

e-Newsletter Peatland Research Special Interest Group

WELCOME

This is the first e-newsletter to re-launch the Mires Research Interest Group as the new 'Peatland Research Special Interest Group', a specialist forum for researcher and practitioners involved in peatland ecology.

We intend to provide a bi-monthly e-newsletter packed with news, information and opportunities on everything peatland related. We want to keep you up to date with what is happening. To do this we need you, if you have any contributions (share your research, write a review or tell us about a peat bog near you etc.), upcoming events, announcements, opportunities or a recent publication then do let us know.

We hope this will become a useful valued resource for you and your colleagues. Please forward this on and do join our [mailing list](#) for future e-newsletters.

Enjoy!

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What is included in the e-newsletter is determined by what you submit, s if there is anything you think should be included then please pass suggestions on to either [Sarah Edwards](#) (Secretary) or Ian Rotherham. If you have received the e-newsletter indirectly, then you can subscribe by joining our [mailing list](#).

1. NOTICES

Thematic session at BES Annual Meeting

The BES is now inviting proposals for Thematic Topics for the Annual meeting in Birmingham in December. These topics highlight some of the most important ecological science and provide the scientific focal point of the meeting. They create a platform for the discussion of key ecological questions, visions for the future as well as stimulating integration amongst discipline.

The Peatland Research Group would like to organise a session. If you have any ideas or are interested do [get in touch!](#)

2. UPCOMING MEETING

Joint International Union for Conservation of Nature/British Ecological Society. Symposium: 'Investing in Peatlands - Demonstrating Success'

26 - 28 June 2012 in Bangor University, UK

Peatlands are hotspots for biodiversity and ecosystem service provision. They are priority ecosystems for action under international agreements dealing with climate change and biodiversity. This international symposium will bring together experts from science, policy and practice to highlight and debate the importance of peatlands and peatland restoration from an ecological, social and economic perspective and showcase successful peatland restoration partnerships.

The programme is interdisciplinary and includes presentations from Prof Hans Joosten, University of Greifswald; Tatiana Minaeva, Wetlands International Russia Programme; Prof Line Rochefort, University of Quebec; David Baldock, Director of the

Institute for European Environmental Policy; and Angelo Salsi, Head of LIFE Nature Unit, European Commission. Networking opportunities include a welcome mixer, a conference dinner and a Welsh twmpath (folk dance). A range of fieldtrips will showcase successful science-policy-practice interfaces of restoration projects and allow for further networking.

To register and a detailed programme click [here](#).

14th International Peat Congress: 'Peatlands in Balance'

3 - 8 June 2012, Stockholm, Sweden

The theme of the 14th IPC is "Peatlands in Balance" and its core will be presentations and documentation of the latest research results on peat and peatlands in the broadest sense from the boreal, temperate, and tropical regions of the world. The Congress will offer an excellent opportunity for all stakeholders – scientists, policy makers, and industry representatives – to meet and share new knowledge on all aspects of peat and peatlands.

Keynote speakers include Professor Prof Nigel T. Roulet, McGill University; Jack Rieler, University of Nottingham; Norber Siebels, Chairman of the European Peat and Growing Media Association (EPAGMA) and Lena Ek, Swedish Minister for the Environment. The congress offers a superb social programme including an ice breaking party, early morning yoga class congress dinner, boat cruise and a variety of mid – congress excursion.

To find out more and for registration click [here](#).

3. OPPORTUNITIES

PhD STUDENTSHIPS

University of Glasgow

'Understanding the interacting effects of climate change and wildfire severity on peatland carbon dynamics'

PhD. Supervisors: Dr G Davies and Prof S Waldron. Closing date 30th March 2012.

UK peatlands contain carbon equivalent to twenty years of global fossil CO₂ emissions. This vast carbon store is threatened by altered patterns of land-use, climate change and an increasing incidence of wildfires. The relationships between the impact of fires, climate change and peatland carbon fluxes involve complex interactions. For instance, a warming climate will increase rates of peat decomposition but may also reduce vegetation moisture contents thus increasing the likelihood of more damaging burns and altered patterns of post-fire vegetation regeneration. Such linkages risk creating feedbacks that exacerbate climate change and the ecological damage caused by wildfires. Researchers have observed differences in fire severity on peatlands but do not currently understand the fundamental controlling mechanisms. The specific objectives of this project are therefore to:

1. Explain how and why alterations to climate (temperature and rainfall) affect fire severity.
2. Describe how patterns of post-fire vegetation recovery differ between different types of fire.
3. Assess the extent to which elements of the peatland carbon balance are affected by combinations of fire, drought and warming.

The student in collaboration will develop the experimental design with the supervisors. However, the project will have at its heart a novel combination of field,

laboratory and modelling approaches. Field studies will include climate manipulation using passive warming chambers and/or drought-shelters that will allow the student to alter vegetation and peat moisture content and to examine the effect of this on vegetation flammability and fire severity. Thus, post-fire monitoring could include assessment of vegetation and peat (carbon) consumption; monitoring patterns of vegetation regeneration; and using flux chambers and pore water samplers to assess gaseous and dissolved carbon fluxes. Lab experiments could use peat cores extracted from areas burnt under different severities to assess differences in post-fire hydrology and dissolved organic carbon flux.

We are seeking dynamic candidates with a sound understanding of Earth system processes / ecology / environmental chemistry. For Further details and how to apply see [here](#).

