

Environment and Sustainability Committee

Inquiry into Sustainable Land Management

Response from Maelor Forest Nurseries Limited

Who we are (Maelor Forest Nurseries Limited).

Maelor Forest Nursery (MFN) produces 20 million saplings for forest planting on an annual basis. The saplings are either for commercial plantations or for the establishment of native woodlands. MFN continuously invests in seed orchards and local provenance seed collections (both broadleaf and conifer) to ensure that our customers are provided with the best genetic material suitable for planting in the UK. Unfortunately due to the low level of planting in Wales (only some 15 to 20% of our output is planted in Wales) we have had to seek alternative markets for our planting stock. We work with universities in Wales on the development of biological controls of pests and disease in trees as an alternative to pesticides

This presentation to the Environment and Sustainability Committee (ESC) is based on our knowledge and experience as part of the land based industries in Wales involved in forestry. We do not attempt to evaluate other land based industries except where it merits comparison.

Our presentation will be referenced in line with the questions raised by the invitation to consult with their relevance to forestry:

What do we want sustainable land management in Wales to look like and what outcomes do we want to deliver in the short, medium and longer term?

We understand sustainable land management to mean “the adoption of land use systems that, through appropriate management practices, enables land users to maximise the economic and social benefits from the land while maintaining or enhancing the ecological support functions of the land resources” (Food and agriculture organisation of the United Nations. (2005)).

When looking at defining ecosystems and ecosystem services with regard to sustainable land management we believe that it is import to look at systems that provide the maximum benefits. Rare ecosystems would be given priority status. However other land uses should be viewed in terms of their social, economic and environmental potential.

The Welsh Government Woodland Strategy promotes a form of sustainable land management through the application of “multi-purpose” forestry. In the most degraded areas of the uplands of Wales i.e. the Severely Disadvantaged Areas (SDA’s) multi-purpose forestry would bring multi-faceted benefits. Through the Woodland Strategy we envisage large areas of over-grazed desolate uplands converted to a rich tapestry of commercial plantations (providing economic sustainability), planted broadleaf riparian areas with open spaces protected from grazers, allowing “re-wilding” through natural regeneration. Such a change in land use we believe will provide the desired outcomes of enhancing the ecological support functions of the land resource as well as maximising the economic and social benefits. The environmental and economic benefits of forestry have received less focus than social benefits in recent years, therefore we will detail these two only below.

Environmental benefits:

Well managed and planned conifer plantations can have a positive effect on biodiversity that is often overlooked “biodiversity within plantations tends to increase over time” (Carnus, JM. (2006) Journal of Forestry). According to evidence presented by Humphrey, J.W., Ferris, F. and Quine, C.P. (eds. (2003). Biodiversity in Britain’s Planted Forests) – “The results from the Biodiversity Assessment Project clearly illustrate that planted woodlands provide a habitat that is suitable for a wide range of different species. A surprisingly high number of Red Data List species (29) were recorded in the upland Sitka spruce stands”. An example of this can be seen when looking at bird life in commercial plantations “an important group of species that depends on young stages of growth includes hen Harrier, black Grouse, short-eared Owl, Nightjar, Woodlark, Tree Pipit, Whinchat, Grasshopper Warbler and lesser Redpoll.” This view is also supported by Cameron who states that “Contrary to the view that conifer plantations are bad for the environment, there is a growing body of research that shows that planted conifer forests are associated with high levels of biodiversity in addition to providing functions such as soil protection and flood control (Cameron , A.D.(2011.)Scottish Forestry)”

The environmental benefit of forestry can also be seen through its potential to act as a carbon sink. The Read report has stated that “Woodland creation (and subsequent management) in the UK can be a cost-effective approach to combating climate change” (Read. D. 2009); according to the Welsh Governments ‘Land Use and Climate Change’ report (2010), “An expansion of woodland over 20 years, by about 100,000ha from the 284,000ha...would create an additional major GHG sink of 1,600 kt CO₂ equivalent annually by 2040, with a net sink of 1,200 kt CO₂ equivalent and an additional fuel wood potential of perhaps 1.4TWh/year by 2030–2040, off-setting emissions of a further 350 kt CO₂ equivalent of fossil fuels.”

