

Bulletin

No. 134 – Summer 2021



News in Brief	2
Editorial: People and nature	3
Mark Measures reflects on a life's work	4
Agroforestry at Elm Farm and Wakelyns	6
Transforming the farming landscape with trees	8
Agroforestry for transition	9
Health in organic farming systems	10
Feeding pigs and poultry on 100% organic feed	12
Diversify toolbox for policy-makers	13
ORC Board/staff news	14
Obituary: Yvonne Pye, ORC Patron	15
Events and announcements	16



News in brief

Young Organic Farmer/Grower of the Year Award 2021

Are you, or do you know, a forward-thinking, innovative young organic farmer or grower who is passionate about implementing organic principles, has proven the ability to inspire others and deserves recognition for their work?

ORC, the UK's leading independent organic research organisation, continually aspires to develop innovative solutions that enhance the changing farming/growing landscape and grow its network in the agricultural community.

To encourage the emergence of a new generation of organic farmers/growers, we have created a new annual award: 'The Young Organic Farmer/Grower of the Year', which has been launched to celebrate our 40th anniversary. The winner of the award will be presented with a donated prize of £1,500.

Nominations are now sought for an individual who is:

- Young – nominees should be between 18-40 years old
- Organic – nominations should centre around the adoption of organic principles even though the nominee may not be producing or working with organically certified produce
- Farmer/grower – nominees should be working in and for the organic community; they may be employed by farmers/growers or organisations within the sector even if they do not class themselves as farmers.

The deadline for entries is 15th August 2021.

www.organicresearchcentre.com/news-events/award-2021/

Organic at the Heart Appeal success!

We are very grateful to everyone who made a contribution to our Organic at the Heart Appeal, which we are delighted to say is now fully funded.

The Organic at the Heart project aims to build communities around environmentally friendly farming through the development and demonstration of local hubs that embody the Organic Principles of Health, Ecology, Fairness and Care.

It is our hope that as a result of this project:

- More farmers are inspired to transition from conventional to organic and agroecological farming.
- Connections between farmers and local food businesses will be improved, leading to the development of regional relationships and food networks.
- Communities will have improved access to healthy food that's produced in an ethical and sustainable way and consumer demand will grow.

We've been overwhelmed by the support we have received and it gives us great hope of being able to realise our ambition to take greater control of our research agenda and supporting our knowledge exchange programme.

Our project team has started work developing the methods and protocols to identify the local hub farms that will participate. Regular updates will be posted on the Organic at the Heart project website page so please do check back to see how things are developing: <https://tinyurl.com/ORC-OATH>

Organic Agriculture at the Heart of agroecological Transition – call for submissions

ORC's Ambrogio Costanzo is a guest co-editor of a forthcoming special issue of Agronomy entitled Organic Agriculture at the Heart of Agroecological Transition. The deadline for manuscript submissions is 15 September 2021.

Ambrogio said: "In this Special Issue, we will welcome original research and/or reviews that will highlight the contribution of organic agriculture to inform the redesign of cropping systems based on global/holistic and ecological understanding of agroecosystems and fairer relationships in supply chains and food systems. Contributions that adopt a system approach, thus, encompassing multiple aspects of crop production as contextualized in local agroclimatic and socio-economic contexts, and resulting from participatory research methods, are especially relevant."

Disease-resistant hop varieties for organic beer

Farmers and brewers are teaming up with ORC to begin a three-year Innovative Farmers field lab to identify disease resistant hop varieties for organic beer production. Demand is growing for organic beer using locally-sourced ingredients but there is a lack of UK-grown organic hops, with currently only three such growers supplying the market. Hops are notoriously vulnerable to disease and pests in the UK's temperate climate, and organic growers can face two-in-five crop failures. To tackle this issue the field lab is bringing hop growers together with breeder Charles Faram and ORC to co-design practical on-farm research. Stroud Brewery plans to use the hop varieties identified by the field trial in three new organic beers made in collaboration with the rural cookery school and organic food brand, River Cottage.

Toxic Trade

The UK could be opening the door to 119 pesticides banned for health and environmental reasons, warns a new report looking at implications of signing up to a Pacific free trade agreement. The deal with 11 countries, including Australia, Canada and Mexico, risks exposing UK consumers and wildlife to a new suite of toxic pesticides.

The report, part of the Toxic Trade series authored by Pesticide Action Network UK (PAN UK), Sustain and trade expert Dr Emily Lydgate, reveals that the deal poses a direct threat to the British public's health, environment and farming sector. It would also set a dangerous precedent that UK pesticide and environmental standards are up for grabs in other post-Brexit trade negotiations. For UK farmers, the report highlights that the deal could spell disaster. It risks cheap food imports produced to weaker pesticide standards flooding the domestic market, undermining UK farmers' competitiveness. And if the UK weakens its pesticides regime due to joining the CPTPP, farmers will lose their largest export market as UK produce will no longer meet EU standards. <https://pan-uk.eaction.org.uk/toxic-trade-cptpp>

For more details on items on this page, including links to the publications, visit the News link at www.organicresearchcentre.com or, to receive more frequent updates, register for our E-bulletin service and follow us on Facebook, Twitter and Flickr.



Editorial: People and nature



Welcome to the Summer 2021 Bulletin

Dame Professor Georgina Mace, a pioneering conservationist who sadly passed away last September, wrote about how dominant approaches to conservation have changed over the years, from an emphasis on 'nature for people' in the early 2000s, to one of 'people and nature' more recently¹. The first framing emphasises ecosystem services and economic values of nature; the second recognises the importance of environmental change, resilience, adaptability and socioecological systems. In the context of rapid climate and other environmental change, people and nature are in it together.

How does this have to do with farming? For most of Britain, people and nature translates to agriculture and ecology, or agroecology, and for the last 40 years ORC has been at the forefront of researching and developing one of the most established and regulated of agroecological approaches: organic farming. Using this experience and knowledge gained from working with farmers and food producers, we have much to contribute to the new agenda of public money for public goods. However, with the people and nature paradigm squarely in our sights, we need to show how agroecology is not just about delivering ecosystem services, but about developing a resilient farming system in which the health of people and of nature is interdependent.

Health is one of the three IFOAM principles of organic farming, and in this issue Anja Vieweger looks back at ORC's research into health principles over the last decade, seeking to answer questions such as how do you measure health, and how do farmers increase health in their farming systems. Soil health underpins the health of the whole food system and we include two related research digests, one on measuring and monitoring soil health and the other on improving soil health using woodchip.

In the context of the UK's agricultural transition and new focus on public goods, ORC has been involved in a number of the Tests and Trials set up by Defra to involve farmers in the co-design of future options under Environmental Land Management. We are leading the Test project on Agroforestry, and this is described by our Senior Agroforestry Researcher Dr Colin Tosh in the pages that follow. As Colin goes on to describe, this work builds on over 20 years of pioneering research on the silvoarable system of Wakelyns and silvopastoral trial at Elm Farm. Much of this work is summarised in a number of technical reports that are available to those who want to find out more.

A feature on the recently completed OK-Net EcoFeed project, which involved 11 European countries in researching ways to achieve 100% organic and regional feed for poultry and pigs, completes a snapshot of the broad range of research activity being undertaken by our team. In this Bulletin you can get to meet our newest team member, Henrietta Lowth, as well as hearing the reflections of Mark Measures who leaves ORC after nearly 40 years of association. We are hugely indebted to his contribution to ORC and to organic farming as a whole. We wish him well and hope to give him a proper send off when circumstances allow.

We hope our work stimulates and inspires you, and we look forward to your feedback and collaboration on advancing a strong organic, agroecological, and 'people and nature' agenda into the future.

