

# SCOTTISH CONSORTIUM FOR RURAL RESEARCH

## **Minutes of the 51st Main Board Meeting held on Monday 13th January 2014, in the Board Room, Royal (Dick) School of Veterinary Studies, The University of Edinburgh, Easter Bush, Midlothian.**

### **Present**

Professor Jonathan Seckl (Chair)  
Professor Stuart K Monro (Scientific Director)  
Professor Ian Bryden (UHI)  
Dr Chris Quine (Forest Res)  
Professor Willie Donachie (Moredun)  
Dr Ian Bainbridge (SNH)  
Professor John Oldham (SRUC)  
Professor Martin Price (UHI)  
Dr Alistair Dawson (CEH)  
Dr Ron Wilson (U of E)  
Dr Nick Fraser (NMS)  
Professor David Elston (BioSS)  
Professor Philip Wookey (Heriot-Watt)  
Dr Alastair A Macdonald (Secretary/Treasurer)

1. Professor Jonathan Seckl welcomed members and representatives. Apologies had been received from:

Dr Kevin O'Donnell (SASA)  
Prof Geoff Simm (SRUC)  
Prof Janet Swadling (SRUC)  
Professor Brian Austin (Stirling Aquaculture)  
Professor Colin Campbell (JHI)  
Professor Pete Hollingsworth (RBGE)  
Professor Valentina Bold (Crichton Campus)  
Dr Kathy Velandar (Napier)  
Professor Steve Yearley (Sabbatical)  
Ruth Wolstenholme (Sniffer)  
Professor David Hopkins (Heriot Watt)  
Dr Murdo Macdonald (SRTP)  
Professor David Gray (School of Biological Sciences, U of E)  
Dr Mike Bonaventura (Crichton Carbon Centre)  
Dr Simon Shackley (Biochar)

2. **Minutes of 50th Board Meeting held on 6<sup>th</sup> May 2013**  
Accepted, with minor typographical corrections.
3. **Matters arising from minutes**  
None, that will not be covered elsewhere.
4. **Centres of Excellence & Networks**
  - **SNIFFER Networks**  
Ruth had sent apologies.

- **Co-ordinated Agenda for Marine, Environmental & Rural Affairs Science (CAMERAS)**

Ian Bainbridge reported that the strategy being developed for Rural, Agricultural and Environmental (RAE) science in Scotland is progressing; it is expected to be more or less completed by the end of February 2014. The Main Board met in November and another Board meeting will be held on the 22nd of January. The expectation is that CAMERAS will be 'issues-led' in future.

- **Scottish Biodiversity Information Forum (SBIF)**

Nick Fraser reported that SBIF was 'up and running' as far as collection of data and institutions working together, however there is concern over the future of systematics in the UK. Training of systematists and the care of collections will be discussed at a meeting on the 15th January in the Natural History Museum in London. There are fewer undergraduate training programs to replace the staff who are retiring. Adequate care of reference samples is becoming a staffing issue. There was discussion of the reduction in those competent in the science of taxonomy, despite the increased knowledge of genetic markers, to be able to identify animals in the wild, such as the Scottish wild cat, as an example. Lack of money to house the reference samples, essential to species identification, is a concern in the UK, but seemingly less so in the United States. The need to make the Research Councils aware of this problem was identified, with the suggestion that the Councils should attend appropriate meetings. It was also suggested that the DEFRA animal resources committee should be kept informed, through Prof Geoff Simm. Action NF

Reference should be made to the House of Lords - Science and Technology - 5th report, published in 2008. (<http://www.publications.parliament.uk/pa/ld200708/ldselect/ldsctech/162/16202.htm>). It was reported that no universities in the UK offering a degree specifically in Botany. The problem seems to begin in school education. Apprenticeship schemes have sought to cope with the lack of training available, but these are not sufficient. The question was asked whether there were jobs available, and it was agreed that there were, such as chartered ecologists. To attract government attention it was suggested that the package offered needed to contain an element of novelty - for example the intersection between taxonomy, habitat, genetics and the data that have to be held in order to retain the knowledge that would otherwise be lost. Big Data and Genetics are very important at the moment. Action NF

There was recognition that general citizens with specific knowledge of biology might play a role in moving this agenda forward. Action SKM

- **Scotland's Environmental web project**

Stuart Monro had attended the launch of the Soils Database for Scotland in the Botanic Gardens recently, and reported the extensive collaboration occurring between members of the Consortium. He suggested that SCRR may be able to help with the identification of ways in which the data can be handled, how data standards might be set, etc. He and Colin Campbell will discuss the possibility of setting up an SCRR Workshop to facilitate this process. Action SKM & CC

- **Other Networks**

Ron Wilson reported that a network called ESCOM Scotland (Ecosystem Service Community Scotland) was due to be launched on the 29th April, involving research staff from many of the Consortium's members. Further information will be made available on the SCRR website.

