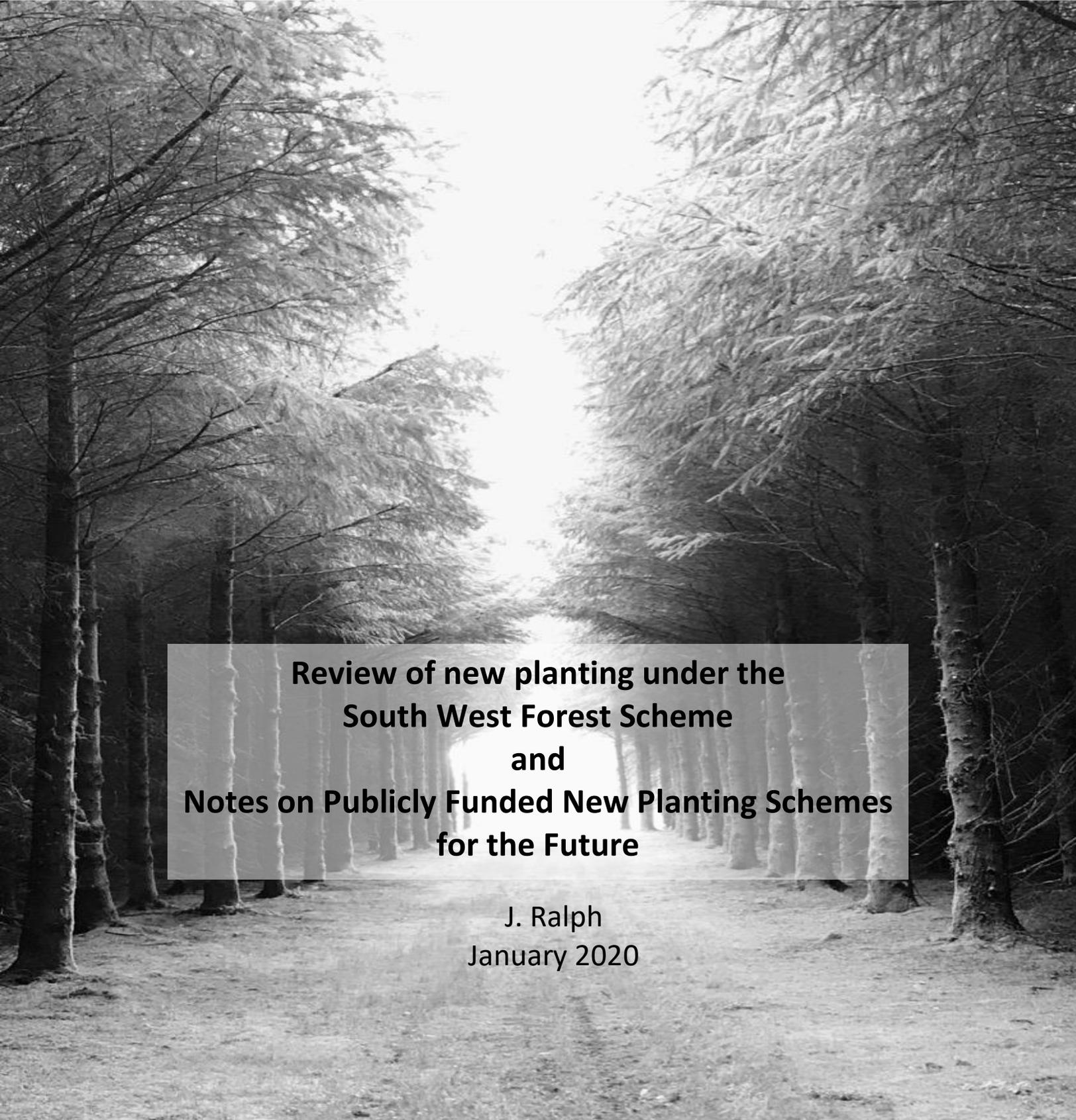




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**Review of new planting under the
South West Forest Scheme
and
Notes on Publicly Funded New Planting Schemes
for the Future**

J. Ralph
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1. INTRODUCTION

The South West Forest was a Community Forest based in a deeply rural area that undertook substantial new planting on rural farms in North Devon and Cornwall. The aim of the scheme was to support sustainable livelihoods in an area suffering from a declining farming economy¹:

- To facilitate integrated rural development and to influence, positively, structural changes occurring within the rural sectors;
- To increase and create new and complementary rural resources, including wood and wood products;
- To protect and enhance the environment;
- To recognise and encourage potential of the area's rural resources for recreation, access and tourism;
- To better enable rural communities to thrive through capacity building and the revitalisation of existing rural networks and the supporting of nascent ones;
- To develop as a model and facilitate elements being transferred to other situations and areas.

