8th ORC Organic Producers' Conference:
Intensive Sustainability *or* Sustainable Intensification?

WEDNESDAY 22 JANUARY 2014

11:00–13:00 OPENING PLENARY

Room 1*

Sustainable food systems - the challenges we face

Addressing the main theme of the conference, this session features leading speakers on themes of economic and environmental sustainability, food systems, food security and sustainable intensification.

Susanne Padel (ORC): Chair

Charles Godfray (University of Oxford): What do we mean by Sustainable Intensification?

Over the next few decades we shall see a major increase in the global demand for food while at the same time the need to make food production sustainable will become ever more imperative. In this talk I shall argue that the challenges ahead require action throughout the food system: on moderating demand, reducing waste, improving governance but also increasing supply. Globally, the environmental costs of bringing new land into agriculture should rule out major extensification and this implies that any increase in food production should come from existing land and should emphasise the environment. This programme has been called sustainable intensification though the term is not liked by everyone. I will explore the different dimensions of sustainable intensification, how the organic movement can contribute to it, and how sustainable intensification relates to other food system priorities.

Sue Lockhart (Sainsbury's): 2020 and Beyond

The presentation will cover Sainsbury's approach to sustainability, including Sainsbury's sustainability plan (2020), the contribution of organic products, lessons learned to date, and what we are doing to help find solutions to some of the challenges we face e.g. R&D; and to secure the best most reliable information/data to ensure we make informed decisions particularly if trade-offs have to be made between targets.

Gunnar Rundgren (Grolink): Curing the global eating and farming disorder

"To bake the bread I wanted, I didn't just need a better recipe. I needed a whole different civilization" (M Pollan)

Industrial food and farming have been very successful in producing more food, and cheaper food. But it has come at a very high price. The practices have wreaked havoc in important biological systems, in particular in biodiversity and the nitrogen and carbon cycles.

While food is abundant, the distribution system, the market, fails to reach 1 billion people which are hungry. More than anything else the global market revolution fuelled by oil and coal and shaped by endless competition and rent-seeking has been the factor that has determined the whole food system, from the prairies to the supermarket shelf, from the production of margarine to the emergence of fast food chains. It even transformed the act of eating from an act of confirmation of social relations to individual satisfaction of real or imaginary dietary needs. As a response to this organic farming, local foods, fair trade and alike has developed.

However, these systems are by and large still subject to the market imperatives of competition, profit and constant labour productivity increase, and increasingly so the more successful they are – clearly visible in the organic sector. This limits their transformational power. Real change of our farm and food system must be linked also to changes in social institutions, in particular the market. A truly regenerative food and farm system will close loops of flow of energy, nutrients and most importantly meaning and culture.

Iain Tolhurst (Tolhurst Organic Produce): The challenge of sustainable food production from a grower's perspective

Growers have always faced many challenges and risks, that is part of the job. The nature of those risks has been changing and as our understanding of sustainable practices develops and matures we begin to see the real challenges that lay ahead. Sustainability to me means being able to feed people for ever from the optimal use of the planets resources whilst maintaining the natural ecology. Easier said than done though, and we face some stark choices.

Soil health is vital and if we mess-up then the future looks bleak. Fertility inputs need to be from sustainable sources, from within the farm or from local waste streams. Good soil management has the potential to lock up carbon on a grand scale if we treat it carefully and efficiently. The weather is getting tougher and we will need to prepare our growing systems to be resilient.

We will have to be accountable for the right to use an increasingly scarce energy for food production. Biodiversity should be integral to the whole food production system and be seen as the heart of the farm with food as a by-product of that. Marketing systems will need to be tailored to community needs and distributed as locally as possible. Better education and understanding of food will need to become a part of the social fabric of society, with closer links between growers and their customers.

* room allocated, on ground floor unless other indication

13:00–14:00 Lunch/networking (Restaurant)

14:00–15:00 WORKSHOPS 1

Restaurant area — Achieving sustainability in practice –how can we address the challenges?

This workshop is intended to get people debating the challenges that have been raised in the opening plenary. This session is all about gathering and sharing the knowledge and experience of everyone at the conference and identifying the priority issues we need to tackle. In small groups, we will capture what individuals and organisations are doing on the ground to put the principles of organic and sustainable farming into practice, and what we could do differently/ better. We will record your good works on flip charts which will then be used as a resource to inform the rest of the conference.

Led by Tony Little (OCW) and Kate Gasgoyne (NEFG)

The themes to be covered in this workshop include:

1. *Soil quality and management;*
2. *Manure and nutrient management;*
3. *Water quality and management;*
4. *Food security and productivity;*
5. *Food quality, safety and public health*
6. *Energy and carbon;*
7. *Agricultural systems diversity;*
8. *Biodiversity;*
9. *Landscape and heritage;*
10. *Animal health and welfare;*
11. *Farm resilience and profitability;*
12. *Social capital and rural communities*

15:00–15:30 Refreshments (Lounge area)

15.30–17:00 WORKSHOPS 2

Room 145 (1st floor) — Growing Oats – fulfilling the potential

Oats are an important component of many organic rotations. Practical advice from researchers, industry specialists and end users will help producers realise the full potential of this organic friendly crop.

Henry Creissen (ORC): Chair

Nick Fradgley (ORC): Results from ORC trials: variety performance in organic conditions

Results are presented from the ORC trials as part of the QUOATS project aiming to increase the sustainability and economic attractiveness of oats as a low input crop in cereal based rotations. Data from the trials demonstrates how oats yield higher and more reliably than wheat under organic conditions and highlights the very different trends in variety performance in organic compared to conventional systems. Exactly what factors limiting yield over the four trial years, such as weed or disease pressure, are examined and the traits enabling some varieties to better cope with these pressures is investigated. This will go some way to addressing the lack of information available to farmers for variety selection and identify potential breeding objectives for oats in organic systems.