Martin Price reported on the Cairngorm National Park Research Meeting held in November 2013 at which the amount and range of natural and social scientific research

possibilities were outlined. One aim was to explore ways in which the research providers and those who needed it could make better contact. Nearly every Consortium member is somehow involved. The Park Authority is now aware of CAMERAS, and vice versa. It was suggested that it would be helpful for the two National Park Authorities to press to have close involvement in the development of the next strategic research round of Scottish Government. Once the parks have research agendas, perhaps elements of these could be brought into the strategic programs of Research Institutes such as the James Hutton Institute or the Moredun Institute.

Action MP

The question was asked whether Social Science was well represented within the Consortium. A number of Consortium institutes and universities, such as SRUC, the James Hutton Institute, UHI and the University of Edinburgh have strong social science interest in Rural Research, as was demonstrated by the workshop held in Perth last year. It was also pointed out that Kathy Velander at Napier spans the bridge between natural science and social science.

The Chair also asked about Commercial representation in the Consortium. Stuart Monro indicated that this might indeed be a gap. He recalled the presence in 2011 of business people at a small SCRR workshop on high-speed Broadband in the Highlands (SCRR Newsletter 71). John Oldham pointed out that SRUC still has SAC Consulting and that Moredun has a commercial arm. There was general discussion of who or what in the commercial world might be brought more closely into involvement with SCRR, and how. Martin Price recalled that commerce is brought in to advise on specific topics, e.g. remote sensing and high-speed communications, but also commented that 2020 called for attention to this topic. Ian Bryden noted the significant financial involvement of SSE in the north of Scotland, and the scale of the whisky industry was also mentioned. Choice of the right people may be key, and may result in the generation of small amounts of money to assist appropriate research, the identification of technical solutions (kit) to help collect data/solve research questions. Chris Quine noted that there are organizations, such as 'interface' (<http://www.interface-online.org.uk/>), to facilitate that. The Chair drew attention to the money already included in Research Council grants to form links to industry. John Oldham suggested the topic as a future Forum, which might enable discussion of how to form appropriate links to Commerce.

Action SKM & Executive Committee

Ron Wilson drew attention to a recently formed Scottish Forum on Natural Capital (<http://naturalcapitalscotland.com/about/>). Its first meeting will be in Edinburgh on Monday 24th February 2014. The function and emphasis of this forum seems to be different from that of ESCOM. It is less about research and more about interfacing with the commercial market.

The Chair asked if there was an opportunity for SCRR to simplify this 'landscape' of different but related Fora? In general, having less bodies doing more is better than having more bodies doing less. Stuart Monro reiterated the 'light touch' ethos underlying the work of the SCRR.

##### **5. Public policy and science strategy: Scottish Science Advisory Council**

Stuart Monro advised members to keep an eye on the SSAC website for regular reports (<http://www.scottishscience.org.uk/>). The latest update report was September 2013, which defines the current work. Synthetic Biology is one theme being led by Prof Nigel Brown. Issues related to open access publishing and to open access data continue to be worked on. They also issued a request for feedback on issues relevant to the Independence Debate (see 10, below). That request was circulated round the Consortium membership last year. The responses showed a lot of consistency and Stuart Monro had compiled these into a return from ECRR to SSAC. He felt it was worth having a short discussion at the Board meeting of the relevant bits of the

subsequent Referendum White Paper, and to feed any remaining questions back to SSAC.