Between 1997 and 2005 the project used Woodland Grant Scheme and a supplementary Challenge Funding to undertake 1,118ha of conifer planting and 1,988ha of broadleaved planting, a total of 3,107ha². 256 grants were given and 512 advisory visits undertaken by the scheme's forestry experts.

The scheme offered the standard woodland planting grant plus a supplement of between £600-£1,000/ha based on the size of new planting and, significantly, offered access to advice and expertise. How this translated to the promotion of the scheme to landowners is anecdotal, however, evidence from this review points to the financial incentive being uppermost in owners' decisions to plant. In one case the decision was based on the grant offering over 100% of costs to the point of being set against the expected annual return from renting out grazing rights. In interviewing owners the main attractions of the scheme as sold to them were:

- A financial boost.
- Income for land in poor state or otherwise unusable as an agricultural asset.
- A potentially productive asset that could yield firewood, timber or tourism revenue.
- Increasing the biodiversity on the land (this was the most attractive proposition for small holders).

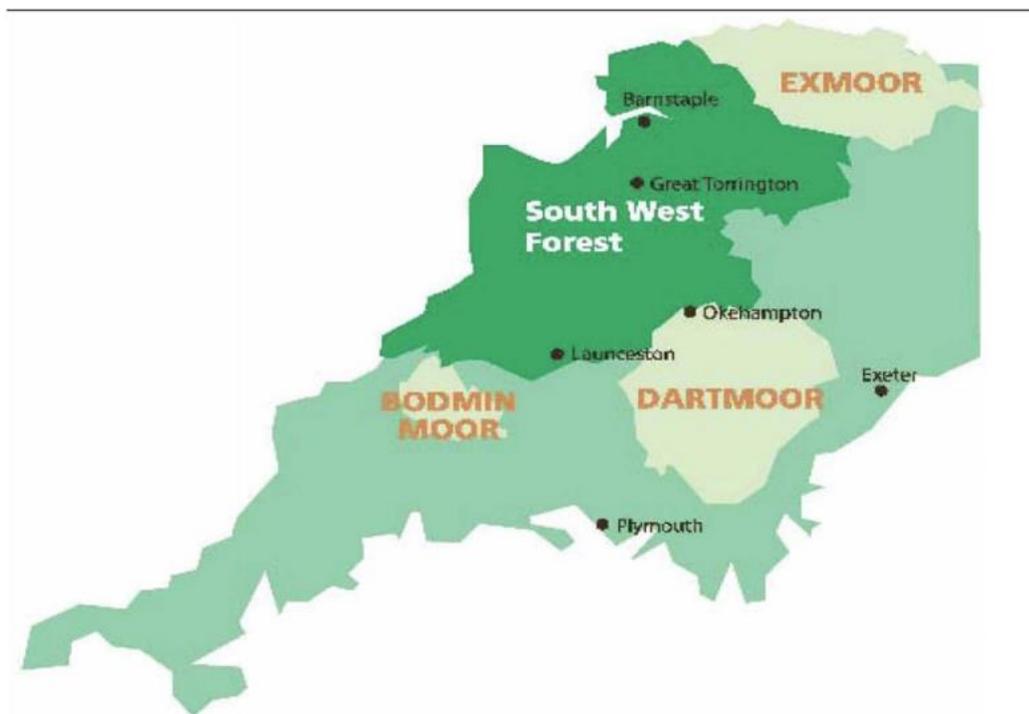
¹ Review of the SW Forest 2002

² Evaluation of SW Forest, PACEC 2006. A number of tables exist in the report with differing figures and the report only covers the period 2002-2005

The earliest planting was in 1997 making the woodlands just over 20 years old now and theoretically at or beyond first-thinning stage. Little was known of the state of these woodlands; the owner's current attitude towards them or the extent of maintenance work taken place.

New planting is becoming an increasingly important issue and the subject of national debate. For this to be successful as long-term woodland and fulfil the objectives of increased tree cover, carbon storage, biodiversity and marketable product it is vital that new planting schemes are successful beyond the initial few years.

