The Organic Research Centre - Elm Farm's Producer Conference:

Doing it right, Doing it better

10th and 11th December 2007
Royal Agricultural College
Cirencester

ORGANIC RESEARCH CENTRE ELM FARM

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ORGANIC INFORM @ ELM FARM

The organisation of the conference was facilitated by The Organic Research Centre - Elm Farm in collaboration with Organic Inform, a Defra/RES part-funded project to exchange and disseminate up-to-date market, research and policy information.

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ORGANIC INFORM @ ELM FARM

The debate on how organic is organic continues and is, if anything, intensifying with increasing media attention. Producers are under increasing pressure to maximise output especially when dealing with customers in the wider market place and it can be difficult to stay focused on what organic production is all about. It was in this context that The Organic Research Centre - Elm Farm organised a second producer conference at the Royal Agricultural College, Cirencester in December 2007. The theme was "Doing it right, Doing it better" and it followed on from the successful conference a year earlier "Organic producers: in principle and in practice".

The programme was very much producer focused and it was to four producers that we turned to open the conference with their take on how they do it right and do it better. All four presentations were inspirational in their different ways but common themes emerged such as the importance of good animal health, strong standards and long term sustainability. They all took a generally holistic approach to their respective production systems and all four were very clear about the importance of community involvement. In many respects this introductory session encapsulated the purpose and the vision of the conference.

Many technical and challenging issues were tackled in the producer workshops and it is clear from these proceeding that presentations were stimulating and the discussion lively. The Defra presentation on the new EU Organic Regulation caused some consternation but not necessarily for the right reasons – delegates' criticisms were focused on the compulsory use of the EU organic logo that will actually carry the term BIO as opposed to organic. There are arguably more pressing issues such as the management of derogations under the new regulation that will have

greater effects on producers. Such issues will be very much to the fore when we hold our next producer conference on 6th and 7th January 2009 as the new regulation will have come into force.

The conference was well received and the programme touched on many important and current issues. As with all such events, many conversations took place away from the workshops and plenary sessions, and delegates took the opportunity to socialise, relax and enjoy each other's company. The theme of "Doing it right, Doing it better" resonated with the great majority of delegates but it is also important to realise that we must do it together if the vision of genuinely holistic and sustainable organic systems is to be realised.

Roger Hitchings
Head of Advisory Services

THE ORGANIC RESEARCH CENTRE ELM FARM

MONDAY 10th DECEMBER

Plenary Session : (14:00 - 15:00)

Chair: Roger Hitchings

Producer Panel: Doing it right, Doing it better

In this inspiring opening session, four producers responded to the question of what "Doing it right, Doing it better" means to them.

Tim Downes, from a dairy farm in Shropshire made it clear that he felt that from carbon footprint to seaweed minerals "Doing it right, Doing it better" is about the whole system, the whole lifestyle and the whole process. He emphasised the importance of animal health and all that goes into this from breed selection on, and demonstrated his belief that the farm is an important part of the community: running open days for local schools and others.

Chris Blunt, arable manager of Lower Pertwood Farm, took to the platform. Chris discussed some critical challenges within his farming system and demonstrated a determination that "Doing it right, Doing it better" demands of its champions. Chris reflected on energy saving ploughing: he aims to keep 'as shallow as possible' at between 5 and 6 inches and managing with lost phosphorous: he would like to import manure from linked farms. Chris went on to make some important observations from a broader perspective which might be key to longer term sustainability of organic systems. Firstly he noted that there is still a stigma attached to organics within colleges and this must be addressed, and secondly he noted that "Doing it right, Doing it better" was undermined by weak standards which threaten best practice competitively.

Scott Sneddon, a grower from near Durham, provided further contrast. He started growing on a 1.1ha site (now 3.6ha) just two years ago, having come from a nursing career in the NHS. He describes his work as 'rooted in community' and about 'keeping people happy'. Scott's direct selling started as walkers on nearby footpaths showed interest in the new activity and made purchases. He now delivers between 70 and 80 boxes a week and still speaks to most customers personally – every week! Scott's community is not just the one that walks by or that he sells to but includes other growers who he has involved in the development of his work and who he recognises for their greater experience. With Scott's enthusiasm for what he is doing it is no surprise that he has inspired so many through an interview with Lifestyle Magazine and in receiving a food hero accolade.

John Newman from Abbey Home Farm, near Cirencester, described his newly developed table bird enterprise which produces a 'hand-crafted and hand-finished product'. He summed up "Doing it right, Doing it better" as 'being responsible for what the public wants'. His presentation made it clear that this responsibility was reflected in thorough attention to detail resulting in high levels of animal welfare though breed choice, flock size and good husbandry. The farm also plays a key community role with school and farm group visits which provide him with something of a litmus test. He explains that it is 'up to the public to decide if we are getting it right'. John, whose commitment to high standards are unquestionable, reflected Chris' comments as he noted that principles and financial considerations present a constant battle; nevertheless animal health and the 'public connection' are clearly the defining areas of John's interpretation of "Doing it right, Doing it better" .

Workshops: Growers (15:00 - 15.50)

Chair: Alan Schofield

Plant-raising and substrates – the choices
Jill Vaughan

Write up courtesy of The Organic Grower

The topic of plant-raising and substrates was well covered in the last issue of The Organic Grower (Autumn 2007 No. 2) but is of such importance to growers that a session at conference was warranted. Who could be more knowledgeable and experienced to talk about the options available to growers but Jill Vaughan of Delfland Nurseries?

Jill Vaughan, together with husband John Overvoorde, runs Delfland Nurseries, near March in Cambridgeshire. They started raising organic plants in 1998 after the derogation to allow organic growers to purchase non-organic plants ended, and last year produced 21 million organic transplants, which was 45% of their total output. They supply over 70 organic customers including the biggest salad producers in the UK, the Riverford group and numerous small producers with transplants of glasshouse crops, celery, leeks, onions, lettuce, brassicas, herbs and minor crops.

With the exception of all tap-rooted crops, true spinach and peas most vegetable crops are suitable for transplanting. Use of transplants can extend the season and enable growers to advance the crop ahead of the weeds. The grower gains more control by being able to set an optimum population and the shortening of growing time can enable longer time for fertility-building crops or weed control. Giving the example of leeks, they need soil temperatures of 7°C to germinate and plants sown in March or April will bolt unless given heat. Although sowing after April is possible, given good seedbeds, weed control and weather, you would still lose 8 –

10 weeks growing time and space. Most Delfland plants are produced as peat blocks or modules, though wrapped plugs, 'whalehide' pots (not actually made of whalehide but thick paper, as Jill had to reassure a worried SACert officer!), biodegradable pots, plastic pots and plastic packs are also used for various markets.

2.7 – 5.0 cm	10cm
celery & celeriac brassicas (sometimes) lettuce endive fennel	glasshouse crops: tomatoes cucumbers peppers aubergines (also pots)

Block sizes
* Usually blocks (ORG= organic CNV= Conventional)

126	216	345	600
beans courgettes squashes marrows asparagus (or 216 half-sown)	brassicas celeriac sweetcorn beetroot swedes & turnips leaf beet herbs oriental veg. celery* lettuce*	leeks & onions (ORG) brassicas (CNV)	leeks (CNV)

Module sizes
The physical requirements for organic growing media are that there is a suitable balance of water, air and particle sizes. It must be capable of being made into blocks or filled into modules or pots mechanically,

anchoring plant roots and also hold together for mechanical planting. It should wet up and re-wet evenly and not slump. The biological requirements are that it is free of plant pathogens or viruses, pests and weed seeds. It should be biologically active and safe to handle for operators. The chemical requirements are suitable pH, correct levels of nutrients for germination and growth, some buffering capacity and no contamination. Other requirements are that it should be ready to use, perform consistently and reliably and have a reasonable shelf-life. Rigorous quality control and full traceability are important, with a full and open specification. A professional guarantee is needed for what you get, but Jill said that Klasmann is the only manufacturer to provide a proper specification. Things can sometimes go wrong and co-operation and communication between the grower and the media manufacturer is needed to identify the causes of the problem and the liability quickly. It is also useful if growers can share experiences to see if there is a problem with a particular brand or batch.

The use of peat is inevitably an issue that rears its head whenever growing media is discussed and if we are to 'do it better' we need to reduce our reliance on it. The target in the UK Biodiversity Action Plan of 1997 for a minimum of 40% of total market requirements to be peat-free by 2005 was met (47%), largely by reducing the use of peat as a soil improver. The target for 2010 is 90%. The Growing Media Initiative is a scheme developed by the Horticultural Trades Association in conjunction with the Growing Media Association, DIY and garden centre retailers, Defra, the RSPB and the RHS to help the horticultural industry in the UK meet these government targets. The main alternatives to peat are barks, wood fibres and green waste compost. Composted green waste seems to be an obvious starting point but it can't be used straight and 20% is the maximum in Klasmann composts. However some growers have had success with higher proportions than this. Green waste compost improves the biological activity of growing media, particularly useful when mixed with an inert substance such as peat, improves wetting and buffering capacity, slowly releases nutrients and can suppress diseases. It can have high pH and potential contamination issues which is why companies such as Klasmann are making their own in order to have full control of the process. Bark has potential and Melcourt are the leaders in this - producing composted bark

products for use as components in growing media including Sylvamix Natural, a peat and animal product free potting compost. Jill questioned the environmental credentials of Perlite, which is being used by some growers in their mixes. It has to travel a large distance (the world's biggest producer is Greece) and temperatures of 850-900°C are needed in the manufacturing process.

