



Rotorua lakes

Bay of Plenty



The Rotorua Lakes area is one of the most distinctive landscapes in the country, with unique hot pools, beautiful lakes and native bush. It is also an extremely important region culturally and historically, with its rich Māori heritage and world-renowned geothermal attractions. Volcanic in origin, the area boasts numerous lakes, with Lake Rotorua as the focal point.

Geothermal features

Rotorua's geothermal field contains numerous features including geysers, hot springs, mud pools, fumaroles, silica terraces and flats. The geothermal field and its associated surface features are national and international taonga (treasures).

Rotorua's sulphur-tinged air, steaming footpaths, mud pools and boiling springs form a unique environment that attracts visitors from around the world. The most iconic feature is Pohutu geyser flat, which ranks alongside the geysers of Yellowstone National Park as one of the last remaining active geyser fields in the world.

J. Smith

Wildlife

The large number of lakes in the Rotorua Lakes region means there is an abundance of waterfowl and wetland birds. Many areas are designated as wildlife refuges specifically for their protection, for example Sulphur Point, Hamurana and Rotomahana.

The southernmost bay on Lake Rotorua is an unusual wildlife refuge and an internationally important wetland. It is affected by the thermal field and the water is warm, milky, sulphurous, shallow and low in oxygen. Over 60 bird species have been recorded in this area, including 45 native species. This type of habitat with a large, flat surface close to a lake is rare in the region.



The Rotorua region is also notable for its scattered kōkako populations. This endangered endemic bird is slowly making a comeback thanks largely to the significant contributions made by local communities working alongside the Department of Conservation (DOC). Other birds that can be seen or heard in the area's forests include tūī, bellbird, kererū, kākā, North Island robin, fantail and ruru (morepork).

The privately-owned Mokoia Island in the middle of Lake Rotorua is home to several endangered native birds, including North Island brown kiwi, tīeke (saddleback) and weka. Visits to the island can be arranged through JONZ Corporation (phone 07 346 8332).

At the Motutara Point refuge, the warmth of the water and environmental conditions create a bird spa. The adjoining Sulphur Point Wildlife Sanctuary is an outstanding habitat for wading birds. Threatened New Zealand dabchick, banded dotterel, scaup, shag, pied stilt and Caspian tern are just some of the area's residents. Small silica inlets within Sulphur Bay provide a nationally significant habitat for one of the few North Island colonies of black-billed gulls. About 60 pairs of Southern black-billed gull breed within the sanctuary each year.

Plants

A fascinating variety of plants have made the Rotorua Lakes area their home, from rare geothermal vegetation and towering rimu trees to tiny native orchids and lush green ferns. With a relatively mild climate, Rotorua is one of the least windy places in the country. Winters are cool because of the general elevation of the district, with frosts common between May and October. Rotorua summers are warm, with the temperatures occasionally rising above 30°C.



The plant life associated with geothermal features is special because it is unique to the harsh geothermal environment and vulnerable to human interference. The risk of weed infestation is high if geothermal vegetation is disturbed. Few people know of the rare thermal orchids and mistletoe, or that the dark orange coloration commonly seen on geothermal vegetation is a fungus.

Threats

The Rotorua lakes have a long history of problems associated with introduced aquatic weeds. Accidental transfers of both nuisance weeds and algae are a threat to the lakes, rivers and streams. Aquatic weeds and algae can form large beds and platforms, often smothering native plant and fish habitat and detracting from aesthetic and recreational values.

Weeds and algae can be spread from lake to lake accidentally by boat owners. Some Rotorua lakes are free of the worst aquatic weeds and must be protected from the accidental introduction of weed fragments carried on boats or equipment used in other lakes. Pest fish eggs can also hide in weed fragments. To prevent the spread of aquatic weeds and fish, it is important that boaties make every possible effort to clean weeds off boats and equipment before entering the Rotorua Lakes.

Geothermal features are fragile, easily damaged and usually irreplaceable. Concreting, pipes, trenches and other structures around thermal pools damage natural features. Examples can be found at Whakarewarewa, Ohinemutu and the Government Gardens (Rachel Spring). Surface gravel on pathways washes readily onto geothermal features, sometimes to the extent of permanently smothering mud pools and geysers and defacing the aesthetic qualities of other formations such as silica terraces.

Activities such as dumping rubbish, bike riding, walking off marked tracks, removing plants and throwing rocks onto sensitive sites such as silica terraces may seem minor but collectively can cause significant damage. The introduction of pine, bamboo, hakea, acacia and grasses to natural geothermal landscapes can also detract from their natural character.

The natural outflow of hot geothermal fluid creates many natural geothermal surface features and powers the geysers. Any lowering of water levels in the geothermal reservoir below these features therefore reduces their performance. Excessive removal of geothermal fluid from the reservoir is the greatest threat to the field's surface features.

Further information

For more information about this special area contact the Rotorua Lakes Area Office (phone 07 348 3610) or visit the DOC website at www.doc.govt.nz.