



southern uplands partnership
living land, living community

Renewables Issue

Newsletter of the
Southern Uplands Partnership

No. 18 Spring 2005



With heated debates about wind farms filling our local and national press other sources of renewable energy can be overlooked. This newsletter focuses on a few of the alternative renewable initiatives, most to be found in the south of Scotland, from household size to industrial scale.

As members will know, SUP has been involved with a number of events to help encourage thinking about renewables, including a visit to the biomass system at Kielder and a seminar on community benefits in the Borders last November. We are now well underway with partners to hold community/household renewables seminars in both Dumfries and Galloway and the Borders, plus a conference to look at renewables strategy later this year. Details will be on our website www.sup.org.uk in the next few weeks, but if you would like to attend as a delegate or an exhibitor please make contact and we will ensure that you are kept informed.

We are always keen to cover sustainable projects - if you have a story to tell, why not share it? The next issue will include a report on progress with the exciting Communities on the Edge project established last autumn, and a piece on the pros and cons of new villages.



Farm Biogas Plants: A SUSTAINABLE SOLUTION FOR SOUTH-WEST SCOTLAND

In the past twelve months seven biogas plants have become part of the landscape in the Sandyhills and Saltcoats regions of South-West Scotland. These biogas plants are located on farms that are within just miles of the coast. This is part of a Scottish Executive research programme into diffuse pollution of bathing waters. The large amount of rainfall in the area, together with high numbers of livestock, impermeable soils and short river lengths all contribute to the risk of faecal indicator organisms (FIO) ending up in the water courses.

The biogas plants have been integrated into the farms waste management systems. The slurry is being collected in the dairies where it is pumped into a large reception tank, which previously would have been a slurry tank or pit where it would have been stored until it was transferred to the fields. The slurry is then automatically fed into the anaerobic digester. This is a sealed vessel that is insulated and heated to 37oC (mesophilic) or 55oC (thermophilic). Within this tank naturally occurring bacteria breakdown the organic matter which in turn produces biogas and bio-fertiliser. This process is a continuous cycle, with a metered amount of bio-fertiliser pumped out and a metered amount of slurry pumped in on an hourly / six hourly basis. The contents of the

digester is frequently mixed to keep a constant temperature and to prevent solid separation. As a result of this biological process the pathogen content of the slurry is greatly reduced.

For the farmers, this has not only enhanced their waste management system, but it has also given them a valuable by-product. The biogas produced is made up of approximately 60% methane and 40% carbon dioxide, a highly burnable gas. It is primarily used to heat the digesters, after which the farmers can choose how they wish to use this renewable energy. Many of them are using it to heat water for use in the dairies; other options include using it for domestic heating, and running a generator to produce electricity.

Greenfinch Ltd, the company contracted to design and construct the biogas plants, is now looking at ways in which farmers can enhance the use of these systems with particular reference to wet energy crops. Greenfinch has previously looked at the use of Ryegrass as an energy crop using anaerobic digestion technology and are now expanding this research to other crops such as Maize, Lupins, and Lucerne. This is part of a Pan-European project called Cropgen which is funded by the European Commission. One Scottish farmer has agreed to run trials on his farm as part of this project and specifically looking at the use of crops already grown on his farm as a feedstock for the biogas plant. Alternative feedstock is especially important for the summer months when the cows are outside and only a small amount of slurry is produced at milking times.

Biogas plants use simple technology and natural biological processes to reduce the pathogens present in slurry. In addition they provide a bio-fertiliser and biogas, which if used can be economically and environmentally beneficial. The use of energy crops within this system could be an easy way for the farmers to produce more biogas, using machinery and skills that they already have.

For further information contact Lucy Holliday, Greenfinch Ltd on tel: 01584 877687



Visit our updated website www.sup.org.uk
Southern Upland Way User Survey now available

DIRECTORS COMMENT

In the Southern Uplands, we have a major wood resource in all of our local forests and we have experts in woodfuel on our doorstep. An estimated 45% of energy demand in Scotland is required to generate heat, and this rises to more than 80% in the domestic sector, so we should be looking to generate heat rather than electricity far more than we are and the potential for burning wood to provide that heat is immense.

