peatland restoration. It seems that such a combination of different issues is very attractive, but we must work even harder to bring experts from different areas really into touch with each other, to exchange new information that opens new horizons for all of us.



Another event of that kind was the Symposium of the Society for Ecological Restoration in Oulu in early August, which was attended by a large number of IPS members from Finland and other countries. During the field excursion in Lapland and near Oulu, I had the chance to talk with an amazing number of people who are involved in very different issues but are still very interested in peatlands and how they are managed. It was not only nature on the agenda, but also how local people can be involved, how new instruments can be used to finance restoration and how all this can go hand-in-hand with employment

Peatlands International is the global magazine of the International Peat Society (IPS). It provides the more than 1,500 corporate and individual 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.peatsociety.org/join-us and sign up as a member.

and development policies at EU and national level. Biodiversity plays an important role, as does climate change, of course, and stakeholder involvement, to name just a few. It remains the task of our scientists to make their findings understandable for a large group of people, or to involve others who have the motivation, networks and skills to take over this task.

What has IPS done in this respect? We have taken a closer look at how peatland management decisions are made and how they are being influenced on a global level; at how non-government organizations and international conventions work, how they are connected to each other, and why for instance world-famous organizations like UNESCO, FAO, WTO and IPCC are dealing with peatlands. The result is a 56-page report on "International Conventions, Agencies, Agreements and Programmes - Implications for Peat and Peatland Management", which can be downloaded from www.peatociety.org/conventions2014. Get involved, contact your local convention and NGO partners and tell them about your work, about your research projects and field

sites. They are sure to be eager to learn from the experts. And they might be able to provide funding, too, at some point.

Funding is another important topic. The IPS has just sent out its membership invoices for this year. We hope that you enjoy being a member of this important network and that you also contribute by paying the fees, which are necessary to keep up our Secretariat, provide for travel, our publications like Peatlands International and Peat News, the IPS website, and last but not least, the numerous conferences and field trips close to you.

On the subject of travelling - did you know that next June we will meet again in Tullamore for the IPS Annual Meetings and a great "Colloquy on the Peatland Experience"? This will be so diverse and new that you simply can't miss it. We look forward to seeing you - and invite your peers!

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Viewpoint

Norbert Siebels
Managing Director
Klasmann-Deilmann GmbH

General Remarks about the Situation of the Peat and Growing Media Industry

*Keynote speech of the
Peat Technology Symposium in Riga
25 - 29 August 2014*

Ladies and Gentlemen,

Thank you for giving me the opportunity to share with you my ideas about the situation of our industry. Last week, I moved. I sold my old house and rented a new one. The old house had a big basement, a lot of space to store things which I might need again one day. And I used that space for almost 20 years.

Clean up for the future

My basement looked like a chaotic mess. The new house is much smaller. Therefore I had to make important decisions. What did I want to take with me? Did I really need all these things I kept for so many years? What do I really need in future?

Why do I tell you this? Because when I was cleaning up and deciding what I do need, I was thinking that the situation of our industry is similar to my old basement. In all our different organizations, which are involved in our national and international industries, many things have accumulated during the past decades - many things of which I am not sure whether we will need them anymore. It seems to me that also within our organizations we have to say "bye, bye". Many processes and tools which have been useful in former times are no longer needed. At the same time we need new tools, fresh ideas and we have to use them effectively and efficiently - because like in my new basement, our resources are limited.

What does the actual situation of our industry mean for us? I have thought about it intensively. I have thought about what we should take with us, what we should throw away, what we might need in the future and how we use our scopes more effectively and efficiently. Today, I would like to present to you my thoughts. And please - do not get me wrong, I do not want to seem to be a "Mr. Know-It-All".

I only wish to express my thoughts regarding our industry's situation and future. It is my personal view. You might share it or not. That is not so important. It is most important and absolutely necessary that we think intensively about the future of our industry. We all should. You have invited me as your guest but unfortunately I

Norbert Siebels in Riga. Photo: Susann Warnecke



cannot promise that I will behave well and be polite to everyone. Thinking of our needs in the future leads me to make critical remarks about organizations and their representatives who have invited me.

Please do not blame me for anything. In any case I ask you to let me finish presenting my thoughts about the situation and future of our industry - even if you do not share my ideas. I can assure you, if we will not start tackling some of these mostly internal issues, I see the continuity of our industry to be in real danger. We should act now - it is urgent. So let us start.

Our biggest challenge: Sustainability

From my point of view, our industry in these times is facing its biggest challenge ever. For most growing media applications, peat is the favored

Do you agree? Mail us at ips@peatsociety.org or discuss at www.facebook.com/peatsociety.

Our biggest challenge: Sustainability



Sustainability Report 2013

Klasmann-Deilmann did publish their Sustainability Report this month. It contains a fully transparent climate balance for the whole group. We will distribute our report during the Symposium. It is innovative, it is brave, but I am convinced that this is the only way to succeed.

The dialogue is opened. Small companies might say that they cannot afford this kind of costly reporting - but why not establish a Sustainability Report for the industry and their related

constituent. In many years, peat has gained reputation from growing media manufacturers and growers alike.

However, environmental concerns regarding peat extraction are growing. You might call it “responsible use of peat” or “the sustainability of our industry”. It leads to the same conclusion. We have to be prepared for an open dialogue about the impact of our industry on climate and the environment – with real facts and figures – provided by scientists and by us. Responsible or sustainable production is the license for every industry. If you can’t prove it – the license will be gone. The consumer himself will withdraw and stop buying your products.

Forget about hiding CO₂ and other emissions of our industry. Collect your data yourself, publish it and be clear, open and transparent. This is the only way to survive. And it is a chance.

Open communication with facts and figures stops or at least reduces emotional discussions.

products? Isn’t that an interesting task for the national and international bodies representing our industry?

Let us take the public hype on sustainability as a chance and not as a threat to our industry. Let us prove that our industry is acting a lot more responsibly and sustainably than the international environmental NGOs are trying to let the public believe. In their view any kind of peatland seems to be highly esteemed as a natural habitat, for its biodiversity and more recently as a carbon sink.

Change public perception

The general public, IENGOS and even governments firm opinion is that:

- Peat extraction kills intact eco-systems and bogs
- Peat bog destruction boosts global warming
- Peat extraction causes losses on biodiversity
- Peat extraction can never be sustainable

This describes the current perception of the public. How did that happen?

Looking back it can be clearly stated that it is the result of at least 30 years of failure to communicate on our part. We have not been open, we have not been clear and we did not

provide enough arguments on real facts - easy to understand.

Our industry did not and it does not have any lobby in most of the peat producing European countries. And we are going to lose even the ones we have, if we continue in this manner. Yes, we did communicate many arguments that are in favor of peat for horticulture and for energy production. And yes, we know that our antagonists use also somehow wrong facts and statements to discredit us. But we did let that all happen. Let's face it: Our opponents have managed, via professional and effective communication, to paint a picture of the DIRTY INDUSTRY to the public and we have not been able to hinder them.

The IENGOS have done what we have not done. They lobbied professionally and they did it successfully. They forced those who have an impact on our industry to regulate peat extraction for environmental reasons. And even if we know that these decisions were based somehow on incomplete and unbalanced information, the result of the political lobbying by these IENGOS can be found in various political initiatives all over Europe.

Listen, cooperate and compensate

Let me take the example of recent developments in one of the most traditional peat extraction countries – Germany. Politicians in Lower Saxony recently took strong actions against our industry. In fact they plan to phase out peat extraction and peat-use in the long run. The German peat industry is struggling now for its survival. And even if the German industry knew it was coming, even if we read it in the political program, all our actions taken did not influence the political decision at all. Lower Saxony decided to stop providing permits for peat extraction and withdrew the designated peat extraction areas from the new land-use plan. However, it seems to be secured, that existing permits cannot be withdrawn.

Again, I and partly also our German Association IVG, see that all this happened due to lack of clear and uniform communication. Lessons learned in this case also mean that we should have cooperated a lot earlier with IENGOS, listened to

their arguments and found compromises. Currently, the German industry is trying to convince Lower Saxony to review their concept.

Together with the powerful German NGO NABU, the German Peat and Growing Media Industry did develop a new concept including compensation duties, if new permits are released. Degradation of 1 ha of peatland shall be compensated by rehabilitating or rewetting half a hectare of extensive grasslands or a third of a hectare of intensive grasslands. In various formal and informal meetings this concept has been presented to the authorities. Let us hope that there will be a real movement in their position.

However, this proactive approach brings me to the next challenge:

International certification for peat used in horticulture

Hein Boon, Marcel Silvius and Stefaan Vandaele will report to us today about the situation of the RPP certification. This initiative started two years ago and is another challenge to our industry. It reflects the demand of our customers to be able to prove that the raw material used in their horticultural production is produced responsibly.

Our customers in professional horticulture are under the same pressure as we are. Their customers, consumers as well as retail chains, are asking about the sustainability of their products. But – and this is typical for our conservative and traditional industry – there is still a resistance against RPP, especially in the Baltics.

Peat producers are afraid of not getting enough space for a future viability of their operation. In Latvia many producers guess that 70% of potential areas could be declared as protected sites. This fear cannot be tackled at the moment, because there is no accurate inventory list of bogs and therefore validation is not possible. Many Baltic producers – as they are not involved in sales activities with end users – do not see a need for this certification in the markets and do not pay any attention.

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Study is an important part of the permission application process. At the same time new and higher extraction and raw material taxes have been introduced. In Latvia, there is a plan to link them to cadastral values being fixed by third parties who are no experts for our industry. All this endangers the economic situation of many Baltic peat producers as a result of permit requirements and tenders. I ask myself: Why have we not been able to stop this development?

For other producers it appears that the costs and time required for RPP certification are too high. Dear Members of the Baltic Associations, I do understand your concerns. But please be aware that a certification scheme providing consumers with an orientation of responsible peat production is an essential need for our industry. Please participate in all critical discussions about the certification system. Be part of it, but do not block it. Take part, be active, and bring in your ideas.

There is no doubt that our industry needs a certification system. I am convinced that with one well-accepted certification scheme in Europe for peat or even better for any raw materials used in the production of growing media. That is the way to create more transparency and to counteract the negative perception of peat.

More barriers also in the Baltics

Without any doubt the Baltic States can be seen as the main European peat resource of our industry - also in the long run. However, also in the Baltics the beginning of “threatening” activities can be recognized.

New permits require a long and bureaucratic process. The Environmental Impact Assessment

Of course, there are multiple reasons. I do not want to blame anyone personally – we are all involved. Let us take some time to think about what could be improved in future.

First of all we do not concentrate on the most important topics. We have no clear strategy and even associations within our industry seem to have opposing opinions. If we want to survive, all bodies involved need a clear strategy accepted by their members and hopefully adjusted to activities of other bodies involved. EPAGMA, IPS and local associations - each of them has to play and to accept their certain role.

What is and will be the future role of IPS?

Do they find the right strategy that is fitting for their resources and their members? They should not copy EPAGMA; they should find their own way, which means IPS and EPAGMA have to reengineer their current partnership. The start was done during yesterday’s meeting.

EPAGMA is willing and in a position to do the coordination of all lobbying activities on a European scale, integrating and covering the interest of their members including all national peat and growing media associations. We even

Is that a clear communication?



associations, especially in the Baltics, I see that knowledge is not properly shared. In addition, company or personal interests are sometimes put above the industries' interests. Or they do not share their ideas with other associations because they are concerned that disadvantages might arise for their national industry. Going on like this will not result in the desired outcome because, in fact the bigger we are, the louder we can shout.