The rules of course are different for pot-grown herbs and ornamentals, which standards require to contain 51% materials from organic farming origin and 49% green waste and/or permitted materials. Suppliers include Fertile Fibre & West Riding Organics. Delfland themselves use Klasmann composts, which they find reliable. Though a peat-based compost it contains 20% green waste compost and the sphagnum peat is, Klasmann claim, sustainably harvested (over a long time!). They even raise all their conventional brassica plants in Klasmann composts, which are 'converted' to conventional by drenching for cabbage-root fly immediately prior to despatch. The green waste in the compost is loved by Sciarid flies, which they treat with biological controls. Everything raised in modules plus some blocks (e.g. tomatoes) are liquid fed with a low but frequent dose of Nu-gro NPK. They are trying to reduce their environmental impact not only by looking further at peat-reduced media but by combining plant deliveries with produce (filling lories on their return trips) and are planning a biomass boiler for heating the greenhouses.

Jill produced a wish list for further research

- Fundamental research on biological processes in organic growing media inc. nitrogen availability & disease suppression
- composted green waste
- trials of peat-free media inc. mechanised handling
- follow-up field trials inc. mechanised planting

Discussion followed as to why despite much research into growing media (outlined by Tim Deane in The OG no.2 p.25) we are not much further ahead than in 1981. The research done was vigorously defended by 'gamekeeper turned poacher' Bruce Pearce of the Organic Research Centre - Elm Farm and formerly of MAFF, who argued that the failure was on the part of the commercial companies who hadn't made use of the

research, rather than the research itself. That may be due to the still small relative size of the commercial organic growers market.

Further information –

- www.delfland.co.uk
- Soil Association Food and Farming Department fact sheets:
  Suppliers of transplants, herbs and rootstocks – Summer 2007
  Composts, plant raising media and mulches for use in organic production – Autumn 2007
- www.wrap.org.uk - Guidelines for the specification of composted green materials used as a growing medium component. WRAP Tel: 0808 100 2040

Dutch Tour September 2007 - Alan Schofield

Write up courtesy of The Organic Grower

The tour had been sponsored by Elsoms seeds and was to visit the Bejo seeds and trials site at Warmenhuizen, as well as to visit three Dutch organic vegetable growers.

Bejo Zaden are a family-owned global seeds business. During the rest of the day we were treated to guided tours around both the seeds facility and the trials ground. Bejo produce a wide range of organically grown seeds and to see these all growing on one site is always educational. To be able to make a comparison between differing varieties of the same crop sown and planted at the same time with similar fertility regimes really helps the grower to make an informed choice about which variety to use. In the late afternoon we were given a guided tour around the seeds house itself. Here seed that has been grown in various locations around the globe all arrives to be sorted, graded, cleaned and then packaged, a sight that would be an education for any grower.

Advances in technology that are compatible with organic techniques have led to some amazing changes over the years at Bejo seeds. Two of the

most striking are in the way seeds are primed, a technique of pre-germinating seed and then re-drying them for sale. This used to be done using ethylene glycol or antifreeze but is now accomplished by warm water and temperature-controlled rotating drums. The germination process begins and then, just prior to the radical breaking the seed coat, the process is stopped and the seed dried and made ready for sale. Laser technology allows the seed to be graded into batches all at the same stage of development prior to sale. The seed must be sown within days of receipt but for a crop like parsnip the shortened field germination time gives the grower a real advantage.

The other technique that caught my eye was the old method of warm water treating the seed to control seed born disease. This was used a lot during the 1950s and 1960s, to be replaced by chemical treatments during the 1970s. What was refreshing to me was that this method is being used by Bejo not just on organically-produced seed but for most of their seeds, helping to replace the chemical seed treatments. This process is a must for the non-chemical control of septoria on celery . It is a very simple process whereby the seed is treated with water at 50 degrees C for approximately 25 minutes and again dried, prior to sale. Bejo are also working on eradicating pseudomonas and onion mildew through their continuing selective breeding work.

That evening we went on to a huge hotel complex at Egmond aan Zee, a Dutch seaside town on the North Sea coast complete with surf suitable for surfing and, of course, the off shore wind farm. After an early start the next morning, we travelled around North East Holland and visited 3 very large growers - all with something different to show us.

The first was a 450 ha vegetable grower, a conventional grower until 2000, whose major crops are carrots and cabbage. A state-of-the-art packing and storage facility was just being finished. Cabbages are stored for sale all year round. His major markets were the UK and Germany. As a conventional grower he had suffered from major compaction problems. After going organic he approached machinery manufacturer Fendt to modify one of their tractors for him. This entailed widening the wheel width to 3 metres and adapting all associated machinery to fit. Not cheap

at €110,000/tractor, but coupled to a GPS system he can now drive within 2cm of the previous years' wheelings. With an extensive rotation, including cereals sold to a local dairy farmer with manure returned and lots of green manure crops, he is now achieving yields of carrots approaching 70 tons/ha. This is 10 tons/ha more than when he was conventional. With a market return of 25 cents per kilo for carrots he is setting a hard act to follow.

The second grower was a little smaller with only 330 ha of vegetables under cultivation - 100 ha carrots, 45ha onions, 80ha potatoes, 20ha beet and 50ha cabbage, with the remainder down to phacelia. This grower was using a lot of green waste compost to improve fertility. A convert to organic in 1999, he told a lovely story about his soils. Not very happy with the medium clay that he had been working prior to conversion, he was convinced that it needed improving before organic production commenced. Whereas you or me would be looking to make additions to our existing soil, after an extensive soil survey revealing a sandier soil profile at about 2 metres down he took the decision to plough with a 2 metre mouldboard plough to bring the more favourable soil to the surface. My imagination boggles at the machine that pulled it ! Job done, he is now working a beautiful sandy loam that again was yielding carrots at approaching 70 ton/ha.

Just as I had got to the stage of contemplating a career change, he then showed us his €250,000 twin row harvester going full belt harvesting carrots at approx. 1 ton every 3 minutes. All his carrots were being harvested in perfect conditions and destined for his again immaculate state-of-the-art cold store for long term storage.

By the time we arrived at our third and final grower even the most hardened, professional growers in our party were green with envy. Our last host of the day was a small grower (by comparison) with a mere 130ha. Wheat, beet, potatoes, onions and cauliflowers were grown on this holding and once again GPS was the main theme here to overcome compaction problems. These systems were developed at the National Institute for Agricultural Engineering (NIAE) here in the UK but have not been as widely adopted by UK growers as we saw in Holland. Once

again this figure of 2 cm tolerance was quoted year on year for wheelings and the results were there for all to see.

I will leave it to the reader to imagine the discussions that ensued on the trip home. I was impressed and bewildered by what we had seen. Organic production has certainly come of age in Holland. This was my third trip to Holland over the last twenty or so years and every time I have visited I have been impressed and amazed at Dutch horticulture. They receive no more government grants than UK producers, but they do have a government that recognises the worth of horticulture and a marketing system that has developed to the point that this little piece of land across the North Sea produces many of the vegetables consumed fresh in Northern Europe. As growers they also have access to cheap finance (0.5%-1%) and that to my mind is where they have the advantage over me.

However no matter how impressive it may seem we have to remember that 60 years ago the land on which we saw this production was under water. These so-called polders have been reclaimed from the sea and the tiny fragments of sea shells in the ground are testament to this. There is no tree or hedge older than 60 years and their weed seed banks have only had this amount of time to develop. As a light distraction during the afternoon on the third holding we visited, I set off to count the amount of perennial weed that I could find. I must have walked 20 ha or so without seeing a nettle or dock, creeping thistle or buttercup, and when I did find a weed it was, of course, chickweed.

Workshops: Arable, poultry, dairy, beef & sheep (15:00 - 17.00)

Chair: Dr Susanne Padel

Cross sector session on feed (I)

Susanne Padel introduced the issues surrounding shortage of feed and steps we could take to solve it. **Andrew Trump** of the Organic Arable Marketing Group began with a presentation on cereal supply and demand, on farm feeding and models for the future.

The area of organic arable land has decreased in recent years and, due to high non-organic wheat prices, further conversion is unlikely. At the same time, demand for feed from growing organic livestock enterprises has soared. Consequently, we are now reliant on derogations and imports to fill this gap – although this is not organic farming as most people present would like to see it.

Organic farming should be based upon closed loop systems and the majority of feed should come from on farm production. However, there can be significant barriers to this, particularly in peoples' attitudes. Andrew believes that as organic farmers we are already good at questioning existing structures, and should look closely at our businesses to see where changes could be made in order to increase our production of both cereals and proteins for on farm feeding. He also stressed the potential for partnerships and nutrient exchange between neighbouring farms.

The discussions included comments that the IFOAM principles state feed should be on-farm, and it was the certifier's job to include this in their standards. It was agreed that this could be difficult on some small farms, but most dairy farmers should be able to achieve it. **Stephen Briggs** of

Abacus Organic Associates noted that whilst dairy, beef and sheep producers were likely to have enough space, many poultry and pig producers are tenants. It was also noted that feed should be mainly restricted to mono-gastricts, and there was interest in feeding waste food and bi-products to pigs and poultry as well as allowing them more forage. **Martin Wolfe** of the Organic Research Centre stated there is a vast body of work demonstrating that mixtures e.g. of wheat and beans are very successful and there are endless combinations that can be used. **Rex Humphrey** agreed, saying he uses spring wheat/pea mixtures in Northern Ireland and crimps them to achieve high protein feed – it can be done!

