

Agroforestry at Dartington

Broadleaves field

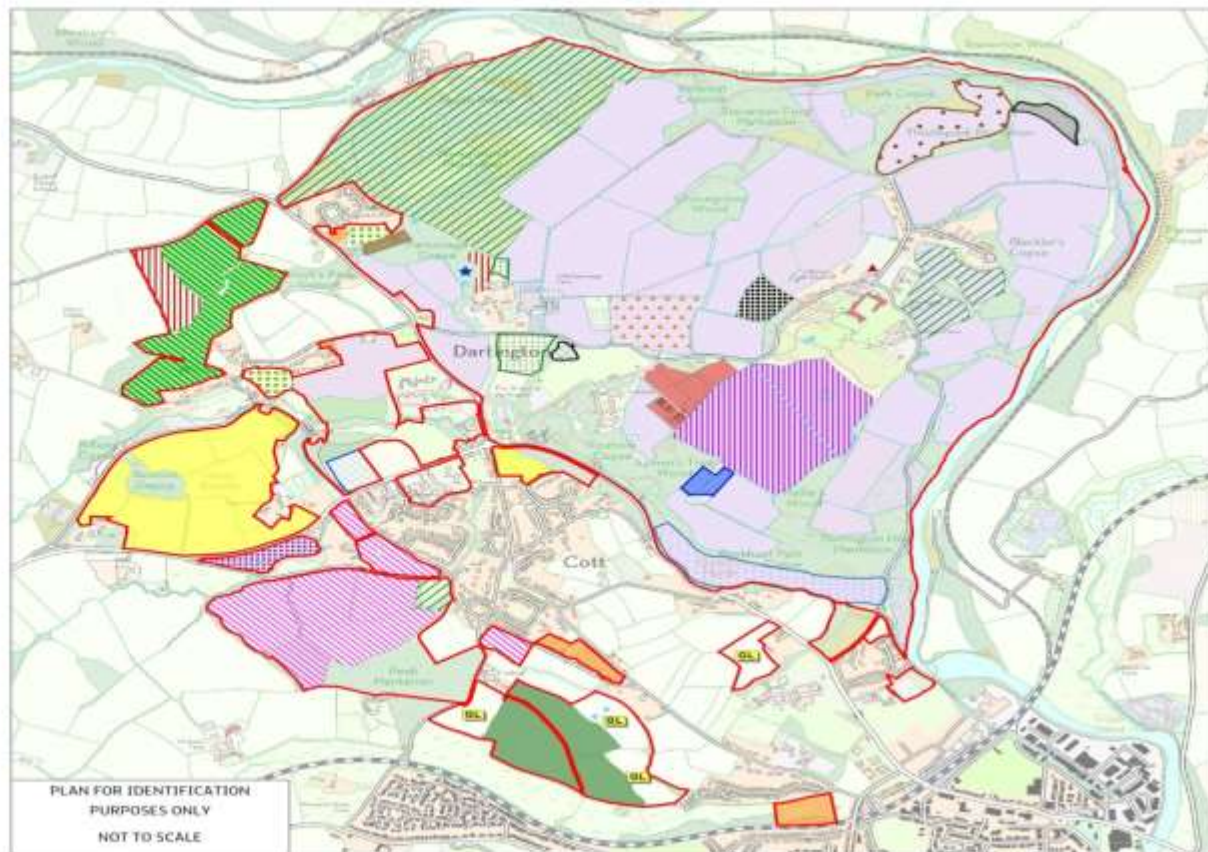


Dartington

Land Use Map
Update April 2017

Key

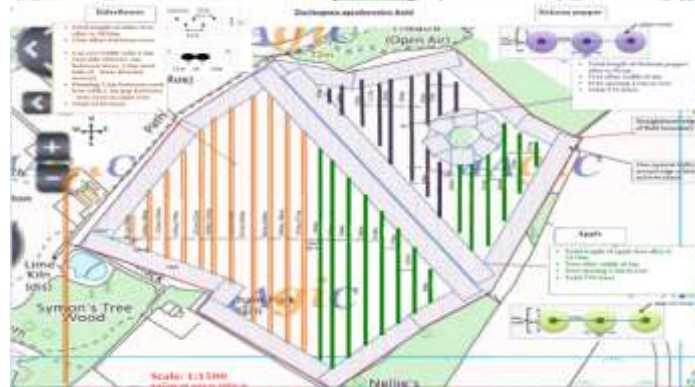
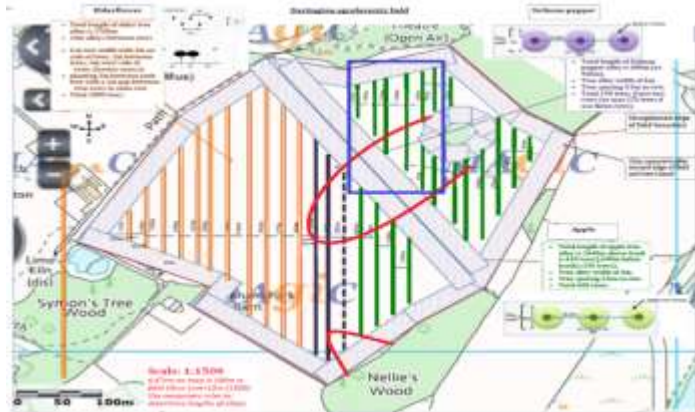
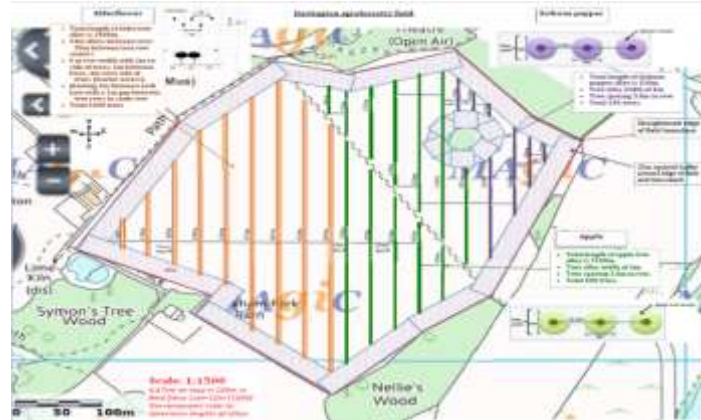
-  Estate Boundary
-  Old Parsonage Farm
-  The Agroforestry Research Trust
-  Agroforestry
-  Infield Farm
-  Schumacher College
-  Landworks
-  Grain of Truth
-  Hazel Copse
-  Campsite
-  Community Garden/Virchard
-  Nuthams Cross Woodlands Farm
