

Agroforestry and the decentralisation of food and energy production

Martin Wolfe

The Organic Research Centre, CAWR Coventry University and Wakelyns Agroforestry, Suffolk
Presentation at Farm Woodland Forum Meeting, Cranfield University, 23 June 2017

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

The Organic Research Centre



© The Organic Research Centre



The complex ley phase...



Winter oats in hazel alley July 2013



Tree alley with lentil/Camelina intercrop



The Organic Research Centre

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

The Organic Research Centre



Hazel coppice system



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



Sycamore pollard recovery

The Organic Research Centre



© The Organic Research Centre



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

The Organic Research Centre



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

The Organic Research Centre



....and beyond?