Planting schemes undertaken by SW Forest, now at a crucial point in their development have been sampled to assess the condition and owner-attitudes in order to understand how current new planting schemes can be improved and to maximise their long-term chances of success.



Source: South West Forest Partnership, Delivery Plan (June 2005 to June 2008), with amendments.



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2. METHODOLOGY

The archives of the SW Forest were stored in a container at its old headquarters at Cookworthy Forest and only available as hard copy with a summary digital spreadsheet available. The archive was made available by kind permission of Devon County Council and the Forestry Commission.

The hard copy archive was cross referenced against the digital archive and a final list of 223 new planting projects were identified and contacted by mail through Devon County Council who were the official data holders. The initial contact asked for permission to view the woodlands planted under SW Forest and talk to the owner in return for brief general advice on the state of the woodland and any work that may need doing.

The 50 responses were grouped by type of planting and size of planting to ensure a good spread of sites were visited within the limited budget. These were mapped and site visits organised in geographic clusters. We were able to visit 15 sites and talk to a further 3 owners by telephone.

Owners were asked about their attitudes to the initial planting scheme and the current state of their woodlands. They were asked if they or the funder should or could have done anything differently and what their intentions were for their woodland. These interviews were generally carried out whilst visiting the woodland so that a brief visual condition survey could be carried out.

After completion of the survey all owners were re-contacted with any relevant information that may be of interest for the ongoing management of their woodland.

3. RESULTS

We expected a 5-10% return rate from the initial letter sent to all grant recipients but had 50 responses, 22% of the total. This encouraging number pointed to a general attitude of goodwill towards the scheme and an indication that the woodlands planted and their condition was of interest to many of the owners.

3.1 Woodland typology

Those who responded to enquiries held:

- 318ha of broadleaf woodland and 159ha of conifer.
- Woodlands were either broadleaf only, accounting for 23 of the 50 responses, or mixed with elements of conifer and broadleaf.
- The average size of broadleaf block was 6.5ha (just above the lower limit for the supplement) and average size of conifer block was 3.25ha, though usually mixed with areas of broadleaf to bring the total to above 5ha, the lower limit for the supplement.

These numbers can be summarised into a number of woodland types:

Woodland gardens – Those with sub 5ha who have tended their woodlands as extended gardens putting effort into ride/path management and cultivating a diverse mix of tree and shrub species.

Farm field edge broadleaf planting – Often 2-3 plots on a single farm unit taking otherwise poor or redundant land to plant mixed broadleaves. Owner attitudes to these field edge planting were primarily taking advantage of the grant offered with a secondary view to some firewood production.

Larger-scale plantings – Often taking up whole fields or groups of fields on farms and often a mix of broadleaf and conifer blocks. Attitude to planting was a mixture of grant-led and production-led decision making.

Species decisions were a mixture of joint agreement between landowner and agent and the owner leaving all decision making to the agent. The nature of the scheme allowed landowners to use third party agents, usually professional foresters, who would work with the owner to design the scheme and facilitate the grant submission. There appeared to be 4-5 key agents or businesses (Such as Silvanus Services) used in the scheme as third party advisors and it became quite clear that woodlands could be attributed to agents based on the style of planting.

The decision to plant ash in such high volume was accepted as a good-faith decision that had gone wrong through no fault of the agents however some planting decisions were questioned by the owners. The drive to plant mixed broadleaves was highlighted by one

owner who had very poor condition woodland bordered by a successful young conifer stand planted by a neighbouring owner.

3.2 Silvicultural condition

In very general terms the silvicultural condition of the woodlands was poor. Whilst woodland gardens were well tended and some owners had made silvicultural interventions the overall state of the woodlands suffered in a number of areas:

- There was a large volume of ash in almost all woodlands and 90% of ash showed signs of ash dieback (see below for further details on ash).
- Very little vermin control was seen and oak especially had suffered. No good quality oak was seen, almost all being affected and stunted from browsing damage.
- Very little thinning had occurred in either broadleaf or conifer crops. Conifer stands in particular were generally under-thinned or not thinned to the point of putting the viability of the stand in jeopardy.

