

Agroforestry

Farming with trees



Forestry Commission

James Ramskir-Gardiner

Agroforestry Adviser

Who am I?

James Ramskir-Gardiner

Forestry Commission's Agroforestry Adviser

'Breaking down the silos between farming and forestry'

My main role is the support & upskilling of both the forestry & farming sectors in England to facilitate agroforestry understanding, creation and management.

I am also working with Defra and wider partners in designing the ELMS Agroforestry grants and regulations as well as providing advice and support to FC staff, local and national organisations regarding agroforestry.

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Agroforestry is tree planting that is deliberately combined with food production on the same land. It can:

- **reduce soil erosion**
- **improve water and air quality**
- **provide shelter for livestock and crops**
- **reduce flood risk**
- **increase biodiversity**
- **capture and store carbon**
- **improve climate change resilience**

Why Agroforestry?

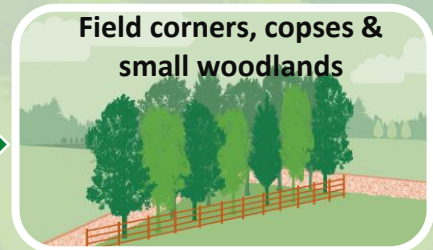
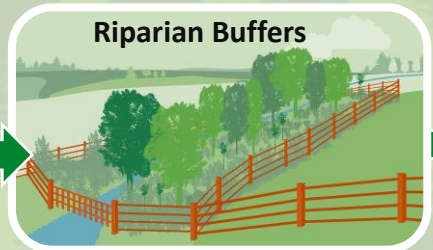
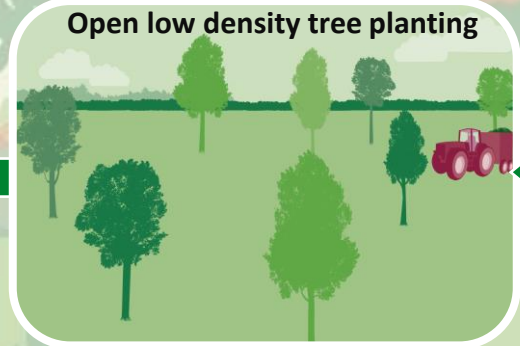
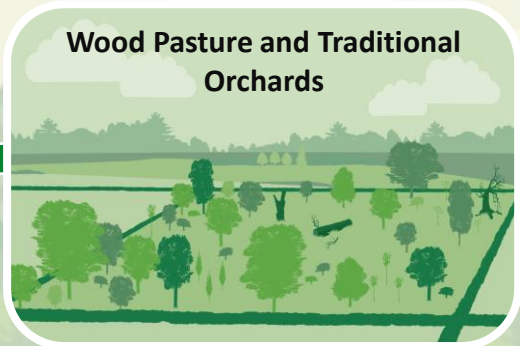
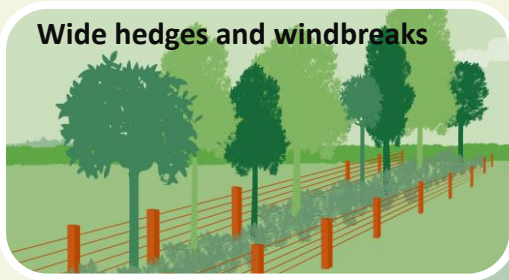
Trees, woodland, and forestry can play a beneficial **supporting** role on the farm

Farmers should decide on *their own drivers* for tree planting

Government, Society, the Environment, will reap the benefits from each application as a by product



The Agroforestry spectrum



Existing Woodland:
Introducing managed grazing into woodland

Woodland Creation
New woodland creation, with longer term agroforestry intention

Other agroforestry types;
e.g., short rotation coppice for fodder and/or bioenergy

Regular systems

Allows grass sward management

High pruned and thinned

For sward light levels and timber quality



Row systems

Allows grass sward management

Fenced easily for livestock protection

Plant a high density of trees whilst minimising shading



Row systems

Create paddocks for rotational grazing systems

Multi tree rows balance timber growth & forage species for livestock

Plant a high density of trees whilst minimising shading



Tree Fodder

Pollard fodder trees to manage access to forage

Pollards provide shade during summer, then cut for either immediate feed or stores for winter tree hay

Fast regrowth following season (*species dependant*)

Tree	Palatability	Notes
Willow	V. High	High amounts Salicylic acid, Zinc & Cobalt
Ash	High	Not currently plantable due to Ash Dieback
Elm	High	Unlikely to reach maturity due to Elm disease
Rowan	High	
Aspen	High	Initial results show reduced fly count
Poplar	High/ Medium	Suitable for chipping for biomass/ bedding
Hazel	Medium	Suitable chipping for horticultural compost
Field Maple	Medium	
Hawthorn	Medium	
Oak	Medium	Contains Selenium
Holly	Medium	
Lime	Medium	



* With thanks to Prof Lindsay Whistance

Informal systems

Mixture of cluster planting & single trees

Well suited to minimising landscape impact



Informal systems



7ha upland grazed area
with approx. 30 trees/ ha
Near Troutbeck, Windermere



Grazed Woodland systems

More dense woodland canopy providing livestock shade and shelter in extreme weather

A mix of canopy cover and open grassland can be an effective compromise

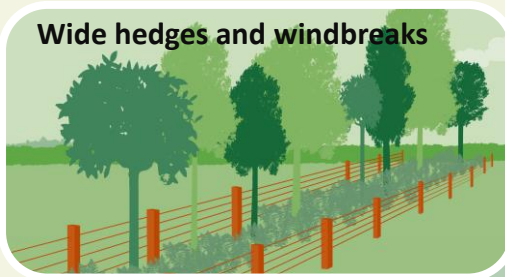
Fast growing broadleaves, delivering quality timber within 40-80 years