Burning wood, whether as logs in our living room fire or as woodchips or pellets in high-tech boilers, is highly sustainable. Our forests act as carbon sinks, they sustain wildlife in its myriad forms, they support our rural and tourism industries and they give us a sense of place and well-being.

But, in order to minimise our demand for energy, we need to keep in the heat that we introduce to our buildings. Every time we build something we should use sustainable materials - and that means not only that they can be replaced without depriving our grand-children but that they work in a sustainable fashion and help to avoid using any more energy than is necessary.

So let us build our new public buildings, our new offices and our new homes from wood and straw wool and turf rather like our ancestors did but with the help of technology; let us make them as efficient as possible and well insulated.

Here in the Scottish Borders, and I imagine in other parts of the Southern Uplands, we are about to embark on a major new school building programme with three high schools and several primary

schools to be built or refurbished over the next few years. It is not too late to build into the design and tendering plans for these schools a demand for specific heat retention levels and for woodfuel to be, at the very least, considered as a heat source.

We can use these school projects to pump prime the supply chain for woodfuel so that other projects are encouraged to consider the same concepts when it comes to new homes and offices, council buildings and hospitals and indeed the renewing and upgrading of existing facilities. The benefits would extend right into our forests and woodlands because the rapidly increasing timber production from Keilder and other forests is coming on

stream and there needs to be a market for that timber if we are to keep our forestry industries intact.



James Pringle,
Director

SOLAR POWER AT SOLAR COURT

Solar Court in South Lanarkshire was originally built with solar hot water systems in the 1980s. The systems became obsolete and fell into disrepair. As part of a roof refurbishment scheme, it was decided to update the solar systems to maximise the benefit of the mainly elderly tenants. Key Local Authority issues for the elderly are fuel poverty and affordable warmth. The use of solar water and air heating has the potential to reduce fuel bills and improve tenant comfort and health. The nine bungalows still in Local Authority ownership are also having energy efficiency improvements to maximise the renewable energy benefit. Estimates of energy saving are 4230 kWt per annum per house. This would equate to a saving of 738kg of CO₂ per house per year.

The cost of the project overall was around £88,000 with £40,000 from the Scottish Community & Householder Renewables Initiative (SCHRI) through the Strathclyde and Central Energy

Efficiency Advice Centre and financial support from South Lanarkshire Council. Work on site ran for about four weeks while the installation of Nuair "Sunwarm" solar air and water heating systems were put in place. For further information on this project contact Neil Phillips on 0141 552 0799 at The Wise Group.



Solar Court before (left) and after (right) panel styles.

Solar, so good – a sunny future for Gatehouse

The community of Gatehouse of Fleet, on the Solway coast near Kirkcudbright, is making the most of government grants for green energy equipment and becoming a veritable centre of solar energy use. A dozen houses in or near the village are being fitted with solar water heating panels during March.

The Gatehouse Solar Scheme was promoted to the community by the Gatehouse Development Initiative, with assistance from the Energy Agency in Ayr, and a presentation made in a local hotel. Those who are taking up the invitation are benefiting from a substantial discount on the usual costs, with a standard system costing them around £1,700. As Joe Fergusson, Renewables Development Officer at the Energy Agency explains, "With the energy prices on the increase, buying about 25 years of water heating in advance, with the help of the generous grants available now, is a clever way of saving money whilst helping reduce our fossil fuel use and greenhouse gas production. It's a win-win-win proposition. In fact it's better than that as this project also involves the training up of several new solar system installers under the Building Research Establishment's mentoring scheme.

The Scottish Executive's initiative to increase the use of small-scale renewable energy systems amongst householders and community groups is to continue for a second three year term from this

April. Since June 2002, 235 community projects have been awarded funding of around £3 million. Over two hundred awards, amounting in total to £374,046, have been made to householders. The projects have included woodchip and wood pellet heating systems, solar water heating, small hydro and wind turbines and ground-source heatpumps. At the heart of the Scottish Community & Householder Renewables Initiative (SCHRI), delivered in the Lowlands by the Energy Saving Trust, is a national network of development officers who are able to give advice on the technical and funding aspects and direct enquirers to the appropriate accredited specialists. Householder installations qualify for 30% of the cost of a system up to a limit of £4,000. Community groups can get up to £100,000 with no percentage limit.

