## EDITORIAL

## **Regenerating forests**

Whoever coined the phrase continuous cover must have had a rush of blood to the head, for there are very few silvicultural systems that involve keeping the forest floor under the cover of a full canopy during regeneration. In the past few years the phrase has gradually seeded itself into forestry usage, even state forestry bodies have not been immune! The fact is that light demanding species such as oak will simply not develop under a canopy; germinate they will but they need full light to grow on. Why not call it simply natural regeneration, or, where it is practised, underplanting – far more accurate terms.

Leaving these considerations aside natural regeneration has been practised successfully for centuries in Europe and there is now increasing interest in it in Ireland. This has been spurred on by forest certification, and a growing interest among practitioners. They have seen spontaneous regeneration following clearfelling of species such as Sitka spruce and lodgepole pine, and have asked the obvious question: why go to the cost of planting where there is already a new forest crop in the making?

As the paper by O'Leary and his collaborators in this issue shows, spontaneous natural regeneration, often involving native species such as birch, is now occurring on a reasonably widespread basis after clearfelling of spruce and pine crops. While experience of predicting and managing natural regeneration is limited here – field research began but five years ago – some progress has been made, its occurrence after clearfelling can at least be partially predicted and silvicultural systems to encourage its development are now under investigation. Like all innovative processes it will take time to get it right and for it to gain acceptance.

There is little doubt that planting after clearfelling will continue to be the dominant form of regeneration on most sites over the coming decade. For the present it is far more reliable and offers the opportunity to either change species entirely or move to faster growing forests with improved wood quality. Considerable investment has been made in tree improvement over the past decades, especially in Sitka spruce, and it would make little sense not to avail of these improvements when the opportunity arises in reforestation. Improved material will make a big difference in the rate of return to the grower and will have further beneficial downstream effects in wood processing and utilisation.

Once deployed, improved genetic material can itself be perpetuated and further improved through natural regeneration – there is a great deal of evidence of adaptation and improved performance in second and subsequent generations of planted tree species. This is only to be expected where thinning to favour faster growing, better quality stems takes place and is followed by natural regeneration. The stems that remain at the final seeding felling will pass on these superior traits to the next generation. Even the process of natural regeneration itself favours faster growing, healthier seedlings. Submissions to Irish Forestry are welcomed and will be considered for publication. The attention of contributors is drawn to "Guidelines for Submissions".

Submissions to be addressed to:

The Editor, Irish Forestry, The Society of Irish Foresters, Enterprise Centre, Ballintogher, Co. Sligo. sif@eircom.net

*Editor* Eugene Hendrick

Associate Editor Conor O'Reilly

Business Editor Sean Lenihan

ISSN 0021-1192 Volume 58 Nos. 1 & 2, 2001

Designed, laid out and printed by: Elo Press Ltd., Dublin 8, Ireland.