

Date 5 November 2012

Ditchley Park Estate

Investment ensures sustainable future as Ditchley Park Estate enters growing Woodfuel supply chain.

The largest award so far from the Forestry Commission's Woodfuel Woodland Improvement Grant (WWIG) has been used to pay for professional advice and to build innovative roading and timber extraction infrastructure at The Ditchley Park Estate in Oxfordshire.

There were strong reasons motivating the Trustees to start this project:

- Heating costs for the historic country house were spiralling upwards;
- Income generated by wood products on the Estate was falling;
- The emerging Woodfuel market shows considerable promise for sustainable income.

The Estate operates as a Charitable Trust and lies within the Cotswolds Area of Outstanding Natural Beauty. The elegant country house is home to the Ditchley Foundation which hosts renowned international conferences. Sustainability and responsible use of resources have featured among recent topics. After careful consideration of the alternatives available to them, the Trustees decided to invest £800,000 to put a sustainable Woodfuel heating system in place. This will put the woodland management on a better economic footing and at the same time demonstrate their commitment to looking after the environment.



Ditchley Park House will be heated using woodfuel from the Ditchley Park Estate thanks to Woodfuel WIG.

Factbox Summary

Total investment £800,000

WWIG funding £166,000

Size of woodland 296ha

Length of roading project 7,355m

Potential wood fuel yield

Planned harvest of 8,770m³ over 10 years.

Composition of woodland

55% Beech; 6% Oak; 7% Ash; 5% Poplar; 4% Wild Cherry/Sycamore/Norway Maple; 6% European and Japanese Larch; 6% Norway Spruce; 6% Douglas Fir and Grand Fir; 2% Scots Pine and Corsican Pine; 2% Lawson Cypress and Western Red Cedar; 1% unplanted ground.



This grant scheme is supported with European Union and Defra funding.



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The Forestry Commission's Woodfuel WIG, worth £166,000, is part the Estate's long term management and investment plan. It will be used to upgrade the woodland roads and stacking areas - essential first steps to sustainable extraction of large volumes of timber for feeding the newly installed Biomass boiler which replaces the previous oil fired heating system.



Locally quarried stone will be converted to road-stone in situ by a tractor-mounted Kirpy Crusher.

Image from a quarry nr Cheddar for illustration purposes only.

sporting pursuits, as well as significantly reducing heating costs.

The cost savings to the Estate are based on this calculation:

Oil has an energy value of approximately 10kWh per litre while seasoned beechwood produces approximately 2700 kWh. One cubic metre of beech is equivalent to about £150 worth of heating oil. Over half of the Ditchley Park woods are beech.

The management took a systematic approach to planning this integrated project as part of its 20-year plan. The plan takes into account protecting natural habitats, natural regeneration of the woodland and enhancing the natural environment for leisure and

The Woodfuel WIG forms part of the funding necessary for the long term Ditchley Park investment plans. The Ditchley House Trust has decided to work with the Estate Trust (as the fuel supplier) and will install a major woodheat system. Eventually profitable Woodfuel production on the Estate will provide local employment.

Neil Holiday (Laws & Fiennes, Land Management Agents) on behalf of Ditchley Park Estate, said:

"This is a wonderful project and could certainly be held up as an example of good business management and environmental sustainability."

By using Woodfuel produced on the Estate instead of oil, the money saved can be used to fund the complete wood to warmth supply chain. There are three large blocks which make up 66% of the woodland, with 29 individual woods of various sizes interspersed across the Estate. The yield from the coupes over 10 years should be around 100 cubic metres per hectare. Looking to the future, the Estate is interested in the possibility of developing a woodfuel hub which will create new jobs in the locality.



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Professional advice and design was imperative for successful delivery of this large scheme. This particular grant can be used to pay for professional services in the preparatory stages. This meant that specialists could be commissioned by the Ditchley Estate to survey and design the roads, ensuring optimum design and specifications needed in a variety of conditions found across the estate.