Will Simonson, Head of Research ORC

1. Mace (2014) Whose conservation? Changes in the perception and goals of nature conservation require a solid scientific basis. *Science*, 345(6204)

About us

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Bulletin editor

Phil Sumption

The Organic Research Centre is a leading, independent, research charity working for better farming, food and health, promoting environmental sustainability, quality food and health and wellbeing for all. We work in the UK and internationally to: research and develop practical, sustainable land management and food production systems based on organic and agro-ecological principles; foster knowledge exchange with and between current and future producers, food businesses and related professionals; and influence policy and public debates on the future of food and farming based on sound evidence.

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Cover photo: Mark Measures, who has retired from ORC after 38 years, as Farm Manager, and founder of the Organic Advisory Service and Institute of Organic Training and Advice (see pp 4-5).

Photo: Susanne Padel



Mark Measures reflects on a life's work of organic advice



Mark Measures, who is retiring from ORC after nearly 40 years involvement, reflects on a life's work

A third generation farmer, I joined ORC in 1983 as the farm manager. Disillusioned by my very practical experiences of arable, dairy, sheep, pig and poultry farming throughout the UK and asking questions about environmental pollution, wildlife decline, human pesticide poisoning and animal welfare, questions that Newcastle University had failed to raise, let alone answer. I was inspired by organic pioneers and the prospect of finding a better way.

As Lawrence pointed out in the last ORC Bulletin, although nominally a research centre, ORC is about changing the world for the better and as such, research is a means to an end, a means of influencing agricultural and environment policy and support, and a means of developing farming systems and practices that take a holistic view of the world with an understanding of health, and the links between the health of soil, plant, animal and human. At Elm Farm, it was that which drew me into helping to set organic standards, the development of MAFF/Defra organic support schemes and marketing initiatives such as OMSCo, but my main focus has been the provision of advice to farmers and growers, setting up and heading the ORC Organic Advisory Service (OAS) and more recently the Institute of Organic Training and Advice (IOTA).

Provision of advice can be a fine line between practical reality and the need for a farming system, between short and long-term aims, between principles and financial viability. It involves practical advice, hand holding, providing reassurance, motivation and inspiration. As the late Edward Goff said: "My organic adviser is like a parson, he comforts the afflicted and afflicts the comfortable!" The OAS quickly developed over 15 years, operating nationally, providing a wide range of services through a team of 10 full-time and 20 part-time advisers. The Defra-funded Organic Conversion Information Service, which we led, undertook visits to 10,000 farms over 10 years. We maintained our focus on farming systems as the cornerstone of organic farming, through the development of whole farm conversion planning. We focused on biological soil fertility building, backed up by the research programme on clover leys and green manures and supported by good manure management. We resisted the high input trap now prevalent in much of US organic farming, and we understood the role of biodiversity in the workings of genuinely sustainable farming.

Key to our experience was understanding the financial performance of organic farming businesses; without a viable business achieved through premiums, marketing, grants, low costs and reasonable productivity there is no future. Our next (12th) edition of the Organic Farm Management Handbook will continue to provide the sort of information needed by organic farmers and growers for benchmarking, planning and budgeting.

Institute of Organic Training and Advice (IOTA)

In 2000/2001 the ORC's Organic Advisory Service had reached a peak, but that was brought to a grinding halt by foot and mouth, which that meant staffing levels in the OAS had to be drastically reduced.

At the same time I was feeling that the advisory world was changing – there were many more independent advisers offering advice on organic farming and organic conversion; frankly it was all rather unregulated and there were some problems. As a result, I decided to leave the employment of ORC to set up IOTA which I was able to do with the practical and financial support of ORC, the Soil Association, ADAS and Organic Centre Wales.

They enabled the initiative to get off the ground. Aimed at raising the standard of advice and the management of organic farms IOTA was a professional body for organic advisors, providing them with information on organic farming, training and importantly accreditation. So, when a farmer wanted to know where they should go for advice then we were able to point to a list of accredited advisers who we knew had the expertise. We ran IOTA for about 10 years as an independent organisation and it was not until I wanted to reduce my input and responsibilities for it that we decided it needed to be amalgamated with one of the other organic organisations. By this time ORC had stopped providing advice, so it was the logical home for IOTA, which became amalgamated with ORC. I continued to manage it, but then in due course stepped back. It remains to be seen how it develops in the future. But there's no doubt that the need for that information, training and accreditation of organic farming advisors still remains.

No nonsense practicality and honesty

The work of the OAS and ORC is characterised by no-nonsense practicality and honesty. That has not always made us popular. The fight we had for genuine organic standards in the UK in the 1980s is now hard to believe. We tell a farmer if their farm is unsuitable for organic conversion, some have complained. We challenge bad science, even if it is supporting organic, and critique the latest fads from travelling gurus and pop-up advisers. Over-enthusiastic claims for saving the planet through soil carbon credits are probably the latest to fall into that category.

Have we made a difference? Certainly, even if the wild campaign ambitions of '20% by 2000' were not realised. Though looking at the new EU target of 25% organic by 2030 we were not too far out! What ORC has contributed to, and





in many instances has secured, are the many commercially successful organic farmers and growers in the UK, some now run by their third generation. The base may be small but reasonably secure. The market is thriving. There is a place at the Government table, even if the organic case still has to be made time after time as a new cohort of staff arrives, steeped in the pervasive commercial dogma of inputs and biotech. It is heartening to see conventional arable farming finally waking up to the problems of soil and the need for crop rotation; I am not sure we have contributed much to these but at least they have somewhere to go when they want to learn about soil life and fertility and how to control weeds. Dairy farmers are at last realising that routine prophylactic antibiotics are perhaps a bad idea, for future disease control in their cows and in humans; again the research and practical experience of ORC is potentially invaluable.

Less encouraging are the problems of intensification of livestock in conventional farming; sows still in farrowing crates, pollution of water courses such as the Wye, the ongoing decline in most bird and insect populations, the gross inefficiency of the use of nitrogen fertilisers and the waste of finite resources.

What is most disappointing to me is the failure of Government, farmers' representatives and environmental organisations. The latter are a cause for real concern. While the RSPB has usefully set a target for low input and organic farming, there is no concerted effort on the part of conservation organisations to seek a wholesale change in farming systems and practices towards genuinely more sustainable, organic agroecological farming, which is essential if we are to even halt the decline in wildlife, let alone turn it round. They seem to continue the focus on taking land out of production and on the non-farmed wildlife habitats. Where is the vision for proper, mutually beneficial integration of farming and wildlife? Until there is pressure from these groups, Government will get away with the currently inadequate proposals for the Environmental Land Management (ELM) scheme, based as it is on isolated farming practices and management of the margins, and which does not even acknowledge the importance of the farming system. It is only made worse by Government's refusal to provide publicly funded advice to help implement the schemes well, despite this being one thing that virtually all farmers have said that they need in the ELM Test and Trials consultations held up and down the country over the last 12 months.

Retirement

I feel that it's time to take a step back, to do a bit less; I guess it comes to us all. ORC and organic farming has preoccupied me for most of my working life, not without its challenges of course, but ORC has been such a stimulating and rewarding place and a great opportunity to work with so many wonderful colleagues, clients and contacts. ORC still remains immensely important. There is nowhere else in the UK dedicated in the same way to the development and uptake of organic farming as the most effective means of addressing the universal and fundamental need to feed people a healthy diet while caring for our livestock and wildlife in a finite world.

I will continue to do some advisory work, but much less, and it will be rather more focused on one-off projects that I think are particularly interesting and something I can contribute to. I have been involved in the farming and wildlife Foundation of Rachel and Pamela Schiele in Argentina for the last 30 years, and I'm keen to continue to have some input there.

