

The worker tree



Bethney McLennan

A special area of Wellington Botanic Gardens pays tribute to the industrious pine.



OVERSEAS visitors driving through the central North Island might easily be fooled into thinking that the pine forests extending from the highway to the horizon comprise some rampant indigenous species.

That radiata pine have become widely, though not universally, frowned on is probably because of unfair confusion with its more feral cousin, *P contorta*.

Aside from building materials, fenceposts, paper and furniture, radiata is a highly lucrative source of overseas income, fulfilling the role intended for it when the first seeds were planted in Wellington by scientist Sir James Hector in the late 1860s. In 1867, Sir James, then a government consultant, was asked for his views on 5.2

hectares of Wellington land earmarked for a botanic garden. This was the beginning of a 30-year relationship with what became Wellington Botanic Gardens, and the centre of Sir James' vision of an area for recreation and pleasure that also afforded teaching and research opportunities. He installed a teaching garden, where settlers could learn the elements of plants and gardening vital in decades of enforced self-sufficiency, but he became

particularly engrossed in his research into setting up a nationwide forestry industry.

Among the 200 species of seed that Sir James had on hand in 1869 were those of the pines that would set the scene in New Zealand. Great old pines of several species in the Botanic Gardens bear witness to Sir James' work and a pinetum named after him was opened in June, 1992. Last month saw completion of a memorial cairn, given by the Friends of the Botanic Gardens. Though radiata won out as the base for our exotic forestry industry, the pinetum holds examples of many other *Pinus* species.

James Jones, who heads the tree

This article, originally published in the Evening Post, provides more information on the interesting Pinetum area of the Garden

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Pines and needles: Shoots of *Pinus coulteri*, above, will become branches supporting the world's largest cones. Below, *P mugo* looks every bit the perfect pine for Christmas. Right, in contrast to the rough, craggy bark of other pines, that of the *Sequoiadendrons*, or big pines (pictured left), is richly coloured and papery and the cones are tiny for such large trees.

Pictures: PHIL REID



team at the Botanic Gardens says the objective of the pinetum is to show the diversity of plant growth, form, and structure within the Gymnosperm genus, which includes Pinaceae, Cupressaceae, Taxaceae, Podocarpaceae, Ginkgoaceae, Cephalotaxaceae, Aracariaceae and Taxodiaceae.

At the 1992 opening, Peter Hector, one of Sir James' great-grandsons, helped plant a *P sabaniana*. Though

still a toddler in pine terms, this promises to grow to an attractive, medium-sized tree with impressive long needles and large, egg-shaped cones with thickly ridged grey scales.

Forming a sheltering canopy above it are survivors of the area's original planting in the 1870s, including *P radiata* trees imported as seed from Monterey. There are plans for these pines, among the

oldest in Wellington, to be dna fingerprinted and have tissue culture taken to determine their precise origins.

Dominant among the older pines are several *Pinus pinea*, otherwise known as umbrella or stone pines, producers of costly but delicious pine nuts. Beyond these, windswept and stark, are *P torreyana* or soledad pines. Normally 10 to 15 metres tall, these have an open habit, stiff, tufted leaves and chubby cones, which produce edible seeds. Their nearly-black bark and craggy branches make striking silhouettes.

On a lower slope is a stand of *Sequoiadendron giganteum*, or big pines, their straight-as-a-die reddish brown trunks race skyward. They have soft, papery bark and surprisingly petite cones.

While some older pines shelter their offspring, new species are also settling in. Still negotiating adolescence is *P coulteri*, source of the world's largest pine cones and named after Thomas Coulter, the first curator of Trinity College Herbarium. Also known as pitch pine or big cone, its fruit cases retail for \$20, but this specimen is still reaching pinkish fingers of new growth through a cuff of dusty green needles.

In contrast, a pair of *P mugo*, or Swiss mountain pines, represent the warm fuzzy branch of the family. Snuggly covered in short, bright green needles and self-decorated in traditional Christmas cones, this could easily fit in a suburban garden.

Though the arboretum is a harsh site, the trees get little fussing. "New plantings are made in the original soil, as it has been found they sulk if you put really good soil into the planting hole. The plants' roots love the new soil, but when they get to the original soil they tend not to want to grow through into it," says James.

"At planting time we add a small amount of slow release fertiliser, but we do very little watering. If you need to keep watering, you have obviously planted it in an unsuitable location, and I find that less watering encourages better root growth as the plant searches for water."