Simon Penson (Campden BRI): Oat quality requirements

Oats are used in a range of human food products because they deliver high nutritional value. Increasingly, oat-based ingredients and products are also being exploited to support marketing associated with heart health. This has led to a new wave of products on supermarket shelves and increasing awareness of the benefits of oat consumption in the mind of consumers.

Reliable production of high quality foods from oats requires high quality raw as supplied by the farmer. Grain quality is determined by a mixture of physical characteristics (e.g. 1000g weight), composition (e.g. moisture content) and visual appearance (e.g. absence of discolouration). These requirements have a direct impact on process performance in the oat mill, and the stability and attractiveness of the finished product. Oats are unique among cereals in that a large volume is consumed as essentially the whole kernel (groat), as in porridge for example. For this reason, visual appearance is important. When growing oats, it is vital to maintain an understanding of end-user quality requirements if the maximum value is to be secured for the crop. Having the customer's needs in mind enables sound crop management decisions to be made.

Ross Dawson (GB Seeds): The potential for naked oats

The niche Naked Oats market has much to offer the modern organic producer yet few have adopted the crop into their system. A grain merchant's perspective on the current markets and contracts supplied by the merchants will be discussed in this talk. Information regarding the advantages and disadvantages of current varieties and their specific agronomics will allow the grower to fully utilise this premium crop in the organic rotation. Current on-going work in the organic naked oats sector will be outlined and coupled with a view of the future markets and the potential for the organic sector.

Room 1A — Building local/regionally adapted seed systems
(Organised by OGA)

What are the implications of the new EU seed directive? How can growers re-skill in seed-growing and build resilient varieties fit for purpose?

Phil Sumption (ORC/OGA): Chair

Ben Raskin (Soil Association): Biodiversity and choice under threat from proposed EU Seed and Plant Directive

New legislation proposed by the EU Commission seeks to significantly increase scope and reach of current variety control for plant breeders and retailers. This talk will give an overview of the proposals and show examples of how the proposals are a threat to Agricultural Diversity and Customer Choice. In particular how they might affect commercial growers and what we can do to challenge them before they become enshrined in law.

John English (The Community Farm): Open-pollinated seeds trial

The Community Farm was one of 22 sites taking part in field trials of Open Pollinated seeds for the Duchy Originals Future Farming Programme in 2013. The aim of the lab was evaluate some of the OP varieties available to non-organic growers by trialling them in an organic system, with a view to either creating demand for them from organic growers or saving them on farm for use in a subsequent year. The session offers one grower's experience of taking part in a farmer-led field lab for the first time and the findings on the relative performance of OP versus F1 hybrid varieties in 3 crop lines. Looking more broadly, what can a grower learn from taking part in a seed field lab? And having taken part, would we consider making more use of OP seed in the future?

Peter Brown (Tablehurst Farm/Biodynamic Association): The biodynamic seed production and breeding project

The Biodynamic Association is helping start a new initiative, which will be based on a farm in Essex, with three aims around the need for organic, open pollinated seed produced in the UK. They are plant breeding, to produce new varieties, seed production, to meet the growing demand and thirdly to offer education to professional growers, to home gardeners and the general public. We hope organic and biodynamic growers across the country will be keen to be involved in, for instance, test trialling vegetable breeding lines and even growing and producing seed from one or two crops, which can then be sold to the initiative for cleaning and processing. We are therefore setting up a co-op, the Biodynamic Plant Breeding and Seed Co-operative, in which suppliers as well as the workers can become members. The seed production, which will be based on expanding the work of Stormy Hall Seeds, will need funding to get it started at the new site but will be viable by year five, whilst the plant breeding will need ongoing funding into the future. Today plant breeding for low- input agriculture has virtually no Governmental funding, so the challenge is to attract the necessary funding from elsewhere.

Room 3 — Liverfluke control
(Organised by NSA)

The session aim is for the delegates to understand: the impacts of fluke on sheep/cattle health, the life cycle of liver fluke and climate change related changes, the avoidance and treatment options available.

Phil Stocker (National Sheep Association): Chair

Kevin Thomas (Producer/Lantra Wales): The impacts of liver fluke

No abstract

Phil Skuce (Moredun): Life cycles, climatic changes testing/analysis options, new developments

The liver fluke is a highly pathogenic flatworm parasite of grazing livestock, causing considerable animal health and welfare issues and significant economic losses to the livestock industry. It has a complicated life-cycle, involving a tiny mud snail intermediate host. As a result, fluke prevalence, seasonality and geographic spread are very much driven by the prevailing weather conditions, especially rainfall Following one of the wettest summers on record last year, many farmers experienced significant losses due to liver fluke over the winter months of 2012-2013, with sheep farmers particularly badly hit. This presentation will describe the liver fluke's complicated life-cycle, the role of climatic and other factors in its spread and implications for its management and control. Liver fluke is notoriously difficult to diagnose in the live animal, the various diagnostic options and their relative advantages and disadvantages will be explored. Finally, new developments, such as the emergence of rumen fluke, and recent fluke research findings will be discussed.

Fiona Lovatt (Flock Health Ltd): What can an organic farmer do to protect against liver fluke?

The control of liver fluke presents sheep farmers with a huge challenge due in part to its complicated life cycle. Environmental factors such as farm topography and the weather have a large part to play and it is important for all farmers to consider what control measures are possible by good management practices. As a part of this, it is necessary to understand which fields are high risk at which times of year and which categories of stock to put where. This presentation will discuss the principles of pasture protection, which aims to limit the contamination of fluke eggs on snail habitats, stock protection, which keeps susceptible animals away from high risk areas and whole farm protection, which ensures a robust quarantine policy for bought-in stock. We will explore how to use flock management, veterinary supported health planning and the strategic use of diagnostics to minimise the need for pharmaceutical products. We will discuss the responsible use of pharmaceuticals for those circumstances when they are necessary.

