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Cover: The new cattle agro-forestry trial is planted out at Elm Farm in April - see page 13 *(Photo: Jo Smith)* 



# Organic Research Centre Bulletin No. 104 - Spring 2011



### News in brief

#### Organic Research Centre seeks new Chair of Trustees' Council of Management

The Organic Research Centre was founded as a charity (the Progressive Farming Trust Ltd.) over thirty years ago and is now the UK's leading independent organic research centre, with 25 staff, an annual income of £1.3m from UK and EU contracts and charitable sponsors, supporting a wide range of research and knowledge exchange activities.

The Charity is seeking a new Chair to succeed Christopher Bielenberg, who has held the position since its foundation.

For further details of the position, please see the full announcement on the back page of the Bulletin.

### Making the most of on-farm resources: producer questionnaire

As part of our agroforestry programme we would like to find out how UK producers manage and use the woody elements (hedgerows, shelter belts, coppice and woodland etc) on their land. This will give us a better understanding of current farmland wood usage and gauge whether there is potential for producers to gain more from the woody elements on their land, both financially and ecologically. We have constructed a short on-line questionnaire to gather this information, which should take no longer than 10 minutes to fill out. Please visit our web-site www.organicresearchcentre.com for the link to the questionnaire. Alternatively, if you would rather receive a paper copy, contact Jo Smith on 01488 658298 or jo.s@organicresearchcentre.com.

### UN report says agro-ecology is answer to food security

A new UN report states that agro-ecological approaches like organic farming are the way of addressing food needs in critical regions and can double food production in 10 years. The report by Olivier De Schutter, UN Special Rapporteur on the right to food, was based on an extensive review of recent scientific literature and concludes that by applying agro-ecological principles to the design of agricultural systems we can help to put an end to food crises and address climate-change and poverty challenges.

### Does soil biota benefit from organic farming in complex vs. simple landscapes?

Organic farming can counteract detrimental effects of agricultural intensification on farmland biodiversity, according to a new paper in the journal Agriculture, Ecosystems and Environment. The paper reports measurements on diversity and abundance of arable weeds, earthworms and collembolans, soil respiration rate and microbial biomass in 12 pairs of organically and conventionally managed fields in landscapes differing in structural complexity.

For more details, visit the News link at www.organicresearchcentre.com.

#### Have UK organic sales turned the corner?

The Soil Association's 2011 Organic Market Report has reported a 5.9 per cent fall in UK organic sales from £1.84bn to £1.73bn in 2010. Sales of organic fresh fruit and vegetables and dairy were down by 6.3% and 2.7% respectively, fresh meat by 5.8% and organic ready meals by 36%. Supermarket sales were down by an average 7.7% and the amount of land in organic production by around 10%. But there are positive signs; supermarket sales still achieved £1.25bn, organic baby food sales increased 10.3% and organic textiles were also up. The slump showed clear signs of bottoming in the last quarter of the year and, critically, the SA estimates that 86% of UK households have bought organic products.

## ORC and British Ecological Society confer on the role of organic farming in delivering functional biodiversity and ecosystem services

The increasing evidence that organic farming has benefits for biodiversity and the delivery of ecosystem services was under the spotlight at a joint meeting of the Organic Research Centre (ORC) and the British Ecological Society (BES) held on 17<sup>th</sup> May 2011 at Elm Farm. The event brought together leading scientists, policy makers and NGOs to discuss the role of organic farming in delivering biodiversity and a wide range of other ecosystem services within a productive UK farming sector. At the heart of the meeting was a discussion of the critical issues around sustainable farming and land-use including apparent tradeoffs between different demands on land, such as food production, biodiversity and other ecosystem services.

### IFOAM publishes report on organic farming as a systems approach to meeting policy goals

This dossier builds a strong case to demonstrate that organic farming can effectively deliver a wide range of policy goals in an integrated way. It explains the origin of the organic farming concept and the development of organic agriculture as an holistic approach to sustainable food production and identifies the benefits that result. Improved organic matter management, increased carbon sequestration in soils and the prohibition of chemical fertiliser use contribute to climate change mitigation potential, while longer crop sequences, spatial design and in general a higher tolerance level for wild plants and pests under organic farming result in increased biodiversity compared to conventional farm systems. Crop rotation, nutrient recycling, restricted use of external inputs and crop mixtures contribute to enhanced soil structure, long-term soil fertility and improved groundwater quality, as well as improved efficiency of nutrient and energy use. The report concludes that organic farming represents an effective and cost-efficient measure to meet several sustainability goals, highlighting the synergistic combination of environmental effects, lower transaction costs and enhanced consumer support through premium prices.

### 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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### Obstacles the Tsunami didn't sweep away

One would have thought that the horrific events in Japan would have led to universal recognition that further development of nuclear power is folly; that there would now be a wholesale, vigorous effort to develop and implement genuine renewable energy schemes: that collectively we would have learnt that trying to dominate nature by high technology is a fatal mistake; we had better and urgently renew our faith in technologies that are appropriate to our fragile planet.

The proverbial "thought" followed a funeral believing it to be a wedding. He made a mistake because he'd never done it before. Incredibly, politicians, "experts" and professional commentators seem set on leading us to the graveside even though the road is well trodden and the hole is visible to anyone who cares to look.

But complacency, arrogance, prejudice, vested interest and dumb bloody mindedness are obstacles that get in the way and seem to be untouched by the horrors of Tsunamis. Yet, they are found everywhere and need to be swept away – globally and locally.

Our own local manifestation is that West Berkshire Council has only achieved 0.005% of its renewable energy development target yet it looks like it will turn down an application to erect two wind turbines on another organic farm. We live in an Area of Outstanding Natural Beauty but these schemes are compatible. Yet those obstacles are widespread in hearts, minds, pockets and property valuations and their bleak shadows dominate policy, politics and planning. The words "business as usual is not an option" are spouted everywhere; but it is and is very much the predominant one.

The latest Spelman spectacular in Brussels is a good example. So what that the majority of EU citizens do not want cloned animals or their offspring in the food chain; so what that they don't want GM; who cares that they want labelling, transparency and a precautionary approach to technology. All this would be "bad for business" – and that is not an option.

Contrast Germany's Environment Minister Norbert Röttgen writing recently: 'Environmental policy must be safety policy in the 21st century. This means that we must end the economic use of nuclear energy and embark on the path to the age of renewable energy, as called for under the German government's energy concept in the fall of 2010. Now we must take this path more quickly and decisively. The prospects of this happening are good, because there is almost universal, cross-party consensus for it. And, contrary to what some critics are saying, Germany is not going its own way in pursuing this approach. Instead, it is the reasonable and correct path if we are to have a safe and affordable energy supply, one that does not continue to cause global warming and does not exploit natural resources in a way that would be irresponsible to future generations. We must be trailblazers and show that this path is feasible, especially in a highly industrialized country like Germany. If we proceed successfully, others will follow.'

Mrs. Spelman and the UK government don't believe they are being complacent, arrogant, prejudicial, bloody minded or serving vested interests. They just know best like the Japanese did when they built nuclear power stations in an earthquake zone.

