

Cross-Institute Programme for Sustainable Soil Function

SoilCIP

Newsletter for March 2008



A new and larger SoilCIP

I have not yet received formal acceptance by SO of our Institute Strategic Programme Grant (ISPG). I'll let you know as soon as I hear. Assuming its existence from 1st April, the SoilCIP now encompasses all of the Soil Science Department and the Rhizosphere Biology Group at Rothamsted, and the GESS Programme at North Wyke. Welcome everybody! I have tried to include all appropriate staff in the e-mail distribution list for this newsletter. Team/Group Leaders please make sure that everyone in your team who should receive a copy has it, and let me know of any missed or included by mistake. Brian Kerry and I hope to organize a meeting for all SoilCIP staff this year.

I'm still writing most of this newsletter on my own and would be delighted to get copy from others. It's also a rather simple and bland newsletter compared to some. Offers to improve the appearance (or even take it over!) would also be welcome.

Website

In anticipation of the new ISPG, Kevin Coleman and I are revising the SoilCIP website. A basic structure is available for you to look at and comment on:

http://www.rothamsted.bbsrc.ac.uk/aen/SoilCIP_update/

We are basing the new pages on the ISPG for the reason that this must be the focus of our research for the next 4-5 years. There is an introductory statement that lists the 5 Work Packages, hyperlinks from this to a page for each WP describing hypotheses and objectives and, eventually, links from each of these pages to the detailed descriptions of the various key science areas in each WP. There are also pages for staff list and contacts, partnerships, achievements, training opportunities, public engagement, etc.

Kevin and I need comments on the structure of the pages and, especially, photos, graphs, etc., to add to the descriptions of the key science areas. These pages could also include links to people or groups, although there will be a separate section on research groups.

At the moment only some of the research groups are listed - Murray's group and the N Wyke teams are missing. We need your input as to how these should be included, which could be via links to current pages or new pages.

There are no Rothamsted or N Wyke logos on it. Do you think we should have these at the top level at least?

Kevin has been assisted in managing the website by Sarah Kemmitt but, as most of you will know, Sarah has moved on. Kevin and Sarah use 'Dreamweaver' to construct the web pages. There is a copy of 'Dreamweaver' on Sarah's PC that should be moved to someone who could use it. I would like to have someone at North Wyke to work with Kevin, with a special focus on the N Wyke parts of the SoilCIP site. Any volunteers?

If you want to see an excellent website then look at the SIMBIOS site at:

<http://simbios.abertay.ac.uk/index2.php>

SIMBIOS is based at Abertay where there is a School of Computing and Creative Technologies!

Cross-Institute links

I met Bridget Emmett, Head of Site at CEH Bangor, at this year's CAPER (air pollution) meeting at Bangor. She has been given a clear steer to align CEH soils research with that in the SoilCIP, so we shall be meeting soon to begin the process.

International research links

Pascal Niklaus and Petra Braun were at Rothamsted from 25th to 28th March, working with Paul Poulton to begin a series of measurements on the role of soil structure, nitrogen fertilizer application and pH on methane oxidation. They are measuring methane oxidation rates on a series of plots on the Park Grass Experiment and collecting soil samples. In their lab in Switzerland they will use a combination of radiolabelling (with ¹⁴C), soil thin section preparation and autoradiography to map the spatial distribution of methanotrophic activity in intact soil samples. More information is available at Pascal's website at:

<http://www.gl.ipw.agrl.ethz.ch/people/pniklaus/index>

The Highfield Experiment

A new shared network drive has been set up for those working on the Highfield Experiment. It's not open to all SoilCIP members, but those who need access should have been granted it. If you are expecting to work on the project but do

not have access, please ask me, Ian Clark or Phil Murray. We will ask Rothamsted IT to grant you access.

British Society of Soil Science autumn meeting: 'Something old, something new: integrating molecular biology with other techniques in soil science'

On 17th September 2008, the SoilCIP will be hosting at Rothamsted a one-day meeting of BSSS to consider the application of molecular biology to soil science. We are looking for papers to stimulate discussion on what molecular biologists need to know about soils to apply their techniques effectively, and how we should integrate molecular with other methods to answer some of the key questions posed to soil science today.

We are seeking oral contributions of 15+5 minutes and posters to develop the debate. If you want to offer a paper or a poster, please send title, author(s), affiliations and a brief outline to me by the end of April. A draft programme and registration form will appear in the summer edition of the BSSS Newsletter.

Agri-Food Panel evaluation

Many of our BBSRC grant applications are submitted to the Agri-Food (AF) Panel. The BBSRC Agri-Food Committee portfolio evaluation report has been presented to the BBSRC Strategy Board and Agri-Food committee, and published on the BBSRC website, at:

http://www.bbsrc.ac.uk/organisation/policies/reviews/funded_science/0803_agri_food.html

It points out the importance of AF for soil science research, amongst several areas, and highlights one excellent soil science project, 'An integrative study of S cycling', run by Steve McGrath and Fangjie Zhao, at the top of page 13.

Food Standards Agency research requirements

The new research requirements document for the FSA was issued last month. The links is below. I have read it and can't see much of direct interest to us, but I might have missed something.

<http://www.food.gov.uk/science/researchpolicy/researchfunding/rrd/requirements/>

Extracts from the

BIOSCIENCES FEDERATION

**Report on science policy
February 2008**

In a report on the implications for Treasury policy of the 2006 Stern Review into the economic impact of climate change the House of Commons Treasury Committee has called for the creation of a ministerial post specifically to tackle climate change. In a series of recommendations, the committee praised the 2006 establishment of an Office for Climate Change as progress but cited the "need for ministerial accountability in this important area". The report also criticised the government's environmental taxation record, which it said was "timid". The report is published amid concern that the UK is falling behind its own targets from reducing greenhouse gas emissions. The UK is third from bottom in the EU league for use of renewable energy. http://www.parliament.uk/parliamentary_committees/treasury_committee/tc050208pn22.cfm

The Government announced that the wider economic and environmental impacts of biofuels will be officially reviewed. The results of the study will inform the UK policies in this area, and will underpin the consideration of EU biofuel targets after 2010. Ruth Kelly, the minister for transport has asked the UK's newly established Renewable Fuels Agency to lead the study. Announcing the review, Kelly said: "future biofuel targets must also take into account the latest scientific evidence about the environmental effects of biofuel production. There has been much recent debate around the risks associated with overly rapid expansion of biofuel production, with evidence now emerging on the indirect, or "displacement" impacts, of growing demand for agricultural production around the world. The review follows the publication of two papers questioning the advantages of biofuels in the journal Science earlier this month. The Royal Society also recently produced a report assessing the viability of biofuels as a low-carbon alternative. <http://www.gnn.gov.uk/environment/fullDetail.asp?ReleaseID=354445&NewsAreaID=2&NavigatedFromDepartment=False>

The House of Commons Environment, Food and Rural Affairs Committee is to conduct a review of science at the Department for Environment, Food and Rural Affairs. MPs will assess the capabilities of Defra and its agencies in terms of scientific infrastructures, approach to science funding and in sustaining a dialogue with scientific professionals. The committee has invited the BSF to make recommendations on the scope of its inquiry. Please send your comments to cwallace.bsf@physoc.org by 21st March. (Rothamsted has already submitted some suggestions.)

The full Biosciences Federation report can be seen at the BSF Science Policy web page:

http://www.bsf.ac.uk/science_policy.htm

Go to the bottom of the web page and click on 'FULL REPORT'.

I'm on holiday from 29th March to 5th April, so this Newsletter is a few days earlier than normal.

Keith Goulding, 28th March 2008