



## Woodland Workshops

### Inside this issue:

Winter weather	2
Goat herd health workshops	3
Birch syrup	2
Upcoming events	4

### CALU's subject areas:

- Horticulture
- Bio-energy
- Arable crops
- Non-food crops
- Alternative livestock

Three woodland workshops kicked off CALU's 2010 series of events.

Two of the events focused on wood as a fuel. At these workshops, attendees spent the morning looking at practical management issues and operations in an actively managed woodland. The afternoon sessions moved from the growing stage to focus on processing the wood into fuel.

The importance of wood as a fuel is only going to increase as oil prices rise. In rural Wales, where a high proportion of households are off mains gas supply and still use solid fuel systems, wood is of particular interest.

Obviously, to make the best use of the wood, it has to be burnt in an efficient stove rather than on an inefficient open fire. This aspect of the wood fuel story was also covered at both events.

Of course, woodlands are not only useful for fuel production. One historic role that is of huge po-

tential benefit to farmers and growers, is the use of woodlands to provide shelter.

Woodlands and shelterbelts not only provide protection against biting winds, they also create a micro-climate which is considerably milder than surrounding open fields or moors.

In a winter such as we have just experienced, woodlands and shelterbelts are a vital habitat for wildlife, providing both shelter and food.

Careful management means that woodlands and shelterbelts can provide a diverse range of benefits to a farm business and to the wider environment. The products that can be harvested from the woodland range from firewood, through timber for use in fencing, to wild fruits and nuts, and ultimately, timber for saw mills.

We will have more woodland workshops starting in the Autumn of 2010.

## Farming Connect Funding Increased to 80%

The amount of support available to eligible businesses through Farming Connect has received a significant boost. There is now 80% funding available to all eligible farmers, growers and land managers wishing to take up the services provided through Farming Connect.

The services on offer range from support for business

related training, through specific on-farm mentoring advice to deal with specific aspects of the business.

For further information on the full range of Farming Connect services please visit the Welsh Assembly website [www.wales.gov.uk](http://www.wales.gov.uk) and type in "Farming Connect". Alternatively, call the Farming Connect Service Centre on 0845 6000 813..

## How cold was it for you?

Late December 2009 and early January 2010 brought a real taste of winter to Wales.

Here at Henfaes, we escaped relatively unscathed. Our weather station recorded a minimum air temperature of  $-4.504^{\circ}\text{C}$  on 8th January. The way that soil buffers temperature changes is clearly demonstrated by our records. The coldest temperature recorded at 50cm depth was  $2.615^{\circ}\text{C}$  on 12th January—a full four days after the air temperatures had begun to rise.

The lowest temperature noted in the unheated glasshouse was  $-8^{\circ}\text{C}$ . The glasshouse is situated in a sheltered spot, and a slight depression, meaning cold air rolls down and pools there.

Surprisingly, we have only recorded nine nights with sub-zero temperatures since the 1st December until mid January. We have not had any daytime maximums that have failed to climb above zero: the lowest maximum was recorded on 3rd January at  $1.708^{\circ}\text{C}$ .

Despite the relatively mild temperatures we experienced, the effect on the heating consumption for the boiler running the two temperature regulated glasshouses has been significant. At the same time, worries about shortages of gas for domestic customers meant that some businesses on interruptible gas supplies had to switch to oil. Consequently, the cost of heating oil rose and it had to be bought blind, i.e. the suppliers could not quote a forward price.

Short day lengths, and low light levels, have also meant that there has been a significant use of supplementary lighting. This, however, is usual during winter.

Elsewhere in north Wales Mark Pottles at Pottles Premier Plants, nr Holywell reported temperatures as low as minus  $9^{\circ}\text{C}$  as the coldest so far in 2010. Mark said, 'we have been very lucky as the snow insulated the plants from the very cold, fingers

crossed we are looking positive. We will know better in a month'

Gareth Davies from Old Chapel Nursery, Llanidloes, reported around 30cm of snow and the lowest temperature in Llanidloes was minus  $14^{\circ}\text{C}$ . All of the young trees at the site were frozen in the ground. Gareth commented 'It will take a few months for the trees to start growing and then I will find out how many have been lost.' Gareth is optimistic, he felt the winter of 2008/9 was colder than this year. The land was frozen for longer then, but losses were minimal.

The cold has also brought problems for livestock producers. Sharon Mears, from Pwhelli has found the biggest problem to be keeping their poultry watered. The water troughs needed to be emptied overnight to stop them freezing and then refilled every morning.

We are interested to hear how the winter conditions have affected your business. Have you suffered stock losses? Or has the snow caused damage to structures, particularly polytunnels? Were you able to lift crops as planned. If you have any stories to share, please contact us via [calu@bangor.ac.uk](mailto:calu@bangor.ac.uk).



Snow on the mountains above Henfaes

4th January 2010

### DID YOU KNOW...

*The cold winter means early flowering plants, such as snowdrops, have reverted to more normal flowering times. Snowdrops need a cold spell to trigger flowering, but prolonged cold slows their growth down. This year, most snowdrops have reverted to January flowering because of the persistent cold.*

### DID YOU KNOW...

*The lowest temperature ever recorded by the Met Office in Wales was minus  $23.3^{\circ}\text{C}$  at Rhayader in January 1940.*

## Goat herd health workshop

CALU's first goat herd health workshop took place on a snowy January day at Pant Farm near Abergavenny.

