

# UK Agroforestry Innovation Network

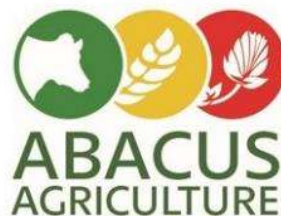
Agroforestry design for livestock and arable farmers



David Rose, Home Farm

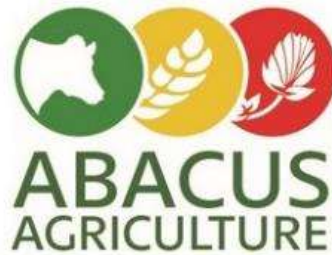
# Agenda:

- 12.45: Welcome and introductions.
- 13.00: Farm walk lead by David Rose
- 14.30: UK Agroforestry Network - innovation list (Sally Westaway, ORC)
- 14.45: Coffee break
- 15.00: Challenges of mature systems and lessons learnt: a perspective (Steve Newman, Biodiversity International)
- 15.20: Agroforestry Design workshop (Stephen Briggs and Ian Knight, Abacus Agriculture)
- 16.50: Opportunities for funding new agroforestry systems (Emma Bird, Woodland Trust)
- 17.00: Discussion and close



# UK Agroforestry Innovation Network

Sally Westaway, Organic Research Centre



# AGROFORESTRY INNOVATION NETWORKS

Supporting innovation in agroforestry by enhancing knowledge transfer between farmers, foresters, researchers and advisors

H2020 RUR 10 2016-2017

Jan 2017-Dec 2019



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 727872.



## How?

- Develop a **forum** to share experiences, challenges and opportunities
- A series of **practical workshops** with **farmer groups** identifying common barriers to uptake and exploring solutions – sharing knowledge
- A free **web-based knowledge cloud** to share knowledge on innovative agroforestry practices



Tree Fodder, Elm Farm  
May 17



Agroforestry for Growers  
Pangbourne, Sept 17



Trees and Livestock,  
Pitlochry, Sept 17

Tree and vegetables, Duchy  
Home Farm Jan 18



Trees and livestock,  
Tim Downes Farm Jan 18



Trees and arable, Whitehall  
Farm Feb 18

## Biggest problems and barriers to setting up an agroforestry system

1.	Economics – set up and ongoing costs	31 %
2.	Improving policy support tools	22 %
3.	Time and expertise	19 %
4.	Lack of advice/ best practice examples	19 %
5.	Access to land/ tenure issues with trees	17 %

# AFINET outputs

- We would like your feedback on the planned outputs and solutions to knowledge gaps and barriers that we are suggesting
- Please have a look though and rank the list according to importance and usefulness to you (1 = not so important/useful, 3 = very important/useful)



Topic	Knowledge gap/ barrier and suggested solution	Rank
<b>knowledge sharing</b>	Access to a network linking existing agroforestry organisations and farmers, increase the visibility and accessibility of the Farm Woodland Forum - include a discussion forum	
	Access to case studies: farms demonstrating good agroforestry practices - via factsheets and on-farm workshops	
	Development of practical guidelines/sharing best management practices - via factsheets and on-farm workshops	
	Digital map of agroforestry farms in the UK with links to case studies/ information	
	Practical workshops on range of topics	
<b>design</b>	Information on optimal combinations of trees and livestock/ crops to maximise productivity - factsheet and decision making tool	
	System design and planning. Where to start, how to get started - via factsheets, on-farm workshops and training module	
	Tree and shrub database - decision making tool to help farmers make appropriate species selections (including suppliers)	
	Factsheet listing potential tree outputs e.g. timber, fruit, compost, fodder	
	Options for management of the tree understorey and crops for understorey - factsheets with case studies	
	Use of hedges and shelterbelts - economic and management case studies from different farms	

Topic	Knowledge gap/ barrier and suggested solution	Rank
<b>implementation</b>	Alternative/ cooperative working models between agroforestry growers and buyers - case studies and examples	
	Working with landlords – how to make your case. Influencing land agents - via factsheets and on-farm workshop	
	Tree protection strategies for different systems and designs	
<b>management</b>	Easy to use biodiversity and performance indicators - factsheet, tools	
	Productivity data (tree, crop, pasture). How to measure tree productivity - methods	
	Tree management in different systems (e.g. timber, fruit, coppice, pollards) - via factsheets, case studies and on-farm workshops	
	Livestock management in trees (sheep, poultry, mob grazing) - via factsheets, case studies and on-farm workshops	
	Examples of alternative uses for woody component - woodchip for compost, animal bedding, mulch - factsheets with case studies	
	Management of tree fodder (direct browsing; cut and carry; tree hay; ensiling) - via factsheets, case studies and on-farm workshops	
	Factsheet: How offering access to trees can improve the welfare of domestic animals	
	Factsheet: How browsing on trees can help animals to manage internal parasites and provide pain relief	




Topic	Knowledge gap/ barrier and suggested solution	Rank
economics	Costs and Benefits: Development of a spreadsheet tool with indicative figures and economic case studies	
	Separate tree and crop cost/ benefits – benefit of trees to crop (and soil)	
marketing	Leaflet for farm shops/ box schemes etc. informing consumers and society about the benefits of agroforestry	
policy	More policy clarity - regular concise policy updates and links on website. Policy support tools.	
Any additional topics or general comments:		

# Example Factsheet

01  
INNOVATION

## MANAGING THE TREE UNDERSTORY

Opportunities for crop diversification



watch video



Aerial view of Wakeleys Agroforestry, Suffolk UK, shows how 25% of the land area is occupied by the tree rows.  
Ref: Permaculture Association, UK

In many agroforestry systems, the area between the trees and under the tree canopy is an overlooked and underutilised space and, unmanaged, this can create problems with weed control. Rather than being viewed as a wasted space, this understorey area could provide new opportunities for introducing new crops, therefore increasing production and diversifying the range of marketable products from the system.

### THE WHAT AND WHY

#### The tree understorey – a waste of space?

Planting trees into arable or vegetable fields means that land is taken out of annual production; depending on the design of the system, this could be up to 25% of the cropping area. There may be no return from the trees for many years after planting; this varies from approximately five years for fruiting species or short rotation coppice systems, to several decades for timber species.



watch video

Rhubarb as an understorey crop at Tolhurst Organics, UK.  
Ref: Organic Research Centre

### HOW IS THE CHALLENGE ADDRESSED

#### Herbs, flowers, fruit, vegetables..... take your pick!

One option is to plant new crops in the tree rows to provide an income in the years following tree establishment, or longer term if shade tolerant species are used. Ideally, the new crop will complement what you are already producing (e.g. new lines of fruit or vegetables in a horticultural enterprise) but you may need to find a new market or generate interest for the new crop within your existing

could be established underneath the trees include herbs, flowering bulbs or cut flowers, perennial fruit and vegetables such as globe artichokes or rhubarb, mushrooms and berry bushes. Within the different crop types, some species and varieties will be better suited to the conditions found in tree rows (particularly levels of tolerance to shade) and it may be worth trialling varieties or species on a small scale first to

# Upcoming workshops

## Agroforestry design workshops for growers

- **Wakelyns Agroforestry: 9 August 2018**

## Agroforestry implementation workshop

- **Dartington Estate: 7 February 2019**



# AGROFORESTRY INNOVATION NETWORKS

Any Questions?



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