Let’s not get too smart

SMART is an acronym for a type of target. It stands for specific, measurable, accepted, relevant, time-bound. Talk of SMART targets is increasing in volubility if not clarity as the debate about CAP reform has noticeably moved up a few gears and as the financial crisis has magnified the concern about how much the CAP costs.

The pressure is on to cut the CAP budget and improve the actual and perceived value for money of the remaining spend. One respected view is that up to a 25% cut can be expected. But that doesn’t take into account how sluggish or volatile the EU economies might become as energy prices rise and climate change measures sharpen up; or the impact of possible Euro zone bail outs, restructuring or collapse.

What is clear is that the criticisms by the European Audit Office of the value for money of current agro-environment schemes will, at some stage, loom large in the discussion of how public goods are going to be delivered in the reformed CAP.

Output based payments - in other words targets, as opposed to prescription based payments – in other words a farming system or described management practices, are being presented as a response. But targets – however SMART they pretend to be – only work properly with limited and precise goals. As the article on page 10 indicates the aspirations, both declared and hidden, of the CAP are anything but that.

“Land sparing” is also being presented as an answer. This is featured on Page 2. Essentially it means the taxpayer should support “High Nature Value” (HNV) land and let rip with intensification and unfettered market forces on the rest. It’s the sort of idea that might be found in the brain of Winnie the Pooh but without the charm. Nonetheless, it is being discussed, apparently seriously, by ecologists and the type of policy maker who confuses simple and simplistic.

An excellent publication from the Institute for European Environmental Policy (IEEP) (www.ieep.eu), “Provision of Public Goods through Agriculture in the EU” sets out various scenarios for a reformed CAP. The horrific consequences of “land sparing and let rip elsewhere” can be seen there.

If taken too far targets and focus on HNV land can conflict with the case for organic farming. We have to win the argument that organic farming is the most robust basis on which to build the delivery of public goods. It is good news therefore that IEEP concludes that along with extensive livestock and mixed systems and traditional permanent crop systems, organic farming is one of the three most important ways of delivering environmental public goods.

Lawrence Woodward
Misleading PR sours collaboration and diminishes research

Bruce Pearce, Ulrich Schmutz* and Lawrence Woodward

An extensive comparative study of 32 organic and conventional farms involving researchers from conventional organisations and organic institutions, including ORC and Garden Organic, has become embroiled in controversy following a misleading press release issued by Leeds University’s Faculty of Biological Science, one of the conventional partners (University of Leeds, 2010).

The project is funded by Defra and the Research Councils as part of its Rural Economy and Land Use Programme (RELU Scale). RELU funds cross institutional and multi disciplinary research and is meant to foster greater understanding and collaboration. But the Leeds press release and subsequent interviews given by team leader Prof. Tim Benton has caused consternation amongst the partners and has dismayed the ORC and Garden Organic researchers.

A paper led by the Leeds team covering the biodiversity aspects of the study has been published in the journal Ecology Letters (Gabriel et al. 2010). The paper itself is a reasonable presentation of the research work and for the most part raises valid points which, although we might not agree with all of them, are worthy of serious consideration and discussion.

It shows that there is an overall 12% increase in biodiversity of organic over the conventional areas. However, there was not a uniform increase across all biodiversity groups; some, such as plant diversity, earthworms, insects (e.g. butterflies and bumblebees), were higher in the organic fields; while others, such as some types of birds and insects (including honeybees), were more prevalent on conventional fields. The study also found that levels of some butterflies and other insects increased on conventional farms which had an organic neighbour.

With its unique design, comparing high concentrations (17%) of organic farming in a landscape with those with low concentrations (1%) of organic farming, the study also added knowledge to our understanding of scale in farming. The biodiversity benefits in areas with high organic farming were higher than in those with low organic farming. One would expect this, but it is good to know that the data support this. However, the new and interesting finding is that the conventional farms in the landscapes with a high organic farming share also had a higher biodiversity. To our knowledge this is the first time these spill-over effects of biodiversity created by organic farming have been directly measured in the UK. In other words, concentrated organic farms clearly benefit the whole landscape not just the land farmed organically and this is a significant public good.

These are very interesting findings and they ought to lead to a fruitful discussion which now might never happen. In a move more aimed at getting their name in the papers than in disseminating sound research information, Prof Benton and Leeds University issued a press release which led with the banner headline “Organic farming shows limited benefit to wildlife” and went on to say “Organic farms may be seen as wildlife friendly, but the benefits to birds, bees and butterflies don’t compensate for the lower yields produced”.

The press release is deeply misleading (leaving aside the issue as to whether a 12% increase in a comparison with untypical very mixed conventional farms can be described as limited not to mention the spill over benefits outlined above). Data on winter wheat yields was collected and reported but production output from the other enterprises on the farms were not studied or even recorded. To draw conclusions about the overall outputs from a mixed farm that is producing a range of products (grass, livestock etc) from only one crop is very questionable. To extrapolate those limited results to draw conclusions at whole farm level, let alone at the level of a region or a whole country is scientifically unsound and to present that extrapolation as the conclusions of very narrow research is bordering on disingenuity.

Some readers might think this is just a minor academic tiff with no relevance to the real world. But in the context of the current debates about the future of agriculture it represents a dynamic that might be very important to the future of organic farming. Incredibly, the press reports arising out of Prof. Benton’s press release have been circulating in Brussels as evidence against supporting organic farming. Please note; not the published paper but press reports of a misleading press release.

Even though there is now a wealth of scientific evidence showing that organic farming provides a range of ecosystem services over conventional farming approaches (Fuller et al. 2005) (Hole et al. 2005) (Pimentel et al. 2005); and a large number of EU countries support organic farming schemes and measures including the Organic Action Plan of the EU (Commission of the European Communities, 2004), organic farming is under attack.