Room 1B Home grown feed and forage – closing the system

(Organised by PFLA)

There are many forages that can be grown on farm either as a standalone crop or as a mix. Such diverse forages can be used to minimise the need for grain and other concentrate feeds while maintaining production. This workshop will cover the experience of farmers as well as providing information on other forage options.

Anna Bassett (Pasture Fed Livestock Association): Chair

Tom Tolputt (Farm Consultancy Group): Nutritional benefits of using alternative forages

No abstract

Simon Cutter (Model farm): Experiences of using alternative forages on an organic farm

Simon will discuss his experience of using alternative forages for a range of livestock species. Simon's farm is 700 rented acres. 570 acres of this is extensive grassland which is both organic and in an HLS. The remaining acreage is in lucerne, hybrid rape/kale and red clover. The farm has cattle, sheep - including a small Nov/Dec lambing flock - and pigs. As an approved supplier for the Pasture Fed Livestock Association all beef and sheep are forage fed. There has been good success with lucerne and vetches. The lucerne did 22t/acre fresh weight and the silage is 17.5% protein, so more than conventional maize. When conventional farming neighbours bought lucerne, one round bale saved them £50 of soya in their mix. Hybrid rape/kale can also be a very cost effective option for feeding livestock - but it important to have access to the right machinery to grow and utilise these alternative crops. Simon will discuss growing fodder beet (estimated to yield around 10-12t/acre); sainfoin and other mixed forages and how these have been integrated with his HLS agreement and will also talk about experimenting with maximising forage for the pig herd.

Rob Richmond (Manor Farm, Chedworth):

No abstract

Room 1C CAP reform – what's in store?

With the new EU policy regulations nearly finalized, and plans for implementation in different parts of the UK and Ireland well advanced, what are the implications for organic producers and what issues still need to be addressed? (Organised by ORC)

Nic Lampkin (ORC): Chair

Emma Hockridge (SA) and Mark Measures (IOTA): Organic support in England 2014-2020

Overall, Defra is taking a more targeted approach to agri-environment payments, via its 'New Environmental Land Management Scheme' (NELMs). There would be no separate strands for organic production or uplands, but Defra has stated that 'management options appropriate for these farming systems would be included in the scheme'. Work is being done to ensure that all organic farmers have access to these payments. Defra are still not planning to use income foregone calculations between equivalent organic and non-organic farms being as the basis for calculations of support payments. Using such calculations has been recommended by the EU in recognition of the environmental gains produced by organic farming. Partly as a result of this, the UK receives the lowest support payments of all member states. The environmental contribution of organic farming is still being questioned by some officials within Defra despite the large and growing body of evidence. Modulation, whereby money is transferred from Pillar one to Pillar two (from which all environmental payments including organic schemes are paid from) has recently been set at 12%. This will mean a lower amount of money for pillar II than originally planned by Defra. Organic farming support should be underpinned by other support for advice, market development etc. England still does not have a strategy to ensure this is developed.

Mark adds: Two years work spent developing innovative organic options and recent intense activity providing financial data to Defra have been distilled into a shortlist of only marginally more useful land management options specifically for organic farming and uncertain levels of financial support for organic conversion and maintenance.

Gillian Westbrook (IOFGA): Irish organic support 2014 to 2020

Ireland Pillar 2 RDP: The calculations to determine per hectare payments for organic farmers (2014-2020) remain in discussion as does the possible design of a much needed new agri-environment programme (AES) that compliments a system based approach. Ireland will not have an AES available for new entrants for 2014. The design of the previous AES offered limited options to organic producers and therefore a more encompassing scheme that supports functioning bio-diversity is required. The RDP SWOT and ex-ante evaluation discussions to date have indicated the need, under cross cutting objectives, to support organic production. Still required is to have organic farming prioritised and a sub-thematic programme created. This is on-going and due for completion in February 2014. The RDP budget is limited, and contains a risk of 15% fund transfer into Pillar 1, also a possible 8% coupled support, neither of which are favourable for organic producers.

Debs Roberts (SOPA): Organic farming support in Scotland 2014-2020

Scotland is in the fallow part of its normal rotation as farming businesses hunker down and sit tight until the CAP wave has washed over. While there is so much uncertainty about what the CAP will mean for individual businesses, farmers are being very conservative and not making any strategic changes to their business in case it is results in an unintended consequence. No-one will invest in rural development until the CAP budget and the application system is in place, so we do have concerns for the organic sector while we are in this limbo. Scotland has two Scottish Government CAP Consultations running until the end of February 2014. There are numerous worries under Direct Payments but the proposals for Rural Development are worthy of support.

We are fortunate to have a close working relationship with Scottish government officials. And if the CAP was not bewildering enough, the waters are being further muddied with the Independence Referendum and the political future of Scotland is swinging in the balance. The politicisation is really not helpful and is causing even more uncertainty.

Keri Davies (Producer, OGoW): Organic farming support in Wales 2014-2020

The Welsh Government (WG) has issued a consultation on organic farming policy, which closed on 21st January. The consultation focuses on the following key aspects:

- The structure of organic farming support within the framework of Pillar 1 and Pillar 2 support – this is likely to come under the Glastir umbrella of agri-environment schemes as Glastir Organic is likely to allow access to other elements such as Advanced and Efficiency (currently can only be accessed through Glastir Entry)
- The basis for support payments – the balance of conversion payments compared to maintenance payments is possibly going to shift to increase maintenance payments.
- Co-operative schemes – WG is proposing that a feasibility study is undertaken to consider opportunities for an organic co-operative scheme which could result in increased benefits
- Targeting and selection criteria – with a finite resources available, WG is consulting on how organic support can be targeted based on appropriate selection criteria including environmental and potentially economic sustainability
- Training, advice and business planning – it is proposed that organic support is dependent on the applicant having a comprehensive business and farm management plan
- Business modernisation through investment – the WG is proposing that loans and/or capital grants for business modernisation measures and infrastructure investments
- WG is beginning to consider how they can develop getting businesses within Wales to pay for environmental displacement to enhance environmental schemes and thus reduce our dependency on CAP
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17:00–17:10 Comfort break

17:10–18:00 Short workshops/small group meetings

Room 145 (1st floor) — Future arable research priorities for organic farmers (Organised by HGCA)

This will be an interactive session that will aim to identify the current and future challenges for arable organic growers and then discuss how new research activities may help address these challenges. This will be done against the backdrop of developing HGCA's next research strategy.

