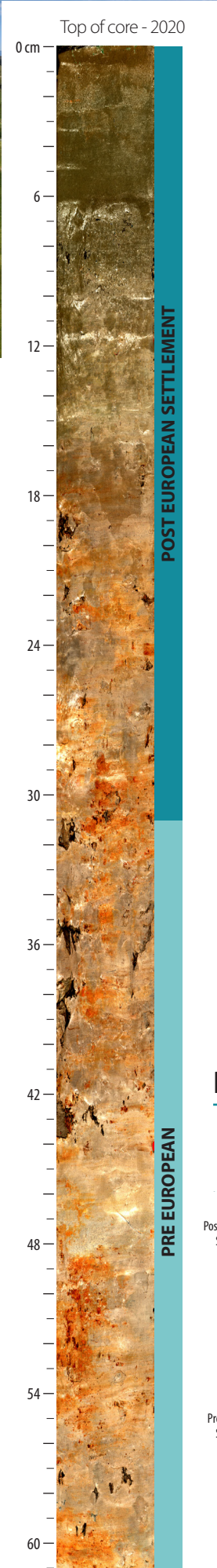




Lakes380

Our lakes' health past, present, future

Me hoki whakamuri, kia haere whakamua



LAKE ELTERWATER

TE RUAKANAKANA

Region: Marlborough **Location:** Seddon **Coordinates:** 41° 47' 57" S 174° 9' 15" E **Depth:** 1 m

Te Ruakanakana, or Lake Elterwater, is a large shallow lake which has previously dried out completely in hot summers. The lake has been designated a wildlife refuge since 1956 and is an important habitat for waterfowl.

The Te Ruakanakana sediment core does not show pre human times. Initial results from the sediment core suggest that prior to European settlement some mixed native forest of beech, podocarps (especially rimu and mataī) and bracken fern surrounded the lake margins.

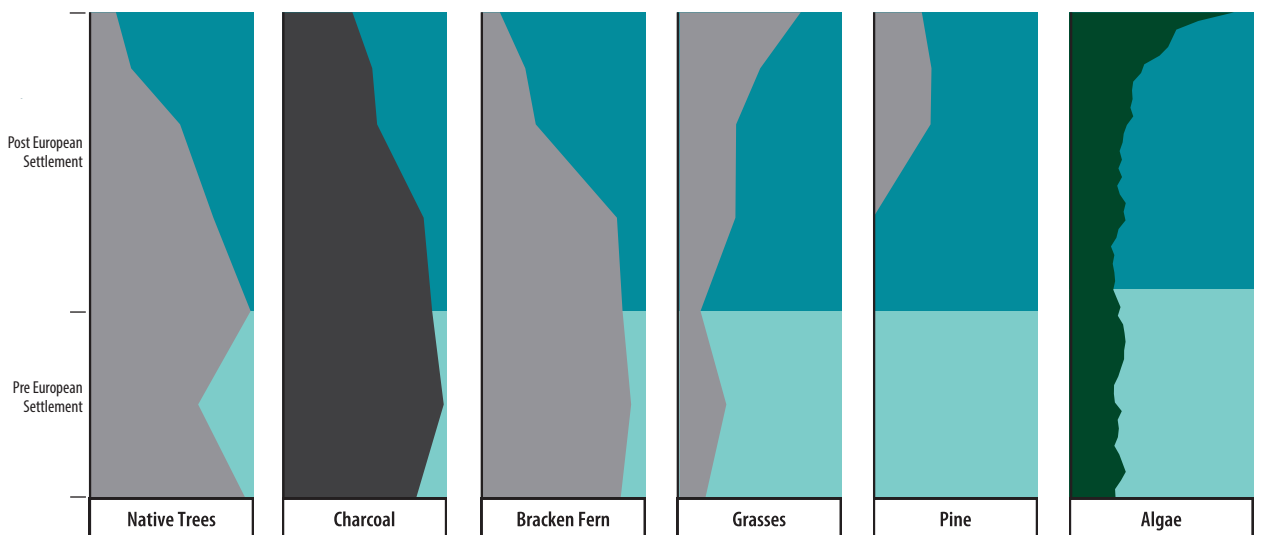
Before European settlement some vegetation clearance began in the region. This is highlighted in the graphic below by the presence of charcoal

(fire) and bracken fern, which is often associated with vegetation disturbance.

Post European settlement native trees and ferns decreased steadily, as the landscape was changed to farmland (grasses) and exotic pine trees were planted in the region.

Algae have always been present in the lake, but their levels have increased markedly in the last approximately 50 years.

POLLEN, CHARCOAL AND ALGAE LEVELS FOR THE PAST ~300 YEARS



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