A unique feature of the application was the proposal to produce suitable quality stone for the roads, sourced from a quarry on the Estate.

Project Manager Mike Furness said: "This was a novel aspect. We weren't sure at first about the technical proposals, but we could be confident because of the specialists used, the testing that took place, supported by the grant, and the professional design that was submitted. The method of road building is also not a standard procedure, but we were convinced when we saw the proposed method in action and we were able to run with this innovative technique and support it with WWIG funding."

In turn the Estate was delighted that the saving to be achieved by using home produced stone is estimated to be in the region of £140,000, or half the cost of buying in and transporting the stone from elsewhere.

Mike was involved in the early stages of this scheme and was able to advise the Estate managers about which features were eligible to be covered by the grant money. In this instance professional input was vital, and was paid for out of the grant. Mike is keen to discuss ideas with other potential grant applicants to help set them out on the right lines so that they too can be successful. He can also advise with the paperwork, which is relatively small for the value of the grant that could be forthcoming.

He has produced a useful 5 Steps Guide to making an application for a Woodfuel WIG which is available from the Ngage website:

<http://www.ngagesolutions.co.uk/blog/woodfuel-woodland-improvement-grant/>



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Woodfuel WIG Calculator Screenshot

EWGS - WF WIG Roads application WF WIG Roads Calculator V4.0 (Issued 27.02.12)

WIG fund: **Woodfuel WIG - Roads Fund** Case ref (FC use): **EWGS** Sheet number: **1 (3)**

Percentage contribution: **60%**

Property name: **Ditchley Park Estate** Region: **South East**

Summary of operation/aims: Create new access roads and stacking areas suitable for 44T timber lorries and updated forwarder tracks to allow timber harvesting to be carried out 12 months of the year. WIG Calculator 1 of 3

Select a claim year: **2012 / 2013**

Estimated Grant Profile	
Estimated expenditure (£)	Estimated Grant at 60% (£)
£ 135,354.50	£81,212.70

Work areas: Area of work (Ha):

Work details				Estimated financial details			
Work Code	Activity	Additional description of work	Work areas affected	Work Quantity	Unit	Indicative Cost per Unit (£)	Estimated expenditure (£)
NA2	New access - Forwarder road			1406	Per linear metre	£29.00	£ 30,556.00
NA3	New access - Haulage road (suitable for 44 tonne road going vehicles)			556	Per linear metre	£55.00	£ 30,560.00
NA4	New access - Turning point / Timber stacking area (suitable for 44 tonne road going vehicles)			2181	Per m2	£20.00	£ 43,620.00
NA7	New access - Bridge installation			821	Per m2	£16.00	£ 13,136.00
RR2	Road repair - Reinstatement of haulage road (suitable for 44 tonne road going vehicles)			655	Per linear metre	£17.50	£ 11,462.50
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FC Use only:		FC Comments:
total cost/ha	#DN/0	
grant cost/ha	#DN/0	
GLOS WIG Fund:	WF Roads	
GLOS input Z3:	£ 135,354.50	
Claim Year:	2012 / 2013	
Profile:	100%	



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Notes:

1. For applications for Woodfuel WIG contact **Mike Furness**, Project Manager, **Woodfuel WIG** by email mike.furness@ngagesolutions.co.uk or by telephone 01494 568970 or 07795 515413
2. If woodland owners don't already have an approved Forestry Commission management plan, the Woodland Planning Grant is available to meet the cost of preparing one and they can contact their local Forestry Commission Woodland Officer for further information.
3. For more information about the Ditchley Foundation or Estate visit www.ditchley.co.uk/
4. For more information about the benefits of woodfuel visit www.biomassenergy.org.uk or www.forestry.gov.uk/woodfuel.
5. For media information, please contact Sharon Kavanagh, Ngage Solutions, Tel 07885 046973 or email sharon.kavanagh@ngagesolutions.co.uk



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