

General Volume Table for *Pinus contorta* in Ireland

Department of Lands, Forestry Division

by P. M. Joyce

THE author accepted F. C. Hummel's assumption that "the regression of volume on basal area can be adequately approximated by a straight line within each height class" and prepared this table on the basis of this relationship of volume to basal area, the latter being the sectional area at breast height. This method of volume estimation, known as the Volume-Basal Area Line method, was first used by Gehrhardt and Kopecky for determining sample plot volume and is now widely used in Europe for permanent sample plot investigations. F. C. Hummel in preparing a series of volume tables for the British Forestry Commission was the first to use the Volume—Basal Area Line method as the basis for volume table preparation.

Mr. Joyce's decision to use the same method seems a wise choice, especially in view of S. H. Spurr's conclusion, after reviewing all the different methods in his book "Forest Inventory", that Hummel's method was the best when working with more than 300 trees (2,081 trees were used in the preparation of the *Pinus contorta* table).

To those of us, who have been using the British General Volume Tables for volume estimation of timber, the inclusion by the author in a separate column of the basal areas—an added feature on the British tables—will be of great practical help and is, in itself, in a small way indicative of the awareness, on the part of author, of the requirements of a volume table for use by the timber estimator.

The Publication by the Department of Lands (Forestry Division) of this volume table is an event in Irish Forestry and is deserving of the gratitude of all forest personnel.

It is indeed fitting that the first volume table for this species, published in Europe, should come from the Irish Forest Service, who are much to the fore in the investigation of the suitability of this tree for the poorest forest soils.

The author emphasises that the table is for use with the coastal form, now regarded as a better prospect than the inland form, for afforestation here.

The arrival of this, the first Irish volume table, is a further sign of our growing forest industry with the coming on the market in recent years of the ever increasing amounts of Irish timber. The accurate estimation of wood-lots is of paramount importance to an organised timber trade and the provision of volume tables, probably the most accurate practical method of estimating standing timber volume, is a boon to the timber estimator.

The publication of this table is indicative of the Irish Forest Service's recognition of the rôle of the volume table in Forest Utilisation and we can therefore hopefully regard the *Pinus contorta* table as the first of a series of general volume tables, with possibly a subsequent series of regional tables—but this latter may be hoping for too much.

S.C.
