**SIF Policy on the Diversification of Species**

***Issue:***
Most of Ireland’s mature forests are the result of afforestation during the 1950s and 1960s. The lands made available for forestry at the time were the more impoverished upland sites and this is reflected in the narrow range of species currently visible s mature forestry in Ireland. Since the mid 1990s and concurrent with both the rise in private afforestation and the development of different grant and premia categories, the range of species planted in Ireland has broadened to include a wider range of broadleaves and conifers. This has become possible because of the increased availability of better site types that offer the possibility of planting a wider variety of conifers and broadleaved species. It also reflects public demand for a greater diversity of tree species in the landscape.

***The Society of Irish Foresters’ Position:***

* A fundamental job of a professional forester is to plant the right species in the right place. This requirement to match species to site is dependent on an in-depth knowledge of the different site types prevalent in Ireland and available species.
* Sitka spruce is the main species of Irish forestry and is set to remain so for the foreseeable future. It has proven itself to be the most productive coniferous species under Irish conditions. It is an easy and cost effective species to establish, versatile in use and tolerates all but the most difficult site conditions.
* Plantation forestry will develop its own ecological characteristics over a long period. The diversity of any plantation is not measured at any one instant in time or by the species planted. Diversity, in a plantation forest, is cyclical and related to the ebb and flow of interactions with other flora and fauna as the plantation matures.
* Current market conditions for timber in Ireland favour coniferous afforestation as an investment. Bearing in mind that most planting is now carried out by private individuals, primarily farmers, it is understandable that they should want to plant those species that will optimise their financial return. While facilitating this, foresters should actively encourage species diversity in order to foster and develop markets for different timber species.
* The Irish forest industry is an important rural employer. It is estimated that over 16,000 people are now employed directly or indirectly in the industry. Most of these jobs are primarily associated with the main coniferous species and any change in national policy with regard to species diversity should take cognisance of this fact.
* Where soil and site are suitable, broadleaved species should be favoured, particularly high value species such as ash and oak. Diversification can also be fostered through the use of improved stock of native species such as birch and alder on suitable sites. With better quality sites becoming available there is a need to increase the range of conifers planted, including Scots pine, Norway spruce, Douglas fir, western red cedar and larch.
* Unduly heavy reliance on a single species is, from a national viewpoint, unwise. Diversification of species is desirable in order to reduce the risk of serious pest attack or disease outbreak and to broaden the base of market opportunity.
* The curricula of forestry training institutions should reflect the increasing requirement for education and training in broadleaved silviculture.
* A well financed research programme is needed to study the potential of minor species, maintenance of genetic diversity, the effect of global warming, the potential for CO2 sequestration, the non-timber benefits of different species and the optimisation of timber quality through silvicultural practice.

***Issue:*** Forestry is a major land use and economic activity in rural areas. Current and recent government policy has changed forestry from an activity practised predominantly by the state to one that is attractive to private investors, particularly farmers. There are many factors that make an investment in forestry quite different to other forms of investment. The most obvious of these factors is that the return on investment is realised when the timber crop is sold at the end of the forestry rotation. An investment in forestry is analysed by considering the various costs and revenues and the times at which they occur throughout a forestry rotation. The values attributed to different cost and revenue items occurring in the future must be predicted and used in the analysis. Investment in forestry is currently heavily subsidised through the provision of grants, premia and a favourable tax regime.

***The Society of Irish Foresters’ Position:***

* The Society of Irish Foresters recommends Discounted cash flow (DCF) as the most acceptable technique for the valuation of forestry investments. This is particularly suitable in Ireland where the majority of investment concerns the establishment of new plantations. DCF uses a discount rate to equalise or compare future costs and revenues in terms of today’s costs and prices. Typically, a discount rate of between 3% and 5% is used. The DCF calculation relies on the inclusion of the market value of the land as a cost at the start of the rotation. This applies to farmers who own the land already. Despite the fact that there may be no financial transaction involved, farmers incur an opportunity cost when changing their land use to forestry.
* Investment in Forestry is more attractive for farmers who get a higher annual premium for a 20 year period as opposed to non-farmers who receive a lower premium for 15 years.
* Rates of return on investment in forestry are sensitive to the many costs and revenues and the timing of these throughout the forest rotation. In the current situation where afforestation and other grants are available, the most significant cost in the analysis is the price of land and the achievable rate of return is very sensitive to changes in this. Because this cost is incurred at the start of the rotation, it is possible to accurately account for it in the analysis.
* The timber prices used in calculating revenues are difficult to predict as these sales occur late in the rotation. Instead, it is normal practice to use historic timber prices averaged over a 10-15 year period, adjusted for inflation using the Wholesale Timber Price Index.
* Investment in forestry is generally regarded as having low associated risk. However, there are natural risks associated with forestry such as wind, frost disease and fire. There are also macroeconomic risks such as changes to forestry policy at national or European level, a fall in demand for timber or the addition of forest management constraints. In any investment analysis it is important to state clearly the risks considered and where possible to account for them.
* The optimal duration of an investment in forestry, generally called a financial rotation, may very depending on specific objectives and the management considerations involved.
* Rates of return on investment in forestry are sensitive to many parameters, particularly land and timber prices. However, most analyses show that rates of return of between 4% and 7% are achievable.
* The analysis of a forestry investment is a complex task which requires a thorough understanding of both forest management and the mechanism used in the analysis. Forestry professionals are trained and practised in both of these areas. Anyone considering an investment in forestry is advised by the Society of Irish Foresters to consult with a professional forester.