

Te Hiku

Te Arai Ephemeral Wetland and Pond (Aupouri), NRC Lake No. 46.



Te Arai Pond. Photo taken 2004 (above), with grazed margins and sparse emergent vegetation, note the exotic floating fern (red) *Azolla pinnata*. Photo taken 2017 (below) in the opposite direction showing the pond was mostly dry.

Summary	Te Arai ephemeral wetland / pond
Surveyed:	2004 and 2017.
Overall ranking:	Moderate-Low: Small areas of water, with decreasing water level, and grazing damage by horses.
Threats:	Further decrease in water table would further reduce the habitat value. Low risk of introduction and establishment of invasive pests.
Management recommendations:	No monitoring.

Description

This dune wetland (1598022E 6159812N) supported a small pond ~ 0.2 ha in area with a maximum depth of ~ 1 m in 2004, but was mostly dry in 2017 with an adjacent shallow ephemeral turf area (total area 2.3 ha). The catchment is pine plantation forestry with a fringe of grass and scrub around the wetland margin. There are no inlets or outlets. Access is through 2 km of forestry roads past Bulrush Lake.

Wetland vegetation

Much of the area accessible to grazing had scattered clumps of *Typha orientalis* (pond) and *Eleocharis sphacelata* with widespread turf communities in the ephemeral wetland. Dominant species here were the native *Centella uniflora*, *Myriophyllum propinquum*, *Centipeda aotearana*, *Cotula coronopifolia* and the introduced *Ludwigia palustris*, *Persicaria hydropiper*, *Symphyotrichum subulatum* and *Cyperus polystachyos*.

Submerged vegetation

In 2004, the pond was dominated by *Chara australis* forming a 0.8 m tall turf across the bottom (1 m) with surface reaching *Potamogeton cheesemanii* occasionally present, but the pond was mostly dry in 2017.

LakeSPI

No LakeSPI score generated.

Water birds

Approximately 20 mallards (*Anas platyrhynchos*) and pairs of Canada geese (*Branta canadensis*) and paradise shelduck (*Tardorna variegata*) were seen in 2004.

Fish

No fish were seen.

Aquatic invertebrates

Backswimmers (*Sigara arguta*) were noted in 2004.

Endangered species

No threatened species were seen.

Lake Ecological Value

The condition of Te Arai Pond had declined due to loss of submerged vegetation.

Threats

Decreasing water table and horse grazing appear to be the main threats to this area.

Management recommendations

No monitoring.