THE ORGANIC RESEARCH CENTRE

ELM FARM

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Cover: Our summer festival attracts hundreds - see page 2
(Photo: Anne Boisnard)

Organic Research Centre

Bulletin

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New E-Bulletin

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News in brief

Elm Farm Summer Festival draws the crowds

Over 700 adults and some 200 children enjoyed the sunshine, the music, the organic food and drink, a cornucopia of stalls and exhibits, walks around the farm trail, bug hunts and chilling out on a glorious July Saturday afternoon and evening.

Improving Animal Welfare: A Practical Approach

Published by CAB International this is the title of a new book edited by animal welfare expert Dr Temple Grandin. Dr Grandin gave an interesting lecture on the subject recently (see page 14). She believes that there should be financial or market rewards for improving animal welfare at various levels in the supply chain, for example for stockmen, farmers, livestock transporters, slaughter plant workers and abattoirs. It's a challenging idea.

Stop GM Wheat being grown in the UK.

Rothamsted Research has applied to grow a field trial of GM wheat in 2012 and again in 2013 on its farm in Hertfordshire. The crop is genetically modified to produce aphid "alarm" chemicals, conceivably a good idea, but:

- there is a lack of any data on potential health effects of the GM wheat;
- an antibiotic resistant marker gene is being used, despite concern raised by the European Medicines Agency that this may contribute to a rise in resistant infections in humans and animals;
- there is a risk of cross-contamination with other wheat crops and some grasses including organic populations;
- the potential impact on predator and parasite populations, which already provide some control for aphid infestations, is unknown.

GM Freeze has produced an excellent briefing note - see www.gmfreeze.org.

The farming horror of GM in the US caught on camera.

Farmer Michael Hart of the Small Farmers Association has just released a film of his visits and interviews with US farmers who have been growing GM crops. It should be x rated but is essential viewing for anyone who wants to know about GM farming – go to: www.gmcropsfarmertofarmer.com.

The spread of resistant weeds is still being denied by the biotech industry, but you can see the reality on these short video clips

www.youtube.com/watch?v=2_iJhIGtOJM&feature=related

www.youtube.com/watch?v=T2wTlzixSG8

www.youtube.com/watch?v=ZUt_pp3NUUc&NR=1

If you prefer to read rather than watch, GM Freeze have just published a report on glyphosate including a chapter on resistance. See www.gmfreeze.org.

David Fleming's book Lean Logic published

ORC's late friend and colleague Dr David Fleming spent more than 20 years compiling his highly original and very pertinent thoughts about the future of our civilisation. During that time he took part in many significant environmental initiatives and influenced and inspired many people; most of whom thought he would never finish or publish his book. He didn't, but following his death last year some of his friends and family have.

Lean Logic- A Dictionary for the Future and How to Survive it – is a life changing book composed of a community of essays about inventive, cooperative self-reliance in the face of great uncertainty. It acknowledges, with honesty, the challenges ahead in finding our way out of an economy that has all but destroyed the very foundations upon which it depends - the climate, the complex ecological system and the community and culture which give meaning to life. But rather than inducing despair, Lean Logic inspires optimism in the creativity and intelligence of humans and our capability to nurse our ecology back to health, to rediscover the importance of place and play, of community and culture, and of reciprocity and resilience.

You can buy Lean Logic at www.leanlogic.net.

Sue Coppard talks about the history of WWOOF

In a wide-ranging internet interview, Sue Coppard has described how she started Willing Workers on Organic Farms (WWOOF) and its history since then, as well as her involvement with the organic movement, calling on others to get involved personally with organics.
www.viewfromthepier.com/peertopier/sue-coppard-wwoof/

Leafy vegetables and evolutionary breeding wow the crowds at Wakelyns 2011

The 2011 Wakelyns Agroforestry Open Day in June drew capacity crowds and was an interesting, lively event. This year the morning was divided into a mixture of research and experience-based presentations. Professor Steven Dorling gave a highly informative presentation on weather patterns and their effects on farming over the last half century. Another highlight was Richard Morris' presentation about Wimpole Hall's working farm and its successful endeavours to integrate public engagement into the busy running of an organic farm, through the MyFarm Project (www.my-farm.org.uk).

The Wakelyns farm tour encompassed both the agroforestry systems and the research projects. The tour of the cereal trials was carefully structured to guide people conceptually through the differences between pure varieties, mixtures and populations. The visitors discussed how these differences are evident visually in the crop, but also give rise to varying breeding potential. The now legendary Wakelyns lunch did not disappoint and included plenty of our own produce.

For more details on some of these items, visit www.organicresearchcentre.com.

About us

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Bulletin editor
Lawrence Woodward OBE

The Organic Research Centre is the UK's leading, independent research organisation committed to developing sustainable land management and food production systems based on IFOAM organic/ agro-ecological principles; disseminating knowledge to current & future farmers/ land managers and other related businesses; compiling evidence on systems performance and informing public debate through communication with policy makers and opinion leaders, and through them the wider public, in order to ensure the health and well-being of soil, plant, animal, people and the environment.

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Editorial: Commissioner Ciolos and the Deathly Hallows

According to EU Agriculture Commissioner Ciolos, organic farming will be relatively well treated in the reformed CAP. Sceptics might say you have to believe in Father Christmas, Harry Potter or at least in what politicians tell you at conferences to think that. But there are grounds for optimism.

At the recent IFOAM EU Congress in Hungary, Commissioner Ciolos and the Agricultural Ministers of Hungary and Poland – the outgoing and incoming EU Presidencies – seemed to be vying with each other to extol the virtues of organic farming and why it must have a key position in the EU's agricultural policy.

Ciolos clearly stated that after 2013 organic farming will have a place in Pillar 1 – with certified organic farmers qualifying automatically for the greening element of the single payment – and that the role of organic farming will be strengthened in Pillar 2 agri-environment schemes. Although EU officials apparently confirmed later that he did actually say this, the subsequent Congress communiqué is more circumspect. So what can we make of it?

- There does seem a real chance "green measures" will be part of a reformed Pillar 1 (current EC proposals are for 30% of the Pillar 1 budget). Certified organic farming may be a specific component of the measure.
- There is a broad view in the EU that organic farming approaches should feature more prominently in Pillar 2 schemes. However as these are not 100% EU funded they will remain vulnerable to less positive implementation by member states (e.g. the UK).
- There is a proposal to introduce flexibility between the two pillars which may improve or might reduce the prospects for organic farming across the EU generally and certainly in different member states.
- The Commission is aware and concerned that differing levels of support for organic farming in different countries can distort the market and is considering how to secure the famous if illusory "level playing field". The height of the level will be a very moot point though.

Seen from the Congress Hall in Budapest the prospects for organic farming took on a faintly positive glow distinct enough to see that the Commission and many members states are positive about organic farming and would like it to be well placed in a revised CAP. Which leaves the UK, or to be precise Defra because the Welsh, Scottish and Northern Irish administrations seem to have a different view on CAP Reform.

Being largely isolated in the EU on CAP reform is not automatically a bad thing but the UK (Defra) stance has too much of the guillotine about it with agri-environment and organic farming as potential victims. Domestically, Defra seems too spellbound by the Voldemort voices of the NFU, the Food and Drink Federation, the GM lobby and other industry bodies to give credence to the policy value of organic farming.

All of which leaves the sector in England out in the cold and needing –desperately – to work together on more than celebrity marketing initiatives. Things are not universally bad but it is hard to pretend that many organic farms are in a good state financially and indeed some are on the edge.

Can we work together and find a way to improve things? ORC is fostering an initiative – the English Organic Forum – which hopefully will help. But more is needed; it is imperative that those individuals, businesses and organisations who have not generally participated in the organic movement get involved. The old agendas, institutional power plays and methods of working need to be set aside and replaced by a willingness to be mutually supportive in ways we haven't achieved before. Organic was once a movement and needs to become one again – urgently.