Cross sector session on feed (II)

Rex Humphrey started the session by asking some thought-provoking questions about the feed issue – Should we let the market sort it out naturally? Should changes be enforced? Should Defra play a role? Should a higher level of grant be available for cereal production? Should feed compounders offer forward contracts? Should we be forced to change our farming systems?

Rex then introduced **Heather McCalman** of IGER, Aberystwyth. Heather said that some farmers are living under the false illusion of derogations and should be working with 100% organic feed. Heather advocates appropriate quality forage systems. She said that farmers need to design something that works for their system and that it's about getting as much home grown cereals and protein as possible. Heather thinks that if you have the right livestock on your farm, you don't need cereals. She said that there is a forage for every occasion and all the way through the year.

If a farmer in a marginal growing area does want to grow cereals, wholecrops and crimping could be considered. Heather mentioned oats as a good crop to grow - they are competitive, they thrive in low fertility conditions, and there are new varieties with higher grain quality. Naked oats are better nutritionally and have less fibre than the husked varieties. They have a high energy content, a good amino acid profile, and a high

essential fatty acid content. They are lower yielding than the husked varieties, are usually grown under contract and need to be dried after harvest. One farm Heather knows has fed naked oats to layers as a sole diet (with grazing).

Discussion
The discussion centred on whether farms should be growing their own feed or be linked to a farm that could grow for them. One farmer suggested that we should be producing more milk off forage. Another asked whether the consumer would rather have imported organic grain/ feed or imported organic milk.

Gerry Minister said that we need a linked farms system to avoid situations where cereals sit in the grain store when things are being imported. **Rex Humphrey** asked whether certification bodies (CBs) should force farms to be linked. **Steven Jacobs** (OF&G) said that CBs are getting pressure from both sides – the market and farmers. **Helen Browning** (Soil Association) wondered whether it would be possible to get the certification bodies together.

Rex Humphrey commented that the rules say that feed should be from the farm/area. He thought that an opportunity had been missed to put a strategy about this in the EU regulation.

It was suggested from the floor that a carrot not a stick approach was needed and that there should be a levy on livestock which should be paid to the cereal farmers; others disagreed. **Michael Marriage** said that farming is a long term business. Recently there has been a lag with low cereal prices, but now he can't see many livestock enterprises that would make as much money as cereals at £300/t. He thinks it will right itself. **Andrew Trump** wondered why people can't value security of supply.

At the end of the session, **Rex Humphrey** asked for a show of hands of how many people thought that there needs to be a level of enforcement from the certification bodies for people to grow their own cereals? Yes – 21; No – 10.

Meeting: Arable (17:00 - 17.30)

The Real Bread Campaign - Andrew Whitley

The per capita consumption of bread has dropped dramatically (over half) in the last 50-60 years. The reasons are likely to not only be an evolution and wider sourcing of food, but also the intolerance of bread itself.

Andrew argues that the present processing of wheat to bread is making it less palatable, and less digestible. Significant changes need to be made to:
1. Milling varieties; and
2. Processing of bread, where 90-95% of bread is made by the Chorleywood Bread Process (CBP). This process integrates "no time dough" where the fermentation step in bread making is eliminated.

The Real Bread Campaign (RBC) has been developed as a result of the issues associated with Peak Oil, which will ultimately result in the breakdown of the global supply change with the subsequent need for localised self-sufficiency.

The conventional wheat breeding programme has emphasised yield and the quality demanded by large scale commercial processors. The varieties are selected based on the extensibility and the elasticity of the gluten network. The nutritional content of wheat is only considered in the production of animal feed, not for food. Old wheat varieties have a tendency to have less of the gliadin fraction of gluten, and it is this fraction which is largely associated with coeliac gluten – intolerance. Therefore, the new high-gliadin wheat varieties augment wheat sensitivity.

The fermentation of dough in the production of bread is essential; the absence of this in the CBP is damaging the end product. If yeast-based bread is fermented for 6 hours (compared to the CBP) the amount of folate in the bread is doubled yet there is a push to add folic acid to bread to reduce the incidence of spina bifida babies. Well fermented bread could

provide the folate required. Furthermore, the level of acrylamide that is produced in the crusts of bread and in toast can be significantly reduced if the dough is fermented. Also, the bio-availability of nutrients is increased in bread that is fermented for a greater length of time.

In 1953 coeliac disease was first identified – is the incidence of this disease related to the development of the CBP process? Fermented bread, which contains lactobacilli, can make bread edible to coeliac sufferers.

Additives are commonly added to bread such as enzymes. These are described as 'processing aids' but existing legislation does not require them to be added to the ingredient labels. Over 90% of bread contains these additives; even artisan bakers use them to increase the shelf life of the bread. Andrew kept a branded loaf "For kids" for 3 months, and it remained soft and squidgy. Organic bakers are allowed to add improvers to their bread, which Andrew strongly objects to. As the chair of the Soil Association processing committee, he is pushing to eliminate this practice.

One large baker that Andrew has spoken to said that if the addition of enzymes was banned they would of course have to deal with it, but it was expected that he would have problems in the future.

The use of genetic engineering is extensive in enzyme production – a key issue in organic processing. There are two main options regarding bread processing for organic production:

1. A healthy eating range which is fortified with various additives (Andrew: "and so consumers might just as well eat pills")
2. Bread needs to be re-thought from first principles, since a healthy product comes from healthy soil. If this process is ruptured there is impaired health. The most wholesome flour must be used to make bread with a process that doesn't throw away the nutrients.

A campaign to address the issue of bread needs to:
1. Agree a definition for real bread
2. Have an educational remit
3. Research to enlist people who cannot eat ordinary bread

4. Look for local diversity from a suitable plant breeding system
5. Train independent bakers in supply and demand
6. A celebration of bread

Society has a tendency to over-consume. The diet of the population needs to be adjusted so that we eat less, but gain more nutrients from what we eat. (The desire to eat more relates to low nutrient food). A small intake of good bread can achieve this… "Eat less, eat better bread"…

A certification process is required to label good bread – such bread doesn't have to be organic but it has a tendency to veer towards it.

Q: What is the FSA doing?
The FSA would take the problem to the science lobby, and look for evidence from their conservative lobby members. FSA support the addition of foliate, but the government is pushing for choice – a conflicting argument.

(Comment from audience) Should the FSA be campaigned to do the research? - Yes

Q: Local wheat will have variable quality – how can that be dealt with?
An artisan baker can adjust to variable flour quality, large scale processors cannot. Seasonal variation can in fact be interpreted as positive.

IOTA (morning session)

After a welcome and brief introduction to the day, delegates took part in Open Space sessions in the morning in which they chose the topics they wished to discuss and prioritise.

Eight discussions took place on the following subjects: Feed Supply, Soil Management, Policy, Learning, Qualities of Advice, Distribution Systems and Climate Change/ Energy use.

At the end of the morning, delegates were given the opportunity of voting on which topics they felt were most important and on those topics they would like to follow up personally. Climate Change/ Energy use emerged as the top priority for delegates on the day, followed by Learning, Soil Management. Policy and Feed Supply shared equal fourth place, followed by Qualities of Advice and Distribution Systems.

IOTA will follow up on the results of these sessions in the course of 2008.

Workshops: IOTA (15:00 - 15.50)

Facilitator: Tony Little

Energy and Emissions

Energy was identified as a key priority at last year's IOTA conference. This workshop provided an opportunity for further discussion on the subject of reducing energy use on-farm. **Dr David Fleming** (Lean Economy and leading specialist on Peak Oil) set the scene with a brief, but thought-provoking presentation on the impending energy gap, climate change and policy implications. Dr Fleming advocates a transformative approach to energy use involving the use of Tradeable Energy Quotas (TEQs) and 'Lean Energy'. He concluded that energy conservation technologies, major structural changes, a radical rethink of the way we use land and how we farm and plugging renewables into the work done so far are the ways forward.

Iain Tolhurst's presentation explained how his 8 hectare stockless farm, Tolhurst Organic, has been reducing its use of energy over recent years. The carbon footprint of the farm in a single year is 8 tons - similar to that of an average family's yearly footprint. He has calculated that his produce is 90 percent more energy-efficient than conventional supermarket produce. Iain spoke of the need for a whole systems approach to energy

use and of educating and engaging customers regarding the limitations of low energy agricultural enterprises.

Tony Little (Organic Centre Wales) summarised the IOTA research review he had recently been completed on the various energy audit systems now available to advisers. These range from simple on-farm tools to complex spreadsheets. However, a suitable audit tool for use in organic systems has not yet been fully developed and sequestration is often ignored because it is difficult to quantify. Good data is needed to create a comprehensive audit tool.

Finally, **Peter How** (The Organic Research Centre - Elm Farm) outlined some of the critical aspects regarding the auditing farms for energy use and emissions specifically with the objective of building recommendations that take the whole system into account including important landscape and biodiversity issues. The Organic Research Centre is testing benchmarking tools and developing a protocol through a pilot study at Luddesdown Organic Farm.

