



DWOSL NEWSLETTER Autumn 2013

Chairman's Message

It has been a very busy year for Donegal Woodland Owners Society Limited (DWOSL). Up to 2,000 cubic meters of timber have been felled in member's forests. Our wood to energy project with the wood gasifiers is on-going. Sales of firewood are increasing and forestry training is progressing well. Forestry is a rural growth sector with great potential to increase employment and production. DWOSL has a leading role to play in protecting the interests of Donegal forest owners. Since our last newsletter our small organisation has grown and have harvested to date this year approx. 2000



we

tonnes of timber. We have installed and commissioned our first of three gasifiers and have trained 19 young men, up to FETAC level 5, in forestry work including c30&c31 chainsaw course. This gives DWOSL a strong foundation and work force, going forward into a bright future.

John Jackson Chairman



Field Day: Donegal Woodland Owners are holding a field day in the Evans Family Farm & Forest in Sallows, Frosses, on Saturday November the 2nd, 2013 at 11 am.

Topics include: First Thinnings, Wood Energy, Gasifier Project, Continuous Cover Forestry, Timber Security and High Altitude - Low Yield Class Forestry.

Follow the DWOSL Sign Posts from Frosses Village(between Donegal Town and Glenties) for 5 miles, heading north.

A tribute to the memory of Mr. Clive Evans (RIP), a loyal member of DWOSL

who's family are hosting our field day, Saturday November the 2nd at 11 am.

From: Clive Evans < bruc@iol.ie >

Date: 18 April 2012 09:52 To: admin.dwogsl@gmail.com

Forestry at Sallows



Dear John (Jackson),

As promised I would like to record my appreciation of Leslie Edwards and his work in splitting upwards of 40 cu.m of hardwood firewood at my farm here in Bruckless on Tuesday of last week. Leslie surveyed the work before committing himself and deemed that, due to its twisted nature, it was unsuitable for the log-splitter that the DWOGS hires out, so it had to be done

with a tractor-

mounted log-splitter. On the day, which proved kindly in terms of the weather (although we did have a shower), with Nick, Leslie's helper, my own son, son-in-law, and a kindly neighbour, with support from my daughter, beginning at about 0930 and ending at 1730 with a short break for lunch, all the wood was cut and split as well as piled in my sheds. Leslie organised the "team" and demonstrated his skill at assessing how to tackle a not-so-routine task and then getting the job done in good time and in good humour. My thanks to him and to Nick for a job very well done. I shall get back to him when my next job arises.

Yours truly, Clive.

Bruckless House, Bruckless, Co Donegal. Tel: 074 9737071



www.bruckless.com

Laghy Nursing Home – LOPPER Wood Gasification Boiler installation.

(John Jackson DWOSL, James Clinton Nursing Home Owner, Dieter Schlottman CEO Lopper, Andy, Lopper Engineer.)



Finally, in the last week of September, we commissioned our first log gasification boiler installation in the **Nursing Home in** Laghy. The Lopper CEO, Mr. **Dieter** Schlottmann and a technical engineer from LOPPER company in Germany spent 3 days approving,

commissioning and training the gasifier operating personnel.

Following that, for a period of seven days we provided the heat for the Nursing Home. The Nursing Home reported a more than adequate supply of heat. Following some technical changes we have installed the Heat Meter and are now ready to go into production.

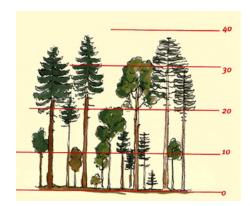
Our projected budget is within target and we will be in a position to invoice from November onward.

Charlie Doherty, Treasurer, DWOSL



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Permanent Cover Forestry (PCF)



INTRODUCTION

In 2008, the private woodland owners in County Donegal formed a co-op (DWOSL) to address our needs. We have 160 members, with 6000 hectares of plantations in our care. Having visited a wide range of sites both here and throughout Europe, we have seen the benefits of a more sustainable model of forestry than is practiced here, and are convinced that we can, and should, convert our own forests to it.

With a unanimous vote in favour of conversion at our last AGM, and a large database of information about our own forests, we are in a strong position to proceed with plans for the conversion of each individual plantation, if the forest owner so wishes.

THE PRESENT SYSTEM v CONTINUOUS COVER

Commercial forestry in Ireland started within living memory. There was virtually no native woodland left, so we had to plant our forests on mainly marginal agricultural used land. So our forests are mostly evenaged, mono-cultures of one tree species – Sitka Spruce from the North American Pacific coast – which was known to be tolerant of these conditions. This means that all trees in each forest are ready for harvest at the same time. They are clear-felled, and we start again – a boom and bust economy that needs state support over the long years prior to harvesting. The harvesting date is largely determined by the need to fell before the wind does it for us – usually at 30-40 years.

