

Case Study

# Whitehall Farm

Planting to improve  
economic returns

July 2017



WOODLAND  
TRUST

# Case Study

## Whitehall Farm - Planting to improve economic returns.

Stephen and Lynn Briggs are tenant farmers at Whitehall Farm in Cambridgeshire. They have integrated trees into their wheat, barley, clover and vegetable-producing business, establishing the largest agroforestry system in the UK.

The system was implemented to reduce wind erosion affecting the fine grade one soils on the farm. It also enhances biodiversity, creates a mix of perennial and annual crops better able to meet the challenges of climate change, and diversifies their cropping.

Apple trees were planted in rows as windbreaks, but also to produce fruit and 24m alleys were left in between the tree rows for cereal production. Tree rows are orientated north:south to minimise shading and tree canopies are managed by annual pruning.

A diverse range of pollen and nectar species and wildflowers has been established in the 3m wide tree understorey strip beneath the trees. This benefits pollinating insects and farmland birds.

The arable crops primarily use water, nutrients and sunlight in spring and early summer, whereas the trees need these resources from late spring right through to late autumn. Tree roots gather nutrients and water from deep in the soil, beneath the zone used by the arable crops. Tree height

enables this system to use another dimension of space above the ground enabling maximum energy to be captured from sunlight and turned into food.

The 52 hectare silvoarable agroforestry scheme cost an initial £65,000 to establish in 2009. In total 8% of the land is planted with trees and the remaining 92% is cropped under the existing cereal rotation. It took five years for the trees to mature into full production. With the trees now seven years old, fruit yield per ha is similar to the surrounding arable crop, with gross margins typically c.£1000/ha. The young fruit trees will continue to grow and increase to peak yield in year 15.

Central to profitability is the ability to add value to farm outputs. Adding value to commodities like cereals is difficult, whereas there is greater potential to increase the value of the fruit through processing into juice, or direct sales. Stephen and his wife Lynn have built and opened a farm shop to benefit from direct retail.

Speaking about agroforestry Stephen Briggs says: "It has delivered everything we wanted. It's making us more income and delivering soil protection and biodiversity benefits. There is a lot of talk about cover crops at the moment. Trees are the ultimate cover crop because you do not have to plant them each year."

Whitehall Farm: WTM/ Tim Scrivener



**Agroforestry is not without its challenges; learning new skills, establishing a system and playing the 'long game' for the trees to deliver production outputs. Consider the following;**

- Do you own the land or can you develop a joint venture with the land owner?
- What market are you seeking to supply or do you need to develop your own market?
- What are your timescales? When do you need an economic return as this will affect tree choice?
- Will tree management and harvesting fit your labour demands?
- How will you manage pests like deer, hares and birds?

Stephen would like the Government to look at a more multi-functional use of land, adding; "Nature doesn't do monoculture. If you do nothing with your land for 40 years nature will revert it to trees and bushes - this should guide you that it's what nature wants to do."

Agroforestry builds on this principle while enabling productive profitable farming. The new scheme has simultaneously provided Stephen and Lynn with another income-earning crop, protected and nourished the soil, attracted pollinators and encouraged local wildlife.

Whitehall Farm: WTML/Tim Scrivener



**“It's getting more for the same area - through three dimensional farming, while helping risk manage against climate change by having a mix of perennials and annuals.”**

**Stephen Briggs**

#### **How the Woodland Trust can help:**

Our woodland creation advisors have years of experience advising landowners on the benefits of trees. We provide subsidised trees and independent advice and support to farmers interested in planting trees, including:

- A free tree planting assessment for your whole farm.
- A bespoke planting scheme.
- Identification of potential funding support.
- Ongoing support over the subsequent years to monitor results.

#### **Find out more**

For more information about how we can help you to plant trees on your farm:

Call 0330 333 5303

or email [plant@woodlandtrust.org.uk](mailto:plant@woodlandtrust.org.uk)



WOODLAND  
TRUST

The Woodland Trust, Kempton Way, Grantham, Lincolnshire NG31 6LL.

[woodlandtrust.org.uk](http://woodlandtrust.org.uk)

The Woodland Trust logo is a registered trademark. The Woodland Trust is a charity registered in England and Wales number 294344 and in Scotland number SC038885. A non-profit making company limited by guarantee. Registered in England number 1982873. 10122 06/17