

Agroforestry and the decentralisation of food and energy production

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Agroforestry Positives

SOCIAL

Jobs
Pensions
Health and recreation

YIELD

DIVERSIFICATION

Fruit, nuts
Timber
Forage
Biofuels

ENVIRONMENTAL

PHYSICAL

Carbon sequestration
Soil quality
Shade and shelter
Pollution abatement (*ammonia, air, soil, water*)
Oxygen, Water, Nutrient cycling

BIOLOGICAL

Encouraging beneficials (*above and below ground*)
Encouraging diversity (*arable and woodland*)

Wakelyns Agroforestry

Established from 1994 – 22.5ha

Willow
coppice

Hazel
coppice

Mixed
hardwood and
fruit trees



Wakelyns potatoes July 2013

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The complex ley phase...



Winter oats in hazel alley July 2013



Tree alley with lentil/Camelina intercrop

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YQ wheat population plots with plots of modern wheats – all late-sown (Dec. 2016)



Hazel coppice system



Hazel alley: coppice recovery at five months (note number of stems per stool and genetic variation)



Sycamore pollard recovery

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Small-leaved lime pollard with brushwood (could have been ramial chipped wood RCW) and log wood



Italian alder shelter belt now in 5 year pollard rotation



To make this work, there is a need for

a) a better appreciation of **TOTAL productivity** from, and **environmental benefits** of, agroforestry systems

b) appropriate **regulatory changes** to allow farmers to take advantage of agroforestry systems – as in EU policy

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....and beyond?