Vicky Foster (HGCA): Chair

Room 3 — Participatory plant breeding with wheat populations

Diverse cereal populations are likely to be available soon for marketing. The increase in diversity available to farmers can be exploited through on-farm participatory breeding approaches, leading to the creation of locally adapted lines and populations, which may ultimately result in a decentralisation of the seed supply chain.

Nick Fradgley (ORC): Chair

Room 1A — UK organic markets – trends and opportunities

The UK organic market has been difficult, but we are seeing some indication of change. The main aim of the session is to give an up-to-date overview of recent trends in the development of the UK organic market and compare this information from other European countries. A presentation from Finn Cottle, Soil Association, will be followed by time for questions and a discussion on the implications for organic producers.

Susanne Padel (ORC): Chair

Finn Cottle (Soil Association) UK market performance and comparison to other Eurpean markets

This session will consider the most up to date performance of the UK organic market and the characteristics of the UK organic consumer: given that most other European organic markets have continued to experience good growth over the last few years, the presentation will also review this performance and try to identify the key dynamics of the French and German markets as well as looking at organic consumer motivations in those countries

Room 1B — The organic principle of health in practice

During two international expert workshops of the research project 'Reviewing and Developing Health Concepts for Ecological Agriculture' funded by the Swedish Ekhaga Foundation, the IFOAM principle of health and its translation into regulations and practise were discussed. The organic principle of

health has adopted the vision of Lady Eve Balfour that "organic agriculture should sustain and enhance the health of soil, plant, animal, human and the planet as one an indivisible", suggesting that human health strongly depends on the health of all other agricultural domains. Now if we take the findings of the project and its qualitative literature analysis on the current use of health concepts in agriculture into account, it becomes clear that the specific 'languages spoken' and concepts used in the different (but connected!) domains can lead to obstacles and difficulties when the principle is applied in practise. We found that there are some similarities of concepts and criteria to describe health in the different domains; however, many concepts are not equally shared or comparable. We conclude that an open dialogue among the disciplines is needed for a clearer understanding of links between the health of soils, plants, animals, humans and ecosystems; then also rules and regulations could be formulated in a more applied and clear form to enable the direct translation of principles into practice.

Anja Vieweger(ORC): Chair, with Lawrence Woodward (Whole Organic Plus)

Room 1C — Community woodfuel : Integrating energy production into farming systems and communities

This session will explore ways in which farmers, landowners and communities can localise energy production and make use of existing on-farm resources; using regular management activities to provide sustainable, locally sourced woodfuel for different scales of heating systems.

Sally Westaway (ORC): Chair.

Andrew Shadrake (Dartmoor Circle): Community woodfuel agreements: how community groups can help manage hedges for fuel

The UK's hedges are a resource unique in the world, but continue to be under threat. Devon Hedge Group helps farmers and people from the communities near them to reach agreements under which woodfuel groups fell and chop firewood. The benefits to farmers include reduced management costs for hedges, a supply of firewood, increased understanding of farming issues among local people, and hedges laid using local traditional techniques. Woodfuel group members benefit from free heating fuel, exercise, social interaction and learning about the role of hedges in farming and biodiversity.

Devon Hedge Group held a very successful series of community events on farms around Dartmoor last winter. It has published the Community Woodfuel Toolkit, which shows how to manage issues of insurance, health and safety and competence. It also contains templates for the farmer/community agreement and woodfuel group constitution. Copies of the toolkit will be available at the event. Devon Hedge Group is keen to share its experience in the hope that other parts of the UK might develop locally-appropriate models for farmer/community hedge management.

Jon Halle (ShareEnergy): Woolhope Woodheat Co-op - a new model for community woodfuel

Woolhope Woodheat is the UK's first green heat co-op - aiming to source wood from neglected woodlands in South Herefordshire and use it to fuel boilers in the area, selling low-carbon heat to residents of hard-to-heat buildings. Jon will look at the inception and development of this successful project and some of its lessons and successor projects

18:30–19:00 Bar and informal Workshop 1 feedback session

19:30–24:00 Conference Dinner and Bar

During the breaks, please visit the Trade Stands and Poster Display.
While there, you can pre-order the 2014 Organic Farm Management Handbook at the special conference offer price of £15 including postage. Why not subscribe to the ORC Bulletin at the same time? See your conference packs for details.

RDPE 20% discount for English producers and others earning a living from agriculture or agricultural products.
If you have applied for the funding, please remember that you need to sign the register on **ALL** days that you are attending. If you have not yet applied and think you may be eligible, you can still do so. Please ask at the registration desk.
Refunds will be issued after the conference.

THURSDAY 23 JANUARY 2014

09:00–10:30 WORKSHOPS 3

Room 145 (1st floor) — Reducing the productivity gap in organic farming – balancing nutrient supply and demand (Organised by NEFG)

What does the research on comparative yields and the long term trials in the UK and Switzerland tell us? How have farmers measured and managed the fertility gap to maintain yields over 10 and 20 years?

Julia Cooper (NEFG): Chair

Julia Cooper (NEFG): Comparative yields under organic and low-input systems.