Changes in land use from agricultural to forested would also contribute to reducing the total of agriculture's contribution of 11% to Wales' net carbon dioxide emissions.

Economic benefits:

From an economic perspective, the 75% of SDA are used for agricultural purposes. Types of farm vary in range, but over 75% are upland sheep farms. Figures published by Aberystwyth University's Farm Survey, show that without the Single Payment Scheme from the EU, and Tir Mynydd grants from the Welsh Government, these farms would not be profitable, or only marginally profitable – depending on the size of farm. This paints a bleak picture for upland farmers; but we believe their presence in the uplands can be maintained with the help of forestry plantations which bring in a more reliable and higher income which is sustainable economically and which will significantly improve the biodiversity of these land areas, enabling them to pass on more fertile and diverse land to their successors

During the lifecycle of the new crop suggested here for the SDAs, growers will be creating employment beyond their farm, and able to make an income from the two main stages of growth: first and second thinnings being processed for fuel wood and biomass; and good quality timber suitable for selling to sawmills. Introduction of new entrants into the timber processing industry in Wales as investors gain confidence that timber will be available in the longer term to repay the investment.

It has been demonstrated in progeny trials of genotypes from tree improvement programmes, that the same geno-type produces a higher quality of timber if planted in Wales rather than Scotland or N. England (Lee, personal 2013). Wales therefore has an environmental advantage in the growing of quality timber, which should ensure it attracts investment from wood processors. Furthermore Wales is closer to the market than Scotland. This introduction of "new players" into the market would then ensure that timber prices strengthen so that growers both in the public and private sectors earn a sufficient return to maintain and renew their forests, woodlands, and nurseries.

In conclusion therefore we believe multi-purpose forestry offers great potential for employment, carbon sequestration, increased biodiversity, soil remediation and the supply of an increasingly valuable raw material (WWF has recent predicted that the demand for wood products will triple by 2050– that is when trees planted for timber today would be due to be felled).

What are the barriers preventing us from delivering these outcomes now?

Conservation lobby.

Currently the pattern of land use in Wales is resulting in a decline in conifer plantations in the uplands. The area of woodland cover in Wales has declined by 1.7% from 289.000ha in 2000/01 to 284.000ha in 2009/10. The area of conifer in Wales has decreased by 13.000ha, while the area of broadleaf has increased by 8.000 ha. (The Forestry Commission. (2011)). This is contrary to the objectives of the WG Woodland Strategy.

Single interest bodies such as the RSPB and government agencies such as CCW have prevented the planting of the uplands in Wales through powerful lobbying and registering objections to planting schemes. We believe that the reasons put forward against such plantings are often based on misconceptions regarding modern day forestry. These misconceptions stem from a time when mistakes did occur. Lessons have been learnt and continue to be learnt to ensure that the forestry systems of today produce the maximum benefit for both the environment and people of Wales for many years to come. Where problems have been highlighted in the past work has been carried out to focus forest management on practices that resolve these issues. These practices are based on scientific research and are laid out in the forestry practice guides. These guides are updated regularly and incorporate recent advances in the scientific understanding of forestry.

One of the problem areas between forestry and conservation has been on the peatbogs of the uplands. Planting areas where peat depth is greater than 30cm has been shown to result in a net loss of carbon and as such are not suitable for planting ((Cannell, M.G.R et al. (1993)) There is also a biodiversity argument for not planting deep peat areas as “blanket peat lands contain some globally rare plant species (egg, *Scirpus cespitosus*, *Erica tetralix*, *Calluna vulgaris*, *Eriophorum vaginatum* and *Molinia caerulea*)” (S.J. Ramchunder, L.E. Brown and J. Holden. (2009)). However it has been shown that “much of the deep peat in Wales is part of a mosaic of soil types rather than being in large blocks.” (Vanguelova, E, et al. (2012)). Site specific

analysis is required if this mosaic to be taken into account when planting applications are approved or rejected.

Establishment of unsustainable broadleaf woodlands drawing resources away from the establishment of sustainable woodlands.