The question of food security has moved up the political agenda and calls are being made for massive increases in food production. Organic farming has been criticised for its perceived lower yields and integrated approach to production of food, fibre, energy and other ecosystems services. It is argued that a more effective alternative approach is the separation of intensified production land and ecosystem delivery land. This has become known as land sparing or land sharing (Green et al. 2005).

Prof. Benton believes that “land sparing” is the way to go. The Leeds press release and his subsequent press statements essentially highlighted his personal opinion - that in the future we will need to farm “our most productive areas in the most intensive way we can” and that organic methods may only be useful “for the less productive parts of the UK”- as if it was the conclusions of the research. In fact, the published research does not support this conclusion.

Nonetheless, this is a critically important debate and it is vital that sound information is brought together and considered carefully. We very much regret Prof. Benton’s injudicious action because it sours the kind of multidisciplinary approach that can provide valuable guidance in the development of appropriate policies in this area.
The RELU project brings together the raft of findings from ecology, soil science and various areas of economics as well as social studies in an attempt to understand how land and landscape is used for a wide range of activities and functions and to see how the trade-offs between these different activities and functions can be best managed. For example, the section of the project we are working on is showing some interesting results concerning soil water infiltration in grassland (Hathaway-Jenkins 2010).

We need to have a greater understanding of these inter-actions and trade-offs. They are complex and more R&D is needed. Inaccurate reporting, dubious extrapolation and misusing research for policy purposes are not.


* Dr. Ulrich Schmutz is a researcher at Garden Organic and is a co-author of the Gabriel et al. 2010 paper.

**Will the Government put down its FSA Lapdog?**

**Lawrence Woodward**

My reaction to the news that the Food Standards Agency (FSA) might be abolished was mixed. As we go to press, it seems it will be dismembered rather than killed. At least for the time being. Like many others, I campaigned for its establishment and was delighted when it came into being. Disappointment quickly followed.

It was probably inevitable that the appointment of Sir John Krebs as its first chair would be problematic; his world view seems to begin and end at the inner councils of The Royal Society; and his reductionist science knows-it-all approach set the culture and the core methodology of the FSA. Unfortunately, this approach was also prevalent in the Department of Health and within the Department of the Environment and Rural Affairs (Defra).

It is not that the FSA has been especially pro-industry or anti-NGO. The problem has been its pro-technology, pro-narrow science, elitist and tick-box mentality. If anything it is pro-“nannyism” because nanny knows best and this supertech, scientific nanny had no time for anything that didn’t fit her view of things. Hence, food sterility has been promoted under the guise of food safety, pesticide residues have been ignored and living foods almost totally banished.

So despite the proclamations of openness, the board meetings held in public, the consultations and the forums, real dialogue and communication was smothered by a pervasive we know best, patrician attitude. Sir John, his cohorts and his successors, for the most part politely and courteously, did not listen to anyone else.

This is best exemplified by the FSA’s prejudicial attitude to both GM and organic food. Its determination to promote GM technology led, in recent weeks, to two resignations by independent advisers. Whilst, last year, its biased presentation of a report on organic food received widespread and justified criticism.

Of course the FSA has not been a complete failure. Many NGOs in the food and health fields argue that in some areas the FSA has had a positive impact. Given the state of the food and health sector when it was formed, the nature of its original remit and the resources at its disposal, it had to get something right. After all, even a stopped watch gets things right twice in 24 hours.

The fact is, it could and should have done more. We desperately need a truly independent and truly effective Food Standards Agency. We don’t need a government annex pretending to be something it’s not. A government source is reported as saying “The functions of the FSA will be subsumed into the Department of Health and Defra”. I’m sure that this will save money and that it can be done seamlessly because there was little difference between them anyway.

It is hard to gauge the government’s true intentions. This is worrying but I’m sure putting down the FSA has little to do with complaints by the food industry over “traffic light labelling proposals”. It is to do with saving money and reveals something of where the government’s priorities lie. The FSA became more lapdog than watchdog some time ago. Had it been otherwise, they wouldn’t have been able to chop it up.

www.organicresearchcentre.com August 2010
Are shoppers aware of Organic Certification logos?
Susanne Padel and Laurence Smith, ORC and Meike Janssen, University of Kassel

The introduction on the 1st July of the new mandatory EU logo for organic food and farming presents a new challenge for the various existing organic certification schemes in Europe.

Details of the logo and its use can be found on http://ec.europa.eu/agriculture/organic/eu-policy/logo_en. A very helpful guidance note has been produced by OF&G and can be found on their website www.organicfarmers.org.uk.

In this article we explore consumer awareness and perception of different certification schemes and corresponding logos in the UK, based on a survey with more than 400 consumers in three supermarkets and one organic shop. The work is part of the Certcost project*, funded by the European Seventh Framework Programme.

The survey covered the old EU organic logo, two private logos (Soil Association and Organic Farmers and Growers) and products labelled just with the word organic. This choice was based on a preliminary survey of the presence of logos on 10 product categories in UK shops in November 2008, in which across all categories more than 50% of products carried the SA logo, but only about 10% carried the logo of another control body and only about 4% carried the EU logo. In six categories (e.g. fresh produce) between 30% and 50% of products did not carry any certification logo (Janssen and Hamm, 2008).

Consumers had to fill in a short questionnaire that examined their perception and expectations of organic standards and logos. This article contains a short summary of the attitude statements towards the different UK logos and a European logo.

