

Workshop Feedback & Actions

Developed from First SRC Annual Stakeholder Event,
10th December 2014

Background

The following set of actions has been developed from workshop feedback provided in response to these questions:

Question 1: What are the soil research priority areas for you/your organisation for the next 1-3 years? How could Reading help you deliver on these needs?

Facilitator/Rapporteur: John Hammond/Anne Verhoef

Question 2: What are the broader soil research opportunities to meet national and global needs? How could we work together to make progress?

Facilitator: Chris Collins; Rapporteur: Liz Shaw

Question 3: What activities, services and information could the Soil Research Centre provide that would help you/your organisation? e.g. How do you think our stakeholder event should be run next year?

Facilitator: Alison Bailey; Rapporteur: Tom Sizmur

Research Priorities

Discussions identified a number of exciting opportunities. We have considered the feedback carefully, and have prioritised based on needs that were expressed most widely across the group. Action 1 will be the main focus of SRC development activities. Actions 2-7 are aligned with ongoing work and we invite our partners to get in touch to discuss how to take this forward. We will review opportunities again at the next SRC Event and update as appropriate.

- 1. Soil quality indicators.** The need for better diagnostic tools for soil quality, soil health and yield was identified by wide range of partners, including farmers, consultants, regulators and policy. Particular examples included linking measures of soil organic matter and soil biology to yield, soil function and/or soil ecosystem services (perspective varied with organisation); and yield response curves with respect to soil organic matter quality and water content. Given Reading expertise in soil organic matter, soil biology and technology we feel this is a priority area where we can develop in partnership with those interested. Defra will release an evidence review on soils carried out under the NERC Soil Security programme in Autumn, which includes a section on soil quality indications. **Tom Sizmur and Chris Collins will run a focused session at the 2nd SRC Event on 18th November 2015 to follow up on priorities**

identified in the Defra review. Please get in touch with Tom (t.sizmur@reading.ac.uk) in the meantime if you would like to discuss further.

2. **Tools for visualisation and management of soil ecosystem services, flood risk and land management (including afforestation).** Like soil quality indicators, this was identified as another common need across many partners. This need has also been identified by the Loddon Catchment Partnership (LCP), and we are currently developing a Virtual Catchment Laboratory (VCL) as part of wider plans for the Loddon Observatory with the LCP and others organisations including the Environment Agency. The VCL will enable data from a range of sources to be assimilated in to dynamic models to explore impact of different land management and climate scenarios on flooding, water quality and greenhouse gas emissions. Work is in the early stages and we will demonstrate the beta version developed through funding by a NERC Impact Accelerator project in one of the workshop sessions at the next SRC event on the 18th November 2015. **Please contact Joanna Clark (j.m.clark@reading.ac.uk) for more information if you are interested in getting involved with work in the Loddon and/or have ideas for other applications of the VCL.** There are also many projects ongoing looking at improving flood risk prediction. **For more information on predicting flood risk please contact Hannah Cloke (h.l.cloke@reading.ac.uk).**
3. **Access to soil data** was another common need identified by many. This including access available data from national soil surveys to developing better soil parameter data sets for climate models. The use of the UK Soil Observatory (www.ukso.org) was discussed, along with other open access data sources. The Environment Agency are about to increase the amount of data available in open access form, but note there are caveats with this. Pulling together soil data from different sources will form part of the VCL (see item #2). **An update on progress with the VCL and further opportunities will be provided at the Annual Event in November. If you are interested in improving soil parameter data sets for models please get in touch with Anne Verhoef (a.verhoef@reading.ac.uk)**
4. **Pesticides.** Regulators and industry are interested in the fate of pesticides moving through soils into surface and ground waters as an issue related to the Water Framework Directive. Needs include identifying soils properties that need to be measured for legislation and better understanding of the fate of chemicals in 'real' soils. **Please contact Liz Shaw (e.j.shaw@reading.ac.uk) if you are interested in developing work in this area with Reading.**
5. **Make the nitrogen cycle less leaky.** The issue of nitrogen fate in soils and subsequent transport to surface waters is a critical issue for the Water Framework Directive, with efficient nitrogen use critical for Sustainable Intensification. **Please contact John Hammond (j.p.hammond@reading.ac.uk) if you are keen to develop work with Reading in this area.**
6. **Waste to land.** Safe disposal of waste on land is an area of interest for regulators and industry. **Please contact Chris Collins (c.d.collins@reading.ac.uk) if you are interested in developing working in this area with Reading.**
7. **Land use change impacts on forestry and peatlands,** including economic valuation and ecosystem services approach. Forestry and peatlands are important carbon stores and their management to reduce greenhouse gas emissions is of interest to policy and practitioners. **Please contact Martin Lukac (m.lukac@reading.ac.uk) if you are interested in developing projects on forestry with Reading and Joanna Clark (j.m.clark@reading.ac.uk) if you are interested in peatlands.**