This system has served us well, and raised national tree cover from less than 2% to around 13%. But forests now have to provide social and environmental services, and be sustainable into an uncertain future. And our timber products will have to be more diverse if there is any possibility that hardwood imports could be threatened. So we must rise to those challenges if we can.

In continental Europe, native broadleaved and mixed forests have been adapted over centuries to yield a small annual harvest, equivalent to the annual increment of wood in the forest as a whole. So the need for state subsidies is removed, or at least reduced.

The tree canopy is never removed, and younger trees are protected from wind-throw until they take their place as part of the firmly rooted protective canopy. So each year some mature trees of 100 plus years are available for harvest, and can be individually selected – to create space for slightly younger trees waiting in the wings.

Tree seedlings germinate in the pools of light which are created when large trees are removed. These can be encouraged, when appropriate, to develop into groups of replacement trees. So re-planting is never necessary. These young saplings are better rooted than those transplanted from nurseries, and due to the huge densities, only the very best of them are selected to grow on, by gradual removal of the competitors (thinning).

OTHER ADVANTAGES

Soils are not disrupted, and can continue to improve, and to develop a rich micro-flora and fauna which supplies the trees with all the nutrients they need. Supportive fungal networks are one of the main characteristic of forest soils. This is in total contrast to the clear-fell system, where peat soils are initially ploughed/drained for planting, and then further disrupted by the re-planting process every 30-40 years. The closed tree canopy helps sustain a micro-climate, which partly insulates the forest against the fluctuations of weather. Climate change is bringing a whole new set of challenges, and continuous cover is the best way to address those too.

- The micro-climates within forests should allow a tree species no longer well adapted to the general climate, to continue to flourish.
- The diversity of tree species in the forests means that there should always be some species that are still well adapted to the changing climate.
- Burning wood (carbon emitting) that is balanced by growing replacement trees (carbon absorbing), is well understood as a carbon-neutral form of energy. But some of those advantages are lost by the clear-fell system, which releases the carbon stored within peat. As soils are not disrupted by continuous cover, cc forests are more efficient at removing carbon from the atmosphere.

The diversity of age classes, and of species, both help to create stability in the forest environment, and in the industry.

- The frequency of major pest and disease attacks is rising. If we have diverse species, the loss of one species through an attack will not be so serious. And in addition, both the likelihood of an attack and its severity should be less, as a fully developed woodland ecosystem has mechanisms to combat alien species and disruptive events.
- Yearly harvests, even if small, are much better for business than a huge harvest every 40 years, with little or no outputs in between they are better for the owner, and better for the markets. And they create local employment in forestry and processing.

The development of forests that mimic natural woodlands have spin-offs beyond commercial timber production.

- Their visual characteristics, both externally in the landscape, and internally, would have greater amenity value for tourism and general recreation.
- It would benefit biodiversity.
- It would make a much greater contribution to reducing our carbon footprint.
- River systems are protected from pollution, as soil is not disrupted or eroded.

All these features should make it much easier for us to gain Forest Stewartship Council (or other) certification, which is becoming increasingly necessary for trading purposes. At the moment, Coillte has managed to get certified – presumable because with such a huge area under its control, the disadvantages of still using the clear-fell system is balanced by its habitat restoration work on unproductive land, and other activities. These options are not open to the majority of small forest owners. But with continuous cover, we should have a better chance (either individually, or more likely, collectively as a growers co-op) of gaining certification.

WHAT WE NOW NEED

There will probably be little difference between the two systems in the costs, or in the effort expended over the life-cycle of an individual tree. Once the conversion has been made, operating a continuous cover plantation should be no different in principle from farming. So it will engage the owners on a more regular basis. There will be tools to be bought, and training to be provided. Growers will not be able to leave it all up to the contractors – or leave it all to the last moment.

But in the transition from a clear-fell plantation to continuous cover, professionals will be needed for much of the crucial decision-making. Most of the consultations will be in the first year, but there are likely to be a few more inputs needed over the first 20 or so years.

Every plantation will be different. Recommendations will be made mainly by qualified foresters, perhaps supported by other specialists in soils, hydrology, ecology etc.

In the early stages of conversion, natural tree regeneration may be limited, and saplings will have to be planted in at least some of the clearings. But the choice of species will be much wider than before, and that may also require the input of experts.

TIMBER STOLEN!!!



Recently, a quantity of timber was stolen from a member's forest in central Donegal.