Those of us who are less certain about things have to keep going.

#### Lawrence Woodward

#### Welcome to the new-look ORC Bulletin!

It's taken a little longer than anticipated, but here it is – the result of our review of the Bulletin last year. As indicated in the last Bulletin, we are moving to quarterly publication, supported by a monthly e-bulletin of news-in-brief items. While technical problems with our website have delayed the launch of the e-Bulletin, we aim to have resolved these by the time the next Bulletin is published in July. In the meantime, subscription details for the new Bulletin can be found on the back page and insert and we would welcome your comments and feedback.



### A festival of information and discussion: the ORC Organic Producer Conference 2011

300 participants, among them 150 farmers and 100 researchers, attended this year's producer conference. Some 50 presentations were made; some were challenging, some controversial, generally stimulating and almost always informative, confirming that this is the conference UK organic producers must attend. Here are reports on all the sessions. All the abstracts and presentations can be found on www.organicresearchcentre.com.



#### **Cotswold Water Park provided idyllic setting**

#### **Opening plenary: The changing policy environment and impacts on organic producers**

Helen Browning (National Trust/Soil Association), David Baldock (IEEP), Nic Lampkin (ORC)

Helen Browning covered the background and context of current organic farming policy. She suggested that the organic sector would be best served by thinking of how we might want to respond to Government in the new political arena of "Big Society" and CAP reform. This needs to be done in an inclusive, non-lecturing way and show how organic farming can address the environmental, societal and economic tensions in farming, food, energy and land management.

David Baldock's talk covered CAP reform and the potential for organic farming. CAP reform will increase demands for agriculture to deliver public goods. The presentation outlined the scale of environmental challenges facing the EU. Agriculture has an important role to play in protecting the environment and organic farming, as one of the most beneficial farming systems for environmental public goods, is particularly important.

Nic Lampkin explained that the situation of organic agriculture in CAP reform was complicated because of the often conflicting perceptions of two key issues; land management to deliver sustainability and public goods; and the role and operation of the market. This is a particular problem with UK policy makers who want simple boxed solutions and therefore fail to see that organic farming can deliver a multi-functional, farming systems approach which addresses multiple goals. Nic argued that organic action plans can help resolve this perceived conflict and assist in making multiple goals more complementary and integrated. Organic farming could be part of the "greening" of Pillar 1 although this is not currently on the political agenda. In any event, CAP reform should increase support for organic farming because agri-environment support is still justified.

#### Horticulture: Protected cropping and more

Kathleen Hewlett (Soil Association/SA), Alan Schofield (OGA/Growing with Nature), Les Lane (XL Horticulture) presented by Roger Hitchings (ORC), Peter Dollimore (Hankham Organics)

Kathleen Hewlett gave an update on organic standards development for protected cropping, feedback from the latest SA consultation and the timeframe for the next stages in the process. Alan Schofield responded to this with a 'grower's perspective', drawing out those areas where there is support of the proposed standards, and those areas that are contentious. Roger Hitchings gave Les Lane's presentation on the latest technology concerning specialist UV stable films in covered crops and there was discussion as to the practical use of such a product in various growing situations. Peter Dollimore gave a well-received presentation on his experiences in using green manures, highlighting suitable species and combinations tested at Hankham Organics and emphasising the importance of timing.

#### Soil structure, biological activity, management

Christine Watson (Scottish Agricultural College), Julia Cooper (Nafferton Ecological Farming Group), Paul Gosling (University of Warwick), Heather McCalman (Aberystwyth University) This session explored soil health in terms of nutrient profile, structure and microbial life. Recent research was presented on phosphorous management through phosphate rock additions and the use of buckwheat as a green manure. Good soil structure supports rich microbial life which is integral to the performance of the crops. The importance of bulk density and porosity and their implications for soil behaviour and cropping were discussed. Microbial additives are available on the market but research shows they are not necessarily effective and that supporting native soil fauna is a sensible alternative strategy. In Wales, good soil management practices are being brought together and their implications for crop quality explored in the PROSOIL project.

Next year's conference will be held on

#### 18-19<sup>th</sup> January 2012 at Aston University, Birmingham

Work is starting on preparing the programme. Suggestions for and offers of contributions welcome!

#### Ruminants: Feeding for health and profit

John Bax (dairy consultant), Markus Hohl (dairy farmer, Devon), Jeremy Hoskins (beef farmer)

Organic producers are facing rising feed prices, with beef and sheep concentrates up 6% on last year and up 32% compared to equivalent conventional feeds. There is an urgent need, therefore, to identify how to produce milk and beef successfully and sustainably from systems that minimise the input of feeds while promoting animal health. John Bax outlined the key role of nutrition from quality forage in promoting good health and longevity through its influence on rumen microflora; the practical application of this was demonstrated by Markus Hohl. He has been able to achieve an impressive lifetime yield of 53915 litres from forage by producing a wide variety of good quality forages, supported by healthy soils, a diverse crop rotation, and feeding practices that optimise feed intake. The role of forage in finishing beef cattle was illustrated by Jeremy Hoskins who highlighted the importance of knowing the value of forage on the farm. He regularly tests stored forage to match nutritional needs with optimal feed provision. Both farmers stressed the importance of breed selection in maximising production from forage.

#### Novel horticultural crops and genetic resources

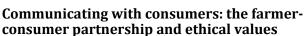
Anton Rosenfeld (Garden Organic), Phil Sumption (Garden Organic), Sally Howlett (ORC), Scott Sneddon (Scott's Garden)

Although growers are 'spoiled for choice' by the range of commercially available varieties, organic quality seed is limited. However, there is remarkable diversity of plant genetic resources available in the UK and information about new projects drawing on non-commercial sources was presented. Garden Organic's "Sowing New Seeds" programme has found that some exotic varieties have been successful in UK conditions; "The Leafy Veg Project" tested heritage varieties and found that many of them provide commercially viable options. ORC is participating in a European project (SOLIBAM) to develop varieties and populations for organic systems. However, there were mixed feelings from growers about the marketability of novel varieties. On-farm selection and seed saving became a theme in the session, with many growers supporting the idea of increasing their own control over seed resources and whilst some crops are challenging, reporting successful crops from saved seed.

### Climate change and sustainability: tools to improve farm performance

#### Rachel Taylor (Bangor University, Laurence Smith (ORC), Tim Downes (dairy farmer)

The tools available for assessing farm Greenhouse Gas (GHG) footprints vary in detail, complexity and cost. When choosing farmers should consider end use, how much time they are prepared to spend using the tool, and what the system boundaries of the tool are. This is a new field and tools continue to be developed and improved: more work is being done on methane emissions; ORC is developing a new tool for assessing provision of 'public goods' for which there has been positive feedback from pilot studies. In a changing situation information exchange between farmers about the use of these tools is particularly valuable.