In the study, only consumers who stated that they bought organic eggs and apples at least once per month could participate. 70% of them were female, reflecting the distribution of main food shoppers in the population (Davies, 2006) and we recruited an equal share of the two age groups: 18 to 44 and 45 to 70 years old.

Results
Participants were asked to rank each logo on a scale of 1 to 7 for a number of questions (see Figure 1).

The results show some difference in relation to the certification logos (see Figure 1). In relation to most questions the Soil Association received the highest ratings, mostly followed by the OF&G logo.

Figure 1: Knowledge, trust and attitudes to four labels among 412 Shoppers in the UK on a scale of 1(low score) to 7 (high score)

Only in response to the statement ‘This logo is well known to me’ did the no-logo option come second. Interestingly, about 45% of participants thought that the OF&G logo represents a British product (Figure 2) although it is clear that this is not always the case.

Comments made indicate that many people thought that the OF&G logo stands for a co-operative group of UK based organic farmers. The results showed higher level of awareness of the logos than had been found in focus groups conducted in 2009, where very low recognition of any logo and of differences between the schemes was found (Janssen and Hamm 2010 submitted). The difference is likely to be a reflection of differences in the organic shopping habits between the two samples. It will be interesting to see whether the differences translate to a willingness to pay more for a particular logo.

The responses to all questions revealed a very low awareness of the old EU logo. We also presented participants with a number of statements in relation to the new EU logo with which they had to agree or disagree, on a scale of 1 to 7.
The same questions were also asked in several other countries. The questions were asked in general, not in relation to the new logo, because this had not been published at the time of the survey. The results showed some agreement to a common European standard and logo (Figure 3) in all countries, but people did not seem aware that a common EU standard is already reality. Agreement was lower in the UK than other countries, especially Italy where the EU logo was found on 50% of the products in the inventory study.

The results make clear that the introduction of the mandatory EU logo is not likely to lead to negative reactions among organic consumers, although greater recognition will only be achieved if the logo is promoted. Private certification schemes may need to raise their profiles so that they remain attractive to producer, processors and retailers when the new EU logo becomes mandatory.

References:

Breeding efforts for healthy food
Louisa Winkler and Thomas Döring

Breeding for grain with ‘enhanced health benefits’ is a focus of the EU HEALTHGRAIN project, which believes it now has the tools to develop wheat with high concentrations of dietary fibre, vitamins and other bioactive compounds.

The HEALTHGRAIN project group discovered that among wheat varieties, differences in the concentrations of fibre and bioactive compounds are not only significant but also heritable. The project identified molecular markers associated with the compounds, pursuing a marker-assisted selection process in breeding programmes which would concentrate the relevant genes within one wheat genome. Using this approach, the group has created a high-amylose wheat variety and plans to extend efforts to create high-fibre, high-vitamin wheats.

While these results are encouraging, genetic differences of wheat varieties might in the end be less decisive for effects on health than consumer behaviour, in particular the choice of products made from white flour vs. whole grain flour. The production of white flours requires removing parts of the wheat grain which are rich in dietary fibre and other bioactive compounds.

The HEALTHGRAIN project has therefore also performed consumer research, and this perspective will be taken forward with the HEALTHGRAIN Forum, as part of which consumer and industry consultations are planned. It will be interesting to see how the breeding efforts and the project’s findings from consumer research will be integrated.

Source: www.healthgrain.org.
New research projects at ORC

Bruce Pearce, Senior Programme Manager, outlines the new research projects that have started at ORC in the past few months.

Methodology for Assessing Farming Systems
We are participating in a new Defra funded project (OF0386): To produce a methodology for assessing the environmental, economic and social characteristics of (organic and non-organic) farming systems. The consortium is led by Warwick HRI and The Countryside and Community Research Institute, Cranfield University, Garden Organic and SAC.

The project will describe the range of current UK farming systems, for example organic, low input, extensive, integrated, intensive, etc. and develop methodology to describe their environmental, economic and social characteristics. The methodology will be based on a life-cycle approach and will consider inputs, products, outputs and impacts characterised for the different farming systems. Indicators will be chosen to represent those characteristics and combined to produce a methodology which could be used to evaluate the productivity and sustainability of different farming systems.

The project will begin with a review of both published and unpublished work to inform the description of a comprehensive range of farming systems. The team will then identify the characteristics of those systems and develop methods that can be used to assess and quantify the impact of farming systems at appropriate scales. Finally, the methods will be validated using case studies.

www2.warwick.ac.uk/fac/sci/whri/research/farming

Solibam
We are very pleased to be part of a new consortium of EU research partners, crop breeding companies and small scale farms in Africa that will undertake a project led by INRA in France called Strategies for Organic and Low-Input Integrated Breeding and Management (SOLIBAM).

The aim of the project is to develop novel breeding approaches and combine them with optimal management practices to improve the performance, quality and sustainability of crops adapted to organic and low-input systems. The work covers a wide range of activities and disciplines:

• Identifying appropriate traits specific for adaptation to low-input/organic conditions.

• Trialling genetically diverse plant populations in a range of agro-climatic conditions to stabilise yield and quality.

• The utilisation of molecular tools to monitor accuracy of breeding and selection processes.

• Comparison of breeding strategies and assessment of crop quality in organic, low-input and conventional systems.

• Evaluate socio-economic and environmental impacts of breeding innovations to assess factors influencing their adoption.

www.rennes.inra.fr/sad/projets/projets_en_cours/solibam

Quoats
Building on previous work carried out in OatLINK, we are involved in a large consortium which is undertaking a new LINK project; “LK09124 “Harnessing new technologies for sustainable oat production and utilisation”. The QUOATS project, is led by Aberystwyth University (IBERS), and is jointly sponsored by BBSRC, by Defra through the Sustainable Arable LINK Programme, by European Regional Development Funding through the Welsh Assembly Government’s Academic Expertise for Business (A4B) Programme and through the Scottish Government Contract Research Fund; and is supported by industry partners.

