

Marching with these activities has been the adoption of a new, cheaper, and more efficient technique of tree-production and plantation-formation. The solution of the problem of efficient land-use by tree-cropping is linked with that of forestation technique, for low-priced land coupled with low planting-costs mean profitable use. The Service has concerned itself during the past few years with the solving of forestation-cost problems, and, it is submitted, not unsuccessfully. The straight-line methods now generally adopted throughout the Service take full advantage, among other factors, of the use of mechanical power and machinery in nursery and plantation, wide planting espacement, and direct seeding. Five acres of trees can now be formed where 1 acre was planted in the year 1920. This new standard Forest Service technique—now in general use by tree-planting companies and others—will be applied in the formation of 60,000 acres of plantation (State and private) during the current season, and its use enables the production of tree-stocks and creation of plantations on a cost basis as low as that of any overseas Service or other agency in any part of the Empire. The development of this practice has only been possible through the closest co-operation of the Service personnel, and by the staff functioning as one man in the work of reorganization and along a straight-line routine.

#### LOCAL-GOVERNMENT FOREST ACTIVITIES.

The same forces that have enabled the Central Government to work to a wider objective in the creation of man-raised forests have also been reflected in the splendid interest shown by boroughs, towns, counties, Power and Harbour Boards, and other local governments in the formation of commercial forests.

Twenty-nine local-government bodies in the North Island have established tree-plantations, ranging in area from  $2\frac{1}{2}$  acres to 630 acres. In the South Island nineteen local authorities planted 1,221 acres during the period under review. The Dunedin City Council heading the list by establishing 450 acres, while other areas exceeding 100 acres were planted by the Selwyn Plantation Board (368 acres), Christchurch City Council (150 acres), and Ashburton County Council (118 acres).

The area of Crown land set aside for tree-planting purposes by local bodies was further increased by vesting 721 acres in the Whakatane County Council, and the disposal of further areas for the purpose of creating communal artificial forests is under consideration.

#### PRIVATE FORESTATION EFFORTS.

The year witnessed a new planting record set by individuals, syndicates, tree-growing companies, and other industrial corporations, nearly 18,000 acres of forest plantations being established. The Service sold for these purposes 4,540,176 trees, and at least 10,000,000 trees were purchased or raised by others. From the information at the disposal of the Forest Service the area of commercial timber plantations formed was—

State forest plantations	..	..	..	..	15,964 acres
Farmers	..	..	..	..	2,800 acres
Tree-planting companies and syndicates	..	..	..	..	14,847 acres
Other industrial companies	..	..	..	..	277 acres
Grand total	..	..	..	..	33,888 acres

which can be taken as a record for the Empire. The plantings for the current year will much exceed this figure.

#### AREA OF STATE FORESTS.

The state forests area was increased by a net acreage of 68,100 acres, which addition makes the grand total of Crown forests dedicated to forest-conservation and tree-cropping 7,553,690 acres, equivalent to 11.4 per cent of the area of the Dominion.

#### PROTECTION OF FORESTS.

Losses by fire in State forests have been practically negligible during the reporting year, the sum of £87 representing the monetary loss of forest-produce. It is to be regretted that private and local-body plantations suffered the comparatively severe loss of 1,016 acres of naturalized trees, principally through inadequate supervision and indifferent protection.

Substantial progress was made in dealing with wild-pig and deer pests, for the Service, acting in co-operation with the Departments of Lands, Agriculture, and Internal Affairs, paid out the sum of £1,012 as bounty-money on the destruction of 19,253 wild pigs, while payments were also made on 5,877 deer killed in infested areas. Plans are now in hand for the operation of more effective measures for the extermination of wild pigs and the control of deer. This latter pest has increased to such an extent that it has become a serious menace to farming and pastoral activities and to the forests of the State. The Forest Service is strongly of the opinion that in the interest of all concerned—primary producers, sportsmen, and the community generally—it is essential that protection on all species of deer excepting moose and wapiti, should be removed for at least three years commencing 1st January, 1927, and that the payment of bounty should be continued on all deer destroyed during that period.

#### FINANCE.

The total forest revenues from all sources totalled £152,550, whilst the sum of £174,247 was expended in forming plantations, constructing permanent improvements in the indigenous State forests, in forest-protection, salaries, forest research and investigations, in the purchase of forests and forestable lands, in subventions to county bodies for the construction and maintenance of back roads and bridges, and in payments to the National Endowment Fund.