If you are involved in a community group which would be interested in a grant to help install a system to provide green heating or electricity, or a scheme like the one in Gatehouse, call Joe Fergusson at the Energy Agency, or Richard Witney at LEEP, both on 0800 512012. If you are a householder, call the SCRI helpline on 0800 138 8858 for information and an application form or visit www.est.org.uk/renewables. You could sign up for the free REnews renewable energy newsletter by sending an e-mail to anne.mcgonigle@south-ayrshire.gov.uk.

Sawmill Takes Sustainability Seriously

Howie Forest Products Ltd has one of the largest British sawmilling sites, right here in Southern Scotland. Tucked away as it is, two miles out of Dalbeattie, no one could tell that as well as sawmilling, deep in the site, there is a wood-waste fired boiler plant!

Back to the sawmilling, the Company brings in 270,000 tonnes of sawlogs a year for processing through its two sawmills. This timber, the majority of which is supplied from the growing forests of South Scotland is processed into a number of sawn products for construction, DIY, pallet, fencing and other uses. In addition, as part of the process, we produce quality wood chips for the paper and panelboard (MDF) industries, some even being exported to Finland!

Howie Forest Products take its environmental impact seriously. All of our sawlogs are purchased from sustainable sources as guaranteed by third party verification through the world renowned Forest Stewardship Council (FSC). This has allowed us to generate business with customers such as B&Q who pride themselves in sourcing sustainably produced timber products.

Timber is made up of wood fibre and water in almost equal parts by weight. To produce construction grade timber it must first of all be dried. The most efficient method of drying is through what we call kilning. The sawn timber is stacked in large packs on trolleys and rolled into the kiln chambers where it is subjected to a force of hot air, driven through the layers of timber. Large fans circulating air through heat exchangers, huge radiators through which is pumped hot water, generate the hot air. The hot air carries the timber moisture out of the wood in a process that takes five days or so.

In 1995, when we were looking to expand the kilning capacity, an important consideration was the heat source necessary to generate the hot air. Typically in this country kiln boiler plants are fired by heating oil or natural gas. There is no gas main supply to the sawmill and heating oil is expensive. Our natural heat source is the waste wood generated on site!

As part of the process, there are arising some 12,000 tonnes of wood fibre. For example, the butts from the large end of the sawlogs we use are trimmed away prior to sawing; this material makes ideal boiler fuel. This is augmented with floor sweepings and other crushed waste material from site.

So in 1995 we installed our wood fired boiler plant. The manufacturer is Järnfors Energi, a Swedish company founded in 1984. Their early plants were in fact used for community heating schemes using forest waste and crushed recycled timber. Later, they developed industrial applications including timber-drying kilns.

The Howie plant is rated at five megawatts and is in the mid-range of their systems. The system is almost entirely automatic. Wood fuel is loaded into a giant bunker; hydraulically driven rams on the bunker floor push the fuel in graduated doses onto a series of conveyors which carry it to the furnace. The bunker can contain enough fuel to fire the plant for nearly three days, ideal for over weekends.

The moisture content of the wood waste is critical. Too wet and the furnace will quite literally cease firing; too dry and the

material will just flare up and burn. We try to achieve an even, slow burn. As the wood fuel tumbles into the top of the furnace, there is a certain amount of pre-drying. As the fuel falls to the lower end of the grate, it burns red, generating a heat of 225°C. The rising gas then passes through the heat exchanger tubes (the actual boiler) to heat the water. Flu gas is then passed through two scrubbing systems before flowing up the chimneystack.

In the meantime, the water is heated to around 110°C under 4 Bar pressure. This water is then pumped to the kilns. It is a completely closed loop system with the hot water returning to the boiler. Heat loss is remarkably small. The whole system is entirely demand-driven from the fuel bunker right through to the kilns. This linked system is controlled from the kilns. As timber passes through the drying cycle, it has a reducing demand for heat, which is reflected by the feed of wood fuel into the system. However, as we have nine separate kiln chambers all operating at different phases, the demand is well balanced. Ash generated amounts to 4% of the wood fuel, 480 tonnes a year.