Lawrence Woodward

British ecologists scrutinise organic farming

The increasing evidence that organic farming has benefits for biodiversity and the delivery of ecosystem services was put under the spotlight at a recent joint meeting of ORC and the British Ecological Society (BES). Held at ORC in May, the event brought together leading scientists, policy makers, farmers and NGOs. ORC researcher **Jo Smith** *outlines what happened.*

At the heart of the meeting was a discussion of the critical issues around sustainable farming and land-use including apparent trade-offs between the different demands on land, such as food production, biodiversity and other ecosystem services.

These themes were revisited throughout the day. BES members had a good deal of empathy with the organic approach, but the event was not an "organic love-in". Challenging points and questions were raised, but it is fair to say that organic farming and the eco-agroforestry approach emerged from the scrutiny in a positive light.

Speakers Prof. Martin Wolfe (ORC/Wakelyns Agroforestry), Dr Lisa Norton (Centre for Ecology and Hydrology), Dr Jo Smith (ORC), Rob Brown (University of Reading) and Andy Goldring (Permaculture Association) covered agro-ecological approaches, the effects of organic farming at landscape level and the evidence of biodiversity benefits of organic farming.

The morning session concluded with a visit to the newly established silvopastoral trials on Elm Farm, where the integration of biomass energy crops (SRC willow and alder) and livestock production are being investigated as part of an EU-funded project on organic dairy farming.

Later visits were made to two innovative organic farms to see the delivery of ecosystem services in practice. Sheepdrove Organic farm (www.sheepdrove.com) is a mixed organic farm of nearly 1,000 ha in the Lambourn Valley. The farming system has been designed to work with nature and boost biodiversity on soils previously damaged by intensive, chemical farming.

The visit included a tour of a chalk grassland restoration project, ORC's wheat population trials and the agroforestry system where discussion centred on the challenges faced by organic producers in the current economic climate.

Visiting the newly established silvopastoral trial at Elm Farm ***(Photo: Barbara Smith).***

Tolhurst Organic Produce (www.tolhurstorganic.co.uk) is an 8 ha stock-free vegetable farm near Pangbourne run by Iain Tolhurst and his business partner Lynn. They adopt a 'systems approach' to managing potential pest problems by creating a diverse and dynamic habitat within the fields. This hugely impressive holding is an eye-opener to anyone thinking that organic farming relies on masses of bought-in fertility.

Abstracts and pdf's of the presentations and posters are available at www.organicresearchcentre.org.

How thick is the thicket?

Our regular readers know of our strongly held view that Eco-Agroforestry is a sustainable land-use system which has immense potential to help the UK adapt to future challenges by providing ecosystem services, sequestering carbon, and increasing resilience to climate change, whilst producing food, fuel and fibre. However there is currently little awareness of this amongst UK farmers and landowners. In fact, we wondered how much farmers use and value their existing woodlands, so we did a survey to find out. **Sophie Lewis**, *who has been with us on an internship, organised the survey and reports the findings.*

The aim of the online survey, carried out between March and May 2011, was to gain an understanding of how farmers and landowners in the UK are currently using the woody components on their land (shelterbelts, hedgerows, woodlands, orchards, coppice areas, buffer zones, ally cropping methods).

We had 57 respondents with an average farm size of 207ha (ranging from 1100ha – 0.7ha). 86% of the farms were organic. The results show that farmers are integrating the woody components on their land into the management of their farming system to some extent, for example in livestock management. They also indicate an awareness of the potential and willingness for trees to be further integrated into the farm systems in order to provide both an economic and ecological output.

There is potential for added economic value from eco-agroforestry systems. They can be managed in a way that delivers a high end profit through the sale of timber whilst providing multiple products and services during the growing lifetime. For example, fruit or nut crops allow for a continuous and immediate return and also a high end return from the timber. The growth of fast growing wood fuel species can also be used to subsidise a slow growth high value timber crop.

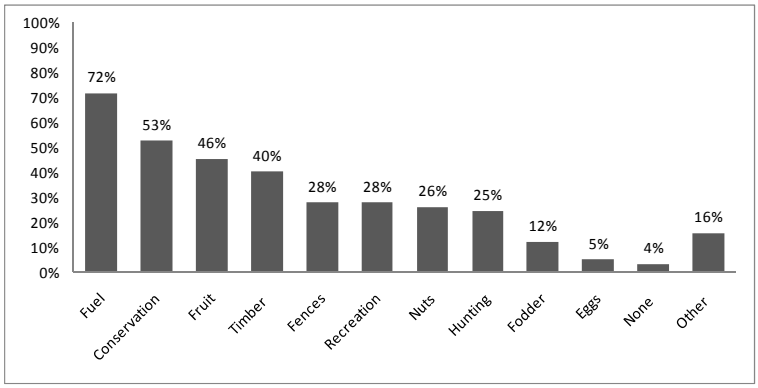

Figure 1: Farmer/landowner (n=57) on-farm utilisation of products/services from their farm's woody components.

A majority of the respondents are utilising the products and services derived from the woody components on their farms including amenity and biodiversity benefits (Fig. 1). However, the survey highlighted that management time and cost of the woody components were viewed by farmers and landowners as limitations. There is no doubt that the added complexity of agroforestry systems compared to monoculture systems requires a major up-front commitment from farmers and landowners when developing agroforestry sites. Therefore before establishing such sites there is a need to quantify outputs (both directly through sale of products, and indirectly through improved ecosystem services) to ensure that they outweigh the inputs.

In this context the recent and considerable interest in placing a monetary value on the delivery of ecosystem services, such as soil protection and carbon sequestration is potentially significant. Obviously there are many challenges involved with using an ecosystem services approach to developing economic support for agroforestry, but there has been much progress in the field of ecological economics [1] and an increased awareness at policy level following the release of the UK National Ecosystem Assessment [2].

It seems likely that in the future eco-agroforestry – including managing farm woodlands and even thinning the thickets – will become more interesting for farmers and landowners.

1. Cooper, T., Hart, K., Baldock, D., 2009. The provision of Public Goods Through Agriculture in the European Union. Report prepared for DG Agriculture and Rural Development Contract no. 30-CE-0233091/00-28. Institute for European Environmental Policy, London.

2. http://uknea.unep-wcmc.org/Home/tabid/38/Default.aspx

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Nitrogen: 170 and out for poultry or not?

Working standards and regulations evolve and adapt to economic, structural and political conditions; principles shouldn't. This causes tensions which can be creative but can also be destructive. In an ideal world we would always have creative tension that produces drive, innovation and progress but too often misguided attempts to compromise and be inclusive leads to weasel words, illogical incoherence, grey areas, derogations and poor enforcement.

The latest round of discussions of the development of the organic regulation are revealing plenty of tensions as – credit to them – the EU Commission, taking the organic sector's principles to heart, seeks to move the regulations closer to them. A number of areas are throwing up "interesting challenges" not least of which is the move towards 100% organic feed, increasing the amount of feed that has to be produced on the farm and in the "region". It's a toss-up which is more "challenging" this or the debate on protected cropping.

An interesting link between the two is the limit – already accepted and included in the regulation – of 170kgN/ha that can be applied to organic land. Some farms have no problem with this but others – the more specialised ones - do. To date the matter has been dealt with by using certifiers directly descended from Cyclops but what about the future?

It is argued that some types of intensive horticulture and protected cropping – such as long season tomatoes and production in certain climatic regions - is untenable if nutrient supply is limited to 170kgN/ha. This figure also poses a problem for some poultry producers.

ORC's Poultry Researcher Rebecca Nelder points out what this means for bird stocking rates using figures from the Soil Association's Introductory Guide to Organic Poultry Production (see table below).

She calculates that this effectively sets a maximum stocking density equivalent to 230 laying hens/ha, and 3.5 batches of 580 table birds/ha over the farm as a whole. In other words, to keep 1,000 laying hens a producer needs 1ha of land where the hens will actually be kept and access to an additional 3.34ha of organic land if the nitrogen limit is not to be exceeded.

