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Review by THOMAS THOMSON

A FOREST garden is an experimental area in which different species of forest trees are grown under silvicultural conditions in order to test their behaviour. This bulletin gives a description of five such forest gardens in different parts of England and Wales. The gardens in question are situated in Cockle Park, Northumberland; at Cirencester; in the Forest of Dean; in Alice Holt Woods, Hants; and at Ceiriog, Denbighshire.

The first part of the bulletin contains a description of the locality of each forest garden and a detailed description of the plots. The figures given for height and diameter growth and the comments made on the form, health, and appearance of the species, and their behaviour in pure crops and in the various mixtures, will form a useful guide to the selection and treatment of species for sites with climatic and topographical conditions similar to those of the gardens. One of the main functions of forest gardens is to test out, under similar conditions of soil, climate, and exposure, the merits of different species, and methods of treatment. At the time when these particular areas were planted, this was probably the main object of those responsible for founding them. Uncommon species and mixtures were introduced experimentally on a small scale as well as the already well tried.

The second part of the bulletin discusses the rates of growth of the species in each forest garden. The course of height growth of each species in the various plots is worked out from stem analyses and the records of past measurements. The figures thus obtained together with the climatic and topographical data are used in the last part of the bulletin as a basis for the discussion of the rates of growth of each species in relation to the factors of the locality. In this connexion it is pointed out that the distribution of the gardens in England is irregular, in that three out of five are in the west and south-west whilst of the others one is in the south and the other in the extreme north-east. None of the areas is in a district of high rainfall. As regards elevation four of the gardens are situated below the 500 feet level, whilst the Ceiriog area lies between 1,000 and 1,250 feet and is between 600 and 700 feet above the level of the valley below. It is moreover much more fully exposed than the other areas. In view of the fact that most of the species employed in the gardens are conifers, it is perhaps unfortunate that, with the exception of Ceiriog, none of the areas is on a typical site for conifers.

These circumstances limit the scope for generalization from the results, but nevertheless some very interesting comparisons are made and deductions drawn as to the effect of the site factors on the growth of different species. Among the points noted are the effect of exposure on the height growth of European larch, the maintenance of rapid height growth by the Japanese larch at the high elevation of the Ceiriog area on light loam and its comparative failure on heavy soils, and the fact that none of the gardens provides conditions for the best growth of Douglas fir, the more sheltered areas having too heavy soils, and the elevation and exposure of the Ceiriog area outweighing the advantage of its light loamy soil.

The bulletin contains a number of height-growth curves and photographs of interesting plots, and forms a valuable record of the condition of the gardens when they have just entered upon the thinning stage. With the exception of Cockle Park, which was planted in 1898 and 1899, none of the plots are more than 27 years old at the present time, and the final results are still matters for the future.