

# Communications – Review of the Year

## Phil Taylor

SCRI enjoyed an astonishingly busy year from the perspective of the events and public engagements in which the staff participated.

It was also a watershed year in the Institute's history following the decisions of both the SCRI and Macaulay Land Use Research Institute's Governing Boards to accept in principle the formation of a new, research organisation.

The 'New Institute', as it has been tantalisingly christened, will combine the respective strengths of both

institutes while at the same time exploiting new scientific opportunities and the advantages of scale.

The Scottish Government's Cabinet Secretary for Rural Affairs and Environment, Richard Lochhead MSP, summed up the aspirations of all concerned when he said: "Both SCRI and the Macaulay already enjoy well-deserved reputations for excellence. Together they will be in an even stronger position to compete in the international arena and to address complex global issues, further raising Scotland's profile on the world stage."

It may be the case that SCRI's 2009 Annual Report is the penultimate edition. Happily there is no shortage of events, visits and achievements to fill the pages.

2009 was the first year in which several of SCRI's major stakeholder knowledge exchange events were held at Balruddery Farm. Balruddery was purchased by SCRI in 2008 and comprises 118 hectares of arable farm land located seven miles west of Dundee and between 70 and 160 m above sea level on the lower slopes of the Sidlaw Hills.



Directors and senior scientists from SCRI and the Macaulay Land Use Research Institute at their first joint meeting in Montrose.



Cereals in Practice which saw an encouraging growth in attendance in its first year at Balruddery.

Both Cereals in Practice and Potatoes in Practice were transferred to Balruddery and both events were hailed as successes.

Cereals in Practice (CiP) is organised jointly by SCRI, SAC (Scottish Agricultural College) and SSCR (Scottish Society for Crop Research). It is also supported by HGCA (Home-Grown Cereals Authority). It is the key event in the cereals industry calendar in Scotland.

More than 200 visitors arrived on the day, more than twice the number of visitors than in previous years and including a large group from Sweden.

Dr Keith Dawson, SAC's Principal Crops Consultant, who is also chairman of the SSCR Combinable and Energy Crops Sub-committee, said: "There was a tremendous amount of work done by all concerned to bring together the programme for the event.

"The whole aim of the work we do is to try to speed up the development of knowledge from the research lab through to the field and through on to the farm to benefit the consumer and the industry as a whole."

In August, Potatoes in Practice (PiP), the UK's largest potato industry field event, also made the move to Balruddery Farm. For the second year running, very heavy rain immediately before the event caused some difficulties. Happily a bright and windy day soon helped dry the ground. More than 600 visitors made the journey to this lovely corner of Angus. The biggest proportion was farmers, closely followed by those active in marketing and retail.

PiP was sent a message of support from Roseanna Cunningham MSP, Scotland's Environment Minister. She said: "Potatoes in Practice is a great example of Government and industry working in partnership to create a real Scottish success story. Participation in events such as this helps to ensure that Scotland will retain – and expand upon – its leading position." Later in the year SCRI and Mylnfield Research Services Ltd (MRS Ltd) joined forces at British Potato, the Potato Council's biennial show at Harrogate in Yorkshire.

Fruit for the Future, SCRI's knowledge exchange event tailored for the soft fruit sector, also saw some changes in 2009. It too has seen a steady growth in audience numbers and it was necessary to relocate from the



Commonwealth Potato Collection Assistant Curator, Gaynor McKenzie, with a special CPC display at Potatoes in Practice.





Guests at the 2009 Fruit for the Future event – the biggest to date.

Institute's biggest lecture theatre to a larger marquee set up on the lawns in front of the headquarters.



Guests on a tour of the polytunnels at the 2009 SCRI Director's Summer Soirée.

The installation of the marquee gave us the opportunity to host a summer evening soirée on the same evening on behalf of SCRI's Director, attended by more than 100 friends and stakeholders of SCRI.

Each year the Scottish Research Institutes host a distinguished lecture under the title Science for Life. This year it was the turn of SCRI to host the event and the invitation to speak was kindly accepted by Professor Emeritus Thomas Rosswall.

