

Spruce and Sustainability

By Frank J. Convery, Chairperson, Comhar Sustainable Development Council

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In his latest article, Professor Frank J. Convery, Chairperson of Comhar Sustainable Development Council, argues that – at a time when farming is struggling and public funds are in short supply – we have to take another look at the patchwork of forestry and farm policies that have developed over recent years and assess if we can maximise the overall contribution of forestry to benefit us all. Moreover, Professor Convery argues that multi-aged strands of coniferous trees, including Sitka, seem to be the only way to halt the march of the grey squirrel and the extinction of the native red...

Two convictions in South County Dublin are guaranteed to evoke pity, bemusement, and disdain in equal measure: the first is an enthusiasm for – or at least a tolerance of – Sitka Spruce; the second is country music. And I am guilty of both.

Sitka Spruce has been the main species planted as a commercial forest crop in Ireland. It is native to the moist West Coast of North America, and grows with great rapidity in Ireland. In the early years, it was planted in straight lines, with little reference to contour, hydrology, native vegetation or landscape. More recently, planting has been adapted to recognise these dimensions.

My enthusiasm is a product of many influences: in training, every student in every field osmoses key values and reflexes – a sort of professional brain-washing; after five years in University College Dublin's forestry programme, the 'Sitka is your only man' message was well absorbed. The context was influential.

Except for individual hedgerows, trees and the few remaining pockets of the great estate forests established in the 18th and 19th centuries, Ireland in the mid-20th century was a forest-free zone. This status was associated with clearances of the native forests to eliminate the last hiding place of the old Irish order; commercial exploitation to supply masts to the British navy and staves for barrels, and clearance of land for cultivation, the latter becoming predominant as the population grew exponentially in the first half of the 19th century.

Like restoring the Irish language, restoring this lost patrimony became a patriotic duty, and Sitka Spruce was the 'miracle tree' that made it possible. It made it possible because – with a modicum of phosphate fertiliser – it would grow on poor soil.

Restoring the oak and pine forests of old would require better land; this had been distributed to former tenants under the Land Acts, and they were not likely to compromise their relatively recent status as a land-owning farming class to embrace forestry.

In order to guarantee that the only land that would be used for trees was land that had no value for farming, a very low-ceiling land-purchase price – which for decades was set at €25 per hectare – was established. Also, it takes time to grow trees to maturity, and the faster they grow – other things being equal – the better the return on investment. This was relevant for the Department of Finance, which provided the money to make the investment, and demanded a reasonable rate of return for the taxpayer.

The afforestation mission – and it was a mission – was defined in terms of area; a planting target of 25,000 acres (about 10,000 hectares) a year was established, and the extent to which the target was met was the key measure of performance.

Another source of my enthusiasm for the Sitka were visits to Jane and the late Robert Tottenham near Inagh, County Clare, where they pioneered – with advice and support from the late Professor Tom Clear of UCD – a new form of Sitka forestry: close planting, early thinning and very short rotations, all on the intractable grey ‘daub’ soil of the drumlins.

At a time when State and Church dominated, and to be different was to be dangerous, they challenged two orthodoxies – only the State could ‘do’ forestry, and the official silvi-culture that dictated the ‘right’ spacing and rotation. And they were risk-takers, investing their entire emotional, financial and land capital in support of their view.

My empathy with Sitka Spruce was further enriched by a visit to the Olympic National Park in Washington State, where magisterial Sitka of 2.5 metres diameter over 60 metres in height showed what they could be if left alone for hundreds of years

Forestry in Ireland has evolved in the meantime, moving back down the hill onto better land, which allows a wider range of species. The need to decarbonise our economy opens up opportunities for the supply and use of carbon-neutral wood for heat, and research supported by COFORD (the National Council for Forest Research and Development) has shown that native broadleaves can compete commercially under some circumstances with Sitka Spruce.

The antipathy to coniferous species in general, and Sitka Spruce in particular, has been muted somewhat in wildlife circles by the findings that multi-aged strands of coniferous trees, including Sitka – together with some hazel – seem to be the only way to halt the march of the introduced grey squirrel and the extinction of the native red, a paradoxical replay of the role the original woodland played in allowing the native Irish to hold on.

We now know so much more than when we started about the realities of commercial forestry, the fitness of various species for different sites, and the role that forests of different types can play as sources of wood for construction, fuel, habitat, recreation, and water storage and supply.

With farming struggling and public funds in short supply, it seems timely to look again at the patchwork of forest and farm policies that have grown to meet different needs at different times, and see if we can maximise the overall contribution to the benefit of us all. And let’s allow some of our Sitka to live on to their natural end, and show us what they can be untrammelled by man.