#### Susanne Padel (ORC), Sue Fowler (Organic Centre Wales/OCW), Roger Kerr (Calon Wen)

This session explored research and experiences of consumer buying preferences. The overriding message was that consumers tend to buy organic food for "self" reasons; better taste or health benefit. Organic competes for consumer attention with other ethical issues and particularly local food. In many cases consumers – in an OCW survey even "heavy organic" buyers - appear more interested in where the product came from, than whether it is organic. However, some consumers are willing to pay an additional premium for products that clearly show 'Organic Plus' value, but claims need to be very clear and precise. A summary publication of the CORE-organic Farmer Consumer Partnership project was available for participants and can be downloaded at http://orgprints.org/15199/.

#### Non-ruminants: Feeding from the range and alternative feeds

### *Jos Houdijk (Scottish Agricultural College), Mike Gooding (Farm Animal Initiative), Gerald Osborne (poultry farmer)*

The regulatory requirements of using alternatives to synthetic amino acids are challenging for organic farmers of non-ruminant animals. Therefore the speaker's insights were very welcome. Jos Houdijk has been trialling pea and bean varieties to assess differences in amino acid levels. Lysine levels compare favourably to soybean meal but low methionine levels would pose problems in feeding monogastrics. Mike Gooding and Gerald Osborne are both using their animals' natural behaviour – such as range - to try and address 'wants' rather than just 'needs'. Interesting discussions ensued, particularly about providing a stress free environment for animals.

### Arable and field veg: improving yield through better soil management

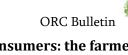
Francis Rayns (Garden Organic), Peter Mejnertsen (Knowledge Centre for Agriculture, Denmark), Steve Wilcockson (Nafferton Ecological Farming Group), Thomas Döring (ORC).

With nitrogen availability a key factor determining yields of arable crops and field vegetables, this session explored ways of maintaining soil fertility; drawing on practical experience and research in manure management, rhizobia inoculation, fertility building and green waste. The presentations highlighted that there are many ways of managing soil fertility and the success of each method depends on the farm's specific soil and cropping characteristics. The session reiterated the key challenge of organic management lies in matching nutrient availability to crop requirements whilst minimizing nutrient losses.

### AssureWel: Advancing animal welfare assurance through the certification process

Iain Rogerson (Soil Association), Alison Bond (Soil Association), Dr Siobhan Mullan (University of Bristol), Kate Still (Soil Association)

'AssureWel' is a joint project of the Soil Association, Bristol University and the RSPCA funded by the Tubney





Charitable Trust starting in 2010 and exploring how welfare outcome assessment can be introduced into the certification systems. There was agreement that this is an important initiative in an area that is of great interest to organic consumers. Five core measures for poultry have been identified and included in the certification process- dairy cows are next. The core measures are selected with reference to the detailed welfare assessment protocols of the EU project WelfareQuality® (www.welfarequality.net). Qualitative measurements of animal welfare – where an observer spends time with a herd- will also be considered. Discussions highlighted the importance of supporting farmers in improving performance in relation to core indicators for each species and organic farming principles.

#### Reduced tillage systems and energy use

Oliver Crowley (ORC), Jemima Showering (Royal Agricultural College), Harald Schmidt (Stiftung Ökologie und Landbau) presented by Thomas Doring (ORC), Richard Gantlett (Yatesbury House Farm)

Oliver Crowley and Jemima Showering presented the results from the first year of trials comparing spring oat performance under Eco-Dyn tilling and conventional ploughing. Eco-Dyn compared favourably for labour, energy costs and profit margin, but was less effective in controlling perennial weeds. Thomas Döring (for Harald Schmidt) gave an overview of non-inversion tillage (NIT) practices in Germany. These showed that organic arable production with NIT is possible and can reduce fuel costs, but may lead to increased weed pressure. Richard Gantlett provided practical experience of NIT; he has reduced cultivations which he complements by carefully chosen species for the ley phase.

#### The role of livestock in food production

Simon Fairlie (Farmer and author), Richard Young (Farmer and Soil Association policy adviser), Nigel Elgar (Farmer), Anita Idel (vet and author)

Simon Fairlie stated that there is an optimum level of meat consumption based on utilisation of grassland and agricultural by-products. He argued that estimates of Greenhouse Gas emissions (GHGs) from livestock have been overestimated. Richard Young supported this claim and highlighted that soil carbon costs have not been included in calculations. He outlined health benefits from eating grass fed meat. Nigel Elgar pointed to the advantages of grassfed systems in preventing adverse Land Use Change and the importance of upland systems linking with lowland farms. Anita Idel noted that the biggest factor in GHGs from agriculture is nitrous oxide (N2O), not methane. She argued that intensification of livestock is wrongly presented as an answer to reducing agriculture's climate change impact. Anita highlighted soil erosion as a critical "hidden issue" and that one of the best arguments for organic agriculture in terms of climate change is the resilience of soil it can achieve.

We would like to thank our sponsors Triodos Bank, Dove's Farm and Elsom's Seeds for their generous financial support

#### Developing the arable market with quality production

#### Nigel Gossett (Norton Organic Grain), Michael Marriage (Doves Farm), Cark Maunsell (Oat Services).

Nigel Gossett began by advising grain producers to "know their market" and plan crop rotations with an end use in mind. More than half the trade in the organic grain market is in wheat where demand for home-grown organic grain currently exceeds its supply. In contrast the market demand for triticale, barley, and oats is currently lower than the supply due to their end uses being primarily onfarm feed. However oats can also be a cash crop that is particularly suitable for organic farming. Alterative wheat crops, such as Einkorn and Spelt were also discussed, as well as the grain quality requirements and expectations of grain buyers from their suppliers.

#### Biodiversity, ecosystem services, agroforestry

Martin Wolfe (ORC), Ulrich Schmutz (Garden Organic), Charlotte Hollins (Fordhall Farm)

The common theme of all the speakers was that agriculture and nature should not be partitioned into separate areas; that there are benefits, especially in terms of biodiversity and yield and other "ecosystem services", from farming in a way that incorporates nature. This is evident from studies and practical experience in organic farming, the foggage system practiced on Fordhall Farm and agroforestry. Examples were presented where higher levels of plant diversity result in increased resilience resulting in more stable, productive and reliable systems. There are caveats: variable results from some studies and examples show the importance of good system design and careful management; and a change in policy is needed to tailor payments to fit these polyculture systems.

### Closing Plenary: Developing the Organic Market and Engaging with Consumers

Finn Cottle (Soil Association), Sophie Daranyi (Haygarth), Catherine Fookes (Sustain).

Discussion panel: Dairy: Richard Smith (Daylesford Organic Farm), Meat: Peter Davies (Slade Farm Organics), Arable: John Pawsey (Organic Arable and David Alston (Suffolk) Ltd); Horticulture: Alan Schofield (OGA and Growing with Nature).

Finn Cottle gave an upbeat presentation on the current position of the organic market; decline in 2007 - 09 has stabilised. There have been winners (Baby food and alcohol) and losers (fruit, vegetables, eggs) but overall the sector is in a good position to go forward. Sophie Daranyi introduced the new generic marketing campaign "Why I Love Organic". This 3 year campaign is focusing on growing the market by increasing the frequency of sales and "democratising organics" by broadening its appeal without alienating existing buyers. The campaign (whyiloveorganic.co.uk) will use press, PR and digital approaches to get across broad messages as to why people buy organic and that this can be different for each type of product. Catherine Fookes highlighted cross sector funding support for the promotion (along with the EU) and the need for the whole organic sector to amplify the campaign.