Swedish born Professor Rosswall, recently retired Executive Director of the International Council for Science (ICSU), speaks on behalf of the Challenge Programme of the Consultative Group on International Agricultural Research. This is a consortium of more than 2000 scientists in 100 countries with over \$500 million invested each year for research for development.

He told his audience at Dundee's science centre, Sensation, that the issues of food security and climate change had to be much more closely linked.



The central message of his lecture was that the global demand for food is expected to increase by 50% by 2030 as the population grows and consumption patterns change. He said there was an urgent need to connect climate change and food security both in scientific and policy contexts.

The Science for Life lecture is also the opportunity to run a postgraduate student competition testing oral and presentation skills. Happily for SCRI, the 2009 winner was our own Lindsay McMenemy, a member of the Environment Plant Interactions programme. Lindsay's presentation topic was: 'Plant mediated interactions with the large raspberry aphid.' Professor Rosswall made the prize presentation of a certificate and cheque.



Lindsay McMenemy, winner of the 2009 Scottish Research Institutes' Student PhD competition (middle) with her fellow contestants, Peter Gregory and guest speaker Professor Thomas Rosswall.

The runners up were: Paula Scott from the Rowett Institute of Nutrition and Health and Kerry Waylen from the Macaulay Land Use Research Institute.

Another award went to Susan McCallum of SCRI who won the Innovation prize, which is supported by the Mylnefield Trust and MRS Ltd. Susan's title was: 'Marker assisted breeding for sensory characteristics in red raspberry (*Rubus ideaus* L.)'.

For Lindsay McMenemy it was the second achievement of the year: she was awarded the runner-up prize in a student essay competition run by the Royal Entomological Society.

Another notable achievement was the award to SCRI's Dr Julie Graham of the Royal Horticultural Society's Jones-Bateman Cup. The trophy is awarded by the RHS every three years to recognise major advances and excellence in fruit research. It is the second time in recent years that SCRI has been recognised. A previous winner was Dr Rex Brennan for his work on blackcurrants.

Dr Graham's research focuses on identifying genetic markers for desirable traits in raspberries such as taste and pest and disease resistance. Her research has led to new more specific and timely breeding methods which are based on an understanding of the link between genotype, the genetics of the plant, and the phenotype, what the plant looks or tastes like.



Dr Julie Graham, winner of the RHS Jones-Bateman Trophy.

Four SCRI scientists won an outstanding paper award from the American Journal of Potato Research. (Morris, W.L., Ducreux, L.J.M., Bryan, G.J. and Taylor, M.A. 2008. Molecular dissection of sensory traits in the potato tuber. *American Journal of Potato Research* **85**, 286-297.) Mark Taylor, Laurence Ducreux and Wayne Morris are members of the Plant Products and Food Quality



programme and their colleague, Glenn Bryan, works with Genetics. Their former colleague Walter de Jong collected the award on the authors' behalf at the Potato Association of America annual meeting in August in New Brunswick, Canada.



An 'outstanding paper' award from the American Journal of Potato Research was received by (left to right) Laurence Ducreux, Wayne Morris, Glen Bryan and Mark Taylor.

Later in the year SCRI and the University of Dundee's College of Life Sciences hosted the annual Distinguished Lecturer Seminar. It was delivered by Professor Nick Harberd who was at the John Innes Centre for many years before moving to the University of Oxford to take up the Sibthorpe Professorship in Plant Sciences.

The busy season of SCRI events continued with a new, joint venture involving the Royal Botanic Garden Edinburgh. The 'Berry Festival' was held over a weekend in July and visitors to the Garden's exhibition centre were treated to the story of Scotland's rich and diverse berries.

Photographs, living plants and other exhibits celebrated the bewildering variety of raspberries, strawberries, blackcurrants, brambles, tayberries and other fruits and demonstrated the science behind Scotland's berry industry.

SCRI was also the driving force behind the biggest event in the 2009 calendar of activities organised by KnowledgeScotland. This is a knowledge exchange initiative funded by the Scottish Government and run jointly by all the Scottish Research Institutes.