Due to a tracking device and good local investigations, all the timber has been recovered.

This incident was reported to the local Garda and is currently under investigation.

The committee of Donegal Woodland Owners Society Limited urge all **woodland owners to be vigilant**, particularly with felled

timber. Good security is needed to protect one's investment.

Hazel an introduction

In 2000 I planted about 400 small hazels. I used them to border a 10 foot winding ride through a corner of the plantation, in irregular bands or groups up to three or more plants deep. I had no serious expectations that they would serve much purpose, but I knew that there was no shortage of possibilities.

Hazels in Nature

Hazel in nature is a large shrub or small tree, with a tendency to be multistemmed, and an ability to grow under shade. In the wet west, their stems can host a fine community of the "lower" plants - mosses and lichens - which are seen at their best in moist wintery weather when there is little else to enliven a wood. But hazel also has a remarkable ability to grow back when felled, with even more straight shoots than on the uncut "maiden" plant. When stems are



"The good life is inspired by love and guided by knowledge."

harvested on a regular basis, the plants can survive for hundreds of years, and a spectacular community of woodland plants develops which can survive the dark years of closed canopy, and then thrive in that burst of light which follows every harvest. The vigorous light-demanding plants (grasses mainly) that out-compete them in the open, can't cope with this cyclical pattern of light, so the primroses, bluebells, wood anemones, wild garlic, violets etc. have the undergrowth to themselves. This fully evolved "coppice" habitat is in England also vital to the survival of many butterfly species. However, it all takes time, as woodland plants don't disperse easily, and some, like the Wood Anemone, can take hundreds of years to move beyond their home base. But time is just what a continuous-cover plantation has an unlimited supply of – and anyway, the process can be kick-started with a few transplants of the right species.

Hazels in Use

But why would anyone bother to cut the bushes every eight to ten years? This practice of "coppicing" hazel can supply stems of different thickness for all sorts of uses: some which other tree species can also fulfill, and some which are specific to Hazel, such as those which require the stems to be twisted as well as bent. Most of these woodland products have been replaced by manufactured goods, but the crafts have survived and are being revived all over the country by skilled enthusiasts. *Muintir na Coille: The Coppice Association of Ireland*, has coppicers, thatchers, basket-makers, blacksmiths and charcoal-makers among its members. Michael Hentschel from Fanad is one of them, and came this winter to harvest my hazel. His trained eye could plan how to tackle a bush to produce the desired balance of different products, with minimum waste. From year to year the market will point to different strategies, and so the gross income, and the time taken for extraction and processing will both vary to some extent. This year we opted for maximum product diversity (rather than maximizing one product, minimizing labour costs, or maximizing profit) just to test the system. Michael didn't rush at it, but immersed himself in what he sees as more a way of life than a job. The result was impressive, to say the least.

My Hazels

We cut half of our 400 trees, and got a total of 4323 stems of all sizes, from \(\frac{1}{4}\)-\(\frac{1}{2}\) inch rods, up to 14 foot fork-topped poles at 1½-2½ inches thick (the coppicing profession has seen no need to adopt the metric system!). These products are targeted at about 10 different uses, from baskets to tipi poles, and from hurdles to green coffins. The market price for the lot is about €1800, and so far we have sold about 90%. The main outlets have been the National Heritage Park in Co. Wexford, were the old crafts are used to re-construct iron age huts, crannogs etc., and Electric Picnic, where things are a bit more up to date, but shelters, fencing etc. are still needed. Hazel is a fine dense wood which burns very hot. So in addition to these craft materials, there is a substantial residue of firewood from the stem butts and the crooked branches. I didn't measure the quantity, but it was probably around three cubic metres of roundwood at mostly 2-4 inches in diameter, so not needing to be split. In theory, we could repeat this operation indefinitely. Having only cut half of the 400 trees, that would be twice every eight or so years. My woodland ride is now much wider than before. Light is coming in from the side to give the ashes, oaks and alders along it a boost of growth. Shoots have emerged from the small stumps which Michael had carefully prepared. Some weeding will be necessary for a year or two, to make sure nettles, creeping buttercup, bramble and grasses don't swamp the new shoots. And I've shifted a few plants of native woodland wildflowers from elsewhere on the farm, even though a couple of the faster colonizing species had already made it under their own steam.

Do I hear the sceptics wondering if it is worth the effort? They should bear in mind that these hazel are just a very small element in my plantation, diversifying the output, and multiplying the interest. Commercially, they may not be in the first rank, but they are certainly of more value in every way than the doomed cosmetic belts of rowans and alder so often seen around new conifer plantations.

Ralph Sheppard