EDITORIAL

Turning a new leaf on broadleaves

This issue contains a large number of papers covering a wide range of topics. In particular, broadleaf species are the main focus of several papers. In a paper commissioned by the Journal, for which we are indebted, Dr John Cross summarises the very large amount of information collected in the National Survey of Native Woodlands in Ireland. Broadleaf species feature heavily in these woodlands. The results highlight the fragmented nature of the resource, but the diversity present in terms of woodland types and plant species-richness is immense. Properly managed, they can also be a valuable and renewable source of raw material.

Broadleaf planting has expanded greatly in Ireland in recent years, with the potential to provide a similarly diverse source of raw materials and services as the native woodlands. However, there will undoubtedly be a much greater focus on timber production in these forests. According to Hawe and Short (this issue), broadleaf planting accounted for 16% of all new planting in 1998 and had more than doubled to 38% by 2010. Some concern has been expressed about the quality of the resulting stands. The poor quality of the stands is the result of a variety of factors, including poor species/provenance choice, inappropriate site preparation, poor management and other factors. Broadleaves are often established on open field sites, where exposure and other site factors may militate against the production of good quality broadleaves. Most broadleaf species do not naturally regenerate well in the open, so it is not surprising that they "struggle" following planting on open field sites. Although we have considerable experience in the growing of conifers, we are much less experienced in growing broadleaves. It is hoped that the new book on growing broadleaves in Ireland, entitled "Broadleaf Forestry in Ireland", to be published by COFORD late this year or early next year, will provide a comprehensive insight into the requirements necessary for the production of a valuable high quality broadleaf resource in Ireland. In addition, the results that are likely to emanate from the COFORD-funded B-SilvRD project (see Short and Hawe, this issue) will also help inform foresters and others, leading to improvements in broadleaf silviculture in Ireland. Nevertheless, insufficient attention has been given to a key driver in specieschoice decisions - the grant and premium system.

The generally more attractive government grants and premiums offered for establishing broadleaves compared with conifers have contributed greatly to the shift in favour of broadleaves. Unfortunately, there is considerable anecdotal evidence that farmers and others who are establishing new forests have focussed too much on maximising grant and premium returns, leading to more inappropriate species selection than might otherwise occur. The grants and premiums need to be restructured to better reward good silvicultural practice, with the full amount being paid on merit only. A higher grant amount should be paid for the use of genetically improved material. Unfortunately, some of the "improved" material available for planting in the Irish market is of dubious quality, since much of this material has been developed for use in

other countries and therefore, it is unlikely that the expected returns will be delivered under Irish conditions. For example, some of the improved Sitka spruce being sold in the Irish market is of QCI origin and is unlikely to perform any better than unimproved Washington origin material. The additional payments should be provided only for the use of improved material that has been approved by the Forest Service. The premium for broadleaves could be replaced by a lower basic premium, with additional amounts being paid when quality targets are met. This would require more inspections of broadleaf crops, perhaps at four-year intervals. The Forest Service may not have the manpower to carry out these inspections, so Forest-Service-approved assessors might be required to do this work. The need for other measures, such as the Forest Service Woodland Improvement Scheme and Reconstitution of Woodlands Scheme, might be greatly reduced if a scheme of this kind is implemented. If the forest owner is more acutely aware at the time of planting that he/she risks losing some of the premium if his/her stand does not perform well, better care may be taken during the establishment phase. Of course there is a risk that changes to the grant and premium scheme of this type might encourage the planting of more conifers in preference to broadleaves. However, this may be a preferable outcome if inappropriate species selections become less common and the quality of the broadleaved timber resource improves and becomes more consistent.

Another man who clearly aimed to improve silviculture in Ireland was Otto Reinhard. David O'Donoghue, in his article in Forest Perspectives, provides an absorbing account of pre-WWII life in Ireland as well as a fascinating picture of the machinations within the Forest Service. Contributions from Niall OCarroll and Donal Magner, with further extractives from the archives and recollections from several people who worked in forestry at the time, greatly augment this account.

The theme of broadleaves, and their place in the popular subconscious, is continued in the Trees, Woods and Literature and book review sections. Augustine Henry ("In the footsteps Augustine Henry") was a man who left a definite mark on Irish Forestry and was the first professor of forestry at UCD. With considerable foresight, Henry appears to have concluded that European methods of silviculture were sub-optimal for Irish conditions.

There are so many articles in this issue that it is impractical to comment on all papers, but it nonetheless demonstrates that scientific knowledge in forestry is expanding rapidly in Ireland. This bodes well for the development of sustainable forestry practices in Ireland, underpinned by solid scientific information.