

Organic Research Centre Annual Report November 2009 – October 2010



The object of the Progressive Farming Trust is the advancement of public education by the promotion, encouragement and advancement of knowledge of and research and experiments into agriculture, biological (organic) husbandry and technical, economic and social sciences or intermediate technology within the UK and internationally.

To this end, the business of the Organic Research Centre is to develop and support appropriate agriculture and food systems, primarily within local economies, which build on organic and agro-ecological principles, to ensure the health and wellbeing of soil, plant, animal, man and the environment.

The Organic Research Centre has played a central role, in the UK and abroad, in the development of organic food and farming research, policy and standards since 1980. Our aim is to strengthen our position and effectiveness as the leading independent UK research and development institution for organic food and farming, by:

- Developing ORC's research programme and conducting research on organic/agro-ecological approaches to food and farming in order to:
- a. Improve the productivity and sustainability of such approaches and address key technical problems where current practice falls short of organic/agro-ecological principles; recognizing the importance of working within the participatory/farming systems research tradition.
- b. Evaluate, with a view to improvement, the economic, social, environmental, quality and other impacts of such systems, including delivery of ecosystem services; pollution, resource use and biodiversity impacts; greenhouse gas emissions and potential for climate change mitigation; food security, food sovereignty and sustainability of food production systems; food quality, safety and human/animal health and wellbeing.

- Developing ORC's information services in order to:
- a. Communicate organic principles/ best practice and disseminate technical and market information to producers, consultants, food businesses and others, so as to improve both business performance and delivery of public goods (climate change, animal welfare, biodiversity etc.), and
- b. Facilitate the sound development of the organic sector primarily in the UK and internationally.
- Developing ORC's education and public relations programme in order to:
- Educate and inform students, school children, consumers and civil society more generally about the issues affecting the sustainability of primary food/energy/fibre production, and
- b. Engage with the media on relevant food, farming and sustainability issues.
- 4) Engaging with and influencing policy-makers at local, national and international level in order to ensure that the potential of organic/ agro-ecological approaches is recognized in climate change, food security, biodiversity, animal health/welfare, food quality/ health and agri-environmental/ rural development policy debates and that appropriate policies are developed.

 Developing the farm and estate of ORC as a resource, and its administration and governance systems, to support the above activities.

Public benefit

From April 2008, section 4 of the Charities Act 2006 requires explicit reporting of the public benefit derived from the Charity's activities, consistent with guidance published by the Charity Commission.

The Progressive Farming Trust was established for the advancement of education through research. In the context of the current Charity Commission's 13 areas of potentially relevant public benefit purposes, the relevant ones are:

- advancement of education, i.e. activities to promote, sustain and increase individual and collective knowledge and understanding of specific areas of study, skills and expertise;
- the advancement of health;
- the advancement of environmental protection and improvement (in particular the promotion of sustainable development and biodiversity; the promotion of recycling and sustainable waste management; and research projects into the use of renewable energy sources); and
- the advancement of animal welfare through research into improved livestock production systems.

Specific examples of how these public benefit issues are addressed are provided at various points in this report.

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Chair's report

2010 marked both the 30th anniversary of the establishment of the Progressive Farming Trust and the research centre, which was celebrated in style with a visit by Prince Charles in May, and a period of significant change and development.

The process of re-invigorating ORC with new staff, building on the appointment of Prof. Nic Lampkin as Executive Director and Dr Thomas Döring as Crops Research Team Leader in 2009, was continued in 2010 with the appointment of Dr Susanne Padel as Socio-economic Research Team Leader and several other researchers (see Factfile). The research teams have been very active in securing additional project funding, in particular from EU sources, resulting in a significant increase in activity.

These positive developments and achievements were celebrated on 24th May 2010 when HRH Prince Charles visited ORC to mark its 30th anniversary and to officially open the new conference centre and refurbished buildings. The event was also marked by a special 100th edition of the ORC Bulletin and a colour photographic supplement documenting the history of ORC. The 30th anniversary celebrations continued in July with an open day at ORC and a Food Festival attracting more than 700 participants.

The 30th anniversary year also marked a turning point for the governance of the organisation, with several new trustees appointed (Alice Astor, Andrew Jedwell, Jennifer Jones and Jeanette Longfield). There were also significant changes in the Directorate with Prof Dr Hardy Vogtmann's term as President ending and the departure of Lawrence Woodward as Director.

Lawrence Woodward was the founding Director of ORC and responsible for its development, from the germ of an idea nurtured jointly with PFT's benefactor David Astor and Hardy Vogtmann in the 1970s.

HRH Prince Charles addresses ORC on its 30th anniversary

As Director, Lawrence helped guide and sustain ORC through thick and thin and made a significant contribution to the development of the organic movement in the UK and internationally, with his contribution recognised by the award of an OBE and by Prince Charles in his address to our 30th anniversary event. The vibrant organisation which remains is testament to his efforts over the last three decades.

The period of transition that we have been through over the last three years, with significant senior staff changes and the completion of the building refurbishment programme, has not been without cost financially, with a significant loss recorded again in this financial year. This period has also coincided with the recession, and we have not been isolated from the impact of the downturn on donors, with a significant reduction in income from these sources. Fortunately, the success of the research team in securing project contracts means that we are looking forward to a 30% increase in the overall level of income and reduced overhead costs in 2011 and with this a very good prospect that we can move back into the black next year.

Christopher Bielenberg





The research programme

ORC's research to support the development of sustainable food systems aims to improve the productivity and sustainability of organic/agro-ecological approaches and to evaluate, with a view to improvement, the impacts of organic/agro-ecological approaches, including delivery of ecosystem services; pollution, resource use and biodiversity impacts; greenhouse gas emissions and potential for climate change mitigation; food security, food sovereignty and sustainability of food production systems; food quality, safety and human/animal health and wellbeing.

Our research programmes deliver public benefits by the advancement of health, advancement of environmental protection and improvement (in particular the promotion of sustainable development and biodiversity; the promotion of recycling and sustainable waste management; and research projects into the use of renewable energy sources), and the advancement of animal welfare through research into improved livestock production systems.

Crops research

(Team Leader Dr Thomas Döring)

A major focus of the crops research programme is the use and maintenance of plant diversity to increase crop performance and stability and to enhance the provision of ecosystem services. Using a whole-system approach in highly participatory research projects, ORC aims to develop innovative solutions for farming systems in a range of arable and horticultural crops, including wheat, oats, barley, spelt, oilseed rape, broccoli, beans, and various forage legumes. ORC continues to collaborate with several UK and overseas universities in joint supervision of cropsrelated PhD and MSc theses alongside our existing research.

The public benefit from this programme include the advancement of agricultural, ecological and plant breeding knowledge through research as well as contributing to food security (through more stable-yielding and locally-adapted populations), sustainable development, biodiversity conservation and the reduction of greenhouse gas emissions through better design of the fertility-building (nitrogen and carbon capture) phase of rotations, reducing the need for industrially-fixed nitrogen fertiliser inputs, fossil energy use and related emissions. All findings of the research programme are being made available in the public domain.

Genetically diverse wheat for stable yields and quality: Wheat Breeding LINK

One of our major research activities in the crops programme is the Wheat Breeding LINK project. It is led by ORC and follows on from a previous project on using high genetic diversity in wheat. The current project, running from 2008 to 2012, is funded by Defra and industry partners, including plant breeders, organic certification bodies, millers and bakers.

