



Farming Connect Management Exchange

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Ireland

Christmas Tree Production, especially Noble Fir (Part - 1 Ireland)

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1 Background

I have a diversified farm business located to the east of Cardiff which comprises of 200 acres of no till arable land and is mostly free draining Sandy Clay loam formed from stony glacial debris. The farm also supports a small sheep flock and has diversified into letting residential barns and renewable energy which produces enough energy for 500 homes from a privately-owned wind turbine and solar parks.

Following a number of years of poor returns from arable and sheep farming, other enterprises were pursued which would give a return from the local economy rather than being exposed to world markets.

The Christmas tree growing business was started approximately 10 years ago with various species trialled. One of the species, Noble Fir, is found to make the most attractive, aromatic and long-lasting tree. However, I have experienced considerable problems cultivating this tree.

It is known that Noble Fir production is reducing throughout Europe, but that there is still a significant demand for this tree for sale both as whole trees and for foliage production.

Two countries were identified as being of significant importance to the industry – Denmark and Ireland.

Growers in Ireland export Christmas trees, including Noble Fir, to the UK. Ireland has similar climate and soils to Wales, therefore, I decided to visit Ireland for the first part of my exchange.

Denmark is a significant agricultural exporting nation and has a very large Christmas tree industry. They supply large volumes of trees all over Europe including large retailers and garden centre chains in the UK. They are also the main supplier of tree seedlings of all varieties to the industry in northern Europe and also have some large-scale Noble Fir plantation for foliage production. This will be the subject of a later visit.



High quality Noble Fir at Clearwell farm.



Lower quality Noble Fir foliage showing needle dieback on central branches.

2 Itinerary

Day 1

Travel from Cardiff to Wexford, Ireland.

Day 2

Kavanagh Christmas Trees

Christy Kavanagh is the Chairman for Irish Christmas Tree Growers association.

Kavanagh Christmas Trees have 40.5 hectares of Christmas trees where about 15% of them are Noble Fir. They also have a nursery growing transplants from seed for sale to other growers and a trial area with unusual varieties.

I then went on to visit **Kildare Christmas Trees**, where Nordmann and Noble Fir are grown from seed. They had very good stands of Noble Fir at all stages of growth and a successful retail business from the farmyard.

Day 3

Galway Christmas Trees

This farm consisted of approximately 12 hectares of mixed varieties of trees. They are a “choose and cut” farm, which were very well organised and set out for efficient operation.

Day 4

Travel day.

Day 5

Belfield Nurseries

Belfield Nurseries uses organic principles to grow Christmas trees on a commercial scale. They use organic fertilisers and biological predator control.

I then visited **Killarney Christmas Trees**, a large-scale production of a mixture of varieties. They had a successful “choose and cut” retail area and grow trees of all sizes, including large trees for town centre displays.

Day 6

Travel day.

Day 7

Meeting cancelled, travelled back to Wicklow area.

Day 8

Conor Browne Wreaths

Conor Browne is a young and successful entrepreneur growing trees and cutting foliage on other farms to make into wreaths and supplying the floristry industry in Ireland and UK. They had a significant area of recently planted Noble Fir.

Visit 1: Kavanagh Christmas Trees. (Christy Kavanagh, Chairman for Irish Christmas Tree Growers)

Their approximately 100 acres of Christmas trees are grown in rotation on sandy free draining loam over shale at 200 metres above sea level. 15% of the trees are Noble Fir and they also have a nursery growing transplants from seed. Varieties of trees grown includes a number of Nordmann types, Korean and Turkish Lasiocarpa. Good stands of Noble Fir were being grown at 1.2m by 1.2m. Regular foliage samples were sent for tissue analysis and a low pH was favoured. All trees grown were grown from seed with the plants raised on the farm in a bed system. A two plus one transplant was favoured which means the plant is grown in seedbed for two years, and then replanted for one year before finally setting in a field. They also sell seedlings to other growers in Ireland. Some of the tree seeds are collected from 50-year-old trees in the Wicklow area while others are imported from USA.



Noble seedlings on bed system at Kavanagh Christmas Trees.

Visit 2: Kildare Christmas Trees

Kildare Christmas Trees are about 30 acres of trees of which about 40% were Noble Fir. Again, the farmer grows his own transplants from his own seed nursery. This was done to rigorously keep out soil borne diseases from other areas. Foliar sprays were regularly applied. Some Noble Fir had been lost due to needle cast, therefore, the area was destroyed and fallowed before replanting.