### Organic agriculture and climate change: fighting for recognition

The organic movement has long argued that the breaking down of agricultural systems into their constituent parts can miss the 'bigger picture'. ORC researcher **Laurence Smith** argues that such a reductionist approach is also now common practice in the field of climate change research where the primary interest is the kg of  $CO_2$  equivalent produced per kg of food. A more holistic approach to the understanding of complex systems is needed, which includes consideration of the trade-offs with other issues of importance, such as biodiversity.

It can be an uphill struggle to promote any consideration of the 'bigger picture' in climate change research, with many organisations, such as the Royal Agricultural Society for England and the FAO arguing for dramatic increases in yields to reduce CO<sub>2</sub> equivalents per unit food produced.

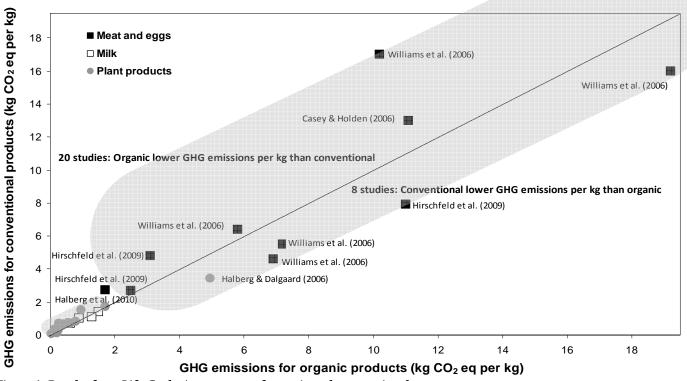
The fact that organic farming is a complex system that maximises the potential for interactions between separate enterprises to create and reduce inputs has been largely ignored. Organic systems do not fit into 'neat little boxes' and consequently, studies such as the Scottish Agricultural College (SAC) Marginal Abatement Cost Curve Report (MACC) have taken apart aspects of organic systems, such as the use of legumes, in place of fertilisers, and considered them in isolation. Inevitably they reach erroneous conclusions.

Such an approach makes the high input, mineral nitrogen based farming compare favourably to organic systems, due to higher yields. However, when the energy required to produce and transport the fertiliser (often referred to as upstream emissions) is included, the difference between conventional and organic is reduced significantly, and in many cases organically produced plant products perform better (see Figure 1).

The recently published report from the government's independent advisory Committee on Climate Change (2010) does at least highlight that an organic approach can lead to lower emissions per hectare, due to lower inputs, and points out that intensification to reduce emissions needs to be examined carefully to explore 'trade-offs' with regard to animal welfare, biodiversity, water quality and other environmental factors.

These comments are very welcome, but narrow thinking and simplistic equations still dominate the climate change debate and we need to persuade scientists and policy makers to consider agricultural systems as opposed to individual practices. This is one of the reasons for the formation of the international Round Table of Organic Agriculture and Climate Change of which ORC is a member. The Round Table, through the collection of evidence, aims to develop a coherent case for where organic agriculture fits in the climate debate and to promote its potential to policy makers.

Even from a reductionist perspective positive contributions from organic management are clear. Literature gathered by the Round Table has shown benefits as a result of a) compost use, b) synthetic fertilizer avoidance, c) biomass waste and manure storage and handling and d) agro forestry and soil carbon sequestration.



#### Figure 1: Results from Life Cycle Assessments of organic and conventional systems.

When considering the full life-cycle of products, including 'upstream' indirect emissions such as the manufacture of fertiliser, in many cases the organic products perform better than conventional (Knudsen et al. 2010 in progress)



Adaptation to climate change impacts is also an area where organic farming systems - through higher diversity, robust varieties and better soil quality – can make a significant contribution (Niggli, 2010). ORC has been making this case during the development of the English agriculture industry's Greenhouse Gas Action Plan published in February 2010. We sit on the industry steering group and have made recommendations which have been included in the final draft (see Box). Through this activity we hope to be able to highlight where and how organic farming can fit within low-greenhouse gas agriculture. The organic sector's involvement in this process is a promising sign and hopefully means that policy makers are becoming interested in the role that organic farming can play.

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#### The Agriculture Industry Greenhouse Gas Action Plan

The Greenhouse Gas Action Plan (GHGAP) has been developed by an industry partnership to deliver an initial reduction in agricultural GHG emissions of 3Mt CO2e by 2020. This action is in response to the last Government's Low Carbon Transition Plan, published in July 2009, and represents the agriculture sector's commitment to meeting the national target of an overall 80% reduction in greenhouse gas emissions by 2050.

The initial focus of the delivery plan is to promote production efficiency. It uses existing delivery routes where possible such as recently published sector "Roadmaps". ORC has made recommendations (eg: for the use of clover mixes to reduce the need for nitrogen application), which have been included in the final draft. Our recommendation to utilise existing channels of organic farming advice, such as the Institute of Organic Training and Advice (IOTA) have also been included as have recommendations to pick-up results from our farming systems research such as the Legume LINK project.



### Protected cropping and the "Living Demarcated Container"

In Bulletin 98 **Roger Hitchings**, our Principal Consultant, wrote about the move to develop regulations for protected cropping and focussed on the emerging disagreements about "soilless" organic production. The debates have continued and Roger has been actively involved at EU level and in the former UK Advisory Committee on Organic Standards (ACOS). He has also worked with the Icelandic certification body, Vottunarstofan Tún, to develop a comprehensive set of protected cropping standards. Here he provides an update on the situation.

Draft standards for organic protected cropping were developed in the UK in 2002 but were never implemented because the then responsible authority, The United Kingdom Register of Organic Food Standards (UKROFS) was disbanded and its powers taken into Defra. However, the EU Commission has appointed a Technical Expert Group to assist the Standing Committee on Organic Farming in an in-depth review of the technical issues involved. So, at last, there is at least a horizon for the incorporation of protected cropping standards into the regulation.

But from here to there is likely to be a bumpy road as the extent of the differences between member states in their approach to some issues has emerged. For example, there is an opinion originating from southern Europe that production structures should not be artificially heated on the grounds of resource conservation (gas and oil) and the impact of greenhouse gas emissions. There are also different views on the level of permitted fertility amendments given to long season tomato crops. However, the main area of disagreement involves the medium in which the crop is grown. It is a matter of principle in most member states including the UK that organic crops should be grown in soil. A number of Scandinavian member states have taken a different view by allowing crop production in biologically active organic substrates i.e. various forms of compost.

There are perhaps two main questions to be considered. "What do the Regulations say?" and "What do we mean by soil?"

There are a number of 'recitals' at the start of the relevant regulation (834/2007) that essentially summarise the purpose and objectives of the regulation. "Recital 12" is explicit about soil: "Organic plant production should contribute to maintaining and enhancing soil fertility as well as to preventing soil erosion. Plants should preferably be fed through the soil eco-system and not through soluble fertilisers added to the soil."