University of Swansea

Wildfire impacts on carbon storage and physical properties of soils

PhD. supervisors: Dr S Doerr and Dr R A Shakesby. Closing date: 13 April 2012

Wildfires are a prominent disturbance factor in most vegetation zones throughout the world. Their frequency and severity is increasing in many regions due to changes in land use and climate (Shakesby & Doerr 2006). Fire can profoundly affect the quantity, quality and distribution of soil carbon through volatilization, condensation, pyrolysis and combustion. They affect the balance and resilience of carbon in soil, as well as soil fertility, structure and hydrological properties. Gaining knowledge of fire effects on soil carbon dynamics ranks very high on the environmental research agenda given that more carbon is stored in the world's soils than, for example, in aboveground biomass (Neary *et al.* 1999;

Doerr *et al.* 2005).

The aim of this project is to determine the effects of vegetation fire on the carbon storage and physical chemical properties of soils. Samples are already available from the tragic 2009 'Black Saturday' wildfires in Australia and maybe supplemented by samples from burned sites in the UK, Portugal, Spain or Canada. Specific analytical methods could include, amongst others, Total Organic Carbon (TOC) analysis, extraction of soil organic matter and characterisation by Gas-Chromatography (GC), and Pyrolysis-Gas-Chromatography-Mass-Spectroscopy (Py-GC-MS). This project will be challenging in experimental terms and is also expected to involve fieldwork in rugged forest terrain.

Applicant requirements

The successful candidate will possess (as a minimum) a BSc/BA (Hons) degree class 2(i) in Geography, Environmental Science, Soil Science, Chemistry or a related discipline, should be able to work well within a team and is expected to present at international conferences. For further details, please contact: s.doerr@swansea.ac.uk or r.a.shakesby@swansea.ac.uk

4. COURSES

Statistics for Environmental Evaluation: Quantifying the environment.
27 - 31 August, University of Glasgow, UK

This one-week course provides practically motivated training in key statistical analysis and modelling skills for environmental scientists. The course is based on earlier successful courses run since 2004. Sponsorship is available for NERC funded PhD students and post-doctoral researchers. There are a number of fully

funded places available for NERC PhD students and NERC funded postdoctoral researchers. Priority for the funded places has been given to NERC PhD students.

To find out more course information and registration details can be found on the [website](#). Interested participants should contact [Prof Marian Scott](#) to register interest. The final deadline for full registration will be 29 June 2012.

Sphagnum Identification Workshops **Dates TBC Autumn 2012 Peak District**

Organised with the South Yorkshire Biodiversity Research Group and Sheffield Hallam University we have two linked Sphagnum identification workshops & field visits in the Peak National Park for professionals, researchers, academics, postgraduate students and others. This was a theme requested at the September workshop at the Sheffield BES Meeting. Numbers restricted to 20 maximum. For further details of to get involved please contact Christine Handley on 0114 2724227 or [email: info@hallamec.plus.com](mailto:info@hallamec.plus.com)

Day Excursion to Fenns and Whixhall Moss, Shropshire Date TBC

Simon Caporn and colleagues at Manchester Metropolitan University are organising a site visit / excursion to Fenns and Whixhall Mosses. This is to look at the National Nature Reserve site in general (including restoration work, cultural background, site ecology *etc.*), and to take in the climate change experiment as well. This is a great site and will be an event not to miss. It will be a single day activity, but with accommodation arranged for those coming from afar. Numbers restricted to 50 maximum.

For further details contact [Dr Simon Caporn](#) (Tel: 0161 247 3661) at the School of Science and Environment, Manchester Metropolitan University.

5. Dates for the Diary

2012

19 April *BES Conservation Ecology Specialist Group: 'Making space for Nature' – Ecological implications of the Lawton Review*, Charles Darwin House, London

22 – 27 April *European Geosciences Union (EGU) General Assembly*, Wien, Austria. ([website](#))

26 – 28 April *BES Tropical Ecology Specialist Interest Group: 5th Early Career Researcher Meeting – 'Making science relevant for the sustainable management of tropical ecosystems'*, Newcastle University, UK

3 -8 June *14th International Peat Congress – Peatlands in Balance*, Stockholm, Sweden ([website](#))

3 – 8 June *9th INTECOL Wetlands Conference – Wetlands in a complex world*, Orlando, Florida ([website](#))

26 – 28 June *Joint International Union for Conservation of Nature/British Ecological Society. Symposium: 'Investing in Peatlands - Demonstrating Success'*, Bangor University, UK ([website](#))

26 – 28 June *Rewetting of raised bogs*, Schneverdingen, Germany ([website](#))

15 – 20 July *BIOGEMON 2012: The 7th International Symposium on ecosystem behaviour*, University of Maine, USA ([website](#))

22 – 25 July *Sharing experience on raised bog restoration*, Riga, Latvia ([website](#))

5 -10 August *97th Annual meeting of the Ecological Society of America*, Portland, Oregon, USA ([website](#))

10 – 19 August *5th International Meeting on the Biology of Sphagnum*, Estonia and Latvia ([website](#))

6 – 8 September *Mires and their catchment area*, Schorfheide-Chorin, Werbellinsee, Germany ([website](#))

14 – 16 September *BES Forest Ecology Specialist Group: Animals, Man and Treescapes Conference*, Sheffield Hallam University, UK.

21 September – 3 October *International Mire Conservation Group (IMCG) Field symposium and conference*, Ecuador and Columbia ([website](#))

1 – 3 October *Mires and peat as a raw material*, Hannover, Germany ([website](#))

18 – 20 December *BES Annual Meeting 2012*, University of Birmingham, UK

2013

18 – 23 August *INTECOL 11 -Ecology: Into the next 100 years*, ExCeL, London, UK ([website](#))