Workshops: IOTA (16:10 - 17.00)

Facilitators: Mike Tame & Joy Greenall

Improving organic practice and uptake of new ideas

The final IOTA workshop of the afternoon focused on improving organic practice and the uptake of new ideas. This subject was also highlighted as a key priority by advisers at last year's conference. The session started with an outline of the IFOAM principles and focused on what is needed by advisers to support farmers more effectively in adopting new ideas and techniques.

Meeting: Poultry, dairy, beef & sheep (17.00 - 17.30)

Chair: Richard Sanders

The case for an "Animal Health Summit" - Dick Roper

In the UK 2007 has been a year of livestock disease after disease. **Richard Sanders** introduced the session with a growing list of diseases threatening the future viability of the livestock sector – avian flu, foot and mouth, Bluetongue and TB.

Too many of these "plagues" are man made, he said. Avian Flu – a product of over-intensification in the poultry sector; Bluetongue in the UK as a result of Global warming; foot and mouth in Surrey escaped from a Government laboratory.

He bemoaned the primitive responses to disease – slaughter, slash and burn – so prevalent in our society. Whatever happened to positive health – prevention, not cure?

Richard Sanders reminded the session that positive health lies at the heart of organic philosophy. Is it time, he asked, to convene an Animal Health Summit to devise an organic survival route through this storm of disease?

To illustrate positive health in action, he introduced Gloucestershire farmer **Dick Roper.** His 3000 acre unit has an organic herd of cattle (600 head, 200 fatteners) and is surrounded by farms suffering from TB. His cattle are a healthy island – TB free. How does he achieve that?

His starting point was to decide that his energy feed of silage maize was at least part of the problem. After analysing this feed he was convinced that it is simply a high starch food, with low values of just about everything

else, but especially low in minerals. And low essential minerals such as selenium are known to seriously compromise livestock health and natural immunity.

Dick Roper set about boosting the mineral intake of his cattle with feed blocks. But he was also aware that maize is a favourite foodstuff of badgers. If the cattle were immuno-suppressed by eating maize, wouldn't the badgers suffer likewise? Could this be the key to thriving TB infections in badgers and cattle?

He then set about feeding mineral blocks to his local badgers. The result has been seven clear years of TB testing on Dick Roper's farm – healthy badgers, healthy cattle and all achieved for minimal investment and with a little imagination/innovation.

From the floor, delegates were inspired by this presentation and suggested this clearly illustrated the need for more farmer-driven research.

Helen Browning suggested it showed the need for an event showcasing more examples of organic positive health – more Dick Ropers – before venturing into the political arena with an Animal Health Summit. She agreed that livestock production was facing increasing threats and argued that we need strong, coherent arguments to push the organic, positive health agenda with animal welfare issues very much to the fore.

Evening

A conference dinner was followed by **John Bilsborough**, "the funny poet" speaking humorously on rural life.

TUESDAY 11th DECEMBER

Workshop: Growers (09.00 - 10.30)

Chair: Ben Raskin

Making and using compost on a small scale
Charles Dowding

Write up courtesy of The Organic Grower

Charles developed a permanent bed system when he started growing commercially at Shepton Montague, Somerset, in 1983. After a spell in France he is now on the other side of the village - growing a variety of crops, but especially salads, on a 1.2 acre site. Salad bags are the main output, and the financial backbone of his growing, and a few veg boxes are sold as well. Nothing travels further than four miles and organic certification is unnecessary – produce being labelled "Compost grown".

Compost on top of the soil has always been central to Charles' system. Annual usage is about 12 to 13 tons. Every bed receives about an inch of compost annually as a surface mulch, twice that in the polytunnels. The worms and other soil creatures work it in - no cultivation of any sort is employed. The result has been a massive improvement in the drainage of the soil - a heavy Fullers Earth over limestone. Seven years ago the soil in parts of one field were grey and airless and grew poor crops. Now worms have revived the drainage, air is present and growth is abundant.

The value of compost is more biological than chemical – it increases soil life and energy. It was easy to believe in the truth of this, seeing Charles' slides of his vibrant and colourful multi-cropped beds. These covered all the years of his growing. Pictures of his current beds well indicated two salient features of the system – beautiful salad combinations and an astonishing absence of weeds.

Over the years Charles has tried many different methods and equipment to make compost, including rotating drums and commercial boxes (e.g. link-a-bord), but nothing has proved better than heaps enclosed by old pallets or straw bales. The best compost is achieved after about six months, by which time it is black and well broken down. The heaps usually take about a month to assemble, and measure about 8'x8' on average. They are turned once, after the initial heat is mostly gone, and are kept covered with some old straw and, preferably, polythene or something to keep the rain off. The chief problems arise from too much moisture - from rain or from using insufficient fibre/cellulose. Main ingredients are grass mowings, crop residues, vegetable waste from the greengrocer, stinging nettles, apple pomace, old straw, paper packaging and some rock dust. Any long stems are chopped or cut.

Not all the compost used can be produced at home and both green waste and spent mushroom compost are also used.

For the future Charles is interested in experimenting with biodynamic preparations, although he believes that it is most important to get the basics right in the first place. He's excited by the potential of compost teas – aerobic brews fermented at 15-26°C using small amounts of top quality, high fungi, high bacteria compost as seed to propagate billions of beneficial micro organisms. On the "substrate" front he intends to set up a small vermicompost operation, using brandlings, for the production of potting compost.

Compost use at Coleshill Organics - Pete Richardson

Write up courtesy of The Organic Grower

Pete and his partner Sonia grow on 6 acres of walled garden and 24 acres of field at Coleshill, Wilts. They sell through 350 weekly boxes, a farm shop, 2 market stalls, local catering outlets and some wholesale. They have been using green waste compost from Worton Farm, near Oxford, for 12 years, and are thoroughly convinced of its value for soil structure and fertility. Switching from farmyard manure they were amazed at the results:

> "Compost acts as a wonderful disease suppressant, is much more complex than manure and is rich in microbial goodness. The soil gets a great fertility boost, while we get healthier plants and better quality vegetables. We see very little disease and can produce strong, healthy tomatoes, peppers and salads year after year".

After heavy use in the first few years it is now applied just in the 10 polytunnels (a total area of 2000 m²) at the rate of 1 inch annually (costing about £10/m³ this works out at between £30 -£40 per tunnel). They cannot produce enough of their own compost for the whole protected area and rely on buying-in to make up the shortfall. It is not found economic to use it on the open ground, where the use of green manures combined with a wider rotation and lesser intensity of production maintains sufficient fertility. The quality and consistency of the purchased material has improved over the last few years, partly as experience has been gained, but particularly on account of the introduction of the British Standard Institution's specification for composted materials - PAS 100 – in 2002. They now rate the Worton Farm compost very highly.

As well as emphasising the value of green waste compost for soil and plant health Pete spoke convincingly of its ease of use compared to FYM. The nature of the compost is consistent and well divided. They are able to use it as a potting medium without any amendment being necessary and with no danger of an excess of freely available nitrogen. Unlike FYM it can be readily spread in the tunnels to an even depth, with the use of a shovel. It is very easy to order, arriving the next day in up to 24 m³ lorry loads, but do have it tipped out on a concrete pad if possible!

Plastic in organic horticulture: is it sustainable?
Iain Tolhurst

Write up courtesy of The Organic Grower

Iain set the scene by pointing out just how many things in our work we use plastic for – tunnels, crop covers, mulches, pots, trays, packaging and even

tools. The total amount of the stuff used in UK agriculture tops 90,000 tons per annum. Consider packaging in general - four percent of all oil extracted is used to make plastic bags. Twelve bags worth of oil would propel a car one mile. In the course of a year bags used by the Tolhurst box scheme equate to one thousand miles. Can we do something about this, or will it be Cold Turkey?

We need our tunnels for early and late crops and for exotics, but to what extent can tunnel production be offset against reduced imports, and how much energy is consumed in each case? The answer used to be glass (though not without its problems it does last), but as ever we are up against economics.

Similarly mulches and crop covers are now integral to commercially viable growing. Perhaps plant breeding could result in varieties better able to produce decent crops without these aids. Longer life materials would reduce, but not remove, the problem.

So how can we cut down on plastic use and reduce the costs of that which we do use? Packaging needs to have a longer life. Re-using it is a hassle, but at least re-use is possible with a box scheme. In other cases it is as yet a non-starter. To balance our use of plastics we can do all that is possible to reduce the use of energy in other forms. There is also some scope for carbon sequestration on the holding, but getting the necessary information to judge its effectiveness is another matter.

Recycling has lately become a practical proposition for all types of farm plastic with various commercial schemes. It requires considerable storage space and some equipment if large quantities are involved, and you have to wonder how much energy is actually saved. But if the whole attitude to the disposal of waste plastic has changed enough that we all need to think about it, this itself will tend to reduce use in the first place.

Then there are biodegradable plastics, but do we know that these are an improvement? Here as elsewhere we face conflicting commercial interests and information. Tolly summed up the entire situation by saying that we need reliable information so that we can make informed choices.