Soil-based protected cropping in the UK - should the EU regulations permit production in demarcated containers?

This is reinforced in Article 5 - Specific principles applicable to farming: "In addition to the overall principles set out in Article 4, organic farming shall be based on the following specific principles: (a) the maintenance and enhancement of soil life and natural soil fertility, soil stability and soil biodiversity preventing and combating soil compaction and soil erosion, and the nourishing of plants primarily through the soil eco-system." There are further clear references in Articles 12 (a) and (b), and it is difficult to draw any conclusion other than organic plants and crops should be grown in soil.

But what is soil? An authoritative definition comes from the Soil Science Glossary of the Soil Science Society of America. Soil is "The unconsolidated mineral or organic material on the immediate surface of the earth that (a) serves as a natural medium for the growth of land plants; (b) has been subjected to and shows effects of genetic and environmental factors of climate (including water and temperature effects), and macro- and microorganisms, conditioned by relief, acting on parent material over a period of time." This definition is clear – soil is part of the earth's surface, its creation involves a number of climatic, biotic and environmental factors, and it takes time.

It is fair to say that the majority opinion believes that it is impossible to interpret the organic regulations in a way that allows cultivation of crops in a demarcated container or bed using a mix of materials that bears little or no resemblance to the definitions of soil set out above. If this becomes explicit in the regulations implementing rules (889/2008) the current interpretations of the Scandinavian certifying bodies will be non-compliant.

However, practitioners in both Denmark and Sweden claim that it is possible to create substrates that closely resemble the organic ideals of high organic matter and biological activity. The material in the 'demarcated beds' is not replaced annually and the various ingredients are obtained from sustainable sources. The use of demarcated beds is said to allow greenhouses with concrete floors to be converted to organic production. The beds bear a closer resemblance to raised beds than to grow bags and provide a considerable volume for roots to colonise.

The argument is that these materials can fulfil the requirements of the regulation even though they are not covered by the scientific definitions of soil. Moreover, soil can be used in these substrates - this is usually taken from the land surrounding the greenhouse. It is replaced in due course by 'old' substrate - this is removed from the structure when its useful life has expired but is said to be better in all respects than the soil it is replacing. This has been an attempt to put both sides of the argument. Prevailing opinion in the UK is in favour of production based in soil although (according to a recent Soil Association consultation) there are growers in the UK who would favour soilless production. It is not clear what consumers would prefer – it is easy to assume that they would expect organic crops to be grown in soil but if there are price implications some might opt for a soil-less alternative.

So the debate continues. We would very much like to hear your views.





### Docks - again

In Bulletin 101, IOTA director **Mark Measures** wrote about controlling docks. His article elicited responses from several farmers and the peripatetic NZ adviser/researcher Charles "Merf" Merfield. Here Mark highlights some points from the feedback.

#### **Preventing docks**

The main source of docks is the seed bank in the soil and seed in hay and bedding straw. So to prevent seed spreading through farm yard manure containing contaminated straw bedding or hay do ensure that it is properly composted at a high temperature – I suggest over 65°C.

The research evidence from Humphries (1995) in Ireland shows that there is low survival of dock seeds after they have passed through the ruminant and stored in slurry. He found that ensilage below pH4 kills all seed, the rumen kills all seed and that anaerobic slurry storage kills 30% of seed and aerobic storage kills most seed. However Hance and Holly (1989) claim that digestion and slurry storage do not control dock seed viability.

Dock seedlings do not like competition. The best strategy to minimise dock seedlings is to maximise competition at ley establishment, which is when most docks become established; under-sowing in a cereal or whole-crop, good levels of fertility for the ley and competitive species of ley, broadcast not drilled are all important. A weed strike before sowing is ideal, if you can manage it.

I have a suspicion that many docks are brought onto fields through purchased cereal seed, does anyone have evidence?

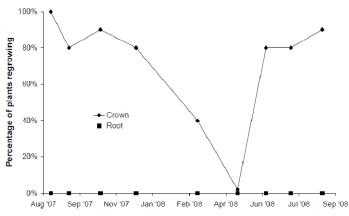
Beware of excess slurry or manure applications as the dock thrives on high potassium levels – hence the problem with dirty water irrigators.

Open swards of crops such as lucerne regularly receiving large applications of slurry are particularly at risk of dock invasion, usually after 2 or 3 years. There are likely to be advantages in mixing clover and grass seed when sowing lucerne.

#### **Killing docks**

When dock plants are completely buried the true root does not grow back, the crown, which may be 5-10 cm deep in the soil, depending on its age, is what produces shoots and grows back. That is what has to be killed in a fallow.

The crown on the surface is knobbly and wrinkled, with side shoots and roots, unlike the root which is smoother with no shoots and few offshoot roots. Cut the crown off the root in order to maximize the chance of drying it out on the soil surface in dry weather; use a Terra disc or similar duck foot under-cutter. Don't go deeper than necessary. Non inversion tillage systems such as the EcoDyn seem to work by starting very shallow and cutting a little deeper with each subsequent cultivation, each pass causing bleeding and desiccation but being very careful not to work below 10 cm. Once desiccated the crown can be left on the surface or ploughed down. The problem is that after ploughing many docks remain half buried, – which is where the Terradisc comes in as it gets the roots onto the surface. If you do plough after surface cultivation/fallowing it is clear that deeper ploughing (16 cm plus) is more effective at burying and killing the remains of the crown than shallow ploughing (12 cm).



#### Figure 1: Dock regrowth from parts of the plants cut above and below the union between the crown and the root (Merfield pers. comm.)

Ploughing as the first cultivation can be a successful strategy on heavy soils, but it does depend on dry weather. Deeper ploughing and inversion of mature docks complete with crown and root results in the plant trying to re-right itself. Until it has done that there will be bits of crown with growing points at all depths. Hence the technique of shallow cultivating and cutting off the crown will not work in arable stubble following a crop established by standard ploughing and cultivation practices. It only works when incorporating an established ley.

Docks in pasture are best controlled and weakened, but not killed of course, by frequent topping e.g. every four weeks. Providing good but not excessive soil nutrient conditions for the ley is important to maximize competition.

Mark can be contacted mark@organicadvice.org.uk

#### References

- Humphreys J. (1995) Investigations into aspects of the dynamics of Rumex obtusifolius L. populations in grassland. PhD Thesis. The National University of Ireland.
- Hance R J, Holly K (1989). Weed Control Handbook: Principles. 8th Edition, Blackwell, Oxford.
- Useful further reading is to be found at: http://www.gardenorganic.org.uk/ organicweeds/downloads/PerennialWeedReview2008.pdf



### Medicinal plants can add value to agroforestry (and farming) systems

Plants have provided humans with all the needs for living including medicines. "Medicinal Aromatic Plants" (MAP) describes the wide range of plants that have been the basis of traditional medicine, alternative medicines, new pharmaceuticals, and healthcare products. Agroforestry systems that integrate trees and agriculture can be a rich resource of these plants. In a recent ORC project, **Katrin Otto** has been developing a database of MAPs that can add to the multi functionality of agroforestry systems.