There are serious structural and regional issues here which will have to be properly addressed. But these are not merely technical issues that can be dealt with in committee by technical experts. They go to the heart of what organic really is and should be. Inclusiveness based on hypocritical window dressing will not cut it either.

Lawrence Woodward

Poultry type	Annual nitrogen (N) produced per animal
Laying hens	0.65 Kg
Table birds (3.5 crops/year)	0.29 Kg
Turkeys - male (13.5kg)	1.42 Kg

Breaking the legal stranglehold on population breeding

The ORC population plant breeding projects have begun to show that this approach has an important role in agro-ecological farming systems. Population breeding encourages genetic diversity in crops and empowers farmers by giving them the opportunity of creating populations that meet and adapt to their specific needs and conditions independent of corporate interests. However, as things stand trade and sale of populations is at odds with the law. **Stephen Wagner**, *a former ORC intern from the College of Atlantic (Maine, USA),* **Bruce Pearce** *and* **Lawrence Woodward** *consider how this might be changed.*

In population (or evolutionary) plant breeding, instead of selecting and growing out a single cross, and essentially freezing the evolution, the populations of plants are grown together and continually evolve and theoretically contain all the characteristics of the parent varieties. This variability, non-uniformity, and dynamic nature is what produces a crop that promises to be stable across a wide range of changing climates, adapt to a specific farm and farmer, and break the dependence on synthetic inputs.

However, it is this intentional dynamic evolution that puts the populations at odds with the law. Current EU regulation is such that any commercial marketing (trade, exchange or sale) of the populations' seed is illegal.

For millennia farmers did not grow single variety monocultures, but instead grew landraces unique to the locality. With the advent of pedigree line plant breeding, monocultures of uniform varieties largely replaced landraces and contributed significantly to the loss of genetic diversity in agriculture. This change was supported by the legal recognition of intellectual property rights (IPR) over plant genetic material, known as Plant Breeders Rights in the UK. While these rights were intended to recognise the investment in breeding by breeders, they also facilitated the movement of genetics from public to private sector.

The DUS and VCU straitjacket

UK plant varieties may only be commercially marketed if they are accepted on the National List. To do so the variety must be "Distinct, Uniform, and Stable" (DUS) and its "Value for Cultivation and Use" (VCU) is satisfactory relative to other varieties already on the National List.

The measurement of **distinctness** requires precision and clarity in recognising and defining the important characteristics that distinguish one variety from another. This can theoretically be accomplished for populations with genetic marking but populations are not intended to be **uniform** because this lack of uniformity ensures that they are adaptable. Whilst by design populations aim for overall **stability**, definition and measurement is problematic as the components of populations may, and should, change as they adapt. This "dynamic stability" is not something regulations currently recognise.

The VCU test requires that in comparative trials a variety must demonstrate a clear improvement in agronomic performance relative to existing listed varieties. The problem for the population arises in how the trials are conducted and the characteristics are measured. Conventional VCU tests do not adequately address the needs of organic breeders and farmers (1). Organic farming systems differ greatly from conventional in such areas as the management of soil fertility, weeds, diseases and pests and plant breeding needs to reflect this (2).

Because of this, several European countries have used provisions in the current seed regulations that allow assessment of additional characteristics to create VCU tests more aligned with the objectives of organic breeders. It might, therefore, be possible that a suitable VCU test could be created for populations.

However, as things stand the requirements of distinct, uniform, and stable and the existing conventional VCU tests are a legal straitjacket on organic plant breeding in general and population breeding in particular.

Loosening up or freeing the chains?

We have investigated a number of different scenarios to overcome this. After consulting with breeders, growers, processors, researchers, and policy officials in the UK, and have found that there is not absolute opposition to loosening current legislation to allow the commercial use of the populations. Many people we talked to expressed willingness, and often an enthusiastic desire, to work together towards creating an alternative system. From these discussions, we identified several scenarios:

Scenario A: Available options in the existing law

Alternative VCU tests for varieties bred under organic conditions are possible under the EU regulations. Member states can define specific conditions "under which seed can be marketed as regards *in situ* conservation and sustainable use of plant genetic resources". This opens the door to define specific conditions for the marketing of varieties for organic farming.

To varying levels of success some European countries have implemented such alternative VUC tests, but no country has yet implemented more flexible DUS tests for organic or low-input breeding. For this to happen the organic sector will have to show clearly that organic seed can meet the same quality standards as conventional seeds do.

Scenario B: Closed contract

The option of a closed contract agreement is widely suggested as the most immediate way to legally expand the population's commercial use. The model creates one body, thereby arguably bypassing the restriction of DUS and VCU, by entering into an agreement between the producer and the processor. While this may be appealing to a single company in the short term, its long-term attraction is less promising as by definition such arrangements impose restrictions on marketability and will limit the spread and uptake of populations.

Scenario C: The TT model

This model is based on meeting the stated objectives of existing regulations by ensuring transparency and traceability. In this approach seed sold from the populations will meet the rigorous quality of the conventional certification, but through a separate system of control.

It replaces DUS, modifies VCU, and places the responsibility of administration in a locally based, central agency. The DUS alternative is to establish a system where the population is identified by keeping a traceable and transparent track of specific components of the population using genetic mapping. Seed health tests would remain the same with slight changes for organic characteristics. The VCU test can be modified to fit organic conditions and take account of the unique improved characteristics of the populations.

There is some support for this model amongst government officials. It provides a great deal of accountability and transparency. However, given the slow nature of EU legislative changes this may not be the most immediate of solutions and several of the partners and stakeholders interested in commercialising the populations did not seem willing to wait.

Scenario D: Open access model

The model is inspired by the Free and Open Source Software movement (FOSS). Innovators in software design were frustrated by their inability to add to and modify existing software, ultimately impeding technological process. FOSS aims to create a "protected commons," a space in which they could develop content and code that can be freely exchanged and modified. Software created under this arrangement is copyrighted and made freely available through licensing agreements that allow modification and distribution as long as the modified software is distributed under the same license through which the source code was originally obtained.

The same logic can be applied to plant breeding as it is a form of patent-like protection. One example of this idea is Tom Michaels' General Public License for Plant Germplasm (GPLPG) (3) which is explicitly modelled on a type of license commonly found in open source arrangements in software.

The open source option can protect the genetic diversity and rights of farmers to innovate within a legal system that simply does not allow or encourage this.

Cry Freedom

This is the point. Our IPR systems are entrenched and restrictive and resistant to change. Whether by accident, design, or a mixture of the two, it has resulted in a few large companies controlling the genetic resources for all the major UK crops. This lack of competition pushes out small British-owned breeders, limits the commercial appeal of organic breeding and raises the price of seed for farmers and limits their choices.

We have been encouraged by the willingness of some regulatory officials and advisors to discuss an easing of the rules but ultimately for a revolutionary idea such as population breeding to expand out of a niche interest it might well need something like the open source system to give farmers the option to choose to break free of the narrowing and restrictive market and have dynamically evolving varieties that adapt to their own systems.

1. Belicka, Ina, and Mara Bleidere. "Variety Testing for Organic Farming: Current Status and Problems for Europe." *Environmentally Friendly Food Production System: Requirements for Plant Breeding and Seed Production*. Talsi, Latvia, State Stende Plant Breeding Station. 2005. 2-12. Web. 4 Apr 2010.

2. Lammerts van Bueren, Edith. Organic plant breeding and propagation: concepts and strategies. Thesis , Wageningen University,The Netherlands / Louis Bolk Instituut, Netherlands, Department of Plant breeding.

3. Michaels, T. (1999) General Public License for Plant Germplasm a proposal . V1.2 http://www.horticulture.umn.edu/Who_sWho/Faculty/TomMichaels/GeneralPublicLicenseforGermplasm/index.htm

Ten Years of Organic Plant Breeding

The European Consortium of Organic Plant Breeding (ECO-PB) – of which ORC was a co-founder – has been going for 10 years and is holding an anniversary conference in Frankfurt in November entitled "Organic Plant Breeding: What makes the difference?".

