Life on the Edge 18 Invaders of the shore.

Our native mangrove *Avicennia marina* is an opportunist invader of silted estuaries that are protected from wave action. What were once open sand-flats between the Deep Creek waterfall and the sea, harbouring shellfish, paddle crabs and other marine life like flounder have been destroyed over the last 150 years by the invasion of mangroves. These have settled on the mud/silt released from the creek headwaters by clearance of vegetation and house-building activities.

The bright green mangrove seeds that are washed up on beaches can be seen at the high-tide line. Many,(with their root systems already sprouting), settle in the silt of creeks and estuaries where they grow rapidly. Mangroves also have aerial roots shooting up out of the mud. At low tide, these aerial roots are exposed to the atmosphere where their very spongy interior extracts oxygen for the plant. Very clever! But they also act as a trap for collecting more silt and floating debris that can create a very foul smell. Not so clever!!

Recent NIWA studies (2007, 2012 Morrissy et al) have shown that, unlike the tropical mangroves, our species are not significant nurseries for marine animals. Once they are well established,as at Deep Creek today, they have severely impacted navigation and recreation activities as well as totally changing the aesthetics and natural character of Deep Creek and its waterfall. Photographs from 1905 and 1910 confirm theabsence of mangroves in this once beautiful estuary and creek .

1910 at Deep Creek – about the same spot as on right

Courtesy Turnbull library

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Photo above the waterfall circa 1930?