Getting there

The lakes are situated in the Ohaupo area, 8km north of Te Awamutu.

Entry to the Serpentine Lakes is from Ohaupo Road (SH3) however turning right across busy SH3 is not permitted when entering or leaving the site. The National Wetland Trust has constructed a boardwalk between South and East Lakes and an easy loop can be completed around East Lake. The Trust plans to construct a network of tracks in the site. Entry is via a double gate in a predator exclusion fence around the site. Please respect the surrounding farms and the wetlands by not disturbing any animals or leaving any litter. Note that some of the fences surrounding the lakes and wetlands may be electrified. Gumboots are advised as areas close to the lakes can become muddy. During duck hunting season (May and June) visitors enter the wetlands at their own risk.



Lakes of the Waikato River catchment

The Serpentine Lakes belong to a chain of more than 30 peat lakes scattered along the historic course of the Waikato River. These shallow, naturally tea-coloured lakes represent the largest collection of this wetland type in New Zealand. The Waikato peat lakes are ecologically, culturally and spiritually significant and highly valued as places for recreation, education and research.

Management

The Serpentine Lakes are Wildlife Management Reserves, administered by the Department of Conservation (DOC). The esplanade reserve at Lake Serpentine east next to the DOC reserve is administered by the Waipa District Council.

The National Wetland Trust has constructed a predator exclusion fence around East Lake and has plans to construct and operate a National Wetland Centre at the site.

TRUST



Te Awamutu Intermediate students planting around the lake. Photo: Karen Denyer

Revised by NZ Landcare Trust July 2013.

ROTOPIKO the Serpentine Lakes complex

Research

The NZ Landcare Trust (NZLT) coordinated project "Recreating a Rare Restiad Wetland" centres on re-introducing two species of wetland plants to areas where they were once found. Wire rush (*Empodisma minus*) and cane rush (*Sporadanthus ferrugineus*), which is found only in the northern half of the North Island, both break down to form peat. All that remains today of the 7500 ha peat bog which once blanketed this area is the Moanatuatua Scientific Reserve (112 ha). The project is trialing a range of different techniques in order to find the best methods for recreating and maintaining this rare wetland type. An added bonus is the introduction of the rare native moth *Houdinia flexillisma* whose larvae live inside the giant cane rush (and no other plant).

Recreation and Education

The lakes have long been used by game bird hunters during duck shooting season – you'll see the odd maimai tucked into the vegetation surrounding the lakes. Exotic trees including swamp cypress, liquidamber, and pin oak were planted to attract wildlife. These are now being removed and a network of walking tracks and interpretation signs installed as part of a planned National Wetland Centre for the site.

The distinctive fluffy seed heads of the cane rush. Photo: Monica Peters (NZLCT)

Recreated restaid vegetation at East Lake. Photo: Monica Peters (NZLT)

Restoring the lakes

Many of the activities listed below are on-going. Much of the work has been coordinated or funded by the Department of Conservation, Waipa District Council, NZ Landcare Trust and the National Wetland Trust.

Fencing – The 3 Serpentine Lakes have been fully fenced to prevent stock from entering, polluting the lakes, damaging native plants and waterfowl habitat. A 1.4 km long mammal exclusion fence has been constructed around East Lake and the mature kahikatea stand. Pests will be removed during 2013-2014.

Pest plant control – Blackberry and willow are being sprayed to allow native plants to regenerate. Willows are aggressive wetland invaders, out-competing native species and shading out smaller plants. Blackberry will easily smother young native plants. Many exotic trees planted in the past are also being removed.

Water level setting – Weirs have been constructed and lake levels set to enable the diverse wetland plant species surrounding the lakes to survive.

Planting – Thousands of native plants have been planted by conservation groups and local schools and volunteers over the past 20 years. This work remains ongoing to restore the natural character of the site.

Expanding the riparian margins – The Waipa District Council acquired and purchased land around East and South Lakes to create a new esplanade reserve adjacent to the existing DOC wildlife management reserve. The two reserves combined create a wider buffer zone between the lakes and the surrounding farm land. Plants in this zone can help protect water quality in the lakes by trapping surface runoff from the catchment before it enters the lakes.

Predator proof fence. Photo: Karen Denyer (National Wetland Trust)

Ecology

The three lakes which make up the Serpentine complex (11.5 ha) were once a single lake named Lake Rotopiko. Lakes Serpentine North, South and East became distinct water bodies as drainage for agriculture in the early 20th century lowered water levels. Notably, the lakes still contain a range of native aquatic plants (macrophytes). Near Lake Serpentine East is a tall stand of mature kahikatea (Dacrycarpus dacrydiodes) and pukatea (Laurelia novaezelandiae), which shows us what much of Waikato's lowland floodplains used to look like. Willows (Salix cinerea, S. fragilis) and other pest plants are being removed from much of the lake margin, where remnants of naturally regenerating native vegetation can be found. Luckily the only pest fish present is rudd, as some species of exotic fish are capable of considerable damage to native aquatic plants and wildlife. Rudd are being removed and a fish barrier has been installed downstream to prevent their return.

Along with game bird species, you may see some of the more secretive native birds such as the New Zealand dabchick, scaup, Australasian bittern, spotless crake, white heron and banded rail. North Island fernbird, longtailed bats and kaka have also been recently recorded at the site.

Rudd – the only pest fish in the lakes. Drawing: Sonia Frimmel

Native pondweed (Potamogeton ochreatus) still survives in the lakes. Photo: Rohan Wells (NIWA)