A main aim of the project is to assess how far the performance and stability of winter wheat yields and wheat quality can be increased over a wide range of (changing) environmental conditions by introducing a high degree of genetic diversity in the field. For this purpose Composite Cross Populations (CCPs) are being trialled both in replicated field experiments and on a large number of on-farm trials throughout England. We test the growing characteristics, agronomic properties and the processing qualities and marketing capabilities of the CCPs for end users, e.g. through baking and malting tests.

CCPs also offer the possibility of selective adaptation to the local farm site on which they are grown. This issue is being tested using molecular tools in collaboration with the John Innes Centre, Norwich. We hope that through our wheat population research we will advance ecological and plant breeding knowledge and can contribute to food security in increasingly changing environments, by developing stable-yielding and locally-adapted crops.

Species diversity in leys for improved functionality of rotations: Legume LINK

A similar approach is being pursued in the Defra-funded Legume LINK project, which is also led by ORC. Legume LINK started in December 2008 and will run for 3 years. In the project, which is co-funded by industry partners, we investigate how increased species diversity in the ley phase of the rotation can help to improve nitrogen use efficiency of cropping systems. In addition we are collecting data on the growth characteristics and agronomic properties of several legume species across a wide geographical range in order to make targeted recommendations on using legume species in the rotation.



Legume mixture at Hardwick Estate (see also back cover)

Many successful low-input systems rely on a legume-based fertilitybuilding ley as an alternative to mineral nitrogen applications. Thus, there is increasing interest in applying these systems more widely. Ultimately, Legume LINK aims to create a legume-based species mixture that can have significantly improved resilience in fertility building and nitrogen release dynamics compared to the traditional grass/clover mixtures.

Research partners in Legume LINK include the Institute of Grassland and Environmental Research (IBERS), Rothamsted Research, the Scottish Agricultural College (SAC), The Arable Group (TAG), and the Organic Studies Centre at Duchy College.

www.organicresearchcentre.com

Agricultural plant diversity on an even larger scale: SOLIBAM

SOLIBAM (Strategies for Organic and Low-input Integrated Breeding and Management) started in March 2010 and will run for 4.5 years. The project, led by the French National Institute for Agricultural Research (INRA), brings together 22 partners from the private and public sectors, representing 10 different European countries and two African countries (Ethiopia and Mali), as well as one international research organisation (ICARDA). The involvement of such a large number of partners means that comparative trials can be coordinated within a single project across an extremely wide range of geographical locations, covering the main agro-ecosystems of Europe as well as sub-Saharan Africa and the Middle East.

The project centres on the thesis that improving quality and stabilizing yields in organic and low-input agriculture depends on increased diversity in cropping systems, and requires an integrated approach combining innovative breeding and crop management techniques. Dissemination of the project findings is of high importance and there will be a number of knowledge transfer events in different countries. SOLIBAM is funded under the EU's 7th Framework Programme for Research and Development.

More diversity: QUOATS, Oilseed rape, Ecodyn and other projects

In addition to these major projects, ORC is also participating in a number of further crops research activities. The project QUOATS (Harnessing new technologies for sustainable oat production and utilisation) is a Defra and industry-funded LINK project on oat breeding. It is running from 2009 to 2014, and is led by Aberystwyth University. ORC is trialling several oat varieties and newly-bred lines under organic crop management in order to contribute to the development of oats best suited to organic conditions.

In an HGCA-funded project on new approaches to weed control in oilseed rape, ORC is assessing the use of vision-guided hoes to control weeds without the use of herbicides in oilseed rape; this project is running from 2009-2012 and is led by The Arable Group (TAG). Finally, ORC has started a pilot trial on reduced



Aerial view of agroforestry alleys with cultivated strips at Wakelyns

tillage in collaboration with Duchy Home Farm,the Institute of Organic Advice and Training, and the Royal Agricultural College. On-farm field experiments have been set up to assess reduced tillage in organic agriculture in order to develop cropping systems with higher energy efficiency, improved soil conservation, and better resilience against water stress.

Agroforestry, agro-ecology, biodiversity and ecosystem services

(Team Leader: Dr Bruce Pearce)

This is a relatively new and expanding group of projects with a focus on the wider impacts of organic systems, the assessment of their sustainability and contribution to delivery of ecosystem services. The public benefit from this work includes the advancement of agricultural and ecological knowledge through research as well as contributing to food security, climate change mitigation, sustainable development and biodiversity. The results will be made available in the public domain.

Eco-agroforestry: integrating agriculture, forestry and biodiversity

This project, with funding provided by the Ashden Trust and others, focuses on an eco-agroforestry approach that integrates agroforestry with organic/ agro-ecological principles. The project objectives are to improve the output of food and fuel from these systems while also enhancing biodiversity. In the second year of this project, we have completed a review of how agroforestry sits within current UK agricultural policies and we have made recomendations for policy changes needed to support the wider adoption of agroforestry. We held a successful meeting to discuss with stakeholders the establishment of an eco-agroforestry network - work is now underway to formalise the network and its activities.

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The website <u>www.sustainable-</u>

agroforestry.org has been established and is being utilised, along with the ORC website, to publicise the work and outputs from the programme. We worked with the University of Reading on an MSc project to investigate the influence of tree rows on an ecosystem service (pest and disease control) and a joint PhD student started in October 2010 who will investigate the goods and services that agroforestry can provide.

RELU-Scale: an integrated analysis of scale effects in alternative agricultural systems

The RELU-Scale project brought together multiple scientific disciplines (sociology, geography, economics, ecology and soil science) to evaluate alternative agricultural systems (including organic farming).





Legumes support bee populations on organic farms

It was initially planned for three years, starting in 2006, but was extended until October, 2010. The project addressed two key questions:

- What causes organic farms to be arranged in clusters at local, regional and national scales, rather than spread more evenly throughout the landscape?
- How do the ecological, hydrological, socio-economic and cultural impacts of organic farming vary due to neighbourhood effects, at a variety of scales?

To address these questions, researchers undertook a comparative study of farms in areas of high and low concentrations of organic farming, to look for differences at field, farm, and local levels. The key findings of the project were:

- Higher concentrations of organic farms leads to higher average levels of biodiversity. This means it would be beneficial to many species for groups of farmers to cooperate to produce habitats for these species. However, some species would actually be worse off if this was the case, and would need alternative arrangements.
- Higher average biodiversity can be produced at no cost to farmers, where adoption of actions are widespread (e.g. on organic farms in hotspot locations). This also supports the case for farmer collaboration on biodiversity.

- Organic management of grasslands results in higher soil water infiltration rates. This could lead to land management measures to reduce flooding in vulnerable areas, through encouragement of conversion to grassland from arable, and reduced stocking density. This can apply not only to organic farms but also to more sensitive management of conventional grassland.
- Less productive agricultural areas are most likely to respond first if increased conversion rates move up the government's agenda.

Livestock

(Team Leader: Dr Bruce Pearce)

Compared with the other research programmes reported here, the livestock programme is currently in transition and was temporarily suspended in 2009/10 due to a combination of funding and staff changes. During 2009/10 we successfully bid for EU funding to enable us to start a dairy research programme in 2011.