Working together

8. **Capacity to provide fast response to problems faces by SME's who have regular stream of small problems.** The tension between time frames Universities and Industry work on was noted. There are real constraints on what can be achieved on all sides. From a University perspective, academic staff work on a range of projects at any one time, and are usually committed to spending a significant proportion of time teaching and engaged in administrative duties. They are interested in developing new ideas, but in general it takes Universities 3-18 months (or longer) to develop new projects and secure funding. **The new Institute for Environmental Analytics (<http://www.the-iea.org/>) at Reading has been set up to address some of these problems (contact Jon Blower (j.d.blower@reading.ac.uk) for information) to provide a more rapid response to industry needs. In addition, we also have funding to set up a new Centre for Agricultural Informatics and Metrics of Sustainability to develop projects to meet industry needs (<https://agritech.blog.gov.uk/2015/03/27/aims-putting-the-uk-at-heart-of-the-big-data-revolution-in-agriculture/>) (contact Richard Tiffin, j.r.tiffin@reading.ac.uk).**
9. **Staff directory.** Many commented that they would like more information about what we do at Reading and who to contact. **We are in the process of updating information on the SRC web page, which includes links to staff and students in the SRC and links to their personal pages are available on the SRC web page (<http://www.reading.ac.uk/soil-research-centre/Staff/src-staff.aspx>).**
10. **Seminar exchange.** This was suggested by partners as a way to follow up with more detailed discussion about research. Partners can give seminars at Reading throughout the year; and Reading researchers can visit partner organisations and present there. **Please get in touch with SRC members directly if you know who you would like to work with (see action 9), or Joanna Clark (j.m.clark@reading.ac.uk) if you would like help to make the right connection.**
11. **Publish ideas/proposals online for feedback/consultation.** Partners are interested in knowing more about the projects we are planning that may be of benefit to them. There was a suggestion that we could release a list of research proposals for feedback. There are issues with setting this up online at the moment. **The best way forward this year will be to use the Annual Partnership Event to share information about upcoming work and opportunities. If you have particular idea you'd like to develop, please get in touch with relevant staff or Joanna Clark (j.m.clark@reading.ac.uk) if you'd like help directing you to the right people.**
12. **Partner matching service and identify upcoming opportunities.** With limited finances in government, there is a greater need for public/private partnerships. Our Research and Enterprise Development office continually looks out for funding opportunities and proactively builds teams to address key research calls. **Please get in touch with Cathy Harris (c.harris@reading.ac.uk) if you would like your details to be held on our partner's database to be altered to future opportunities.**

Actions for activities, services and information

13. **Accessing scientific publications.** Regulators would like to access scientific publications to use as evidence for policy, but have difficulty doing so. Research Councils UK (RCUK) are pushing for open access to be standard. **Reading has a central publication repository CENTAUR, where all outputs are stored.** A list of publications tagged with Soil Research Centre is available on the SRC web page (<http://www.reading.ac.uk/soil-research-centre/Research/src-publications.aspx>) – although please note not every soil paper has been tagged (we are updating entries). **To help locate precise papers, we've added a link to the**