The Agroforestry spectrum



Wide hedges and windbreaks



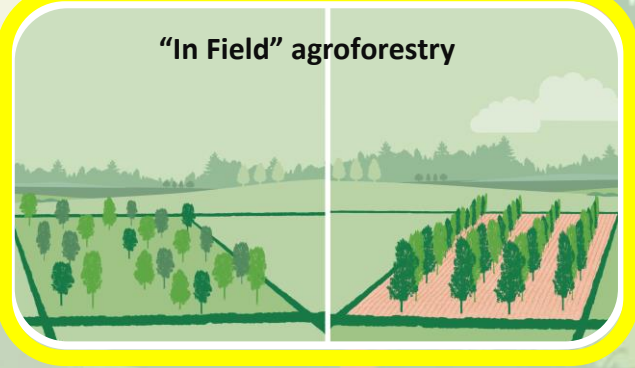
Shelterbelts and shelter networks



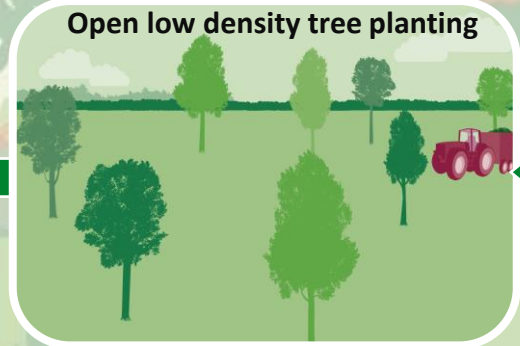
Wood Pasture and Traditional Orchards



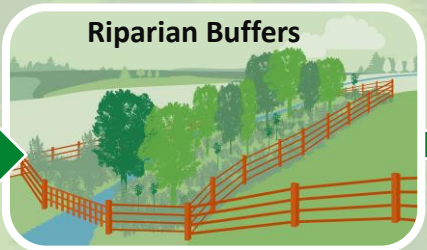
"In Field" agroforestry



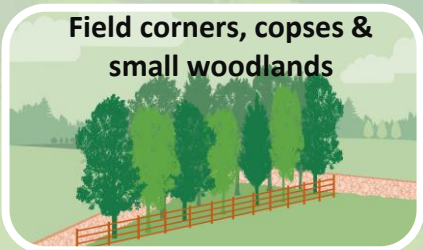
Open low density tree planting



Riparian Buffers



Field corners, copses & small woodlands



Existing Woodland:

Introducing managed grazing into woodland

Woodland Creation

New woodland creation, with longer term agroforestry intention

Other agroforestry types; e.g., short rotation coppice for fodder and/or bioenergy

- **Very Low & Low density actions** – SFI actions allowing tree planting on low sensitivity land without triggering regulatory Environmental Impact Assessments. Very accessible to farmers that want to try agroforestry, as well as to tenant farmers. CS actions allowing tree planting but with more flexibility around land sensitivity and design of planting scheme.
- **Medium & High density actions** – CS actions allow farmers to maximise the benefits from agroforestry planting, including those who are already confident in applying the different methods who want to increase their tree cover in harmony with productive agriculture.
- These new actions supplement agroforestry offers already available in CS and EWCO providing land managers with more flexibility when incorporating trees into agriculture; including hedgerow, wood pasture and parkland, traditional orchard, shelterbelt and riparian planting.

Agroforestry ELMS Payment Rates

Action	Action Type	Duration	Annual Payment	Action's Aim
Maintain high density in-field agroforestry	New (CS)	10 years	£849 per ha	An in-field agroforestry system is maintained, so there's a combination of either trees and arable or horticultural crops, or trees and grassland for forage and livestock
Maintain medium density in-field agroforestry	New (CS)	10 years	£595 per ha	An in-field agroforestry system is maintained, so there's a combination of either trees and arable or horticultural crops, or trees and grassland for forage and livestock
Maintain low density in-field agroforestry	New (SFI)	3 years	£385 per ha	An in-field agroforestry system is maintained, so there's a combination of either trees and arable or horticultural crops, or trees and grassland for forage and livestock
Maintain low density in-field agroforestry	New (CS)	10 years	£385 per ha	An in-field agroforestry system is maintained, so there's a combination of either trees and arable or horticultural crops, or trees and grassland for forage and livestock
Maintain very low density in-field agroforestry	New (SFI)	3 years	£248 per ha	An in-field agroforestry system is maintained, so there's a combination of either trees and arable or horticultural crops, or trees and grassland for forage and livestock
Maintain very low density in-field agroforestry	New (CS)	10 years	£248 per ha	An in-field agroforestry system is maintained, so there's a combination of either trees and arable or horticultural crops, or trees and grassland for forage and livestock

Correct as of Agricultural Transition Plan update January 2024

Agroforestry and the Forestry Commission

- Championing trees, timber and woodlands as **part** of the farm business
- Regulatory and Incentives role (*EIA, Felling licences, ELMS offer*)
- Agroforestry Woodland Officers recruitment across England to advise and support farmers and land managers
- Developing sector training for the designing, creation and management for Agroforestry systems
- Working with Forest Research to consolidate agroforestry research, identify knowledge gaps and supporting increased research in these areas
- Working with agricultural/ forestry universities & colleges to develop and provide agroforestry education as part of standard syllabus