For a short period, work funded by the Sheepdrove Trust continued investigating home grown feed for pigs. This work built on successful previous work undertaken on both pigs and table poultry. The trials continued the work looked at substituting 50% home grown Triticale and Wheat straights in place of bought-in concentrates. This backed up our earlier work that substitution of these cereals with weaner pigs can produce a satisfactory pig with decreased feed and environmental costs.

The public benefit from this work will include the advancement of agricultural and ecological knowledge through research and the advancement of animal welfare, as well as contributing to food security, sustainable development and climate change mitigation through improved utilisation of on-farm resources. The results are and will be available in the public domain.

Socio-economics and resource accounting

(Team Leader Dr Susanne Padel)

This research has developed into a distinct programme of activity with the appointment of Dr. Susanne Padel as principal researcher/team leader. The focus of the programme ranges from markets and consumers to organic farming incomes, sustainability assessment and policy evaluation.

Public benefit is generated by enabling a range of users, including producers, supply chain businesses, and consumers, to improve their financial and environmental sustainability, and improving the effectiveness of regulation and policy-making by governments at national and European level.

Certcost: Economic analysis of certification systems for organic food and farming

In November 2009, ORC became the UK partner of this EU-funded project, taking over the roles and responsibilities of Aberystwyth University. The main project objective is to generate research-based knowledge on how to improve the organic food certification system in terms of efficiency, transparency and cost effectiveness. A report presenting a review of the most important European and international legislation that set the framework for organic certification, and of scientific and applied literature on organic standard setting and certification. was published in March 2010. It discusses problems and future challenges of the organic control systems in Europe, making suggestions for improvement.

Choice experiments to test consumer willingness to pay for different organic standards and logos and attitudes to common European Standards were carried out with more than 400 consumers in three supermarkets and one organic shop. The survey covered the old EU logo, two private logos (Soil Association and Organic Farmers and Growers) and products labelled just with the word organic. The responses to all questions revealed a very low awareness of the old EU logo and limited awareness of the others.

A small survey of all UK control bodies was carried out which is currently being analysed and compared with responses from other countries. Parts of the result are published in an overview of organic certification at <u>www.organicrules.org</u>. For further details see <u>www.certcost.org</u>.

Farmer Consumer Partnership (FCP): realising added values in organic food

In November 2009, ORC also become the UK partner in the final year of this European CORE Organic ERANET collaborative project where the UK work is funded by Defra. The project analyses the opportunities for added values in organic food through activities that are not part of the minimal requirements of organic standards. The aim of this project was to identify the most promising 'ethical' communication arguments exceeding the EU organic farming standards in a multistep approach. This also involved the carrying out of choice experiments to establish the willingness of consumers to pay for additional ethical attributes.

The research has shown that the communication of additional ethical attributes is a possibility for product differentiation in the organic market. Of 14 arguments tested with consumers in five European countries the attributes 'regional/local production', 'animal welfare', and 'fair prices for farmers' were found to be most important, whereas 'care farming', 'protection of biodiversity', 'consideration of cultural features in production' and 'social aspects of production' (e.g. working conditions) were less relevant. A summary of the results has been published by ORC as a short practical guide.

BOBL market reviews of the Welsh organic arable and horticultural sectors

ORC produced two reports reviewing the Welsh organic markets for horticulture and arable, pigs and poultry as part of the Organic Centre Wales Better Organic Business Links (BOBL) supply chain efficiencies programme funded by the Welsh Assembly Government and the EU. The reports covered the difficult period of 2009/10 when the UK organic market declined by about 12.9% and the sectors reviewed were particularly hard hit.

Financial performance of organic farming in England and Wales and the European Union

Since 1995, Defra has funded Aberystwyth University (AU) to produce an annual report on the financial performance of organic farms in England and Wales. In 2009/10, AU successfully bid for this work to be extended to cover the years 2008/9 and 2009/10 as a collaborative project between AU, Rural Business Research and ORC. The 2008/9 report was published in April 2010, showing that organic farms were continuing to perform as well as or better than nonorganic farms, despite the early impacts of recession and the fall in demand for organic products reported elsewhere. The annual reports are published on the Defra and www.orgprints.org websites.

In a related study as part as part of the EU-funded FACEPA project, we analysed the costs of production for a variety of organic products (including milk, wheat and potatoes) across several EU countries (UK, Denmark, Sweden, Poland, France, Italy, and Netherlands). The results show considerable differences across Europe but also a lack of organic data in many countries and a lack of standardisation of cost categories at enterprise level.

Sustainability: development of methods and tools for its assessment

Natural England with Defra support commissioned ORC as part of the Organic Conversion Information Service (OCIS) contract to create a 'rapid appraisal' tool to assess the public goods provided by farms participating in the Organic Entry Level Scheme (OELS). The aim of the tool is to raise awareness about 'public goods' ORC Annual Report

accrued on farms and to encourage more active management to deliver them. A stakeholder workshop helped to identify 11 key areas to account for a range of public benefits - social, environmental and economic - which may be provided by farming systems. Building on the experience of previous projects at ORC (in particular the Defra-funded project on Quality and Environmental Benchmarking completed last year, the ongoing advisory Organic Systems Development Group and the EASI project (see below)), ORC developed a tool and tested it with the help of consultants on 40 farms in England. The tool was well received by both farmers and advisors and will be developed for wider applicability to non-organic farms, used in future research work.

The previous project on the development of an Energy, Emissions, Ecology and Agricultural Systems Integration (EASI) tool has been completed with a final report featuring the pilot audits thanks to financial support from the Ratcliff Foundation,. The tool has been used in a number of advisory contexts and as part of research projects and was particularly valuable in developing the energy and emissions spur for the OCIS public goods tool. It also featured in a comparison of carbon calculators published by Organic Centre Wales as part of the BOBL project. A direct result of the development of the EASI tool is the involvement of ORC in the successful bid for a new project to improve data availability relating to greenhouse gas emissions.

In a separate Defra-funded project led by the Warwick Crop Centre (formerly HRI) at Wellesbourne, ORC is contributing to the development of methods for assessing the sustainability of farming systems: This project aims to describe the range of current UK farming systems, for example organic, low input, extensive, integrated, intensive, etc. and to develop methods to describe their environmental, economic and social characteristics. Previous studies were reviewed to inform the description of farming systems and work on selection of appropriate indicators has been initiated. Once completed, the methods will then be validated using case studies.

Information Services - supporting knowledge exchange through advice and education

The main objectives for our work in this area are to:

- communicate organic principles/best practice and disseminate technical and market information to
 producers, consultants, food businesses and others, so as to improve both business performance and
 delivery of public goods (climate change, animal welfare, biodiversity etc.);
- facilitate the sound development of the organic sector in the UK and internationally;
- educate and inform students, school children, consumers and civil society more generally about the issues affecting the sustainability of primary food/energy/fibre production; and
- engage with the media on relevant food, farming and sustainability issues.

This work is now co-ordinated through an Information Services Team led by Roger Hitchings that is responsible for a range of activities including advice, education, events, website, bulletin and other publications. The main focus in 2009/10 was on the continuing delivery of OCIS in England and Wales, the annual producer conference and open days, work with Organic Centre Wales (OCW) and the Transatlantic Partnership (TAP) summer course.

The public benefit from our advisory and information services derives from the advancement of education, in particular knowledge transfer relating to sustainable agricultural production methods, food security and environmental protection, including climate change mitigation. With very few exceptions, the communication channels used are free-of-charge to the beneficiary. Where charges are imposed, for example conference fees, the costs reflect the costs of providing the communication vehicle, not a charge for the information itself.

