RESEARCH IN THE FLOW COUNTRY – THURSO, OCTOBER 23-25, 2012

THE "FLOW COUNTRY RESEARCH HUB"... LOOKING AHEAD

Dear all.

It's been a pleasure having you here in Thurso for the Flow Country conference, and we would like to thank you all for making it such a successful event. We hope that you have enjoyed your time in Caithness and that you have learned more about all the activities and research that is being done in the North of Scotland.

The peatlands of the Flow Country are special – internationally important, largely undisturbed, yet remote from most of the research centres and



Participants in the field trip © Barbara Bremner, ERI/UHI

confronted to a fast changing landscape. If we want to deliver high quality science covering the broad range of disciplines required to protect, to manage and to understand them, it seems like a coordinated "research hub" is the way forward. The discussion session certainly provided a great opportunity to identify future research priorities and current gaps in our knowledge of the peatlands of the Flow Country: the key points have been summarised in the table below.

Given the enthusiasm and interest expressed during the conference for similar events to be held in the future, and the benefits that this scientific community can gain from maintaining a regular contact, we have decided to take some actions and get the "Flow Country Research Hub" in motion. Firstly, we are pleased to announce that ERI, NERC-CEH and RSPB will partner again to offer a <u>follow-up conference in SPRING 2014</u>. This will be the opportunity for all PhD students to update everyone on their projects, and for all to see the Flows emerging from winter. Secondly, a quarterly newsletter will be sent out to a mailing list (including all the conference participants) with updates on research activities, grants (secured, or opportunities), and Flow Country news, following a format similar to this document.

We would like to thank you once again for your contribution in the Flow Country conference, and hope to see you again soon.

Kindest regards,

Roxane Andersen

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Roxane Andersen
On behalf of the Flow Country Conference Organizing Committee















SYNTHESIS OF THE DISCUSSION SESSION

(Underlined bullet points came up on all 4 groups; no particular order for other points)

In what scientific area are we strong – as a group of researchers?

- The Flow Country provides an ideal setting for large scale, replicated and sound studies.
- Internationally high-quality science (what has been done so far is high quality)

Disciplines/areas where we are strong:

- Biodiversity assessment (especially birds)
- GHG fluxes and carbon measurements
- Water quality assessment
- Restoration techniques
- Aquatic carbon

Existing and good, but could be improved:

- -Stakeholder engagement
- -Hydrology

What areas are weaknesses within the group of researchers working in the Flow country?

- Integration between science and management practices at a broader scale (e.g. adjacent land) and at all levels
- Communication/awareness of research, publication, outreach
- Socio-economics of peatland management
- Lacking the spatial coverage of the Flows (e.g. West-East gradient, or including e.g. Lewis and Shetland)
- Long-term monitoring

Disciplines/areas of research with gaps:

- Soil communities and soil processes
 (including microbial communities, insects, invertebrates)
- Palaeo-ecology
- Modelling
- Climate sciences (also including e.g. remote sensing)
- Hydrology
- Limnology, aquatic sciences (e.g. link with rivers and lochs)
- Human archaeology
- Geomorphology

What are the scientific priorities that researchers in the Flow Country should focus on?

- Peatland restoration/management: evidencebased for effect and cost-effectiveness, habitat response, plant communities requirement, small scale processes – understanding consequences of management practices on peatland functions
- Impact of climate (climate change, regional climate) on peatland across the flows, extreme event managements, effect on GHG
- <u>Carbon</u> we can improve total C stock calculation, use carbon calculator to get numbers on restoration, improve our understanding of the fate of aquatic carbon (e.g. from source to sea)
- Impact of wind-farms on peatlands ecosystem services including biodiversity, microclimate, carbon, etc.
- Peat initiation (where to invest restoration effort for fast carbon accumulation) / linked with palaeoecology
- Baseline monitoring: what is a functional peatland in the flow (reference system), including wider taxonomical coverage, hydrology of pool systems, water table changes, pool initiation and disappearance, connectivity, bog functioning, etc.
- Impact of grazing regimes

What opportunities are there for us to work together as a group?

- Shared projects, whether it is through PhD studentships (e.g. the SAGES model), common projects, consortium grant proposal
- Regular meetings, coordinating field work
- Sharing data, increasing data availability
- Getting the site on a site network (e.g. ECN) and exchange with wider groups (e.g. Canada, Sweden) to increase awareness
- Increased physical facilities (HLF bid)
- Manipulation of land under wind-farms: cooperation in industry/academic projects
- Knowledge exchange/teaching: use the site for school groups, residential courses, grad field course, etc.
- Development of a "Best Practice Guide" for restoration
- Approaching the Scottish Government (e.g. invest in a centre to develop research)
- Remote sensing, Earth observation (e.g. freely accessible datasets)
- Having a point of contact within ERI (coordination of Flow Country research activities)

Flow Country Conference 23-25th October 2012

Participant lists (including people who contributed with a poster but were not present)

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The delegates of the Flow Country Conference, Thurso, October 26th 2012 © Barbara Bremner, ERI/UHI

THE FLOW COUNTRY IN THE NEWS!

To read more about **Flow to the Future**, the RSPB coordinated Heritage Lottery Fund bid, follow this link.

The BBC published an article on the conference on the 25th of October 2012. Read the full article <u>here</u>.

The NERC-CEH News centre posted an article about the conference on the 24th of October. Click <u>here</u> to read it.

FUNDING OPPORTUNITIES

Funding for peatland restoration from Scottish Government

Plans to restore Scotland's peatland landscape will be supported with £1.7 million funding from the Scottish Government. Click <u>here</u> for the full story.

Announcement of Opportunity: Grants & Fellowships

The Natural Environment Research Council (NERC) is inviting research proposals to its Biodiversity & Ecosystem Service Sustainability (BESS) research programme. The BESS programme is a six year £13m research programme, which will address the NERC strategic challenges regarding biodiversity research, and the UK governments' strategic priorities with respect to biodiversity, ecosystems and their services.

Closing date for Full Proposals: 6 December 2012. Details available here.

Announcement of Opportunity: Doctoral Training Partnership (DTP) competition

Proposals are invited for the new NERC Doctoral Training Partnership (DTP) competition. It is expected that 10-20 DTPs will be funded from this call. Funding for 240 studentships will be awarded per annum, and each DTP award will provide funding for five years of new student intake; i.e. nine years of funding in total.

Deadline for proposals: Provisionally 1 May 2013

Please see the full Announcement of Opportunity on the NERC website for further information.

Got something to report in the next edition of the newsletter that will come out in February? Email details about grants, student progress, field work, publication or any other news to Roxane Andersen (roxane.andersen@uhi.ac.uk) before the 20th of January 2013.