ECO-PB has been at the forefront of the development of organic plant breeding and seed production by providing a platform for discussion and exchange of knowledge and experiences, initiating and supporting organic plant breeding programmes, developing scientific concepts of organic plant breeding and the provision of independent, competent expertise to develop standard setting with respect to organic plant breeding.

Its website www.ecopb.org is a treasure house of information and its workshops and seminars draw on the best expertise available from breeders, seed producers and researchers.

ORC is hosting its next workshop -**the 6th European Workshop on Organic Seed Regulation –** on the 21st and 22nd of September. The meeting will evaluate progress made in seed derogation policies and practices in Europe; consider further harmonisation and progress towards a level playing field among (groups of) EU countries.

Representatives from the National Ministries, the EU Commission and Advisors/scientists working in the area of organic seed production or regulation, the official control bodies/departments managing the derogation system, seed companies involved in organic seed production farmers and growers involved in the area will be attending.

To participate go www.ecopb.org or www.organicresearchcentre.com for further details.

Organic farms continue to hold their ground despite the recession

Nic Lampkin *(ORC) and* **Simon Moakes** *(Aberystwyth University)* *present the latest data from the Defra-funded monitoring of the financial performance of organic farms in England and Wales*

The last two years have been tough as far as market conditions for organic products are concerned, but the latest data from the Defra-funded Organic Farming Incomes study, relating to the 2009/10 financial year, show that organic farms have continued to hold their own financially. The analysis utilises data collected through the Farm Business Survey in England and Wales, which included a total of 241 businesses with some organic land. Of these, 189 had more than 70% fully organic certified land and 185 were actually utilised in the analysis.

These organic farms were compared with clusters containing a total of 785 comparable conventional holdings. For each organic farm, a cluster of at least three comparable conventional farms was selected to try to ensure that the comparison between farming types reflects a similar resource endowment, i.e. similar land area, farm type, region and other factors not related to the management system.

The **full sample** analysis utilises data from all 185 organic farms and provides the best comparison of organic and comparable conventional farm income data in 2009/10. Figure /Table 1 indicate that in 2009/10, the profitability (Farm Business Income) of most organic farm types was higher than that of comparable conventional farms. Organic lowland dairy and cropping farm types were considerably more profitable than their conventional comparisons. However, the organic LFA dairy and horticulture (not shown) farm types did not perform as well as conventional, mainly as a result of high feed and other livestock costs in dairying and the specialisation/intensity of comparable conventional horticulture systems. Both types had small organic samples which may have affected the results.

Table 1: Full sample Farm Business Income (£/farm and £/ha) by farm type, 2008/09 and 2009/10

	Sys-		2009/10			2008/09	
Farm type	tem	n	£/farm	£/ha	n	£/farm	£/ha
Cropping	O	31	72946	335	25	81577	358
	CC	260	36767	202	202	66528	322
Horti-	O	10	10006	468	7	12958	649
Culture	CC	47	47510	2633	30	19431	1009
Dairy	O	7	37055	435	7	63140	678
(LFA)	CC	54	46927	523	39	39424	447
Dairy	O	45	69572	530	44	65994	482
(Lowland)	CC	308	52871	424	301	64040	553
Cattle/sheep	O	40	45210	315	39	36895	258
(LFA)	CC	273	36899	292	262	25084	199
Cattle/sheep	O	31	28554	255	33	17871	158
(Lowland)	CC	203	22233	225	223	19864	195
Mixed	O	21	51097	252	19	55644	314
	CC	95	40257	242	95	34507	229

Table 2: Identical sample Farm Business Income (£/farm and £/ha) by farm type, 2008/09 and 2009/10

Farm type	Sys-	n	2009/10	£/ha	n	2008/09	£/ha
	tem		£/farm			£/farm	
Cropping	O	23	69328	299	23	74921	329
	CC	167	39405	212	167	53553	291
Horti-	O	7	-1214	-97	7	24772	2121
culture	CC	33	58300	5174	33	55897	4994
Dairy	O	7	37055	435	7	63140	678
(LFA)	CC	48	45692	518	48	51984	591
Dairy	O	38	68935	503	38	74437	548
(Lowland)	CC	220	49813	418	220	68793	586
Cattle/sheep	O	33	45195	320	33	42319	296
(LFA)	CC	210	36782	298	210	26652	216
Cattle/sheep	O	21	24694	236	21	19761	187
(Lowland)	CC	134	18989	200	134	15005	159
Mixed	O	7	26896	184	7	34256	235
	CC	33	11343	89	33	28824	229

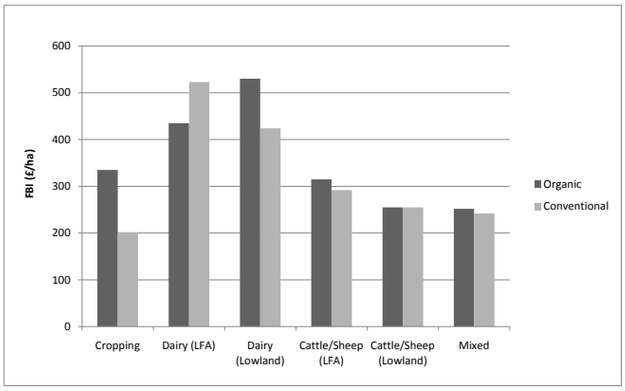

Figure 1: Organic and conventional farm business incomes (£/ha, full samples, 2009/10)

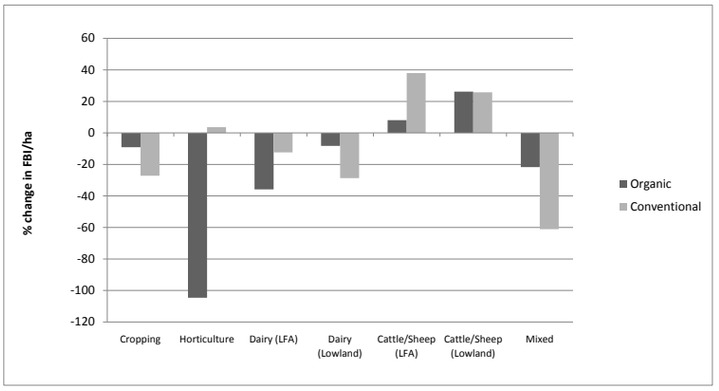

Figure 2: Percentage change in FBI/ha (%, identical samples, 2008/09 and 2009/10)

Identical samples are used to compare the performance of organic and comparable conventional holdings between years (2008/09 and 2009/10). This comparison is a better indicator of year to year changes, with the percentage change in FBI/ha shown in Figure . The chart highlights the loss in profitability of some organic farm types, but also indicates a reduction in conventional profits too. Cattle and sheep holdings were the only real winners, especially for conventional producers that achieved higher prices with lower or similar costs.

Gross and Net Margin data were also calculated for organic and conventional systems, and summary data is shown in Table 3 and 4 below. The dairy sector data indicated reduced output due to lower prices, which outweighed cost reductions, resulting in reduced (often negative) net margins for dairy producers. Beef and sheep margins showed a similar pattern to last year, with both organic and conventional sectors showing large losses per unit of production, only offset by other related outputs (ORO) that include support payments.