Workshop: Arable (09.00 - 10.30)

Chair: Dr Sarah Clarke

Variety Trials - value or ornament?
Dr Hannah Jones & Professor Martin Wolfe

The first speaker was **Dr Hannah Jones** of the Organic Research Centre, who explained that breeding is almost exclusively carried out under high input conditions and consequently many of the varieties produced perform well under non-organic systems, but are much more variable in organic systems. The Organic Research Centre's trials of 19 varieties grown under two different systems showed that at organic sites, the environment is the most dominant factor in defining yield, whereas at non-organic sites the environment is controlled to such an extent by high levels of inputs that the variety is the most dominant factor in defining yield. Although correlations do exist between variety performances across systems, there is little overlap between the highest yielding varieties. Hence she recommends separate organic variety trials, with analysis that includes the stability of performance of varieties amongst sites and years.

Prof. Martin Wolfe, also of The Organic Research Centre continued the theme of use of suitable wheat for production. The rising cost of inputs and the need to limit environmental damage will lead to a reduction in their use in non-organic systems. Additionally, environmental variation is set to increase across all farming systems due to global climate change. Genetic diversity within the crop can be used to buffer the effect of this variability. Yield stability of mixtures of various species and varieties is well documented, but this can be taken a step further with the use of populations. Populations developed from 20 parents have shown promising results; tending to yield higher than the mean of their parents, and mixtures of their parents. They also yield more reliably among sites and years than their parents. The second phase of this project is now underway to assess populations' end use potential and develop suitable legislation for their use.

A lively discussion ensued, chaired by **Dr Sarah Clarke** of The Organic Research Centre. Points raised included **Andrew Trump** of OAMG querying the fact that Claire, a winter wheat variety commonly grown by organic farmers, showed variable performance in these trials. **Martin Wolfe** replied that Claire does have relatively stable performance in organic systems, but since it was a single genotype it was still vulnerable to environmental variation.

Stephen Briggs of Abacus Organic Associates noted that whilst varieties could perform consistently at one site, site to site variation was huge. **Gerry Minister** agreed, saying that whilst results from trials at his farm Luddesdown were frequently completely the opposite of those at other Organic Research Centre sites, he welcomes on farm trials as they can give you an inkling of potential performance.

Martin Wolfe mentioned one breeder in Germany who has begun breeding under low input conditions for non-organic agriculture, and has produced very promising results. **John Bradwell** of Organic Seed Producers confirmed this, saying some breeders in the UK are beginning to breed under 'low-input' conditions, which may produce useful varieties. However since that will take some time, and the full scale use of populations is still some way off, would it be best to grow a mixture of Deben and Claire? **Martin Wolfe** responded that growing a three variety mixture would improve the yield reliability further.

Chris Blunt noted that a seven variety mixture grown since 1999 at Lower Pertwood farm has out-yielded other varieties grown there for the last few years, as well having better weed suppression and quality.

Nigel Gossett of Norton Organic Grain welcomed variety trials which produce interesting and useful data; and felt that despite varieties tending to have variable performance across sites, farmers do need criteria for selecting one over another, and trials are a good starting point for this.

Co-operation and pool pricing versus individual marketing and spot trading - what's best for the producer?
Andrew Trump & Nigel Gossett

This session was a chance for producers to discuss the issues surrounding the organic market. **Andrew Trump** of OAMG began by asking how we can we overcome the horn/corn issue. What structures do we need, or need to improve?

Gerry Minister was of the opinion that the certification bodies have to have the will to ensure people attempt to feed their own animals on-farm, or failing that, from linked farms. **Stephen Briggs** of Abacus Organics said that certification bodies alone could not solve the issue – either production must increase, or livestock decrease. This is difficult as poor arable prices caused many farmers to diversify into livestock. He commented that bad communications between sectors is not helping the mismatch of supply and demand. In the conventional market, farmers know the proportions of grain sold and exported with precision – until we have this information available in the organic sector there will always be a problem.

Nigel Gossett of Norton Organic Grain felt this was a frustrating point of view – as there are at least eight organisations who could give farmers an idea of the organic market at any one time (Soil Association, Norton Organic Grain, OAMG etc), farmers can't wait for someone else to find a solution to this – farmers must take the responsibility themselves to become more self sufficient. There was the feeling that local food is becoming more attractive than organic food in some places – is it possible to market goods from three counties only for example? **Stephen Briggs** said in reality livestock is mostly based in the hills in the west, and arable in the east, so this would be difficult.

Martin Wolfe of The Organic Research Centre said that historically the east did produce lots of livestock, and an organisation called East Anglia

Food Links is currently setting up a 'Genuinely Suffolk' label which means that everything that has gone into that product (including feed) is from Suffolk. **Nigel Gossett** asked if all the farmers here bought only UK wheat? He reminded the room that they are consumers as well as producers.

Andrew Whitley of Bread Matters suggested that a two tier certification system could be introduced, which would encourage organic farmers to move upwards towards more self sufficiency. **Michael Marriage** of Dove's Farm said that the Soil Association already had this system in place – base certification plus 'ethical trade', but that it had not been properly rolled out as yet. The ethical trade adds value and is being used in at least one Welsh Co-op. However, **Andrew Trump** pointed out that the 'ethical trade' part only applies to the relationship between the consumer and the dairy farmer – it does not extend to where feed has been sourced from, which is a weakness.

Nigel Gossett concluded the discussion by saying that although we had been discussing all the difficult issues that we as farmers have to contend with, we should in fact all be celebrating arable prices as they are high and will remain high.

Workshop: Poultry (09.00 - 10.30)

Chair: Paul Sykes

This was a workshop building on recent welfare work at the Organic Research Centre and elsewhere. Three short papers were followed by discussion and an update on the Tubney Trust funded welfare project now started by the Soil Association.

The Impact of Welfare on organic Broiler Production Jesús Concepción

The main issues of the presentation were:

- Animal Health and Welfare Aims/Aspirations
- Relationship between health and welfare
- Main issues of animal/poultry welfare
- Current projects on animal welfare where The Organic Research Centre is participating

The experience of Sheepdrove Organic Farm on broiler production - Ian Salmon

Ian Salmon (farm manager) explained main issues of Sheepdrove organic production. The production is focused on consumer quality demand and organic principles. The poultry unit works on an organic, free-range basis and is organic certified by Soil Association. Ian explained the main issues relating to improved welfare and product quality through better management and structures that includes the addition of conservatories to the brooders to facilitate access to sun at an early age; the introduction of agro-forestry in ranging areas to guarantee shadow, protection (against predators) and as source of nutrients (like vitamins, minerals, etc.) Ian also explained the possibilities of providing birds with more natural protein supplements from the farm like insects, grubs and seeds that the birds forage for on the ground.

Free range broiler production at Clare's Organics Paul Sykes

Paul Sykes described his experience in organic broiler production. He started his business 18 months ago and now has an established production cycle. His birds are killed at 10 – 11 weeks and sold through farmers' markets as well as his own box scheme.

Discussion

The main issues of debate following presentations included:

- Feed costs
- The need of more adapted breeds for organic systems
- The need for other "cheap sources of protein" produced on-farm
- Issues relating organic certification
- The search for 100 % organic feed.

Workshop: Dairy (09.00 - 10.30)

Chair: Dr Susanne Padel

The management of mastitis – preventing the need for antibiotics - Mark Measures & Chris Atkinson

Mark Measures presented on the topic of mastitis management, emphasising that in organic farming, management is based on a number of factors. These include diet, breeding programmes, rearing methods and comfortable housing with minimal stress, enhanced immune system and improved disease resistance. He went on to discuss a recent OMSCo survey which highlighted methods for identification and treatment of mastitis on farms. Most farms identified the problem through SCC recordings or the Californian mastitis test. Clinical mastitis was mainly treated with a combination of antibiotics and homoeopathy whilst treatment of sub-clinical mastitis was split between sole use of antibiotics and homoeopathy and a combined approach. Mark proceeded to outline strategies to minimise mastitis, including through diet, housing, milking, lactation and dry period management.

Chris Atkinson highlighted the recent Scottish Agricultural College (SAC) project which demonstrated that organic dairy production was no worse than conventional in terms of health and welfare. However, one of Chris' major concerns in the industry is that some organic farmers are

justifying the use of dry cow therapy by using Orbeseal. Alternatives to dry cow therapy were discussed, including facilitated groups where farmers share their experience with others. **Peter Savidge** mentioned that OMSCo is working with the Milk Development Council to run organic discussion groups. **Susanne Padel** suggested that certification is perhaps not the route to change the use of dry cow therapies. Rather, it would be better to invest in discussions or training sessions. **Mike Taylor** noted that many farmers do not know their mastitis rate – they know numbers, not percentages, making benchmarking difficult.

Huw Bowles noted that the majority of delegates in the room were advisers, rather than farmers before highlighting that the use of "expert farmers" is problematic because some of the exemplars in the industry have not experienced problems like mastitis and would be less able to help. He further stated that he believed existing farmers were not racing back to using dry cow therapy, but that those joining the industry were using it. However, one of the farmers in the room, **Geoff Mason**, stated that he has returned to dry cow therapy. **Mike Tame** was unhappy that cows' own immune systems were ignored in treatment. Once the cow has been treated, she is put back into the same situation and will probably get it again. Use of these products should be appropriate to the lactation. **Chris Atkinson** noted that he knows a farmer who asked himself what he had done and when he decided that his herd would get mastitis. He highlighted that mastitis is a symptom of other problems, e.g. diet.