To summarize, there should not be any

decided yesterday that we want to have a closer relationship between EPAGMA and the Canadian Sphagnum Peat Moss Association CSPMA.

Furthermore, looking at the variety of associations, we need to pool our financial resources to finance the right measures. Let me take the example of our company again. Klasmann-Deilmann is a member of EPAGMA and IPS, paying the related fees more or less directly.

At the same time Klasmann-Deilmann and their daughter companies are members of the national associations in the Baltics, Germany, the Netherlands, Belgium, Italy, Ireland and France. All these national bodies are also paying their fees to EPAGMA or IPS. In 2013, our company paid more than 100,000 € for contribution fees to various associations. I am not complaining about the amount. But at least we expect these associations to work coordinated, effectively, efficiently and professionally.

International cooperation

Secondly, we do not always work together; sometimes we even work against each other. Often, when talking to different national

unilateral action in the future anymore, especially in the Baltics. They should all follow an international strategy worked out together with EPAGMA and IPS. This then has to be broken down to the individual situations in their countries. I am very happy to see that recently the associations in Lithuania and Latvia made important and promising decisions in that direction.

Thirdly, we do no proper lobbying. The first thing I hear, when I say "let us intensify our lobbying" is, "Lobbying, this is bad, this is not allowed." Yesterday I heard in the Latvian Association that Lobbying is not covered by the Latvian Law. My impression is that it is still thought to be close to some kind of corruption. But, Ladies and Gentlemen, lobbying is neither bad nor illegal. It is a pure necessity to communicate our messages.

Let us take the example of EPAGMA's very successful lobbying work. They have created a clear strategy that could and should be used in national associations. On a national level, we have to win powerful supporters and allies for our industry who also stand up for our goals on an international level. Only this leads to a closed circle that is important in displaying our messages. Lobbying is a must and I am happy to see that serious initiatives have been done in the Baltics to improve our influence on political decision processes.

Fourthly, we do not communicate clearly and persistently. This means that we need more clarity in our communication. Results of EPAGMA's studies must be communicated locally and with the same spotlights to be consistent and persistent. We need to communicate our key messages more persistently and repeat them until they are understood. Let us learn from the IENGOS – they already do this when they blame peat and it seems to work well.

Tetra Pak 1990 - 2014

Another positive argument is that there are also other industries that were in our situation. They survived and are doing even better than before. I found one example that could guide our industry towards a prosperous future. All of you know Tetra Pak packaging. They produce cartons filled with juice for example. What do you think when you hear "Tetra Pak"? Probably:

- Sustainable, modern package material
- Used for food and beverages
- Working with recycled materials

However, in the past they were blamed for being one of the main reasons for the world's ecological breakdown. In particular, their raw material production was under enormous pressure in the 1990s. "Tetra Pak kills rainforests!" was the public perception. Doesn't that sound familiar?

Global opponents of the beverage industry put the entire "value chain" under pressure. Whenever Tetra Pak came up with a compromise, their opponents rejected each one immediately. Their goal was the protection of forests as CO₂ sinks. Their critics were already so persistent that governments and the United Nations worked on laws that aimed to prohibit the supply of wood to the industry. Survival of the whole industry was at risk.

In addition, many local campaigns pushed the industry to use other raw materials.

So what did Tetra Pak do to be perceived as a sustainable industry to the public? In short, Tetra Pak understood that they can only survive if they really became a sustainable industry. Therefore they developed an industry mission statement which introduced sustainability as a guiding principle. They developed one clear strategy to change the public perception including:

- Consistent communication throughout the industry
- No unilateral actions of individual companies or national associations
- They involved customers and other parts of their value chain to find solutions to become more sustainable.
- They convinced IENGOS to participate.
- They have managed to avoid laws against their industry by implementing their own standards and compensation objectives and - what is also important - just one accepted certification scheme.

The result of these actions is that today Tetra Pak is directly linked to sustainability.

Let me finish this presentation of my thoughts about the situation of the peat and growing media industry with a short summary:



What do we need to do?

- Responsible and sustainable production is the major challenge for our industry. Sustainability not only refers to the environment but also to the social and economic aspects of our industry. It is a chance and not a threat.
- A European certification system for responsible production is highly demanded in our markets. It secures the public license for our industry. With RPP we have introduced a European certification scheme for peat. Our industry should support it and give it the importance it deserves.
- Our industrial associations need one central international strategy with targeted measures to be implemented regionally. EPAGMA and IPS should take the lead in working out and implementing that strategy. They should not compete but agree on their particular role fitting to their goals. Hopefully they will find a flexible and un-bureaucratic form of steady cooperation.
- We need to improve and have an effective and efficient use of our human and financial resources. Our industrial organizations need professional networkers at the top. We should search for successful examples from our industry and learn from them.
- We need to communicate clearly and persistently, always having our strategy in mind and speaking with one clear voice.
- We should have open dialogues with our opponents, IENGOS, politicians or the public. We should listen to their arguments and inform them with clear facts and figures about the impact of our industry on the environment and the economy.
- We need to recognize and prevent legal regulations against our industry early. We need to execute more concerted lobbying to

Act now!

- **Responsible Production**
- **Certification**
- **International unified strategy**
- **One common voice**
- **Efficient and effective**
- **Clear communication**
- **Open dialogue**
- **Lobbying**
- **Prevent legal regulations**
- **Closer cooperation**



convince political supporters with influence on our agenda.

- We need to develop a better cooperation between national and international organizations, particularly between the Baltic associations. One unified voice for the Baltic Peat Industry would have a lot more weight in political discussions in the Baltics itself but also in Brussels.

Coming back to my basement: Finally, I decided to leave most of my old things behind. I packed a few things of which I was convinced that I needed them in future. It gave me the good feeling of a new start, slim and without any burden. I am convinced that all these things will suit my new perspective and will effectively and efficiently be used in the future.

I will keep my fingers crossed that our industry will also come to these conclusions in the short run. Let us select the right tools that we need to guarantee the future of our industry.

Thank you for listening.

Norbert Siebels

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Riga attracted peat professionals and scientists

The Latvian Peat Producers Association arranged the International Peat Technology Symposium and Baltic Peat Producers Forum during 25 - 29 August 2014 in Riga, the Latvian capital. The IPS Annual Convention and related meetings were also held during the last week of August.

More than 280 participants, from peatland scientists and peat producers to suppliers and service providers covering 28 countries, took part in the symposium and various meetings at the Radisson Blu Hotel Latvija. Most participants of the conference came from Latvia, Lithuania, Finland, Estonia, Germany, the Netherlands, Sweden and Russia.

Nine different sessions were run on themes such as peat properties, site planning, peat use in horticulture and energy, peatland restoration and conservation, drained organic soils in agriculture, peat in culture and education, and IT solutions. The participants had six excursions to choose from, among others, the Kemeru National Park, Cēna Mīre, Riga Old Town and several peat production, pristine mire and peatland restoration sites.



Positive views of peat

The symposium highlighted the importance of peat and peatlands in many ways. Peat is irreplaceable in many purposes and this is reflected in the market. On the other hand, peat producers are actually one of the strongest players in peatland restoration and favouring conservation. In all three Baltic countries, the peat industry is vital and extraction is considered

Opening session in Riga. All photos: Ernests Dinka





Ilze Ozola speaking to the attendees.



Art and exchanging ideas with Samu Valpola.

to be in balance with other forms of land use and environment. The parallel art exhibition near the venue also demonstrated clearly the inspiring cultural values and many possibilities of peat. Many presentations showed that the responsibility of the peat industry is indeed high. It was also concluded that whether or not peat is produced - in the Baltics or elsewhere - that has, if we want or not, only a small impact on the state of peatlands worldwide. Drainage for agriculture and forestry, changing climatic conditions, urban development and other human impacts were identified as much greater threats.



The company exhibition was very popular.

It was remarkable how well peat producers are nowadays aware of their role in the responsible use and management of valuable peatland as a resource. Much work has been done to develop, for example, an independent third party verifiable certification in North America. Currently, there is also considerable effort being carried out in Europe in preparing a certification scheme for peatlands impacted by human activities and where peat production would not cause further disturbance. Investments on restoration and rehabilitation measures for cut-away and post-harvest peatlands are considered business as usual.



Lunch helped to keep participants alive.

These important questions were emphasized in the key note speeches by Mr Romans Naudins, Minister for Environmental Protection and Regional Development of Latvia; Professor Björn Hånell, President of the IPS; Dr Norbert Siebels of Klasmann-Deilmann GmbH, Germany; Dr Ilze Ozola and Renars Skudra of the Latvian Peat Producers Association; Mr Hein Boon of RHP; Dr Marcel Silvius of Wetlands International; Mr Stefaan



Catherine Farrell and Kari Mutka.



Participants of the IPS Annual Assembly.

Vandaele of Peltracom Ltd. on behalf of RPP certification; as well as Dr Jack Rieley, Chair of the IPS Scientific Advisory Board and Mr Hannu Salo, IPS Secretary General.

Report on international conventions published

At the event, the IPS also launched its report on “International Conventions, Agencies, Agreements and Programmes – implications for peat and peatland management”, edited by Dr Jack Rieley and Sandra Lubinaite. The detailed 54-page report describes 20 conventions/agreements and organizations such as the CBD, UNFCCC, FAO, IPCC and IUCN and their relationships to each other. The full report can be downloaded from the IPS website: www.peatociety.org/conventions2014.

Honors and future plans for the peat science and industry community

In Riga, the International Peat Society granted its 2014 Award of Excellence to Professor Richard “Dicky” Clymo from the United Kingdom, for his lifetime achievements in research and fostering



The Award of Excellence went to Professor Clymo.

international cooperation. In addition, Jaakko Silpola, former Secretary General, became a new honorary member of the IPS.

Of special interest were the Baltic producers’ presentations on 28 August and an informative update on the planning of the International Peat Congress 2016 in Kuching, Malaysia (www.ipc2016.com).

The next IPS Annual Convention will be held in Tullamore, Ireland, on 7 - 12 June 2015, followed by the Baltic Peat Forum in Tallinn, Estonia, in September 2015. Estonia was also authorized to host the 16th International Peat Congress in 2020.

Hannu Salo

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Opening speech

Never before has the need for more knowledge, and a wider spread of knowledge on peat and peatlands been so urgent. Never before have peatlands been highlighted and come into focus in such a burning global issue as in later years – to so many people, regardless of occupation or discipline. The reason is simple: Carbon! Carbon is the key element in climate change and climate change belongs to the greatest challenge humankind faces. We are now 7 Billion and will grow up to 9 Billion by the year 2050. More consumables need to be produced, but with a lower environmental impact. Therefore, carbon emissions must be radically reduced and pricing of carbon emissions should guide investments to carbon free solutions. Carbon, carbon and peatlands – let's quickly look at the peatland-carbon relationship!

In a global perspective the proportion of land that is covered by peat is nothing to write home about, peatlands cover only about 3% per cent of the land area, whereas forests cover about ten times as



Auditorium with industry representatives.



Dinner gala in Jurmala.



Marcel Silvus and Bernd Hofer listening carefully.

by the IPS President in Riga



Björn Hånell. All photos: Ernests Dinka

much, about 30% of the land area. When it comes to carbon however, the carbon store in peatlands is more than two times greater than the carbon stored in all the world's forests. This is a fact that almost brutally underlines the importance of responsible peatland management.

Peatlands have been used long before the present climate change debate started. We have a history of draining peatlands, mostly for agriculture and forestry purposes, and we cannot run away from it. These existing drained peatlands, have to be dealt with – in a responsible way. In the best of



IPS members from Japan and China.