Much of Wales's broadleaf woodlands is in the private sector and is unmanaged. This position will be made worse with WG subsidising further broadleaf woodland establishment. With a few exceptions (Birch and Sycamore), you cannot produce quality timber by growing broadleaves on marginal land in the uplands. The uplands are where tree planting should take place, not on ground where it is viable for agriculture. The current Glastir funding supports the planting of broadleaves with very little financial support for economically sustainable conifers.

Low timber prices dissuading investment in forestry.

Compared to timber prices in Scotland (where the forest industry is flourishing) prices in Wales are depressed. This in our view is due to the combination of two factors:-

1. Failing to achieve the critical mass necessary to attract new entrants. Post war planting by the FC attracted timber processors who were keen to exploit the timber made available. To encourage investment by the processors the FC produced timber production forecasts which it assured processors that it would maintain. However, at the time of planting these plantations the FC fully intended that it would make a significant profit (in cash terms) from timber sales. The private sector through fiscal incentives then invested in significant plantations through the 1970's and 80's. However the level of planting was not maintained so as to achieve the critical mass necessary to attract "new entrants" to the market. Consequently this private sector planting has brought a "surplus" of timber to the market in the short term but without longer term supplies; hence existing processors are in a position to exploit this short term abundance without the fear of "new entrants" (who would need the longer term supplies to recover their investment on entering the market).

2. Unfortunately in recent years the FCW has not generated profits. This we believe is a function of both price and lack of entrepreneurial management. Whilst the initial investment by the public sector in attracting processors to Wales was very welcome; to continue with a production forecast marketing strategy now that there is such a short term surplus of timber does not make commercial sense. Effectively the state is subsidising the processors at the expense of the growers. The effect is to suppress prices thus disengaging the private sector growers from the market resulting in lack of resources for woodland management and incentives for commercial woodland creation.

How do we overcome these challenges?

Conservation lobby.

1. Policy on land-use has to be evidence based. Objections to commercial forestry varying from false perceptions of bio-diversity to misunderstanding on modern forest practice in relation to acidification of water supplies have in the past blocked economically viable and environmentally sustainable planting schemes being established.

2. Currently Glastir granted planting schemes have to follow a “guidance map” showing a “traffic light” system for areas in Wales that can be planted. Given the evidence referred to above of the “mosaic” like nature of these deep peat areas, we believe individual sites should be considered on their merits and the use of the “guidance map” discontinued. Areas of deep peat within an otherwise viable planting area should clearly be left unplanted with peat free areas being planted.

Establishment of unsustainable broadleaf woodlands drawing resources away from the establishment of sustainable woodlands.

Multi-purpose forestry which we advocate will only be sustainable in any true sense if it is also economically sustainable. Without continued subsidy broadleaf planting in the woodlands will result in nothing but unmanaged scrub. Whilst private charities may evoke public support for donations which ensure such plantings are managed, we do not think this is a route government should follow. With properly managed schemes following UKWAS guidelines, forestry can deliver on recreation and biodiversity without being a

constant drain on the public purse. Furthermore commercial forestry provides much more employment.

1. We strongly recommend that any grant aid for new forest plantings should be based on commercially viable plantations. The initial grant aid being a kick start that will eventually reduce government subsidies and generate revenues to the public purse.

2. Rather than financing the creation of new broadleaf woodlands the government, in our view, would achieve better value by funding the management of existing broadleaf woodlands. As the RSPB's "State of Nature" report highlights; the lack of woodland management is a major cause in the decrease in population of many of our woodland birds.

Low timber prices dissuading investment in forestry.

1. We believe that rather than subsidising existing unsustainable land use the government should fund land-use change. It needs to be recognised that farmers will not voluntarily change their practices unless they are incentivised. A sufficient incentive that would create a minimum level of 2000ha of productive woodland on an annual basis should be sufficient to attract new processor investment over time.
2. Separate the "regulatory" function from the "commercial" function with regard to the management of WG woodlands. The culture required to ensure a good "public service" spirit is entirely different from that required to ensure the success of an enterprise. Do not mix the two. Give the managers of the WG estate clear guidance and encouragement to maximise the income from the public estate ensuring that it is on a sustainable basis and complies with UKWAS. Consider a different management model for the public sector forests.