With my wife Joy, we have a particularly interesting farm at Cow Hall, in Shropshire; although I don't plan on spending all my time there I know it will continue to be the centre of our activities. The farm was never farmed conventionally, although not registered organic for many years it never had any agrochemical inputs. Most of the farm is designated a County Wildlife Site, with exceptional biodiversity interest. We keep a herd of traditional Hereford cattle and a flock of Clun sheep, both of which were established in the 1930s and are indigenous to this particular valley. It is important to maintain the genetics. So there's plenty here, but we will be involving farming partners in the future.

Organic farming has taken me round the world, seeing the principles applied in many different ways and led to many discussions on finding a better way to farm. It has meant providing advice to Government, large estates, royalty, rock stars and Arab sheiks. But ultimately it is the involvement with individual growers and farmers, seeing organic farming work in practice, which has been the most rewarding and significant part of my work.

*Listen to ORC Podcast Episode 4: Soil Analysis & Organic Advisory Service + Mark Measures' Retirement.
<https://tinyurl.com/ORC-Pod4-MM>*

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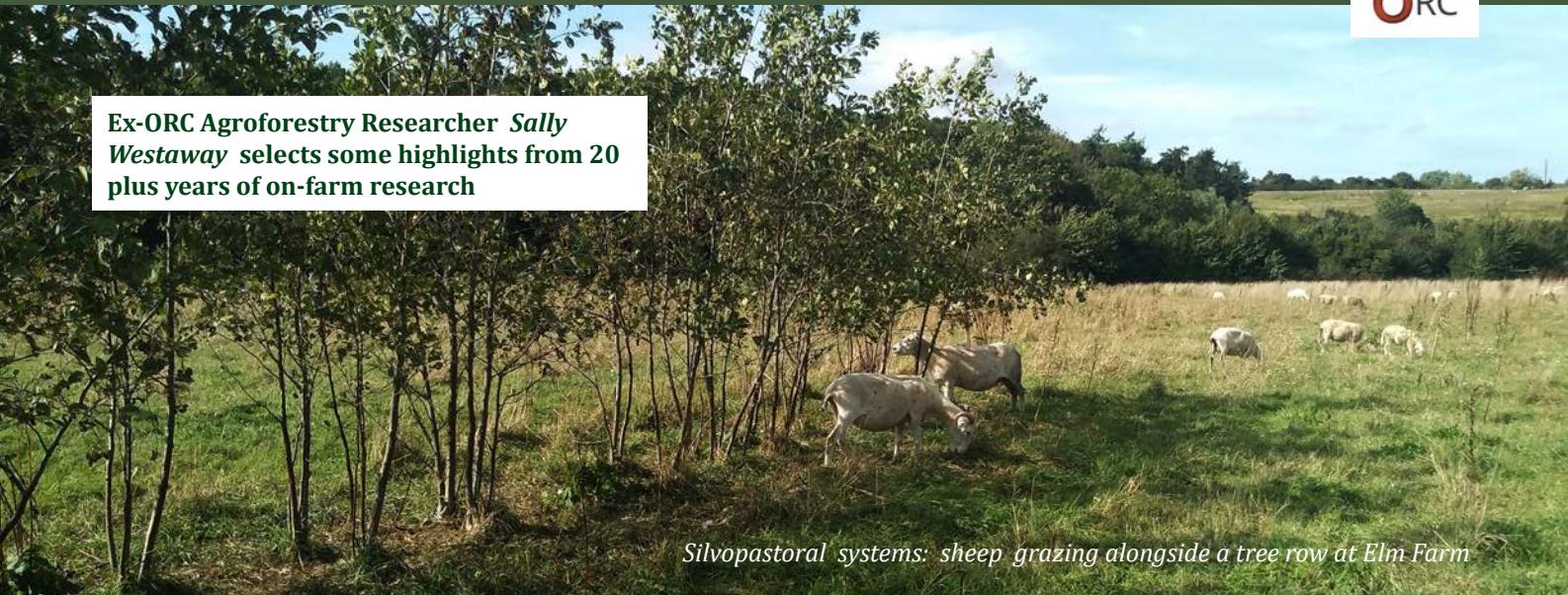
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Agroforestry at Elm Farm and Wakelyns



Ex-ORC Agroforestry Researcher Sally Westaway selects some highlights from 20 plus years of on-farm research



Silvopastoral systems: sheep grazing alongside a tree row at Elm Farm

Agroforestry

Agroforestry encompasses the establishment of new trees in productive fields, the integration of existing boundary hedges and trees into the farming system and the incorporation of farming into forestry. It is a land use approach that can maintain or enhance the productivity of a farming system while supporting ecosystem services including soil and water protection, biodiversity and carbon sequestration. The emphasis is on managing rather than reducing complexity, and as such, it is knowledge intensive, with farmers needing to work with their environment to create a dynamic, ecologically based management system that offers more resilience in the face of future climate uncertainty.

At Wakelyns Agroforestry in Suffolk the four different agroforestry systems, based on a maximum use of biodiversity, have been the site of many years of research trials and demonstrations. Over a 10-year period a range of agroforestry approaches have also been introduced to Elm Farm, formerly a commercial and research farm in West Berkshire.

Over the years these two farms have been key sites for ORC to carry out trials and build up evidence on the contribution of agroforestry to the delivery of a number of important ecosystem services such as food and fuel production, maintenance of soil health and biodiversity enhancement.

Elm Farm

The former home of ORC and an organic livestock farm in West Berkshire. Over the past 10 years, as part of a farm-scale agroforestry plan to increase the overall productivity of the farm whilst also providing environmental benefit, 3,800 new trees (apple, willow, alder, hazel, oak and other native UK tree species) were planted; the planting also included an innovative and fully replicated silvopastoral alley cropping trial. New management approaches for existing trees and hedgerows were also introduced to investigate ways of incorporating them into the productive farm system.

Wakelyns Agroforestry

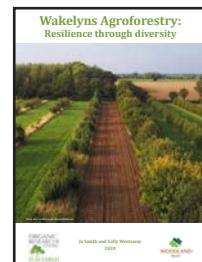
This 22.5 ha experimental and innovative agroforestry farm in Suffolk was established by the late plant pathologist –and ORC Research Director/Principal Scientific Advisor – Prof. Martin Wolfe to put into action his theories of agrobiodiversity being the answer to achieving sustainable and resilient agriculture. Wakelyns integrates trees for timber (ash, wild cherry, Italian alder, small-leaved lime, sycamore, oak and hornbeam), energy (hazel, hybrid willow and poplar) and fruit (apple, plum, pear, cherry, quince, peach and apricot) production into an organic crop rotation in four mature silvoarable systems. The first trees were planted in 1994 and planting continues today.

Key findings and outputs

Key recent technical guides and publications outline the wealth of research and knowledge gathered by ORC and partners over the years from these two sites.

Wakelyns Agroforestry: Resilience through diversity¹

Short summary booklet detailing the story of Wakelyns Agroforestry and key concepts and research, including the innovative approach to diversity at all levels from genes to landscape as the bedrock of sustainable agricultural systems; evidence collected to demonstrate the concept of decentralising and localising food and energy production; and research trials examining the productivity of the different systems and the interactions (positive and negative) between tree and crop components.



Wakelyns Agroforestry: 25 years of agroforestry²

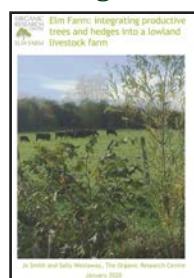
Long report detailing some of the key theories investigated and evidence produced by Martin Wolfe and fellow researchers from the Organic Research Centre at Wakelyns over two decades. The report is arranged into five sections: Farm description, Decentralised food and energy production, Tree-crop interactions and total productivity, Functional diversity, Sustainability.