Having said this, in some areas silvicultural success was seen:

- Alder has succeeded well where planted, sometimes overtopping conifer crops. In only one case was it stated that species selection was based on species growing well in neighbouring woodland. In this case as there was little ash or oak in adjacent mature woodland, the dominant alder was planted and has, indeed, done well.
- Where owners had thinned and pruned (both conifer and broadleaf) silvicultural condition was very good.
- Had ash not been infected it would have been the big success story of the SW Forest planting schemes, it had grown well and was reaching firewood size.
- Increase in biodiversity was mentioned by almost all owners and for two owners had allowed them to access new revenue streams from tourism. Both biodiversity and tourism/leisure were key objectives of the SW Forest and these woodlands can be seen as successes of the scheme. In one case the owner was able to market his caravan site based on the opportunities for bird watching the new woodland presented and in another the owner used his woodland for group activities such as off-road driving or paintballing.
- All but one owner was generally content with the decision to plant and used the resulting woodland for their own enjoyment. Whilst this personal pleasure was not a key objective of the scheme it has left owners with an asset they generally get personal enjoyment out of.

3.3 Ash

Ash was an obvious species to plant at the turn of the century. Relatively fast growing with a guaranteed firewood market. As such it provided a substantial proportion of planting stock, sometimes up to 80% of planting schemes.

Other than occasional healthy trees almost all ash had succumbed or had signs of Chalara. Owners either weren't aware of the state of the ash or were aware and didn't know what to do. Some owners had tried taking measures such as trial coppicing whilst others had done nothing at this stage.

For some owners the death and removal of small coupes or individual trees will have little bearing on their woodland whilst for others they are looking at 80% loss of their entire woodland.

There was an almost universal lack of knowledge of what could be done in their woodlands and as a result every owner visited was sent an email with a number of links to advice notes on how to manage Chalara infected stands.

3.4 Owner attitudes

Owners were asked about their attitudes to the initial planting and to the current condition of the woodland, their perceived value of the woodland and their future intentions.

Attitudes to the initial planting scheme:

- The attractiveness of the grant was almost always the primary motivation. This was in a time post foot and mouth where alternative uses for poor land and the possibility of financial aid were of huge importance.
- Other motivations included increasing the biodiversity on the farm and the possibility of firewood sales. The idea of growing sawlog quality trees was important for a small minority of owners.
- Owners were generally pleased with the advice given, most knowing nothing about woodland, but were less pleased with how the woodland has matured.
- A number of owners now question the species choices given to them. This is not generally around ash, which is accepted as a post-planting problem, but around the push to plant mixed broadleaves when, in hindsight, an element of conifer may have been an attractive choice to give back some income.

3.5 Current condition

- With most woodlands at a stage of needing thinning most owners were either unaware or aware but with no idea what to do about it. Most were surprised that the state of their woodland may mean thinning would be, at best, a break-even operation. The

scheme was sold with an objective of boosting the rural economy and an economic opportunity for owners. Advice on follow-up work to the woodlands post-planting was given but as the scheme ceased access to expertise also ceased. In many cases extensive deer and squirrel damage have been responsible for the poor state of woodland and either the cost was too high or knowledge not in place to deal with this. Many owners did not think annual management would be needed post grant and were happy to take the initial financial incentive and leave their woodlands to grow.

- Owners of unthinned conifer stands were unaware that not thinning may put the woodland in jeopardy.
- Those that had thinned (3 owners), were more enthused about the potential of their woodland and keen to undertake more thinning.
- For those owners for whom the main objective was amenity the silvicultural condition was of little importance. Low growth rates and vermin attack only stunted the growth of the woodland rather than impact on the visual or biodiversity value.
- Two owners had come into conflict with neighbours as a result of the planting. One as a result of needing to upgrade tracks to aid extraction, the other because the growth of the woodland was blocking neighbours panoramic views.

3.6 Perceived value

- Almost every owner “enjoyed” their woodland and found value in having it on their land. They enjoyed making use of the woodland and visited regularly, often daily.
- Two owners had bought the land since the planting scheme and both had seen the addition of young woodland as an asset in the purchase rather than a liability.
- Only one owner was in the process of selling his farm and saw the woodland as a liability as potential buyers were faced with a large volume of dying ash whilst also wanting grazing land.
- For three owners the value of the woodland was now found in its potential to attract visitors. For two of these the woodland had become an attraction for tourists staying on the farm, for the other it was in the potential to offer a diversified range of leisure activities in the woodland.

