

# SOUTH WEST WOOD FUELS Ltd

Quarterly newsletter for biomass heating -

Autumn 2003 edition - Number 1

## Introduction to SWWF

## The SWWF Co-operative

A warm welcome to newsletter one and from South West Wood Fuels - the only 'wood fuel supply co-operative in the South West. The key word here is 'co-operative', we exist as a collective of members,



Richard Tompsett

dedicated to developing a sustainable approach to energy use which challenges the long accepted approaches of unlimited fossil fuel use.

### Our Thanks

Our thanks are extended to existing members who have supported the project to date. You include woodland owners, timber processors, developers and boiler owners who have benefited from pooling

your knowledge, developing new markets and keeping the 'added value' at home within the rural community.

Now we are at a turning point both within our organisation and in the wider field of renewable energy. Grants from the Clear Skies initiative can give up to 50 % for community installations and those within certain targeted regions.

### Our Purpose

The main purpose of this newsletter is to keep you up to date with the latest installations and provide contacts for related organisations and developments in Europe, where automated wood heating is an established and mature technology.

I hope that the launch of this newsletter is useful and the beginning of a new phase that will also give a platform for existing members to air their views and for potential new members to become involved and inspired.

Perhaps you would like further details on wood fuelled heating including a visit to an existing system? If you are thinking of joining the network of members or contributing to the next newsletter please contact us.

### In This Issue:-

- Blackdown Hills project is underway
- Wood chip Installation at Edge Barton Manor
- "How to" series; Avoiding chipping problems
- Forestry news
- Building the network

### Coming Issue:-

- Existing woodland vs Short rotation coppice
- Sam's European fact finding mission
- Pellet Update

*If you would like to write a piece for the next newsletter or have comments and views you would like to air please contact us - the deadline is the end of November.*

## Sam Whatmore



Sam with 150kW Binder Boiler

Pictured here is Sam next to his 150kW Binder boiler at Grascott Farm north of Okehampton.

Commissioned in January 2003, the boiler currently heats a farmhouse and one holiday cottage. He has recently obtained planning permission to construct a further holiday cottage which will be "plugged into" the heat main, buried underground around the buildings. This forms a miniature district heating system.

The boiler burns a mixture of forest residues from 30 acres of existing woodland on the farm together with slab wood bought in from a small local sawmill. The ultimate plan is for further buildings to be heated by the boiler as they are developed over time and for the farm to

become self sufficient in fuel as the 170 acres of 4-5 year old tree planting on the farm approach the age of first thinning at 12 to 15 years of age. Then the first thinnings will be chipped as whole trees to generate fuel.

Sam has held a number of open days at the farm this year to demonstrate the boiler and it's integration with the management of the forest and continues to have a number of visits by government agencies for example the Forestry Commissions Rural Development Officer and the Regional Director of the Countryside Agency providing an excellent opportunity to lobby the decision makers towards small scale wood chip heating.

South West Wood Fuels Ltd is a "not for profit" co-operative supported by:-



Funded by the Sustainable Development Fund



PART FUNDED by the European Union - Government Office South West (Objective 2)



Project Managed through Groundwork

# Building the Network

**Current membership standing at 50 - August 2003**



**Projected membership by August 2005 - 250**



The key to biomass taking off in the South west relies on a critical mass being reached as it has done in Europe and Scandinavia. The situation at present is often described as 'chicken and egg', installations are scattered across the region leading to a fragmented demand for fuel and a general lack of confidence amongst installers, potential purchasers and fuel supplier.

The approach to tackling the fragmentation problem and also challenging people's misconceptions about wood heating (that it is dirty, difficult and old fashioned) is to develop clusters around a number of key successful installations. Only by visiting sites can people appreciate the full potential. Similarly within a cluster an entrepreneurial person can supply four to five boilers in a five mile radius, therefore giving economy of scale, reduced transport costs and potential for useful profit margins.



## Blackdown Hills

The scheme to install wood burning heating systems on Blackdown Hills has now been launched.

Funding for the scheme has come from the European funded Blackdown Hills Leader Plus project and is being implemented by South West Wood Fuels. Phase 1 of the project is underway which includes feasibility studies on 42 potential private and public buildings within the Blackdown Hills area. Linked with this has been a training and publicity programme to increase interest and knowledge amongst community individuals. Following this phase 2 should result in funding 6 to 8 installations and develop the wood fuel infrastructure.

Biomass Heating is a new concept in the UK, although well established in Europe - the benefits include displacement of imported

fossil fuels, the creation of local jobs, added value and community based involvement in the scheme.

There is a great deal of interest in the project for further information contact Richard Tompsett on 01398 324558.



Discussion on sustainable fuel production at the Honiton Show last month.

## Wood Fuel Strategy for the South West

A team of consultants under the umbrella of Renewable Heat and Power Limited consisting of Robin Cotton, Mark Clayton, Stewart Boyle and Sam Whatmore are currently working on the creation of a wood fuel strategy for the South West. This piece of work has been commissioned by the Forestry Commission, the Countryside Agency and SWRDA.

It is intended to look at the current situation in the South West and consider the future potential, especially in the light of the four proposed large scale electricity generating projects using biomass in the South West region.

