



Get financially fitter with forestry

Michael Somers looks at the big picture on forestry and profiles a Tipperary man who planted 40ha in the 1990s

BELIEVE it or not, there are now more timber lorries than cattle lorries on our roads. Over 12,000 people are employed in the forestry sector, which covers more than 10pc of the country. Despite the sometimes negative connotations that forestry has in some farmer's minds, it is an enterprise that is helping many become financially fitter.

It's not just the value of the trees at harvest anymore either. The 18m visits to forests annually by walkers and locals is estimated at over €400m.

However, without the forest-

ry subsidies and grants, much of the forestry in the country today simply wouldn't exist. In January 2015 a new forestry programme was launched. For farmers the main change was an increase in forest premium rates while the number of years of the premium reduced from 20 to 15 years. The current annual forestry premium is still attractive. The premium is still tax free and ranges from €510-615/ha on enclosed or improved ground. The rate is species dependant.

Another change is that this premium level is open to all land owners whether or not they are involved in active farm-

ing. Those actively farming that declared land for SFP in 2008 can plant part of their land and still claim SPS, subject to meeting certain criteria. Given that the average SFP is €9,800 a forest enterprise can aid in the financial fitness of total farm planning.

Plantation size

In all 47pc of the total forested area in Ireland is in private ownership. But the overall forest area is small. The average farm forest size is 9ha. This presents a massive challenge for harvesting. Thinning should be encouraged where possible. In some cases farmers are

joining together to complete co-ordinated harvesting and timber sales. This increases the saleability of the timber and reduces harvesting costs. Farmers can also pool their forests together to optimise the roading grant. This year alone there have been applications for over 90km of road.

Tree species

Sitka spruce is still the most commonly planted tree in Ireland. However, its premium rate is €510/ha. It accounts for 60pc of the forest area in Ireland. On productive sites it is fit for final harvest within 30 years. Recent timber prices are encouraging, with trees ranging from 0.6-0.9m³ making between €67-€84/m³. Timber sales are income tax free up to €80,000 in any one year. This maybe

subject to change in this week's Budget. The average clearfell nets €20,000/ha. Therefore, it is important to seek advice on taxation before clear-felling forestry.

Last year between Coillte and the private sector, in excess of 3 million tonnes of timber was harvested in Ireland. Sawmilling alone is worth €630m to the Irish economy. It employs approximately 1,700 people.

Sitka spruce is not the only tree species planted. Over the past 25 years, better land becoming available for forestry has resulted in other species being planted. Douglas fir, larch, Norway spruce, pines and a plethora of broadleaf species now make a varied forest landscape. All these species are

site specific. Markets are continuing to grow indicating that tree growers have a bright future with their emergence into the wood processing landscape.

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'The day you plant is the day you thin'

The current price for timber makes Michael Ryan (pictured right) optimistic about the future. Timber is buoyant at the moment. Since World War 1 the price of timber has remained 3pc above inflation. Forecasts would suggest that this trend continues, especially for exports. In addition more uses such as biomass are constantly being developed. Today, the resource he built 20 years ago is now "free". Recently he conducted a small clear-fell. One of forestry's advantages is that if timber prices are down you can leave the crop on the stump. It's the only crop that has this advantage.

Planning is a critical part of any thinning and Michael states: "The day you plant is the day you thin. All the decisions that were made at planting stage influenced how we thinned the forest. From our extraction lines to where the timber was stacked, even though we didn't know it at the time. Any farmer planting land should realise that time passes quickly and thinning is not that far away".

Social exclusion

Michael is well aware of farmers' scepticism towards forestry and the social exclusion of those who consider planting. He reckons that's these opinions are born out of the legacy of the Land War. Michael concurs with the Teagasc National Farm Survey that forestry does not compete with dairy on suitable land. However on wet mineral soils forestry is an excellent land use option with low inputs and labour costs. From a purely economic standpoint with the wet mineral gley soils in the Slieve Felim area forestry does pay

"All farmers should have some forestry", reckons Michael. Pointing to recent problems in the country he stresses everyone needs to diversify. Farmers should devote a portion of their land to amenity and firewood production.