'Science Policy Success' was a two day conference held at Dynamic Earth in the early autumn. One hundred and thirteen delegates watched presentations on the themes of health and wellbeing, climate change, biodiversity and sustainability. There was also an acclaimed presentation by the writer and broadcaster Lesley Riddoch who discussed the task of communicating complex information to the public.



Scottish Government Chief Scientist, Dr Anne Glover, addressing the Science Policy Success conference at Dynamic Earth in Edinburgh.

The post-conference evaluation found that 71% of those responding believed that the conference had achieved its aim of improving links between science and policy.

In September, scientists from all over the world travelled to Dundee for the meeting of the 'Biometrics in Plant Breeding' section of EUCARPIA, hosted by SCRI.

More than 100 delegates took part and also enjoyed a



Professor Mike Kearsey of the University of Birmingham speaking at the EUCARPIA conference dinner where he was honoured for his long and distinguished career.



Delegates at the EUCARPIA conference at their civic reception in Dundee.

civic reception hosted by the Lord Provost of Dundee, Councillor John Letford. Later they had a memorable dinner on board HM Frigate Unicorn, one of the last intact warships from the days of sail, and one of the six oldest ships in the world.

Towards the end of the year, a stakeholder day was organised on behalf of the Scottish Government's research initiative Programme 1: Profitable and Sustainable Agriculture – Plants. The day included short presentations from scientists contributing to RERAD's commissioned research and from relevant policy divisions.

Three other set-piece events helped to put SCRI in touch with its audiences.

The 2009 Royal Highland Show set a new attendance record over its four days with 176,522 people coming through the gates at the Royal Highland Centre, Ingliston, Edinburgh.

At the SAC Pavilion SCRI presented the 'timeline' of the Institute's history and also an interactive display

of the Living Field run by staff from Environment Plant Interactions. In the Royal Highland Education Trust



Her Majesty The Queen at the Royal Highland Show, Ingliston. The Queen spent nearly 10 minutes chatting to staff and Dundee school visitors at the SCRI stand in the Royal Highland Education Trust building.



building, a team from Communications introduced a younger audience to the work being done on berries, nutrition and health. The highlight for the team was a visit from Her Majesty the Queen who spent nearly 10 minutes chatting to staff and a party of visiting schoolchildren from Dundee.

For the second year running, SCRI joined the staff of Edward Baxter's Gilston Mains Farm in Fife for LEAF (Linking Environment and Farming) Open Farm Sunday. Once again the Living Field team was in action.



Celebrity guest Stephen Purdon from the BBC's River City soap with visitors to LEAF Open Farm Sunday.

The Institute's work on soft fruit was the centrepiece of the display mounted for the Dundee Flower and Food Festival in early September.

SCRI hosted a number of special guests during 2009 and they included members of parliaments far and



SAC Chairman, Lord Jamie Lindsay with the SCRI Director during a visit in July.



Members of the European Parliament on a visit to SCRI.

wide. Pete Wishart MP (Perth and North Perthshire) is a long time supporter of SCRI and was welcomed back to Invergowrie in September. Another very supportive politician, Alyn Smith MEP, was also welcomed back to SCRI during the year. In August the Director welcomed a visitor from further afield: Tony Windsor MP – a member of the Australian House of Representatives for New England.

On the day of Fruit for the Future SCRI hosted Lord Jamie Lindsay, a former Scottish Agriculture Minister and currently the Chairman of SAC. He met the Director and then was hosted by all the science programmes before being taken on a quick tour of the glasshouses, the Commonwealth Potato Collection and the Living Field.

SCRI's strong links with the Scottish Government were reflected in visits from Ron Stagg, Deputy Director, Research and Science Division, Scottish Government – Rural and Environment Research and Analysis Directorate and from Dennis Dick, a former Chairman of the Scottish Wildlife Trust and a member of the Scottish Biodiversity Committee which is advising the Government on the 2010 UN Year of Biodiversity.