Malaysia promoted the 2016 International Peat Congress.



Honorary member Don Grubich from Minnesota.



Team Canada with Stephanie Boudreau and Paul Short.

worlds the big decisions that will regulate the future management of peatlands will be science-based. This is a vision, because far from all recent decisions, directives and regulations on peatland management, within and outside EU, are based on facts. There are too many examples of abuse of facts and avoiding facts in order to gain support for views that fit short-term policies. One example and consequence of this is that your industry, the peat industry, responsible for quite a small proportion of the total area of drained peatlands, has become the whipping-boy among peat and peatland utilizers, and receives most of the criticism.

So, facts are not enough, facts on peat and peatlands need to become common knowledge. The public awareness of what is true and not true regarding peatlands needs to be raised. This requires gathering of facts and new knowledge, and spreading it to all with interests in peat-covered land, certainly including the public. The crucial information and messages must be brought to the appropriate conventions and other international fora by a neutral player, to finally reach the decision makers. The International Peat Society (IPS) is precisely such a neutral player. We are a non-profit and non-governmental organization with about 1500 corporate and

individual members in 44 countries, representing all stakeholders of peatlands and peat.

We are dedicated to the responsible management and wise use of peatlands and we have learned that one very efficient way of promoting the gathering, exchange and communication of peat knowledge is to initiate international meetings via our National Committees. The Peat Technology Symposium we are now opening, is organized by the Latvian National Committee of the IPS, together with the Baltic Peat Producers Forum. They have now worked out a challenging and exciting program for us. It will give us new knowledge and it is up to all of us to spread it. Let's do that. Let's make peat knowledge common knowledge.

On behalf of the International Peat Society I welcome all of you to the Peat Technology Symposium and I warmly encourage you to do the same thing as I have already started doing: Enjoy!

Björn Hånell

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Development of a Concept between the Peat Industry and the NGO NABU (Bird Life Partner Germany) of Lower Saxony

Introduction

Two years ago, the Association of the German Peat producers (IVG) and NABU of Lower Saxony, an NGO, started a dialogue about peat extraction in Lower Saxony. Lower Saxony is a federal state in the north of Germany, where the most of the peatlands in the country are located, and almost the whole peat industry is based.

In the beginning, the issue was to explain the different positions of the two parties for a better understanding and to begin an exchange of ideas about whether there are any common positions or even a common strategy. In 2012, when this dialogue started, the idea of a common policy document was almost unthinkable.

The first step was taken by IVG to explain why the industry is currently unable to substitute peat as a raw material for a larger percentage of growing media, especially in horticulture. The main problem in respect to horticulture is the quality

and, in general, the quantity of alternative raw materials. The subsidies (EEG) for using biomass materials such as bark, wood-fibres or compost for renewable energy are so high that the availability of such products is decreasing.

Other emerging developments like Sphagnum farming are at an early stage, and presently economic problems in the form of competition for sites with traditional farming and with the acquisition of seeding material are to solve.

At the end of the discussion, NABU took the following positions:

- NABU is against peat excavation in general
- NABU demands the development of alternative raw materials and the increase of their market share, especially in the hobby market
- NABU recognizes that, currently, horticulture depends on peat, and a substitute is not to be expected for the next decades

Analysis of the current situation of peatland in Lower Saxony

In the second step, the task was to arrive at a general consensus on the current situation of the peatland areas in Lower Saxony. More than two thirds of them are drained and used for agriculture or forestry. Under this drained condition, processes of sacking, shrinking and oxidation have been going on for decades, and will not stop before they are rewetted or turned into mineral locations. The inventory of the mires was done in the 1960s and early 1970s through the Geological Survey of Lower Saxony. Since this time, 40 to 50 years of peat loss and agricultural treatment have ensued. This has led to a situation where the real extension of the peatlands is unknown.

In a GIS project carried out on three testing sites, the loss of peatlands was simulated. The result is shown in the diagram above. One third of the peatlands are lost and are now mostly in agricultural use as mineral soils. Some bog sites have changed to fen soils, because they have thick fen peat layers beneath the Sphagnum peat. Around 6% will switch into a situation with less than 30 cm of peat and will thus be not longer defined as a peatland. A fourth has currently less than 1 m of Sphagnum peat and is in serious danger of being turned into mineral soil through agricultural use. These results show the urgent need for measures to stop the loss of mires and peatlands in Germany.

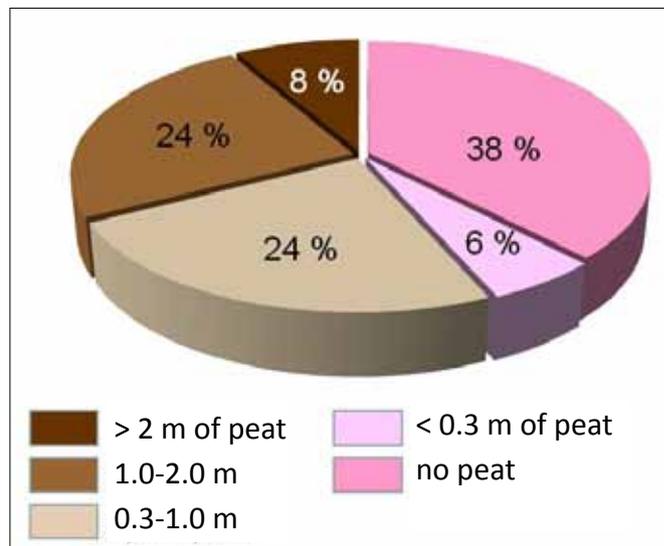


Figure 1: Simulation of the loss of Sphagnum peat since the last inventory of bogs in Lower Saxony - in comparison to the reference (inventory from 1960/70) there is a total loss of the bogland areas of 38% and 6% of the areas have currently less than 30 cm of Sphagnum peat. Chart: Bernd Hofer

Options for future development from the perspective of nature and climate protection

The next step was a discussion of different options for development in these locations. Figure 2 shows typical sites of bog peatland under agricultural use. For those areas, only rewetting will stop oxidation and the loss of peat. After the rewetting, these sites should be developed into natural bogs, or transitioned to mires or fens if there are too



Figure 2a: Intensive grassland.



Figure 2b: Corn fields for "biofuel" production.

many nutrients from agricultural use left. Another option is agricultural use under wet conditions - paludiculture. For both options, the ownership of the sites is necessary. Most of the land is farmer-owned, and this leads to enormous costs because of the increasing prices for farmers' land in Germany. In total, the costs for land, rewetting, planning, licenses and management are around € 5,000,000/100 ha. It is thus not realistic for the state to raise this amount on a scale of 100,000 ha.

Principle of the NABU-IVG concept

Recognizing this background, peat extraction is acceptable for NABU under defined conditions to achieve the aim of nature and climate protection:

- Extraction sites will be changed from agricultural use into renaturation sites by rewetting after the period of use.
- The impacts on environmental values of peat extraction are minimized by using only highly degraded peat in agricultural use.
- The areas concerned should, through a balance of factors, achieve positive development due to nature conservation and climate protection.
- For the negative effect on GHG caused by the use of the peat as growing media, external compensation measures will be realized in the concept.

- For peat excavation, best practice will be used to guarantee the goals of rewetting and rehabilitation.

Stopping peat excavation in Germany without the development of other raw materials for growing media would lead to increasing issues with higher CO₂ emissions due to transport from other countries, so that impacts on nature and the climate would simply be exported.

To calculate the external compensation for the climate that would arise, the ongoing GHG emissions under agricultural use were compared to the emissions of peat extraction during the use phase and after use.

In the following diagrams in Figure 3,

- the green line represents the accumulated GHG emissions under ongoing agricultural use
- the blue line shows the emissions caused by the restoration of the peatland through

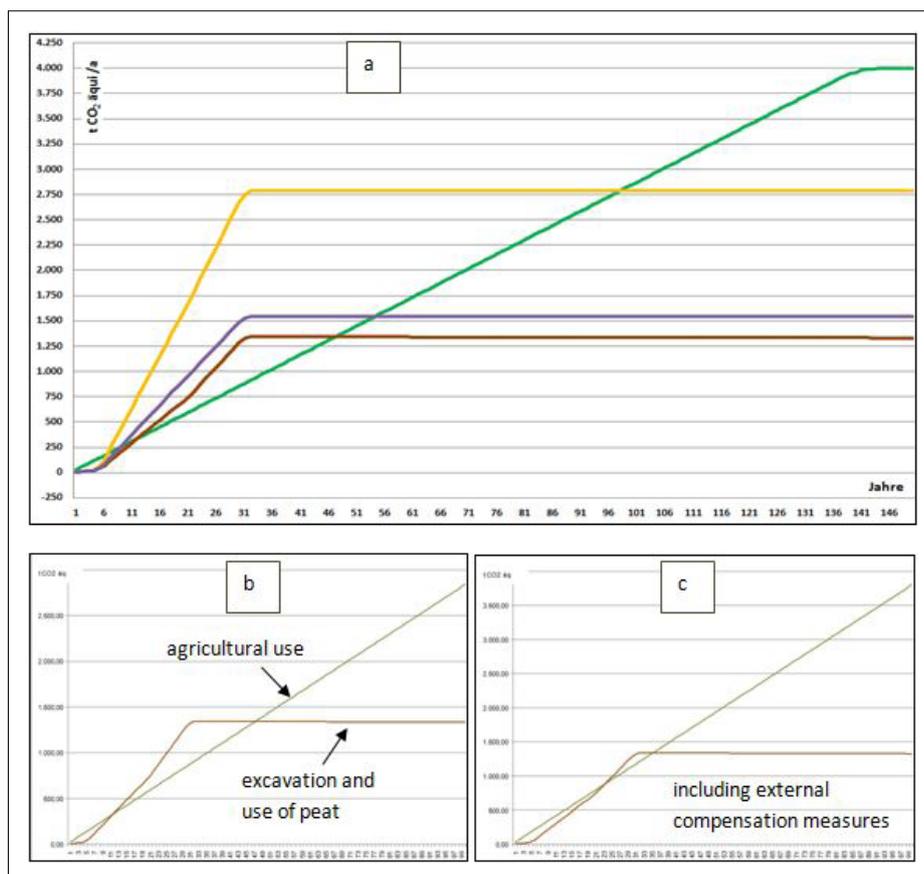


Figure 3: a) graph of accumulated GHG emissions under agricultural use (green), restoration and rewetting (blue) and use of peat as growing media for a typical bog profile in Lower Saxony, b) comparison between ongoing agricultural use and peat excavation and use (over the necessary volume for restoration), c) as b) but including external compensation for climate.



- removal of the agricultural top soil, drainage and rewetting
- the brown line shows the GHG emissions caused by excavation and use of peat taken from the part of the profile that is deeper than necessary for the restoration
- the yellow line shows the sum of restoration and deeper extraction.

Diagram 3b focuses on the relation between ongoing agricultural use, peat excavation and use at a depth exceeding what is necessary for restoration of the site. Diagram 3c shows the effect of external compensation measures on this relation. Based on this model, factors for external compensation measures were calculated.

For a “typical” hectare of excavation with rewetting after extraction, there will be demand for:

- 1 ha rewetting of degraded bog vegetation, like dry *Molinia caerulea* stages of succession or birch shrub
- 0.5 ha rewetting of extensive grassland
- 0.33 ha of intensive grassland
- 0.25 ha of cropland on peat

Planning this external compensation together with the excavation sites’ concept areas should be carried out in such a way that development of better hydrological conditions for the rewetting, in particular, could be realized.