#### **6. SCRR – membership**

Stuart Monro commented on new and prospective new members. Attendance at the Fora and workshops last year has assisted the drive to increase and spread the membership of Institutes in SCRR. The criteria for membership has led to the production of a new matrix which potential members can use to self-assess their contributory position (see attached). This has been used in approaches made to Aberdeen University and St Andrews University. Discussions with the former are on-going. Sadly, St Andrews has declined to rejoin. Discussions are also on-going with Glasgow University. The Secretary reported that the Glasgow staff on the Crichton Campus had been responsive, and that it would be good to have various parts of the main Glasgow campus involved, such as the Schools of Life Sciences, Veterinary Medicine, Geographical and Earth Sciences, and Humanities. We have contacted Stirling University and would like to spread our contacts beyond Aquaculture. Dundee University is also being attracted to be a member, and SAMS has now joined as a member. There are a large number of people in the Archaeology Community who are busy in the rural environment. They actively participate in the Scottish tourism industry and should perhaps be more closely aware of our activities, and indeed be part of the Consortium.

Action AAM

Stuart indicated that the aim was to increase the amount of research collaboration within the whole area of Rural Research, and also to gain an increase in activity within the Consortium - the one stimulates and feeds the other in a beneficial cyclical fashion. The Chair suggested that the availability of a small fund of pilot start-up research money (~£20k) might act as an inducement. The Secretary reported that a young staff member in Moredun, Craig Watkins, had produced a note on how beneficial the Metagenomics meeting had been to him (see attached document). A similar response had been noted within SNH, and it was clear that getting these early career researchers to our fora and other meetings was important to the improved functioning of SCRR. Ian Bainbridge reported that SNH runs a programme of events called 'Sharing Good Practice'. These draw together people who do not normally meet one another and yet ought to get together more often. The Chair asked why we are not asking businesses like Diageo to sponsor research prizes or meetings? Glenmorangie sponsor archaeological research, and the Edrington Group (which produces Black Grouse) is involved in conservation work and had sponsored UHI Perth's recent conference. The funding potential of the Whisky Industry is very large, and they are intimately linked to the quality of Scottish land, its crops, and the ground water draining off it.

Action SKM & Executive Committee

- **Web-publication of minutes of meetings**

Stuart Monro requested a decision on the publication of minutes of meetings. After discussion it was decided that they would go onto the web after 'signing off' by the Executive Committee (on behalf of the Board) following two weeks of inspection by Executive Committee Members, having been sent to them electronically.

Action AAM

#### **7. SCRR fora & workshops**

Stuart Monro reminded the Board that every two years we have an SCRR Forum, which is usually a bigger meeting, and that last year we had one on Environmental and Agricultural Metagenomics. Colin Campbell and Willie Donachie had promoted this. It was very successful. Increasingly we are having workshops, recently one on Nature Tourism as well as others, such as the Cairngorms Research meeting, which had an SCRR 'badge' attached to it. Another example was the Panda Research Symposium at

the Royal Zoological Society of Scotland earlier in the year. We were able to spread the word about these events round the Consortium.

With regard to future workshops, there is a real demand for one on Environmental Data, and Colin Campbell has expressed a desire for this to be addressed. It may end up being quite a large workshop. Stuart Monro also indicated that he is open to suggestions of other topics. The idea of the Clyde Basin study could fit as part of the Environmental Data workshop. Discussion indicated that data standardisation was becoming crucial for computer analyses.

The other thing to do, perhaps in collaboration with SNH, as part of the Sharing Best Practice activities, is looking at best practice in Citizen Science. SNH, RSPB, SEPA, CEH, Sniffer and others are involved in this. In terms of Outreach and involvement with the general public it would be useful to meet and share experience of best practice in this area. It was suggested that the general public may be responsible for 85-90% of wildlife observation data collected. How can people be encouraged to take appropriate samples (e.g. water from a local burn for quality analyses - at greatly reduced cost)? The nature of irregular, non-stratified or non-parametric data collection by citizens also needs thought with regard to appropriate statistical analyses. DEFRA has put out several contracts to universities to seek solutions to these questions of analyses. Certain areas of citizen data collection are examples of good practice, such as that of the British Trust for Ornithology, those working in archaeology, and that with regard to marine climatic information, which over the last 100 years, has been collected by the 'voluntary observation fleet' (lightly trained individuals on fishing boats, ferries, etc). CEH use large numbers of citizens to generate some of the science they require. An attempt has been made to put a value on that input, and it is said to be equivalent to tens of millions of pounds.