Its objective is to develop new varieties of oats that will provide significant economic and environmental benefits for growers, millers and the dairy, beef and poultry industries.

The project will develop and apply state-of-the-art genomic and metabolomic tools for oat genetic improvement. Its focus is the understanding and manipulation of key traits that will enhance the value of oats in human health improvement, capitalise on the value of oats as a low input cereal, increase the environmental and economic sustainability of cereal based rotations, realise the potential of oats as a high value animal feed and develop new opportunities for using oats through advanced fractionation.

Powerful enabling technologies for the identification of specific genes and markers will drive the development of breeder-friendly tools accelerating the production of improved oat varieties that will be marketed by industrial partners.

A multi-disciplinary programme which combines modern phenotyping methodologies with the expertise of genomics researchers, oat breeders and end-users, will also address long term breeding goals by developing experimental populations which are polymorphic for agronomically important traits but more amenable to mapping and forward genetic approaches than conventional agronomic lines.

The work specifically undertaken by ORC is to assess varieties and breeding accessions for their appropriateness in organic production.

www.quoats.org/index.htm
Realising farm woodland values

The challenges and opportunities for realising the full potential and value of private forestry on farms were the key themes of the 2010 annual meeting of the Farm Woodland Forum, held at Teagasc Kinsealy near Dublin. ORC’s agro-ecology researcher Jo Smith was there.

Since the 1980’s, the Irish government has provided support in the form of 100% establishment grants and annual farmer premiums which has stimulated tree planting on farms. The total private forest area in Ireland is approximately 350,000 ha, forming 44% of the total forest area, and involving 16,000 private owners.

Government projections for national timber production to meet the increasing demand for home-grown timber and wood fuel assume that these private forests will be managed and harvested in the same way as State forests. However, farm woodland owners face a number of challenges, including a lack of infrastructure, small and fragmented ownership structure (the average area of farm forestry is 9 ha), and insufficient knowledge of farm woodland management. With 20% of the Irish farm forestry estate approaching its first thinning, these barriers need to be overcome so that farmers can maximise their financial returns as grants and premiums decline.

The importance of research and development activities and knowledge transfer was recognised in the Forum. And the role of producer groups and cooperatives was highlighted as a means of promoting and developing farmer knowledge of forest management and marketing opportunities.

Balancing conservation objectives with quality timber production from native broadleaf woodlands is critical. Guidelines developed by Woodlands of Ireland were presented and discussed. These show how it is possible to achieve both economic and ecological sustainability, with short rotation species such as alder, ash and birch, having the best potential under continual close-to-nature silvicultural management. Alternative forest products such as hurley making from ash and exotic mushroom and truffle production were also discussed as a means of adding value to farm woodland.

Moving forwards: the creation of an eco-agroforestry network

We have recently organised a meeting at our agroforestry research site, at Wakelyns Agroforestry, Suffolk, to discuss the establishment of an ‘eco-agroforestry’ network. This will promote an organic and agro-ecological agroforestry approach through research, dissemination and policy changes.

It was suggested that there is a limited understanding among the farming community of what agroforestry is and what it can offer. However, there are likely to be many examples of farmers making use of the woody resources on their land but not referring to this as ‘agroforestry’. As such, it was decided that the first action of the network should be to collate examples of ‘agroforestry’ practitioners into a database.

It is hoped that this will provide evidence of the extent and diversity of these systems within the UK and give support to the case for greater inclusion of agroforestry within policy frameworks. It will also provide case studies that can help to further the economic, ethical and ecological implications of integrating working trees and agriculture.

We have developed a short questionnaire for agroforestry practitioners to complete which asks for information on the age, design and management of the system. If you would like to take part in this survey, or know of others who are creative in their use of the woody resources on their land, please contact Jo Smith at jo.s@organicresearchcentre.com or on 01488 658298 Option 1, Option 4. www.sustainable-agroforestry.org.
Controlling perennial weeds

Mark Measures

Diamonds might or might not be forever but perennial weeds certainly are. The need to control them is an ongoing fact of life for the organic farmer. It is therefore a surprise how often basic husbandry approaches are forgotten. New favourites emerge from time to time and some stay for a while; others are quickly discarded.

It is a good idea to occasionally review what approaches are around. IOTA Director Mark Measures, who leads the ORC Organic Systems Development Group, reports on the group’s recent workshop Commonwork Organic Farm where some of the country’s most experienced organic farmers pooled their collective knowledge about controlling perennial weeds.

Several organic farmers are now getting reliable control of docks, couch and creeping thistle by fallowing. The technique does depend on thorough and regular, repeated cultivations using the right machine at the right time. Dry weather can’t be guaranteed but most find July and August the most reliable period, fallowing after a ley and pre winter cereals. Some fallow in May and June prior to establishing a ley. The most effective machine is the Lemkin Terradisc or one of its variants.

A few farmers have a Kwik-up which operates like a rotor-spike, flicking roots onto the surface for desiccation. The machine is reasonably effective but it does damage soil structure, so can only be used once and it needs dry weather.

At Commonwork, docks have become a serious problem in the arable area of this predominantly dairy farm on heavy Weald clay. The field-scale trials that Mike Cottrell and his contractor Graham Mackenzie have been experimenting with are:

1) Rotovating grassland in July to a depth of 3 inches, followed by regular, light cultivations to desiccate and kill the crown of the dock. (There is good evidence that there is very little germination of the part of the dock root remaining in the ground). The advantage of this technique being that it is much easier to desiccate a smaller dock crown than the entire dock root if it has been brought to the surface with standard cultivations. The technique has proved moderately effective, at least in the first year or two of cereals following a ley, however, the use of the rotovator in this way is very expensive and time-consuming and does significant damage to the soil structure.