-  Jolly Farm - Varner
-  The Living Projects - Pined Field
-  Ross Birbeck - Park Farm
-  Barnais
-  Allotments
-  Open Space
-  Solar Array
-  Fallow Deer Park
-  Street
-  Queen's Marsh Wetland Restoration
-  Woodland Products Hub
-  Grazing Licence
-  Forest School Site
-  Mammas Madder



Dartington



Dartington



Dartington



Dartington



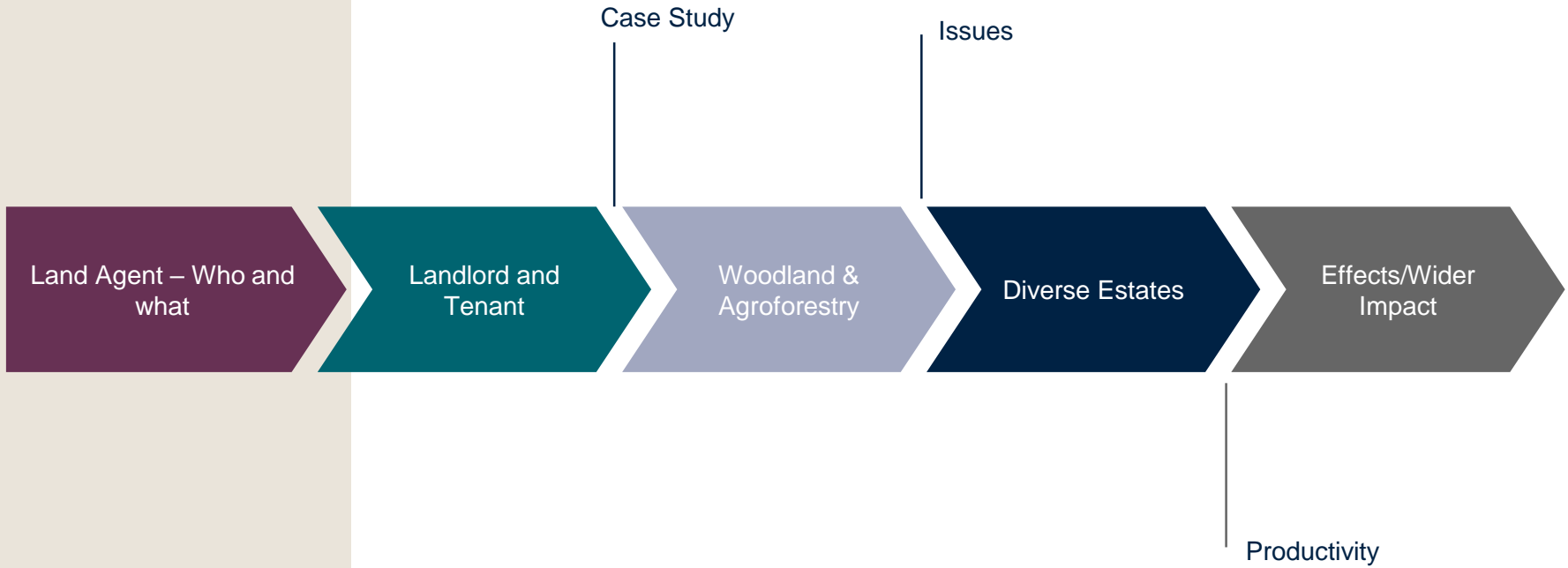
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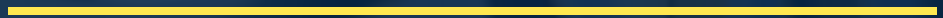