The system operates 24 hours a day, seven days a week with only a week's stoppage in each of the summer and winter mill holidays. The whole system fits entirely satisfactorily with the Company's sustainable wood supply chain. Of the site's usage of 270,000 tonnes of logs per annum, the only true waste generated from the site is the 10 tonnes of ash per week! Although there is a very high capital cost, the pioneering nature of our heat generation is extremely cost-effective in comparison with alternative fuels.

Hamish Macleod
Joint Managing Director, Howie Forest Products Ltd.

Aerial shot of the site showing the boiler plant slightly to the left of centre.



THE YARN STORE – WHAT'S THE STORY?

The Yarn Store project seeks to turn a redundant and derelict building in Selkirk into a state-of-the-art shared office space for non-profit making organisations.

For the last few years there has been agreement that there are big advantages when organisations work more closely together. It is what community planning is all about. The Southern Uplands Partnership is core funded by the same funders who also support the Borders Rural Partnership, the Borders Forum of Councils of Voluntary Service, the Elder Council, Tweed Forum and a number of other not-for-profit organisations. If organisations can cut overheads and equipment (eg share admin support and photocopiers) it reduces core costs and makes limited funds go further. There are also the advantages that come from being under the one hi-tech roof - new ideas, joint initiatives and new ways of working, breaking down the barriers that tend to exist when organisations only meet to discuss "issues". Coffee break chats can provide novel solutions.

On top of this, there is currently an urgent need to demonstrate new technologies - use of wood as a high-tech fuel, use of photovoltaic cells, mini-wind turbines, heat-pumps, solar panels. Renewable energy is still dominated by the wind farm debate and we need to show that we can make more of renewable energy now - as well as making better use of existing energy sources.

The Yarn Store project has been inching forward for over a year now and several times it has almost collapsed - but it may yet have a future. Eildon Enterprise are currently looking at the potential for the project to work financially and other partners are looking to see if the project could fit with a strategy to regenerate Selkirk. If the lights go green, Selkirk could become home to a project which would demonstrate excellent practice on a number of fronts.

WOOD PELLETS, THE CHIPS ARE DOWN

The Glenkens Community & Arts Trust (GCAT) is developing The Old School in New Galloway, South West Scotland to create a Community, Arts and Business Centre. The centre will provide a Conference suite, performance area, exhibition space, meeting rooms and a range of facilities designed to support the communities of the Glenkens.

Sustainability and protecting the natural environment of the Glenkens were key objectives of the design proposal and a bio-mass boiler was to be the forefront of the project.

GCAT began to research bio-mass boilers, assuming that a plentiful supply of local forestry products would mean a wood chip fuel supply was relatively straight forward. However there were other issues that had to be considered and it soon became apparent that a wood chip boiler was not going to be just as straight forward as was first envisaged.

Size of boiler, hopper to store the wood chips, quality of wood chip in terms of moisture content, how does a delivery lorry gain access, how big does the plant room need to be, and so on.

These were all significant issues and pressure began to build on whether we could actually fit the boiler in, whether we had space for storing a large quantity of wood chip or whether we had enough room for a delivery lorry. The whole idea was beginning to look as if it might have to be scrapped, solely because of the lack of space. Then somebody suggested "WOOD PELLETS" as the potential answer, the space required for boilers and fuel being much less than wood chip and it would fit into the available space.

Our first reaction was what are wood pellets, what's the difference?

In essence wood pellets are compressed sawdust, they are very dry, very dense, dust free, easy to transport and easy to burn in specially designed boilers. They require much less space and the size of boiler is comparable to a conventional oil boiler.

Availability of pellets was a concern, particularly to our architects and heating engineers, but the reality is that though wood chip might seem to be readily available, the quality is so random problems can be built up by feeding the boiler with variable material with differing moisture content and potential scrap material entering the supply, potentially damaging the system. Wood pellet on the other hand is a uniform material specifically designed for the purpose. However very few manufacturers produce pellets in our area, with the nearest suppliers in the North East of England and Northern Ireland. Agencies are beginning to emerge as the market grows and it is through a local wood pellet agency GCAT will obtain supplies.