One of the most memorable seminars to be held at SCRI during the year featured the renowned Professor Dianne Edwards, Head of the School of Earth, Ocean and Planetary Sciences at Cardiff University. Professor Edwards is also a fellow of the Royal Society and a trustee of the Natural History Museum and the National Botanical Garden of Wales.

Her lecture was one of the many events to celebrate the achievements of Women in Science, Technology, Engineering and Mathematics (STEM) that took place at



Eleanor Gilroy demonstrates 'You choose the news' - an interactive game on the theme of GM.

the Universities of Dundee, Abertay and St Andrews and at SCRI and the Sensation science centre.

SCRI's strong links with organisations furth of Scotland were underlined by involvement in a major Biotechnology and Biological Sciences Research Council (BBSRC) project and an award from the Monsanto Trust for a project in Africa.

SCRI and the University of Dundee are collaborating in a £27 million Sustainable Bioenergy Centre under the auspices of the BBSRC.

The centre was launched to provide the science to underpin and develop the important and emerging UK sustainable bioenergy sector. It represents the biggest ever single UK public investment in the field.

The University of Dundee, based at SCRI, was named as one of the six research hubs of academic and industrial partners to benefit from the investment. The Dundee-led team (which includes SCRI) aims to alter lignin production in barley to make it easier to produce bioenergy from waste straw without reducing the quality of the crop.

In another project SCRI is leading an international project to help potato farmers in Kenya. The mission is being supported with a grant from the Monsanto Fund totalling £186,000.

The ambition is to increase potato yields – and importantly farmers' incomes – by establishing systems



Dr Lesley Torrance of Plant Pathology with the Monsanto Fund's Bridget Badiou at the launch of an international project to help potato farmers in Kenya.

to support virus-free potato seed tuber production. The potato is the second most important food crop in Kenya after maize; 1.2 million tonnes are grown every year.

SCRI's Head of Plant Pathology, Dr Lesley Torrance is leading the project. She said: "There is massive scope for crop improvement by effective control of virus diseases and their aphid carriers. We hope to increase potato yields and thereby farmers' incomes on a sustainable basis."



Farewell to John: Dr John Bradshaw is presented with a leaving gift on his retiral after a distinguished career at SCRI.



During 2009 the Institute bade farewell to several long-serving and distinguished members of staff. Dr John Bradshaw, one of the world's leading plant breeders, retired at the end of March. John began his career in Scotland at the Scottish Plant Breeding Station in Pentlandsfield, Edinburgh 33 years ago. Latterly at SCRI he led the Potato Genetics research programme.

SCRI Director, Professor Peter Gregory, said John embodied what was best about SCRI. "John is an academic to his fingertips and has a love of his subject. He has the ability to communicate the passion that he has for his subject. But he's not just an academic who operates on his own. He interacts with many other people within the Institute. He conveys that passion to visitors and in scientific meetings and in particular he has converted that academic passion into commercially useful products that people want to buy. It is a marvellous testimony to his whole career that he has been able to do these things bringing great credit to both him and to the institute."

SCRI also said farewell to Mike De,Maine, who retired from SCRI at the end of April after long and distinguished service, latterly as the Health and Safety Manager.



Mike De,Maine's retirement.



Ronnie Forbes RSA takes a breather during the launch party for his SCRI portfolio.

Two members of staff celebrated 40 years service with SCRI: Alex Mills, a soft fruit specialist with Field Services, has planted and tended tens of thousands of raspberry canes and blackcurrant bushes. Ronnie Ogg, another member of the Invergowrie community, has also spent 40 years working in the glasshouses and has been a stalwart helper at all the Institute's public events.

Much of SCRI's work in genetics, plant pathology, environment plant interactions and food has now been summed up in stunning imagery by the Leverhulme Trust artist-in-residence, Ronnie Forbes RSA. Ronnie's time with SCRI came to an end, but his portfolio of work went on public show during the year, starting at the Hannah Maclure Centre in Dundee. The body of work produced during his residency – *De Rerum Natura: The Nature of Things* – forms a narrative around the way we see and understand the world. The work comprises large paintings, unique digital-collage prints and a film. More exhibitions of his SCRI work are planned in the year ahead.