4. OBSERVATIONS

In a normal survey of this type one can expect maybe 10% of those sent information to respond. That 22% of owners responded points to an interest in the owner's woodland and a keenness to re-engage with those that may be able to help with advice. Every owner spoken to had praise for the SWF scheme and a wish that there could be some follow-on service providing advice or new planting grants.

Though owners are almost always happy to have their woodland and make use of their woodland, from a professional point of view the woodlands are often in poor condition. The scheme had clear objectives around growing the rural economy and providing employment opportunities however the current state of the woodland means this is unlikely to happen in any significant way.

Problems were generally not with the initial planting design but with post planting maintenance, especially vermin control, stocking density, beating up and thinning. It was felt by the authors that the attractiveness of the grant led some owners to be less involved in the initial design as the state of the woodland was of less importance than the initial income, as long as there was some woodland resulting from it.

At this stage of the woodlands growth most owners were aware to some degree that work needed doing but didn't have the knowledge to undertake it or the knowledge of where to turn for help. Even from inside the industry it is difficult to know who may be able to help owners with management planning, thinning or harvesting in small woodlands as it tends to be the domain of very local contractors or firewood merchants working in the grey economy. Possibly, uniquely in the area, one very experienced and expert woodland owner who also runs a small harvesting and timber sales business is able to take on this type of work.

5. RECOMMENDATIONS

Recommendations have been divided into area specific actions and broader policy suggestions.

AREA SPECIFIC

1. Almost every owner expressed an interest and a need for further advice. The advice needed was both for general management at this crucial stage where most woodlands are at first thinning stage and advice on managing ash.
2. A mechanism needs to be put in place to offer cost-effective thinning of woodlands generally and felling of ash. One owner, a forestry expert who runs a small harvesting operation believes this can be accomplished, in many cases, with a small surplus to the owners and is willing to discuss how this can be made to happen.
3. The general silvicultural conditions from the brief visual surveys is seen as poor however no quantifiable data was collected on growth rates or volumes (equating to stored carbon) against what could be expected. Sampling and inventory on a selection of sites could be undertaken to compare these woodlands against well managed woodlands of a similar age.
4. Owners feel largely abandoned and without the right knowledge or contacts to progress the management of their woodlands.
5. Left without a focussed project it is unlikely any of the points above will be actioned. We would recommend that support is given to a project covering the SW Forest area that brings together advice that landowners can access, a knowledge point and a means of accessing contractors who can undertake thinning and replanting work where needed.
6. This project should make available detailed advice on dealing with ash and could be extended across Devon and Cornwall.

BROADER RECOMMENDATIONS

1. There should be a review of how woodland establishment is subsidised under the new ELMs scheme. In particular how, post-planting, woodland owners are encouraged to continue good management which favours growth (and carbon storage), biodiversity and long-term resilience. One suggestion has been that initial grant rates are lower with money held back to be offered to fill gaps in costs at first

-
- thinning. Conversely most owners expressed the opinion that any new planting they undertook would need to be at a 100% grant rate.
2. Farm owners have little exposure to growing trees and often little understanding of the need for intervention post establishment. This has led to many woodlands in the SWF to come into poor condition and puts some at risk of failure. If farm woodland planting is to become an important element of new forest planting this ongoing relationship with owners needs to be put in place with a commitment to be in place until at least first thinnings have been completed.
 3. SWF has been reviewed in isolation to other similar schemes. It would be a useful exercise to undertake a comparative review of the National Forest Scheme which started at similar times but has retained ongoing advice and owner interaction through the National Forest organisation.
 4. Species diversity has to be at the heart of new planting schemes to avoid the current situation with ash. It is felt that the owners were pushed towards mixed broadleaf planting in many cases and were happy to proceed largely based on the attractiveness of the grant. In future planting a more thorough description of the pros & cons of various planting types; expected ongoing costs and expected returns could be given to the owner to make a decision more informed and more inclusive of the owners' views.
 5. It is the opinion of the author that the sub 5ha planting schemes in this survey and planting schemes where amenity is the primary objective add little to the national effort to store carbon or add to the growing stock of wood products. Their size makes management difficult and they lack the scale needed to undertake thinnings at cost. The only proviso to this is in small coupes of specialist conifer or broadleaf where the objective is to produce quality timber or in agroforestry systems where the tree element provides multiple benefits or planting schemes that run contiguously across neighbouring land to create scale.

Appendices have been removed for data protection reasons.