Since 2001 the Nafferton Factorial Systems Comparison trial has provided a unique facility to investigate factors limiting yields in organic cropping systems. The trial compares two different crop rotations: one cereal-intensive 'conventional' rotation and one more diverse 'organic' rotation, as well as organic and conventional crop protection and fertility management practices. Analysis of annual yield data allows us to determine whether yield reductions in organic systems are due to rotational history, weed, insect and disease pressure, nutrient limitations, or a combination of these factors. Experience to date indicates that some crops (particularly potato) have yield limitations when grown with only compost as an N source. Recently the trial has been modified to include applications of slurry as well as compost, to try to address the problem of quantity and timing of N supply to the growing crop under organic fertility management. Results will be presented from the 2013 season for winter wheat, potatoes and cabbages grown using various nutrient sources in the background of an organic and conventional crop rotation.

Jochen Mayer (Agroscope)**: Nutrient limitations in organic farming? Results from the DOK trial at Agroscope**

The DOK experiment started in 1978 near Basle, Switzerland and provides valuable insights into the long-term effects of different organic management strategies on crop nutrition and yields. This presentation will focus on trends in wheat yields throughout the trial. Substantial differences in yield between 'organic' and 'conventional' farming systems and different fertilisation intensities (50% and 100% of standard fertilisation) were primarily attributed to the delivery of nutrients – in particular, nitrogen – to the plants. In the two organic systems, bio-organic and bio-dynamic, the doubling of manure application only slightly improved wheat grain yields but did not improve grain baking quality. However in the same systems, a pre-crop of potatoes significantly increased yields of wheat compared with a silage maize pre-crop; this effect was not apparent in the conventional systems. Analysis of wheat straw and grains showed sufficient phosphorous supply, but potassium and nitrogen were co-limiting factors in the organic systems at the low fertilisation intensity. In contrast, both the bio-dynamic and bio-organic system exhibited a balanced potassium supply at the high fertilisation intensity. Analysis of clover in the two years of clover-grass ley support these findings and also indicate a limitation of clover growth by phosphorous at low fertilisation intensity.

Daniel Seaborne (Holme Lacy College) : Monitoring nutrient balances at Holme Lacy College farm.

Field records on soil analyses, inputs and offtake have been measured at the Herefordshire College farm, since conversion in 2000 and two fields have been studied in detail every year.

Room 1A — Making our growing systems truly local (Organised by OGA)

Many growers sell their produce locally, but to what extent can our systems be considered truly local? What about our energy inputs, seeds, labour, fertility? This interactive workshop will set out the challenges and highlight innovation and what needs to change.

Alan Schofield (OGA): Chair

Wendy Seel (Vital Veg): The challenges of re-localising our systems

There are encouraging numbers of local selling systems (box schemes, farmers markets, CSAs etc) but the growing systems that supply these often have some important inputs that are not local at all. Fertility, energy, seeds, labour, bio-control, sundries are often imported. Does it matter where the key inputs for local food production come from, how far they travel, or who owns the company that supplies them? Building on the plenary and other relevant sessions, the aim of this discussion is to identify which of the key inputs into vegetable growing systems can be obtained locally - and which of those that could be, or should be local, are more commonly brought in from a distance. What needs to happen to make these key inputs available locally - and what might happen if we don't find a local solution? Do we need new knowledge, new skills, or new systems? Can we prioritise what needs to happen in terms of current economic feasibility, and in terms of resilience (the two might not match at the moment)?

Room 3 (gr floor) — Organic beef and lamb markets: opportunities and bottlenecks (Organised by OCW)

This workshop will help producers understand recent trends in the organic red meat market and help them identify where the opportunities lie and where the pinch points are along the supply chain. With regard to the latter it will focus on the issue of ensuring the supply of organic beef stores, many of which are currently sold on the conventional market, to enable us to meet the current demand for finished beef.

Dafydd Owen (OCW): Chair

Tim Leigh (Organic Livestock Marketing Co-operative): Market trends and opportunities for organic red meat

No abstract

Stuart Vile (Graig Producers/ Meadow Quality): The beef market – Linking store producers and finishers

In the autumn of 2013 we faced many problems when marketing organic stock for both store producers and finishers, will these problems grow and become the norm? In my discussion the role of promoting the virtues of organic beef and ages of cattle slaughtered decides whether it is possible to link store producers with finishers. The organic industry needs to change Supermarket buyers criteria for under 30 month old beef to stand a chance that a 'producers link' can be formalised. Costs of inputs, breeds of cattle and timing of sales will be discussed, whether the result meets the workshops approval we wait and see!

Philip Jones (Lan Farm) (tbc): Producing and marketing beef stores: A farmer's view

To maximise profit, should the beef farmer sell more cattle as stores or keep fewer and finish them?

Room 1B — Maintaining productivity from grassland long-term

Grassland productivity on organic farms varies widely. This workshop will draw on the experiences of farmers to identify some of the causes of low performance and how to remedy them: phosphate and potassium levels, biological activity, soil structure, forage species, manuring and grazing systems.

Discussion facilitated by Mark Measures (IOTA)

Tim Downes (JR & MC Downes & Son): Growing forage in the "Orange Triangle"!

We converted to Organic in 2000 and have since moved to an all grass system this season, 250 Cows and finish beef from red clover silage. All loose-yarded, so making use of compost and recycling of nutrients according to soil analysis. We plate meter measure the grazing block weekly and have done for over 7 years giving a good idea which paddocks are under or over performing. Recently forage yields have declined; we will discuss if that is due to the difficult weather conditions or if there is some other factor after 13 year of organic farming.

Edward Goff (Hindford Grange): Forage production at Hindford Grange

I started organic conversion of the 150 acre dairy farm 30 years ago, since which successful forage production has been central to the business. Through regular re-seeding with white and red clover leys, soil analysis and occasional use of rock fertilisers, use of composted FYM and paddock grazing acceptable stocking rates have been maintained throughout the period.