We are now committed to a wood pellet system, having overcome the issues of space and availability. We believe that in the long-term a wood pellet boiler system will prove to be the correct decision economically, as the price of oil will rise as supplies dry up, and not least we will make a small contribution to the reduction of green house gases.

Andrew Ward, Project Manager



Bucleuch One Stop BioEnergy Shop

The Bucleuch Group operates internationally in a diverse range of sectors, employing over 200 people. The company, founded on its rural estates, continues to expand its significant commercial property, food brands and other business activities.

Bucleuch BioEnergy is a renewable energy business within the Bucleuch Group and is at the forefront of the rapidly expanding wood energy industry. The company provides working solutions for a growing number of customers who choose wood energy as a renewable and cost effective form of heating.

Bucleuch BioEnergy are an independent supplier of Woodchip and Woodpellet Boilers. We are not tied to any one manufacturer, and therefore we can source boilers from the world's leading manufacturers. The boilers utilised by Bucleuch BioEnergy are manufactured in Europe where this proven technology has been in operation for nearly fifty years.

Bucleuch BioEnergy offers a choice of Woodchip Boilers ranging from 30KW to 10MW and Woodpellet Boilers ranging from 15KW to 50KW.

The Woodchip Boilers perform in much the same way as conventional boilers and will interface with existing pipe work, alongside the existing heating system. By converting to woodchip heating, the way in which the building is heated remains unchanged as the Woodchip Boiler responds instantaneously to demand.

The Woodpellet Boilers are designed to the highest of specifications; fully automated feed systems and automatic ignition systems are included as standard features.

Bucleuch BioEnergy has proven experience and expertise in providing "turnkey" design & build projects. We can provide a unique all-encompassing service including; assistance with grant funding applications, advice on planning permission & building control requirements, supply & installation of district heating schemes, assistance with fuel provision, interfacing with existing pipe work and if required, design and installation of new heating systems.

Once a Woodchip Fired Heating System has been installed, Bucleuch BioEnergy can undertake the management of the heating system through a Heat Supply Contract. Customers are



provided with metered woodchip heating, offering a cost-effective, convenient and renewable alternative to traditional forms of heating. Within the Heat Supply Contract the unit rate for heat consumed is fixed, rising only in line with inflation, for the entire term of the contract. This eliminates any unforeseen price fluctuations. By converting to metered woodchip heating, the customer only pays for the heat actually consumed, metered as it leaves the Woodchip Boiler, using ultra-sonic heat meters. This is in direct contrast to conventional systems where consumers purchase fuel by the litre, though, due to seasonal boiler inefficiencies, approximately only 70% of the purchased fuel is converted into useable heat.

Bucleuch BioEnergy Heat Supply Contract rates will be, in most cases, cheaper than the equivalent heat generated in heating systems fired by LPG, electricity and, depending upon the current spot price, oil. Bucleuch BioEnergy can also offer an optional service & maintenance contract.

Utilising our successful track record of applying for grant funding from Scottish Community & Householder Renewables Initiative, SCHRI, and the Community Energy Program, CEP, we also offer an extensive range of consultancy services. For customers with their own supply of fuel, we also carry out feasibility studies to assess the viability of producing fuel grade woodchip, the best production methods, storage and handling requirements and specify the best suited Woodchip Boiler for the customer to become self sufficient.

The installations listed below are the projects managed by Bucleuch BioEnergy;

- 1 x 360Kw Woodchip Boiler heating a Fleet Maintenance Depot for The City of Edinburgh Council, Edinburgh.
- 1 x 460Kw Woodchip Boiler heating a private nursing home in Lanarkshire.
- 1 x 100Kw Woodchip Boiler heating the Estate Office at Bowhill Estate, Selkirk.

For further information please contact Bucleuch BioEnergy direct;
E-mail: amcglynn@bucleuch.com
Web: www.bucleuch-bioenergy.com Tel: 0131 524 0910

Case Study – Ground Source Heatpump

Ballantrae Rural Initiative for Care in the Community (BRICC) recently installed three heatpumps in to a semi-detached town-house which is being converted into a day-care centre for local elderly and disabled people. There is currently no such facility in the local area. BRICC House will also offer training, office facilities and meeting space for community groups.

