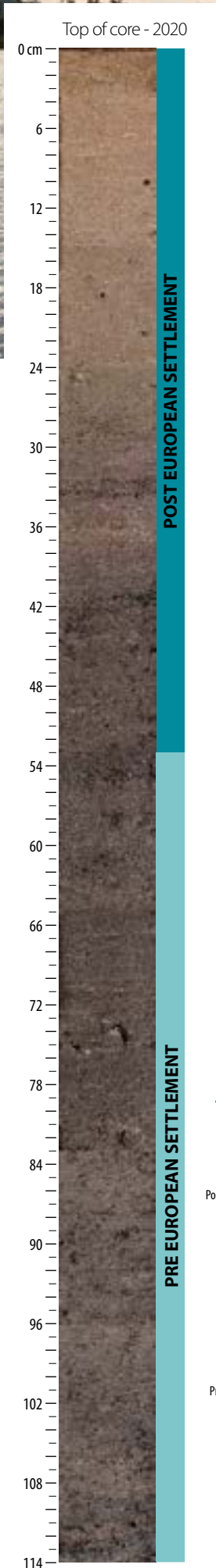




Lakes380

Our lakes' health past, present, future

Me hoki whakamuri, kia haere whakamua



# LAKE ALICE

**Region:** Manawatū Whanganui **Location:** Bulls **Coordinates:** 40° 8' 3" S 175° 19' 55" E **Depth:** 3.5 m

Lake Alice is a coastal dune lake located north of Bulls. The lake has high levels of nutrients and suffers from algal blooms. Native mudfish live in the lake.

The Lake Alice sediment core captures historic information going back about 500 years. Initial results from the sediment core suggest that prior to European settlement Lake Alice was surrounded by native bush dominated by rimu and other podocarps with some small trees and shrubs present, especially the native shrub tutu.

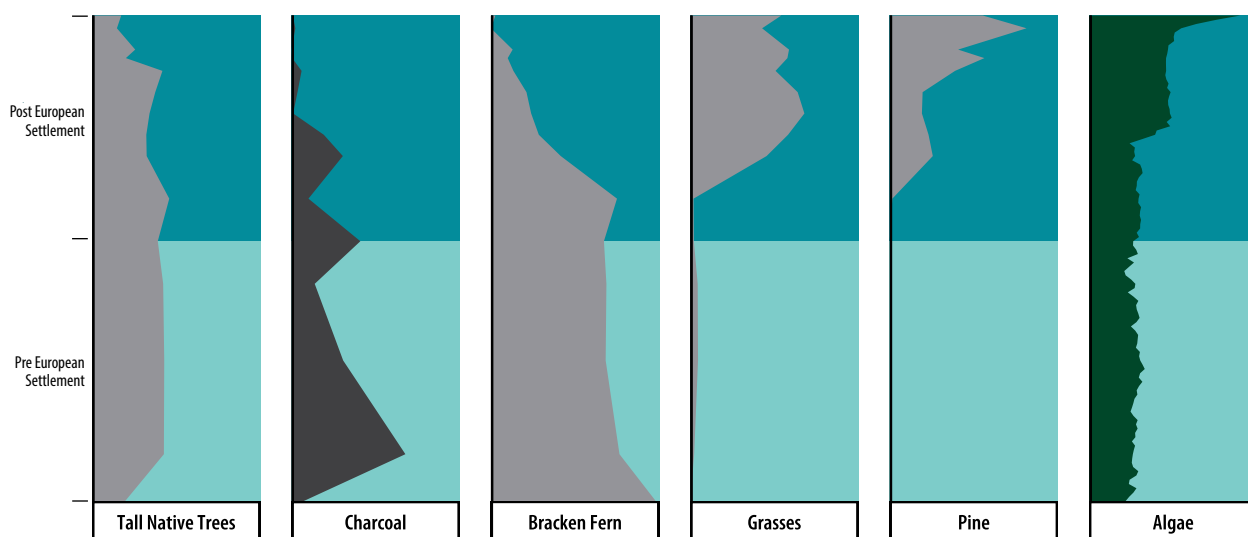
Charcoal in the graph below suggests some vegetation was cleared by fire and replaced by

bracken fern and tutu, which inhabit disturbed areas.

Post European settlement land use changed. The increase in grasses and non native pine pollen in the graphic below highlights the establishment of pasture and exotic pine plantations in the region.

Algae has always been present in the lake but has increased markedly in the last about 50 years.

## POLLEN, CHARCOAL AND ALGAE LEVELS FOR THE PAST ~500 YEARS



This graphic indicates the changes in abundance of plants, charcoal or algae through time.