

Cross-Institute Programme for Sustainable Soil Function



SoilCIP

Newsletter for October 2009

SoilCIP review

Peter Gregory, CE of SCRI, David Hopkins, Director of Science Planning Programme: Environment Plant Interactions, SCRI, Mark Bailey, Biodiversity Programme Director, CEH, and Helaina Black, Work Package leader, Macaulay, were external assessors at a one-day review of the SoilCIP, held on 27th October. Brief reviews of all 5 Work Packages were presented and discussed, followed by a general discussion focusing mostly on the next ISPG. All 4 reviewers spoke very highly of the work but also made some good points for us to pick up, e.g.:

- Be clear about what is being achieved by ISPG and what by uplift funding.
- What are the real highlights/beacons/big hitters?
- We have too many objectives. We should agree on what are the most exciting scientific results and areas for future work and set a few, maybe 3, objectives/major challenges around which to focus our research.
- What do strategic partnerships deliver and what is our strategy for these?
- Where is the next generation of highly cited scientists?
- We appear to be too rigid; we should be flexible and adjust to changing needs and priorities.

Comments received afterwards by e-mail:

Peter Gregory: "It was a great pleasure to help. You have something very good in progress and I believe that you could capitalise on this and help BBSRC in the process. Well done on what you have created and shaped."

Mark Bailey: "please thank all involved. it was a most enjoyable day. clearly lots of valuable and internationally competitive research going on. looking forward to being involved."

I discussed ideas for a possible future Plant-Soil Interactions ISPG with Peter Shewry the day after the review. The next steps are the NW SSG meeting on 12th November, a video conference for SoilCIP WP leaders on 18th November, and then the meeting of Centre Directors and HoDs on 4th December to agree an institute strategy and the number and content of the next round of ISPGs. The better idea we have of what we want to do, the stronger will be our position at the meeting on 4th December.

Strategically Important and Vulnerable Capabilities in UK Bioscience

The report of the public consultation run by BBSRC and the Biosciences Federation (now the Society of Biology) on Strategically Important and Vulnerable Capabilities in UK Bioscience ('niche' research skills) is now available on the BBSRC website:

http://www.bbsrc.ac.uk/organisation/policies/reviews/consultations/0905_bioscience_research_skills.pdf

The report summarises the recommendations made from the Bioscience Skills and Careers (BSC) Strategy Panel to BBSRC. A summary of the inputs from the Soil Science community and the BBSRC response starts on page 17.

Royal Society Report: 'Reaping the Benefits'

The Royal Society launched a report, 'Reaping the benefits: science and the sustainable intensification of global agriculture' on Thursday 22nd October. The Society describes the report as "...a landmark study examining the contribution of the biological sciences to food crop production." The study was conducted by a working group chaired by Prof Sir David Baulcombe FRS, a member of the Rothamsted Board. The Working group included Ian Crute, our ex-Director, and the review panel included John Pickett. There are lots of references to soils and soil science (twice as many as to GM, which was the focus of media attention). One of the main recommendations is: "Recommendation 3. RCUK should increase support for ecosystem-based approaches, agronomy and the related sciences that underpin improved crop and soil management." Copies of the report can be downloaded from: <http://royalsociety.org/document.asp?tip=0&id=8825>

China-UK Workshop

Les Firbank, Phil Murray, Jenni Dungait, Kit Macleod, Penny Hirsch, Chris Watts and I attended a 3-day workshop (14-16 October) at China Agricultural University, Beijing, entitled 'Soils for sustainable agriculture and the environment'; Jenni was the main UK organizer. It was profitable and enjoyable and should lead to new collaborative links with CAU, with PhD students and other CAU staff coming to Rothamsted and North Wyke for training on topics such as effects of carbon on yield, carbon turnover, soil physical quality and microbial interactions in the rhizosphere. David Hopkins of SCRI and Liz Stockdale from Newcastle University also participated. Liz is likely to help set up an organic farming workshop at CAU in May 2010. Thanks to a BBSRC ISIS grant for the partial funding of travel for UK delegates.

Soil Scientists Dinner

Each year Peter Gregory organizes a dinner in London for about 20 soil scientists from around the UK. The dinner is held at the Farmers Club. We have a pre-dinner speaker who this year was Prof John Beddington, Chief Scientific Adviser to the Government. He gave an excellent talk, showing that he clearly understands the importance of soil science for sustainable agriculture and that funding for soil science research has declined over a considerable period, with resulting problems for

succession. We had a unique opportunity to discuss future soil science strategy with him. We will be sending him slides and a brief paper containing some examples of good soil management to counter the usual information about poor soil management such as eroding soil, rutted fields, etc.

New call from the Technology Strategy Board

Although perhaps not of immediate relevance to us it is worth noting this e-mail from Pete Kennedy, Commercial Business Development Specialist at Rothamsted, because of likely future calls for soils-related bids.

Posted within the last week or so on the TSB website is a new competition “New Approaches to Crop Protection” that is highly relevant to Rothamsted, Brooms Barn and North Wyke. The competition opens on 18th January 2010 and staff manning TSB’s Competition Helpline are currently unable to provide any more additional information than is available via the attached flyer or the information posted on TSB’s website:

<http://www.innovateuk.org/deliveringinnovation/forthcomingcompetitions/newapproachestocropprotectioncompetition.ashx>

The competition is focussed on collaborative R&D and up to £13M is being made available by TSB, Defra and BBSRC to address the dual challenge of increasing productivity of crops while reducing the environmental impact of crop production. The competition is focussed at the following sectors:

- arable crops including wheat, barley, oilseed rape, potatoes and pulse crops
- horticulture
- grasses and forage crops
- crops for biofuels, and other non-food uses
- in the field or protected cultivation

Background to the competition makes reference to pressure of climate change and future restrictions on pesticide use requiring new, effective crop protection strategies and developments, which command public confidence. This investment of £13M is aimed at developing crop protection strategies, products and services that enable sustainable agricultural production and comply with forthcoming EU regulation.

The competition is looking for proposals for projects lasting up to 5 years that will develop novel technologies, products and/or services that can be deployed across the crop-growing supply chain. Proposals should seek to enhance crop productivity, meet new and existing EU regulations and significantly reduce the environmental impact of the agricultural industries. The flyer provides an extensive (though not exhaustive) list of areas of interest – most relevant to Rothamsted Research. Projects can range from focussed basic research through to applied research and experimental development projects – with the anticipation that most of the funding will go to applied R&D (attracting up to 50% public funding) or experimental development (attracting up to 25% public funding) categories. Projects involving industry-orientated basic research (up to 75% public funding) will also be considered but a robust case must be provided to justify the funding.

TSB competition’s are intended to be business led. They are open to all UK-based companies and research organisations but in all cases the principal applicant must be a business. Hence, why it is important for us to be aware of this competition well

ahead of the official 'opening' to start forming the necessary relationships with prospective industry/commercial partners. If you need assistance to identify suitable industry/commercial partners or would like me to facilitate early discussions, please let me know as soon as possible. Please take special note of the project requirements listed under 'Funding Allocation and Project Details' – these include evaluations on market application and potential, benefit to the UK economy global environment, and fit with relevant regulatory requirements.

19th World Congress of Soil Science



The closing date for paper submission has passed – 31st October. But registration is open and will remain so until the conference begins: www.19wcss.org.au. I'm aware of one confirmed and two potential contributions to date: Steve McGrath has been invited to present a plenary paper; Murray Lark has offered a paper examining eddy covariance carbon flux data; the Highfield team has offered a paper on the baseline data on diversity and abundance. Is anyone else offering a paper or attending?

Keith Goulding, 30th October 2009