Advisory services: OAS, OCIS and OSDG

The Organic Advisory Service (OAS) continued to deliver one-to-one advice and other consultancy work at a low level historically, in a context of overall low demand from producers and considerable competition in the market place. The delivery of planning advice remains a feature of OAS delivery with a very good success rate in terms of permissions granted. Other work included one-off contracts and training delivery. During the year discussions were started with a number of information providers with a view to forming a partnership that would have increased strength when bidding for funds and seeking work. As part of the OAS work, members of the Organic Systems Development Group (OSDG) continued to explore the implementation of organic principles on their farms under the guidance of Mark Measures.

OAS advisors continued to deliver the Defra-funded **Organic Conversion Information Service** (OCIS) in England (managed by Natural England) into its final year. The service included a helpline, information packs and advisory visits to producers considering converting to production. There was a decrease in promotional activity compared with previous years although some key events were attended. Numbers contacting the helpline and receiving visits (154 calls and 79 visits in the year to March 2010) continued to fall from previously disappointing levels, reflecting low interest in conversion as the organic sector struggles to deal with the fall in market demand following the recession. In the first half of the final year of the contract, the number of calls was broadly comparable, but the number of visits was lower. Because of the lower demand, Natural England and Defra decided to use some of the unspent budget for the development of a tool to assess the public goods delivered by organic farming (see above).

Producer conferences/events

Our **Organic Producer Conference** has become an established part of the organic events calendar, with the 4th conference held again at Harper Adams University College in Shropshire in January 2010. Unfortunately, severe snow just before the event hit attendance, with only about three quarters of the nearly 200 registered participants able to make it. For those that did, the conference again proved informative and was well received, benefitting from our continuing engagement with the Institute of Organic Training and Advice, the Organic Growers Alliance (OGA) and other producer groups.

The first three conferences in the series, and the (re)launch of the OGA at the first of them, were made possible as part of the **Organic Inform** project, which finished in 2009. The continuation of the conference series and the OGA as vibrant initiatives beyond the end of the project, as well other events such as open days held during the year and the redevelopment of the ORC website, illustrate the longer term benefits flowing from projects which were recognised in the external evaluation of Organic Inform completed in 2010.

The future in England

The radical changes to rural development funding for vocational training following the change of government and the abolition of the regional development agencies, combined with the loss of the Organic Conversion Information Service in England in 2011, mean that information and advisory services for organic producers or potential converters are now very limited. Given the low level of demand for user-paid advisory services, a fresh approach is needed. ORC

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is working with other organisations to establish an Organic Knowledge Partnership to put training and advice back on a firmer footing in England.

Working in Wales

Our work in Wales is primarily focused on involvement with Organic Centre Wales. ORC is a founder partner since OCW's establishment in 2000. The Welsh Government continues to fund OCW, but it became clear during the year that the nature of this funding is likely to change significantly in 2011 following a review of OCW and its funding arrangements. ORC has continued to support the activities of OCW with involvement in the provision of policy advice, responses to consultations with a particular emphasis on GM issues, advising Lantra on education and training matters, and direct involvement in the management of OCW, including participation in the steering group of the Better Organic Business Links (BOBL) supply chain efficiencies programme (see above).

The OAS continues to contribute to the delivery of the Welsh OCIS. Over the year 36 visits were delivered, a significant reduction on the previous year. The delivery pattern is affected by the availability of the Organic Farming Conversion Scheme; no window for applications was opened in 2010. The OAS is engaged with Farming Connect on two levels. One is the Farming Connect Organic Development Programme operated by OCW. OAS staff participate in demonstration farm events, the annual Welsh organic producer conference, attendance at the Royal Welsh and other major shows and project work. The other is as an independent provider of technical information under the knowledge transfer activities of Farming Connect. A small number of technical advisory visits took place.

Educational activities with local schools and the community

The completion of the conference centre rebuilding in 2009 meant that work could start on restoring the education garden, which was achieved in time for the opening of the new facilities by Prince Charles in May 2010. Local primary schools were involved in planting the beds and sowing seeds, and some of the pupils from Enborne school met the Prince.



Children and parents from Enborne Primary School plant the first vegetables in our new Education Garden.

Financial support and volunteers from Vodafone Group plc, the Thames Valley Probation Service, the Volunteer Centre West Berkshire and ORC staff made it possible to complete the work. Grants were also received from Peter Baker Foundation, Englefield Charitable Trust, Gerald Palmer Trust, Greenham Common Trust, Zephyr Trust and Hamstead Marshall Parish Council to help pay for equipment and materials. All their support is very gratefully acknowledged.

Unfortunately, we were not successful with our efforts to secure funding for a full-time education officer and, following the retirement at the end of 2010 of 'Farmer Bob' Winfield, Roger Hitchings has taken responsibility for maintaining and building on the progress made in 2010. We continue to believe that, with the conference centre and garden facilities, there is real potential to develop an education programme focused on food systems and sustainability, and efforts to fund both an education officer and the continued development of the horticultural education site will continue.

As part of our education programme targeting the wider community, we received funding from the North Wessex AONB to produce a set of wayside notice boards and leaflets explaining the **farm trail** to children and adults, and a number of farm trail events were held during the year. We also organised a pilot Organic and Local Food Festival in July 2010, with food stands, cookery demonstrations, gardening and environmental displays as well as further farm-trail related activities. As a pilot, the Festival was very successful, attracting 700 visitors, and plans are in progress for a more ambitious event in 2011.

Educational activities with students and professionals

For the second year, ORC was actively involved with the Transatlantic **Partnership** (TAP). This tripartite project involves the College of the Atlantic (Bar Harbor, Maine, USA) and the University of Kassel (Witzenhausen, Germany) and ORC. It is funded by the Partridge Foundation and supports the education of students from the USA, Germany and the UK. CoA staff, including the new Partridge Chair in Food and Sustainable Agricultural Systems Prof. Molly Anderson, and a student came to ORC on a fact finding visit in January. In the spring and early summer we hosted two CoA interns, Steve Wagner, who worked on seed ownership and legislation, and Nathalie Barnett who investigated the history of the Maine-UK apple trade. During August 2010 the second intensive course organised by the Organic Research Centre staff for 12 students from US, Germany and the UK was held at the Organic Research Centre and the University of Kassel. It focused on grains and issues relating to breeding, sustainable production, processing, bread-making and product quality.

We have developed an **interns pro-gramme** at ORC, with a total of eight interns hosted at ORC in 2010 (see FactFile below for details).

The development of **research training** for BSc, MSc and PhD level students, including opportunities to work with our research teams and supervision of dissertations and theses is an important new priority. 2010 saw the successful completion of a PhD by Christian Schader, which reviewed the cost-effectiveness of different agrienvironmental policies including organic support in Switzerland.



Supporting the development of the organic sector through advocacy and communication

Our objective is to engage with and influence policy-makers at local, national and international levels in order to ensure that the potential of organic/ agro-ecological approaches is recognized in climate change, food security, biodiversity, animal health/welfare, food quality/health and agri-environmental/ rural development policy debates and that appropriate policies are developed. The public benefit from our policy and communication work therefore derives from the advancement of education, in particular relating to sustainable agricultural production methods, food security and environmental protection, including climate change mitigation. Our policy engagement is primarily at three levels – within the organic community, with other NGOs and the agricultural industry, and with governmental agencies and committees, both in the UK and in Europe.

