HANMER FOREST

ROGER KEEY

Hanmer Forest, which covers an area of about 5500 hectares in North Canterbury, is important because of its history and composition. The present mixed conifer-broadleaf forest covering the recreational areas is perhaps unique in New Zealand.

At the time of European settlement, the basin below the Hanmer Range was almost treeless, except for *Nothofagus* spp. growing on the flanks of the range. A survey of the vicinity of Hanmer Township taken in September 1892 describes the area as being composed of patchy manuka scrub (probably, *Kunzea ericoides*) and flax swamp. By the end of the nineteenth century, the Government (through the former Lands and Survey Department) was considering enclosing for forestry an area of about 200 hectares out of the Reserve that had been proclaimed by the Nelson Provincial Council around the hot springs discovered in the area. In 1901-2, the Governments' Forester reported that a start had been made, noting that the selected area was "generally poor and stony, exceedingly dry in summer, but nevertheless capable of growing a wide range of forest trees suitable to the climatic conditions". The following season, nearly 7000 trees were planted in Hanmer Springs, with silver birches (*Betula pendula*) being put on the northern and western boundaries for shelter purposes. Many of these trees, most with crowns wind-damaged, can still be seen today.

At first, planting was on a modest scale, with only 100 hectares being established by 1906, but large-scale plantings occurred between 1924-9, and after the mid-1950's, when land retired from St Helens Station became available. The initial species chosen were European larch (*Larix decidua*) and Corsican pine (*Pinus nigra* spp. *laricio*). Both are timber trees from the cool mountainous area of central and southern Europe, selected presumably on assumed climatic compatibility to the Hanmer Basin. In the wetter areas, there were planted alder (*Alnus glutinosa*), a tree of English streamsides, and Norway spruce (*Picea abies*), the Christmas tree of Europe. Numerous acorns were sown, mostly providing fodder for rabbits one suspects, but many maturing oaks (*Quercus* spp.) can be seen in the old recreation reserve area today.

The old foresters experimented with a number of species. The now-omnipresent *Pinus radiata* was initially planted as a shelter tree for the slower-growing Corsican and Austrian pines (*P. nigra* spp. *nigra*). Small areas of Bishop pine (*P. muricata*) and Western yellow pine (*P. ponderosa*) were established. The former is a native of the exposed Californian coasts, and the latter is a major timber tree of western North America. Although trees of Ponderosa pine have reached up to 50 m in height in Hanmer Forest, this species is no longer planted because of its susceptibility to needle blight.

Another North American tree, Douglas fir (*Pseudotsuga menziesii*) was tried. This tree covers vast areas on the Pacific coast from British Columbia to northern California. It is now the second main species grown in Hanmer Forest after *Pinus radiata*, but is more demanding than radiata, preferring well-drained, sheltered sites with good rainfall. The timber of Douglas fir, sometimes called Oregon pine in the trade, is highly valued for structural purposes where small knots and straight grain are important. Radiata pine, the principal species now planted, has gained a reputation as a fast-growing, general-purpose timber, with good properties apart from its stiffness. Most of the timber from Hanmer Forest today is recovered as sawlogs, but some is converted into medium-density fibreboard (MDF) at the Ashley mill.

Throughout the time the Forest was under the control of the former New Zealand Forest Service numerous experimental plantings were carried out. Groves of Coast redwood (*Sequoia sempervirens*) and Sierra redwood (*Sequoiadendron gigantea*) trees were planted beside Pawson Road in the 1930's. In 1984, a 12.5-hectare plot on both sides of Dawson Drive was planted out in various *Cupressus* spp., including several Leyland cultivars. These are hybrids between *Cupressus macrocarpa*, the Monterey cypress, and *Chamaecyparis nootkatenis*, the Nootka cypress, which grows up through the west coast of Canada to Alaska. In the wild, old specimens of Nootka cypress or Alaska cedar are very tall, spire-like trees, with trunks devoid of branches for several metres from the base. The Leyland cultivars are used as a shelterbelt tree in Canterbury. The specimens in Hanmer Forest have been recently pruned by members of the Farm Forestry Association, and the underbrush cleared, so these can now be seen to advantage. Near to the Leyland cultivars are plots of eucalypts (*E. delegatensis & nitens*).