Elm Farm: integrating productive trees and hedges into a lowland livestock farm³

This review document consolidates in detail the research results and experiences of Elm Farm's 10-year agroforestry journey. The review is arranged into four sections: New tree and hedge planting, Managing hedges for bioenergy, Silvopasture trial, Tree fodder.



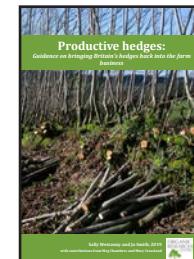
Elm Farm: Planning and developing agroforestry at a farm scale⁴

This research briefing summarises the lessons learned in the planning, establishment and management of the range of agroforestry approaches introduced to Elm Farm over a 10-year period.



Technical Guide: Productive Hedges: Guidance on bringing Britain's hedges back into the farm business⁵

As a valuable resource within our rural landscapes, hedges need to be managed in a way which is sustainable, both economically and ecologically, and allows them to continue being healthy and vigorous so they persist for generations to come. The coppicing of hedges for woodfuel or other products has the potential to not only reduce the cost of managing hedges but to provide local communities with a renewable, low cost energy source whilst supporting wildlife and improving the health of hedges. This practical guide based on case studies from Elm Farm and elsewhere outlines some options for farmers wishing to take a second look at their hedgerows.



Hedgerow harvesting machinery trials report⁶

This is the full report from the hedgerow harvesting trials that were carried out at Elm Farm and Wakelyns. Based on the trial results the report assesses feasibility, efficiency, costs and viability of mechanising the process of coppicing hedges and processing the resultant hedgerow material as a local and sustainable source of woodfuel.



Technical Note: Agroforestry for livestock systems⁷

Based on research at Elm Farm and Wakelyns, this technical note highlights some of the potential benefits and impacts of utilising an agroforestry system for low-input and organic dairy systems. The research evaluated an established willow agroforestry system in terms of productivity, microclimate modification and carbon storage and investigated the establishment phase of a new agroforestry system, providing economic and environmental data on establishing and managing a new system.



Conclusion

These are just some of the key highlights from a selection of the many technical guides, scientific publications and factsheets that have been produced over the years at these two important agroforestry farms. Many of the supporting publications referenced in the long reports can be found on the Organic Research Centre website or on Agricology.

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Published online as:

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[*https://tinyurl.com/ORC40-F1-AF*](https://tinyurl.com/ORC40-F1-AF)

Research digests

Productive hedges: Bringing hedges back into the farm business

This digest summarises our work into the potential of hedges as a source of biofuel, and how hedgerows can be important for their wildlife and other ecological value.

Simonson W (2021) Productive hedges: Bringing hedges back into the farm business. ORC Research Digest No. 4 - Mar 2021.
[*https://tinyurl.com/ORC40-R4-PH*](https://tinyurl.com/ORC40-R4-PH)

Tree-crop interactions: Maximising productivity and public goods with tree-crop alleys

This digest covers research at Wakelyns into maximising the benefits of agroforestry with strategic tree and crop selection, effects on weeds, pests and diseases, and maximising productivity per land area.

Tosh C (2021) Tree-crop interactions: Maximising productivity and public goods with tree-crop alleys. ORC Research Digest No. 5 - Mar 2021
[*https://tinyurl.com/ORC40-R5-TCI*](https://tinyurl.com/ORC40-R5-TCI)

Browse and tree fodder: Nutritional benefits for livestock

Trees offer multiple benefits to livestock including shade and shelter. They provide feed and medicine and can be browsed or cut and preserved as tree fodder. This digest covers trials that looked at the effects of air drying and storage on nutritional content, and trials investigating the mineral, energy and protein content of different tree leaves in June and September.

Whistance L (2021) Browse and tree fodder: Nutritional benefits for livestock. ORC Research Digest No. 6 - Mar 2021
[*https://tinyurl.com/ORC40-R6-BTF*](https://tinyurl.com/ORC40-R6-BTF)



Transforming the English agricultural landscape with trees

ORC's Senior Agroforestry Researcher *Colin Tosh* updates us on the Agroforestry Environmental Land management (ELM) Test and Trials project.

Interest among UK farmers in planting trees on their land has skyrocketed recently. Only ten years ago a survey indicated that very few farmers knew what the term 'agroforestry' meant. Last year one showed that almost all farmers are familiar with it now. For the uninitiated, agroforestry is simply the planting of trees on agricultural land with assumed benefits for existing agricultural processes (trees acting as a windbreak, or fodder for livestock, for example).

This surge in interest in agroforestry is not surprising. Ever since Brexit, English farmers at least have become aware that the replacement system for direct payments will involve them delivering improvements to the natural environment in some way ('public goods'), and what could be more improving of the natural environment than a tree; the ultimate carbon storer, the ultimate biodiversity booster, the ultimate eye candy of the natural world. More studious farmers may even have had a look at the standards for the new Sustainable Farming Incentive (SFI) which will undergo its first trials with farmers this year. Many of these standards make mention of providing habitat for birds and insects and make explicit mention of rewarding planting and maintenance of in-field trees. In fact, it's safe to assume that planting trees on agricultural land will tick numerous of the 'public goods' boxes in SFI and it is little wonder that farmers are clamouring for reliable information on agroforestry.

The SFI is only one of three components of the UK government's new post-Brexit system to replace direct payments from the EU: Environmental Land Management (ELM). The other two components are concerned with local nature and landscape recovery. ELM is still under development and as part of this process 60 or so Defra-funded Test and Trial projects are underway in which research teams from various agricultural stakeholder groups are interacting with farmers to advise government on a structure for ELM.

The Agroforestry ELM Test, which started in November 2020, is led by ORC, working with the Soil Association, the Woodland Trust, and Abacus Agriculture. To get to the bottom of why agroforestry uptake is so low in the UK I conducted a systematic review of all the main literature sources on why farmers are motivated or demotivated to undertake agroforestry in the UK. I found ten key surveys and reviews, extracting a total of 35 factors that could be important. After that I applied a quantitative algorithm to rank the importance of each factor based on how widely it has been assessed and whether it was considered a 'critical factor' in previous studies. The top 10 factors influencing farmers adopting agroforestry in the UK are:

1. Lack of conceptual understanding and knowledge of agroforestry (top factor)
2. Grants, subsidy, funding opportunities for agroforestry or lack thereof (tied second)

3. Lack of practical understanding and knowledge of agroforestry (tied second)
4. Establishment costs (tied third)
5. Capital investment requirements (tied third)
6. Management and maintenance costs (tied third)
7. Reduced profitability and loss of yield (tied third)
8. Lack of economic understanding of agroforestry (tied third)
9. Access to case studies and demo farms (tied third)
10. Clashes with existing agricultural processes and activities (tied third).

Nine of these factors are either financial/economic or knowledge-based: farmers are concerned about the long term costs of agroforestry and the availability of subsidies and they do not feel they know enough about agroforestry to go ahead and implement an agroforestry system.

The Agroforestry ELM Test project has also involved the formation of six regional clusters of farmers, both involved and not involved in agroforestry, and coordinated by monitor farmers who are ensuring the project remains farmer-focused. These cluster farmers will be interviewed in a series of future workshop meetings that will focus on payment and advice and guidance preferences of farmers for planting trees on their land. Consultation will then be expanded to the wider farming community.

The evidence review has already given us an idea of what payment options will need to be included and so allows our workshops to be more focused and ask the right questions. Farmers clearly feel that agroforestry involves a lot of long-term capital and management investment and preferred payment options are likely to reflect this.