Pant farm is run by Gary Yeomans and Co. and is home to 400 milking goats housed on straw all year round. Gary's goats are milked twice a day to supply local cheese manufacturer.

Gary's vet, Matthew Pugh of Belmont Veterinary Centre in Herefordshire, led the morning part of the workshop. Matthew gave an overview of the causes, prevention and treatment of lameness in goats.

Matthew explained that there are many causes of lameness in goats. The best way to minimise

problems is to ensure that their feet are correctly trimmed.

It is critical to avoid the temptation of over-trimming to ensure that healthy feet do not become infected.

When trimming goats' feet you need to preserve heel height, you do not want a flat foot as this can lead to infections and eventually leave you with a lame animal.

Chris Rudge a contract shepherd with a foot trimming business, led the afternoon session: a practical demonstration of foot trimming using a pneumatic roll over crate and shears.

The pneumatic crate makes foot trimming simple, but at a cost of around £3,000 not all goat farm-

ers will be as lucky to trim feet with such ease as Chris.



**Gary Yeomans demonstrates the use of a pneumatic crate for foot trimming one of his goats**

### **DID YOU KNOW...**

*The number of goats in Wales increased by more than 50% between 2004 and 2007: rising from just under 5,500 to more than 8,500.*

## Sweet like...birch syrup?

Many people are familiar with maple syrup, but did you know that a similar product can also be produced from birch sap?

Now is the time that the sap is starting to rise in birch trees, so anybody who fancies having a go at making birch syrup, or wine, or just drinking the sap as a spring tonic, needs to move quickly.

Birch syrup is produced on a very small commercial scale in north America (c. 4,000 litres / annum). By contrast, the production of maple syrup is huge, with Canada alone producing tens of millions of litres each year.

In the UK tapping of birches for their sap has a very long tradition. In traditional medicine, birch sap is recommended as a spring tonic. There is also a small scale, but long established tradition of fermenting birch sap to produce birch wine. But there seems to be little documented evidence of syrup production.

The reason for this may be that birch sap is more difficult to condense than maple sap without spoiling its flavour.

Maple syrup is fairly stable and can be condensed by simply heating it and evaporating away much of the water: reducing each litre of sap down to a meagre 25ml of syrup.

Birch sap has higher levels of fructose (up to around 50%) than maple sap does: the sugar in maple sap is almost exclusively sucrose. Fructose has a lower melting point and burns more easily than sucrose, meaning it is quite difficult to evaporate it sufficiently without spoiling its taste.

To get around this problem, serious producers use a reverse osmosis process.

In summary, although birch syrup production isn't something likely to become a major industry in Wales, it is an interesting venture to try as a small scale project.

### **DID YOU KNOW...**

*Fructose is nearly twice as sweet as sucrose. Glycyrrhizic acid, one of the substances that makes liquorice sweet, is 50 times sweeter than sucrose.*

## CENTRE FOR ALTERNATIVE LAND USE

Henfaes Research Centre  
University of Wales Bangor  
Abergwyngregyn  
LLANFAIRFECHAN  
LL33 0LB

Phone: 01248 680 450  
Fax: 01248 681730  
E-mail: [calu@bangor.ac.uk](mailto:calu@bangor.ac.uk)

[www.calu.bangor.ac.uk](http://www.calu.bangor.ac.uk)

Supporting sustainable land use in Wales



## Forthcoming CALU Events

For more information about any of CALU's events, please contact us. More events are on our website—[www.calu.bangor.ac.uk](http://www.calu.bangor.ac.uk)

Always double check that the event is going ahead before travelling.

3rd February—Marketing workshop for north Wales pig producers—Glynllifon

9th February—Herb Producer workshop: environmental health and legislative considerations in the production of edible herbs, Split Willow Hotel, Llanfairfechan

10th February—Tree Producer workshop: "Trees for Trunk Roads" with Mark Watson Jones of the Trunk Roads Agency. Oakley Arms, Maentwrog.

11th February—Range management in free range poultry production—St Clears

11th February—North Wales Ornamental Producers meeting with Steve Ellison of Young Plants. Bryn Euryn Nursery, Colwyn Bay

17th February—North Wales Goat Producers meeting with Dr Heather McCalman of the Grassland Development Centre on the topic of forages for goat production. Henfaes Research Centre.

18th February—North Wales Poultry Producers meeting at Glasdir, Llanrwst

23rd February—Pig Producer meeting, Llanfwrog Community Centre

28th February—Pig husbandry workshop including tattooing demonstrations—Greenmeadows Community Farm, Cwmbran

2nd March—Management of top fruit trees with Ian Sturrock—Henfaes Research Centre

3rd March—Trees in environmental management—Caeau, Llanfyllin

24th March—Horticulture workshop—Sundawn Nurseries and Garden Centre

21st April—Horticulture workshop—Glyndwr University, Northop

## About CALU

CALU delivers the Farming Connect Knowledge Transfer Development Programme for Land Management. The programme provides information to any business in Wales that is interested in:

- Horticulture
- Bio-energy
- Alternative Livestock
- Arable Crops
- Non-food Crops

CALU has three dedicated members of staff and a network of associate specialists covering all the topics within CALU's remit.

### CALU ACTIVITIES:

- Open days
- Demonstration events
- Factsheets
- Training days
- Press articles
- Crop information sheets
- Project reports
- Talks
- Producer groups
- Agricultural shows
- Information booklets

### CALU PARTNERS:

- Bangor University
- Glyndwr University
- ADAS
- Coed Cymru
- Coleg Llysfasi