The Chair suggested that, as in the case for Medical Science, Scotland (population 5.3m people) could be used as an experimental test bed, for scientific/academic purposes and for industry. Scotland is well connected and well organised. Could it prove to be a good test bed for data collection of a bio-environmental nature? Could there be innovative and creative ways to do this? Citizen scientist; automated data collection; other ways of getting the required density and regularity of data collection. The computer power exists in Scotland. Martin Price hoped that the data collected on the environment would also include data on people and their interaction with the environment. Chris Quine cautioned our understanding of what is meant by 'citizen science' and drew attention to issues of data quality and large volumes of low-quality data. He, and David Elston, advised that a professionally sceptical view should not be neglected. Jaqueline McGlade, who served for ten years as Chair of the European Environment Agency, is very keen on citizen input of data (she is now Senior Advisor to the Executive Director, United Nations Environment Programme, with special responsibilities for UNEP-Live (<http://www.unep-live.org/>) and Eye on Earth (<http://www.eyeonearth.org/en-us/Pages/Home.aspx>). Martin Price suggested that she might be a useful person to bring to the proposed meeting. David Elston advised care in designing the data collection methods as well as the specific data analyses methodologies. The motivation driving people's interest needs to be factored in, as well as the distribution of the population over the landscape. Taking all of this on board, could Scotland be given a substantial edge in this area?

Action SKM & Executive Committee

#### **8. SCRR Annual Lecture - 2014**

Stuart reported that the lecture this year, on the 10th February, would be about 'Running out of land' and would be given in the RSE by Dr Alan Belward of the Land Resource management Unit of the European Commission's Institute for Environment and Sustainability. The SCRR, RSE and the Institute of Biology have in the past

shared the costs of the lecture, which is held in the RSE. In 2011 the one-third share paid by SCRR to the RSE was £566.60. The following year this had risen to £1000.00. Last year the Institute of Biology indicated to us that they were no longer going to pay these increased one-third costs, and would provide £500. Stuart Monro is exploring with the RSE what the background to this increased charge might be, as well as the financial implications of the action of the Institute of Biology. Action SKM

The Board accepted Stuart Monro's proposal that the Chair of the Board of SCRR, the Chair of its Executive and himself should attend the dinner after the lecture.

**9. Minutes of Executive Committee meetings 116, 117 & 118**

Ian Bainbridge indicated that matters covered in the minutes were being dealt with in various places on the Board agenda.

**10. Matter arising: Discussion of Referendum White Paper**

Stuart drew attention to the extracts from the Referendum White Paper that had been distributed before the meeting. Last year, twelve questions had been submitted by the SCRR to SSAC. These were:

- a. What will be the future of funding presently received from UK Research Councils?
- b. Will research institutes/universities in Scotland be able to bid for research funding from Westminster government departments?
- c. What will be our status in Europe?
- d. Will Scottish research institutes/universities be able to access EU funding streams?
- e. What will be the structure of any Research Council bodies in Scotland?
- f. How will strategic partnerships with research institutes/universities elsewhere in the UK be affected by independence?
- g. Will the broad science-base be maintained in an independent Scotland?
- h. Will the scope for Scotland to still “punch above its weight” in scientific research be maintained and if so how?
- i. How will an independent Scotland affect the income to the science-base from the UK Charities?
- j. What will be the effect of an independent Scotland on the governance of the research institutes/universities?
- k. What will be the immediate effect of an independent Scotland on the research community and its moral?
- l. Will the learned societies which bind the research community together continue to develop under an independent Scotland?

Stuart Monro said it would be useful for the SCRR Board to discuss the response contained in the White Paper, and to gather from the Consortium membership any questions that are distinct and important to the Rural Research Community in Scotland that remain unanswered by this document. The Board debated the relevant paragraphs of the White Paper and drew attention to a number of specific questions relating to research funding, UK national research organisations, animal health regulatory support, and other matters. It was agreed that all members of the Board should be invited to send to Stuart questions that remained unanswered and that he compile these in a similar manner as before, for submission to SSAC.

Action SCRR Membership

**11. Membership of the SCRR Executive**

Ian Bainbridge reported that there had been several changes in the last 12 months, and it seemed that the Executive Committee had been losing some of its Agricultural connections. Stuart Monro indicated that it was quite important for the committee to have someone from SRUC. John Oldham agreed to convey this back to SRUC.

Action JO

Ian Bainbridge pointed out the need to be aware of the arrival of new members in the Consortium, and the effect this should have on the balance of the executive.

Action Executive Committee

The Secretary also pointed out that approval was needed for the Scientific Director and the Secretary/Treasurer to continue for another year. There was unanimous approval.

