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Woodlands of Great Britain.

THE report on the "Census of Woodlands and Census of Production of Home-grown Timber, 1924," recently issued by the Forestry Commission,¹ is an interesting production, since it records, probably for the first time, the approximate areas, nature, and conditions of the woods of Great Britain. In England and Wales most of the data were collected by public-spirited private individuals, selected for their knowledge of particular districts. In Scotland the work was done by the Forestry Commissioners' "regular local correspondents" (the term appears obscure), and by the technical staff. The six-inch Ordnance map was used, and the acreage of all woods exceeding 2 acres in extent was marked on the maps. These maps were then sent to the individual proprietors concerned, who were asked to indicate on the map the type and age-classes of their woods. The census was commenced in the autumn of 1921, but was not completed until the end of 1926. The year 1924 has been adopted as the date of the census, as most of the work was carried out in that year, and adjustments have been made from the statistics collected in other years.

Whilst this census cannot be compared for accuracy with those made by a highly trained and skilled staff, as, for example, the census recently undertaken for the forests of Sweden, it has for present purposes a very distinct value, since it enables us to know, if only roughly and approximately, the types of the various woods in existence in Great Britain, and the probable amount of material of various classes they contain.

For the purposes of classification, the woods were divided into two main groups, 'Economic' and 'Uneconomic,' with a third group under which optional information might be furnished on the subject of the degree of stocking of the individual woods. Economic woods are defined as areas maintained primarily for timber production; uneconomic woods are "those areas which are not maintained for timber production, but primarily serve some other purpose." These were most unfortunate definitions to adopt, as it at once ensured the classification as 'uneconomic' of every acre of woodland which the assessor could not regard as a commercial proposition. Yet there are many woods in Great Britain which, although their purpose may have been primarily sport, shelter, or amenity, produce materials which

¹ Forestry Commission. Report on Census of Woodlands and Census of Production of Home-grown Timber, 1924. Pp. 68. (London: H.M. Stationery Office, 1928.) 1s. 9d. net.

are utilised by the local population and have been so used for centuries. At the present day and with changing conditions, it is dangerous to label any area of woodland as 'uneconomic.' Out of the 3,000,000 acres of woods in Great Britain there are probably very few to which the term would apply—for very often the value of a tract of woodland is not primarily connected with its timber-producing capacity—a fact fully accepted by the experienced professional forester. This subdivision influences to a marked degree the methods upon which the results of the census are tabulated. Under economic or potentially productive we have—conifers, 671,840 acres; mixed conifers and hardwoods, 301,690 acres; hardwoods, 443,340 acres; or a total of 1,416,870 acres. Given separately under the same group are coppice and coppice-with-standards, 528,670 acres; scrub (poor coppice areas and so forth), 330,700 acres; and felled and/or devastated, 478,100 acres. Under uneconomic, the amenity woods, shelter belts, etc., amount to 204,290 acres.

Nearly half the area of hardwoods consists of oak woods. It may be agreed that a considerable portion of this area is not under the best forest management, and that present-day fellings are making heavy inroads into the old growing stock. In the interests of the country, it is to be hoped that the major portion of this area will be maintained under oak and other suitable valuable hardwoods, and that they may not be replaced by the conifer. The census shows that the large area of 528,670 acres consists of coppice and coppice-with-standards. Much of this is in poor condition, but there appears to be little doubt that the introduction of a good system of management would result in a considerable proportion of this area becoming a paying proposition. Far more serious is the disclosure that no less an area than 808,800 acres consists of scrub and felled or devastated areas. This large area includes considerable tracts felled during the War. It would appear a somewhat grave reflection on the forest policy of Great Britain that a more energetic effort should not have been made to replant a larger portion. For, in the case of the felled areas, the valuable humus layer built up through the years the former crop stood on the ground is becoming dissipated and the soil thereby impoverished.

The census will have fulfilled a valuable object if it leads to a realisation of the fact that a true forest policy for Great Britain should include steps to safeguard and improve all the woodland areas and forest soils of the country.

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Norman Lockyer's Work and Influence.

Life and Work of Sir Norman Lockyer. By T. Mary Lockyer and Winifred L. Lockyer, with the assistance of Prof. H. Dingle, and contributions by Dr. Charles E. St. John, Prof. Megh Nad Saha, Sir Napier Shaw, Prof. H. N. Russell, the Rev. J. Griffith, Sir Richard Gregory, and Prof. A. Fowler. Pp. xii + 474 + 17 plates. (London: Macmillan and Co., Ltd., 1928.) 18s. net.

THIS book is essentially for those who know and use NATURE and knowing it wish to understand the man who brought it into being—as a child of quite unusual vigour and distinction—giving to it, almost from its birth, the individuality and strength of character which have long made it everywhere the recognised organ of scientific opinion: the *Times* of science. The achievement was his great contribution to scientific advance, of far greater value, I venture to say, because of the effect it has had in promoting the appreciation of scientific endeavour, than his work as an inquirer—which was largely that of a seer, in advance of his time, needing interpretations that only later additions to knowledge were to make possible. Still, the spirit of discovery was at the root of his being: from it he derived his force and it gave to him his success. Wise men like Huxley, seeing this in him, became his willing slaves.

The establishment of NATURE, now fifty-nine years old, was a literary, not a scientific feat, yet one needing for its success a rare combination of qualities—not merely literary but also editorial ability, breadth and intensity of scientific outlook and social qualities of an unusual force and range. The journal was not a financial success until after thirty years. To have kept the enterprise alive, during so long a period, was an astounding exercise of determination, diplomacy and skill. Lockyer was never an easy man to get on with. At times impetuous, often intolerant, always impatient beyond measure and most assertive, from an early date he held scientific workers generally at his behest. His whole-hearted unselfish devotion to his enterprise, his high aims, the importance to us of its success, the difficulty of the work—were so clearly recognised that we all rallied to his standard. There was a feeling that the journal had to be. NATURE is a power to-day because of the sure foundations he laid: upon this his successor—long his assistant and most severely trained in his service—during the past nine years, has been able