The aim was to install a cost-effective heating system with low maintenance, low running costs and simple operation. As a result, Geothermal Ltd installed three



The very long, rotating pneumatic drill at work.

heatpumps and these will provide 100% of the heat and hot water without resulting to immersion heaters.

Three heatpumps, using three boreholes for their heat source, deliver heat through underfloor pipes which give the added benefits of space

saving and improved comfort levels. The system is split in two because of the possibility that the upper floor of the building, which is being developed to be

independent from the ground floor, could someday be sold separately from the ground floor. Two heatpumps with 12kW thermal output serve the ground floor, with its much larger floor area and higher heat demand, and a smaller



The manifold for up to nine temperature zones.



BRICC House, Ballantrae.

6kW one is installed upstairs. The second of the ground floor pair will operate only when the first is unable to meet the immediate demand.

All of this was achieved with the help of an SCHRI capital grant. 74% of the total cost was met including

the underfloor pipework and various other project costs.

In accordance with the grant application conditions, various energy-efficiency measures including additional loft insulation were investigated. Comparative quotes were obtained and installations funded by the SCHRI energy-efficiency grant fund.

The actual benefits of the installation will be hard to determine as there are no records of heating costs prior to the redevelopment, but figures supplied by



The two 12kW heatpumps in situ.

Geothermal Ltd with their quotation suggest that, compared with a condensing oil boiler, the saving could amount to 9.66 tonnes of CO₂ and £2,300 per annum, or a 64% lower fuel bill based on reasonable assumptions.

Funding was also provided by South Ayrshire Council's Sustainable Communities Team, Energy Saving Trust, Scottish Enterprise Ayrshire and The Northern Rock Foundation.

For more information, or to arrange a site visit, call Joe Fergusson on 01292 280109.



The community on Muck.

INCREASINGLY SCOTTISH COMMUNITIES are looking to exploit their local resources and develop their own renewable energy projects. Such schemes generate funds for the local community which, in turn, can be used for all manner of community benefits. They can also:

- Provide employment;
- Stimulate local economic and social development and encourage regeneration;
- Provide an improved source of electricity in remote and island communities;
- Raise the profile of a community and act as an educational resource available to those within the community and further a field.

SgurrEnergy, recent winners of the 'Scottish Green Energy Awards' Best New Renewable Energy Company, is an independent consultancy specialising in the assessment, development, design and management of

Renewable Energy Projects. Based in Scotland, they provide expertise and skills over a broad range of renewable technologies and have the capability to take projects from inception to commercial implementation.

They report that they are currently working in partnership with several Scottish communities on a variety of renewable energy projects. For example, they have recently completed an in-depth study into the prospects for community owned district heating in a popular highland town. They are also supporting projects on Shetland and the Isle of Mull, which we hope will be developed into community owned wind farms, generating green electricity for the benefit of local residents.

Information on these and other projects can be found at www.sgurrenergy.com. If you are interested in finding out more please contact Adam Spearey or email communities@sgurrenergy.com.

Project News . . .

MOUNTAIN HARE SURVEY

The collation of data on mountain hares commissioned by SUP on behalf of SNH, South Lanarkshire Council and Scottish Borders Council is progressing well. Over 300 records are now in the database and more information is due.



BBC Education

Requests for information have been sent out to a huge number of contacts, organisations and media outlets. There has been an excellent response from a wide range of sources including Biological Records Centres, bird recorders, farmers, gamekeepers, estates, and walkers. Announcements in specialist newsletters are still being circulated and a number of people have contacted the consultants, The Wildlife Partnership, to say that they are collating information. As anticipated there is little comprehensive information available but a considerable amount of anecdotal information on current and historic populations is being documented. The final report will document the current population status of mountain hares in the Southern Uplands on the basis of this information, speculate on reasons for change and make recommendations for future monitoring. If any readers would like to submit information please contact Leonie Alexander or Lorna Edey at The Wildlife Partnership on 0131 448 2557 or email la@wildlifepartnership.co.uk

BOOKLET & WEBSITE

SUP members will now have received a copy of the new booklet Southern Uplands: South of Scotland - Coast to Coast. Non-members who would like a copy should be able to find a limited number in their local public library, or can obtain a copy from us by sending a 60p s.a.e. to cover postage costs to Southern Upland Partnership, GCAT, High St, New Galloway, DG7 3RN. If you have web access, all the information in the booklet is now on the updated SUP website - www.sup.org.uk.