CENTAUR search tool on the SRC web page to help locate information. We are also updating entries so that pdfs are included where possible. **If pdf is not available online, please e-mail the corresponding author and request a copy (academics do this all the time).**

14. **Write articles for Farmers Weekly.** Many partners noted the need to publish where interested users already go for information, like trade magazines like Farmers Weekly. A number of staff already do this, although we could do more and are open to invitations for articles. **Please do get in touch with individuals or contact Joanna Clark (j.m.clark@reading.ac.uk) to help find the right person.**
15. **Farmer engagement.** The need for active engagement with farmers was noted, as they may not choose to attend the SRC Annual Event but are likely to be interested in soil research. The School of Agriculture, Policy and Development already attends the Royal Berkshire Show and Cereals. We are also working with local farmers through the Loddon Catchment Partnership. The University has two farms at Sonning and Arborfield and these could be used for Farm open days. More could be done and we welcome ideas on how to take this forward. **Please contact Alison Bailey (a.p.bailey@reading.ac.uk) if you are interested in developing a farmer engagement event/activity.**
16. **E-bulletin, social media etc.** Not much enthusiasm for e-communication amongst partners who attended. Overwhelming feedback was need for face-to-face contact through events. **The SRC has a Facebook page, which focuses more on student activities (<https://www.facebook.com/SoilResearchCentreatReading>).**

Actions for the next SRC event in 2015

17. **Keep holding the annual event.** We were extremely pleased with feedback that the majority felt the event was useful, and should be repeated again.
18. **Time for partner presentations and workshops.** The opportunity for partners to present was also recommended. The research highlights session received mixed feedback, with some finding it really useful to get an overview of activity at Reading whereas others wanted more detail. **At the next event, we will present a much shorter introduction/'highlights' from the year and build in time for more detailed presentations for larger projects from Reading and Partner speakers. Workshop topics will be selected from a survey of attendee interests prior to the event.**
19. **More time for networking.** Attendees commented that they found the networking lunch and poster session really useful. **At the next event, the afternoon poster session will be extended to last 1.5 hours. Posters slots will be available for all attendees.**
20. **Wider participation.** As this was the first time we held an event like this, we choose to keep this small and invite people within our immediate network. Invitations were sent to people we knew in the first instance. We wanted to learn how best to do partnership events, and have used feedback to shape future events. Partners suggested that we should also invite Base UK members, Elm Farm, Organic Research Centre, Reading Alumni and the research councils (knowledge exchange reps from NERC/BBSRC). **We will advertise the event earlier and wider with online registration to extend our reach.**
21. **Renaming the event: Soil Research Centre Annual Partnership Event.** We initially used the word 'stakeholder' to mean anyone with an interest in the SRC activities. However, many attendees felt 'partner' was more appropriate.
22. **Book of abstracts.** Request from attendees to have a book of abstracts accompanying the meeting. We had not appreciated how useful partners found this information. **We are have**

compiled this and will circulate and publish on the web page
(<https://www.reading.ac.uk/soil-research-centre/NewsEvents/src-stakeholder-event.aspx>).

23. Information on the web. Attendees requested information to be widely available. **All presentations, accompanying documentation and feedback and plan will be available on a dedicated web page** (<https://www.reading.ac.uk/soil-research-centre/NewsEvents/src-stakeholder-event.aspx>).

24. Hold the event in November (18th November 2015 confirmed). Many people who could (and could not) attend noted that December was a busy time with year-end reports to be completed.

25. Keep as a half day event. Most people agreed that a half day event was most convenient, allowing time for travel. Provisional timetable for 2015 event, taking feedback above in to consideration:

11:30 Coffee, posters and registration

12:15 Networking lunch and posters

13:15 Presentations

Introduction and 2015 Highlights

Detailed project presentation (by partner)

Detailed project presentation (partner or Reading)

14:00 Workshop/Break-out groups (topics recommended by partners/SRC to identify current challenges/opportunities)

15:00 Extended poster session and drinks reception

16:30 Annual Lecture (partner presentation)

17:30 Close

Dr Joanna Clark

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