The project has collated information on a range of characteristics of temperate herbaceous and woody plant species with medicinal potential. This will provide a resource for identifying appropriate species for the multipurpose development of agroforestry systems. Wakelyns Agroforestry in Suffolk was used as a case study.

Information was obtained from a variety of sources on 87 herbaceous and 36 tree species. The database contains comprehensive information on each species including: habitat preferences; pollinating and invasion characteristics, common cultivation purposes and a selected range of plant derived products and services.

The existing flora at Wakelyns Agroforestry Research Farm was assessed in October 2010, and 47 herbaceous species and 17 shrub and tree species were recorded growing on site. Of these, 23 species are commonly known to have valuable health properties; some are illustrated in Table 1.

The database was then used to identify additional species that could be grown within the various habitats on the farm. For example, within the tree rows, shade-tolerant species such as Comfrey, St. John's Wort, Wormwood, Hedge Garlic, Lupine, Lady's Mantle and Nettles could be established in the understory. Other species which need more gradients of spacing and light, as in a hardwood row, could be Mullein, Elecampane, Fennel, Gooseberry, Common Mallow and Hop. The database also includes information on the potential for self medication by animals. Medicinal properties of plants are mainly due to the presence of secondary metabolites and the line between healthy and toxic is mostly defined by the doses. These characteristics can vary between plant parts and accessibility can change over the day and with environmental conditions. The ability to detoxify and to detect poisons varies with animal species and the degree of co-evolved skills with native vegetation.

So for example, beneficial effects of tanniferous plants against internal parasites might be due to one compound, or a combination. Tannin rich species include Agrimonies, Lady's Mantle, Shepherd's Purse, Wood Avens, Sweet Chestnut, Ash, Witchazel and Walnut. Research has shown that particular concentrations increase the supply and absorption of digestible protein by animals [*Barry*, *T.N. 1999].* This then indirectly improves host resistance and resilience to nematode parasite infections.

With thought and care medicinal aromatic plants can significantly enhance the multi-functionality of agroforestry and other farming systems.

#### Reference

Barry, T.N. The implications of condensed tannins on the nutritive value of temperate forages fed to ruminants, British Journal of Nutrition (1999), 81: 263-272

#### Table 1: Plant species with medicinal properties recorded at Wakelyns Agroforestry

Species	Common name	Habitat type	Health property
HERBS			
Alliara petiole	Hedge Garlic	woodland- edge	antiseptic, vermifuge, vulnerary,
Cirsium arvense	Creeping Thistle	open-waste	tonic, emetic, astringent
Galium aparine	Goosegrass	woodland- edge	diuretic, astringent, tonic, vulnerary
Glechoma hederacea	Ground Ivy	woodland- edge	astringent, expectorant, cathartic, vernerary
Lamium purpureum	Red Dead Nettle	open- margin	astringent, diuretic, purgative
Plantago lanceolata	Ribwort Plantain	open - edge- waste	antiseptic, laxative, expectorant
Polygonum aviculare	Knotweed	margin – waste	Anthelmintic, cardiotonic, purgative, vulnerary
Stellaria media	Chickweed	edge – margin	antirheumatic, vulnerary
Senecio jacobaea	Ragwort	open- edge – waste	purgative, anthelminthic, diuretic
Stachys sylvatica	Hedge woundwort	woodland – edge	tonic, diuretic
Cichorium intybus	Chicory	Open	cardiac, digestive, depurative, laxative
Taraxacum spp.	Dandelion	open – meadow	hepatic, depurative, stomachic, laxative, aperients
Urtica dioica	Dead Nettle	edge – margin	astringent, tonic, diuretic
TREES			
Juglans nigra	Walnut	woodland – hedge	astringent, anthelmintic, anti-inflammatory, purgative
Fraxinus excelsior	Ash	woodland – hedge	antiperiodic, astringent, laxative, purgative
Rosa spp.	Field Rose	woodland – hedge	astringent, laxative, carminative, vermifuge
lsalix spp.	Willow	woodland – hedge	anti-inflammatory, antiperiodic, diuretic, anodyne, calming
Tilia cordata	small-leaved Lime	woodland – hedge	antispasmodic, expectorant, laxative, sedative

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### Measuring organic farming's public good

Farming provides a "public good" alongside the production of food, and this justifies financial support. But policy makers want to know how this can be measured. As a response Natural England asked ORC to create a tool, as part of the Organic Conversion Information Service (OCIS), which could assess the public good provided by organic farms – although it could also be used to assess conventional farms too. **Catherine Gerrard** outlines how we set about it.

As a first step, a range of public goods were identified in a stakeholder workshop and were used to establish the basic structure of the tool. These were: Soil management, Biodiversity, Landscape and heritage, Water management, Manure management and nutrients, Energy and carbon, Food security, Agricultural systems diversity, Social capital, Farm business resilience, and Animal health and welfare.

We labelled these "spurs" and for each, selected a range of activities against which a farm could be scored (from 1 (poor) to 5 (very good). These activities were chosen to give in-depth information on farm performance but could be provided by the farmer from farm records and could be collected and assessed within 2-4 hours.

The scores for each spur are obtained by averaging the scores for all its activities. Each spur is shown on a radar diagram (see below), allowing farmers to identify in which areas they perform well and which could be improved.

The tool was tested on forty organic farms with farm advisors and farmers assessing the tool's performance. Overall opinion was positive: most farmers saying that they would recommend the tool as it stands and a couple suggesting only minor tweaks. The vast majority said that it was of value to their business and would assist in demonstrating the public goods delivered by their farms to the wider community; some advisors thought that discrete sections (e.g. nutrient budget and energy benchmarking) could be used as stand-alone advisory tools.

In the pilot assessment, the highest scoring spurs were animal health and welfare and soil management, with mean scores of 4.2 and the lowest was water management with a mean of 2.9. We found higher biodiversity scores on farms with HLS agreements than those with OELS; also that farm type, advisor and whether or not the farm was solely grassland had significant impacts on three or more spurs.

These inter actions will be investigated in the future alongside the tools ongoing development. Further information can be found the ORC website www.organicresearchcentre.com

#### Acknowledgements:

Thanks go to Natural England for funding this project and the advisors and farmers who took part in the pilot.

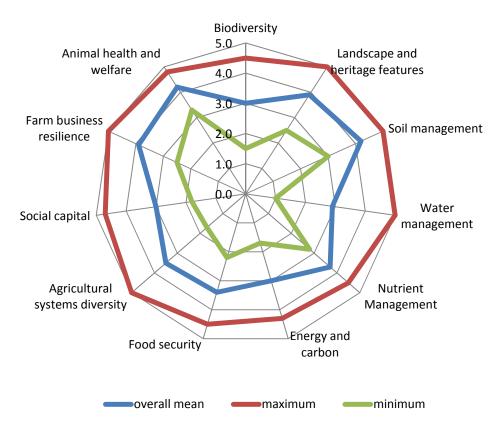


Figure 1: Radar diagram showing the minimum, mean and maximum scores across all forty farms in the pilot assessment.