Tom Willoughby (Producer): Experiences of declining forage production

Organic conversion of our 108 cow dairy farm started in 1999. In the early years forage production and stocking rates were good but we have experienced declining forage yields during the last 5 or 6 years, associated with declining P and K levels, despite routine soil aeration, targeted manure use, reseeding and some use of fertilisers. The presentation will provide and overview of the current situation, what we have done to address the problem and hopefully stimulate some discussion on the way forward.

Room 1C — Addressing the skills gap: Information and innovation opportunities (Organised by ORC/SA)

Addressing the Skills Gap. Organic agriculture and agroecological approaches to farming are reliant on high levels of skills and knowledge. How do we best address the need to improve and expand these skill sets? The workshop will have brief presentations from different approaches to addressing the skills gap (apprenticeships, field labs, SWARM) and then be opened to the floor to draw on the experiences and needs of participants.

Rachel Harries (Soil Association): Chair

Kate Collyns (Grown Green): Addressing the skills gap: The apprenticeship approach

Depending on which study you look at, the average age of British farmers is between 55 and 59; and increasing numbers of young people from rural areas are choosing to ditch farming as a career and search out fame and fortune in the big city. One practical approach to turn this tide was to launch the Soil Association Apprenticeship Scheme in 2007, with the aim of training up young (as well as not-so-young-but-willing) people with an interest in going back to the land. The two-year scheme is a mix of hands-on practical work placements based on organic holdings, alongside weekend seminars to study theory and principles. Now part of the Future Growers' Scheme, the apprenticeship has been a very successful programme training new growers and farmers, many of

whom have gone on to find jobs in the sector, run organic holdings, and even start new projects from scratch.

Steve Roderick (Duchy College): Addressing the skills gap: the SWARM project

The SWARM Knowledge Hub (www.swarmhub.co.uk) is an RDPE funded project that provides a web-based knowledge transfer repository for resource management information aimed at improving the economic and environmental performance of agriculture through research, skills development and unbiased knowledge transfer. Examples of different innovative approaches used include fifty farmer case studies, film, analysis of outputs from advisory schemes, decision tools and mobile phone apps as well as on-line text and imagery to encourage behavioural change and support management decisions across six broad themes: Soils, Water, Energy Efficiency, Nutrients and Manures, Trees and Wood and Renewable Energy. The project is a partnership with industry and academia, including The Soil Association, British Grassland Society, Natural England, Rural Focus, the Environment Agency, Exeter University and Rothamsted Research and the project has encompassed other initiatives such as Low Carbon Farming, Nutrient Wise Demos and www.pasturepromise.tv. A number of significant documents have been converted to user-friendly on-line materials, including the Think Manures manual and Defra-funded guidance on mitigating diffuse water pollution and reducing GHGs. Farmer feedback has been key, enabling the adoption of an underlying approach to delivering knowledge materials in a 'How to' as well as a 'Why' format, highlighting cost-benefit relationships where required.

John Pawsey (Shimpling Park Farms): Organic Blackgrass control field lab - the answer is in the room

Looking at the characteristics of different cereal crops and their effect on black grass populations. From our initial meeting on 11th June 2013 we agreed to select one field at high blackgrass risk, a cereal crop after beans in a non-plough situation. In that field we were to sow a strip of every cereal crop to be grown on the farm for harvest 2014. The crops that have been sown are: winter wheat, winter barley, spelt wheat, winter triticale and an ORC Population. Assessments of weed levels are to be made by participants at the planned meetings through the course of next season. Three further meetings are planned for: winter - after winter crop establishment, spring - possibly around growth stage 32 and early summer - for final assessment.

10:30–11:00 Refreshments (Lounge area)

11:00–12:30 WORKSHOPS 4

Room 145 (1st floor) — Reducing the productivity gap in crop production - weed management (Organised by Organic Arable)

Drawing on the Danish Highcrop research project we will be looking at what we can learn from the Danes using their knowledge in the UK setting. The session will cover planning weed control strategies and discuss some of the tools we have available to assist us.

Andrew Trump (Organic Arable): Chair

Bo Melander (Associate Professor, Dept. of Agroecology, Aarhus University, Denmark) : The ecology and management of perennial weeds.

No abstract

Ken Tuffin: A flamin' farmer tries something different

No abstract

William Hudson: A new approach to organic weed control

No abstract

Room 1A — Innovative local marketing - beyond posh nosh (Organised by OGA).

This session will look at innovative ways of promoting sales and connecting farms, restaurants, shops and consumers, without compromising the organic message. The workshop will also look at shortening food chains in urban areas, both UK and Europe.

Pete Dollimore (OGA): Chair

Rob Alderson (Manchester Veg People): A co-operative approach to feeding a city

Manchester Veg People is a multi-stakeholder co-operative (of growers, buyers and workers) aiming to create a viable new market for locally grown organic fruit & veg in Gtr Manchester. The produce is grown within 50 miles of Manchester city centre and the buyers are catering businesses ranging from small cafes to bigger institutions like the University. This session will look at the progress we have made so far, including the unusual structure of the co-operative, attempts to crack into public procurement, logistics and our work towards basing the prices on true costs of production.

Pete Ritchie (Whitmuir/Nourish): Innovative local marketing: affiliations and associations

"No organics, thanks – we're British" is even more true in Scotland where we eat less organic food relative to income than other parts of the UK. So putting a 100% organic farm shop and licensed restaurant in a sparsely-

populated non-touristy area of Scotland just as the recession got under way was never going to be a smart move. We've spent the last four years keeping our nose just above water by finding ways to connect people to the farm and to get over their fear of 'posh nosh' without compromising on our organic message. We're still one of the largest CSAs in the UK with 250 standing orders and on the way to moving the farm into community ownership. We've also been working on the wider context – putting together a co-operative business to business network (Organic Scotland), seeking to influence local and national government policy on organics, and building Nourish Scotland as a focus for work on sustainable food in Scotland. This session will be 'warts and all' about what's worked and what hasn't - the turkeys, the cash cows and the roadkill.