SUW21 Catalyst, the Dumfries based marketing and business development company, have won the contract to promote the 21st anniversary of the Southern Upland Way (SUW21) for the project steering group working to raise the profile of the route. For information on SUW21 please visit www.suw21.com. Any event along the route can be added to the website Events section, simply contact SUP on 01644 420808 in the first instance. Businesses and community groups along the way will be contacted by Catalyst, alternatively if you would like to make the first move please telephone Lynda Johnson 01387 750333. Those interested in the Southern Upland Way and its potential will also be interested to know that the User Survey undertaken by the Crichton Tourism Research Centre is now complete. The research and recommendations will be available on the SUP website.



COTE GOES TO GOLSPIE

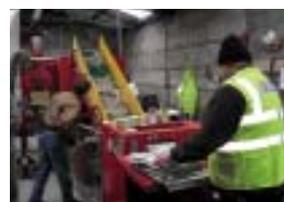
Project Officer David Niven and members of the Communities on the Edge (COTE) projects Sustainable Waste Management Working Group travelled to Golspie to look at potential projects in early March.

Gas powered compost turning machine used at Golspie Recycling and Environmental Action Network (GREAN) to produce compost for their Community Garden. GREAN employ 5 local people in their Kerbside Collection, Sorting, Bailing, Reprocessing, Composting and Community Gardening activities.



Compost Turning

Paper shredding machine used by GREAN to produce high quality, low dust content Flaked Paper Animal Bedding which is proving a popular alternative to straw and sawdust with horse owners and studs.



Paper Shredding

Members at the GREAN, MOBIUS (Computer Recycling) and CRNS (Community Recycling Network for Scotland) Open Day in Golspie on Thursday 3rd March '05. This visit was funded by the Carnegie UK Trust.



South Lanarkshire Visitors at Golspie

RED SQUIRREL SURVEY TRAINING DAY

Red Squirrels in South Scotland Conservation Officer Sue Hearn will be running a training day on Saturday 14th May at Mable Forest which is open to everyone whether a novice or experienced surveyor; it is anticipated that training will lead on to taking part in surveys for the project. To find out more contact Sue on 01750 725157 or sue@red-squirrels.org.uk



Old mill's power renewed

Chris Mason of Ironmacannie Mill, Balmaclellan near Castle Douglas lives in a 400 year old water mill with a working water wheel and has determined to see the water generate power at the mill again. Chris explains . . .

"We live in a 400 year old water mill with a working water wheel. The mill is currently heated by a log stove and by oil. Oil is becoming increasingly expensive and hardwood logs are nowadays very difficult to obtain. We wished to produce an alternative source of heat from a green and renewable source.



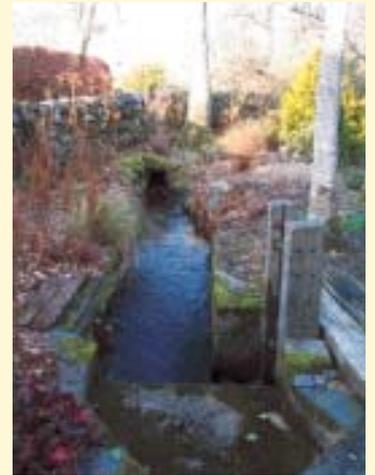
The first plan was to drive a generator with the 14ft waterwheel. However the wheel required new modern bearings and was far too noisy for 24 hour a day use. It was therefore decided to take water from the mill lade in a pipe past the wheel and down to a turbine at the side of the Shirmers Burn. The turbine would drive a small generator and with a fall of 7 meters and a flow of 100 litres per second, should produce 3kWs 24 hours a day. Hopefully

this electricity will heat the house and being grid connected, will allow any unused power to be exported.

Thirty percent of the capital cost of the project is being funded by the SCRI (Scottish Community & Householder Renewable Initiative) and the metered output of the generator is eligible for ROCs (Renewable Obligation Certificates) at 4p per kw.

