

forestry

Valuing the family forest

Moving on from valuing premiums to valuing your forest crop

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Forty-six percent of the forest estate in Ireland, 336,000ha, is in private hands. These forests are owned by almost 20,000 individuals and families (84% are farm families), many having planted on more than one occasion.

While this private forest estate is generally very young; with almost all forests less than 30 years of age; much of it has reached timber production. This could be as first thinnings or where trees are rapidly approaching final harvest. The National Forest Inventory (NFI 2012) found that over 70% of grant-aided forest was over 11 years of age, with more than 16% over 20 years of age.

Many forest owners are therefore moving from a stage where having a forest means an annual premium payment to the point where there is a tangible timber crop with valuable harvests in sight.

For those who have only taken a passing interest in their forest, the end of premium payments seems to be a very challenging point and yet it is the point at which forestry investors become most interested in privately owned crops. In many productive conifer crops, final harvest can occur within 10 to 15 years of the final premium payment (at 20 years).

So what is your forest worth? There

are several tools or sources of support available to private forest owners to quantify the potential value of their forest. These are certainly worth considering before any decision is made to harvest or sell a forest crop:

1. Employ a qualified forester to assess your forest.
2. Join a forest owner group and learn with fellow forest owners about marketing/measuring/valuing timber crops.
3. Talk to your local Teagasc Forestry development Officer/attend a Teagasc timber measurement course.
4. Use existing tools to calculate indicative forest values and timing of harvesting.

- Teagasc FIVE programme (available in consultation with Teagasc forestry development officers).

FIVE is a decision-support tool for forestry advisors, using discounted cashflow to model indicative financial returns for a potential forestry land-use option.

Figure 1 presents an example of an indicative FIVE cashflow analysis for 8ha of fully stocked productive crop of Sitka spruce under normal management. Yield class is how forest productivity is measured. Thus, a yield class 24 forest has the potential to increase its volume by 24m³ per hectare each year over its lifetime, which in this example is assumed to be 33 years.

The annual equivalent value (AEV) is an indication of the annualised value of timber crop per hectare in today's money; in this case it's €543/ha. Within a single tree species, the AEV figure will vary according to a range of factors including growth rate, rotation length and management history among others.



- The Forest Service's new felling decision tool <https://www.agriculture.gov.ie/forests-service/> This is an online tool hosted by the Forest Service webpage which estimates yield class and timber revenues for the main conifer species based on assumptions regarding growth models, access, harvestability, timber quality, product recovery, timber price information and stocking.

Taking control

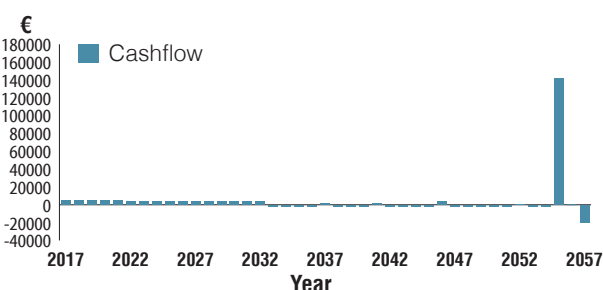
Carlow man Martin Flynn took on the management of a 30ha forest from his late father. Planted in 1993, this mainly Sitka spruce forest has already been thinned twice and is now undergoing a third thinning. Coming

Estimated cashflows for 8ha Sitka spruce

- YC: 24.
- Balance: €203,000.
- Rotation: 33 years.
- AEV/ha: €543.

Figure 1

Estimated cashflow



VALUE TO ECONOMY

The private forest estate is vital to the forest sector in Ireland, which has an estimated overall value to the economy of €2.3bn of which the net contribution to gross domestic product from growing and harvesting is estimated at €137m (DAFM, 2014).

TIMBER 2017

Teagasc's Forestry Development Department is delighted to be in attendance at Timber 2017, the Irish Forestry, Woodland & Bio Energy Show on Friday and Saturday, 5 and 6 May in Stradbally Hall Estate, Co Laois.

Teagasc will have its own marquee and demonstration area highlighting its extensive advisory, research and training services.

Forestry advisers, researchers and specialists will be available over the two days to answer your questions on how best to incorporate a forest into your farm and to provide on-the-spot advice regarding your existing forests.



Martin keeps an eye on stakewood being loaded at his woodland during third thinning.

from a background of tillage farming, Martin decided to approach the management of his forest as he would any other farm enterprise. He realised that if he was going to take an active role in its management he needed to gain the knowledge to do so.

Martin attended many forest walks, demonstrations and events. He also attended a timber measurement course run by local forestry development officers in Teagasc Portlaoise. He is an active member of the Laois forest owner group, a group initiated by Teagasc, which aims to allow forest owners increase their knowledge through peer-to-peer learning and also coordinate the marketing of their timber.

While Martin doesn't claim to be a qualified forester; forestry events and courses have given him the confidence to take ownership of his forest. This knowledge has allowed him to take basic measurements to estimate stocking rate, average tree diameter and timber stack measurement; each of which are essential in order to plan for thinning but also to monitor harvesting while it is taking place.

To many of us, 1993 does not seem long ago and yet Martin's forest will be due its final harvest within the next five to 10 years.

Martin is of the strong opinion that forest owners need to take an active approach to forest management. He urges farmers to look critically at land use on their farm. He sees forestry as an enterprise whose value goes far beyond the annual premiums. In fact, Martin began harvesting at year 17; three years before the premiums finished. His second thinning followed four years later in 2015.

Martin is on site during each harvest; monitoring progress, checking that the agreed thinning intensity is reached and that average tree size increases after each thinning, all which can be done with a simple measuring tape. For those seeking information regarding a future or existing forest enterprise, help is available. A good starting point is to contact your local Teagasc forestry development officer.



OTHER PRODUCTS FROM THE WOOD: Martin adjoining sycamore woodland has also been thinned. Although most of the thinnings were used as firewood there was a small exception. Martin was delighted to supply some sycamore to a local men's shed in Tullow, Co Carlow. The picture shows Martin being presented with the fruits of their labour; a beautiful turned lamp.