### **SOLID:** A new research project on organic and low-input dairying

#### ORC is delighted to be involved in the new EU-funded research project on organic and low input milk production, SOLID (KBBE-266367), which runs from 1 April 2010 to 31 March 2015. **Susanne Padel**, who is leading ORC's involvement with this project, introduces the project.

Organic and low-input dairy farming systems are increasingly noted as delivering multifunctional benefits to the agricultural industry and society but technical and economic constraints prevent widespread adoption. The SOLID project aims to deliver an innovative toolbox of novel methodologies that will contribute to the competitiveness of the dairy industry and increase the effectiveness with which these benefits are delivered.

The main aims of SOLID are to facilitate the use of breeds and feeding strategies to maintain productivity, improve animal health and welfare while meeting the market requirement for high quality milk.

The SOLID consortium is co-ordinated by Prof Nigel Scollan and Dr Pip Nicholas from the Institute of Biological, Environmental and Rural Sciences (IBERS) at Aberystwyth University. It comprises 26 participants (Research Institutes, Universities, private companies and industry organisations) from 10 European countries, as well as New Zealand (in an advisory capacity). Farmers and industry partners in the UK and Europe will be working closely with scientists to find innovative ways of tackling practical problems, increasing productivity and quality without putting more strain on the environment.

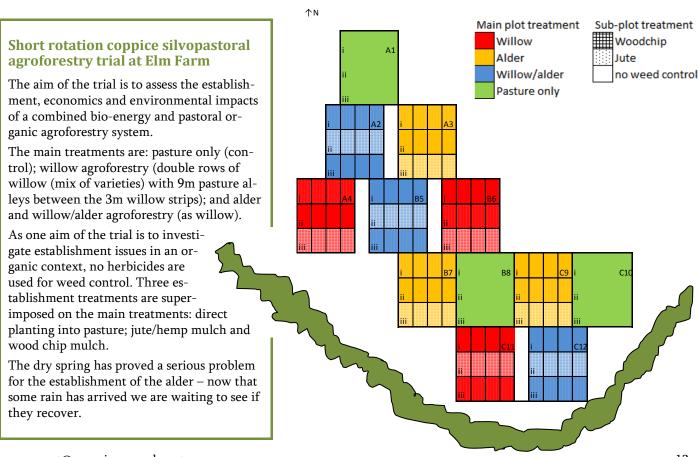
SOLID will consider organic and low-input cattle and small ruminant (goat) systems in diverse geographical and farm systems across Europe and New Zealand. The project will:

- involve farmers and industry partners in planning and conducting research on commercial farms;
- use the latest scientific techniques to help cows and goats to adapt to organic and low-input systems, with few or no chemicals and artificial feedstuffs;
- develop new and sustainable feedstuffs and improve the quality, yield and management of forage crops;
- assess and improve grassland dairy systems, including home-grown forage supplies;
- develop new methods and strategies and improve collaboration along the supply chain, from farm to fork;
- share the knowledge with groups of farmers and the dairy industry in order to make the most of the project's successes at all levels.

ORC is leading the work on participatory research methods across Europe and will develop a number of on-farm projects in close collaboration with the two UK industry partners OMSCo and Calon Wen. ORC is also involved in testing the potential of agro-forestry for dairy systems as part of the work on alternative feed and forage sources.

We have recruited Dr. Katharine Leach, previously working on the Healthy Feet Project at Bristol University, who started working on this project on the 16<sup>th</sup> May 2011.

Further details are available at http://www.solidairy.eu/





### **CAP Reform update**

# The CAP reform debate rumbles on, with little sign of conclusion. Some commentators now expect the implementation of the reforms to be delayed at least until 2015, if not 2016. **Nic Lampkin** reviews progress and reflects on where organic farming fits in the discussions.

The story so far: In 2009 the European Commission initiated the debate on the reform of the Common Agricultural Policy (CAP) with a big emphasis on public goods and on public consultation. In November 2010, deluged by differing views from the consultations and hundreds of policy papers (many reflecting the still polarised 'productivist' positions of COPA and the NFU and the 'environmentalist' position of many citizens and NGOs), the Commission published its proposals for CAP reform.

One of the main elements of the Commission's CAP reform proposals is the 'greening' of Pillar 1 single farm payments (SFP) by introducing mandatory environmental set-aside, permanent grassland, green cover and crop rotation requirements. The UK (led by Defra with some opposition from the devolved administrations) has taken a strong position against this greening of Pillar 1, arguing instead for a substantial reduction in SFP payments and the focus of more resources on agrienvironment measures in Pillar 2.

In past CAP reform debates, the end result has been a compromise between the different priorities of member states and the Commission, with originally ambitious proposals watered down to the lowest common denominator. The disagreements between member states currently remain significant, although the Commission appears to be holding to many of its original proposals.

The current debate, however, is taking place under two additional elements of uncertainty/ confusion. Firstly, the European Parliament has a much increased role in the decision-making process and has produced its own counter-proposals for reform. Secondly, there is still no agreement on the European budget – the prospect that spending on CAP will be cut is much greater than in previous debates, but no one knows by how much.

A key part of the debate in the European Parliament has been focused on a report to the Parliament's Agriculture Committee by the German Conservative MEP Albert Dess. In this report, Dess argued that 'greening' of the CAP should not be focused on Pillar 1, but on 'compulsory agri-environmental measures' such as erosion reduction, crop rotation and investment in green technologies, in Pillar 2. The measures would be compulsory to the extent that farmers would need to undertake at least some of them to qualify for full Pillar 1 payments.

On the budget front, EU budget commissioner Janusz Lewandowski has said that he backs a gradual reduction of the portion of the EU budget dedicated to agriculture, acknowledging the pressure from several member states to reduce spending. But this might not involve an actual reduction in expenditure – farm aid has fallen from 80% of the EU budget in the1970s to 40% today mainly because of increased expenditure in other areas. In real terms, the funding for the CAP could still remain stable at around €58 billion. The Commission's budget proposals for 2014-2020 are due to be presented by the end of June, at which point the debates on distribution of CAP resources between member states and possible limits on amounts individual businesses can receive will intensify.

#### What does all this mean for organic farming?

Organic farming has a significant contribution to make to many of the key goals in the current CAP reform debate, including climate change, biodiversity and soil conservation, and rural development. There is a case, not widely accepted, that organic farming support should become part of the mainstream CAP support under Pillar 1, which would mean that a greater level of consistency in organic policies across member states could be achieved, with 100% funding from the EU helping address the funding gaps in some countries.

The proposed actions for the greening of Pillar 1 (see above) are widely adopted anyway by organic farmers, and the EU regulation defining organic farming provides a common legal basis to make this possible. Some countries, e.g. France, already use the so-called 'Article 68' measure in Pillar 1 to provide support for organic farming, so there is a precedent. But even if the alternative approaches proposed by the UK or by Dess and the European Parliament gained favour (which seems unlikely at present), there should still be scope for a pan-European organic policy as one of the core agrienvironment measures and a case for 100% EU funding.