Planning area for the NABU-IVG concept

Based on the above mentioned GIS simulation and the knowledge of the associations and the consultant engineer, a map was worked out with potential planning areas for excavation (8,450 ha) and for external compensation measures (16,560 ha); altogether, a potential area of sites with a size of 25,000 ha is outlined.

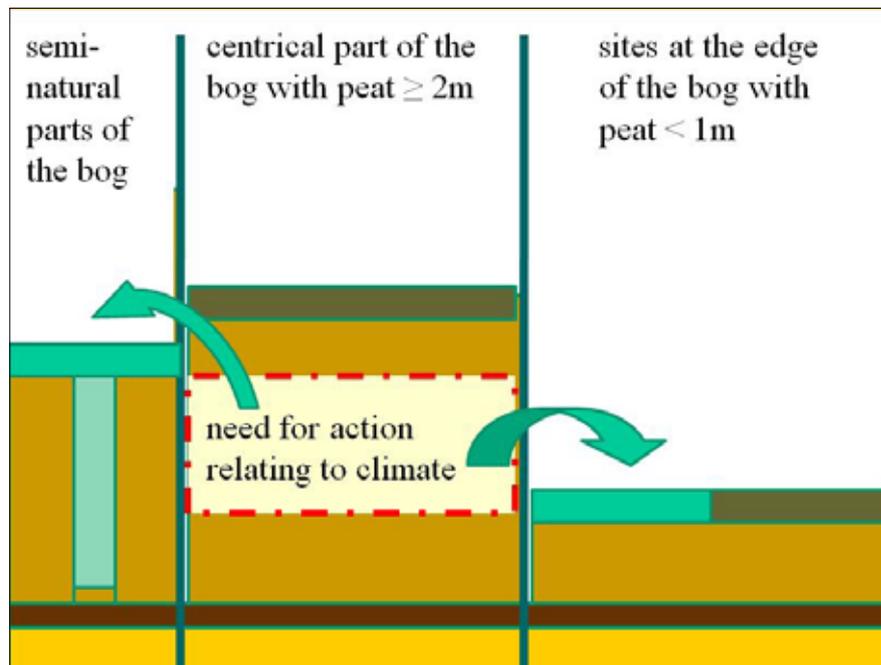


Figure 4: Planning principle of concept areas including external compensation measures.

Conclusion

The NABU-IVG concept is a great step forward on the way to responsible peat production, offering a win-win situation for both the growing media industry and nature conservation.

Even if not all of the areas are completely realized, the concept is a practical tool for achieving the aims of nature and climate protection on a larger scale.

The principles of the concept and the map of the potential areas were explained to the members of both associations, and accepted by the great majority. The associations signed the concept on July 17th, 2014.

This process was only possible through an open-minded dialogue with transparency about needs and problems on both sides, and with the goal of finding practical solutions. In this way, it is more than a concept for Germany alone, even if the situation of peatlands in Germany differs from the European situation more generally.

Bernd Hofer

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IUCN Peatland Programme

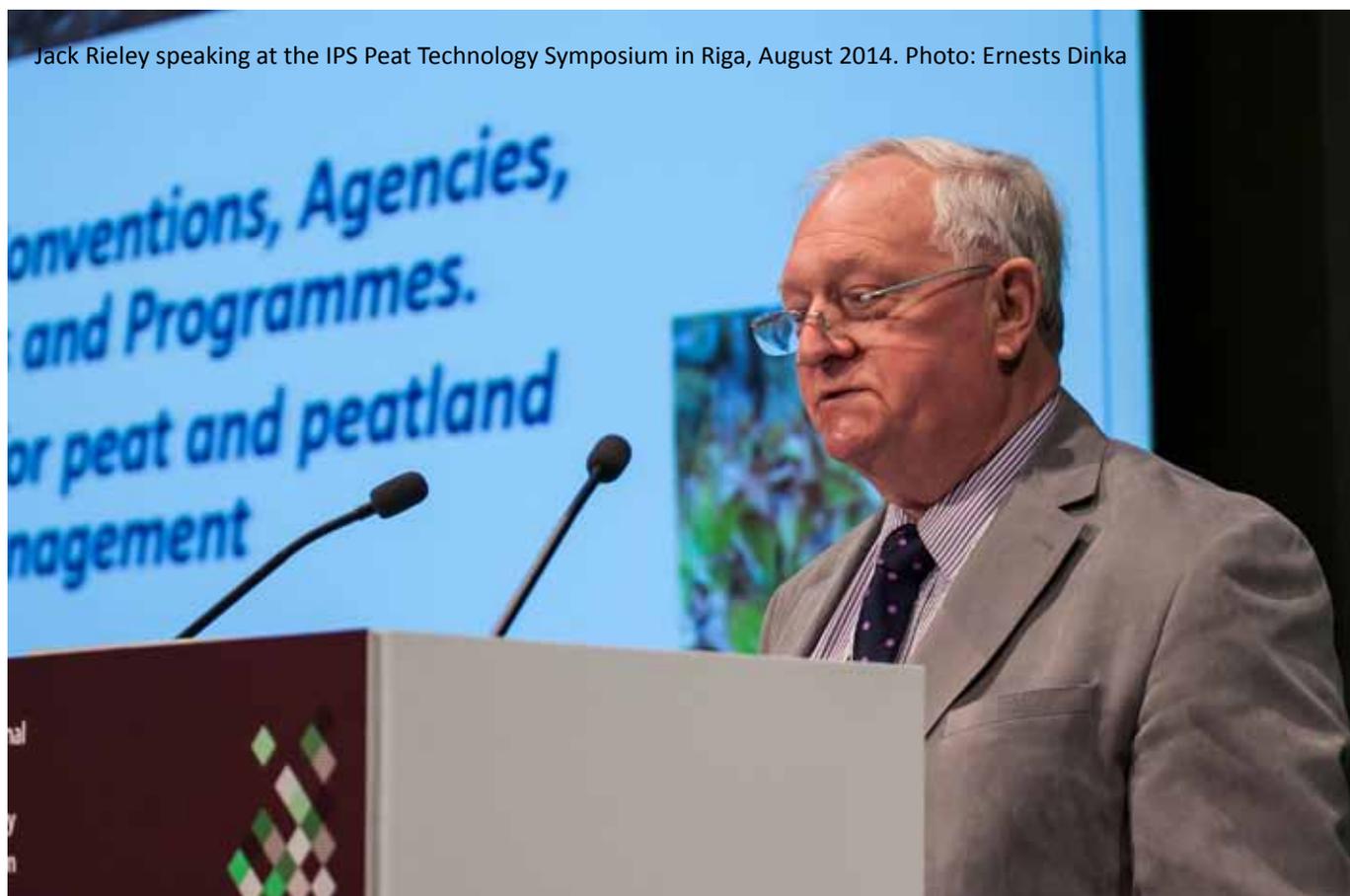
In 2009 the IUCN UK Committee embarked upon a three year 'Peatland Programme' to advocate the multiple benefits of peatlands through partnerships, strong science, sound policy and effective practice and promote restoration of degraded peatlands.

The work of the Peatland Programme was overseen by a coalition of environmental bodies including the John Muir Trust, Scottish Wildlife Trust, Yorkshire Wildlife Trust, RSPB, North Pennines AONB Partnership, Moors for the Future, Natural England and the University of East London. One of the overarching themes for this work was the promotion of the multiple benefits of peatlands to society.

The IUCN UK Peatland Programme co-ordinated a large number of peatland managers and scientists by providing a focus for research and management, information for decision makers, consensus building and knowledge exchange and highlighted the benefits and values of peatland ecosystem services. The Programme carried out a Commission of Inquiry on Peatlands, held several successful conferences and produced a report on good practice examples. It also hosted a workshop at the IUCN World Conservation Congress in Jeju, South Korea in September 2012.

When funding for the IUCN UK Peatland Programme ended, responsibility was transferred to the IUCN Commission for Environmental

Jack Rieley speaking at the IPS Peat Technology Symposium in Riga, August 2014. Photo: Ernests Dinka





Management as the 'Peatland Thematic Group' in order to highlight the benefits of peatland ecosystems globally and explore new funding opportunities for peatlands based on ecosystem services. The IUCN Peatland Thematic Group is led by Clifton Bain, IUCN UK Peatland Programme and Maria Nuutinen, Food and Agriculture Organization of the United Nation. The IUCN UK National Committee Peatland Programme provides the secretariat to support the thematic group.

Anyone wishing to participate in the work of the PTG should contact the chair person and make their interest known. Further information on the procedure can be obtained from www.iucn.org/about/union/commissions/cem/cem_join/.

Overall purpose of the Peatland Thematic Group

1. To provide good practice advice and information aimed at peatland conservation/restoration action to support delivery of biodiversity, climate change and water objectives.
2. To support knowledge exchange with/between partners on peatland management and funding opportunities.
3. To assist the scientific community in recognizing, identifying and describing peatland ecosystems wherever they occur.
4. To support countries in adopting strategic policies for peatlands and to assess progress of peatland ecosystem management towards biodiversity and climate change targets.

Outputs

1. A series of international workshops exploring good practice in peatland ecosystem management and description/identification of peatlands and peatland states.
2. Publish good practice guidance showcasing peatland restoration projects and private funding initiatives (e.g. carbon and water).
3. Provide a global analysis of progress in peatland delivery of biodiversity and climate change objectives.
4. Provide a web based information hub on peatland conservation and restoration.

IUCN Booklet: Global Restoration Demonstrating Success

The IUCN Commission on Environmental Management and IUCN UK National Committee hosted a workshop in Brussels on 29th April 2014 on peatland restoration and launched a new booklet '**Global Restoration Demonstrating Success**' based on case studies from different global geographical regions. The former was held in the Welsh Government EU office and the latter in the IUCN representation office.

The workshop consisted of a series of short presentations of some of the case studies contained in the booklet from UK, Germany, Sweden and Belarus. These were based mostly on the activities and results of EU Life Projects and were therefore linked to each other. They

Global Peatland Restoration demonstrating success



were followed by slightly longer more specific presentations on different aspects of peatlands. The participants were mostly from environmental NGOs with others from EU (DG Climate Action) and Greifswald University. NGOs included Wetlands International, Birdlife International, Scottish Wildlife Trust, IUCN and IPS. The UK DEFRA and the UK retailer B&Q were also represented.

The following is a list of issues and suggestions that cropped up during the workshop based on the presentations, comments and discussions.

1. IUCN have a plan to restore 1 million hectares of peatland (blanket bog) in the UK to 'good condition' by 2020. They are looking to UK country governments, EU and the private sector to pay for it.
2. The new UK 'Peatland Code' was introduced. This is a voluntary standard for peatland restoration projects on the basis of their climate and other benefits. During its pilot phase, this draft Peatland Code is designed to attract funding from businesses interested in restoring damaged peat bogs. It will provide standards and robust science to give business supporters confidence that their financial contribution to peatland restoration will make a measurable and verifiable difference to reducing GHG emissions and therefore mitigate climate change. For further information see www.iucn-uk-peatlandprogramme.org/peatland-gateway/uk/peatland-code.
3. Another new approach is 'nature based

solution' that is being applied to the role of peatland restoration in combatting climate change. This is linked to 'ecosystem services' and 'natural capital' and will be used to take the arguments against using peat further into the policy development arena and decision-taking, especially in the EU.