The farm was close to a reasonably densely populated area. There was a display area where about 50 fresh trees could be displayed. Significant thought had been put into reducing labour at harvest and a large number of metal pallet cages had been manufactured to move trees from field to yard on a good road network that existed around the farm. A Goldoni tractor had been adapted for interrow tree work and a Jutek base pruner was used on rear 3-point linkage. This was the only base pruner we saw on our visit with most growers preferring to base prune by hand.



Jutek base pruner



Goldoni forestry tractor with additional guards to prevent tree damage.



A well grown Noble Fir being examined.

Visit 3: Galway Christmas Trees

Galway Christmas Trees was a small but very well set out Christmas tree farm with a large car park and pathways to the trees. Whilst only 30 acres, the owner works full time at the farm himself and has built up a good local business. Emphasis was put on customer enjoyment of the experience of purchasing a tree, while the planting was interesting with little blocks of trees, good paths and a couple of field shelters.

As the soil was peat over clay, a good network of field drainage had been dug and then filled up to ground level. These were then used as pathways. Mixed species including Lodgepole Pine were planted.

All Noble were planted alongside drainage ditches to ensure that there was no waterlogging. This was an extremely challenging site for Noble Fir but the expenditure on drainage had made it a success. Seedlings were purchased as “two plus one” and grown on in pots at the farm for an additional year before being planted out by hand.



Path - drainage ditch filled to ground level.



Very healthy Noble Fir at Galway Christmas Trees



Noble Fir against perimeter ditch in field

Visit 4: Belfield Nursery – Pdraig Sugrue Bellfield Nursery

Belfield Nursery was growing on organic farming principles. It is a windswept location above Killorglin. The trees were grown on a ridge and furrow system to aid drainage. Grass was allowed to grow between the tree rows and Shropshire Sheep grazed the land

Foliar feeds and dried poultry manure were used. Biological predators such as lacewings to counteract aphid build up were released instead of spraying. It was considered important to have habitat grass and herbage where the predators could multiply. Dried poultry manure pellets were the fertiliser of choice to provide a balanced trace element rich nutrition for the trees.



Contented Shropshire sheep at Belfield.



Grassy rows with furrow between pair of rows.

Visit 4: Killarney Christmas Trees

Killarney Christmas Trees is a mix of mainly Nordmann, some Lodgepole and a few Noble. It was an interesting farm with a large number of retail sales. Trees were cut fresh and displayed in a shed. Considerable pruning was carried out on trees over 20 feet tall destined for town centre displays - some of those trees were 20 years old.



Discussing the merits of large trees.

Visit 5: Conor Browne Wreaths

We returned to the Wicklow area to meet with Conor Browne, a young entrepreneur who began wreath making as a teenager. He has developed a large-scale business with pruning gangs contracting for other growers. He then cuts foliage from other farms around Ireland and makes thousands of wreaths which are sold wholesale to garden centres and other outlets in Ireland and the UK. He has recently acquired additional land which he has planted Noble Fir using Danish “two plus one” seedlings. His plantings are on the square at 1.2m although he suggests he may go wider for better airflow in the future. A considerable amount of his work is done using knapsack sprayers to maximise the cropped area. An important point was all knapsacks are electric controlled to get an accurate spray pattern.



Conor Browne inspecting this season's Noble Fir planting (note accurate setting out of plants). He considers the industry may be short of foliage in the future.



Small Christmas tree retail building at Conor Browne with outside seating area.

3 Next Steps

Following on from the visit, it has given me the confidence to plant one suitable area with Noble Fir with the intention of harvesting them for the foliage market. A particularly light and free draining area has been chosen; however, a different variety will be used on a similar area that has little air movement. Particular attention will be given to addressing any drainage

issues prior to planting. Some seedlings will probably be sourced from the Wicklow area but extreme care will be taken with seedling source. A spray and foliar feed programme will be worked out with a specialist agronomist to keep the plants healthy. Biological control will now always be considered alongside chemical control when there is a pest problem.

4 Key Messages to the industry

1. Noble Fir could be a profitable diversification on some Welsh farms.
2. It is a challenging but rewarding crop choice that must be regularly tended to produce a good return.
3. Noble Fir crop needs to have a dry, free draining soil and good airflow around the trees to succeed. Phytophthora will kill trees at any growth stage.
4. This is definitely not a 'plant and forget' crop. Regular trace element sprays are of paramount importance and a balanced use of fertiliser along with a planned spray programme are necessary.
5. There is a definite lack of Noble Fir for the future in the UK and Ireland, although Nordmann Fir supplies appear to be abundant.
6. The expense of labour and difficulty finding labour for the November wholesale peak season for demand of cutting and harvesting in fields, and transporting to market issues were all mentioned. This ended in adding significant costs to the product in Ireland.

It was noted that there seem to be very few young people in the industry. We met only one grower under 30 years old.