## **12. Science outreach**

Stuart Monro indicated that SCRR, of itself, does not carry out much 'outreach' but does encourage its membership in this direction. However, as an addition to the recent Napier-organised SCRR event on Nature Tourism at Our Dynamic Earth, there was a showing to the general public of a film called "Wild thing" which had the aim of attracting people into the outdoors. It was successful, and attracted an audience in their 20s/30s.

The Chair indicated that a part of the building to be constructed opposite the Dick Vet at Easter Bush would probably be given over to Public Outreach.

- **Year of Natural Scotland (2013)**

Ian Bainbridge indicated that SNH and others were very appreciative of the way in which the SCRR Newsletter had helped broadcast the Year of Natural Scotland throughout the year. The theme for 2015 will be Food and Drink. Action AAM

Stuart Monro indicated that 2014 is the International Year of Family Farming (<http://www.familyfarmingcampaign.net/>).

- **Beltane**

Stuart Monro indicated that it was not clear to the consortium membership at the moment what was happening with Beltane, and he would contact Prof Mary Bownes to come to one of our meetings to give us an update. Action SKM

## **13. Scientific Director's report**

Stuart Monro submitted his report (see attached) and indicated that the details had been covered elsewhere during the course of the meeting. The Chair thanked him for the arrangement of the simplified membership charges and the way in which it enabled self-certification. In answer to a question, it applies to all members with the exception of the University of Edinburgh, which pays £10,000.

## **14. Finances & Secretary's report**

- **Finances 2012-2013**

The Treasurer distributed the Accounts for the year 2012-2013. The Consortium is in good financial shape. This is in part due to the funding given by Genomics to cover the anticipated costs of the Perth 'Ruralities' meeting and the Battleby 'Metagenomics' Forum. In the event both had paid their way. Expenses are being kept low, but a request was made to make a modest increase in the membership fees to bring these into line with the figures in the Matrix developed for members by Stuart. This was agreed. Attention was drawn to the income sheet with the amount of red print indicating delayed payment of membership fees. This was in part due to the problems and delays within the Bank of Scotland in making the administrative change from ECRR to SCRR, and the resulting delay in sending out invoices to the members. Some members have still not paid and correspondence will be sent requesting that this matter be seen to. The aim is to present the next set of accounts with all members having paid on time. Expenditures were not high. The policy of retaining an amount equivalent to the income of one year is being maintained and was very helpful during this year of delayed income stream. The Independent Examiners this year were Ian D. Aitken and Margaret Rennex.

John Oldham raised a question about the charitable status of the SCRR, and that had been resolved last year with the help of the University Accounts Department. The Board, through the Chair expressed thanks for the work that had been done.

- **SCRR Website & Newsletter**

The Secretary thanked all consortium members for the material that had been sent in last year in support of the Year of Natural Scotland. The Newsletter is a reflection of the quality of the short articles submitted. Damien Noonan is responsible for the quality and style of the presentation of both the Newsletter and the Website. They represent the 'public face' of the SCRR, and it is important that this is recognised. This year aspects of family farming may feature as part of the International Year of the Family Farm. The concept of the family embraces aspects of the Scottish Year of Homecoming. Ian Bainbridge drew attention to a suggestion that it might be useful to include in the Newsletter brief notices of senior appointments. It was agreed that these should be forwarded to the Secretary/Treasurer in final copy format following rigorous checks for accuracy. Action SCRR Membership

- **Future Directors' meetings**

The next Directors research meeting will be on the 24th March at Moredun, Easter Bush, Midlothian; the Executive meeting at 11:00 and the Directors' research lunch at 12:00. The dates of further Executive and Board meetings are to be arranged.

**15. Any other business**

Stuart expressed the thanks of the Board to the Chair for the way in which he had conducted the business of the meeting and had given it added value.

**16. The news from members was discussed over lunch.**

**Personal overview by Craig Watkins, Moredun, of the SCRR Environmental and Agricultural Metagenomics Workshop meeting: (In association with the ESRC Genomics Policy and Research Forum), on 02-Oct-2013.**

Venue: Scottish Natural Heritage, Battleby Conference Centre, Perth.