Supporting the development of the organic movement

Facilitating the development of organic producer groups remains a core activity, though at a reduced level compared with previous years. Roger Hitchings provides support to the Organic Growers Alliance, while Lawrence Woodward serves as a Director/Board member of **Organic** Arable and Organic Seed Producers. Nic Lampkin is a Director/Board member of the Welsh meat levy company Hybu Cig Cymru/Meat Promotion Wales, representing organic sector interests. Lawrence Woodward transferred his Director role in the Institute of Organic Training and Advice to Nic Lampkin. During 2010 we started exploring the potential for better relationships between the major organic charities (Soil Association, Garden Organic and ORC) and will progress this in 2011.

At European level, we are involved with policy work through the International Federation of Organic Agriculture Movements (IFOAM) EU group, addressing research priorities (through TP Organics – see below), CAP Reform and organic regulation issues. We are represented both in the IFOAM EU group (with Lawrence Woodward as a deputy UK representative), and in the forum of UK IFOAM members (Nic Lampkin) that started meeting regularly in 2009. We have maintained a low level engagement with the Food Quality and Health (Lawrence Woodward) and Ecological Plant Breeding (Thomas Döring) networks. In 2010, we also completed a five year financial support commitment to the development of organic farming in the Caucasus region, co-ordinated by our President, Prof. Dr. Hardy Vogtmann.

Engagement with the European technology platform TP Organics (www.tporganics.org) on organic food and farming research has been of particular significance. During 2010 ORC accepted the role of scientific coordination of the Research Implementation Action Plan. The work, led by Susanne Padel with support from Bruce Pearce, had as a main aim the setting out of the next steps necessary to improve the development of research priorities for organic farming research at European level. The Implementation Action Plan completes TP Organics' trilogy of key documents. The Research Vision to 2025 (published in 2008) discussed knowledge gaps in technology and science under three themes, 'Empowerment of rural economies', 'Ecofunctional intensification', and 'High

functional intensification', and 'High quality food to improve the quality of life and health'. Following extensive stakeholder consultation the Strategic Research Agenda (published 2009), provided a roadmap for how research could fill the knowledge gaps discussed in the Research Vision.



The Implementation Action Plan considers how innovation in the organic sector can help Europe achieve the goals set out in the EU 2020 strategy for a smart, sustainable and inclusive economy and how this can be stimulated through research. The importance of translating this into real change also stimulated reflections on knowledge management and the further development of participatory research methods.

Working with other agricultural and environmental organisations

ORC continues to engage with a number of other organisations on relevant issues, with particular emphasis on GMOs and climate change in 2010. On genetic modification, we have continued to work on some aspects of the question, through participation in GM Freeze (Bruce Pearce), through the development of alternative breeding approaches in our research (see above) and the investigation of seed regulation issues arising from these new developments, and through the promotion of agroecological alternatives to GM, which we are planning to progress as a research evidence resource for schools.

On **climate change**, we have engaged in debate with the Soil Association following the publication of their Soil Carbon report, achieving some measure of consensus about the real potential of organic farming to deliver. We joined the IFOAM/FAO sponsored Round Table on Organic Farming and Climate Change (Laurence Smith) and participated in the development of an agricultural industry greenhouse gas action plan (Nic Lampkin).

Working with governments in the UK and abroad

ORC continued to be actively engaged with a number of government advisory committees. Two staff (Roger Hitchings and Susanne Padel) were members of the Advisory Committee on Organic Standards (ACOS), which was chaired by one of our new trustees, Andrew Jedwell. ACOS was responsible for advising Defra on the implementation of the EU organic regulations in the UK, as well as on technical issues and research priorities. Regrettably, ACOS was closed down by the Government in 2010 as part of its Quango clearance programme, but the need for advisory input of this type remains.

This is recognised at the European level, where the EU Commission has established a new **Expert group to provide technical advice on organic production** (EGTOP). Four ORC staff have been appointed to this group – Nic Lampkin as a permanent member and Susanne Padel, Bruce Pearce and Roger Hitchings as 'pool' members to be invited to serve on sub-groups when required. The new group will start working actively in 2011.

Nic Lampkin has continued as a member of the **Welsh Assembly Government's** Food and Drink Advisory Partnership and Chair of its Organic Strategy Group.

He has also been an active member of the **Natural England/Defra agrienvironment stakeholders group**, which has been reflecting on future directions for agri-environment policy (including organic farming support) in England in the light of public expenditure cuts.

The UN **Food and Agriculture Organisation** (FAO), as part of its work on the development of policies to support the provision of public goods and environmental services, commissioned Nic Lampkin to review the OECD experiences with agri-environmental policy support and key issues that might need to be considered in the development of future policies to support provision of public goods. The review and the proceedings of a workshop on the subject organised have been published by the FAO:



Communication with the wider public

As a research organisation primarily, we do not see our role as a campaigning or membership organisation engaging directly with the wider public. We rely primarily on the ORC Bulletin and our website to make information available on a regular basis. In our 30th Anniversary Year, we also marked the publication of the 100th edition of the Bulletin with a special issue and a 'colour supplement' documenting the history of ORC. We subsequently reviewed the future format of the Bulletin, deciding to move to quarterly rather than bimonthly publication from 2011 with a new monthly e-bulletin focusing on current developments. We also carried out a significant redevelopment of our website, which has received a positive response.

However, we do endeavour to make information more widely available, particularly where the **media debate** has become partial or poorly informed. If in 2009 media attention focused on the publication of a Food Standards' Agency commissioned review on the nutritional status of organic foods, interest in 2010 was focused for some time on work published by Prof. Tim Benton of Leeds University claiming that the environmental benefits of organic farming were low and not justified in terms of the yield reductions involved. Benton's original work was carried out as part of the RELU-Scale project in which ORC was also involved (see above), but the media spin went much ORC Annual Report



further in attacking organic farming than the published results from this project warranted – in fact the results showed again that environment benefits were to be expected from organic farming. To address this, we submitted information directly to the media at the time, we debated the issues internally within RELU-Scale the project team, requesting (unsuccessfully) withdrawal of the misleading press release, and we produced a review of the research evidence for publication as a special supplement in the December 2010 Bulletin. In response to another critical piece, this time from Dick Taverne of Sense About Science, Nic Lampkin was invited to contribute a review paper on organic farming to the journal World Agriculture (see Factfile below), and Susanne Padel also presented a review of evidence on the environmental and other benefits of organic farming to the Organic Farmers and Growers conference.

The proposal for an EU-funded **con**sumer information campaign, matchfunded by industry partners and led by Sustain and the Organic Trade Board with support from ORC in its development, was approved by the EU in 2010 with significant activity planned from 2011. Around £2 million has now been raised for the three-year campaign that should help the UK sector recover from the damaging impacts of the recession. ORC is continuing to support the delivery of the programme through providing advice on research evidence for claims made in support of the 'Why I Love Organic' theme.





Developing ORC for the future

2010 saw the completion of the landscaping works around the refurbished buildings, including the reestablishment of the education garden, and the official opening of the new facilities by Prince Charles on 24th May. The new facilities have proved their worth in enabling internal and external meetings, workshops, conferences and other events to take place on site, including local community activities. Work started on a gradual restoration of the farmhouse, with a new drainage system in the cellar, and two rooms converted to meeting rooms and office space.