Geoff Mason said that he had made changes to his practices within the last year, including buying a straw chopper for bedding, doing his own milking, pre-dipping, teat end health and Orbeseal. With these processes, he is managing the mastitis. **Andy King** felt that farmers should take more ownership of the problem and not just rely on vets to set health plans. Consensus in the room was that health plans were a waste of time because it is too easy to focus on last year's successes rather than the current situation and how problems will be dealt with. **Ed Goff** questioned at what point the end was reached and the animal should be culled. **Steve Clarkson** stated that both OMSCo and OF&G are collecting information on when and how much antibiotics are used.

Standards: balancing the need to improve with the potential for creating a two tier system - Huw Bowles

OMSCo is concerned about diverging standards in the dairy industry. The Soil Association is addressing risk areas regarding antibiotic use, treatment of calves and in-conversion feed allowances. However, this divergence reduces the efficiency of collection, increases food miles and breaks up producer co-ops. OMSCo is concerned that consumers will be put off the "brand" of organic – they do not understand the differences between certifiers.

Huw believes that there are three options available to the industry. First, to adopt EU standards; second, to strive for a uniform UK standard; third to encourage certifiers to set higher standards, along the lines of a Campaign for Real Milk.

Jon Grimes (Soil Association) noted the reasons for improving their standards, including the problem of dairy calves. **Steve Clarkson** (OF&G), felt that more data needs to be collected on the use of dry cow therapy and that there is no alternative to the calf situation as there is no viable market. When there is, they would have no problem in adopting this policy.

Huw Bowles noted that the issue was philosophical, rather than a standards argument: organisations including Tesco and Waitrose have different policies on e.g. calves. **Susanne Padel** pointed out that the UK standards would not drop with the EU, actually we need to encourage our high standards to be taken up by the EU. Susanne outlined what is happening in the EU as the annexes to the new standard are being set.

Huw Bowles felt that consumers know instinctively what is organic and what is not. **Ed Goff** felt that Huw's Option 3 – to get all certifiers to increase their standards – is the best option for the industry. **Andy King** noted that we need to avoid one-upmanship in the market. Otherwise we will erode the meaning of organic in the market.

Workshop: Beef & Sheep (09.00 - 10.30)

Chair: Phil Stocker

Welfare issues: sheep scab, lameness—Madeleine Neal

Scab
There seem to have been fewer outbreaks of scab during 2007. There may be resistance to Dectomax (and moxidectin) developing in the mite. There are 2 "natural" (plant extracts) for mite control being developed; now submitted for PSD approval. There is very little government funded research on mite control, and there should be a call for more to be initiated.

Lameness
Bristol University and the Soil Association have produced a review with advice on lameness in dairy cattle. There will be a Soil Association adviser training day early next year on lameness in sheep. The 'conventional wisdom' of routine trimming of healthy sheep hooves is being questioned; probably because the gathering is likely to increase the risk of spread. It is better to pick out lame individuals. The use of footbaths when moving to clean grazing has been effective, since the maximum survival in soil is 28 days. Breeds continue to show different levels of susceptibility.

Flystrike
There are no substantially new issues on control of flies and the related animal welfare issues. Cleanliness and other management issues are important.

Heamonchus
This has been increasing in recent years; it is not detected in FEC's and has resistance to wormers.

Health and Welfare Information
There is a clear need for increased access to and exchange of information and experience.

Reading University website gives access to an organic compendium – some people use it routinely.

NADIS is a veterinary website giving current info. on health and welfare
COBSI is the Centre for Beef and Sheep Information.

Useful links

National Sheep Association: Sustainable Control Of Parasites in Sheep (SCOPS) - Sustainable endoparasite control and best practice
www.nationalsheep.org.uk/images/stories/pdf/WormControl_BW.pdf

NADIS (National Animal Disease Information Service) – Parasite forecasts, general information, short quizzes. www.nadis.org.uk

Organic Compendium - Descriptions of clinical signs and advice on prevention and treatment of common diseases in all species. www.organic-vet.reading.ac.uk

Footrot - Information on recognition of, the latest treatment and prevention methods of foot rot. www.footrotinsheep.org Also pictures of lesions on feet at www2.warwick.ac.uk/fac/sci/bio/research/ee/ee/farmers/sheeplameness/

Healthy feet project - Based on lameness in dairy cattle but could be useful in beef as well. www.cattle-lameness.org.uk

Bristol Welfare Assessment Programme - Illustrates the welfare issues of cattle, sheep and laying hens and explains why they are a problem.
www.vetschool.bris.ac.uk/animalwelfare

A strategy for survival - the role of the independent livestock marketing groups
Nigel Elgar and Mark Measures

The CAP reform removal of subsidies has changed the market; now even greater priority on producing for quality and saleability. Nigel Elgar from Graig Farms identified the livestock marketing options a) to the processor (direct or through a producer group); b) to independent producer group. The latter is invariably the better choice, giving efficiency, stability and structure, more accurate information, and more control.

There is currently no profit in beef and sheep if full account is taken of costs, and there is no guaranteed market for the produce from new conversions. Why do British farmers still have a mindset against group marketing? In Denmark 98% of milk is sold through co-ops, and they have a farm gate milk price 17% higher than in UK. The future for the organic sector will depend on cooperation and a) farmers should 'bully' others to join co-ops, b) producer groups should promote their benefits and provide reliable service and c) producer groups should concentrate marketing on buyers for supermarkets.

When organic sector organisations obtain survey information on production it should not be published because information is power. There is also a danger of the retail sector setting up controlled "producer groups" – they must be independent.

Workshop: RELU (09.00 - 10.30)

Chair: Dr Bruce Pearce & Peter How

This workshop came out of a Rural Economy and Land Use (RELU) – Scale project which is looking into spatial dimensions of organic farming and its effects on rural economies, communities and environment. In the

first part participants split into three small sub-groups and were asked to discuss constraints to conversion, particularly reflecting on individual producers that they knew within the area in which they farm, in the case of producers, or work, in the case of advisors and others. It was interesting to find that despite the current issue of high prices within conventional farming, which reduces the marginal economic benefits of a move to organic, various social constraints were still prominent for each of the three sub-groups formed. These included 'farmers do not want to move into something they do not know' and 'organics is perceived as too touchy-feely among 'macho' producers'!

The second part of the workshop invited participants, still in their sub-groups, to consider a change in their landscape from the present 2-3% organic to 20%: in this scenario, how would the landscape, in its broadest sense, be different? Following this session the sub-groups came back with quite diverse responses and the remaining time was spent allowing cross-questioning and discussion between groups. Some clear geographical effects were obvious, for example one participant reported from her Welsh experience that little change in the visual landscape would be detected, whilst an East Anglia-based participant reported that dramatic changes would be effected. Many interesting suggestions came out, falling into biodiversity, community / social and economic categories. Having drawn together long lists of significant potential effects from an increase in organics in the small group sessions the final whole-group discussion revealed a number of interesting points:

- Are these changes all beneficial and how subjective is this e.g. how about greater diversity in East Anglia where people like their large uniform open spaces?
- Would these changes be inevitable when many are not required under standards and some organic producers stick close to the standards e.g. changes such as shortened supply chains and consequences of this or increased labour and improved rural economies when some organic producers can be quite large-scale and mechanised.
- Could this happen under conventional anyway i.e. some conventional producers have these qualities and conventional agriculture is learning from and picking up some of the good practices associated with

organics. The ELS and HLS promote many of the environmental benefits that are perceived to come from organic farming also.
- What implications does peak oil have?

It was therefore suggested that any suppositions be treated with great caution in terms of 'predicting' the effects of an increase in organic farming in our landscapes. The time was short to explore the issues in greater detail although there was clearly an appetite to do so. Final comments seemed to leave improved animal, environmental and human health high on the list of likely winners in the case of such an increase in organics. The exercise served as an effective tool to exploring what the best of organics might potentially be able to deliver if done better: a key conference theme.

The group consisted of 15 participants from across England and Wales and included producers, advisers, academics and others with significant experience within the industry.

The New EU Organic Regulation: presentation and discussion
Andrew Eldridge, Defra (11.00 - 12.30)

Chair: Jan Deane

Andrew Eldrige, from the Defra Organics Team, presented the revisions to EU Regulation which comes into force in January 2009. He stated that these are intended to make the regulation more transparent, and therefore all organic products (those containing at least 95% organic ingredients) will be required to display the new EU logo. GM products will remain prohibited, but up to 0.9% adventitious content will be allowed without change to labelling. Veterinary products are excluded.

Draft of the organic logo

Francis Blake, Standards and Technical Director for the Soil Association, replied with a number of concerns: the new regulation takes a top-down approach; doesn't allow for higher standards of organic production to be marketed; derogations will be managed by the EU Commission and not the certifying bodies; inputs will no longer need to be recognised by the certifying body; the new logo with its EU/non-EU label doesn't provide information on localisation of product; and the 0.9% threshold level for GM products. He praised the new regulation for allowing more flexibility with imported products, and the opportunity to set processing rules, and expressed the need for risk-based rather than annual onsite inspections.