This metagenomic forum was recently held as part of a series of meetings and events organised by the Scottish Consortium for Rural Research. Although a significant number of the invited speakers had backgrounds in metagenomics and/or informatics, I arrived having only recently entered this area of research. As a molecular bacteriologist, the meeting represented an excellent opportunity to meet and discuss the potential benefits of a new technology that has revolutionised the way that complex biological systems can be analysed. Having been involved in the early years of ruminant microarray technology, I was aware of the pressure of expectation and the inferred promise of significant advances of any new technology. I thought that I might be overwhelmed with complex mathematical models, formulae, and algorithms to manage large data sets, with less detail of the biological significance of the analysis. However, this concern was soon dispelled. After the scene was set with an informative introduction by Professor Stuart Munro, the first invited speaker, Professor Jim Prosser, provided a grounded and cautious approach, reporting potential pit falls and limitations within the field of metagenomics. This “cautious” approach was a common theme throughout the subsequent presentations and discussions. The topics presented were wide ranging from soil and fungal and plant research to livestock and human microbiomics. The bioinformatic talks by Mick Watson and Chris Quince demonstrated what could be done but also highlighted the pros and cons of different techniques such as 16S versus whole genome sequencing as well as how to handle large datasets using relevant examples from their own experience. Other speakers ably described their own specific research projects and experiences of managing metagenomics projects.

The open discussion groups in the final session provided an interesting perspective on the experiences of other participants attending the meeting – with preset questions, the debate from within the groups was shared with all those attending in a round up at the end of the day.

For me, this meeting was highly relevant and informative. I realised the potential of carefully designed experiments involving metagenomics. However, I also came away appreciating the limitations and precautions necessary to safe guard against over interpretation. The opportunity to network with a number of participants was invaluable and as a consequence new contacts and collaborations are anticipated.

# Scientific Director's Report

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## Driving wider membership

With the move from ECRR to SCRR comes the opportunity to widen the membership of SCRR. Since the last Board meeting both Alastair and myself have been active in encouraging wider membership. This means demonstrating the relevance of our seminars and workshops and the networking opportunities to enhance the research of the member organisations and to encourage collaboration. Contacts are being followed up in Aberdeen, St Andrew's and in Glasgow.

Increased membership also means that we can do more and this year in addition to the bi-annual Forum held at Battleby, we have had a number of workshops of interest to specific sectors of the membership. In addition there are plans to change the character of the regular Directors' research lunches, encouraging participation of staff in addition to the Directors and focusing on the collaborative research that member organisations deliver.

At the last meeting I was challenged to find a more rational way of determining a member's position in the fee structure. At present we are working from a matrix, the position in which is determined by "self-assessment". The matrix used is shown below.

|                                | Small organisation | Large organisation |
|--------------------------------|--------------------|--------------------|
| Low level of rural research    | £235               | £475               |
| Medium level of rural research | £475               | £950               |
| High level of rural research   | £950               | £1900              |

Organisations can self-evaluate whether they regard themselves as a small or large organisation and the level to which they undertake rural research. This process has proved successful to date and is an approach we will trial for a bit longer.

## SCRR Forum

Every two years, it has been our practice to hold a forum on a major topic of interest to the Consortium membership. This year, with help from Colin Campbell and Willie Donachie a very successful event was held on "Environmental and Agricultural Metagenomics". This brought together a wide variety of individuals who were using, or could potentially be using, the techniques in both animals and plants.

## SCRR Annual Lecture

The SCRR Annual Lecture (the Peter Wilson Lecture) is given annually and is co-hosted with the Royal Society of Edinburgh and the Society of Biology. The lecture this year is on "Running out of Land - a new Global Challenge" to be given by Dr Alan Belward from the Land Resource Management Unit at the European Commission on 10 February 2014. There is, however, a troubling issue, in that the Society of Biology wishes to reduce its financial commitment to the Lecture, and discussions on this are ongoing.

## SCRR Workshops

Usually in the year of the SCRR forum, there are no workshops, but this year another workshop was held on Nature Tourism in Scotland that attracted a diverse audience. In addition, members of the

consortium have badged events in collaboration with SCRR. These were the Cairngorms National Park Research Event and the Giant Panda (*Ailuropoda melanoleuca*) Research Symposium.

## **Future Workshops**

There are embryonic plans for a workshop on “Environmental data” and also one on “Best practice in Citizen Science”. Additional 'badged events' are being organised by consortium members. These would be for 2014.

## **Science Outreach**

The SCRR does not initiate science outreach on its own but through the Newsletter and web pages can act as part of the communication strategy for member organisation. As an adjunct to the nature tourism workshop there was a showing of the film “Project Wild Thing” which encouraged greater use of the outdoors by young people.