However, because all the horse-trading relates to much bigger issues, it is clear that organic farming is not central to any of the main views of CAP reform. As we go to press, it looks like the European Parliament may end up excluding organic farming from its Pillar 2 CAP reform proposals altogether – reflecting the influence of Conservative and Liberal MEPs who have been actively promoting an 'industry friendly' agenda.

But thanks to the efforts of the IFOAM EU Group in Brussels, and environmental and other NGOs in countries like Germany, the role of organic farming continues to be discussed in the European Commission. The Hungarian government, as the current President of the European Union, is hosting a high-level conference on organic farming policy, organised with the IFOAM EU group, in Budapest at the end of May. DG Agri have also commissioned a review of organic farming policies in Europe (see facing page) which they envisage will feed into the more detailed implementation discussions, especially now that the process of publishing draft legislation looks set to be delayed to the autumn or even 2012.

So while there is still a long way to go and the outcome is uncertain, all is not lost. While others make efforts in the European Commission and UK organic groups are involved in ongoing discussions with Defra, now may be the time to talk to your MEP with respect to the European Parliament debates scheduled to be completed by July.

### **Policy research**

### ORC and partners to evaluate German organic research programme

As part of an international consortium, Organic Research Evaluations (ORE), the Organic Research Centre is to play a central role in an evaluation of the German organic research programme, the largest national dedicated organic research programme in Europe.

The ORE consortium was awarded the contract following an open competition commissioned by the German Ministry for Nutrition, Agriculture and Consumer protection (BMELV). It brings together international expertise in organic research, research evaluation processes and the use of research in informing and developing public policy. Other consortium partners are INTERVAL GmbH (Berlin), Eberswalde University for Sustainable Development and Dr Donal Murphy Bokern.

The German organic research programme, widely known as the BÖL programme (Bundesprogramm Ökologischer Landbau) was established in 2000 and has supported more than 500 projects with a total budget of more than 80 million Euros. The programme was developed incrementally:

#### Welsh maintenance payments to be reprieved?

The Welsh Assembly elections have created a new political landscape. Labour won exactly half of the available seats while Plaid Cymru lost ground, so the previous coalition has ended and Labour is attempting to go it alone. This means that Elin Jones, the well-respected Plaid Cymru Minister for Rural Affairs is no longer in government, but perhaps more significantly, the status of agriculture in the Cabinet has been downgraded in the eyes of many.

Alun Davies has been appointed Deputy Minister responsible for agriculture, food, fisheries and European programmes, reporting not to John Griffiths, the new Minister for Environment and Sustainable Development, but to Edwina Hart, Minister for Business, Enterprise and Technology. However, animal health issues (among others) remain with the Environment Minister.

One of the last actions of Elin Jones before the election was to commission and accept most recommendations of the Glastir review group. Glastir is the (now renamed) Welsh Government's flagship sustainable land management policy, which looked set to entail the ending of maintenance payments for organic producers in Wales, with organic producers only qualifying for 50% of the entry points needed to qualify for the All Wales Element. As a result of the review, the 50% points entitlement was abolished, with the promise that new maintenance payments would be introduced after the election.

It remains to be seen whether and how the new Deputy Minister will honour this commitment – Welsh organic sector representatives will be seeking an early meeting with him to discuss this and the future of OCW, which has also been threatened by funding changes. Phase 1 focussed on sector analysis leading to thematic areas for further research. Phase 2 focussed on knowledge dissemination including several thematic networks. Phase 3 aimed to consolidate as well as support interdisciplinary collaboration. In Phase 4 (since 2008) the programme has focused on model and beacon projects and included international collaboration with other funders of organic research in the European CORE Organic ERANET project.

The purpose of this evaluation is to assess the programme's effectiveness in relation to its specific and wider policy goals and to develop recommendations that will inform future directions. The evaluation will look at the impact of the research on the German organic sector, but will also compile and translate thematic summaries and in this way make more of the generated knowledge available to a wider international audience.

The BÖL programme has primarily consisted of applied research and being able to closely study its operation and impact will be of immense value to ORC as an applied research organisation. The ORC team working on the project consists of Susanne Padel, Thomas Doring, Nic Lampkin and new recruit Anja Vieweger.

#### **Organic Farming Policy evaluation for DG Agri**

The EU's DG Agriculture has commissioned a study on "Use and efficiency of public support measures addressing organic farming" (Nr. AGRI-2010-EVAL-12). It aims to identify and analyse key issues in the implementation of these policies and put forward conclusions and recommendations for the future development of organic farming support policy in the EU. A partnership led by Jürn Sanders of von Thünen Institute in Germany and involving the Swiss Research Institute for Organic Farming (FIBL) and ORC will undertake the project.

Work will cover a review and categorisation of public support measures and the level of uptake and public spending across the whole EU 27. This includes organic farming and conversion support measures (implemented and planned) in the Rural Development Programmes for 2007-2013; CAP Pillar 1 and top-ups in the Common Market Organisation (for fruit and vegetables); national and regional support schemes and action plans and an analysis of farm income (FADN) and farm structure survey data. A more in depth analysis of regional or national policies in England and Wales, Austria, Italy (2 regions), the Czech Republic, Denmark and two regions in Germany will investigate the interaction between various policy instruments and the development of the supply of organic products, the conversion to organic farming and where possible the development of demand.

ORC's team will describe and assess the public instruments used to support organic agriculture and will lead the comparative analysis of policy design in the case studies, as well as carrying out the English and Welsh case studies.

The work started in Jan 2011 and will involve regular interaction with the Organic Farming Unit of DG Agriculture in the European Commission.



### **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.

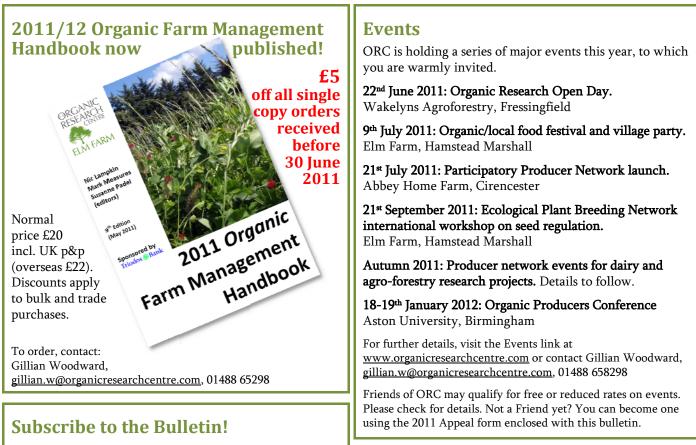
In pursuit of this aim, ORC is now the UK's leading independent organic research centre. Its activities range from policy development and practical research on innovative farming techniques to public information and education. Both Defra and the EU award substantial research projects to ORC, which draw 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 <u>www.organicresearchcentre.com</u> or requested as documents from Pam Bijak, <u>pam.b@organicresearchcentre.com</u>, 01488 658298.



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