The advice and guidance issue is likely to be critical in determining the success or otherwise of ELM. It is clear from our evidence review that farmers don't feel they know enough about agroecological systems like agroforestry to implement them. To some extent the Defra Tests and Trials are there to determine the nature of advice of guidance required, but additional clarifications from government would be useful. Will Defra be prepared to hire the army of farm advisers required to make ELM work? Will organisations like ORC or the Soil Association be expected to assume this role? Can it all be done online through automated and semi-automated decision support? Will provision of advice on agroecological farming principles be left in the hands of the private sector?(!)

One thing that is becoming clear is that there needs to be a deep and rapid investment in farm advisory services and a shift in the type of advice farmers are receiving towards nature-based solutions for ELM to be a success.

See *Agroforestry ELM Test Evidence Review and Policy Brief* at: www.organicresearchcentre.com/research/agroforestry/



Agroforestry for transition towards sustainability and bioeconomy

The fifth European conference on agroforestry – EURAF 2020 (Covid delayed) was held online in May. ORC was represented by Colin Tosh, Will Simonson and Lindsay Whistance. ORC's Senior Agroforestry Researcher **Colin Tosh** reports.

It could be argued that the maturity of a scientific discipline can be gauged by the extent to which it intersects with other scientific disciplines, and by that measure agroforestry is maturing nicely. Themed sessions at EURAF 2020 included agroforestry's interaction with: climate change, biodiversity and wildlife management, landscape ecology and aesthetics, food production and certification, wildfire prevention, ecosystem service provision, and rural tourism, among others.

Detailed discussions of presentations necessarily reflect the interests of the ORC attendees, but agroforestry's role in halting or slowing global biodiversity decline, as well as the potential for agroforestry to utilise the functional benefits of biodiversity, was clearly a major theme of the conference. In a plenary session Professor Bart Muys (Division of Forest, Nature and Landscape, KU Leuven, Belgium) explained that while the relationship between diversity and ecosystem stability is well established, agroforestry has not, to date, been especially efficient at exploiting this relationship, with many agroforestry systems typically utilising only one or a few species of tree or crop. Muys went on to describe some agroforestry systems that have utilised targeted and highly integrated plant diversity to great effect, including an Acacia-maize system and the red chili agroforestry systems of India.

Visual appreciation of agroforestry

This theme of diversity and agroforestry continued into unexpected areas. ORC delegates were delighted by a presentation given by Canadian academics, Geneviève Laroche, Gérald Domon, and Alain Olivier, on *Visual appreciation of tree-based intercropping systems*. Pictures of different agroforestry systems were shown to citizens from different regions of Quebec and their aesthetic appreciation of the images measured. People do not seem to like the 'artificiality' of many agroforestry systems: their typical organisation into strict lines of trees. This may sound a trivial issue but the scientists correctly stated that this could be a serious consideration when developing agroforestry systems in areas that attract significant numbers of tourists. Citizens also appear to prefer agroforestry systems with added biodiversity and structural complexity, such as those that have smaller shrubs added to the system as well as trees.

Putting all this together, then, biodiversity in agroforestry systems can beget further diversity, improve the functioning of the agroforestry system, and appear nicer to tourists. Win-win-win.

Silvoarable modelling

A couple of other talks on the silvoarable side of things particularly appealed to ORC attendees. Computational modelling may not be everyone's idea of a good time, but it is a technique that is heavily utilised in the analysis of agroforestry systems. The main models currently used in European agroforestry are excellent but typically require a large data collection effort from those that want to use them. Eike Luedeling of the Horticultural Sciences Group of the University of Bonn presented a modelling technique

used by his research group based on a decision analysis framework. Essentially, models are cobbled together somewhat based on expert opinion then the constructed model is used to determine which parts of the model require further field data. This intriguing method has the potential to reduce field effort considerably when constructing agroforestry models.

The beautifully presented talk by Anna Panozzo (a PhD student in crop science at the University of Padova, Italy) on the use of artificial shade to mimic tree shade in field trials of wheat interested ORC delegates due to ORC's involvement in programmes such as the LIVESEED and AGFORWARD projects. Panozzo presented experiments in which patches of old and new variety wheat were shaded with plastic nets in the field. Surprisingly, given that we tend to consider old varieties 'robust', the new variety (Bologna) didn't mind the shading and actually did better than in full sun, while the old varieties (Terminillo and Piave) appeared to suffer under reduced sunlight.

Silvopastoral research

Silvopastoral researchers have clearly taken to heart the bad press livestock production has received recently in relation to carbon emissions. Several talks examined the potential for agroforestry to take these farming systems towards net zero carbon. The message from researchers such as Fabiana Villa Alves (Ministério da Agricultura, Pecuária e Abastecimento, Brasil) and Antonio Pulina (Department of Agriculture, Università degli Studi di Sassari) is that trees can help achieve this goal but the design of such systems must be considered carefully. Trees that are too big, for example, can impede pasture growth and the best silvopastoral systems are fully whole-farm integrated.

Animal welfare is a huge concern for livestock researchers and farmers, particularly farmers in the organic sector, where higher standards of animal care are required for certification. The role of trees in promoting animal welfare was well covered in EURAF 2020. ORC's own Lindsay Whistance presented a review on how trees help mammalian livestock regulate temperate. This is relevant to both cold and hot regions. Cows and sheep will seek shade when hot and find tree cover when cold to create a slightly warmer microclimate. This type of behaviour has practical implications beyond animal welfare. Animals that are too hot or cold start to burn energy that could otherwise be used for tissue development.

Let's get those trees planted!

So, EURAF 2020 was a well-organised and interesting meeting. One possible gripe was a perceived lack of urgency about tree planting. We heard a lot of caution being urged – "The right tree for the right place" – but not so much urgency – "Let's get those trees planted!" Agroforestry practitioners do have to be careful and sensible in implementation but, on the other hand, the IPCC gives us until 2030 to halve carbon emissions while achieving carbon neutrality by 2050. Perhaps the next EURAF meeting should hold a session providing sensible and straightforward recommendations for accelerated, emergency planting of trees on agricultural land.

Download the Book of Abstracts here:
<https://tinyurl.com/EURAF20-abstracts>



Health in organic farming systems



Ex-ORC Researcher *Anja Vieweger* reflects on ten years of research into health concepts within organic food and farming systems



Intuition and other soft skills crucial for translating organic principles into practice

Since 2012, ORC has been investigating health concepts within organic food and farming systems. As health is one of humankind's greatest goals, and a prime argument for buying organic food products, we explored crucial questions such as: 'How do we define health?'; 'How do we measure health?' and 'How do farmers increase health in their farming systems?'.

After our qualitative literature analysis found significant variation in health criteria within different scientific disciplines¹ (e.g., soil science prefers to describe health with terms such as sustainability or function; veterinary science, on the other hand, uses the term less, and tends to describe health rather as productivity or resistance)² we wanted to find out how farmers deal with this variation and how they themselves describe and measure health.

Taking the IFOAM principle of health³ as basis for this work, we worked with farmer groups in Germany, Austria and the UK to jointly identify their own strategies and philosophies for running healthy farming systems and increasing the health of soils, plants, animals and humans. The groups initially developed their own 'principles of health' in each country, and later worked together to agree the most 'accurate' formulation to merge these 10 statements⁴.

The *Farm System Health in Practice* project built on these findings, using participatory multi-actor approaches to collaborate with the established international network to develop a concept for farmer-to-farmer learning, defining the most appropriate conditions and methodologies for the transfer and multiplication of tacit farmer knowledge around health.

The pressures on our food systems, including climate change, biodiversity loss, environmental contamination, and global health crises to name a few, call for a comprehensive and holistic approach to finding solutions, linking up individual disciplines and working together towards transformative change.