Steve Clarkson, from Organic Farmers and Growers, agreed with Francis Blake, adding that the new regulation should have been opened up to public consultation. Andrew Eldridge replied that the Commission felt that they had done well in consultation. In response to being asked the extent to which the new regulation could be changed, the Chair, **Jan Deane** (Northwood Farm), replied that very little could be changed, except for the details of the annexes surrounding rules of production. **Peter Kindersley** (Sheepdrove Organic Farm) suggested that we need a new certification to avoid conventionalisation of organic agriculture. **Alan Schofield** (Bradshaw Lane Nursery) commented that the new EU logo doesn't help market the really local producers. The erosion of organic principles was a key problem highlighted by **Patrick Holden** (Soil Association), who argued that the new logo was trade-motivated, and urged the audience to fight these changes. Andrew reminded the room that there would be legal consequences for refusing to use the logo. For some areas, such as organic wine production, there was still time to make changes to the new regulation. **Martin Peck** (Ty'n y Fedw) said that the term 'organic' had been diluted, and questioned whether the logo could be challenged in court, to which Andrew replied that the term 'organic' was already protected in EU law. Defra's disproportionate funding toward GMO versus organic was challenged by **Richard Gantlett** (Yatesbury Organic Farms), but Andrew argued that this was a mis-comparison, and that organic agriculture can benefit from non-organic research. Andrew commented that Defra is in agreement with **Julie Brown**'s (Growing Communities Ltd) assertion that a risk assessment approach would help lower costs for smaller producers. **James Skinner** said that certifying

local production was key. **Jan Deane** ended by reminding the room that we have the power to change the situation by voicing our concerns.

Facing the Future

Chair: Roger Hitchings

The OELS and OHLS
Matthew Heaton (Natural England)

The objective of Environmental Stewardship is to encourage farmers to deliver simple and effective environmental management, and in the case of Organic Environmental Stewardship schemes, drawing upon the recognised environmental benefits of organic systems.

Organic Entry Level Stewardship (OELS) is a non-competitive scheme with 5 year terms. The current rates for OELS are £60 per hectare entered into the scheme. For land in conversion, top-up rates are available of £175 per hectare per year for 2 years for improved land and £600 per hectare per year for 3 years for established top fruit orchards.
Higher Level Stewardship (HLS) is usually combined with ELS or OELS but encompasses more complex environmental management requiring advice and support. Applications are assessed, based on the environmental benefits of the local area. Payments relate to the management options chosen. When considering management options, farmers should consider how these options can fit within their farming system, for example, growing a bird mix could result in weeds if not grown at the right time and location whilst a low input meadow could be a healthy alternative feed for animals.

In October 2008, Natural England will launch a spatial approach to targeting and prioritisation of ES in order to maximise environmental and other public benefits by delivering the most appropriate management

within different geographic areas. More information on these changes can be found online:
www.naturalengland.org.uk/planning/farming-wildlife/es-targeting/docs/briefing.pdf

The Welsh Organic Farming Scheme
Tony Little (Organic Centre Wales)

The new Welsh Organic Farming Scheme opened in November 2007, launched at Organic Centre Wales' Producer Conference in Builth-Wells. This is a better scheme than the previous one with a higher rate now being paid on the first hectare, greater access to arable payments, more support for horticulture and payments are now claimed through the Single Application Form (SAF) each May.

	Annual Payment Rates	
	Conversion rate	Organic rate
First hectare	£1000	£500
Up to 300 hectares		
Grassland	£150	£40
Arable crops	£150	£60
Horticultural crops	£150	£200
Top Fruit & permanent crops	£200	£200
300+ hectares, Extensive grassland and grazed woodland	£20	£10

Further details can be found online at
www.organic.aber.ac.uk/policy/wales.shtml#OFS

Organic Support in Northern Ireland - Rex Humphrey

Rex noted that the information on Northern Ireland was probably only of academic interest to many of the delegates but thought that the figures

were useful for comparison.

The Organic Farming Scheme ended in December 2006. However a new scheme was announced in 2007 and full details will be available in Spring 2008. The new scheme is expected to provide:

- £470 per hectare for improved land for five years (front loaded)
- £570 per hectare for arable rotations
- £670 per hectare for horticulture.

Until now, Northern Ireland has had no maintenance payments, which will be set at £30 per hectare, ongoing for the countryside and organic schemes.

Organic Support in Scotland - Roger Hitchings (The Organic Research Centre - Elm Farm)

David Younie from the Scottish Agricultural College was unable to attend, but had provided Roger with relevant details on support for organic farmers in Scotland.

Information about the new scheme is due to be released in February 2008 but it is intended that the scheme will be competitive. Applications will be judged on local requirements, including rural communities, business viability and environmental improvements.

Payments are expected to be as follows:

- £620 per hectare for arable production
- £780 per hectare for horticultural production
- £25 per hectare for rough grazing.

In addition, £150 will be provided to prepare the application and financial assistance for capital expenditure not related to organic conversion will be available.

Q&A session: OELS

Phil Stocker	When OELS was introduced, Defra reserved the right to not pay grants if the market became out of balance.
Matthew Heaton	This is still being monitored and information is passed to Defra.
Mark Measures	Is it likely that the market would get out of balance and grants would not be paid?
Matthew Heaton	No
Mark Measures	What would be done to avoid unsustainable growth?
Matthew Heaton	Reports come from certification bodies and it wouldn't really be a secret – we would all know if there were imbalances.
Mark Measures	Does this option still exist in Wales and Northern Ireland?
Tony Little	I'm not aware of it in Wales. But, for example, the dairy industry would stop taking milk, so that would be an indication.
Rex Humphreys	In Northern Ireland, the payment would be made regardless.
Roger Hitchings	In Scotland, the payment is market driven.
Patrick Holden	It should be driven by the market.
Mark Measures	Not *driven* but *controlled* by the market.
Roger Hitchings	It is unlikely that this clause would ever by implemented.

Facing the future: The debate

Chair: Roger Hitchings

OGA update - Alan Schofield

I would like to give an update on the activities of the Organic Growers' Alliance (OGA) since the last conference. We came last year as a group seeking a mandate from our peers to begin a producer-based organisation. The time and need to come together had arisen – issues were not being tackled in other forums.

We are now 115 strong and have even gained a couple of members here at the conference! We've published 2 editions of the OGA magazine.

We have helped with representation and support for growers through our membership base. It has been a tough year for growers with the weather, etc. As soon as we realised the scale of crop loss throughout the UK back in June-July of 2007 we invited our membership base to write a few lines on what was going on and how things were affecting them. The result was that our two editors expanded the magazine and printed every report we got. They made some very harsh, very true to heart reading – a message of support for organic growers. It couldn't help crop losses, but it helped to read about other peoples' experiences.

We've been party to consultation with Soil Association and one now with the Food Standards Agency on the publication of draft guidelines for manure use on spring crops – quite an important horticulture issue in the future. We've just received extra funding from Triodos bank to help us put together and build our website.

So, that's where we are. If any of you went away last year and wondered "what kind of a difference has that made", it made a hell of a difference to growers.

Where do we take the market? - Ed Goff

The point is, where do we take the market, rather than where it takes us. If we allow the market to take us, we will no doubt end up conforming with supermarket and industry standards. Markets will develop but we need the energy and diversity to develop the market in the way that we would want it.

As a dairy farmer, one of the most depressing aspects is reading Organic Farming Magazine and seeing page after page of dairy concentrate companies. In OMSCo's newsletter, we saw an article "Good News: Feed mill opening". In my view, good news is feed mills closing!

Farmer driven research - David Gibbon

Farmer driven research is powerful in many areas of the world but does not seem to be in this country. What I mean by participation of farmers is the greater involvement of farmers in the research process. By that I mean planning, design, monitoring and evaluation – being actively involved in carrying out research and the research agenda.

Although there has been token support for farmer participation in research in recent years, there has been no sustainability of this. We did a lot of work, including workshops on the priorities of research. A lot of ideas about what we should research but not how we should be doing it.

I am not saying that it should be removed from non-farmers but that there is a complementary area that is important. There are knowledgeable and experienced organic farmers who need to lead the research agenda and feed into research because they are thinking systemically about change and innovation within and between farming systems. They might have the wider vision that can make trans-disciplinary research effective. I would like to see more farmers writing in journals and bulletins.

Roger Hitchings - The old OGA used to be involved more actively in research in 1980s, for example, we worked on plant substrates to create organic transplants. Unfortunately, 15-18 years later, we find we haven't solved all the problems. The research needs to be sustained, not just for two or three years.

Tony Little - In Wales, through Farming Connect [Organic Centre Wales] we run a network of discussion groups. We would like to extend this and do more of this.

Bruce Pearce - I think you have been a bit disingenuous about some of the work that we [The Organic Research Centre - Elm Farm] are doing. There are routes through public funding where farmers and industry can have greater involvement. For example, LINK funding, in which farmers are completely embedded in that research. Fifty percent of the funding for this comes from Defra and the other fifty percent from industry. We would like to encourage more farmers to be involved – come and talk to us.

Hannah Jones - We [The Organic Research Centre - Elm Farm] are struggling to get funding for some projects. The pot is getting smaller and it is more difficult to get hold of the resources to perform research. Many farmers pay levy boards, e.g. HGCA and there is scope there to influence the research agenda. We can let them know what we think is needed, but it is a two way process – let your levy board know that funding is needed for organics and in what areas.

Iain Tolhurst - The OGA is also lobbying HDC. We have consulted with growers and would like to see funds spent in the way that organic growers benefit.

Bruce Pearce - It's timely to hit the levy boards now due to the changes in their structure in 2008. You're paying the levy and probably getting minimal return on it.

