

Wildlife and farming coexist successfully

Protecting biodiversity is about making sure the scroll plain's native plants and animals continue to survive in sustainable habitat and viable populations. Although farming, especially the establishment of pasture grasses, has changed the vegetation of the scroll plain, most farm grazing management is compatible with the fauna values of the wetlands, while light grazing may be suitable for those wetland areas that have significant botanical values. Keeping stock out of the river and other water bodies will help ensure good water quality in the Taieri River for the benefit of fish and invertebrate fauna and recreational use further downstream.

Biodiversity protection should focus on improving plant and wildlife habitat on the farm through appropriate farm management. This can include the fencing of the most sensitive natural areas or adjusting grazing management to allow areas of bush, native grasslands and wetlands to recover.

The Council's biodiversity programme

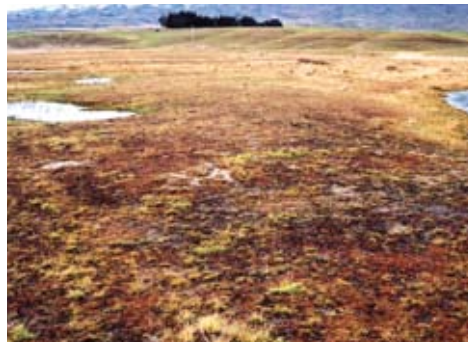
The Otago Regional Council can provide private landholders with technical advice and give financial assistance for fencing, weed and pest control, re-vegetation and other expenses to protect and manage biodiversity in Otago. In the Upper Taieri, biodiversity funding may be available for the protection and management (which can include grazing management) of wetlands, tussock grasslands, salt pans and shrublands.

For detailed information about riparian and stream management, including planting of suitable trees, shrubs and other plants, see Council's free guide for managing waterways in Otago (Environmental Considerations for Clean Streams).

The scroll plain wetlands are protected in the Otago Regional Council's Water Plan and Central Otago District Council's district plan. Please check with these organisations before undertaking any draining or cultivating of land in or near the scroll plain.



A small remnant of *Olearia odorata* shrubland in the Maniototo, some of the original vegetation of the area.



Saline area on the Scroll Plain at Big Sky, Patearoa.

For more information: Otago Regional Council

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The Upper Taieri River Scroll Plain



Part of the Upper Taieri River Scroll Plain within the Styx/Paerau Basin

A significant wetland in semi-arid Central Otago

The Upper Taieri River Scroll Plain is a large natural wetland in the centre of the Maniototo and Styx Basins, with nationally and regionally significant landscape and biodiversity values.

A scroll plain is a flood plain with a meandering river that changes its course during flooding, leaving ox-bow lakes and depressions that hold water for varying periods of time. The Upper Taieri River Scroll Plain is New Zealand's best example of such a meandering river.

Key to the long-term survival of the wetland values of the Upper Taieri River Scroll Plain are the dynamic natural forces that occur during seasonal flooding which create new wetlands and change existing ones.

The scroll plain's unique wetland status is recognised in and protected by the Otago Regional Council's Regional Plan: Water as a "significant wetland". The Central Otago District Council's District Plan describes the same area as an "area of significant indigenous vegetation and habitats of indigenous fauna and wetlands". The Department of Conservation administers reserves and covenants on the scroll plain and surrounding areas, covering more than 500ha.

Pressure on wetlands

Local farmers have lived and worked on the scroll plain in harmony with their natural environment for many farming years. Changes in farming, especially the arrival of dairy and deer farming, have put new pressures on the scroll plain's natural environment and biodiversity values.



Green tussock grass (*Deschampsia cespitosa*) at Serpentine Wildlife Management Reserve.



Looking across wetland dominated by the sedge *Carex secta* on Big Sky, Patearoa.

Cultivation and land use have gradually changed the scroll plain vegetation. Snow tussocks and woody plants (shrubs) have almost disappeared. Some areas still contain typical wetland plants such as sedges, rushes, raupo and the odd copper tussock.

Special plants and abundant fauna

The threatened native plants *Lepidium sisymbrioides* (a cress), mousetail (*Myosurus minimus* subsp. *novae-zelandiae*) (a spring annual), *Carex tenuiculmis* (a sedge) and *Deschampsia cespitosa* (a grass) can be found on the scroll plain. One of the ecologically most significant areas on the scroll plain is Serpentine Wildlife Management Reserve.

Salt pans and other, usually small saline areas naturally occur on the Maniototo part of the scroll plain. These rare ecological areas contain a range of unique salt tolerating plants. Some of these specialised plants are endemic to Central Otago and are found nowhere else in the world.

The wetland's naturally fertile shallow waters provide a rich food supply for waterfowl. Dense vegetation, often close to water, provides good breeding habitat for ducks, while large bodies of open water are ideal for moulting waterfowl. The Upper Taieri River Scroll Plain is an internationally important waterfowl habitat, one of the ten most valuable in New Zealand.

The Upper Taieri River contains a regionally significant brown trout fishery. Native fish in the main river include long-finned eel, common bully and lamprey.

Two unique species of non-migratory galaxiids are present in tributaries like the Eweburn, Linnburn and Totara Creek. These small native fish have suffered from trout competition and habitat modification, and persist only in small fragmented populations.



Flathead galaxiid



The Upper Taieri River in the Styx Basin