Achieving health on organic farms

The international group of farmers collaborating on this project series agreed a list of 10 statements that describe how they achieve health on their organic farms. Although several of these 10 statements are already commonly known, widely accepted in the organic sector and in line with the IFOAM principles, some of the farmer statements are addressed much less often and describe more holistic and softer approaches. While the identified required 'soft skills' scarcely feature in the organic regulatory or advisory framework, these skills were highlighted by the farmers as being of particular importance

for running a healthy farm, producing healthy food and collaborating in healthy value chains¹.

A learning process

Now that the perspectives and philosophies of farmers were written down in their 10 statements of health, we wanted to find methods and suitable approaches to share this tacit knowledge with other farmers and together develop this continuous learning process further. A joint learning process seemed to be particularly challenging for the softer skills such as self-awareness, self-reflection, or intuition. However, all three national farmer groups stated that such skills are crucial for running healthy farms, and that they can be trained and practiced. They identified peer-to-peer exchange as being especially valuable.



The final project in the series brought the three farmer groups together again in each country, UK, Germany and Austria; and together they established three individual concepts for a farmer-to-farmer learning process to spread awareness about their own principles of health. Many aspects of the three learning concepts were quite similar:

1. The exchange with other farmers needed to happen on a farm, to exemplify and demonstrate the meaning behind the statements.
2. The core-group farmers needed to be involved/facilitate at least the initial exchange events in order to 'get the message across' and to explain the process they went through that brought them to these conclusions and statements.
3. The farmer co-learning groups needed to be of a particular size (optimal group size to ensure engagement and room for each member to build up trust, confidence and engagement), although this size was determined to be quite different in the three countries: UK groups were said to ideally count around 20 participants, 10-15 in Germany and a maximum of 10 in Austria, including the three host farmers.

But above all, the farmers unanimously agreed that this was a long learning process, that such courses or exchange events could not, and should not cover the entirety of this subject in just two or three events. The full potential of these 10 statements was seen in their ability to inspire other farmers to reflect and review health concepts on their own farms, and to find parallels or highlight areas where they needed to increase their efforts to foster better health.



There is no silver bullet; each farm needs to be seen within its individual environment, economic and social circumstances. Through a plan of regular meetings within a specific 'working group for farm health', over several years, the farmers expected to enable a sound basis and common ground to learn and develop together, from each other and jointly drive their individual pathways, skills and growth towards healthier and sustainable food systems.

Implementing the organic principle of health on organic farms is a complex and multifaceted task which requires individual approaches on each farm. Transferring knowledge on how to promote health on organic farms can therefore not be based on a simple roll-out of recipe-like recommendations. Instead, it needs a dynamic process based on intensive social interaction with peers, personal engagement and self-reflection, and open-ended questions more than quantifiable health metrics. While this process may be slow, our results and experiences with the organic farmer workshops show that this approach is more appropriate for bringing about and handling the system shifts required for better health on organic farms.

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Published online as:

Vieweger A (2021) *Health in organic farming systems. ORC Factsheet No. 9 - January 2021* <https://tinyurl.com/ORC40-F9-H>

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Research digests

Measuring and monitoring soil health

Soil Health refers to soil functionality and its capacity to deliver ecosystem services and productivity. It is a complex interrelation between physical, chemical and biological properties, all combining to help soil fulfil its key functions. Drawing on experience from recent ORC projects, we aim to help guide farmers' sustainable soil management.

Any lab test should include a measure of soil organic matter as a key indicator of soil health and function, as it enhances soil properties and increases fertility. Whilst a standard test of pH, P, K and Mg provides useful information and should be routinely undertaken, this focuses only on basic chemistry and takes no account of physical or biological elements. Soil health assessments should account for structure with a spade test and texture should also be determined to inform results on other indicators and benchmarks. Earthworms are an excellent biological indicator and simple to assess. Assessment of microbiology is potentially useful with Active Carbon and Soil Protein tests giving the labile fractions that are useful indicators of medium-term fertility that are responsive to management. Microbial activity can be

measured through potentially mineralizable nitrogen or the Solvita CO₂ burst respiration test, but the CO₂ burst has some limitations, as high microbial activity is not necessarily related to other aspects of a healthy, well-structured soil with high earthworm populations.

An integrated health assessment including visual observation, biological activity, and nutrient reserves and availability is essential information for managing a healthy soil. Through the Soil Biology and Soil Health Partnership we aim to better understand the contributions these key indicators play in determining soil health through development of a scorecard, with UK and sector specific benchmarks being developed.

Amos D (2021) Measuring and monitoring soil health. ORC Research Digest No. 9 - Apr 2021. <https://tinyurl.com/ORC40-R9-SH>

Using woodchip to build soil health

Sustaining and building soil organic matter (SOM) on regularly cultivated soils is a common challenge for farmers, who often combine different methods to do so. Repeated compost applications alongside using legume leys and green manures can maintain or enhance SOM levels on stock-free farms but requires producing and composting on-farm (taking up space and time) or sourcing externally (costly and unsustainable). Using woodchip produced from tree and hedge management is an alternative; either composted or applied fresh as Ramial Chipped Wood (RCW). When used at an appropriate phase in a crop rotation it can increase SOM, water holding capacity and soil nutrient levels.

ORC led the WOODchip for Fertile Soils project to investigate using RCW as a sustainable source of organic matter for annual arable and horticultural production, encouraging farmers to manage woody elements on the farm as part of a whole farm system. Observations and results from three years of on-farm field trials are outlined in technical guides and include a focus on logistics and economics.

- Farmers may choose RCW over compost when unable to produce compost, available compost or storage space is lacking, and / or they want to be input self-sufficient.
- Coppicing and chipping become cheaper per unit as volume increases and using larger more efficient machines becomes viable, but the scale of larger farming enterprises often creates less flexibility to change and adapt, ruling out doing things by hand or with smaller machines.
- RCW often makes most economic sense:
 - when coppicing to rejuvenate an old hedgerow
 - where local woodchip supply is limited, costly and/or quality cannot be assured
 - where hedge/tree management for logs produces brash not otherwise used.

Although both RCW and compost add to the SOM, they have different effects on the soil and can be used in a complementary way.

Caldbeck J (2021) Using woodchip to build soil health. ORC Research Digest No. 12 - May 2021 <https://tinyurl.com/ORC40-R12-WC>

Please go to the 40th anniversary communication hub for factsheets, Research digests, podcasts, videos and more! www.organicresearchcentre.com/news-events/orc-turns-40/



Feeding pigs and poultry on 100% organic and regional feed

Senior Livestock Researcher Lindsay Whistance asks 'what have we learned in the OK-Net EcoFeed project?'



For organic pig and poultry farmers, living up to the ideal of feeding 100% regional and organic feed is difficult and especially for protein that fulfils amino acid requirements (cysteine, lysine and methionine most notably). Balanced diets are important, not just for healthy growth and production, but also for animal welfare where, for example, an imbalance can lead to feather pecking and cannibalism in poultry. With a shortfall in amino acid content, proteins are typically overfed, leading to a waste of resources and environmental pollution through excessive nitrogen excretion. Furthermore, some of the preferred feedstuffs, including wheat and soya, rely heavily on imports.

OK-Net EcoFeed project

Over the last three years, a group of stakeholders including researchers, farmers, advisors and processors from 11 European countries have all been working together to help find and test solutions that work in a regional and systems context. **Innovation Groups (IGs)** were created in 8 countries to test potential solutions.

In all, the **Innovation Groups** tested 18 tools reflecting the interests, opportunities and barriers faced by each group. For example, in Denmark, there has been great interest and investment in developing green protein from bio-refined clover-grass leys. In Spain, there are significant ecological and cultural restrictions to producing crops for growing organic pigs, fattened on acorns in the Dehesa agroforestry system. The feeding of 100% organic and regional feed is 'challenged' at multiple levels and the 18 tools tested here addressed 6 challenges in all which were Growing, Processing, Nutritional Value, Ration Planning, Feeding and Animal Health (including behaviour and welfare).