Jill Vaughan - I sit on the British Tomato Growers' Association Board – the technical committee produce an R&D wishlist which lists everything that the members think is a priority. They can pass that list to HDC and

Defra and other interested parties. It's like consensus, we need an overview, a strategic review of research.

Mark Measures - In IOTA, one of the problems we have been discussing is making research available to advisers and others. People barely know what research is being carried out, let alone what the results are and putting them into practice. On the IOTA website, reviews and papers are available.

Roger Hitchings - HDRA have also done very well with their organic weeds project. One of the things that came out of that was that nobody knew that some of the research existed, let alone what it meant and how it could be used.

Lawrence Hasson - A lot of research can be funded by commercial companies that have an interest in organic food production. For example a company that I work for breeds organic potatoes. In the last couple of years, a new variety has come out which has a single gene resistant to potato blight. This is of interest to the whole industry, not just organic. We are going into commercial seed production in 2008 and this could have significant benefits for both the organic and conventional movement. It takes a long time to develop these varieties, but with commercial support, this is a good way of getting things done.

Organic Regulation Discussion

Susanne Padel - The comment I want to make is based on a three year research project, which was paid for by the European Commission. This considered the values that the organic sector stands for. We took the IFOAM principles and what values are encapsulated in the principles and compared them with literature. Then we looked at which of the principles we find in the current and new regulations.

The current regulation is very poor and refers to few concepts in the principles. The new regulation is a step in the right direction. There are

two big areas that the current regulation does not consider: fairness (which is not covered by any of our existing standards anyway) and the systems approach to organic. The new regulation addresses the systems approach better, but it is too early to take the concept of fairness in the legal framework. It's not perfect, but it's an improvement.

We don't know what the implementation rules will be. The current organic practices allow organic poultry producers to use 90% of inputs which are not from their farms. The organic principle states that production should be land based - I hope that we can persuade Andrew to take this message to Brussels and say that we in the UK want production to be land based.

Martin Peck - I accept the point. If they are trying to achieve the good things that you have just portrayed, why are they bringing in the logo which will undermine the good that they are trying to achieve?

We need to go back to the commission and tell them we don't want it. They are our servants, not our masters!

Nathan Richards - The "Bio" logo will be as useful as the USDA organic label state registered logo, i.e. weak and mistrusted!

I wanted to add the consumer experience of living in the US for 7 years. USDA organic is something that people shy away from because the standard appeared to be so low – state registered and state certified. We have a good independent system now, my concern is that the new EU logo would dilute the meaning of organic in the same way as in the USA.

Mark Measures - I live in horror at the idea of another certification word. We need to work hard to get the regulation sorted out. We need to get specific issues resolved – the logo, GM, "systems" based farming and embedding the environmental aspects in farming. I want these issues (the UK position) taken forward to the EU.

Hardy Vogtmann - I think farmers are all on the same side here. But processing is a different matter – this to me is a black hole, a real danger. If consumers knew what was possible, they would be very surprised.

Processing can be identical in conventional and organic systems, this is a real concern.

Roger Hitchings - Organic gelatine is a case in point. A range of chemicals is needed to transform the leather into gelatine and the industry wants to be able to use the same range of chemicals to make organic gelatine.

Carolyn Wacher - We need to establish a mechanism as to how we lobby the EU. Should we send out bulletins or e-mails or a factsheet?

Andrew Eldridge - Organic producers with opinions on the new organic regulation and proposed use of a logo can contact the EU commission so that their voice might be heard.

[Update: *Producers interested in lobbying the EU should contact: Jean-Francois Hulot, DG AGRI - F 5, Loi 130, Rue de la Loi 130, 1040 – Bruxelles*]

Tim Deane - On the topic of the logo – there is a wider gulf in organic production between those producing and those processing. The problem that I have with the logo is that I do not wish to be tarred with the same brush as other producers and processors, e.g. homogenised milk processors. There are bigger worries than the logo itself, rather what it represents.

Patrick Holden - Hearing all this, I wonder whether it's more important to keep everyone in the same tent, despite the fact that there are some areas where the standards are not perfect or there is some compromise. Or is it more important to give a destination to people who are so worried about principles erosion that we set up another scheme. Maybe we should just launch a new Soil Association certification scheme and remove "organic" from the title? It's a bit like walking out of our own tent…

Richard Heinberg in his lecture talked about the bigger issues that we have to deal with globally – we don't need to descend into factions but deal with these issues like the centralisation of farming.

Jill Vaughan - Regarding Soil Association certification, the county of production should also go on the packaging, as well as or instead of the licensee's number. Any consumer can then make a judgement on how local the produce is.

Phil Stocker -We did a lot of work on this about three years ago on origin standards. We have lots of stickers which people can use on their products. A whole range of standards development work is underpinning that direction already.

Andrew Whitley - One of the concerns is the amount of space that two logos take up on the packaging, side by side. I suggest that one way to free up space is to remove all additives and processing aids…!

Martin Peck - Responding to Tim, I partially agree, but we're trying to stop resources being wasted but lots of resources seem to be put into this. We should remove it. There are enough symbols around Europe already.

Jan Deane - I'm not particularly married to the EU logo. But it is precisely to reduce the number of logos across the EU and reduce confusion that they are trying to introduce this. You need to be careful what you argument is. We already have ten different logos and certifiers in this country.

Martin Peck - This logo is going to have a negative effect on the Soil Association standards and symbol and peoples' understanding of it. Let's have something that is unified at a high level, not something that is going to destroy what is already here and is counter-productive. If we are moving towards localisation anyway, this is not right. It does not help people.

Andrew Eldridge - Thank you for your comments. I take the message and will take it with me.

Ben Raskin - I'm not necessarily in favour of the logo but we mustn't forget how little people know about organics outside our own little world.

I met someone who said "I'm not eating that, it's got organics in it!".

Martin Peck - Why complicate it any more? There's a lot of good stuff in the restructuring of the standards, but the logo is not necessary, let's just get rid of it.

Delegate - What do other EU certification bodies think? Maybe they have similar concerns and can work with us?

Roger Hitchings - It might be useful to know – we already know from some of our discussions that some of these issues are not so important in other countries. But it might be useful to build relationships.

Joy Greenall - I think the difficulty is that it is a logo. It's a good thing that there are standards, but the logo can be confused with other things.

Roger Hitchings – It is clear there is a lot of antipathy about the logo, but perhaps there are some bigger issues. We could go back to basics as Patrick has suggested – an alternative approach. And the issues of processing and is it right that highly processed foods are labelled in the same way as fresh produce?

Organic farming, CAP reform and the resource crisis - Prof. Dr Hardy Vogtmann

In his speech, Professor Vogtmann carved a new niche for organic farming in the increasingly tightly funded world of EU agriculture. Organic farming, he said, delivers so much more than food and deserves enhanced funding as a result.

"Ecological health equals economic welfare," says Professor Vogtmann. And he went on to assert that future design of the CAP must have social and ecological benefits as key drivers.

He is calling for 20 per cent of all EU agricultural funds to be dedicated to organic production. In addition he would like to see extra funds for organic breeding (plants and livestock), a ban on GM, support for organic marketing and an abandonment of funding support for maize (corn).

Too many politicians see organic agriculture as merely delivering an absence of pesticides. Alongside wholesome food, he listed conservation, recreation, amenity, landscape, education, higher employment and clean water as key organic outputs. And Professor Vogtmann argued that only organic farming fulfils international commitments to the Rio Convention on biodiversity.

Contacts and Further Information

These proceedings and other information relating to the conference are also available online at www.organicinform.org

Other useful contact details include:

Better British Organic Poultry (B-BOP)
www.b-bop.co.uk
E-mail: info@b-bop.co.uk

Graig Farm Ltd
www.graigfarm.co.uk
E-mail: defaultweb@graigfarm.co.uk
Telephone: 01597 851655

Institute of Organic Trainers & Advice
www.organicadvice.org.uk
E-mail: iota@organicadvice.org.uk
Telephone: 01547 528546

Natural England
www.naturalengland.org.uk
E-mail: enquiries@naturalengland.org.uk
Telephone: 0845 600 3078

Organic Arable Marketing Group
www.organicarablemarketinggroup.co.uk
E-mail: andrew.trump@organicarablemarketinggroup.com
Telephone: 01249 758397

Organic Centre Wales
www.organic.aber.ac.uk
E-mail: organic@aber.ac.uk
Telephone: 01970 622248

Organic Farmers & Growers
www.organicfarmers.org.uk
E-mail: info@organicfarmers.org.uk
Telephone: 0845 330 5122

Organic Growers' Alliance
E-mail: oga@efrc.com

Organic *Inform*
www.organicinform.org
E-mail: organicinform@efrc.com
Telephone: 01488 657600

Organic Livestock Marketing Cooperative
www.olmc.co.uk
E-mail: ralph.human@olmc.co.uk
Telephone: 01409 281365

Organic Milk Suppliers Co-operative
www.omsco.co.uk
E-mail: gill@omsco.co.uk
Telephone: 01934 511 115

The Organic Research Centre - Elm Farm
www.organicresearchcentre.com
Telephone: 01488 658298

Real Bread Campaign
www.realbreadcampaign.org

The Soil Association
www.soilassociation.org
E-mail: info@soilassociation.org
Telephone: 0117 314 5000