4. The representative from the supermarket B&Q, the largest retailer of plants to the amateur market in the UK explained how her company has developed a peat free 'tea bag' method of growing bedding plants based on coir (but still with 5% peat). The 'tea bags' are made in Sri Lanka and shipped to the UK where they are rewetted and seeds planted in them. For more information see: www.diy.com/diy/jsp/content/marketing/easygrow/index.jsp?tmcampid=29&tmad=c&ecamp=Sea6519903429410309276294&ef_id=U1Tr6wAABlvt9S@4:20140430164504:s.
5. In the discussion session the facilitator asked for suggestions of key actions for the EU and member states to implement in support of peatland restoration and conservation in order to get the message across to the European Parliament and national parliaments. What are the key policy issues? There was a general consensus that neither politicians nor the public know what peat and peatlands are or what their importance is to the environment and their role in the carbon cycle. It was felt this needs to be addressed as a priority but how was unclear.
6. The role of peatland restoration (rewetting) in climate change mitigation globally is still uncertain and more research needs to be done to obtain the facts on a cost benefit and life cycle basis.
7. IPS must become more engaged with other NGOs, conventions, policy makers, peat industry and politicians in the peatlands and biodiversity/ecosystem services/climate change debate.

Booklet Launch

This commenced with an informal reception followed by short presentations by some of the booklet case study contributors. These included UK, Belarus, Canada, China, Germany, Ireland and Sweden. Some of these were repetition of those given at the workshop. I kicked off with

a presentation on behalf of the Canadian peat industry which was well received and generated several questions. The fact that this restoration work has been underpinned by 10 years of systematic and sound field-based research of the Peatland Ecology Research Group of Laval University, Quebec, Canada (PERG) was a surprise to many. There was some discussion around the likelihood of restoring biodiversity, hydrology and carbon capture back to that in natural bogs. Presentations were made of a Life Project in Sweden and others in Belarus and UK followed by two video presentations, one from China and the other Ireland.

The latter was made by Gabriel D'Arcy, CEO of Bord na Móna, and was professionally done in a manner that held the audience's attention. I think that most were surprised to be addressed by the top person in a major peat, growing media and energy company. Gabriel's presentation generated numerous questions about peat extraction, restoration and climate change.

IUCN Workshop Recommendations for Peatland Action in the EU

The main consensus points to emerge from the IUCN workshop discussion were:

- 1. Income Streams:** There is an urgent need for capital funding to repair damaged peatlands and for ongoing funds to ensure that the benefits of peatlands to society are reflected in the support given to land managers. Opportunities exist for developing paludiculture as revenue on some peatlands.
- 2. Novel finance mechanisms:** The private business sector presents a new opportunity for restoring and conserving peatlands as natural capital. Emerging markets within EU for ecosystem services can also support peatland work with initiatives such as the UK Peatland Code and German MoorFutures.
- 3. EU Peatland Plan:** Need was identified for a high level plan to support regional peatland action, provide EU acknowledgement of the important role of peatlands and draw together policy from across agriculture, water, climate change and biodiversity. Tie in to global action on peatlands under Ramsar and include EU action to help safeguard peatlands in non EU countries, e.g. through policy on biofuels.
- 4. Peat extraction:** There is ongoing and in some cases increasing pressure for cessation of peat extraction for energy and horticultural use while at the same time there are also



Mire in Lapland, Finland in autumn colours. Photo: Susann Warnecke

positive advances in the development of alternative products for use in the amateur and commercial horticulture industry.

5. **Peatland Communication:** There is a role for coordinated action across EU member states (NGOs and Government bodies) to raise awareness of peatlands as a nature based solution. Social media should be used to make the message 'go viral'.

Specific issues identified were:

1) Agriculture: Action needed to examine the support for peatland management under the Common Agriculture Policy and in particular the role of paludiculture as well as identifying perverse incentives for maintaining peatland drainage.

2) Horticulture peat extraction: Role for EU targets to support the phase out of non-essential peat use and ensure high quality restoration. Important to maintain dialogue with IPS and horticulture industry as well as major garden retailers/suppliers. Need for EU policy to establish a level playing field for growing media/soil conditioners with fiscal and regulatory mechanisms to reflect the environmental costs and benefits regarding carbon, biodiversity and water impacts of any product. EU Eco label Review in 2015 an important milestone.

3) Greenhouse Gas Accounting: IPCC wetland guidelines provide sound science for enabling member states to account for peatland restoration. Important to monitor progress between member states. Further refinement of scientific evidence could come from monitoring of peatland restoration projects.

4) Strategic Peatland plans: Role for IUCN with member states to monitor progress in the production and implementation of national strategic peatland plans in EU and globally. Regular updates could be made available through IUCN CEM Peatland thematic Group. An EU Peatland Plan would help acknowledge importance of peatland and build synergy on peatland action across different Departments in the EU Commission. There is opportunity to build on guidance for developing strategic

peatland plans in FAO MICCA activities (www.fao.org/docrep/015/an762e/an762e.pdf)

5) Ramsar – Global action on peatlands: Time to review what has been achieved and identify new recommendations.

6) EU Advocacy plan: role for IUCN with Wetlands international and Birdlife and others to identify key messages and policy recommendations and build timetable for briefing EU Parliament on peatlands.

6. **Communications:** IUCN/WI/Birdlife international – Share good experience on communications among peatland projects and advocacy organisations – need to raise awareness among general “tax paying” public. Celebrity – who are our popular peatland champions? Also need targeted briefing to inform decision makers, land managers and potential private sector funders. Build a coalition of voices – not just from one sector to highlight:

- a) the ecosystem service benefits of peatlands and the costs to society from damaged peatland
- b) the peatland role in meeting EU objectives (carbon, water and biodiversity)
- c) new funding opportunities – EU grants, paludiculture, ecosystem markets
- d) the successes in restoring peatlands where funding is available.

7. **Restoration good practice:** Need to share good practice and lessons being learned in restoration. Opportunity for IUCN CEM Peatlands Thematic group alongside IMCG and others (IPS?). Encourage projects to monitor effectiveness of restoration as well as ecosystem service benefits – carbon water, biodiversity etc. Recognise regional and habitat variation in peatlands when planning restoration and quantifying benefits

Jack Rieley

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IPS UK National Committee
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In the Bog

Sheffield Sheffield, United Kingdom, September 2014

Summary of Conference Presentations & Discussions

The excellent, high quality presentations at the recent In the Bog conference held in Sheffield covered a range of disciplines, and gave a global perspective to the ecology, landscape, archaeology and heritage of peatlands. This gave rise to a broad range of topics, which facilitated some interesting discussions and challenged thinking for both delegates and speakers alike. The inter-disciplinary nature of the conference brought together historians, ecologists, archaeologists, land-managers, peatland-restoration specialists and climate-change scientists. Many of whom agreed that they seldom talk to each other and know little of each others work – this conference was seen by them as an ‘eye-opener’. Through this meeting

and the exchange of views and ideas, there are already several potential new areas of support and collaborative projects being discussed. One of which is to hold an annual informal low-cost ‘Peatlands’ network meeting to exchange updates, ideas and research and to help coordinate activities and future directions.

The conference was a mix of plenary and parallel sessions with an included field visit and a poster presentation session. The plenary and keynote speakers reflected a breadth of disciplines and the global reach. After Professor Ian Rotherham opened the conference with his context and scene-setting presentation, Clifton Bain outlined the IUCN UK’s Peatland Programme 1-million hectare challenge of 1m ha of UK peatland in favourable conservation management by 2020. Dr Richard Tipping closed the first session with his paper on the archaeological investigation of late Neolithic and early Bronze Age farming communities and their peat working in the North of Scotland.



Discussions at the poster presentation session on 4th September. Photo: Chris Percy



Field visit to Ramsley Moor in the Derbyshire Peak District. Photo: Christine Handley

Professor Jack Rieley (International Peat Society) described the importance of tropical peatlands for carbon storage and, using the case-study example of South-east Asia, specifically Indonesia, graphically demonstrated the scale of the threats to these peatlands from the economic and social pressures for timber and land for agriculture and palm oil plantations.

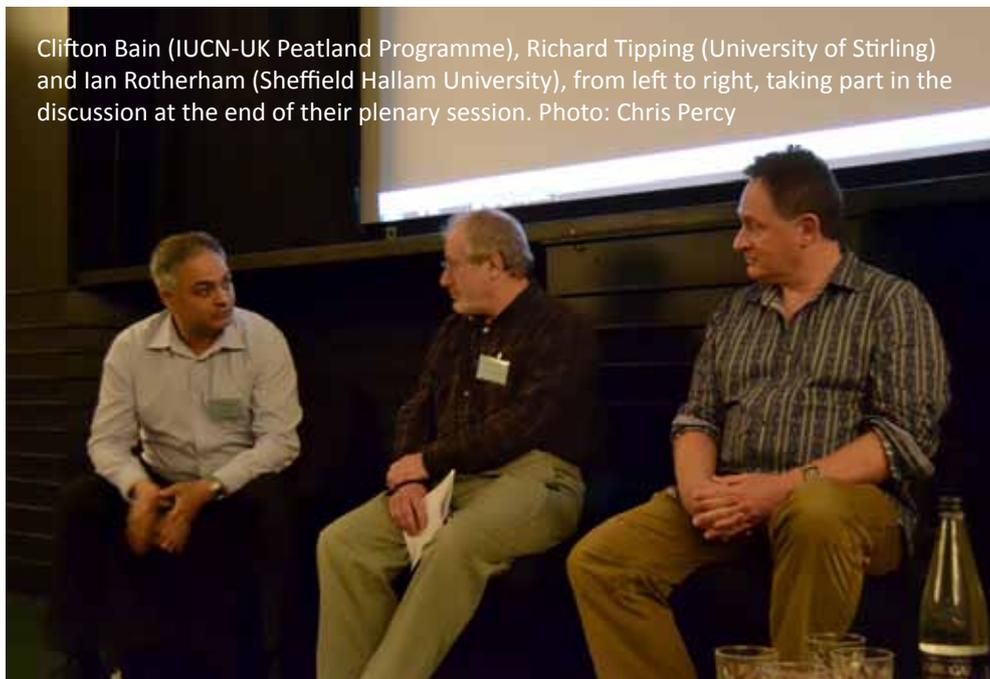
Consequently, over the past two decades, the region's peatlands have undergone rapid deforestation, widespread drainage and frequent and intensive fires. The resulting degradation leads to release of carbon and a reduction in carbon storage contributing to the global environmental change process. Others took up this theme. Dr Ian Thomas talked about the peatlands of Tasmania, the fire-sensitive and fire-adapted vegetation and the fire-management practices of the Aboriginal people. Curtailment of traditional practices, changes in general habitat management and the increased incidence and intensity of wildfires (partly due to increase in storms and lightning strikes) is now threatening the existence of these unique eco-systems.

Dr Andreas Heinemeyer presented modelling results from the MILLENNIA project and discussed not only climate change issues but also management pressures on UK uplands and work on water-storage capacities, which influence a range of ecosystem services. He concluded by

highlighting implications and potential for future work to better understand the interactions between carbon dynamics and hydrology in a changing environment. Dr John Coll presented the findings of a collaborative project looking at the loss of climate space for active blanket bog in Ireland. He showed through a sequence of maps how areas of blanket bog may be lost or form across Ireland as climatic conditions change irrespective of other anthropogenic factors. Professor Jaanus Paal described the diversity of mires and mire forests in Estonia and their characteristic vegetation communities that make up an extensive part of the country. They too are facing threats from intensification of agriculture and forestry, drainage, and changes in water chemistry and greenhouse gas emissions.