The advantage of a watermill set up is that the infrastructure i.e. the weir, the millpond and the lade are all there and available for use. The downside is that the building of micro turbines is very much a minority occupation and our state of the art machine, promised for delivery last autumn, is still sitting in Pennsylvania awaiting completion. Watch this space!

Chris Mason
cjmason@dircon.co.uk



Snippets

GO WILD IN BERWICKSHIRE

at the 7th Natural History Festival on 3 -5 June

Based in Coldingham
Hotline for brochure Tel 018907 71979
www.gowildborders.com

Programme includes led walks, talks, beach art, water divining, bird, bat and badger watching, high speed nature photography, boat trips, wild boar, tree and fungi identification, hide building and much more.

Refreshments and transport available all weekend.
Pre booking strongly advised.

SPORT DOG SCOTLAND – GET MUSHING!

The recent UK Sled Dog Final and World Qualifier event was held at Drumlanrig. The event, part of the Dog Sport Scotland project, is designed to promote and utilise the forests of the region together with raising the profile of the sport of sled dog racing to increase visitor numbers to Dumfries and Galloway. The project has attracted support from a number of partners and private sponsors and hopes to build on the success of the recent UK Sled Dog Final. To keep up to date with the project click onto www.dogsportscotland.com



D & G Wildlife Festival

2 - 17 APRIL

The second Dumfries & Galloway Wildlife Festival boasts Red Kites, Red Squirrels, Red Deer and much, much more! Expanded to run over two weeks the programme has lots to offer the experienced wildlife watcher, the beginner and the whole family. Find out more by visiting the Festival website at www.wildlifefestival.org.uk

SCOTTISH BORDERS PRIVATE LANDLORDS FORUM

The Housing Strategy Team is currently exploring the level of interest in developing a Private Landlords Forum within the Borders. As part of the Local Housing Strategy Scottish Borders Council need to gain a better understanding of the private rented sector.

Nicola Galloway, Research & Liaison Officer within the Housing Strategy Team, is currently carrying out extensive research into this essential sector of housing provision and is hoping that landlords will support the idea of a Forum. "The main reason for this Forum is to encourage dialogue between landlords and the Council. The Forum will be developed in accordance with the needs and areas of concern for all involved with the private rental sector. It is therefore essential that we have their support at this early stage in the development."

In November the Housing Strategy Team held a series of successful Private Landlords Information Sessions across the Borders. The main focus of these sessions was to highlight services that the council can offer the landlord as well as raising awareness to new legislation regarding the registration scheme for private landlords, which comes into force in October.

A well received Legal Seminar was held in conjunction with John Blackwood, Director of the Scottish Association of Landlords in February and the first meeting for the Forum is scheduled for the 27 April when Eleanor Clark of Communities Scotland will be guest speaker.

For further details on the Private Landlords Forum please contact the Housing Strategy Team, Council Headquarters, Newtown St Boswells, MELROSE. Tel: 01835 825169 or email housingenquires@scotborders.gov.uk

Contributions to the newsletter are welcomed.

Every article provided is considered for publication, though as space is limited it may not be possible to use them all.

Inclusion in the newsletter does not imply endorsement of the views or services described by the membership, staff or directors of the Southern Upland Partnership.

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| <input type="checkbox"/> buildings | <input type="checkbox"/> sustainability | <input type="checkbox"/> communities | <input type="checkbox"/> local foods |
| <input type="checkbox"/> agriculture/land use | <input type="checkbox"/> water/fish | <input type="checkbox"/> economics | <input type="checkbox"/> housing |
| <input type="checkbox"/> land reform | <input type="checkbox"/> renewable power | <input type="checkbox"/> access | <input type="checkbox"/> tourism |
| <input type="checkbox"/> employment | <input type="checkbox"/> local arts and crafts | <input type="checkbox"/> ornithology | <input type="checkbox"/> rural transport |

The Southern Uplands Partnership

The Southern Uplands Partnership was established as a company limited by guarantee with charitable status in 1999, with the aim of promoting sustainable land-use in the Southern Uplands of Scotland and thereby keeping people living and working here.

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