It considers the potential regional fuel supply and how best the barriers to the spread of the use of biomass can best be overcome, with a view to pushing the South West region as a national leader in this field of renewable energy.

The strategy is due to be completed and published in September and we will report on the findings in the Xmas issue.

### Training Day a Big Success

On the 1st and 2nd of September a training course was completed for potential wood fuel suppliers in the Blackdown Hills starting from woodland management through to wood chip production and boiler design. The event was attended by 7 people and proved a big success.

Contact South West Wood Fuels at:

SCC Highway Depot, Station Road, Dulverton, Somerset TA22 9AD Tel: 01398 324558 Fax: 01398 324559

Contacts:

Richard Tompsett, Project Manager [rctompsett@tiscali.co.uk](mailto:rctompsett@tiscali.co.uk) Sam Whatmore, Energy Forester - [mitchsam@grascott.freemove.co.uk](mailto:mitchsam@grascott.freemove.co.uk)

Claire Savill, Administrator

# Forestry News

## Planting Grants

### Thinking of planting trees?

Planting grants for new woodland are still available under the Woodland grant scheme co-funded by the Forestry Commission and DEFRA. Changes to the current system connected to the wider reforms in farming and CAP are expected in 2005. However, for now it is business as usual with two deadlines for applications on May 31<sup>st</sup> and October 31<sup>st</sup>.

Grants are available to help with capital expenditure of planting and will normally cover 70-100% of costs depending on levels of rabbit/deer protection needed.

For broadleaf planting on improved grassland /arable /set-aside £1545 per ha is available with a further £405 one off payment in year five.

Farmers and landowners can further benefit from the Farm Woodland Premium scheme which gives annual payments of £260-300 per hectare for fifteen years on the land planted. Note that planted areas can be offset as set-aside but only one grant is paid!

For faster returns of timber consider conifer/poplar planting, which can also be grant funded. Rates of £1350 are available per hectare initially, and annual payments run for 10 years instead of 15.

Considerable research and interest is being generated for Short Rotation Forestry (SRF) and Short Rotation Coppice (SRC) this is closely linked to CAP reform and finding alternatives to traditional set-aside.

Currently, the grants are £1000-1600 for establishing the coppice and continuation of the set-aside rates, while the coppice is productive. Additional incomes from selling material varies and depends on proximity to the energy markets. The South West Forest is an area designated to increasing and improving forest cover in Devon, further grants and supplements are available. Further Community Forest areas with planting

supplements are available in Avon and Swindon. If you are interested and would like further details please call us.

## Woodland Improvement Grants

### Managing your existing woodland

Before you go down to the woods today to start cutting your first energy crop remember that you must check the following:

Do you have a current felling licence or woodland grant scheme in place? remember that they expire after 5 years, so if your paperwork looks like the 'dead sea scrolls' it is time for an update. Check also that the woodland or tree in question is not covered by a Tree Preservation Order (TPO), nor is within a conservation area or designated landscape.

On a more positive note the Forestry Commission has a package of woodland improvement grants which can help substantially with improving your woodland for amenity, conservation value and of course energy production.

Payments are normally 50% of agreed costs for access tracks, thinning, coppicing, fencing and exotic weed control. Again, if you would like a free advisory visit to discuss, please call.

## Services to Members

Fuel supply has an important and integrated role to play in woodland management. It is an outlet for low grade material which must be removed from woodland so that the remaining quality stems can develop to their full potential. We offer the following services to clients - some of which are chargeable - however there is substantial discount available for South West Wood Fuels members or for people interested in joining.

Arrangement of:

- Felling/thinning licence -
- WGS new planting grant -
- WGS Woodland Improvement grant -
- Small woodland certification -

Wood Fuel audits, planning a heating system and worried about your sustainable wood fuel supply? or would you like to get started as a supplier and need help planning sustainable cutting yields and rotations? We can help.

Prior to arranging a contract we always recommend we undertake a free advisory visit to meet, look at the woodland or planting project and discuss practical opportunities and owners objective. **30% discounts available for members.**

## Installation Grants for Automated Wood Heating Systems

### Commercial tax relief "Enhanced Capital Allowance"

Funding body: Carbon Trust / DEFRA

Website: [www.eca.gov.uk](http://www.eca.gov.uk)

Applies to : Anyone VAT registered

Value: 100% capital tax write-off in 1st year

Appliances: Registered Biomass boilers <300kW

**Domestic and Community installation grants - "Clear Skies"**

Funding body: DTI

Website: [www.clear-skies.org](http://www.clear-skies.org)

Applies to : Private purchaser, community groups

Value: £600 for pellet roomheating stove

£50/kW up to 30kW for biomass boilers

**Bio-Energy Capital Grant**

Funding body: Dti / New Opportunities Fund (Lottery)

Website: [www.nof.org.uk](http://www.nof.org.uk)

Ring-fenced money for use as top-up grants for developing clusters of biomass heating systems is available.

Applies to: Private purchaser, community groups

Value: Depends on individual scheme

## Wood Chip Installation - Edge Barton Manor

### Background

Owner Sylvan Robinson is the chairman of British Biogen, the trade association for energy from sustainable sources of wood and other organic materials.