2) Ploughing field in July to a depth of 8 inches and leaving it untouched for a month. During the moderately dry weather last year, the experience was a very high kill rate of large grandfather docks, due to the desiccation of the dock root by the drying soil still attached to the root. This technique is very similar to that recommending in some 1930s agricultural textbooks, which recommend ploughing when the soil is slightly damp – they claimed the subsequent desiccation is more effective when left in the clod. My view is that it is only effective on heavy, clay soils and that it might work just as well if ploughed to a more appropriate 6 inches of depth.

The results at Commonwork in a crop of winter-sown triticale were very convincing in a field which is known to have very high historical levels of mature docks. They will continue with the technique and report back in due course.

3) Mike has also been experimenting with non inversion tillage (NIT) systems in an effort to control perennial weeds, to improve soil structure and importantly to focus the return of organic matter and soil fertility to the top 3 or 4 inches of the soil profile, rather than burying it to 6-8 inches where it is likely to be less available to the plant. He has been using the Knoche cultivator with 16 inch sweep tines — very similar to the Lemkin Terradisc.

Cultivations were started in late July with the machine set as shallow as possible – e.g. 5 cms. operating depth. Three or 4 weekly passes very effectively killed off the turf and produced a seed bed for winter cereals with a very large amount of dead organic matter on the surface into which winter cereals were drilled with a Moore Unidrill. During the winter, establishment was good; the soil had both much higher worm cast levels and was much better drained than would have been found under a ploughed and cultivated regime. The crop in May looked in reasonable condition with the high level of docks reduced by 70 or 80 percent. This technique is being tried in two fields; while the docks and thistles appear to have been controlled reasonably effectively, the annual weeds are at high levels in one field (particularly charlock) and have not yet been reduced by the technique. NIT advocates claim that annual weed populations will initially increase and subsequently reduce significantly. We will see.

The group at Tablehurst Farm.

The group also visited Tablehurst Farm where we had a chance to see the work that Peter Brown and his colleague David Junghans are doing with the non inversion tillage system using the Eco-Dyn. This is a specialist NIT machine with a toolbar frame, adjustable rigid legs and a wide range of tines, a three hopper detachable drill and various crumbler rollers and following spring tines.
The key characteristic of this machine is that it allows very precise depth control, initially skimming the turf or stubble at 2 - 3 cms. thereby getting rapid kill of turf, annual and perennial weeds. Peter has been using the Eco-Dyn for two seasons now, and the results are certainly promising, though not without teething problems. Soil structure is good on these very difficult and inherently poorly-structured soils, levels of historically problematic perennial weeds, particularly docks and thistles are lower in most cases. However, there are problems, including the cost of the machine and some aspects of poor construction.

The principle of non inversion tillage certainly seems to be right for organic farming. There is some good early evidence from Germany that the system works and evidence from the South-east of England is that it can be made to work even in our wetter climate. However, it remains to be seen what the longer term viability of the system is. I am involved with some replicated trials undertaken by the Organic Research Centre and Duchy Home Farm, which we hope will provide some clear commercial guidance. For more information on Non Inversion Tillage see the IOTA Research Review www.organicadvice.org.uk/papers/Res_review_9_min_till.pdf

The main conclusion to draw from the day is that while some organic farmers have been battling with perennial weeds for 50 or 60 years, they are managing to contain them to tolerable levels by using a variety of techniques which need to be very well selected to suit the particular soil and cropping conditions with which they are working – and that there are new techniques being developed which hold promise for the future. For more information on docks see the excellent summary www.gardenorganic.org.uk/organicweeds/downloads/docks.pdf

To summarise the main points that arose from the day’s discussions:

Weeds

Docks are the primary and universal perennial weed problem. However, on lighter soils, couch is also a problem and locally, creeping thistles. Charlock is increasing and, on some farms is becoming the overwhelming problem.

Cultivation options.

• Rotovator in established grassland. This technique works, but is prohibitively slow and expensive and damaging to soil structure.

• Kwik-up. This machine is effective at getting weeds on to the surface for desiccation, but is slow and expensive and should only be used once in order to avoid damaging soil structure.

• Lemkin Terradisc and its variants. This machine does a very effective job, particularly with repeated cultivations in a bastard fallowing in July, August and September and between cereal crops.

• Inter-roe how. Some farms have found the camera-guided inter-roe how useful for both annual and perennial weed control in arable crops. However, others have found it of limited efficacy. Most suited to high-value vegetable crops on friable soils.

• Ploughing. Ploughing in July and leaving land not cultivated for a month or two appears to be a promising technique on heavy land.

• Non inversion till, using the Eco-Dyn or a shallow cultivator; this technique appears to have promise, but is not yet well-proven in UK conditions

Other cultural techniques:

• Bastard fallow – e.g. following a ley, or following whole-crop silage. This is the standard approach followed by many farmers and works reasonably well, provided that the correct equipment is available so that repeated cultivations are timed correctly and that the weather is reasonably dry.

• Potatoes can be a useful cleaning crop, provided additional time is put into inter-roe ridging up.

• Whole-crop. Competitive whole-crops, such as oats and peas, can be very effective and give good opportunity for subsequent bastard fallowing.

• Undersowing. Dock seedlings don't like competition and undersowing does reduce the germination and establishment of docks in re-seeds.

• Manure management. Composting undoubtedly reduces weed seed survival, particularly if temperatures are maintained at 65 to 70 degrees C over 2 or 3 weeks.

