

(2) *Staff.* The staff of the Institute was increased by transfers and new recruitments ; posts of Silviculturist, Assistant Mycologist, Soil Biologist, Biometrician, and Botanical Assistant were filled. Apart from its own programme of research work, the Institute has provided specialist staff for lecturing duties, as required, at the adjoining Training Centre.

The programme of work which can be efficiently undertaken by a research organization is, of course, directly limited by the numerical strength and research experience of its staff. As the Forest Research Institute is at present operating with only a nucleus staff (not more than 5 officers in a total of 16 have the experience to enable them to undertake major research), the response to an advertisement throughout the British Commonwealth for foresters experienced in research is keenly awaited.

(3) *Records and Library.* A permanent record system for the collection of technical information is in course of preparation, the basis being the decimal system of classification for forest literature as used in the *Forestry Abstracts*. The Institute has been allotted the task of abstracting certain New Zealand publications for the Commonwealth Forestry Bureau. Preparation of a punched-card index system for records of sample trees has been commenced.

Additions to the library during the year amounted to about 1,700 books and pamphlets. Compilation of the index is now complete, and it is intended to issue a catalogue shortly, and supplements at quarterly intervals thereafter. A photographic library has been commenced.

(4) *Publications.*—Material for the first issue of *Forest Research Notes* was collected and edited. This series is intended to give relatively short accounts of completed projects, and interim results of more ambitious investigations. The following papers were read to the Seventh Pacific Science Congress by members of the Institute staff:—

“ Shifting Cultivation and Its Effects in Burma,” by F. Allsop.

“ Recent Observations on the *Sirex noctilio* Population in *Pinus radiata* Forests in New Zealand,” by G. B. Rawlings.

“ Ecological Investigations in the *Nothofagus* Forests of New Zealand,” by J. T. Holloway.

SILVICULTURAL AND BOTANICAL RESEARCH

(1) *Herbarium.* The herbarium at the Forest Research Institute was augmented during the year and now contains specimens of 420 indigenous and 240 exotic species. The dried specimens have been supplemented by a collection of fruit and flowers preserved in Hessler's solution.

(2) *Arboreta.* The identification and labelling of trees in the exotic arboretum has been completed. The important additions during the year include *Pinus echinata*, *Pinus strobus*, *Ostrya virginiana*, *Cupressus macrocarpa*, and the hybrid *Cupressus macrocarpa* x *Chamaecyparis lawsoniana*. Improvement of the indigenous arboretum was delayed by drainage work ; but sixteen species were planted out. Seedling stock of both exotic and indigenous species has been raised for further plantings in the arboreta, and for amenity plantings elsewhere. A further 1,350 trees, including exotic species of *Agathis*, were planted in the Northern Arboretum at Waipoua Forest, and some failures of earlier years were replaced.

(3) *Tree Seed Studies.*—Collection of information on the occurrence of seed crops of exotic and indigenous forest trees was continued, also studies of germination periods and cotyledon and seedling characteristics. Routine viability tests of seed were carried out. Observations on growth of native and introduced trees were collected and correlated. Special attention was given to reports on the growth cycles of exotic conifers, and a summary of the information collected to date is being prepared for publication.