Table 3: Summary of organic and conventional livestock enterprise net margins (£/head), 2009/10

£ per head	Dairy lowland		LFA sheep hi-output		LFA suckler stores		Lowl. suckler finishing	
	O	C	O	C	O	C	O	C
Output	1782	1659	87	77	649	686	896	1244
Var. costs	796	800	35	36	289	381	350	680
Gross mar.	986	860	52	41	360	305	546	563
Fixed costs	701	606	70	39	587	420	931	821
Total costs	1498	1406	105	76	877	801	1281	1501
Net margin	284	254	-18	2	-227	-115	-385	-257
Imp. costs$	310	340	31	38	322	380	549	610
Adjust NM	-26	-87	-48	-37	-550	-495	-934	-867
Other*	257	180	63	39	919	556	912	668
Final NM	231	93	14	2	369	61	-22	-199

$ imputed costs for farmer's own labour, land and capital
* includes support payments and by-product and forage values

Table 4: Summary of organic and conventional crop enterprise net margins (£/ha), 2009/10

£ per ha	Winter wheat		Spring barley		Feed beans		Maincrop potatoes	
	O	C	O	C	O	C	O	C
Output	902	909	613	591	631	503	6012	4040
Var. costs	121	473	102	310	128	226	1695	1986
Gross mar.	781	436	511	281	503	277	4316	2054
Fixed costs	650	562	507	513	564	398	2375	1683
Total costs	771	1035	608	823	692	624	4071	3669
Net margin	131	-126	5	-232	-61	-121	1941	371
Imp. costs$	156	167	91	146	113	130	483	592
Adjust NM	-25	-293	-87	-378	-173	-251	1459	-220
Other*	367	315	355	326	354	313	364	326
Final NM	342	22	368	-52	181	62	1823	106

$ imputed costs for farmer's own labour, land and capital
* includes support payments and by-product and forage values

Crop net margin results were quite mixed in 2009/10, but in general output prices and costs were lower in 2009/10. When support payments are included, organic enterprises appear to outperform their conventional counterparts.

Overall, livestock net margins remained negative in 2009/10, but were similar to conventional levels, whilst 2009/10 crop net margin results were mixed but remained significantly above conventional levels.

Comparing production costs across the EU

Catherine Gerrard and Susanne Padel *report on recent working comparing production costs for different organic products across the EU as part of the Farm Accountancy Cost Estimation and Policy Analysis of European Agriculture (FACEPA) project.*

The main products considered were milk, wheat and potatoes and the countries were UK, Denmark, Sweden, Poland, France, Italy, and Netherlands (Table 1). The data were obtained for the year 2006 and all currencies were converted to Euros for ease of comparison.

The results show that feed costs vary between 4.34 Euro cents per litre in Poland and 17.5 Euro cents per litre in Denmark with the UK in the lower half with 7.5 which is reflected in the total variable costs for milk production. Of the countries compared, the UK has the highest yields for wheat production and the second lowest direct costs after Poland. Also potato yields are highest in the UK but the direct costs are also second highest in total. There are two main lessons to be learnt from these tables and from our data collection over the last few months.

Variation between countries

Costs vary considerably between the countries and this could be a result of the nature of the agriculture and the economy of the country involved. In both France and Italy the agriculture is highly regionalised with large variations across the country. Indeed in Italy the milk yields found in a literature review carried out by a visiting researcher in the summer (Dr Francesca Alberti from Ancona University) varied from 2751kg per year to 8524kg per year (Salvadori del Prato, 2007). Also costs in one area of Italy can be very different from those in another.

In Poland, costs in general are low compared with other countries and the costs of seeds are particularly low because organic seeds are not available and therefore the farmers are allowed to buy conventional seed. Poland looks like an extremely attractive place to farm if we look at costs alone, but costs of living are not factored in. Polish dairy farms may be difficult to compare with the UK as in 2006 the average number of dairy cows in Poland was just 6.5 compared with 126 in the UK.

There can also be variation from country to country depending on environmental, economic or agricultural conditions in specific countries in a particular year. For instance in France in 2007 the potato crops were badly affected by blight (Euvrard, 2010) and so yields were low and costs of crop protection high making comparison of costs with other countries not affected very difficult. Data for 2006 – the same year as used in the other countries were not available. With the exception of Poland, seed costs for wheat were similar, but fertiliser and soil improvement costs varied considerably and the costings provided to us are not detailed enough to understand why.

Data collection and classification

The second lesson is that different countries collect and classify their data in different ways so that comparison can be difficult, if not impossible. This is particularly true for indirect costs (such as electricity, fuel use, machinery maintenance and depreciation) at enterprise level. Such costs are notoriously difficult to allocate to a specific enterprise, so different ways to do this exist (e.g. based on average use per hectare, on livestock units, on farmer estimates etc). We did not have indirect cost data for all countries for organic enterprises. In those countries where we did they may not have been allocated to the enterprises in the same way, so the data are not strictly comparable.

Many countries include a calculated "family labour" cost in their overall labour cost, where in the UK this is kept separate as an "imputed cost" and in other countries it may be ignored completely. Denmark and France summarise labour and machinery costs in one category, so the data has now been summed up in the table for wheat in the same way. Table 1 shows higher costs per hectare than in the UK for machinery and labour in Denmark, but lower costs in France and Sweden.

Discussion and conclusions

All of this makes comparison across countries extremely difficult. In the future it would be very useful to researchers and farmers if standardised data collection for enterprise data would be used across Europe. However, it can be interesting to compare the data and see what we can learn about the situation in other countries from these data. As the FACEPA project continues these data will be analysed further. A next step of the project will be looking at the role of the structure of, and the political environment for, the organic farming sector in view of the estimation results for production costs on organic farms. This will include further analysis of how the structure and characteristics of the organic sector relate to production costs: (e.g. specialised vs. diversified; agglomeration vs. sparse organic sector; importance of direct marketing vs. wholesale market oriented) and analysing the relation between the provision of ecosystem services, based on a set of environmental indicators, and production costs. Hopefully this analysis will provide further insights into the factors underlying production costs of organic farming.

Further information on the FACEPA project can be found on its web page at http://www2.ekon.slu.se/facepa/index.html.

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Table 1: Production cost data for milk, wheat and potatoes in selected EU countries, 2006

Country (Source)	United Kingdom	Denmark	Sweden	Poland	France	Italy	Netherlands
Dairy productions costs (€/cow unless otherwise indicated)							
Region	England & Wales (E&W)	All	All	All	All	Firenze	All
Source	Farm Business Survey (FBS)	Videncentral for Landbrug	Jordbruks-verket (JBV)	FADN	Institut de l'elevage	Chiorri et al.	LEI
Yield (kg/cow)	5283	7200	8000	3341	4762		6130
Feed (cent/l)	7.08	15.01	11.26	4.34	5.50		7.98
Total direct (cent/l)	10.71	17.25	13.91	7.81	7.79		12.48
Feed	374	1081	901	145	262	654*	489
Vet & med.	37	161	133	20	24		108
Total direct	566	1242	1113	261	371	684	765
Energy	76		86	71	49	110	147
Interest	37		37		54		792
Contractors	119			23	26	80	154
Other misc.	117		150	223	166	780	411
Labour	387		908	14	184	1395	956
Depreciation	146				321		468
Wheat productions costs (€/ha unless otherwise indicated)							
Region	E&W	All	All	All	All	Firenze	n/a
Source	FBS	Landsbroginfo	JBV	FADN	ChAg Drome	Ilgranoduro.it	n/a
Yield (t/ha)	5	3.7	2.5	2.56	5.5	2.5	
Seeds	82	78	84	23	80	83	
Fertilisers	9	75	140	7	310	42-53	
Crop protection	1						
Total direct costs	92	153	225	30	390	135	
Irrigation					40		
Other energy	7			8			
Interest	35		19			12	
Machinery & labour	639	794	344	70	331		
Other costs	76		72	114		340	
Potato productions costs (€/ha unless otherwise indicated)							
Region	E&W	All	All	All	n/a	n/a	n/a
Source	FBS	Landsbroginfo	JBV	FADN			
Yield t/ha	27	20	14.4	9.1			
Costs	per ha	per ha	per ha	per ha			
Seeds	1328	841	1738	311			
Pre-sprouting			130				
Fertilisers	91	75	180	20			
Crop protection	96		108				
Total direct costs	1515	916	2156	330			
Other energy	31			46			
Other costs	424		2066	635			
Interest	62		73				
Machinery & labour	5275	2656	654	525			

*Includes veterinary costs

We love organic. Should we love the campaign?