• Crimping. Offers great potential for earlier harvesting and much greater opportunity for effective fallowing.

• Skimmer. Use in standing crops to skim flowering weeds, such as wild oats and possibly charlock. Effective at reducing seed return.

• Slurry should only be applied at very light applications, as it encourages bare patches in grassland and establishment of dock seeds.

• Seed germination from slurry is likely to be lower when applied to grassland than if ploughed down prior to a cereal crop.

• Green manure crops can be used to help control docks and other weeds. There is experience of both mustard and buckwheat contributing to weed control though competition and allelopathic effects.

But

• Poaching. Poaching is one of the major causes of dock establishment.

• Cropping. Both field beans and lucerne significantly aggravate docks.

You can contact Mark Measures at: mark@organicadvice.org.uk
Reformers show zeal but within limits

“The public debate” on CAP organised by the EU Commission (DG AGRI) ended in June. Nearly six thousand responses were received including some 5474 from the “general public”. According to a press statement “these will now be fed into a “high-level conference”. But will they influence policy? Lawrence Woodward considers this and reports on how the organic sector is forming its response.

Officials in DG AGRI are certainly getting excited by the responses and taking their lead from Commissioner Ciolos are making statements that ooze with reforming zeal. “The undisputed hero of this debate was the little guy, the small farmer, badly treated but struggling manfully to survive. Small farms, not industrial-size units, will keep the rural economy alive and look after the countryside.”

The responses featured plenty of villains too. Ciolos fingered them: “Industrial-scale farming units; Non-active CAP beneficiaries, variously known as slipper, sofa, or divan farmers; traders, retailers and speculators; politicians; national administrations; EU trade negotiators”.

This is wondrous stuff; it’s so full of reformist zeal it becomes decidedly radical not to say Dantonesque. But don’t bet on too many executions. Even if you can imagine Ciolos or any other EU official pulling the covers off the guillotine – and I can’t – it’s likely to get bogged down in the mud of middle ground pragmatic conservatism as it’s rolled towards 2013. Alongside the “general public” responses were weighty documents from 80 “stakeholders” and 92 “think-tanks”. CAP reform is a policy “geek’s” dream and discussion documents and statements have been appearing with deadening frequency.

Some of them “trip the light fantastic” arguing at one extreme for a complete end to the CAP and at the other declaring that even in its current form it is the most effective way to provide food security. But most stumble ponderously into the middle ground, which, for all Ciolos’ romancing, is where the Commission wants the discussion to be.

The EU is, after all, about compromise and (as long as they are not unholy) deals are reached in the middle ground. Then there is the most fundamental fact of all; the EU and most of the original member states are profoundly conservative about the CAP. Many of the new member states are only somewhat less than profoundly conservative because they want a bigger share of the budget. What other explanation is there for the fact that after decades of dissatisfaction and widespread criticism of the CAP its original aims were reaffirmed in the Lisbon Treaty? For those readers who have had more interesting lives these are:

- Increase agricultural productivity
- Ensure a fair standard of living for the agricultural community
- Stabilise markets
- Assure the availability of supplies
- Ensure that supplies reach consumers at reasonable prices
- Few other groups are likely to argue for this however and we agreed that our headline argument was likely to be for organic farming to be included as a mandatory scheme as part of public goods/agro-environment delivery measures with 100% EU funding. Our case is that on evidential grounds and the fact that it is the only regulated farming system in the EU, the organic approach is a robust basis for the delivery of specific public goods/agro-environment options. The chances of this argument being successful will become clearer in coming weeks as Christopher Stopes and others from the IFOAM EU group meet with Commissioner Ciolos.

It is possible to interpret these in different ways but the EU’s prime driver has been and remains the maintenance if not improvement of the living standards of the agricultural community. Originally this came through such things as price guarantees but has latterly encompassed rural development, then actions to offset market failure, then payment for the provision of public goods.

The story is not as clear cut as this and I recommend you look at the excellent presentation of M. Hulot, (not the Jacques Tati comic character but the Head of DG AGRI’s Organic Farming Unit) where these themes are set in context and traced. These policy evolutions have been variously presented and explained but they have had the same driver.**

So there will be no radical action to scrap or fundamentally reduce the CAP; nor a new combined Common Agriculture/Food/Health/Environment Policy. Instead there will be something that looks similar to what we currently have; and which balances support through direct payments (income support) and support through payment for the delivery of public goods.

Of course there is much to argue about and this is the stuff of most of the CAP reform papers that have been published: equity in who gets what; which public goods and how to measure them; what and how much is 100% EU financed and co-financed; under which “Pillar” which measure and pot of money is to be found; the terms and conditions for accessing them; how to sell it to WTO; how to shape it to measure up to climate change, food security and any other shibboleths that emerge between now and 2013.

Towards an organic UK position

Some of these papers discuss organic farming and building on the excellent work of the IFOAM EU group, a sub-group of UK IFOAM members recently met to seek a common platform on the issue.*

- There was unanimous agreement that whatever separate thoughts we might have on the CAP and the reform process our primary task is to work for the best position for organic farming and organic farmers irrespective of the direction the reform takes.
- We feel the evidence is so strong that organic farming delivers so many of the benefits the CAP aspires to, that it should be a key part of any 100% funded central measure. Nic Lampkin argues that it is compatible and we will return to the case for including organic farming in Pillar 1/Article 68 structures.
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• Our very basic position is to argue for clear and well funded organic options as part of all the public goods/agro-environment measures that will undoubtedly emerge from the reform process. Leaving aside the UK specific problem of the restrictive attitude the government has to co-funding, the position is not as secure as might be assumed. The argument for setting specific output targets as a condition of funding is gaining ground. This might work against support for whole farming systems. We will be watching this closely and reporting back.

