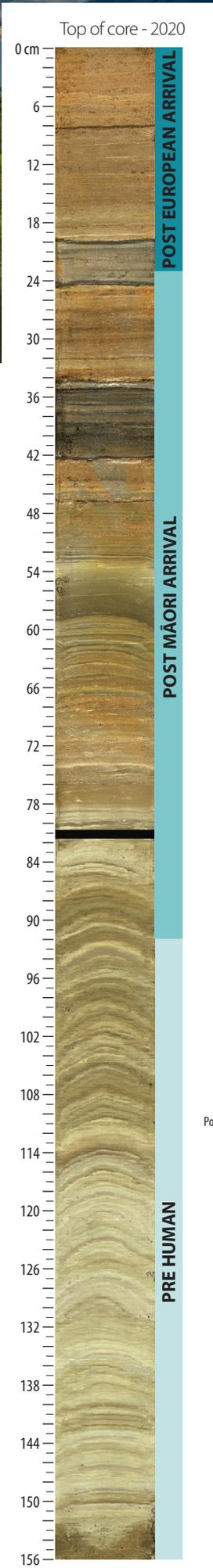




Lakes380

Our lakes' health past, present, future
Me hoki whakamuri,
kia haere whakamua



LAKE ŌTŪROTO/HERON



Region: Canterbury **Location:** Ashburton **Coordinates:** 43° 29' 16" S 171° 9' 58" E **Depth:** 37 m

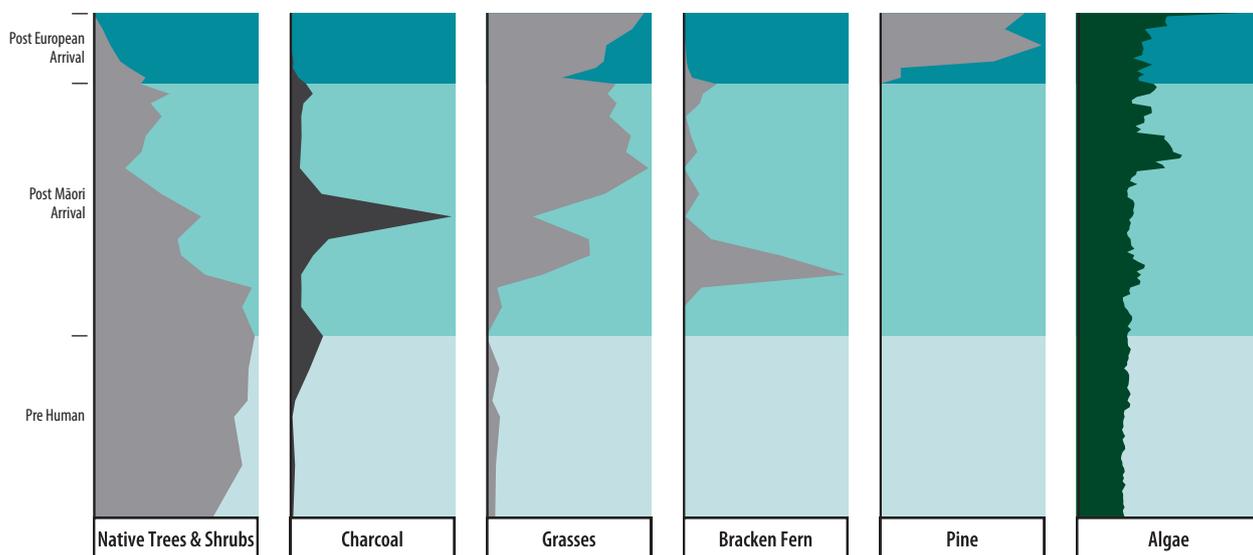
Ōtūroto / Lake Heron is a large, glacially formed, highland lake. It is situated in the upper Rakaia River catchment, into which it drains. The lake has low concentrations of nutrients and algae.

Initial results from the sediment core suggest that prior to human settlement podocarp and beech forest, and native shrubs and small trees were abundant in the region. After humans arrived some forest clearance began. This is highlighted in the graphic below by a large spike in charcoal (burning) and pollen from bracken fern, commonly associated with landscape disturbance. Because of the harsher highland climate, once removed the native trees were largely replaced

by grasses. Post European arrival, non-native trees such as pine were planted in the wider region.

Algae have always been present in the lake, but their abundance has increased slightly in the last 200 years. A number of projects are underway between Environment Canterbury, iwi and landowners to reduce sediment and nutrient loads entering the lake.

POLLEN, CHARCOAL AND ALGAE LEVELS FOR THE PAST ~1200 YEARS



The shaded area indicates the concentration of plants, charcoal or algae through time.