ORC, and in particular director Nic Lampkin, were early and persistent supporters of the push to access EU funds for a generic organic marketing campaign, keeping the pressure on Defra when few others were interested. So we are delighted the "Why I love organic" campaign is up and running. Reports of its first six months are now available. ***Lawrence Woodward*** *(with guidance from Susanne Padel) reflects.*

The "*Why I love organic*" (www.whyiloveorganic.com) promotion campaign aims to help consumers discover what organic means and why it's worth it. Launched in January 2011, it is co-ordinated by Sustain with support from the Organic Trade Board, and is funded by £1m of pledges from over 90 organic bodies, from big brand companies to small farmers, and EU match-funding of £1m.

The campaign uses a combination of press advertising, PR and digital marketing. Its strap line "*There are lots of reasons to love organic, discover yours*" invites people to the website which features four key messages: "*great tasting food*", "*more natural food*", "*better animal welfare*" and "*better for nature*".

Although probably not universally liked, the campaign's strategy was strongly endorsed by the pledgors. It features celebrity supporters - the Radio 1 DJ Sara Cox was recruited to help deliver the campaign key messages and encourage consumers to visit the website and a celebrity "Organic Heroes" book is planned for later this year – the use of social media, and targets online and printed "lifestyle" magazines (such as Female First, New Mother, Kitchen Garden, You, Closer, OK, Heat, Waitrose Food, Tesco Real Food).

Amongst the highlights of the first six months was a "Bugs Radio Day" which was heard by over 8 million listeners and a stand at the Real Food Festival where 500 people were encouraged to put their reasons to love organic on the website and over 300 signed up for the newsletter. As a non – Twittering, Facebook virgin and infrequent website browser I am not really in a position to judge the impact of these approaches but I am impressed by the fact that nearly 1000 people have bothered to put up on the website the reasons why they love organic. And I do like the "everyday" people in the leaflets also saying why they do.

According to the reports the campaign is pretty much hitting its targets but is it having an impact? The targets are tracking PR output and delivery so hitting a projected advertising spend target is not saying much and frankly I don't think that having only 2 celebrity tweets when the target is 5 is telling me much either.

I want to know about the impact on the market and I'm sure that others do too. But of course it is unrealistic to ask for that because; a) its early days, b) only at the end of the campaign will we really know and c) market conditions are so challenging today it is hard to see what a realistic market yardstick might be. But it would be good to know if the campaign has one.

Nonetheless the campaign is in place and organic is being promoted in a systematic way which, with conditions as they are and with a debunking and tending towards hostile attitude in parts of the media, is a very good thing. In one place the report points out that media editors want sensationalist not "good news" stories about organic and elsewhere recounts how there was some media interest in the story of GM toxins found in unborn babies but editors declined to carry it because it was too sensationalist.

ORC has been making the point to the campaign steering group that it should involve and encourage greater involvement from producers. This is a two way street and producers can make use of the material generated by the campaign in the following way:

- Order some of the campaign leaflets to distribute to customers. Email: otbpr@haygarth.co.uk;
- Posting their personal reasons to love organic on the website and in particular encourage friends and customers to do the same;
- Put a link to the campaign on their website. For a banner / logo contact otbpr@haygarth.co.uk;
- "Like" the Why I Love Organic Facebook page and post on the wall, follow it on Twitter
- Pledge to the campaign –more funds means that more work can be done. For information how to pledge see www.organicuk.org or contact Catherine Fookes catherine@organictradeboard.co.uk.

So do I love the campaign? I'm a celebophobe, so not yet. Do I like it? Yes, with reservations. Should I embrace it? Yes and I would like to dance with it – if only we went to the same places.

Someone in the ASA doesn't love organic

The Advertising Standards Authority (ASA) has ruled that an ad in the Why I Love Organic campaign has breached its advertising code and it cannot now be used. The ASA upheld a complaint that the ad implied that animals farmed in a non-organic way had lower welfare standards than those that were organically farmed. Although agreeing with evidence supplied by Organic Trade Board that organically farmed animals experienced high animal welfare conditions, amazingly the ASA ruled the ad was misleading because it couldn't be shown that "in all cases" organically farmed animals experienced better conditions than non-organically farmed animals.

Even more staggering is the fact that the ad had been approved by the ASA's own Committee of Advertising Practice and its expert staff had recommended that the complaint be turned down. However, the ASA Council ignored this and ruled against it.

A touch of holiday sunshine for Organic Wales

As the Welsh Assembly members pack up for the summer recess Deputy Minister for Agriculture, Food, Fisheries and European Programmes, Alun Davies has announced new support arrangements for organic farming in Wales.

There had been worries that the new Labour government might abandon its predecessor's commitments but they have now confirmed that organic farmers in Wales will have access to an organic maintenance fund within the Glastir scheme - the Welsh Government's flagship sustainable land management policy.

This new arrangement will mean that they will no longer be eligible for the 50% points discount for entry into the Glastir All Wales Element and the Deputy Minister said that officials will be on hand to help organic farmers attending Glastir surgeries amend their applications.

In a statement to Welsh Assembly members, Davies said that he was committed to ensuring a sustainable organic sector in Wales and that having "listened closely to organic sector representatives" he had decided to offer extensions to existing Organic Farming Scheme agreement holders to cover the period from the end of their current contracts up to the end of Rural Development Plan (RDP) period (31 Dec 2013). He also announced a further application window for the Organic Farming Conversion Scheme later this year and in 2012.

The Deputy Minister said it was his intention to "ensure ongoing support to existing organic farmers" and to enable "organic producers to make longer term planning decisions about the future of their business." He has instructed officials to draw up proposals for a new organic maintenance fund within Glastir for the next RDP period (2014 - 2020) following publication by the EU of the new Rural Development Regulations and expects "details of these proposed new arrangements to be available for discussion with the organic sector towards the end of this year."

Meanwhile Organic Centre Wales (OCW) has had funding extended until the end of the year pending the Welsh Government inviting tenders for organic support services from January 2012 onwards. OCW has been facing funding cuts and uncertainty about future arrangements.

And what about the Swiss?

Comparisons – some say – are invidious but can make interesting reading; especially if the comparison involves what might be thought of as "Organicland" (Switzerland) and our own "sceptic isle". **Martina Niggli** *recently visited us as an intern and highlights the differences between Swiss and English support.*

First, although since 2000 the rate of growth in organic land in England has been greater than in Switzerland; >10% of agricultural land there is farmed organically compared to 4% in England (2010 figures). Second, the grants for supporting organic farmers are significantly different.

Table 1: Grants for maintenance of organic farming

	England *Organic Entry Level Stewardship* (£/ha/year)	**Switzerland** *Ordinance of Organic Farming* (£/ha/year)
Vegetable, orchards, berries, vineyards	£ 60 (for all non LFA-land)	£ 904.50 (1350 CHF)
Arable land	£ 60 (for all non LFA-land)	£ 636.50 (950 CHF)
Other agriculture area	£ 60 (for all non LFA-land)	£ 134 (200 CHF
Upland OELS*	£ 92	is considered in the calculation of the AWU**

*Upland OELS: at least one parcel of eligible land within the Severely Disadvantaged Area. **Agricultural working unit

Swiss organic farmers have to observe the Ordinance of Organic Farming which is adapted to the EU organic regulation (Council Regulation No. 834/2007). So in terms of required farming methods it is comparable to the English Organic Entry Level Scheme. However, in operation it is very different.

The Swiss scheme is a straight forward grant available to any farmer who is eligible and meets the requirements of the "Ordinance of Organic Farming". So there are no OELS options to consider and apply for. But the eligibility criteria in Switzerland require that a farmer has to have completed an agriculture apprenticeship or a higher education course. Grants are only available until age 65.

