

# TREES ARE NOT FOR BURNING

**T**HE Chief Inspector of the New Zealand State Forest Service, C. M. Smith, spends part of his time in the field, extending from Spirits Bay to Bluff, and part of it in a sunny room crowded with books and reports and wood specimens in a building in Fitzherbert Terrace, Wellington. If you go to visit him there you will notice that the building in which he works is old and high and generous in its proportions; and the moment you show any interest in the polished panels of New Zealand woods on the walls—and you will surely be unable to hide your interest, so satin-and-watered-silk beautiful they are—you will be told what house you are in: the old Beauchamp house, the home of Katherine Mansfield. You may be told that the approximate age of this house can be judged by its 14-by-1 kauri weatherboards; but if you came to see Mr. Smith about the New Zealand State Forest Service, as I did, you will have to wait for another

visit to speculate about the possible life of K.M. in that house.

Mr. Smith took down a Statute book to make firmly clear the basic principle of New Zealand State Forest Administration: all land set aside for State Forests is set aside for that purpose only and may not be used or sold for any other purpose; "inalienability of State Forests," is the technical and legal phrase for this basic principle. In plain 1949 house-hunters' language it means that no one may buy or lease a section of State Forest Reserve for residences. So the envious who see houses being built on sections cut into forests anywhere will know by that sign that the forests are not State-owned; if they are State-owned there will be no sections, no vegetable patches, no summer cabins and no tea-kiosks for tourists. Among the other amenities not allowed are fires; "NO SMOKING" applies as strictly as in a petrol station.

## Dream-Wheel

In its earliest years the Service was unlucky: "In 1896, in Seddon's time, a group of men in Central Otago looked

at the treeless waste and had a vision: they imagined an enormous wheel with the hub at Ranfurly and the spokes going out in all directions in magnificent plantations of trees. So the State Forest Service began at Ranfurly—to be precise, at Wedderburn—and the first spokes of the dream-wheel were planted. To-day we have a small stand, far from healthy or profitable or hopeful, at Naseby. That is all that remains of the magnificent vision of 1896—and the land is still a great treeless waste."

"But what do they do for firewood?"

"They burn lignite. In 100 houses you might find as many as three wood-burning grates, and even those would be extra grates, used for special occasions. Lignite fires are burnt day in and day out for seven months of the year."

My interest in firewood introduced Canterbury. Yes, Mr. Smith said, Canterbury was a wood-buying community; but if I thought forestry was earning its daily bread these days from the firewood trade I was wrong. Times had changed.

"Twenty years ago every sawmill in the country burnt up its own waste wood to generate its steam-power, now many of them run on electricity; twenty years ago the railways started up their fires on wood, factories burnt wood, and cooks and washerwomen burnt wood; now they all use largely coal or electricity and we use coal or electricity to heat our houses and public buildings."

Thwarted and disappointed, thinking of the cords of wood for lack of which Wellingtonians suffer more than they know, I asked if Dunedin was also a wood-burning community.

"Yes, it is. But not as Canterbury is. When I go back to Dunedin in the

winter I always notice the typical smell that hangs over the city—the heavy, sulphurous, not unpleasant smell of lignite. I like it."

"So forestry and the firewood trade have no connexion?"

"Well, unfortunately less and less every year. But forestry and houses, axe handles, butter boxes, telegraph poles, furniture and fence posts—that's different."

This meant harvesting the native forests as well as the introduced forests—what was the approximate area of the two kinds?

## A Few Million Trees

"Of indigenous forest the State has 8½ million acres," Mr. Smith said. Calmly I took the note—8½ million acres of native forests. "And 400,000 acres, less than half a million, of exotics, or as we say artificial forests." But they were all planted by hand, each tree separately—how many trees to the acre? By the time I had all the figures I almost wished I had not asked: the sum begins with the simple statement—the planting is at an average density of 1,000 trees per acre. After that the complications of renewals, thinning, harvesting, and replanting set in. It is safe to say that for the layman, the non-forester, the original planting would cause backache and the continuing arithmetic would cause headache.

"But are the native forests replanted by hand after they have been harvested, or do they renew themselves?" I asked.

## The Incubator and the Hen

"Mostly they renew themselves; Nature is the greatest planter—that applies to exotics as well as to indigenous plants. But we do sow and plant as well, although in general we use the incubator for exotics and let the hen sit for the indigenous renewals, first



**THE HEN AND THE INCUBATOR:** These pictures illustrate the two methods used by the New Zealand State Forest Service to regenerate native forests. Left: Kauri saplings thrusting up in natural second-growth forest. Right: The incubator successfully at work—kauri seedlings at the two-leaf stage in a State nursery