

ANIMAL AND PLANT HEALTH AGENCY

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The influence of Grey Squirrel threat to woodland management.

This presentation is something of an antidote to science, although the impressive progress outlined by this morning's speakers needs no antidote.

Despite the original request to outline a winning formula for tree planting, I will digress to start with and hope to conclude with some ideas. I like to subtitle my words and in this case I would suggest:-

What could have been

What has been

And what still could be if we can defeat the squirrel threat.

I have been managing lowland woodland in England for over forty years, and have to admit that this has not included interface with Red Squirrel populations.

I have a difficulty in showing pictures on the wall,..you all know what a squirrel looks like and you know what squirrel damage looks like, so you will simply have to listen.

I started work in forestry at the age of 17 on an estate on the edge of the Chilterns, partly on the chalk but also on some heavier soils to the east. We had coppice hornbeam for firewood, but the main mature species objective was beech for the furniture market. This was grown in mixture with larch, which had many uses as an early return from thinnings. I don't recall any squirrel damage, but the agents and ownership were happy for the estate woodman and I to spend best part of a day per week in pursuit of squirrels by shooting. Sobering thought that possibly 15 % of the weekly wage bill was going on protecting the crops from squirrel damage. We also under planted much Western Hemlock rather than clearfell. Some 55 years on these should be looking good if they haven't already been harvested.

In those days the common habit was to plant broadleaves in a conifer nurse crop mixture. The broadleaves were drawn up by the side shade, and the conifer provided an early return. Deer were not a problem, but rabbits were and it was usual to enclose new planting in a rabbit proof

fence. The plants used were often two year old transplants, and first year protection from weeds around each plant was by paraquat- based herbicide.

But to control the inter- row vegetation, it was common to cut this by hand, or by pedestrian controlled mower. (a five feet by seven feet spacing did allow a tractor to pass down the rows) Later invading woody growth might well be controlled by basal bark spraying with 2-4-5-T in a diesel mixture!!

So what do these plantations look like now? The conifer is yielding thinnings, but of no greater worth than chip wood, which may cost more to harvest than it is worth, and the often oak groups are probably squirrel damaged. The economic expectation of these crops is falling short.

Then along came the Broadleaves Policy. Cynics commented on the tax payer's money being used to encourage the planting of "squirrel fodder".

But it was economically attractive to landowners, because at 3M by 3M spacing it was possible to plant the areas for the amount of the first instalment of grant. Good provenance plants, a little pruning perhaps, and good trees could be grown, and best of all, the first intervention thinning at say 20 to 25 years can yield a positive cash flow to the firewood market. The attractions of the scheme resulted in a good level of new woodland creation.

But with no cash outlay there was no financial risk, and owners were inclined to take a chance rather than spend money on protection. Oak and birch were routinely squirrel damaged. Cherry were not, but mostly did not thrive on field soils. The ash were the fail safe species as it is largely ignored by squirrels, but now face demise with Chalara. The saving factor is that thinnings from these plantations will at least feed the firewood market, but hopes of high value hardwood sawlogs have gone.

The evolution of grant support has resulted in a hiatus in support for planting followed by new offers which are too complicated, too expensive to set up, and too risky to be interesting to most owners. And this has led to the collapse of any useful scale of new woodland creation.

But there is a feeling that we are entering an age where owners may well just accept that they will pay for planting on an affordable scale, and in so doing they can make their own decisions over what to plant. Most conifer species get past the squirrels, and in future good saw logs will always sell. Establishment is tricky in that deer can now be a problem in the modern age, and conifers dislike plastic protection taller than 60 cms, - inadequate to protect against deer.

So perhaps a way forward is emerging which minimises the risks. There are simple types of deer fencing coming on the market which are reasonably effective. From a cost angle the old principles still apply. An area in excess of two hectares and of a sensible shape keeps the cost per hectare enclosed down to an acceptable level.

As for the planting mixture, if soils drainage and exposure permit, why not adopt the old conifer/oak mix? Go for spruce if possible as the nurse, as at present this is not troubled by disease and is easy to sell. Set the design to enable mechanical harvesting, for example incorporating pure conifer rows at intervals which will come out as line thinning. Thin the spruce to the chip market first and then as saw logs later, leaving the oak to go on to high value at say, 140 years of age. What can possibly go wrong?..well quite a lot in that time span, including perhaps disease we don't even know about yet. And already oak are vulnerable to such conditions as Acute Oak Decline. So a diversity of broadleaf species in the mixture will provide resilience. Not ash, obviously, but sycamore? beech?, or birch?, but only if we can reduce the squirrel problem.

The work of the scientists which was described this morning may well mean this battle is about to get a whole lot easier.

Thank you..!