

Name: Tayforth Machinery Ring - Small Woodland Management Project

Place: Fife & Kinross

Headline:

Bringing small scale farm woodland into management through shared management and marketing

Keywords:

Joint woodland management, joint marketing, equipment, cash positive woodland management

What is the context?

The farmlands of Fife and Kinross, like other lowland areas of Scotland, are characterised by lots of small scale woodlands, often shelter belts consisting mostly of ½ - 5 ha Sitka Spruce, planted 30-50 years ago. They are at or beyond maturity, and once they start to fall down they are no longer serving a purpose, they are dangerous and are losing value.

75% of all farmers in the area are member of the Tayforth machinery ring which is a members-owned cooperative. Farmers join it to access services, such as collectively sourcing input and marketing, fuel at better price, selling straw, locating a digger to put up a shed –a range of things that they don't do on a daily basis. Many have been members for a long time, and the machinery ring is their first port of call, inspiring high levels of trust not only because of their track record but also because of the transparent approach to trading whereby a fixed low rate is charged for services.

What was the initial aim?

We set out to find a way of managing small scale farm woodland that the large forestry companies had often looked at and considered unviable. This was driven by farmer requests for us to find a solution and from the Forestry Commission grant aiding us to promote woodland management.

What actually happened and what has been achieved?

Tayforth machinery ring does two things differently from the usual timber buyers. First, instead of the time honoured system of selling standing where the buyer pays for the harvesting and gives the farmer a low and non-transparent "net of costs" return, the machinery ring separates costs from income, and the farmer pays and receives all items. Second, the machinery ring facilitates the grouping of harvesting jobs, so that several small jobs are carried out in a small geographical area at the same time, therefore making the process more efficient by saving on transport and machinery costs.

The process consists of:

1. Getting paperwork in place; a consultant prepares a farm woodland management plan, and a felling licence, for approval by Forestry Commission Scotland.
2. According to the farmers' priorities within the five year management plan, a first thinning or harvesting job will be agreed with the machinery ring by grouping jobs, to keep costs to minimum.
3. Thinning and harvesting; extraction to roadside.
4. Good wood is marketed for fencing; and the rest to sell to biomass.

We are harvesting small areas of woodland, selling the good timber (must be straight for >3.5 m) at high value to make pallets and putting the rest into chipping for biomass. The end result is usually cash positive for the farmer, even though he has to pay for the harvesting and transport which is expensive.

We have recruited several new members into the Machinery Ring as both buyers and sellers:
 Windy Mains (Humbie) joined in order to buy timber for fencing;
 Some farmers have joined specifically to get a wood harvested;
 St Andrews University joined to buy biomass.

So far we have produced 20 farm woodland management plans and felling licences and have just completed the fourth harvesting job.

Evidence of outcomes

Table 1 shows the final costings from the first forest harvesting job done by Tayforth Machinery Ring in 2014. This first one was seen as an experiment to prove the point. Now that we have established the principle that it is cost-effective to harvest less than 1 hectare, Tayforth has a stream of willing farmers.

Table 1: final costs, Allanhill

ALLANHILL HARVESTING (0.7HA) AND THINNING (2HA) JOB 2014			
INCOME	m ³	£/m ³	total
limbs for fencing materials	51	58	2,986
limbs for chipping	222	30	6,653
limbs retained for logs	50	21	1,050
Total income			10,689
EXPENDITURE			
management plan			350
full harvester & forwarder			3,000
thinning harvester			812
thinning forwarder			975
low loader			560
haulage to windymains	51	17	875
haulage to biomass plant	222	9	1,996
replanting trees			584
guards/tubes			520
Total expenditure			9,672

What factors contributed to those outcomes?

1. A special subsidy from the Forestry Commission to keep the cost of the management plan low. The full cost of the management plan is £650 but until now FCS have paid half. This isn't just about saving money, it's about getting farmers on board. They are more easily attracted by a relatively low cost of paperwork.
2. Lots of members have biomass boilers, so there are a number of ready customers.
3. The transparency and low cost of machinery ring services. E.g. if the owner receives £32 / tonne, and is able to sell nearby, the transport costs can be as low as £2 / tonne, so the return to the

farmer is excellent.

What might we do differently with the benefit of hindsight?

The main thing we are learning is that the planning stage is key and not all woodland consultants think it through – for example where to stack the timber. We would choose the consultant for the woodland management plan and felling licence more wisely.

How replicable is this experience; what is its potential as an element of a better approach to forestry?

This model can be replicated throughout the country through Machinery Rings and without it, most small woodland plantations will simply fall down and become worthless.

Key messages

- By using a joint approach and careful selection of the correct harvesting and forwarding equipment we can maximise the return to the farmer. Individually very few of these could provide a return, but collectively we can make it work.
- Just because Tilhill, Scottish Woodlands and RTS all say that a wood cannot be economically harvested, that does not make it so.
- A joint approach to harvesting and marketing whereby several farmers simultaneously harvest woodlands, gets better returns.
- By using Machinery Ring members for all operations and marketing, we are in control of the finances, and can make them transparent. This provides reassurance to woodland owners and increases trust that they are getting a fair price.
- Small farm woods can be managed without always costing money.
- Machinery Rings are very good at bringing people and expertise together for mutual benefit