



Central Canterbury Farm Forestry will hold a field day and lunch-time barbeque at its experimental area at Silverwood, Hororata, to mark the 10th anniversary of both the death at 91 of Frank White, who gave farm forestry the right to occupy the 4ha block on his 440ha Silverwood farm for 100 years, and the completion of the first major planting in the experimental block.

Farm Forestry members and their guests are welcome to attend the event on Saturday, December 1. The proceedings will begin at 11am with a brief summary of research in progress by the current Central Canterbury branch chairman, John Clarkson. Members associated with the planning of the various trials being undertaken will then give brief descriptions of the planning, aims, and objectives of each trial. The emphasis in all the trials is on sustainability.

Visitors will then have an opportunity to wander among, and ask questions about, the various dryland trials. These include experimental plantings of indigenous species to test them for hardiness and drought tolerance, a trial of five cypress clones for growth rates and plant health, an experimental planting of ground-durable eucalypts to test them for hardiness, and a recently-planted spacing and silviculture trial of selected silver wattles. The latter trial is supported by a grant from the Neil Barr Foundation.

A lunch-time barbeque will begin about 12.30pm. Bread, cooked onions, and some wine will be supplied. Bring your own chops, steaks, pre-cooked sausages, or whatever.

Write the date and time in your calendar now: 11am Saturday, December 1, at Silverwood, Hororata.

The emphasis at Silverwood is on dryland, cold-climate farm forestry: the property is inland, about 220 metres above sea level, and exposed to strong winds. The soil is Lismore stony loam which is subject to extreme drying out in summer despite the mean annual rainfall of 830mm, about half of which falls in the summer months.

The main planting, now up to 10 years old, is a 2ha hardwood coppicing block. The aim of this trial is to produce a combination of durable chestnut hardwood posts, hazel stakes, and hardwood timber. The initial coppicing has been completed and some of the chestnut stems harvested are now being tested as intermediate vineyard posts. Despite being only 10 years old they have yielded on average about 85 per cent heartwood.

A flurry of activity (unfortunately involving compulsorily volunteered committee members despite appeals to the membership at large for volunteers) has been the feature of the Silverwood experimental area in the last few weeks and those who have not been there for a while will find plenty of new things to see. Supply difficulties delayed the completion of wattle planting after the main bulk of trees had been planted by Ashburton contractor Doug Lowry, whose generosity in donating his time and labour was much appreciated. Committee members finished the planting in the third week of October after Mike Davies secured the necessary seedlings.

Rows 28, 29, and 30 in the hardwood block were coppiced on October 16. The felling cuts were made about 15cm above the root crown. A second cut, angled at about 30 degrees, was made below the felling cut so that regrowth would arise from close to the root crown; standard European practice.

Regrowth will be monitored, and assessed after 12 months, at which time the number of stems will be reduced if necessary. The ideal number is assumed to be three stems per root crown, but a range of experimental treatments is proposed, ranging from a single stem to five or seven. As the regrowth will arise from well-established root systems, faster growth than was achieved from the original planting is expected. After 2014 stem diameters will be measured at 12-month intervals. The aim is to harvest poles suitable for use as vineyard posts at intervals of seven to eight years. Heartwood development in the second harvest will be compared with the heartwood percentage of the original stems, which varied from about 60 per cent in small stems to about 85 per cent in the larger stems.

A total of about 10 stems with superior growth or form or both was selected from the 114 stems in the three rows to remain as "standards", which will be grown for three or more rotations to yield sawlogs.

Marcel van Leeuwen (MalvernGIS Ltd) was engaged in October to make accurate height measurements of the five clones in the three-year-old cypress trial. Growth rates have been impressive. Average heights of the five clones were: Hocking 2.56; Sturrock 2.5; Silverwood 3.34; Satchell 2.2; NZR 2.6. As can be seen, the 'Silverwood' clone has a 29 per cent advantage in height growth over the other clones and the Satchell selection has a small disadvantage. The 'Silverwood' clone also has the best early growth form, with only light, horizontal branches. The other clones, particularly the Satchell selection, were in general much "bushier". This may be a juvenile growth phase that will not persist. Tree health was generally excellent, but there were early indications of susceptibility to cypress canker in the 'NZR' clone. While the 'NZR' clone appears to have a significant advantage in biomass, it also shows relatively heavy branching that may necessitate early and extensive pruning.

Guard rows, consisting of *Cupressus xovensii* and Lawson cypress (*Chamaecyparis lawsoniana*), were neither measured nor assessed for tree health.

The measurement will be repeated when the cypresses are aged five. At that stage diameter growth will also be measured and the need for pruning will be assessed.



Plenty of heartwood: The 10-year-old chestnut poles (left) contain about 85 per cent heartwood, compared with only about 25 per cent in the oaks of the same age (right)

The eucalypts, planted last year, suffered severe damage and some were killed in the June snowstorm and frosts. Replacement plants, said to be hardier types, arrived in the last week of October and were planted by a group of committee members, who also placed combi-guards on them. The wattles and recently planted natives have also been shielded by combi-guards to protect them from hares, which are rampant at Silverwood.

Please note that the stand-alone web site (www.silverwood.org.nz) is now up and running. It is still under construction but it already contains a wide range of data, historical information about the site, maps, and photographs.

If you have not yet been to Silverwood and aren't sure where it is, you will find a useful location map on the web site. Or you can just drive to Hororata, exit the township via the bridge at the roundabout, and continue around the bend by Selwyn Sawmills on to Leaches Road. Silverwood is the first farm on the left after the junction with Steeles Road (the first road on the left after the sawmill). The experimental area is on the left between the manager's house and the farm cottage.

Ivan Honoured

Ivan McIlroy, founder of Allenton Nursery, for many years one of New Zealand's biggest suppliers of bare-rooted specimen trees, was awarded a life membership by Ashburton Farm Forestry at a Sunday-afternoon gathering last month. Ivan grew the Hanmer Springs chestnut provenance which is included in the hardwood trial at Silverwood, not as a coppice but as a timber tree. He also raised selected strains of oak for the hardwood trials. Although long retired from the nursery, Ivan until recently was there almost every day, working on his specialty lines of ornamental trees and on a pet project: assembling a large collection of heirloom fruit trees, many of which were made available for sale through the nursery catalogue. He was also a regular at both Central Canterbury and Ashburton branch field days for many years and it was standard practice for the Ashburton branch to present one of Ivan's special trees to its field-day hosts. Allenton Nursery, which Ivan says he founded with a little bit of help from another farm-forestry stalwart, the late Bill Buchan, grew into a major supplier of amenity and fruit trees to garden centres throughout the country. Almost every farm in Canterbury has Allenton plants among its amenity trees. The nursery was recently sold and will no longer trade under the Allenton name.

Tony Tripp and Derrick Rooney represented Central Canterbury at the gathering, and Tony spoke about Ivan's contribution to the Silverwood plantings. As well as supplying the trees mentioned, Ivan gave Central Canterbury Farm Forestry a number of grafted Waikato-strain chestnuts selected for the quality of their nuts. These were planted separately from the main hardwood block, to provide our members, in due course, with summer shade and an autumn food resource.

They Said It

- *I like to think that others will benefit from the trees that I planted.* – **Frank White, in an interview in his 90th year.**
- *Even in winter the coppices are beautiful to the eye, while they comfort the mind with the idea of shelter and warmth.* – **William Cobbett (1762-1835)**
- *There is no doubt that trees are necessary for us, for both body and soul.* – **Graham Stuart Thomas, gardens advisor to the British National Trust, in "Trees in the Landscape" (1983)**