

Kahikatea: small seeds to giant trees

The Northern Forest of East Harbour Regional Park is a combination of lowland beech (hard and black), lowland podocarp and mixed broadleaf. Sadly, this lowland forest is now a rarity, a remnant of a forest type that was once widespread on low terraces of rivers and margins of lowland swamps. Kahikatea (*Dacrycarpus dacrydioides*) grew in close proximity, intertwining their roots for support in the swampy ground.

In East Harbour, Kahikatea is the most common podocarp but others present are Miro, Rimu, Totara and Matai. The tallest of our native trees, Kahikatea can reach heights of around 60 metres. Slow growing, it may take 600 years or so to reach such a height. Because of its height, the tree form, its bark and fluted grey trunks, clear of branches for some metres, are the main aids to identification.

Its small fruit has red berry-like receptacles and black seeds of 4-5 mm (koroī). During mast seedings, trees can produce over 100kg of seed. It is dispersed by birds that eat the fruit, digest the fleshy berry and excrete the seed. Common dispersers are Tui, Kereru and Korimako. I recall passing by one large Kahikatea located between Butterfly Creek and Gollans Stream in autumn. It was boiling with Tui eating the koroī and making a huge cacophony that could be heard for some distance.

The fruit was also collected by Māori and served in large quantity at feasts. Collection must have been challenging as acknowledged by the Māori proverb: He toa piki rakau kahikatea, he kai na te pakiaka (the kahikatea climber is food for the roots).

Wood from the Kahikatea was used by Māori for weapons, canoes, and bird spears. Soot from burning the heart wood was used for tattooing. A concoction from the leaves was used for medicinal purposes.

Kahikatea was initially referred to as White Pine by Europeans, when it was not a pine at all. They found the timber was not durable and thus of no use as spars or for building. Europeans however exploited Kahikatea for butter boxes following the start of refrigerated shipping in 1882. The odourless, pale timber was ideal for packaging butter and cheese exports. This usage of the timber, which grew best on wet lowlands, decimated the lowland forests that were logged and then drained for pasture.

As a climactic species, Kahikatea is included in the restoration plantings taking place at the Parangarahu Lakes in sheltered plots where pioneer vegetation has already been established. Seeds have been eco-sourced from the Northern Forest for propagation.

Kahikatea can be observed locally in the Northern Forest along Butterfly Creek and Gollans Stream as well as near the Cheviot Road and Lees Grove entrances.

Gail Abel, MIRO