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No 773911.

The information contained in this communication only reflects the author's view.



Cereal crops were cleaned to avoid penalties and weed spreading, and the tailings were tested as a broiler feed in the UK. There was no loss of nutrition in smaller and broken grains and, compared to cleaned grain, the tailings had higher protein, sugar and oil content, as well as an increase in important amino acids.

By-products

The Innovation Group (IG) in Spain tested by-products as a feed source for growing pigs. Brewer's yeast and grain are high in protein but storage is short-lived and costly in liquid form. Mixing with wheat straw and ensiling turned it into a stable and storable feed that was attractive to the pigs.

Ration planning

In France, the Broiler IG tested finisher bird feeds with a mix of locally produced protein including camelina cake, rapeseed expeller and sunflower expeller - replacing the soya. The tested feed fulfilled dietary requirements without increasing feed costs.

The trial for layers in France noted that soya is less easily replaced in egg production and focussed on diets of 100% organic origin. Total eggs per bird was 290 for the tested feed compared to 300 for the control feed (95% organic). The tested feed was 6% more costly but, with direct sales, the customers accepted the price increase.

Range utilisation and foraged feed

In Germany, alfalfa and white and red clover varieties were planted in strips to observe the hens' feeding preferences. Alfalfa offered protein and, with a higher sugar content, there was a marginal preference for white clover.

Rather than grow, harvest and store crops to feed fattening pigs, a farmer in France trialled a 'mob grazing' system with protein-rich plants including moha, clovers, maize and beans. The pigs adapted to cell grazing and a single strand of electric tape contained them. Concentrate rationing led to leaner carcasses, but balancing concentrates and forage is important in order to avoid lower finishing weights.

For hungry gestating sows, a farmer in Sweden tested growing forage turnips (Barkant brassica Turnip). The turnips offered a bulky feed to help satisfy hunger, behavioural enrichment and reduced damage from rooting behaviour.

Utilising existing protein sources

For layers, the UK test looked at producing green vegetation during winter and forced housing events. Sprouting equipment was developed on-farm, testing wheat and vetch sprouts. Sprouting triggered the breakdown of antinutritional factors in the vetch seeds, and amino acid profiles were not affected.



Diversify toolbox for policy-makers

Rediscovering old crops

In Italy, the IG tested growing, processing and feeding camelina cake to laying hens. Low leaf coverage promoted weed growth and the small seed size required accurate drill settings and slow harvesting speeds. In feeding trials with pressed cake, production costs were reduced, the eggs had higher omega-3 content, and the hens had a longer productive life.

Hi-tech

Clover-grass protein extract has a good amino acid profile for poultry but the fresh paste has a very short shelf life and drying is expensive. The trial in Denmark tested anaerobic storage at 24°C or 4°C for six months. Protein and amino acid content increased during storage. At 24°C, there were higher levels of undesirable clostridia bacteria. The quality could be maintained for 2 months at 24°C and 3 months at 4°C.

Gut health

The benefits of feeding silage are well established for pig gut health and a Swedish IG tested feeding chicory silage to weaning piglets. Chicory contains a high level of pectin which promotes beneficial bacteria in the gut. Silage also promotes foraging and rooting behaviour, reducing the piglets' stress levels. Piglets on chicory silage gained more weight than those fed grass-clover silage or no silage.

Practical feeding

In Sweden, finisher pigs fed on a liquid feed were offered additional silage in a separate trough. The silage increased positive activity and reduced anxiety at feeding time but, although the pigs chewed a lot on the silage, they did not swallow the most fibrous parts.

Quality control

Correct processing of soya beans is important since underheating won't deactivate anti-nutritive components and overheating damages the amino acids. The IG in Austria tested soya samples from processors across Europe showing that near-infrared spectroscopy (NIRS) offers a cheaper, quicker and more reliable monitoring process than wet chemistry analysis.

Sharing learning

For the 18 tested tools, videos and a user-friendly Practice Abstract have been created and over 100 Practice Abstracts have also been created from existing knowledge. Some foreign-language texts were also translated and, in the UK, the English version of the Danish report *Plants and planting designs for organic poultry ranges* can be found on Agricology here. <https://tinyurl.com/plants4poultry-range>

To extend the value of findings

To find the Practice Abstracts and videos, have a look at the Organic Farm Knowledge platform where all of the project results, and much more, are available.

<https://organic-farmknowledge.org/>

The DIVERSify project worked to understand how to optimise the performance of crop species mixtures or 'plant teams' to improve yield stability, reduce losses to weeds, pests and diseases, and enhance resilience to environmental change. Working together, a team of international researchers, farmers and other stakeholders developed evidence and guidance on how to improve the productivity and sustainability of European agriculture through the application of ecological concepts.

As part of the project we used the following strategies, policies and position papers to identify a range of policy targets that intercropping can contribute towards:

- Sustainable Development Goals (12, 13 and 15 in particular)
- The EU Farm 2 Fork and CAP, and the UK Agriculture Act 2020 and ELM
- EU Biodiversity Strategy and associated national laws/ proposals e.g. UK Environment Bill
- EU Climate Adaptation Strategy/UK Climate Change Act 2008
- EU Protein Plan
- Promoting healthy and sustainable diets in the EU initiative and the UK National Food Strategy

The toolbox is designed for use by:

- Policy makers
- Member state national representatives
- Campaign groups and advocates
- Advisers
- Farmers' associations

The user can explore the relevant research coming out of the DIVERSify project, and its sister project ReMIX: Redesigning European cropping systems based on species MIXtures. We have curated the evidence of how intercropping can support key policy target areas.

...How can intercropping contribute towards...



An associated report outlining how policy support of crop diversification practices could be included in new farm payment schemes as part of the new Common Agricultural Policy and Environmental Land Management scheme has also been published. The report identifies continued support of on-farm trials and farm advisory services as key to realising the benefits of crop diversification in practice. Visit: <http://plant-teams.org/policy-toolbox/>



ORC strengthens Board with appointment of three industry leaders

Appointments will bring senior experience in food policy, agricultural economics, rural policy and food retailing to ORC's Board.

The new appointments – Janet Dwyer, Honor May Eldridge and Jake Pickering – will bring a breadth of experience from research in sustainable agriculture, agricultural economics and policy through to food retail and will support ORC in its work to deliver the transition to naturally healthy and resilient farming systems.

Commenting on their appointment, Tim Bennett, Chair of the Board of Trustees at ORC, said:

"The addition of Janet, Honor and Jake to our Trustee Board will significantly strengthen our leadership and governance. This will help us ensure that we continue to deliver innovative research and knowledge transfer, to better equip farmers in managing the transition to naturally healthy and resilient farming systems. The wide range of experience, contacts and expertise that they bring to our organisation will be invaluable as we work to help farmers navigate the global challenges ahead."

Janet Dwyer

Janet joined the Countryside and Community Research Institute at the University of Gloucestershire (CCRI) in 2002 after working for more than a decade in a government agency and an independent policy think-tank. She was awarded the title of Professor of Rural Policy in 2010 upon appointment as CCRI's co-Director, and then became CCRI Director in 2013. Janet directs and undertakes research related to agriculture, the environment and rural development. Her research expertise centres on European and UK rural development policy and practice, with particular interest in integrated approaches, environmental sustainability and institutional adaptation. Janet is well-known in policymaking circles in the UK and EU, has skills in facilitation and consensus-building, and is a regular speaker at international conferences.