Illustration of barriers preventing delivery of outcomes referred to in our written submission:-

1. Conservation lobby.

In 2012 the RSPB published a report “Review of biodiversity impacts of practices typically undertaken in **certified forests** in Britain and Ireland.” The report has not been “peer reviewed”. The executive summary of the report states “There was a consistent message from studies across a number of plant and animal groups that many specialist species of open habitats that were afforested are lost and replaced by generalist or widespread forest species. For most groups this resulted in fewer species than the original habitats.” This is opinion based on studies on forest plantings that **were not certified** i.e. pre-certification. FSC practices would never allow the habitats referenced in these studies to be planted. This is recognised further in the executive summary “Most studies of afforestation were carried out prior to the introduction of forest certification standards and afforestation carried out under the current standards is less likely to occur on habitats of high conservation value”; but fails completely to make the point that land considered suitable for afforestation under FSC would be **only** that which has low conservation value. This clearly (afforesting high value conservation habitats) was and is not “practices typically undertaken in certified forests in Britain and Ireland”!!

In our view the above is clearly an example of the miss-use of science.

The sponsor of the report is “Ace UK” which represents a section of the Nordic wood products industry. A video on Ace UK’s web-site claims “North European forests are a vital resource for biodiversity, but also for the economy. Responsibly managed, the forests are a renewable resource’ and ‘Responsibly managed forestry and biodiversity are intricately linked and need to be protected to ensure a healthy ecosystem’. Clearly then “Nordic plc’s” forest industry is good for biodiversity but not the establishment of a rival “Wales plc’s”!?!

In 2006 a World Wildlife report on illegal logging found that 88% of illegal imports of Russian round wood (some 6.4million m³ RWE) into the EU was through the Nordic countries; much of it re-exported as wood products to the UK.

2. Low timber prices dissuading investment in forestry.

Please refer to the attached table (Appendix1). In 2011-12 the FCW lost £2.4million on harvesting £13.4million sales of timber. Either there is gross mismanagement in the harvesting operations or the price obtained is too low (which has an inference for the £100million valuation of the WG’s biological asset stated in FCW’s balance sheet-an item which generates losses we would treat as a liability not an asset).

Softwood Production

		Wales	Scotland	England
Public Sector				
(Forestry Statistics 2012)				
2011-2012 Timber Sales £ million		13.4	58.9	33.4
2011-2012 Harvesting & haulage costs £ million		9.5	22.3	12
Softwood removal - 000's tonnes		689	2566	1185
Price per tonne		£19.45	£22.95	£28.19
Harvesting and haulage per tonne		£13.79	£8.69	£10.13
(NB: this is calculated on tonnes sold but standing sales do not incur these costs- not able to find a breakdown of sales between them)				
Net earnings per tonne		£5.66	£14.26	£18.06
Standing Volumes 000 m3:-				
(National Forest Inventory Report 2012)				
	Public	18868	79559	26148
	Private	17720	132827	60621
	Public >20cm dbh	6117	40317	18784
	Private >20cm dbh	14688	92052	53133
Private sector softwood removal - 000's tonnes		501	3746	735
Public sector % of softwood removal		58%	41%	62%
Public sector % of standing volumes > 20cm dbh		29%	30%	26%
Woodland creation for 5 years to 2012 - 000's ha				
(Forestry Statistics 2012)				
	Public	0	3.7	0.1
	Private	1.6	20.7	12.4
	Total	1.6	24.4	12.5
FCW last trading year:-		£ 000's		
Timber sales (FC Statistics 2012)		13,400		
Book value of timber sold (Annual Report 2011-2012)		6,042		
Harvesting and haulage costs (FC Statistics 2012)		9,500		
Gross loss before overheads and interest charges		-2,142		
NB:- e-timber sales average prices 1 April 2012 to 31 March 2013	price £/m3	9.01	10.9	20.16
Average price from size class sold with greatest volume	0.5 to 0.599m3	7.95	14.04	15.99