The final point we discussed was how far we should go in arguing the case for support for the generality of farmers. How conditional should that support be?

An X-file: Aminopyralid

In June 2008 a number of gardeners and allotment holders noticed some unusual symptoms in their vegetable crops. Roger Hitchings summarises:

It quickly became clear that the effects were most likely to be associated with hormonal herbicides. Cupping of leaves upwards is a typical sign of hormonal herbicide contamination and new growth may take on a fern-like appearance. Leaf texture may become leathery and veins may appear more prominent.

Problems continued into 2009 and a campaign to have products containing aminopyralid (Forefront, Pharaoh and Banish) withdrawn. Organisations involved included Garden Organic, Soil Association, Organic Growers Alliance, and a number of allotment holder organisations. The products were withdrawn temporarily by Dow Agrosciences pending investigation of the problems.

Aminopyralid is an herbicide used by farmers and horse paddock owners to control persistent perennial broadleaf weeds such as docks, thistles, ragwort and nettles. If the grass is subsequently cut for hay, haylage, etc. the residues survive passage through the digestive systems of the animals fed with this forage. The residues continue to survive in the manure stack because they have been quite strongly adsorbed. If this manure is incorporated into soil the aminopyralid is released as the organic matter breaks down causing the symptoms outline above.

Aminopyralid damage to courgette plants - Sally Cunningham - www.gardenorganic.org.uk.

An online petition against the re-introduction of these products was established on the Downing Street website but to no avail. The Chemical Regulations Directorate (formerly the Pesticides Safety Directorate) developed a set of restrictions which allowed the reintroduction. To ensure that their use does not lead to a repeat of the issues seen previously, their availability is now tightly controlled with a significantly amended label and a stewardship scheme which ensures farmers are aware of the implications for subsequent manure management. The herbicides cannot be used on grassland destined for hay and silage or on grassland grazed by horses. This year sales are restricted to Scotland, South West England and Northern Ireland.

There have been some incidents this year but it is not clear whether this is because old manure is still being used. There have been few if any cases involving commercial organic growers but this kind of problem raises the issue of whether growers should be relying on brought in animal manures of potentially dubious provenance. It has also been suggested that some green waste compost could be affected by aminopyralid. This is an issue that needs wider discussion in the light of questions about GMOs in manures and composts, and the increasing use of food waste in the production of available composts. These issues will be discussed in a later article.

In the meantime anyone contemplating the use of brought in manure should either not do it or ask some detailed questions of the supplier.

Aminopyralid Alert

Sensitive Crops include:
Peas, beans, other legumes: beets including sugar and fodder beet; carrots and other umbellifers: potatoes, tomatoes, lettuce

Look for:
Leaves that are twisted, cupped, elongated; misshapen fruit; poor germination; death of young plants;

Before sowing or planting:
Test the soil by trying to germinate seeds of a sensitive crop like lettuce - if the germination is weak or non-existent, leave the soil in a green manure for another 12 months.

* See http://ec.europa.eu/ agriculture/cap-post-2013/debate/index en.htm
** The presentation was given to the recent IFOAM EU Congress in Madrid. See www.ifoam-eu.org and www.organicresearchcentre.com
† See www.ifoam-eu.org
Monday the 24th May 2010 was a special day in our history. HRH The Prince of Wales came to visit – the third time he has done so since we were established at Elm Farm in 1980. Unlike the first time, which was a private occasion, this had all the ceremony of an official visit; The Deputy Lord Lieutenant, The High Sheriff, West Berkshire’s MP, the Chairman of the County Council, the Chairman of the Parish Council all lined up to meet and greet.

Fortuitously our MP is Richard Benyon who a few days before had been appointed to the ranks of government ministers – Parliamentary Under-Secretary for Natural Environment and Fisheries, to give him his full title – was able to join us.

As an MP Richard has tabled questions in the House on organic issues and helped us with meetings. He has an organic farm near Newbury and although organic farming isn’t in his ministerial portfolio, it does include biodiversity and ecosystem services, so we’re sure we will be having discussions with him.

During the official line up, he and our President, Hardy Vogtmann (who was in charge of Germany’s conservation agency) were discussing a possible fact finding trip to Germany.
HRH’s officially opened our new/old, ecologically renovated office building and conference centre. The building renovation has combined traditional materials with modern eco-technology such as ground source heating, solar panels, rainwater harvesting and the highest standards of insulation. Our Grade 2 listed barn has been transformed into a beautiful conference hall.

The Prince’s interest in organic farming is well known; what is less so, is just how knowledgeable he is on all aspects of the subject. He looked at display boards and talked to ORC staff about their projects; some of which he has followed for a number of years. We are growing some of our cereal populations on his Duchy Home Farm and he questioned the crops team closely on progress.

HRH showed a particular interest in our agro-forestry work and asked for a visit to be arranged to our Wakelyns site in Suffolk.

Following the completion of our building work we have begun to reconstruct our education and therapy garden. This was a feature of our education work some years ago but had to be put on hold as the site was occupied by the paraphernalia of a construction site. However, since the spring we have begun to re-establish contacts with local schools and one of them has their own areas within the garden.

The children were there to meet the Prince and he enthusiastically engaged with them for far longer than we had timetabled. Credibility was possibly stretched a little when all of them said that they always ate up all of their vegetables but maybe times really are changing.

Nearly a hundred guests attended the event, most of them long term friends and supporters of our work. This was our chance to say thank you for help given, to celebrate 30 years of ORC’s existence and to invite continued support into the future.