The administrative, human resource and governance changes initiated in 2009 have bedded-in well, though the dispersed nature of the organisation, with research sites at Wakelyns Agroforestry in Suffolk and on 50 participatory research farms, and a team of self-employed consultants providing the input to our advisory work, provides particular challenges to ensure that multi –site working is efficient and effective. In particular, our IT systems need to be able to meet the needs of a modern, dispersed organisation; the lack of broadband access (in common with many rural communities), reliance on satellite links, and inability to access digital telephony remain significant barriers to achieving service standards that would be expected in the 21st century. Some new options to address this problem have been identified to be explored further in 2011.

Developing towards 2015

The aims and objectives outlined in the report are drawn from the 2010-2012 Corporate Plan and they will continue to be our focus for 2010/11. However, in October 2010, the Council of Management undertook a further Strategy Review, and on the basis of this a new Corporate Plan for the period 2011-2015 is under development. Core to this plan is a revised mission statement which states that:

The Organic Research Centre is a research organisation committed to:

 developing sustainable land management and food production systems based on IFOAM organic and agro-ecological principles;

- disseminating knowledge to current and future farmers/land managers (knowledge networks) and other related businesses;
- compiling evidence on systems performance; and
- informing public debate through dissemination of knowledge to policy makers and opinion leaders, and through them the wider public.

in order to ensure the health and wellbeing of soil, plant, animal, people and the environment.

The Organic Research Centre continues to lead in the fields of research, development and advice for organic agriculture, with the public benefits that that entails. For more than 30 years, it has played a central role in the development of policy and standards for organic farming and food within the UK, EU and internationally. The Centre's alliance of practice and policy, on-farm and desk research and consultancy and advice is unique. We will develop this approach, with an increased emphasis on working in partnership with others.

Financial report

Review of financial position for year ended 31st October 2010

At £1,189,635, income generated from donations and grants, investments and charitable activities was 24% higher that the preceding year (£958,869). Both voluntary income and investment income were reduced, in large part due to the recession, with the total income from these sources down by 21% at £203,062 (following a similar fall the previous year). In contrast, income from other sources was up by nearly 41% at £986,573, representing 83% of the income in 2010 (73% in 2009). Of this, research income increased by 93% to £727,183.

Expenditure at £1,368,880 was up 36% compared with 2009 (£1,004,648). This reflected increased staffing required to deliver the additional research projects, the continuation of the dual director roles until May 2010, and staff restructuring costs relating to the departure of one director. Overall expenditure on charitable activities increased by 54% to £1,290,488. Of this, expenditure on research projects increased by 79% to £995,124 and staff costs accounted for £566,301 (2009: £491,301). This increase in part reflected costs of retaining key staff between early ending of some funding streams and the new project funding becoming available (which is now in place). However, fundraising and publicity costs were down significantly to £64,159 (2009: £153,444), in part due to early staff departures without replacement.

Despite the increased income overall, the loss of voluntary income (which covers a range of core-funded projects, and the increased expenditure on research and staff restructuring, led to a significant loss for the year. The trading deficit (net outgoing resources) increased to £179,245 (2009: £45,779). The stock market recovery increased the value of our investments assets by £22,418 (2009: £41,632). As a result, the net overall loss for the year (net movement in funds) was £156,827 (2009: £4,147).

This large deficit was not consistent with the small trading surplus budget for the year, which had projected both higher income and expenditure than was actually achieved. The result reflects a challenging combination of circumstances, including staff restructuring costs, delays in project start-ups due to government expenditure reviews and the significant recessionrelated fall-off of voluntary donations. However, with senior management costs now slimmed down, project funding secure and increasing further in 2011, and staff costs covered to a greater extent by external project funding, we are optimistic that the out-turn in 2011 will be significantly better.



Statement of financial activity for year ended October 2010

Values (£)	Funds	Unrestricted	Designated	Restricted	Total (2010)	Total (2009)
Incoming resources						
Donations and grants		186,714	-	-	186,714	237,404
Farm and estates		50,274	-	-	50,274	72,612
Research and projects		-	108,600	618,583	727,183	377,681
Advisory and training		1,278	-	166,744	168,022	207,544
Education and publications		-	-	41,094	41,094	43,859
Interest received		-	-	-	-	3,394
Investment income		16,348	-	-	16,348	16,375
Sundry		-	-	-	-	-
Total		254,614	108,600	826,421	1,189,635	958,869
Resources expended						
Fundraising and publicity		64,159	-	-	64,159	153,444
Farm and estates		12,327	-		12,327	8,050
Research and projects		373,983	5,604	615,537	995,124	555,334
Advisory and training		53,326	-	173,913	227,239	234,491
Education and publications		3,962	-	51,836	55,798	40,438
Governance		14,233	-	-	14,233	12,891
Total		521,990	5,604	841,286	1,368,880	1,004,648
Net incoming/outgoing resources						
Before transfers		-267,376	102,996	-14,865	-179,245	-45,779
Gross transfers between funds		-13,865	-	13,865	-	-
Gain/loss on investment assets		22,418	-	-	22,418	41,632
Net movement in funds	_	-258,823	102,996	-1,000	-156,827	-4,147

Notes: Income and expenditure are divided into project funds in three categories:

Unrestricted: without stipulation on use.

Designated: where the charity itself restricts use to a particular purpose.

Restricted: restricted use by stipulation of the sponsor for a particular purpose.

Balance sheet as at 31st October 2010

		2010	2009
Fixed assets		2,544,284	2,656,185
of which	Land (historic cost)	750,000	750,000
	Buildings (historic cost)	1,520,443	1,518,170
	Investments (market value)	273,841	388,015
Current assets		258,846	284,834
of which	Stocks	4,805	6,538
	Debtors	162,354	195,379
	Cash at bank/in hand	91,687	82,917
Creditors	amounts due within 1 year	-388,833	-294,895
Net current liabilities		-129,987	-10,061
Total assets less current liabilities		2,414,297	2,646,124
Amounts falling due after one year		350,000	425,000
Net assets		2,064,297	2,221,124
of which	Restricted	-	1,000
	Designated	102,966	-







Compared with the significant investment in buildings in recent years, there was a smaller investment in finishing works amounting to £32,463, which was offset by buildings depreciation of £32,533, leaving tangible fixed assets, calculated on an historic cost basis, slightly higher at £2,270,443 (2009: £2,268,170).

The decision of the Pye Trust to forgive a loan of £75,000 for the building refurbishment project (£50,000 in 2010 and the remainder in 2011) was a welcome retrospective contribution to the cost of the refurbishment work completed in 2009.

As a result of the deficit for the year, total net assets fell to $\pounds 2,064,297$ (2009: $\pounds 2,221,124$).

With tangible fixed assets slightly higher, the main reductions were due to sales of investments at £273,841 (2009: £388,015) and in current debtors at £162,354 (2009: £195,379). While creditors falling due within one year increased to £388,833 (2009: £294,895), this was largely offset by creditors falling due after more than one year, which fell by £75,000 to £350,000 as a result of the Pye Trust loan changes. The remaining change in creditors reflected cashflow management efforts to avoid the need for further investment sales.

The budget for 2011 foresees a significant further increase in research and project funding income with costs constrained at or below 2010 levels, leading to a break-even position. This is based on conservative assumptions relating to voluntary donations due to the continuing difficulties in the wider economy, although increased efforts are being made to address this issue.