Dr Benjamin Gearey talked about the implications of climatic and anthropogenic pressures on peatlands for the archaeological and paleo-environmental record using Ireland as a case study. He identified both opportunities and challenges for conservation and management of peatlands and their archaeological resource and how these are heavily influenced by Governmental economic and policy decisions that do not fully take into account the fragile nature of the resource. Professor Richard Oram presented an historical case study of the exploitation of peatland for fuel in medieval Southern Scotland using records from several monastic houses. He explained how the

Clifton Bain (IUCN-UK Peatland Programme), Richard Tipping (University of Stirling) and Ian Rotherham (Sheffield Hallam University), from left to right, taking part in the discussion at the end of their plenary session. Photo: Chris Percy



heather for blanket bog management, and the implications of rising DOC trends for the water chemistry of treatment of potable waters. Other posters were presented by representatives from County Wildlife Trusts, the Thorne & Hatfield Moors Conservation Forum and HLF funded Living Landscapes projects. There were also displays from technical specialists involved in peatland restoration. The included field visit looked at three local sites within the eastern fringe

monasteries used peat as the principal fuel for their primary industry of salt extraction as well as for their own domestic use. This exploitation was on an unsustainable scale when added to the pressure from other communities and led to the depletion of many of the mosses as early as the fourteenth century. The impact of that loss is still apparent in the landscape today; the mosses, which now exist, are fragments of formerly extensive areas. Professor David Hey continued this theme by describing the impact of trade routes across the moorland areas of the Peak District and their legacy in today's landscape. He also talked about the transport of commodities harvested, quarried and mined within the Peak District and the tracks and route-ways that were built to accommodate these. Many, now degraded, still exist and are part of the archaeological and ecological record of these peatlands.

There was a similar breadth of presentations in the six parallel sessions. Contributions covered social aspects of peatland use, the conservation of the peatlands of Turkey and agricultural management of the Falkland Island peatlands and the Blackland of the Hebrides. One session focussed on peatland restoration and management, and another on the detailed monitoring of vegetation and hydrological changes. The poster presentation session included over 20 different projects. Several of these were from PhD students covering topics such as the environmental history of Whittlesea Mere, an assessment of alternatives to burning

of the Peak District. The sites were chosen to reflect some of the themes from Ian Rotherham's opening presentation to set a context for the discussions through the rest of the conference.

A fuller account of the meeting will be published later together with a book of the conference proceedings and individual papers in various publications. Photographs from the conference, taken by Chris Percy and Christine Handley, can be found at www.flickr.com/groups/syeconet. The conference was sponsored and supported by the British Ecological Society, Sheffield Hallam University, the UK National Committee of the International Peat Society, IUCN UK's Peatland Programme, JBA Consulting, Thorne & Hatfield Moors Conservation Forum, IUFRO and the Landscape Conservation Forum.

The conference organisers intended the September 2014 conference to be worthwhile in itself but also help set the scene for our international conference in September 2015 on the theme of 're-wilding' landscapes and landscape changes. From the conference feedback,



these expectations were more than achieved and some of this year's contributors have already asked to be part of next year's event. The historic management of these peatland landscapes and the attempts to restore them will be one of the major themes for next year's conference.

Wilder By Design Part 2: September 2015

The paradigms of wilder landscapes and the interactions between nature and culture, between history and ecology, and between climate, people and nature, will make for a continuing and rich discussion. This will continue at the major international conference to be held in Sheffield in September 2015. The events continue a long tradition of major meetings here relating to key issues of landscape and forest management. (Publications from these events and other outputs can be found on our website www.ukeconet.org). Following the 2015 conference there will be a full conference proceedings volume produced and published by Wildtrack Publishing, plus a book of selected and invited papers with Routledge.

The 2015 conference, 9-11 September, will expand on the discussions from the 2014 events and look critically at projects, issues and themes from across the world. Speakers will examine concepts of cultural severance and the nature of eco-cultural landscapes as well as addressing critical practical issues around (re)wilding. Speakers already confirmed include Adrian Newton, Peter Bridgewater, Ted Green, Keith Alexander, Jill Butler, Della Hooke, Anna Jorgensen, Rob Lambert, George Peterken, Chris Spray, Ian Rotherham, Sue Everett, Frans Vera and Tom Williamson. Chris and Anne-Marie Smout will be attending as guests of honour.

Periodically, there will be more information about the 2015 conference posted on our website www.ukeconet.org. If you want to be added to our mailing list or want to offer a paper / poster or other support for the 2015 conference, then please email us at info@hallamec.plus.com. Closing date for the initial call for papers was 30th September 2014 but there may still be spaces, especially for poster presentations so if you are interested, please contact us.

A Life in Ecology – a celebration of the work and inspiration of Dr Oliver Gilbert pioneer ecologist: November 2015

Ten years on from Dr Oliver Gilbert's premature death, this 2-day conference is being organised by Professor Ian Rotherham and Dr Paul Ardron both long-term friends and associates of Ollie. It encompasses his many interests and is a celebration of his contributions to the ecology of peatlands and peat bogs, urban ecology, lichenology, exotic plants, and urban and post-industrial landscapes over a period of 50 years. Invited speakers will deliver papers relating to topics, which reflect some of Oliver's passions including 'alien' species, lichens, urban woodlands, and the flora associated with post-industrial sites.

It will also reflect some of the themes which will be discussed at the September 2015 conference, particularly the impacts of exotic plants and the natural colonisation of post-industrial landscapes. Speakers so far confirmed include Penny Anderson, Dr Rob Francis, Professor Melvyn Jones, Dr John Barnatt and Dr Peter Shaw. If you want to be added to our mailing list for this conference or want to find out more please email us at info@hallamec.plus.com ; more information will be added periodically to the events page on our website www.ukeconet.org.

Ian D. Rotherham

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Peat: an important local fuel to improve regional energy security

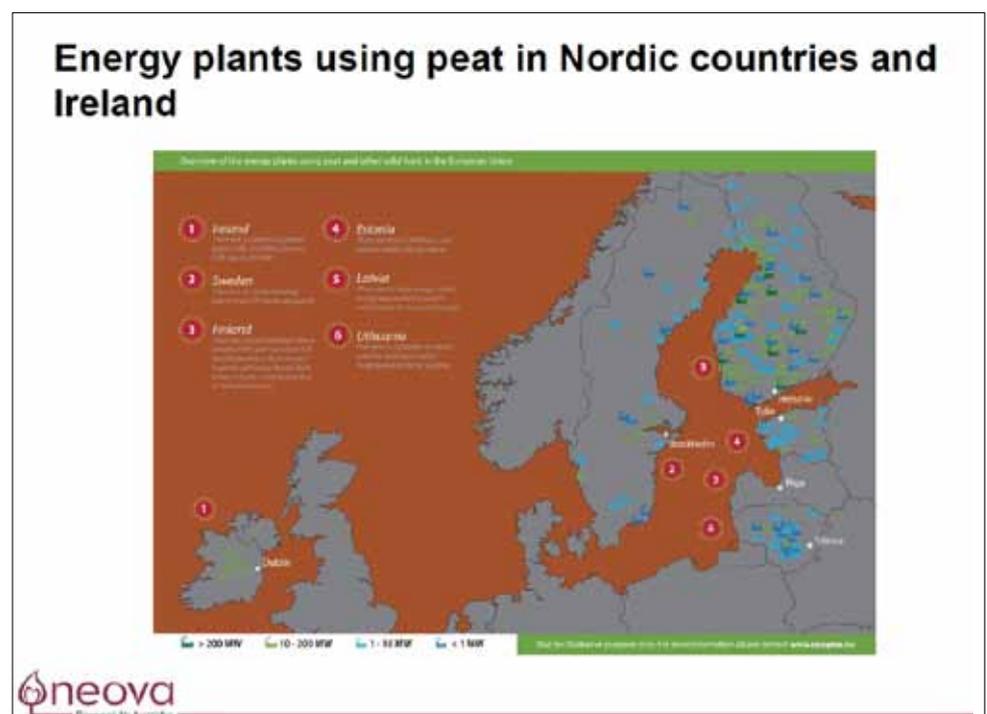
The European Union is facing new energy challenges that show how vulnerable we are towards energy security disruption linked to the situation in Ukraine. This means that local fuels such as peat can play a vital role to improve energy security and environment in our region. One conclusion is that we need every fuel we can get in our energy system. As mentioned in the EU Commission's framework on energy and climate strategy for 2020 to 2030 countries should make national plans for national energy mixes that include local fuels.

As mentioned in the Commission's European Energy Security Strategy (COM 2014 330 Final), too often energy security issues are being addressed only at national level without taking fully into account the interdependence of member states (page 3). The key to improve energy security lies firstly, in a more collective approach through a functioning internal market and greater cooperation at regional and European levels, in particular, for coordination networks and opening up markets, and secondly, in a more coherent external market.

This includes ensuring through the enlargement instruments that these guiding principles are followed by candidate countries and potential candidates. The reason to use more local fuels in our energy systems are as follows:

- Peat is a locally abundant resource and could be sustainable in some countries and we should carefully assess peat bogs suitable for peat energy production.
- Peat improves energy security.
- Peat co-fuelled with wood fuel can improve energy efficiency and meet high environmental standards.
- Peat production could eliminate CO₂-emissions from drained peat bogs and convert certain peatlands from greenhouse gas sources to sinks.

With an integrated market for production and use of peat we can be less vulnerable to disruption and shortage of fuel and the problem with weather when producing peat. Peat production and use should therefore be in accordance with the energy strategy and be seen from a regional perspective. With an overall climate goal, peat could fit into



the strategy for a more climate benign energy production.

We therefore need a playing ground with a common framework that considers national circumstances:

- A transparent and sustainable agenda for peat production and use, meaning there must be requirements on industry for licensing of peat production and co-fuelling together with wood, and social consideration towards local people that promotes development and enhances local employment.
- A regional market that is well balanced, based on local and national fuels that is robust and resilient to disruptions and variations in weather conditions.

Climate and biodiversity are important as framework conditions for peat production. When choosing degraded peat bogs with high emission of CO₂, for example, we could produce peat with lower emission of CO₂ from a life cycle perspective. This means that, from a regional point of view, we could obtain energy from peat with lower emissions. If such an approach could be used in a local and regional context it could be a very important way of reducing emission from drained peatlands and contribute to global targets for reducing greenhouse gases.

A regional strategy for peat production and use in the Nordic and Baltic countries, and Ireland should be discussed by the European Peat and Growing Media Association (EPAGMA) together with national Governments, IPS, peat industry companies and national peat producers' associations. An implementation strategy could contain:

- Targets for future peat production and use which are well balanced from a regional perspective.
- Closer cooperation over RD&D in connection with peat production and use conducted together with the IPS.

Thank you !



neova
Growing in the Nordic

- It is important to review the development of a regional market based on sustainable fuels as peat and wood fuel.
- A coordinating group could be established to monitor the development of peat production and use.

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Book Launching: The Gallery of Peatland in Kampar Peninsula and Beyond: Beauties, Challenges, Opportunities

Kampar Peninsula is one of the peat swamp forest ecosystems remaining on Sumatera Island, Indonesia. This area of peat swamp forest is part of the natural resources that have important functions in the conservation of water resources, flood absorbers, seawater intrusion prevention and climate control through its ability to absorb and store carbon. The peatland forest ecosystem's sustainability is a unity that is determined by the condition of the water system and it is controlled by a dome in the middle. In ecology, the forest ecosystem in the Kampar Peninsula is one of the key areas for biodiversity in Sumatera. This has resulted in the ecosystem being one of the focuses on stopping today's biodiversity decline due to continuous deforestation in Sumatera. In general, land use change that has predominantly occurred in the tropics and agricultural activities globally accounts for about



The Book Launch, Jakarta, 16 September 2014. Left to Right: Professor Budi Indra Setiawan (book author), Mr. Kusnan Rahmin (President Director of Riau Andalan Pulp and Paper), Professor Muhajir Utomo (book author), Mr. Zulkifli Hasan (Forestry Minister of Republic of Indonesia), Mrs. Yulwiriati Moesa (Head of Riau Environmental Agency), Mr. Al Azhar (Chairman of Riau Malay Custom Organization), Professor Sugeng Harianto, (Lampung University Rector), Dr. Basuki Sumawinata (book author).