Recent projects include a major study on rural economies and communities for Defra; evaluations of the impact of the Common Agricultural Policy on generational renewal and local employment in rural areas; also on knowledge, advice and innovation in agriculture; and on rural socio-economic conditions across the EU; and an evaluation of the impact of LEADER on Balanced Territorial Development, for the European Commission. She co-led PEGASUS - a major, EU-28 Horizon2020 funded study on public goods and ecosystem services from farming and forestry (www.pegasus.ieep.eu); and is supporting the government of Malta to prepare its CAP Strategic Plan for 2022-2027.

Janet is currently President of the UK Agricultural Economics Society, also a fellow of the Royal Society of Arts, a founder and steering group member of the Uplands Alliance, and Director of Rural England. She chairs Defra's Nutrient Management Expert Group and sits on advisory

boards and panels for the Food, Farming and Countryside Commission, Green Alliance, and Defra (rural academic panel). In 2017, Janet was elected an Associate of the Royal Agricultural Societies of the UK, and member of the French Académie d'Agriculture.

Honor May Eldridge

Honor is a food systems consultant, working primarily to advise NGOs and businesses in the agriculture and food retail sectors. Her areas of focus include UK agriculture policy, international agrifood trade policy and agri-tech innovation. She has written briefings on potential food implications from a transatlantic trade deal, on the unintended consequences of crop insurance programmes, and on migrant labour in large-scale horticulture. In addition to her role with Wilson Wraight, she is currently Policy Lead at Plantlife International, the Chair of GM Freeze and participatory board member of Bristol Food Producers.



She was previously Head of Policy for the Sustainable Food Trust, worked on post-Brexit policy at the Soil Association and was the Legislative and Government Affairs Coordinator in Washington D.C. for the Center For Food Safety.

Jake Pickering

Jake is the Senior Manager for Agriculture at Waitrose, where he leads the team that is responsible for setting and implementing the Waitrose agriculture strategy. His responsibility stretches across the livestock, dairy, fresh produce and horticulture supply chains producing Waitrose products. After completing a degree in Agriculture and Business at the Royal Agricultural University, Jake started his career on the Sainsbury's graduate scheme. Over the seven years he spent at Sainsbury's he worked in various roles across sourcing and agriculture, including secondments to retail and food processing.



Jake is a passionate foodie and never happier than with his head in a cookbook planning his next culinary adventure.

Staff news at ORC

Welcomes

Henny Lowth

We welcome Henny Lowth to our research team as Field Crops Researcher. Henny's main role is to assist the crops team in the collection and analysis of field data for the LiveWheat project.





'Don't worry, be happy': Yvonne Pye, ORC Patron

Writing about the sad news of the death in January of Yvonne Pye, one of ORC's long-standing Patrons and supporters, is difficult for me.

As John Donne reminds us in his poem, 'No Man is an Island', 'every man (or woman)'s death diminishes me, because I am involved in mankind'. And as Yvonne was a lively, buzzy, bright and fun woman, her death is especially diminishing.

A legacy she has left me is an 'earworm' she implanted in me in the shape of a song called 'Don't Worry, Be Happy' and a recurring vision of a garish animatronic toy fish called 'Big Mouth Billy Bass' singing the chorus over and over and over – and probably for the rest of my conscious life. She exposed me to this some 20 years ago and I have never been free of it since.

The phrase and the sentiment became something of a mantra for her and its not a bad piece of advice – don't brood, fret, overly worry; get on with things and be happy. It is what she tried to do following the death of Graham, her husband and soulmate in 2009, carrying on with the projects and causes they had been engaged in together. One of which was ORC.

The Organic Jack Pye

Yvonne's death marks the end of the direct family contact between the Pye family and the organic movement and sector in the UK. This has been an important and highly significant one for several organisations and individuals, including the Soil Association, Garden Organic, some what are now called 'care farms', various nutritional and whole food initiatives, conservation organisations and – notably Elm Farm/Organic Research Centre.

Our connection goes back to Jack Pye, the founder of the Pye housebuilding company based in Oxford, who together with his wife Mary, became a significant and innovative philanthropist.

During the 1960s Jack provided massive financial support for the Soil Association and sat on its Council. When it finally became clear that the SA could not continue to fund the world famous and ground breaking Haughley Experiment, Jack took it over and ensured its survival for another decade.

He was self-educated and had a fierce appetite for knowledge especially relating to health and wellbeing. It was his curiosity that led him to make several visits to the newly formed Elm Farm Research Centre. Jack was keen to support us and couldn't understand why we didn't ask him for money – an unusual situation for him. Eventually, he decided that we needed a laboratory and insisted on providing the equipment and building. We didn't argue with him for too long.



Yvonne Pye at Elm Farm in 2010

Building up Elm Farm Organic Research Centre

Following his death in 1984, his son Graham picked up our cause and continued to support us until his own early death in 2009. For all of that period we were always able to count on Graham and Yvonne, not just for financial support but also for steadfast loyalty, good sense and fun-loving friendship.

Whether in his business or his charitable activities Graham was always effective but always quiet and gracious. He would never boast of his achievements and certainly never flaunt his wealth. Like his father, he was one of this country's leading benefactors but hardly anyone knew it and whilst he

was appointed a Deputy Lord Lieutenant of Oxfordshire his contribution to our society has been largely unrecognised by an establishment that seems to get bedazzled by glitz and celebrity, whilst ignoring substance.

Jack was hugely passionate and had great knowledge of the ideas about health, wellbeing and the holistic connections between farming methods, food quality and health. Both Graham and Yvonne wholeheartedly took on Jack's commitment and, Graham especially, brought some interesting questions and challenges to us as they became more involved over the years.

Graham proposed a £ for £ scheme by which the Pye Trust matched all the money we raised through paid advisory work and soil analysis. This was in addition to the large and ongoing, no strings attached donations which were so important to us. Using this challenge, we were able to subsidise advisory work and the establishment of on-farm trials and a demonstration farm network.

After Graham's death Yvonne and the Pye Trust continued with their support of ORC. Yvonne was resolute that the organic cause represented by Elm Farm/ORC, as espoused by Jack all those years ago and taken up by Graham, should thrive and prosper.



Nic Lampkin, Jo Saardy and Lawrence Woodward with Yvonne Pye at the unveiling of the plaque in memory of Graham Pye at Elm Farm in 2010

Sometimes when we met and I fell into telling her about the difficulties of the day, I always got the same response, 'don't worry, be happy'. Thankfully, she never tried to sing it.

Lawrence Woodward OBE

Events and announcements - details at www.organicresearchcentre.com

Events

6 July 2021: National Organic Combinable Crops.
OF&G event hosted by John Pawsey, Shimpling Park Farm, Suffolk. ORC's crops team will be involved with LiveWheat and other projects represented. Provisional, dependent on any pandemic and government restrictions.
<https://ofoorganic.org/>

30 August-2 September 2021: 2nd International Conference on Biodynamic Research - Growing beyond resilience. Online.
<https://tinyurl.com/Biod-res-conf21>

6 - 10 September 2021: 20th Organic World Congress. Rennes, France. Planned to be both an in-person and online event.
<https://owc.ifoam.bio/2021/en>

8-9 September 2021: ORFC in the Field @ Wakelyns. Two day residential event at Wakelyns Agroforestry in Suffolk. with optional farm visits on the 10th September <https://orfc.org.uk/events/>

8-9 September 2021: Agroforestry Design Masterclass (2 Day Intensive). FarmEd Gloucestershire. <https://www.farm-ed.co.uk/>

13 October 2021: Organic Matters. OGA Horticultural conference, Manchester/online
<https://organicgrowersalliance.co.uk/>

Technical guides/publications



Download only at present! <https://tinyurl.com/ORC-pubs>