Ulrich Schmutz (Garden Organic/CAFS): Shortening food chains in metropolitan areas - examples from London, Berlin, Rotterdam and Milan

Foodmetres is a 3-year EU 7th framework research project looking at ways of shortening food supply chains in metropolitan areas. FoodMetRes is short for the 'Food planning and innovation for sustainable Metropolitan Regions' (www.foodmetres.eu). Seven universities and eleven small and medium size enterprises (SME's) are involved with case studies in the UK, Germany, Netherlands, Italy, Slovenia and Kenya. One aim of the project is to study innovations and shortening food supply chains - reducing the actual distance food travels but also cutting the number of "middlepersons". Another aim is to study urban agriculture/horticulture ('zero chain food supply') and its potential contribution to food supply in different metropolitan areas. New growing spaces can be found in unexpected places: e.g. roof and vertical gardens or containers on temporarily and brownfield sites. Urban orchards (>12 trees) can be created with pneumatic drills carving out a narrow strip (0.2-0.3m) at the edge of roads or pavements and training fruit trees on slow growing rootstocks along walls. Computer map tools are used to help identify all the sites possible for new growing spaces and calculate potential cost-benefit scenarios. The presentation will share other practical innovation examples and participants' experiences on this subject matter – a process academically coined as 'knowledge brokerage'.

Room 3 Reducing antibiotic use for sustainable agriculture (Organised by SA)

The aim of this session is to learn from research and on farm practice towards reducing antibiotic use and promoting sustainable and responsible health management. Come and discuss the problems, and identify solutions and actions we need to take to reduce antibiotic resistance going forward.

Tim Bevan(Soil Association): Chair

David Tisdall (Bristol University): The responsible and sustainable use of antimicrobials in farm animals - A practical approach to medicines audits at farm and practice level

Ensuring responsible medicines use is an essential role of the farm animal veterinary surgeon, with key responsibilities for both animal and human health. Increasing concern over antimicrobial resistance (AMR) and the challenge of treatment regime compliance make this even more critical. In line with the BVA and RUMA guidance, and while decreasing total antimicrobial use through disease prevention, Langford Farm Animal Practice has assumed a deliberate strategy to reduce reliance on protected antimicrobials (namely third and fourth generation Cephalosporins and Quinolones). A practical approach to medicines audits has been developed, making a useful, proactive and ongoing contribution to farm level active herd health management (HHM) and practice level clinical governance. Educational farmers' meetings and regular newsletter articles are used to raise awareness and to encourage engagement. Consideration of both animal health and economic implications of current medicines use, including the balance between preventive interventions and reactive treatments allows targeted recommendations to both reduce disease and improve profitability. Areas of good practice and responsible medicines use are identified, emphasised and encouraged, and poor compliance highlighted. Protected antimicrobial use decreased by 25% in the first year with altered prescribing practices having no deleterious effect on treatment outcomes or animal health.

Christine Gosling (Berkeley Farm): Putting research into practice: lessons learnt from a field lab to reduce antibiotics on the dairy farm.

An explanation of the Field Lab programme, who is funding it and why, the farmers involved and what was discussed in the early meetings - including nutrition, breeding, management, housing, mastitis treatments and protocol, homeopathy, prevention of mastitis and dry cow therapy.The decision to trial udder mint as a treatment for mastitis and high cell counts and the method used and welfare considerations for the cows. A description of udder mint, the composition, effect and side effects (samples will be available for an experience of the effect on skin). The results and conclusion of the trial, and the problems and benefits incurred. The next stage of the trial using udder mint as a preventative treatment for mastitis and high cell counts, including the method and monitoring of results. The benefits of the field lab, comments from the farmers involved and a commendation to William Waterfield, The Prince of Wales Charitable Foundation, The Organic Research Centre, The Soil Association and Duchy Originals Future Farming Programme.

Richard Young (Soil Association): Organic farming and antibiotics - problems and solutions.

The development of antibiotic resistance is an inevitable process, but it is greatly encouraged by misuse and overuse. All use of antibiotics can cause resistance to increase, but low level use over prolonged periods is more likely to cause problems than full therapeutic use

for short periods. Antibiotics are a finite resource and there is growing pressure for them to be used as sparingly as possible in all human and veterinary medicine. No new antibiotic classes have been developed since the mid-1980s, 'peak antibiotics' would have been in the mid-1950s and we are unlikely ever to get better antibiotics than we currently have. Organic farmers already use antibiotics with extreme care, avoiding routine preventative use as well as antibiotics critically important in human medicine, except in very rare situations. But is there a danger that in their caution some organic farmers will not use antibiotics when they really should do so? Where should we draw the line? Organic farmers also observe extended withdrawal periods after use. These can greatly increase costs, especially in dairy farming. Are these really necessary and are there alternatives that genuinely help to reduce the need for treatment? Also, do we really need to avoid top of the range antibiotics in intramammary tubes, even if these are related to important medical drugs, when any bacteria and therefore any resistance will be killed by pasteurisation?

Room 1B — Soft rush control in grassland (Organised by NEFG)

In some areas, increasing soft (common) rush is cited as a reason for ceasing organic production. What do we know about how to control rush in organic management after 6 years of wet summers in the west of the UK and British Isles?

Kate Gascoyne (NEFG): Chair

Ian Cairns (SRUC): Effective common rush management strategies in organic systems

Common (soft) rush encroachment in pasture on marginal farms in the north and west of England has become a significant issue over the past 5 years. A combination of wet ground conditions during summer and autumn months and changes to livestock management systems has resulted in increasing competition from rush plants. Short term control strategies can help to limit the spread of encroachment, but a more fundamental and farm specific approach is needed to address the problem. This involves assessment of soil management, acidity, nutrient availability and pasture management in line with the objectives of land managers. A financially and technically sustainable plan can then be designed and put in place. This includes four stages; 1) Soil and sward appraisal; 2) Common rush control & management programme; 3) Improve competition from a more productive sward; 4) Implement an effective grazing and sward management programme.