Jakarta, 16 September 2014

one-third of the total global Green House Gases (GHG) emission. In Indonesia, land and forest-use change contributes 53% of the total CO₂ emission. In fact, 47% of the national CO₂ emissions are generated from peatland ecosystems. The CO₂ emission from peatlands is mainly caused by fires, peat decomposition and biomass removals. As these emissions are considered a serious global warming threat, Indonesia has made a non-binding commitment to reduce its GHG emissions by 26-41% by the year 2020. One of the policy options to reduce GHG emission is by enhancing peatland management practices.

In responding to the issue of CO₂ emission from peatlands and to implement sustainable industrial plantation forest management, PT. Riau Andalan Pulp and Paper has improved and executed so called eco-hydro technology at Meranti Estate, Kampar Peninsula, Riau Province, Sumatera Island, Indonesia. The Ministry of Forestry Republic of Indonesia has appointed a Measurement, Reporting and Verification (MRV) team in 2010. The MRV team is in charge of carrying out the measurement, reporting and verification (MRV) of eco-hydro management implemented by RAPP in peatland in Kampar Peninsula, Riau Province.

During the MRV activities, beauties, challenges and opportunities of peatland in Kampar Peninsula and beyond were captured by Professor Muhajir Utomo and Dr. Basuki Sumawinata. The book authors are Professor Muhajir Utomo, Dr. Basuki Sumawinata and Professor Budi Indra Setiawan; members of the MRV team. This photo book describes the natural richness of Indonesia, in particular location in Kampar Peninsula as peat swamp forest area which is located in Riau Province.

From left to right: Prof. Dr. Budi Indra Setiawan (co-author), Prof. Dr. Muhajir Utomo (first author), Ms. Dian Novarina (Riaupulp), Dr. Wawan (Guest), and Dr. Basuki Sumawinata (co-author).

Industrial plantation forest (HTI) development in Kampar Ring must implement landscape approach given the Kampar Ring is one entity of ecosystem and water management in Kampar Peninsula in the provincial and district scales in the preparation to participate in efforts to mitigate climate change. This approach is done to ensure that up to how much influence the development of industrial plantation forest in Kampar Ring with water management "eco-hydro" implemented by industrial plantation forest of RAPP to the water system in Kampar Peninsula as well as the connectivity of high conservation value forest functioned as endemic wildlife corridor to the broader habitat.

The book was launched by Forestry Minister of Republic of Indonesia. The authors hope that this photo book can enhance the knowledge base and enrich the wealth of Indonesia's forest visualization as well as the community social economy living in the forest and surrounding forest in Indonesia. They also hope to expose challenges ahead that must be faced by all of us.

Budi I. Setiawan

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The surprise of biodiversity in peat extraction areas

Most people think that life does not exist in peat extraction areas. It has been wonderful to realize how wrong they actually are.

Before I started my career in bioenergy, my studies and my work as a biologist mainly related to evolutionary biology and ecology. Therefore, I can say that I have an excellent understanding of how different species are able to adapt to their environment and of course I have spent much time in diverse natural environments. However, to my – and surely others' – surprise, during these

last few years, my most striking nature experiences have been in peat extraction areas. As an internal environment inspector I have observed these landscapes very carefully.

A few of my most memorable moments occurred last summer, which included spotting a European badger (*Meles meles*) right in the middle of the bright afternoon, as he trotted through the extraction field, seeing a golden plover (*Pluvialis apricaria*) next to a stock pile, scaring off a male capercaillie (*Tetrao urogallus*) just a few metres



Internal inspector at work. Photo: Hannu Miettinen

from me, and identifying a spotted marsh-orchid (*Dactylorhiza maculata*) when returning to my car at the end of my inspection tour. Furthermore, in one of our peat extraction areas, beavers (*Castoridae sp*) seem to have their own opinion as to where to direct the surrounding waters. After having seen all that, I no longer question as urban legends the stories of fellow colleagues about otters (*Lutra lutra*) nesting in drying pipes, or the largest ever discovered population of moor frogs (*Rana arvalis*) found in an overflow field used to clean runoff waters.

Mire species thrive better than expected

When a forest is cleared in Finland to make room for fields for food production or to use the trees for the wood industry, not many highlight or even grieve the loss of the species there. Nevertheless, at the moment, up to 36% of our threatened species are found in forests, whereas for mires the number is only 4.5% (The 2010 Red List of Finnish Species). Still, when an area of peatland is transformed for peat extraction, mainly for energy peat, or as early as the planning stage, people are easily motivated to protest against the destruction of the habitat. The main understanding seems to be that a peat extraction area is a brutally destroyed landscape where no life exists – but clearly this is not the case!

As an example, traditional agriculture caused meadow species to evolve and adapt to rural biotopes. Later on, the Industrial Revolution acted as a source of pressure spurring on natural selection, making species adapt to their changing surroundings. This phenomenon is seen, for instance, in industrial melanism. Nowadays even “traditional” rural biotopes are threatened due to factory farming and are often rather artificially maintained.

In the process of obtaining an environmental permit for peat extraction, different plant, animal and insect surveys are performed. However, there is little scientific data on the species that live in or next to extraction sites. I dare to argue that peat extraction, having been practiced for decades already, has also placed pressure on species to adapt to these areas.



The spotted marsh-orchid (*Dactylorhiza maculata*) thrives quite well near peat extraction sites. Photo: Susanna Palmu

Knowledge creates potential

Species surveys in peat extraction areas and genetic research into those populations would surely introduce interesting and surprising facts to the discussion of different land uses, and the conservation of biodiversity. Maybe there are already populations that exist at the extraction sites that cannot be found in any other environment? At least, at the stage when an extraction site is being finished, knowledge of the species there would provide better possibilities for planning its after-use or to direct the area’s rewetting measures along a certain path. In the best of cases, we could already establish the basis for the development of less common and threatened habitat types via natural succession.

When choosing your next field trip destination I warmly recommend considering one of the nearest peat extraction sites and see for yourself what they look like today. Moose and duck hunting parties have already found their way there - surely for a reason.

Susanna Palmu

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Ecological Restoration and Research in Theory and Practice

One week at the SER Symposium 2014 in Oulu

The SER European Conference on Ecological Restoration was held in Oulu, Finland, from 3rd-8th August, 2014. The aim of SER2014 was to provide an international forum to discuss the restoration of ecosystem services, and also the ecological, economic and socio-cultural values of restoration. In practice, this meant strengthening the link between

restoration and land-use policies, pointing towards issues discussed continually at international, EU and national level.

About 400 participants from 35 countries attended the event, with about a quarter of them being more or less familiar to me from the IPS. They included researchers and students, but also



Opening session at Oulu University.



Reindeers in the backyard of Pallas hotel. Photos: Susann Warnecke

many participants from companies, as well as consultants and policy-makers.

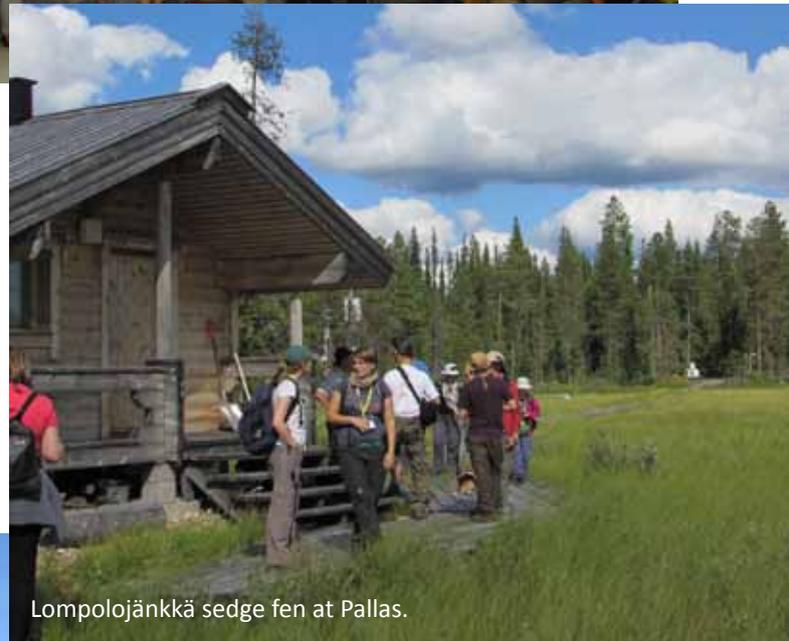
The pre-conference tour took some 40 of us to Lapland for four days, visiting particularly the Ylläs and Pallas region, where we learned about land-use changes, hydrology, catchment management, peatland flux measurements, employment and tourism, and their effects on the local population.

Many of these pre-tour attendees were SER Europe Board members or otherwise very active in their field, and the trip provided an excellent opportunity to socialize and talk about peatlands and forests and their use in Finland. Most participants came from Germany, Hungary, Finland, Estonia, the Netherlands, Australia and the UK, and for the majority this was also their first time in Finland.

This was a great start for the actual conference in Oulu, which lasted from Monday to Friday. We tried to attend as many presentations and social events as possible, although the programme was packed with more interesting sessions than one could cope with - especially in the extraordinary summer heat of 30 degrees. Special attention was given to the EU Biodiversity Strategy 2020 and the Aichi Targets, which include the restoration of at least 15 % of degraded ecosystems (Target 15), contributing via biodiversity and carbon stocks to climate change mitigation and adaptation.



About half of the participants. Photo: Jouni Karhu, Metla



Lompolojänkkä sedge fen at Pallas.



At the Torne River, learning about local livelihoods.

IPS Publications



The following publications can be ordered in print from the IPS Secretariat by sending an **email to ips@peatsociety.org**. You will receive an invoice from us by post or email. Payment by paypal (credit card) to ips@peatsociety.org or international bank transfer (IBAN/BIC). Global mailing costs are included. We ship after we have received your payment.

