

Case Study

Building a successful and sustainable woodfuel partnership

September 2015



**WOODLAND
TRUST**

Building a successful and sustainable woodfuel partnership

We hear a great deal about the potential of a growing woodfuel market to deliver multiple benefits: low-carbon, renewable energy, a boost for rural business, and biodiversity. But does the reality live up to the promises? One partnership in the Chilterns is demonstrating how it can.

Penn Wood, as part of an ancient wooded common has provided grazing, fodder and fuel for local people in the Chilterns through centuries of traditional management, and has accumulated significant wildlife interest along the way. After its enclosure in 1855 the site underwent multiple felling and replanting; it is now around 40% plantation on an ancient woodland site, 40% semi-natural woodland, and 20% scattered trees and scrub. The area is rich in wildlife and is home to a varied population of birds, a number of nationally scarce invertebrates and at least ten species of plant not commonly found in the county.

The site was almost cleared for a golf course, but was rescued by the Woodland Trust in 1999 after a lengthy planning process and local funding appeal. The Woodland Trust now aims to restore the plantation areas through gradual removal of conifers, and to manage much of the site in the long term as wood pasture through grazing.

A perfect match

The restoration work has not only been economically viable, but is also contributing to the development of local woodfuel supply chains, thanks to a mutually beneficial working relationship with a local contractor.

The company has a woodfuel hub just a stone's throw away from Penn Wood, and is supplying woodchip for small scale renewable heat installations in the area.

“It is a perfect match. The nature of Penn Wood and the work needed means we are not producing high grade timber, but it is ideal for woodfuel. We are seeing Penn Wood once more becoming a productive site, serving the needs of local people.”

Paul Jarczewski, site manager

Using biomass for local energy production

For the Woodland Trust, the work at Penn Wood represents more than simply improvement of one site.

“The Trust advocates use of biomass for small-scale, local heat production. We have also led the way with research, advocacy, and now a project to advise and work in partnership



Key Facts

- Penn Wood is one of the largest ancient woods in the Chilterns Area of Outstanding Natural Beauty, measuring over 176 hectares (over 435 acres).
- The timber extracted from Penn Wood as part of restoration is being sold at a profit of £5 per m³, which equates to a profit of over £440 per hectare.
- Around 3800m³ of soft-wood timber has been produced from the site over 5 years following approximately 43 hectares of thinning work.
- Around 80% of the site is a mix of semi-natural woodland and plantation on ancient woodland site.
- The woodland area has been managed for centuries. A herd of cows is still used to manage part of the site as 'wood pasture', continuing the traditional management.

with landowners on ancient woodland restoration,” says Paul Jarczewski. “It’s vital that we lead by example and show that woodland management with conservation benefits can be economically viable.”

Since 2010, Penn Wood has produced 3800m³ of soft-wood timber from approximately 43 hectares of thinning; up to 600 tonnes of timber is removed every year. The wood is extracted as part of the restoration process and an average profit of £5 per m³ is earned from timber sales direct to the local woodfuel

hub. This makes up around 15% of the total woodchip output of the company who carry out the work under a 5 year rolling contract, which helps ensure the security of supply that is vital to building a successful woodfuel business.

Penn Wood is now in a programme of active management to maintain and enhance its conservation value and continue providing fuel for the local area. The Woodland Trust is focusing further attention on the Chilterns by embarking on another ancient woodland restoration project. The project will provide consultancy support to owners of plantations on ancient woodland sites. The restoration work at Penn Wood is an important demonstration of how a joined up partnership approach can be both successful and economically sustainable.

The benefits of restoring ancient woodland

- **Woodfuel:** There is a growing market for wood fuel produced through restoration work or from sensitively-managed restored woods. If your farm or estate uses firewood or woodchips, then restoration can provide a sustainable home-produced source of fuel
- **Timber:** Many woods in need of restoration are capable of producing economically viable timber as non natives are gradually removed. Restoration in its initial stages is often similar to commercial harvesting, with a few extra conservation safeguards.
- **Conservation:** Healthy habitats give a home to a wider variety of birds and animals. The restoration process within ancient woodland revives the unique conditions that allow dependent plants, birds and animals to thrive.
- **Game:** Restoration management produces a more diverse woodland structure with more shelter and food, making restored woods more game-friendly.
- **Shelter:** Broadleaved woods are inherently more stable than conifer woods, which often encounter stability problems as they age. Restoration management can help produce sustainable long-term shelter that is more effective.
- **Resilience:** Ancient woods in restoration management steadily gain greater structure and species diversity. With the growing threat from climate change and tree disease, restoration helps to build resilience within woodlands and avoids having all your eggs in one basket.

How the Trust can help

Bringing damaged ancient woodland back into restoration requires careful management. Thanks to funding from the Heritage Lottery Fund, the Woodland Trust is working to offer landowners and managers free, professional support and training to sustainably manage and restore their woodlands.

If you own a plantation on an ancient woodland site we can help you discover its history, and provide independent and practical advice on topics including:

- How restoration can complement your woodland business and interests
- How restoration can support forestry certification
- Making the most of grant funding

FOR MORE INFORMATION CONTACT:

Ancient Woodland Restoration Team

restoration@woodlandtrust.org.uk



Penn Wood



The Woodland Trust, Kempton Way, Grantham, Lincolnshire NG31 6LL.
The Woodland Trust is a charity registered in England and Wales no. 294344 and in Scotland no. SC038885. A non-profit making company limited by guarantee. Registered in England no. 1982873. The Woodland Trust logo is a registered trademark. 7114 07/15