Prominent amongst the guests was our patron, Yvonne Pye and her family and friends. HRH had agreed to unveil a plaque in memory of her late husband Graham who had been one of our most steadfast supporters. Graham’s plaque is placed near to one in memory of his father Jack; an acknowledgement of some 27 years of unbroken support by the Pye family.

HRH also acknowledged the contribution made by our founder David Astor and the fact that they had shared interests in a number of causes like organic farming and Intermediate Technology when they were very minority interests.

He developed this theme of the need for pioneers in his speech where he reiterated his long standing support for ORC and organic farming in general. As he spoke he became increasingly passionate about the separation of our society from nature, exemplified by the drive towards GM technology.

He highlighted the wastefulness of the food system and how from the field, through to processing, transport, the retailers and in the home we waste millions of tonnes of food. The problems that beset us, including climate change, he believed can be dealt with if we treat nature and natural resources with respect. Organic farming can and must play a crucial role in this.
Open day and food festivities bring in the neighbours.

The good weather which blessed HRH’s visit and the opening of our new buildings continued into July and despite some last minute worries the sun shone brightly on our two open days on the 16th and 17th.

The first day was aimed at fellow researchers, advisors, farmers and growers and covered a range of research and advisory topics. As well as home grown material on such things as markets/consumer attitudes, agro-forestry, 100% organic feed, legumes, GM and conversion, we imported products from around the world in the shape Berward Geier – the pied piper of the international organic movement.

Bernward has been a friend of ORC for about 25 years. During his time leading IFOAM (the International Federation of Organic Agriculture Movements) he travelled all over the world bringing people into the organic family.

As a direct result of his efforts IFOAM has members in over 160 countries. His renowned pictorial presentations are full of colour and uplifting information. We were pleased that he was able to join us to talk about organic agriculture around the world and also about the threats from GM.

While here, Bernward also presented us with the IFOAM Recognition Award for 30 years of the Organic Research Centre supporting IFOAM’s organic principles and the development of organic agriculture.

Advisory, soil, compost and conversion workshops were held during the day. Trips were also made to see our research sites at Sheepdrove and Doves Farms. So much was happening in consecutive sessions that participant numbers were spread out sufficiently to enable plenty of in depth discussion to take place.

Friday was good but Saturday was superb

700 people visited our organic and local food festival to buy from the “marketplace” stalls – selling vegetables, cheeses, cakes, chocolates, ice cream, preserves, eggs, meat and all manner of tasty things. There were plenty of kids with plenty of things to do and see: slinky apples, veggie painted faces, eggs to paint, bugs to hunt, busy bees, Flying Pigs (the organic burger bar) and hands that glow in the dark so you can spot the germs if you don’t wash them. There were cookery demos, green woodworking demos, weaving demos, compost demos, seed demos but no protesting demos unless you count the “Love Food Hate Waste” workshop.

It was glorious weather and no-one was forced to be active – although plenty were – there were places to just sit and taste Vintage Roots (beer, cider, wine) or tea and picnic and all that jazz in the shape of the St. Bart’s School Combo and Gypsy Jazz Music who were as good as the day was sunny and long.

This was the first time we have been able to use all of our renovated barn, reconstructed courtyard and garden and to have the local community come visit and play. And at the end they all wanted to know when they could come again.
A lot has been happening on the GM front since the last Bulletin. The focus in most of the UK press has been about whether Caroline Spelman is too close to the GM industry and whether the FSA can be trusted to run a national “debate” on whether GM crops should be planted in the UK.

In short; she is and they can’t. Even though she has resigned or closed down her company Caroline Spelman is intellectually and emotionally committed to GM. But this is no different to what we’ve become used to. Since the sacking of Michael Meacher, all Defra Minister’s and all the key officials have been committed to GM.

Our perspective on the FSA is set out elsewhere but as we are going to press there is no news about the GM promotion – sorry debate. In considering the FSA’s fitness for purpose on this issue, the fact that they were woefully inactive when unapproved and unregulated GM linseed contaminated an M&S product last year has incredibly gone unnoticed.

But the big issue on GM is the introduction by the commission of a so called GM package consisting of a new Commission Recommendation on non-binding co-existence guidelines & a draft Regulation, which seeks a legislative amendment (the inclusion of Article 26b) to Directive 2001/18 for the deliberate release of GMOs into the environment.

The new EU Commissioner for Health and Consumer Policy, John Dalli, sounds as if he should be an American gangster but is in fact from Malta. The new version of the old joke is – “what makes an organic Maltese Cross?” The answer is John Dalli – because his dealings on GM could be out of the script of The Godfather.

According to him this package “should be viewed as a “positive step”, particularly in light of the fact that these issues are now being looked upon in a holistic way in one portfolio in a bid to generate a “coherent debate”.

In fact it is a piece of dodgy dealing which ostensibly allows members states to make decisions on growing GM crops as long as they adopt a more flexible i.e. lax approach in the EU wide approvals process. There is no doubt that the package significantly promoted the GM industry and threatens all organic and non-GM interests.

Dalli had a frank exchange of views with MEPs on the proposals and the arguments will run through the summer and into the autumn. We will return to the issue when we have properly digested the package and found out what Defra’s response is.
Our work includes practical, participatory research for and with producers, advice, education for students and schools, policy engagement with governments and much much more.

Much of our work is funded by government research contracts, but without your support, we cannot maintain our role as an independent voice for food sustainability based on organic principles and best practice.

If you would like to donate, become a friend with a regular donation or include us in your will, please phone 01488 658298 for details or download our 30th Anniversary Appeal details from www.organicresearchcentre.com

30TH ANNIVERSARY APPEAL

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