In England the minimum size a farmer has to cultivate to qualify for OELS support is 3 ha, in Switzerland there is a different determination base: the Agriculture Working Unit (AWU). A farmer has to achieve at least 0.25 AWU to receive grants. The calculation is based on the type of agricultural land area and of livestock (Table 2).

Table 2: Calculation of Agriculture Working Unit (AWU)

Agricultural land area	*AWU/ ha*	*Livestock*	*AWU/ LU*	*Additional allowance*	*AWU/ ha*
Agricultural land area without speciality crops	0.028	dairy cow, milk sheep, milk goats	0.043	Slope in highland	0.015
Speciality crops without vineyards in steep slopes	0.30	fattening pig	0.007	Steep slope in highland	0.03
Vineyard on steep slopes and terraces	1.00	breeding pig	0.04	For organic agriculture	+20%
		other livestock	0.03	Standard orchard trees	0.001 per tree

Specialty crops = Vegetable, orchards, berries, vineyards

Healthy feet, happy feet, happy cows, better yields

Katharine Leach, *who has recently joined ORC as Senior Livestock Researcher, worked on the Healthy Feet project whilst in her previous post at Bristol University. Here she outlines the project and describes how one farmer and his cows reaped the benefit.*

The Healthy Feet project involving around sixty organic dairy farmers and their herds has demonstrated the potential to change the life of dairy cows for the better – and the farmer's bank balance. Funded by the Tubney Charitable Trust, its aim was to explore practical ways of reducing lameness in dairy herds. The project began in autumn 2006 and continued for four years.

Farmers taking part in the project were visited annually by trained project representatives from the University of Bristol. Input included scoring the whole milking herd for lameness, using a method similar to the DairyCo mobility score, analysing records of lameness cases to gain a picture of the types and patterns of problems and discussing with the farmer possible causes and solutions. An initial visit from a project veterinary surgeon was available if desired.

The project network provided contacts with suppliers of useful materials or information, and farmers in similar situations. Farmers then drew up their own action plans, and aimed to make certain changes to management or treatment. Group meetings were organised at which farmers could exchange ideas and experiences.

The best way to give an idea of what happened is to look at the experience of one participating farmer. Richard Abell, an organic dairy farmer from Herefordshire, has seen many benefits from the changes he has made to help reduce lameness. Historically sole ulcers were a problem, but thanks to several changes this is no longer the case.

Richard's attitude towards lameness changed over the four years of the project: "I used to think you could never be without lame cows, it was the norm, but actually it is possible to reduce lameness so you only have just the odd case".

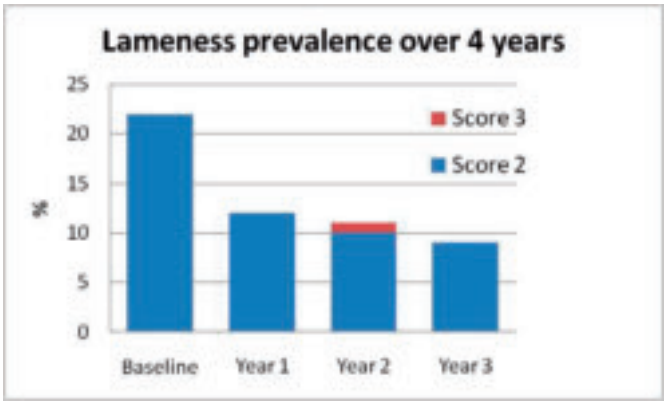
He made a number of fairly simple and straight forward changes that cumulatively have brought about a massive reduction in lameness.

- **Putting down rubber matting t**o encourage cows into the parlour and to reduce the time cows stood on concrete, Richard placed matting throughout the parlour. He was so pleased with the results he quickly extended it out of the parlour exit to reduce twisting and turning of cows' feet on rough concrete.

Before: Lumpy Concrete After: Rubber Matting

- **Buying a new crush t**o make trimming cows' feet a quicker and easier job. According to Richard, "Spending the £2500 on a new crush is worth the money as it is well built and makes trimming feet a quicker job."
- **Improving walking surfaces** – to aid the cows' mobility a dedicated cow track was created and woodchip was put down on a steep hill. "We get the woodchip delivered free by a local tree surgeon, good for cow flow and less foot problems"
- **Mobility scoring and prompt treatment –** Richard's top tip to other farmers is mobility scoring "Once you start really looking at the cows you cannot stop, it completely changes the way you look at them walk". Richard stands back and watches his cows walk past him when he gets them in for milking, to ensure he sees every cow walk, and uses the Dairy Co mobility score to pick out cows for treatment (Score 2 & 3's).

As a result of these changes lameness in the herd has reduced by over half:



At the end of the project Richard was asked about the benefits of these changes.

*Q: How do you feel **you** have benefited as a result of actions taken to reduce lameness?* **A:** A lot less foot trimming to do to cure cows since lameness has reduced; used to be 2-3 cows a week needing trimming, now it is more like 1 a month; more time to do other things on and off the farm

Q: How do you feel the cows have benefited as a result of actions taken to reduce lameness? **A:** Fewer lame cows which is obviously good for them; fetching cows in from grazing is a much quicker job now there is no lame group at the back slowing things down, so again cows have more time for other things.

Q: How do you feel the farm has benefited as a result of actions taken to reduce lameness? **A:** No noticeable difference to costs, but yields are definitely better with fewer lame cows, not so easy to see, but you know it's there.

Richard Abell's encouraging message to other farmers – "If you sort out your problems and spend more time getting on top of lameness, in the long run you will get more time for other things".

Animals don't use words so try thinking in pictures.

Dr Temple Grandin designs livestock handling facilities and is a Professor of Animal Science at Colorado State University. She is world renowned for her knowledge of animal behaviour and improving animal welfare on farms and in slaughter plants. In June she gave a lecture at the Bristol Festival of Ideas. **Katharine Leach** was there.

Temple describes herself as "thinking in pictures" and believes this is vital to understanding animals. For example, viewing handling systems literally from the animals' point of view enables us to notice "distractions" that will prevent them from voluntarily taking the intended route. Some are obvious, others less so; for example shadows, changes of light intensity, reflections, changes of level, changes of surface, people, moving parts of equipment.

Removing features such as slippery floors is important; as is planning the flow of the animals. Using their natural inclinations to return to a familiar place, to follow herdmates and avoid unfamiliar objects can improve handling and flow, as can understanding their "flight zone" and fitting strategically placed turns in the raceway. This does not always require major structural changes. Temple reports improving handling systems with carefully positioned lights, large sheets of cardboard to create solid sides to raceways and repositioning or screening humans from the animals' sight as they pass along the race.

Large size units are not necessarily a problem, but production systems which push animal metabolism beyond its realistic limits are. Temple warns of "exporting problems" by forcing production into countries with poorer standards.

She thinks there should be financial rewards for animal welfare but having seen incidents of poor coat condition and lice infestation in organic cattle in other countries warns that simply being certified organic isn't enough.

The organic feed dilemma

Whilst the stop/start push to 100% organic feed staggers on, the Commission has weighed in with a proposal to add to the regulation the long standing organic principle that livestock should generally be fed from the farm and/or the region. Moving organic production closer to organic principles is a good thing, but this can be beset with problems.

It was interesting therefore to hear the views of the highly respected and long standing organic livestock researcher Prof. Dr Albert Sundrum of the University of Kassel at the recent Food Quality and Health (FQH) conference.

Speaking about the "Impact of Organic Feed on Pig's Health" he pointed out that the organic concept of human and animal health is based on the idea that organic plants will be of consistently high quality and contain beneficial levels of nutrients, minerals, micro-nutrients and energy (whether in a dietary or holistic sense).

However, many studies show that, although there are some distinct trends, there is huge variability in organic produce (both food and feed). Sundrum argues that whilst this has been discussed in relation to human consumption, its importance has been overlooked in livestock feeding – a problem made worse by the large variability in quality, nature and management of the livestock systems themselves. All of which could have a massive impact on the effectiveness of the organic diet and on the viability of using 100% organic feed.