Public interest in the Forest started early in its history: an annual report for 1925-6 notes 429 applications to enter the State Forest. In 1968, the Woodland Walk was created, and then in 1972 the Forest Walk and Forest Drive were opened to the public. Further official recognition came when the old 207-hectare area was formally gazetted by the then Minister of Forests, Duncan MacIntyre, giving the public free access for recreation. Then in 1978, Grantham and Hanmer State Forest were combined into a State Forest Park of 16 844 hectares covering the southern slopes of the Hanmer Range and the northern edge of the Hanmer Plain. The Forest Park was conceived as a multipurpose area involving public recreation, conservation of areas of special significance, education and production forestry.

The areas beside the Woodland Walk and opposite the old Forest Manager's house were enriched with specimen trees. Adjacent to the Woodland Walk, one could see a glaucous-leaved Californian red fir (*Abies magnifica*), a Swamp cypress (*Taxodium distichum*) – now unfortunately cut out –, a Serbian spruce (*Picea omrika*), which in the wild grows only in a limited area in the Drina River basin, the Deodar (*Cedrus deodara*) from the Himalaya with its downswept branches, and a small grove of Antarctic beech (*Nothofagus antarctica*), a deciduous Southern beech with leaves somewhat like those of *N. menziesii*.

The old forest area, situated between the village and the indigenous scrub and forest cover, has been invaded by a range of shrubby species to form a rich understorey, in places very dense where the light levels are high. Prominent species include Currant (*Ribes sangnuineum*), Holly (*Ilex aquifolium*), Cotoneaster (*C. frigidus (?) & horizontalis*) and indigenous shrubs, with *Coprosma propinqua* being most prominent together with other *Coprosma* and *Hebe* spp. The small tree, the Rowan (*Sorbus aucuparia*) is distributed throughout the Forest by birds attracted to its berries. Sycamore maple trees (*Acer pseudoplatanus*) have spread by wind-drift of their winged seeds, to give a golden understorey glow in autumn.

A checklist of 1975 cites 16 orchid species, including the Australian adventive, *Chiloglottis gunnii*, which was confirmed still to be present in 1999. In autumn, the forest floor is host to numerous interesting fungi, including the Fly agaric (*Amanita candida*), the Stinkhorn (*Aseroe*

rubra) and various bracket fungi (*Trametes* spp.). In summer, the edges of the rides and tracks that traverse the forest have wildflower colour from Viper's bugloss (*Echium vulgaris*), Perforate St-John's-wort (*Hypericum tetrapterum*), Foxglove (*Digitalis purpurea*), Common centaury (*Centaurium erythracea*), Oxeye daisies (*Leucanthemum vulgare*) and the dainty Deptford pink (*Dianthus armeria*), besides various common Compositae. In the damp area along the banks of the Dog Stream, the Wood avens (*Geum urbanum*) is abundant, and later in summer the banks are lined with Indian balsam (*Impatiens glandulifera*), with (alas) Traveller's joy (*Clematis vitalba*) scrambling among the sycamore trees.

With the state-sector reforms of the late 1980's, and the disbanding of the Forest Service, the forest-park status was lost, and the former Forest Park was divided between the Conservation Estate and a Crown production forest. This latter was mainly composed of coniferous trees, which were sold, first to NZ Timberlands Ltd and then to Carter Holt Harvey Forests Ltd, subject to certain covenants to protect scenic and other values, with the land itself being leased under Crown Forest Lease agreement. The leased forest included the former recreation reserve, while the Woodland Walk area fell to the control of the Department of Conservation. Finally, in early 2000, the state has withdrawn from production forestry in North Canterbury, with the sale of the Crown's forest assets to the Ngai Tahu following the deed of settlement with the iwi. Because the covenants can be revisited in the future there is some uncertainty about the long-term guarantee of public access and the conservation of this unique mixed forest in its present form. Because of this uncertainty and the divided management of the areas open for public recreation, consideration is being given to the possibility of forming a public trust to manage the total recreational area of some 500 hectares, which bounds Hanmer Springs in an arc from north to east and provides the forest backdrop to it. It would be a significant environmental loss if the area became degraded or substantially altered in composition.

REFERENCE

Washbourn, R.W. *et al.* 1984: *Hanmer Forest Park,* New Zealand Forest Service, Wellington, 110 pp.

Roger Keey is one of three Forest Guardians appointed by Hurunui District Council