

Woodland Creation case study

Orchard Farm

A woodland haven for people and wildlife



Six year old saplings

Key facts

- **Type of woodland:** Mixed, native broadleaf species
- **Number of hectares planted:** 2.7 hectares
- **Species:** Field maple, ash, pedunculate oak, alder, Crack willow, black poplar, Crab apple, Goat willow and a variety of shrub species
- **Grant used:** Woodland Creation Grant Scheme in 2009

Key objectives

- Enhance other conservation habitats already established in the area
- Create a suitable breeding and winter-feeding habitat for a variety of UK Biodiversity Action Plan (BAP) bird species, notably tree sparrows, with the aim of securing this breeding population in South East Somerset
- Create a public access woodland to be used by the local community of Castle Cary and its surrounding villages, a region which has few open-access woodlands
- Produce a small amount of sustainable woodfuel for the farm's biomass boiler by coppicing hazel and willow



"Carymarsh Nature Reserve has become a sanctuary not only for wildlife, but also the local community."

David Boyer, Owner, Orchard Farm

Conservation at the heart of it all

Returning to the family farm in Somerset in 2004, having worked in conservation for almost 30 years, David and Helen Boyer were keen to develop part of their farm into a natural conservation area.

In 2005 David and Helen converted a low-lying field into a wetland area: comprising 5 hectares of reedbeds, ponds, ditches and rough tussocky grassland. Four years later they decided to plant an adjacent field with woodland, to complete their 10 hectare Carymarsh Nature Reserve. The new nature reserve lies adjacent to the Carymoor Environment Centre and Carymoor Nature Reserve – an existing 40 hectare conservation project born out of a restored old landfill site, which today supports a range of natural habitats.

With guidance from their local Forestry Commission Woodland Officer, Dave and Helen proposed a small woodland of approximately 2.7 ha with native trees and shrubs, surrounded by rides of a conservation mix of grass species and an area to be planted each year for winter bird food. The woodland species mix followed the South Somerset guidelines for planting in the area, which is on the boundary of two landscape character areas – Ilchester Vale and South Somerset Moors. The planting density was at a rate of 1,600 trees/acre, which equated to a total of 4,300 trees.



Helen Boyer transplanting an oak into the woodland

Establishing climate resilient species

Woodland establishment wasn't without its challenges, and the Boyers suffered significant tree losses due to drought and flooding which were replaced with wet-tolerant and climate resistant species, such as alder, aspen, willow and black poplar. Subsequently ash dieback killed more than 1,100 ash trees planted; their replacement was aided by the Tree Health Restoration scheme. Self-sown trees also began appearing, including oak, which were given ongoing protection in the form of tree guards due to the large roe deer population in the local area.

Planting was spread over two years, with significant help from a group of conservation volunteers who had previously been involved in planting reeds in the wetland and hedge-laying around the farm. Volunteers have subsequently supported ongoing woodland management activity, notably replacing lost saplings and knocking back thickets of brambles that would otherwise smother young trees and result in tree loss. As the woodland matures, the trees will continue to sequester carbon and bring further environmental benefits to the local area.

"In 2009, we applied for the Woodland Creation Grant Scheme to cover part of the establishment costs, and the cost of removing the land from productive use for 15 years."

David Boyer, Owner, Orchard Farm



Overcoming challenges

Weed control has been challenging, particularly as the Boyers limited the use of herbicides to support conservation efforts. Experimenting with plastic sheeting around each whip proved labour intensive and led to sheeting becoming overgrown with grass, making it difficult to remove. However, through ongoing woodland management and perseverance in the early stages of establishment, they managed to overcome these challenges.

Reusing tree guards from local forestry projects has helped to reduce establishment costs by approximately £1 per tree. However, this meant tree planting using split guards was more labour intensive compared to applying new tree guards, and reused guards can require frequent repair and replacement – especially when exposed to periods of high winds. At the time of planting, grant funding did not cover the cost of tree guards, but more recent schemes support farmers and landowners with associated capital costs.



Volunteers with bird nest boxes and bat roosts ready to erect in the woodland

Woodlands and wetlands working in harmony

Dave and Helen have created a habitat that is uncommon in the area, contributing to greater biodiversity, enjoyed by people and local wildlife. It may be too soon to say if there has been a marked increase in wildlife species, however the adjacent wetland, which is five years more mature, has attracted a variety of wildlife, including several rarer species such as otters, protected water voles, cattle egret, turtle doves, and purple herons.

Coppicing and thinning dense areas of woodland has also helped to promote the growth of more diverse plant species and is used to power the farm's biomass boiler – providing a more sustainable form of heating, complementing the couple's wider conservation efforts. Other activities have included the planting of a winter bird forage crop every year, establishing bird and bat boxes throughout the woods, and cutting rides to encourage wildflowers and pathways for walkers, all of which has had a collective positive impact on nature recovery.



One of a number of southern marsh orchids within the woodland



"The ability of nature to improve people's mental health and general wellbeing is well-established and we believe that our reserve is contributing to this."

David Boyer, Owner, Orchard Farm

Helen Boyer checking the winter bird fodder crop

Supporting health and well-being

As the woodland has matured, and can now withstand greater use, there are plans to improve public access to this section of the reserve, to encourage even more people to enjoy the positive impact on health and well-being.

A footpath gate will be constructed, extra footpaths cut, and several interpretation boards erected to encourage greater use by the education centre. Dave and Helen are working with Carymoor Environmental Centre on establishing a footpath trail from Castle Cary through their reserve.

"Carymarsh Nature Reserve (both the woodland and wetland components) has become a sanctuary not only for wildlife, but also the local community. It provides a haven in nature where residents and visitors to South East Somerset can enjoy the peace and quiet of the countryside. Indeed, one of the primary aims when the reserve was created was to provide a place where local people from South East Somerset could enjoy the natural environment, watch and appreciate our native wildlife, and hopefully become enthused, and maybe involved in caring for and protecting our natural world." David Boyer, Owner, Orchard Farm

Find out more about how the Forestry Commission can help you create woodland. Visit:

www.gov.uk/guidance/tree-planting-and-woodland-creation-overview

Top Tips

- **Upfront, expert advice is important – seek financial advice when converting agricultural land into woodland as this can impact inheritance tax**
- **Look for help from volunteer groups to aid with the establishment and management of your woodland**
- **Consider adequate tree protection methods – reusing plastic tree guards can help to reduce costs and the impact on the environment**
- **Ongoing management is critical, especially during establishment – and organic methods could be explored as well, such as non-chemical forms of weed control**