Sundrum reported a study of 101 organic pig farms in 6 European countries. Only 6 farms produced 100% of their own feed although just over half used more than 50% home grown feed. Critically:

- 46 out of the total of 101 farms did not analyse any of the feed they used
- 64 did not test for fungal toxins in the feed or straw
- 16 made no nutritional calculation of the rations they fed.

This is concerning given the challenge of maintaining adequate levels of production and animal health and welfare whilst pursuing the goal of 100% organic feed. Prof. Sundrum's study also showed that very few of the farmers are balancing or tailoring feed rations to the pigs changing life cycle - of which he is very critical.

Considering these findings the debate about 100% organic feed has been very one dimensional and unsatisfactory, at least for organic pigs and poultry. Given the variability in organic feed quality, farm systems and most critically, management skill, Sundrum argues that the move towards 100% organic feed should not be driven solely by the certification of feed sources. The monitoring of animal health and welfare should be at least as important and arguably more so.

If ever an issue demanded a holistic approach this is it.

Lawrence Woodward

Legumes at Cereals 2011

The Cereals Event seems to get stronger and more diverse every year. This year ORC researcher **Oliver Crowley** *was there in the HGCA biodiversity research area talking about the LegumeLINK project with the aid of a plot of mixed legumes. But his conversations took a surprising turn.*

We had sown the All Species Mixture plot in September 2010 with the idea of demonstrating mixtures of legumes growing together and the LegumeLINK project generally. This rather late sowing was followed by a particularly harsh winter and a very dry spring. Consequently the mixture did not look at its best.

However it was species rich and most of the legumes were in flower, albeit at a low density. It did attract attention with a reasonable number of farmer visitors over the two days. Surprisingly, although there were some organic farmer visitors, the majority were conventional farmers.

Their response was very encouraging. Most of them had no experience of growing legumes, and as a result wanted general information on how to grow them and which species are suited to particular purposes. The concept of optimising fertility building crops with diverse mixtures was less relevant than for farmers already growing legumes, but they were very interested in the concept and benefits of species mixtures.

Conventional farmers are unlikely to take fields out of cash crop production for a prolonged period, but increasing N fertiliser costs are an incentive and consequently most of them wanted to know which species would be suitable as a short term fertility building cover crop that could be squeezed in-between cash crops in the summer or over winter.

There was a lot of interest in crimson clover; and amongst those farmers with livestock, Sainfoin for its reputed anthelmintic properties and high tannin content which potentially can improve protein use efficiency in cattle. Undersowing and growing legumes as a bi-crop were also frequently raised topics.

For most of the two days I found myself promoting the general benefits of legumes and cover crops rather than the improved additional benefits of growing diverse mixtures. But at least it shows that conventional farmers are now showing an interest in fertility building and soil conservation. More information on LegLINK can be found at http://tinyurl.com/3ldcydm.

CAP Reform: From pillar to post to pavement?

It seems that the prospects for organic farming in a reformed CAP after 2013 have taken on a more positive look – not enough to launch a "the future is bright, the future is organic" campaign – but distinct enough to see through the grey mist of future years. But **Lawrence Woodward** *thinks the CAP could be pushed from pillar to post and finally to the pavement.*

The reality is that agricultural spending in the EU is to be cut in real terms. The Commission using ingenious reallocations plus smoke and mirrors says it will be "frozen" but a reduction of CAP spending by 3% as a proportion of an overall EU budget which is economically and politically under threat is a real cut. In fact it is less of a cut than some of us thought it would be and much less than I believe will eventually happen.

Despite a European Parliament resolution demanding more funding for Pillar 2 (within the Dess Report), some conservation, environmental and rural development bodies fear that that the sharpest cuts will fall on agri-environment schemes so that across the board income protection for farmers can be maintained in Pillar 1.

The Commission denies this and by some adept wand waving might largely avoid it by relabelling or recategorising other funds. Still, the next few months will see plenty of debate and hard negotiations on issues that will become more and more pressing in the future:

- How "greening" Pillar 1 will actually happen and with how much money
- What is really meant by flexibility between the two Pillars
- The speed at which and the amounts farmers in new Member States will receive in direct income support
- The principle and extent of capping the level of payments to farmers
- How and to what extent support can be given to small farmers

At its heart CAP is about providing income support for farmers. This was enshrined in the Treaty of Rome and the decision to leave the two Pillar structure intact with only relatively minor adjustments is confirmation of the status quo. So is the allocation of €281.8bn to the 1st Pillar (income support) and €89.9bn to the 2nd Pillar (agri-environment) in 2011 budget proposal.

In the long run though – and wider economic circumstances might make it medium or short – something will have to give. The costs and inequality of the current CAP structure is out of line with the aspirations of an enlarged EU and both are at odds with economic reality. Not to mention the fundamental incompatibility of sustainability and competitiveness on the world market.

At present there are few signs that this is being faced up to but until it is the tensions and stresses will increase and intensify. Unfortunately reducing Pillar 2 payments might be seen as the easiest way to achieve the plastering over the cracks compromises necessary to keep the edifice standing in the meantime.

Events and announcements

Organic Research Centre seeks new Chair of Council of Management

The Organic Research Centre was founded thirty years ago to work on the development of an agricultural and food system that it is equitable and fit for a world of finite and diminishing resources, an objective which becomes increasingly relevant as each year passes.

In pursuit of this aim, ORC is now the UK's leading independent organic research centre. Its activities range from policy development and practical research on innovative farming techniques to public information and education. Both Defra and the EU award substantial research projects to ORC, which draw on the depth of expertise within the organisation and which are frequently implemented in conjunction with partners from across Europe and beyond. A partnership approach is also used for much of the "hands on" work with UK farmers.

The ORC's 25 researchers, support staff and interns work at Elm Farm, a beautiful site in the heart of the Berkshire countryside as well as at Wakelyns Agroforestry in Suffolk. The property includes an impressive new conference facility. The Director operates within the guidance set by the Council of Management, which currently consists of eleven members.

The present Chair, who has been in place since the foundation of the Centre, now wishes to stand down. Applications are therefore invited for his successor. The post is not remunerated, but all reasonable expenses will be met. The appointment will be for an initial term of three years.

More information on ORC and the position (including a person specification) can be found under 'Working with us' at www.organicresearchcentre.com or requested as documents from Pam Bijak, pam.b@organicresearchcentre.com, 01488 658298.

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To order, contact: Gillian Woodward, gillian.w@organicresearchcentre.com, 01488 658298

Events

ORC is holding a series of major events this year, to which you are warmly invited.

10th/11th September 2011 (2-4pm): Elm Farm participates in West Berkshire's Eco-Buildings Open Days
Elm Farm, Hamstead Marshall

21st September 2011: Ecological Plant Breeding Network international workshop on seed regulation.
Elm Farm, Hamstead Marshall

Autumn 2011: Producer network events for dairy and agro-forestry research projects. Details to follow.

18-19th January 2012: Organic Producers Conference
Aston University, Birmingham

For further details, visit the Events link at www.organicresearchcentre.com or contact Gillian Woodward, gillian.w@organicresearchcentre.com, 01488 658298

Friends of ORC may qualify for free or reduced rates on events. Please check for details. Not a Friend yet? You can become one using the 2011 Appeal form available from our website.

Organic Research Centre 2011 Appeal – please support us!

Our work at ORC is unique and vital to the future of organic farming, but we need ongoing financial support that will enable us to continue our important research, training and policy work to demonstrate sustainable, ecological solutions to the food security, public health, climate change, biodiversity, economic and other challenges global society is now facing. To remain independent, to be able to challenge the accepted view of things and to be able to make the case for an ecological, not industrial farming future, we need your support.

You can download our 2011 Appeal form, with details on becoming a Friend of ORC, subscribing to the Bulletin and much more at www.organicresearchcentre.com. Please give generously!