Nicolas Lampkin, Executive Director and Company Secretary

Auditor's report

In our opinion the accounts give a true and fair view of the state of affairs of the charity as at 31 October 2010, and of its incoming resources and application of resources, including its income and expenditure, for the year then ended. The accounts have been properly prepared in accordance with United Kingdom Generally Accepted Accounting Practice and with the Companies Act 2006. The information given in the Report is consistent with the accounts.

Mr Mark Cummins FCCA

(Senior Statutory Auditor) for and on behalf of Russell New Limited, Statutory Auditors, The Courtyard, Shoreham Road, Upper Beeding, Steyning, West Sussex, BN44 3TN.

The accounts were approved by the Annual General Meeting of the Progressive Farming Trust on 23rd May 2011. Full audited accounts are available for inspection at the Trust's registered office (see page 3) and on the Charity Commission website.

Factfile

Resources

New grants/contracts

- Strategies for Organic and Low-input Integrated Breeding and Management (SOLIBAM): EU FP7-funded research project led by INRA, France, with 22 partners, 2010-2014, ORC share €400k.
- Economic Analysis of Certification Systems in Organic Food and Farming (Certcost): EU FP7-funded research project led by University of Hohenheim, Germany, with 10 partners, 2009-2011, ORC share £160k.
- Farmer Consumer Partnerships (CORE FCP): CORE Eranet-funded, multi-partner research project led by University of Kassel, Germany, 2009-2010, ORC share £24k.
- Farm Accountancy Cost Estimation and Policy Analysis of European Agriculture (FACEPA): EU FP7-funded research project, subcontract with von Thuenen Institut, Germany, 2010, ORC share £7.5k.
- Better Organic Business Links (BOBL): Welsh Assembly Government-funded project coordinated by Organic Centre Wales, Aberystwyth University, 2010, ORC share £22.5k.
- Technology Platform TP Organics. Funded by various sponsors, co-ordinated by IFOAM EU group, Brussels, 2010, ORC share £3,2k.
- *OCIS Public Goods Tool:* Defra-funded, Natural England-commissioned, 2010, ORC share £40k.

Continuing statutory funders Defra (LINK research)

Natural England (OCIS England)

- South East England Develop. Agency (Organic
- Inform) Welsh Assembly Government (Organic Centre
- Wales, OCIS Wales, Farming Connect) European Commission (Research projects)

Individual donors/supporters

I Alexander; Lady Arbib; F Astor; R Aker; D Buffin; W&H Chester-Master; P Conford; S Coppard; T Deane; R Ewbank; B Feder; D Fleming; J & A Gear; E Goff; M Gillett; Mr Griffin; T Gwyn Jones; W Kendall; P Kearney; C Lavell; E Lord; Rev J Mason; C Merfield; D O'Neill; Mrs Oppenheimer; B Panvel; L Phillips; W & L Pope; Y Pye; S Richmond; R A Rowlands; C Sales; Mr Sandwith; A Sharples; E Scott; C Sinclair; J Skinner; R Tandy; C Wacher; R Weller; B Winfield; D Younie.

Trusts and companies

Ashden Trust; David Alston Suffolk Ltd; Peter Baker Foundation; Ben Goldsmith Foundation; Birthday Trust; Bodfach Trust; Canon Frome Co-op; Doves Farm; Court of Noke Farm; Cuthbert Horn Trust; Duchy of Cornwall; Guy Fawkes Charitable Trust; Greenham Common Trust; Mitchell Trust; Henry Doubleday Research Association; Jersey Organic Association; Oakdale Trust; Organic farmers and Growers; Dr Mortimer & Theresa Sackler Foundation; Tinsley Charitable Trust; Turner Charitable Trust; Luddesdown Organic Farm; Paget Trust; Partridge Foundation; Polden Puckham Charitable Foundation; Pye Trust; Ratcliff Foundation; Sheepdrove Trust; Spear Charitable Trust; Stevenson Family Trust; Constance Travis Charitable Trust; Triodos Bank; Veolia plc; Vodafone Group plc; Zephyr Charitable Trust.

People

New staff

Dr Susanne Padel, Principal Researcher and Team Leader Socio-Economics Dr Catherine Gerrard, Data Analyst

Staff leaving

Lawrence Woodward, Director Claudia Sales, Fundraising and PR Officer

Interns and volunteers

Dr Francesca Alberti, Italy Natalie Barnett, USA Cyril Bigot, France Matthias Girschick, Germany Julie Mabileau, France Katrin Otto, Germany Jemima Showering, UK Stephen Wagner, USA

Postgraduate students

PhD: Robert Brown, University of Reading; Laura Hathaway-Jenkins, Cranfield University; Sascha Kirchner, University of Helsinki, Finland; Christian Schader, Aberystwyth University/FIBL; Alexa Varah, University of Reading

MSc: Meike Grosse, University of Kassel, Germany; Tom Pinkham, University of Reading

Project partners

Research UK: University of Aberdeen; Aberystwyth University (IBERS and Organic Centre Wales); ADAS; University of Cambridge; Cranfield University; Duchy College; Harper Adams University College, Garden Organic; University of Gloucester (Countryside and Community Research Institute); Imperial College, London; University of Leeds; John Innes Centre; Macaulay Land Use Research Institute; University of Manchester; Queen Mary University, London; University of Reading; Rothamsted Research; Scottish Agricultural College; Scottish Crops Research Institute; University of Sussex; Warwick University.

Industry: Abacus Organic Services Ltd; HGCA; Bernard Matthews Foods Ltd; Bread Matters Ltd; British Oat and Barley Millers Association (BOBMA); Causey Park Farms Ltd; CPB Twyford Ltd.; Crisping Malting Group Ltd; DairyCo; Doves Farm Foods Ltd; Duchy Home Farm; DuPont (UK); East Haydon Farm; EBLEX;

Farmeco Ltd; Garfords; GBSeeds; Halo Foods Ltd; Institute of Organic Training and Advice; John Deere; J E Wardle and Sons; LEAF; Letheringsett Watermill; Mole Valley Feed Solutions; New Houses Farm; Nairns Oatcakes; Nickerson-Advanta Ltd; Norton Organic Grain Ltd; Oat Services Ltd; Organic Arable; Organic Farmers and Growers Ltd; Organic Seed Producers Ltd; Panary Ltd; Phytatec; Poultry Xperience; RAGT Seeds Ltd; Rushall Farms; SAC Commercial Ltd; Scottish Organic Producers Association; Senova Ltd; Shipton Mill Ltd; Soil Association Certification Ltd; Soil Association Ltd (Charity); The Arable Group; Tillet and Hague Technology; W & H Marriage & Sons Ltd; Wakelyns Agroforestry; Whitehall Farm.

The participatory research engagement of many individual producers is particularly appreciated as is the participation of consumers in choice experiments.