ORFC 2020 - Woodland & agroforestry Offering new business opportunities for farmers

Jeremy Smith MRICS – Land Agent Perspective

24 January 2020







‘Developing a Farm Woodland & Agroforestry Economy’

A strategy to make farmer led tree planting credible



Tories pledge 30 million trees a year until 2024



Lib Dems aim for 60 million trees a year through to 2045

Labour announces 2 billion more trees by 2040 = 100 million a year

But the reality is only 15 million publicly funded trees over the last 8 years – maybe its time for a new strategy?



Farmers as foresters?

Woodland Ownership	England (000 ha.)	Scotland (000 ha.)	Wales (000 ha.)	Northern Ireland (000 ha.)	%age of Total Woodland area	TOTAL area (000 ha.)
Farm Woodland	368	560	93	16	33% (45% of all private woodland)	1037
TOTAL Woodland area	1307	1445	308	113		3173



Benefits from trees

1. Public benefits = public money
2. **Farm benefits = increased farm enterprise revenue**

Farm benefits

Indirect

- from the interaction between trees and the agricultural system e.g. nutrient provision for crops or shelter benefits for livestock
- farm management benefits e.g. water management

Direct – substitution or market opportunities for the tree outputs e.g. timber, fuel, food

Strategy = more focus on the direct farm enterprise benefits of trees



Timber from trees?

- For on farm fencing demand and farm buildings?
- For sale to timber markets



Fuel from trees?

- For on farm heat demand and/or local use



Food from trees?

- Hard & soft fruit
- Nuts
- Cider/Perry/Juice



Contract growing opportunities?

- Cobnuts
- Cricket Bat Willow
- Poplar
- Cider/Perry





Income from capital grants

- Is tree planting & maintenance really that difficult?
- Transferable skills...





Farm fencing requirements – for trees and livestock

- Grown on the farm, erected by farmers?



Dealing with scale

- Mobile equipment
- Machinery rings
- Cooperatives/ Groups





Dealing with scale

- Low cost farm machinery adaptations





Making it happen?

- Learn from longstanding initiatives – e.g. Coed Cymru, European models
- Support for developing capacity/capability in tree management
- Rural development support for new business opportunities & supply chain development



The future?

*Trees for farmers,
managed by
farmers...*

*...with public
benefits as well...*



Food and Forest

Showcasing Agroforestry Farming



foodandforest.co.uk

Alley Cropping



Benefits



3-Point Alley Cropping Incentive Package

1. A specific, one-off, alley cropping grant
2. A forward contract for nut purchase
3. An equity release system to liquify the timber value before harvest.



Dimensions	Create new woodland	Create new woodland to improve water quality or reduce flood risk	Restock after a tree health issue
Minimum agreement size	3ha	1ha	0.25ha
Minimum block size	0.5ha	0.1ha	0.1ha
Minimum width	20m	10m	20m
Minimum stocking density	400 stems per ha (sph)	1,600sph	400sph
Maximum internal open space	20%	20%	20%
Maximum individual glade area (after canopy closure)	0.5ha	0.5ha	0.5ha
Maximum linear open space width (after canopy closure)	20m	20m	



Forward Contract



Equity Release System



Alley Cropping Grant Proposal

Ecosystem Services Approach - “public money for public good”

35 tonnes of carbon sequestered per hectare per year (Palma et al, 2007)

Social Cost of Carbon 2019 - central scenario = £13.15 per tonne

35 X 13.15 = £460.25

Social Cost of Carbon 2020 - central scenario = £13.84 per tonne

35 X 13.84 = £484.40

Social Cost of Carbon 2021 - central scenario = £20.54

35 X 20.54 = £718.90

Total = £1663.55 total

References:

Palma et al, 2007 - Modelling environmental benefits of silvoarable agroforestry in Europe. Agriculture, Ecosystems and Environment 119: 320-334

Updated Short-Term Traded Carbon Values Used for UK public policy appraisal - accessed 09.07.19

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/794186/2018-short-term-traded-carbon-values-for-appraisal-purposes.pdf

Results from Phase 1 - Jan 19

- All 30 proposals approach the topic at a landscape scale, intending to link land owners in a approach.
- Use of a reverse auction method trialled by Wessex Water for reductions in Nitrogen run off.

<http://green.brightblue.org.uk/blog/2017/12/8/paying-for-itself-using-reverse-auctions-for-environmental-improvement>