

## **Crown Pastoral Land Tenure Review**

**Lease name: GEM LAKE**

**Lease number: PO 122**

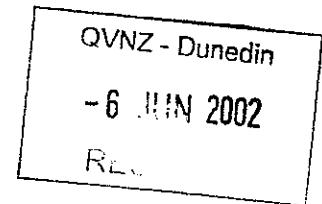
### **Fish & Game Report**

As part of the process of Tenure Review Fish & Game councils may provide advice on significant inherent values within the pastoral lease, and the information may be incorporated in the Conservation Resources Report. The advice is part of the information gathered and assessed for the development of a preliminary consultation document.

The report attached is released under the Official Information Act 1982.

**December**

**05**



## Fish and Game Resources Report for the Gem Lake Pastoral Lease.

Prepared by the  
Otago Fish and Game Council

### Section One - Introduction

#### *1.1 Purpose*

The purpose of this report is to advise the Commissioner of Crown Lands on the sports fish and game bird values present on the land included in the Gem Lake Crown pastoral lease. The lease is being considered for land tenure review and disposal under the provisions of the Crown Pastoral Land Act. As well as habitat values the report covers angling and hunting values and associated access issues. ✓

Information for this report has been researched and prepared by Otago Fish and Game Council staff. ✓

#### *1.2 Location*

The Gem Lake Crown Pastoral lease is bordered by the Pomahaka River in the east, the Umbrella Ranges in the west, the Whitecomb Crown Pastoral lease in the south, and the area known as "Island Country" in the north. ✓

#### *1.3 Habitat Description*

The westerly boundary of the pastoral lease contains high altitude rolling semi-modified tussock grasslands, changing to predominately exotic grasses in the midsections and becomes steep towards the Pomahaka River. Tongues of native bush are found around streams that flow into the Pomahaka River. ✓

The Pomahaka River contains a variety of instream habitat types and clear, slightly tannin stained waters. The riparian margin contains intermittent patches of native bush, exotic and native grasses. ✓

Jordan Creek is a tributary of the Pomahaka River. The lower reaches are approximately 20m wide, contain riffles and runs mainly, with lesser areas of pools, and a substrate containing boulders, cobbles and gravel in the surveyed area (approximately 150m

*Statutory managers of freshwater sports fish, game birds and their habitats*

**Otago Region**

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upstream and 350m downstream of the ford). The riparian margin contained a mixture of native forest and both exotic and native grasses.

The remaining Pomahaka tributaries in the Gem Lake pastoral lease are small and steep, surrounded by native bush in the lower reaches, and both exotic and native grasses in the upper reaches.

#### *1.4 Invertebrate Fauna*

The invertebrate fauna found was similar for all streams, with the mayfly *Nesameletus* sp. (Ephemeroptera) dominating the invertebrate fauna numerically. Other taxa found in lesser numbers included *Deleatidium* spp. (Ephemeroptera), *Psilochorema* spp., *Hydrobiosis* spp. and the cased caddis *Olinga feredayi* (all Trichoptera), *Stenoperla* spp. (Plecoptera) and *Archichauliodes diversus* (Megaloptera). Overall, the invertebrates found were taxa associated with good quality waters.

In addition there were several streams that appeared to be ephemeral and contained taxa such as Amphipods that are able to tolerate periods of low or no flow providing some dampness remains in the streambed.

## **Section Two - General Resources Information**

### *2.1 Sports Fisheries Habitat Values*

The upper Pomahaka River contains regionally significant fish habitat (brown trout, *Salmo trutta*, spawning and rearing) and was gazetted as such under the "the Local Water Conservation Notice 1989". Chinook salmon (*Oncorhynchus tshawytscha*) are recorded as spawning in the upper Pomahaka also.

### *2.2 Sports Fisheries Recreation Values*

The upper Pomahaka contains good back country fishing on a seasonal basis and was gazetted under the "the Local Water Conservation Notice 1989" as containing regionally significant fish habitat (brown trout, *Salmo trutta*, spawning and rearing).

No sports fish were found in Jordan Creek or other Pomahaka tributaries located within the pastoral lease area.

### *2.3 Gamebird Recreation Values*

There are Paradise Shelduck present within the lease. These are of limited recreational value due to the isolation of the pastoral lease.

### *2.4 Other Recreational Values*

No other recreational values identified.

### *2.5 Access Information*

Access through the Gem Lake Pastoral Lease is at the runholders discretion.

**Section Three - Consultation**

*3.1 Consultation Undertaken*

N/A

*3.2 Issues Identified Through Consultation*

N/A

**Section Four - Fish and Game Recommendations**

*4.1 Fisheries Habitat Values*

The current marginal strip (subject to section 24 (9) of the Conservation Act 1987) will provide adequate protection for fishery habitat values. ✓

*4.2 Fisheries Recreation Values*

Recreational fishery values would be adequately protected by the measures outlined in 4.1. ✓

*4.3 Recreational Game Bird Values*

Limited value to game bird hunters due to the isolation of the area, what values exist should be protected by measures outlined in 4.1. ✓

*4.4 Access Views*

Vehicle access along the formed farm road should be secured by the creation of a road reserve or public vehicle access easement. This road starts at the south end of the Gem Lake Pastoral lease and would need to run to the point where the farm road crosses the unformed legal road.

*want vehicle access*

Dated: Wednesday, 30 May 2002

Signed

John Hollows  
Resource Officer  
For: The Otago Fish and Game Council