There are a significant number of variables in an effective management strategy. An increase in farmer knowledge and practical understanding of key control and management options and limitations is required. The main issues are common to both organic and conventional grassland systems and this offers an opportunity for closer integration and identification of a sustainable solution.

Dianne Horn (Slack House Farm) Adapting management of rushes in an increasingly wet climate

The weather in the last few years has caused major problems for controlling the rushes in the most productive parts of the farm. They hosted a workshop on the problem in autumn this year.

Room 1C — Agroforestry: A question of scale – from forest gardens to landscapes

The aim is to explore the benefits and challenges of integrating trees into a productive agricultural system at different scales, ranging from forest gardens, to farm-scale agroforestry to landscape scale projects. (Organised by ORC)

Jo Smith (ORC): Chair

Bethan Stagg (SchumacherCollege): Forest gardens – an experiment in horticulture based on woodland complexity

Forest gardens are based on the structure of young natural woodland but with a planting composition of perennial food plants and functional species. Originating in the tropics, they have been adapted for temperate climates in the last two decades, principally through the permaculture movement. We conducted a preliminary productivity assessment of forest gardens compared to organic kitchen gardens (annual vegetables and mixed fruit) at Schumacher College. Yield was substantially lower in forest gardens than kitchen gardens but with proportionately lower labour requirements. Forest garden plots were established in 2007 so yield is anticipated to increase as fruit trees mature. Yield was also subject to the practicalities of perennial greens as food crops and environmental constraints due to locality and design. Challenges with perennial greens relate to seasonal availability, labour associated with harvesting and food preparation. One of the major benefits of forest gardens is ecological and yield stability in variable climates, a consequence of high species diversity. Forest gardens are highly resource extensive, requiring little or no material inputs, as well as minimal labour. Species used as leaf crops in the forest garden are proven to be higher in dietary fibre, macro- and micronutrients than domesticated leaf crops.

Martyn Bragg (Shillingford Organics): Starting an Agroforestry scheme- giving us fruit and nuts to sell and enhancing our production of vegetables

We designed and started planting an Agroforestry scheme in a 10 acre, south facing field last winter and will finish this winter. The avenues are 4.5 metres wide and the cropping area is 24 metres. To the west end there is a thick, tall copse, which gives fabulous shelter and the 'edge' area produces fantastic crops. The long term plan is to extend this effect across the whole field. We have designed the scheme very much with our markets and outlets in mind. So we will have a greater range of top fruit (mainly apples,) soft fruit and nuts to sell. At the same time to enhance our production of

vegetables in the area between the avenues of trees and shrubs. These avenues will be productive, give shelter and bring in biodiversity. Between the apple trees we planted nitrogen fixing trees. Unfortunately the hot and dry conditions of last summer meant we lost some of these nitrogen fixers. We used 'tree mats' but it is definitely better to mulch the whole strip for at least a metre each side of the trees. Once the trees are well established we will remove the mulch and establish a wildflower mix.

Mike Townsend (Woodland Trust): Pontbren farmers – cooperative action for landscape scale change

The Pontbren Project is an innovative approach using woodland management and tree planting to improve the efficiency of upland livestock farming. In 2001 the Pontbren farmers came together as a group of ten, managing a total of 1000 ha of farmland across the catchment. Over the past 15 years their innovations have been subject to field research on the environmental benefits of trees on farms. Trees and woodlands are now an integral part of farm management in Pontbren demonstrating the benefits for upland livestock farming, water management, wildlife and landscape. The Pontbren project worked because it was led throughout by the farmers who actively took an innovative approach, and who were willing and able to interest and involve others in active collaboration. The undoubted success of Pontbren in agricultural, environmental, scientific and social terms has provided some critical lessons for farmers and policy makers seeking a better way of delivering essential environmental services as part of productive upland livestock farming in the UK.

12:30–13:30 Lunch/networking (Restaurant)

13:30–15:00 CLOSING PLENARY

Room 1 Making sustainability happen!

During the conference, we will have debated the theme of 'Intensive Sustainability or Sustainable Intensification', and we hope many positive ideas for really improving the sustainability of food production systems will emerge. This session will highlight some of the most innovative ideas discussed and conclude with thought-provoking analysis of the potential of organic farming to deliver food security and sustainability.

Lawrence Woodward (TBC): Chair

Innovative actions to meet the sustainability challenges:

Short presentations from conference participants highlighting some of the best approaches discussed.

Nic Lampkin (ORC):) Reconciling food security and sustainability organically

Feeding the world is not just about how many people there are to be fed and how much we produce. On the one side is how much and what we consume – diet matters, not only for sustainability but also for health. On the other side are the resources we consume to produce what we do – it's no good producing more if we use up our non-renewable resources faster and damage the environment and the ecosystems services that sustain us in the long term. What matters here is not individual crop yields, but overall system productivity – how many people's food, fibre and fuel needs can we sustain per hectare – and if livestock are competing for resources, what role should they really be playing? Even if we can get the input-output balance right, which is where organic/agro-ecological practices have a significant role to play, what about the economic, political, legal and other institutional frameworks within which we operate and their impact on enabling, or impeding, genuine food sovereignty and sustainable food systems?

15:00 – 15:30 Refreshments and Close of Conference

Tell us what you thought about the event – please complete the forms!
We are very keen to get your feedback so that we can improve the event. If you know people who decided not to come, we would be particularly interested to get some insight into reasons why.

RDPE 20% discount for English producers and others earning a living from agriculture or agricultural products.
If you have applied for the funding, please remember that you need to sign the register on **ALL** days that you are attending. Please also make sure you have completed the separate RDP event feedback form. We will lose funding if we do not get forms returned by **at least 80%** of funded participants