1984 Peat Dictionary	€ 38
1996 "Global Peat Resources"	€ 80
1998 Jyväskylä "The Spirit of Peatlands"	€ 90 (few copies)
2002 "Wise Use of Mires and Peatlands"	€ 25
2002 "Peatland Ecosystems and Man; An Impact Assesment"	€ 53
2003 "PeatPolis.nl" An exhibition in the Netherlands	€ 15
2006 Conference Proceedings "Peatland Utilisation and Research in Ireland"	€ 21
2008 "Peatlands and Climate Change"	€ 25
2008 "Finland-Fenland"	€ 55
2012 "Peatland Ecology and Forestry - a Sound Approach"	€ 40

Strategy for Responsible Peatland Management

for free

IPS metal pin or IPS logo pen	€ 5
International Peat Journal No. 1-12	€ 16
Peatlands International 1+2/1998-2013	€ 10
DVD Wise Use of Peatlands"	€ 10 (TV version)

Proceedings of International Peat Congresses:

1972 Otaniemi, 1980 Duluth, 1984 Dublin, 1988 Leningrad, 1992 Uppsala	€ 80
1996 Bremen, 2000 Québec, 2004 Tampere	€ 90
2012 Stockholm "Peatlands in Balance" Abstracts	€ 25

1981 Wageningen Conference Proceedings "Peatlands below sea level"	€ 29
1983 Aberdeen "Remote Sensing in Peat and Terrain Resource Surveys"	€ 25
1985 Jönköping Conference Proceedings "Peat and the Environment '85"	€ 29
1985 Kingston "Tropical Peat Resources - Prospects and Potential"	€ 29
1986 Finland "Socio-Economic Impacts of the Utilization of Peatlands"	€ 25
1994 Brussels Conference Proceedings "International Peat Conference"	€ 38
1995 Pärnu Conference Proceedings "Peat Industry and Environment"	€ 15
1997 Amsterdam "Peat in Horticulture - its Use and Sustainability"	€ 43
1997 Saint-Malo "Natural and Agricultural Ecosystems in Peatlands"	€ 15
1998 Duluth Conference Proceedings "Peatland Restoration & Reclamation"	€ 47
1999 Jokioinen Abstracts "Chemical, Physical and Biological Processes in Peat Soils"	€ 15
1999 Amsterdam "Development of the Role of Peat in Growing Media"	€ 13
1999 Bad Kissingen "Peat Therapy on its Way into the Next Millenium"	€ 47
1999 Jokioinen "SUO: Chemical, Physical and Biological Processes in Peat Soils"	€ 25
2001 Amsterdam "Peat in Horticulture. Peat and its alternatives in growing media"	€ 19
2003 Amsterdam "Peat in Horticulture. Additives in growing media"	€ 36
2001 Jakarta Conference Proceedings "Peatlands and People"	€ 35
2002 Bremen Conference Abstracts "Future Utilisation of Peatlands"	€ 9
2002 Pärnu "Peat in Horticulture. Quality and Environmental Challenges"	€ 35
2006 Amsterdam "Peat in Horticulture. Peat in the Stranglehold of Interest Groups"	€ 25
2010 Amsterdam "Peat in Horticulture. Life in Growing Media"	€ 30

During the peatland sessions, many of the IPS members gave presentations on after-use, rehabilitation and other research projects, e.g., Olli Reinikainen, Edgar Karofeld, Mati Ilomets, Tatiana Minayeva, Florence Renou-Wilson, David Fallon, Timo Penttilä, Alue Dohong, Samu Valpola, Anna Laine and Harri Vasander. The complete programme can be seen at www.ser2014.org.

The cooperation with the organizers from Oulu University was very successful. The conference was extremely well organized, with plenty of information provided beforehand and during the conference, including lists of participants, a book of abstracts, the programme, maps, name tags, as well as catering and plenty of staff on hand at the site. The mid-conference excursions on Wednesday were also very well planned and interesting. Of course, it is a challenge to guide dozens of clumsy people through newly rewetted rich spring fens with high iron content very close to the city!

During every day of the conference, it seemed that everybody was highly motivated and very interested in the subject. However, one big challenge remains - to make sure that knowledge and experience is transferred effectively to those who actually do the work, who need restoration services, want to measure results or are able to finance them. The targets are set at international and national level, and tough work is required of science, industry and politicians to realize them, especially when resources are scarce.

On Thursday, I gave a presentation on the IPS, our Strategy for Responsible Peatland Management and the activities of IPS Commission V on peatland rehabilitation and after-use, to some 40 attendees. IPS also had a stand with Peatlands International, posters, pens and



Mid conference excursion on the way to Harakkasuo near Oulu.

our books at the venue, and many people came to talk and exchange ideas. In every respect, the conference was very inspiring and this could surely be a way to further cooperate in the future.

The next events are the SER World Conference in Manchester, 23rd-27th August, 2015 (www.ser.org/programs/world-conference); in Freising, Germany in August 2016 (IPS Congress at the same time in Malaysia), and the IUCN World Conservation Congress in Hawaii in September 2016.

Susann Warnecke

IPS Communications Manager
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Peatland experts and Kessu dog at Pilpasuo.

International volunteers researching mire hydrology in the Sarobetsu Mire, Hokkaido, Japan



Hidenori Takahashi

Japan Peatland Society

The 1st volunteer activity in July 2010 was conducted by 24 persons from local towns and Sapporo city.

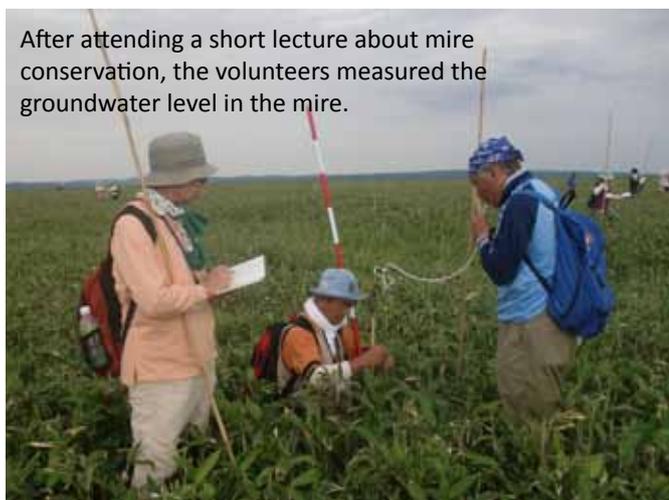
A local society for mire conservation, the Club Sarobetsu, was established by mire scientists and local people living near the Sarobetsu Mire in 2009. The Sarobetsu Mire, 66.57 km² in area, is located along the Sarobetsu River in northern Hokkaido as a part of the Rishiri-Rebun-Sarobetsu National Park. The raised area in the central part of the mire, the core

of the mire, is dominated by *Sphagnum papillosum* and *S. magellanicum*. The western marginal part of the mire, which faces the Sarobetsu River, is dominated by dwarf bamboo, *Sasa senanesis*. There are many bog rills in this marginal area of the mire.

Club Sarobetsu focused on the effects of the bog rills on the hydrological system, especially on the groundwater level in the mire. A quadrat with 50 m by 100 m was set in the marginal area and 66 plastic pipes were inserted into the peat layer for measuring groundwater levels. Volunteers from Indonesia and Japan collaborated in this work. The results of measuring the groundwater level were accumulated in a database and will be used for an analysis of the hydrological system in this area.

The collaboration with the volunteers is conducted once a year, including the winter season. The figures on this page portray the activities in the mire. The 6th volunteer activity is scheduled for 4th and 5th October, 2014.

After attending a short lecture about mire conservation, the volunteers measured the groundwater level in the mire.



Snow is an important water resource for the mire. Indonesian and Japanese volunteers and their children listened to a lecture by a snow scientist



The 2nd volunteer activity in March 2011 was conducted by 26 Indonesians and Japanese, including children from local towns and Sapporo city.



The 3rd volunteer activity in August 2012 was conducted by 24 persons from local towns and Sapporo city.



The children were very interested in the snow profile.

Young Indonesian scientists measuring the groundwater level in the mire.



After field work, the participants enjoyed salad, fruit and ice cream.



New IPS members

The following individual, student, corporate and research institute members (or their contact persons) have joined the IPS within the previous weeks. The IPS membership list is regularly updated by information from our National Committees or directly from our members (status 10 October 2014).

To see an online list of members (those who have opened their contact information in their personal profiles), log in to the IPS website with your personal user ID and password and go to www.peatociety.org/members.

To join us the IPS as a member, please visit www.peatociety.org/join-us or directly contact the National Committee in your country: www.peatociety.org/about.

Individual members

Rwanda: Pierre Kalinganire

Corporate & Institutes

Russia: Yuri Jenihov, Oleg Misnikov, Vladimir Panov, Kirill Shakhmatov, Andrey Twardowski, Boris Zyuzin (Tver State Technical University)

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Colloquy on the Peatland Experience

The Irish National Committee of the IPS invites the IPS Annual Assembly to hold its 2015 meeting in Tullamore, Ireland, in June 2015. The issuing of this invitation has been approved by the IPS Executive Board. The meeting will take place in association with a Colloquy on The Peatland Experience from **Sunday 7th to Friday 12th June 2015 in the Tullamore Court Hotel**, Tullamore, Co Offaly, Ireland, organised by the Irish Peat Society.

The Colloquy will begin with The Irish Experience, a day-long journey around all aspects of peatlands and their uses, providing a hands-on experience relevant to the subjects that will be covered during the Colloquy. This first day will be essential for all attending, as it will set the scene for the following days as well as being a comprehensive and fun-filled journey through the peatlands and communities of the midlands.

The Colloquy will be opened by two contrasting inspirational keynote speakers. The rest of the time will be divided between

- Master-classes, sessions designed to impart relevant knowledge and skills from experts to participants;
- Interactive poster sessions at which the authors of some 30+ posters will each make a five-minute presentation followed by questions and discussion; and
- 'Fireside chats' which will combine discussion of different perspectives on peatland issues with enjoyable social occasions.

A Mistress/Master of Ceremonies (MC) will coordinate and motivate the Colloquy. Keynote speakers, poster presenters and mentors of Master-classes and fireside chats will be asked to be present for the whole Colloquy.

The purpose of the Colloquy is to communicate experience and convey instruction and learning to everybody participating. This will be a unique opportunity to consider new perspectives, develop new skills and enjoy the rich peatland fabric of the Irish midlands.



Peat and peatland events

October 2014

IUFRO 2014 World Congress
Sustaining Forests, Sustaining People.
The Role of Research
Salt Lake City, USA, 5 - 11 October, 2014
<http://iufro2014.com>

8th European Ramsar Meeting
Austria, Kufstein, 20 - 24 October, 2014
www.ramsar.org

Peatland Action: Learning from Success -
Annual IUCN Conference
Inverness, Scotland
20 - 22 October 2014
www.iucn-uk-peatlandprogramme.org

November 2014

IPS Executive Board Meeting
Brussels, Belgium, 11 - 13 November 2014
www.peatsociety.org

Finnish National Committee
Autumn meeting and seminar
Helsinki, 26 November 2014
www.suoseura.fi

December 2014

The Arctic Biodiversity Congress
Trondheim, Norway
2 - 4 December 2014
www.arcticbiodiversity.is/congress

2015

European Biomass Association (AEBIOM)
Bioenergy Conference
Brussels, Belgium, 4 - 6 May 2015
www.aebiom.org/conference

More events at: www.peatsociety.org/events

Apply now to host the 50th
Anniversary Conference of the
International Peat Society in May/
June 2018! Ask for more info:
ips@peatsociety.org.

The 17th IBFRA Conference
Towards a New Era of Forest Science in
the Boreal Region
Rovaniemi, Finland
24 - 29 May 2015
www.ibfra2015.org

**IPS Annual Meetings and
Colloquy on the Peatland Experience
Tullamore, Ireland, 7 - 12 June 2015
www.peatsociety.org/tullamore2015**

IPS-ISHS Peat in Horticulture
Vienna, Austria, 7 - 11 September 2015
www.ages.at/index.php?id=27529

Wilder by Design 2
UK, 9 - 11 September 2015
www.ukeconet.org

Baltic Peat Forum
Tallinn, Estonia, September 2015
www.turbaliit.ee

2016

15th International Peat Congress
"Peatland in Harmony - Agriculture,
Industry, Nature"
Kuching, Malaysia, 15 - 19 August 2016
www.ipc2016.com

2020

16th International
Peat Congress
Tallinn, Estonia
June 2020



Next issue...

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Submission deadline: PI 4/2014: 12 November

Give us quick feedback to this magazine:
www.bit.ly/17VfJF2 or by email to ips@peatsociety.org.



Excursion of the Finnish Peatland Society to the Southwest Archipelago

Exciting plans for the 2015 IPS Convention on invitation of the Irish National Committee



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