Michael's positive experience of forestry has encouraged him to recently acquire more land to plant.

Table 3 illustrates the projected cash flow from a hectare of Yield Class 24 Sitka spruce planted in 2015 with a 35 year rotation, with a 15 year premium.

The SPS is not taken into account since it can vary from farm to farm. Thinning cycles are estimated to be every five years.

CASE STUDY: MICHAEL RYAN, SOLOHEAD, CO TIPPERARY

Michael Ryan runs a suckler and beef finishing enterprise on a substantial farm. He's recently retired from state employment.

Back in the 1990s he looked at the idea of purchasing land for afforestation. During this time there were massive levels of afforestation which were supported by the Forest Service through Grants and Premiums. As an economist, Michael realised that this was a "good deal". He purchased some 40ha of land in 1994 and planted it.

From the moment Michael purchased the land he went about organising the work himself. He employed a forester who devised a plan and carried out all the manual work such as fencing and planting. To this day he is happy with this decision because it gave him more control in how the work was carried out.

Even though Michael planted and carried out much of

the afforestation himself, he is similar to many farmers with forestry in that he has a beef rearing system. Today, this forest is out of premium but the forest still has cash flow.

This is because Michael has thinned his forest twice and it will require thinning again in 2017. Michael sold his timber standing after conducting an inventory. He is adamant that farmers should have their timber measured before sale.

"Selling product without knowing what you are selling is bad farm management," he says.

The previous time Michael sold his timber at the roadside. However, this may have tax implications.

He reck-

ons that standing sales are best suited to his system.

When asked about comparing forest incomes with other enterprises Michael agrees that different forest crop rotations can be expressed on an annual per hectare basis.

This can be done by expressing the Net Present Value (NPV) of a forestry plantation as a series of equal cash flows over the forest rotation length, known as the Annual Equivalent Value (AEV). This AEV figure on a per hectare basis can then be used for broad comparison purposes with the gross margin (€) per hectare per year for other farming enterprises.

When looking at Table 1 below, bear in mind, that the Gross

Margins (€/ha) by farm system referred to above is calculated differently. Those figures are based on prices received in a particular year and have also been averaged.

Within a single tree species, the AEV figure will vary according to growth rate, rotation length, management history, etc.

For example, the AEV for Sitka spruce at Yield Class 24 could be as high as €602/ha, while the AEV for Sitka spruce at Yield Class 16 could be €400/ha.

These are indicative values and calculations are based on premium and timber sales minus costs, including inspection paths, maintenance, insurance, roading and reforestation. The timber prices are based on a 3, 5 or 10 year average rather than a specific year. Michael's forest is at the higher end of this because thinning cycles are one in every three years.

CASH FLOW FROM SITKA SPRUCE

Year	Per hectare Cashflow (€)
1-15	510
18	500
23	1900
27	2500
35	21000

COMPARING TIMBER CROP VALUE BASED ON LAND QUALITY SCENARIO

Soil type	Grass/ rush wet mineral soil	Less fertile rushy peaty soil
Species	Sitka spruce	Sitka spruce
Growth rate (Yield Class***)	YC 24	YC 16
Crop rotation	35 years	40 years
NPV*	€9,849/ ha	€7113/ ha
AEV**	€602/ ha	€415/ ha

*Net present value (NPV) = Total net value of timber crop over the rotation expressed in today's money.

**Annual equivalent value (AEV) = Annualised value of timber crop in today's money.

***Yield Class is how forest productivity is measured. A Yield Class 24 forest has the potential to increase its volume by 24 cubic metres per hectare each year over its lifetime (38 years) compared with a Yield Class 16 forest which has the potential to only increase its volume by 16 cubic metres per hectare each year over its lifetime (44 years)