The recent conversion of the barn at Edge Barton Manor left a requirement for heating which could not be met by the oil boiler used in the main house. A state of the art 40kW chip boiler from French company Energie-Systeme was installed by Wood Energy Ltd. to heat the barn, a small conservatory used as an office, and the nearby swimming pool. A nearby outbuilding has been adopted as the boiler house with a partitioned section as a chip store of upwards of 25m<sup>3</sup> capacity.

### Fuel Supply

To coincide with the installation of the 40kW chip boiler SWWF were asked to source and process local seasoned wood to provide the first batch of fuel for boiler commissioning. 3 tonnes of Birch wood (with some softwood) was sourced from a local SWWF member within 6 miles, to supplement the 1½ tonnes of mixed hardwood from the floor of the owner's woodland.

The Birch had been cut to poles of up to 8' in length 6-8 months before, and air dried in a sunny location since then. Chipping was undertaken two days before boiler commissioning at the customer's site. The chipper used was the TP200 belonging to the SWWF machinery ring, connected to the tractor of a local farmer. The outsourced wood was delivered to the site by tractor and tipping trailer in one load. Two operators converted the 4½ tonnes of pole wood into 20m<sup>3</sup> of chip in under 4 hours.

In future the owner will self supply using wood from his 20 acres of mixed native broadleaved woodland, and chip on site. Any supplementary requirements can be catered for from other local SWWF members.



# How to...

# Avoid Chipper and Blade Damage

A few simple guidelines for avoiding unnecessary and costly damage to both your own set of chipper blades and also to the machine "owned" by all of us: first of all - **read the instructions before fitting your blades and preparing to use the machine.** Like airline mechanics, make sure all tools can be accounted for - it's a shame to lose them and left inside the chipper they can cause great damage.

Stones, soil and rock dust can damage the chipper, will always blunt the blades and reduce their life. Stones can also cause damage to mechanical augers in the boiler and soil will form clinker if burnt, which can damage boiler grates. Soil and stones can creep into your fuel supply through many routes: branch wood left on soil will become caked if in contact with the soil for a long period of time, trees skidded out of the forest by winch will invariably contain soil, stones and grit, stacked material needs to be up on bearers to avoid contamination by stones and grit (it will also dry better due to good ventilation). See pictures.

Any material which is mechanically handled prior to chipping must be lifted cleanly on or off vehicles, being



carried from above, not "scooped" from underneath as this invariably leads to contamination with soil or stones (unless off a clean smooth concrete surface). See pictures.

Although it's tempting to use wood from hedges and woodland edges these can very often contain old fencing and staples: living wood will regrow around barbed wire and staples completely hiding it from view - unless you are very sure of the "history" of the hedge then it's best not to take the risk.

At the end of a day's work don't be tempted to put the pile of debris which inevitably gathers below the chipper "mouth" back into the machine - although this needs clearing up, just chuck it on the bonfire as it's exactly where the stones and grit will lurk!

Careful handling of material to be chipped, its storage during drying and knowing where it comes from are all important logistical details that are very worthwhile in both prolonging the life of the chipper, ensuring your blades remain sharp (which maintains chip quality) and protecting mechanical boiler parts.



**If you would like to advertise in our Christmas edition please contact us on 01398 324558**

## Wood Energy Ltd

### Design, Installation and Service of Wood Fuelled Heating Systems

WEL are a leading UK Biomass Heating System company based in the South West. We provide systems ranging from domestic 12kW to commercial systems in excess of 5MW.

The systems can use a variety of fuel including wood chip, wood pellet, grain and dried fruit kernels and shells. These fuels can provide heat at about one third of the price of an equivalent oil system.

To contact us:

Tel: 01398 351349

admin@woodenergyltd.co.uk

## Diary

South West Forestry Show, Exeter Racecourse 12<sup>th</sup> September.

South West Wood Fuels AGM at Exmoor House, Dulverton, 25<sup>th</sup> September at 1.00pm (please call to book a place).

ITEBE wood fair in France, November 20<sup>th</sup>-23<sup>rd</sup> November 2003 and 1<sup>st</sup> - 4<sup>th</sup> April 2004.

Wood Chipper Training to be arranged Further open days and training to be announced.

## Website Links

South West Wood Fuels ([www.swwf.info](http://www.swwf.info) under construction)

ITEBE: [www.itebe.org](http://www.itebe.org)

Devon Association of Renewable Energy (DARE): [www.devondare.org](http://www.devondare.org)

British Biogen: [www.britishbiogen.co.uk](http://www.britishbiogen.co.uk)

Forestry Commission: [www.forestry.gov.uk](http://www.forestry.gov.uk)

Defra: [www.defra.gov.uk](http://www.defra.gov.uk)

Carbon Trust: [www.thecarbontrust.co.uk](http://www.thecarbontrust.co.uk)

### Please return for details on:

Please tick ✓

Membership Information

General Information

Fuel Supply

Woodland Management

Free Advisory Visit

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Tel: \_\_\_\_\_

E-Mail: \_\_\_\_\_

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