Overseas partners and affiliates:

Agencia Éstatal Consejo Superior de Investigaciones científicas (ES); Agricultural Research Institute of the Hungarian Academy of Sciences (HU); Agroscope Reckenholz-Tänikon Research Station (CH); Agrovegetal (ES); Arcoiris (IT); Associazione Italiana per l'Agricoltura Biologica (IT); College of the Atlantic (Maine, USA); Coordination Nationale des Organisations Paysannes du Mali (Mali); Czech University of Life Sciences, Prague (CZ); European Consor tium of Organic Plant Breeding (EU); Ege University, Izmir (TK); Escola Superior Agraria de Coimbra (PT); FIBL - Research Institute of Organic Agriculture (CH); Gautier Semences (FR); Getreidezüchtung Darzau (DE); Instituto de Agricultura Sostenible (IT); Institute for Ethical and Environmental Certification (IT); Institut National de la Recherche Agronomique (FR); INRA Transfert (FR); Institut Technique de l'Agriculture Biologique (FR); Institute of Food and Research Economics; Institute for Marketecology (IMO, CH), Instituto de Tecnologia Quimica e Biologica (PT); International Center for Agricultural Research in the Dry Areas (INT); International Centre for Research in Organic Food Systems, University of Aarhus (DK); International Federation of Organic Agriculture Movements EU Group, Brussels (EU); Johann Heinrich von Thünen-Institute (DE); Louis Bolk Instituut, Driebergen (NL); Mediterranean Agronomic Institute, Bari (IT); Mekelle University (Ethiopia); Polytechnic University of Marche (IT); RISØ National Laboratory for Sustainable Energy (DK); Saatzucht Donau (AT); Scuola Superiore Sant'Anna, Pisa (IT); Technical University of Munich (DE); University of Helsinki (FI); University of Hohenheim (DE); University of Kassel (DE); University of Perugia (IT); University of Natural Resources and Applied Life Sciences, Vienna (AT)

Outputs

Publications

- Döring T 2010. Genetic, ecological and economic approaches to improve yield reliability in cereals. Organic Producer Conference. 8-9 Jan. 2010, Harper Adams College.
- Döring T, Grosse M, Wolfe M 2010. Growing together – evolution of plant height in wheat composite cross populations. In: Goldringer I, Lammerts van Bueren E (Eds.): Breeding for resilience: a strategy for organic and lowinput farming sytems? Eucarpia 2nd Conf. of Organic and Low-Input Agriculture Section. Paris, p 35.

- Döring TF, Wolfe M, Jones H, Pearce H, and Zhan J 2010. Breeding for resilience in wheat - Nature's choice. In: Goldringer I, Lammerts van Bueren E (Eds.): Breeding for resilience: a strategy for organic and low-input farming sytems? Eucarpia 2nd Conf. of Organic and Low-Input Agriculture Section. Paris. 45-48.
- Jones H, Clarke S, Haigh Z, Pearce H and Wolfe M 2010. The effect of the year of wheat variety release on productivity and stability of performance on two organic and two nonorganic farms. Journal of Agricultural Science 148, 303-317.
- Lampkin N 2010. Organic farming myths and reality. World Agriculture, 1(2).
- Moakes S and Lampkin N 2010. Organic farm incomes in England and Wales, 2008/09. Aberystwyth University.
- Padel S (ed.) 2010. The European regulatory framework and its implementation in influencing organic inspection and certification systems in the EU. Deliverable D11, Certcost project, Organic Research Centre - Elm Farm, Newbury, www.certcost.org.
- Padel S, Zander K and Gössinger K 2010. Regional production and 'Fairness' in organic farming: evidence from a CORE Organic project. 9th European IFSA Symposium, 4-7 July 2009. Presented in workshop 4.3: Fair and regional: New trends of organic and sustainable food systems. International Farming Systems Association, Vienna. http://ifsa.boku.ac.at/cms/ filead-
- min/Proceeding2010/ 2010_WS4.3_Padel.pdf Saucke H, Juergens M, Döring T, Lesemann D, Fittje S and Vetten H 2009. Effect of sowing date and straw mulch on virus incidence and aphid infestation in organic faba-beans (Vicia faba L). Annals of Appl. Biology 154:239-250.
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- Smith J 2010. Agroforestry: reconciling production with protection of the environment. A synopsis of research literature. Organic Research Centre, Newbury. <u>www.orgprints.org/18172/</u>
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- Wolfe M, Döring T 2010. Steps towards an ecological future. In: Goldringer I, Lammerts van Bueren E (Eds.): Breeding for resilience: a strategy for organic and low-input farming systems? Eucarpia 2nd Conf. of Organic and Low-Input Agriculture Section. Paris, 38-41.
- Zander K, Hamm U, Freyer B, Gössinger K, Hametter M, Naspetti S, Padel S, Stolz H, Stolze M and Zanoli R 2010. Farmer Consumer Partnerships – successful communication of values of organic food production to consumers: a handbook. CORE Organic Project Report. Department of Agricultural and Food Marketing, University of Kassel, Witzenhausen.
- Zander K, Hamm U, Freyer B, Gössinger K, Hametter M, Naspetti S, Padel S, Stolz H, Stolze M. and Zanoli R 2010. Landwirte-Verbraucher-Partnerschaften – Erfolgreiche Kommunikation von Werten ökologischer Lebensmittel, Eigenverlag Fachgebiet Agrarund Lebensmittelmarketing, Universität Kassel. Witzenhausen.

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Events organised

- Organic Producer Conference (Jan 2010) Stakeholder workshop for OCIS Public Goods Tool (February 2010)
- Official opening of conference centre with HRH Prince Charles (May 2010)
- Open Day, Wakelyns Agroforestry (June 2010) Open Day, Elm Farm (July 2010)
- Organic and Local Food Festival, Elm Farm (July 2010)
- Training day for OCIS Public Goods Tool (September 2010)

Events contributed to

- Biofach congress (February 2010) 'Woodland: The Untapped Agricultural Asset', North Wyke (March 2010)
- European Congress of the International Farming Systems Association (July 2010)
- TP Organics stakeholder platform (July 2010) FAO workshop on payments for environmental
- services (September 2010) Organic Systems Development Group work-
- shop: 'Opportunities for Agroforestry' (September 2010)
- Organic Farmers and Growers conference 'Selling organic: The next chapter' (October 2010)
- *Trees: The Untapped Agricultural Asset'*, Royal Agricultural College (October 2010)

Directorships, Membership of Boards and Government Committees

- Döring, T Fellow, Royal Entomological Society Hitchings, R Member, Defra Advisory Commit-
- tee on Organic Standards Board Hitchings, R Chair, Defra Advisory Committee on Organic Standards Technical Committee
- Lampkin, N Member, Welsh Assembly Government Food and Drink Advisory Partnership
- Lampkin, N Chair, Welsh Assembly Government Organic Strategy Group
- Lampkin, N Member, Defra/Natural England Agri-environment Stakeholders Group
- Lampkin, N Director, Hybu Cig Cymru
- Lampkin, N Director, Institute Organic Training Advice
- Lampkin, N Member, Agricultural Industry Greenhouse Gas Action Plan Steering Group
- Padel, S Member, Defra Advisory Committee on Organic Standards Board
- Padel, S Chair, Defra Advisory Committee on Organic Standards Technical Committee
- Padel, S Member, Steering Group, Better Organic Business Links Programme, Organic Centre Wales
- Pearce, B Member, Royal Horticultural Society Science and Horticultural Advice Committee
- Pearce, B Director, GM Freeze
- Smith, L Member, Parliamentary Renewable and Sustainable Energy Group
- Smith, J Member, Farm Woodland Forum executive committee
- Woodward, L Member, International Energy Agency Task 37 (Biogas) Group
- Woodward, L Director, Organic Arable
- Woodward, L Director, Organic Seed Producers Woodward, L Director, Institute of Organic
- Training and Advice

