

Crown Pastoral Land Tenure Review

Lease name : MT CECIL

Lease number : PT 078

Conservation Resources Report

As part of the process of Tenure Review, advice on significant inherent values within the pastoral lease is provided by Department of Conservation officials in the form of a Conservation Resources Report. This report is the result of outdoor survey and inspection. It is a key piece of information for the development of a preliminary consultation document.

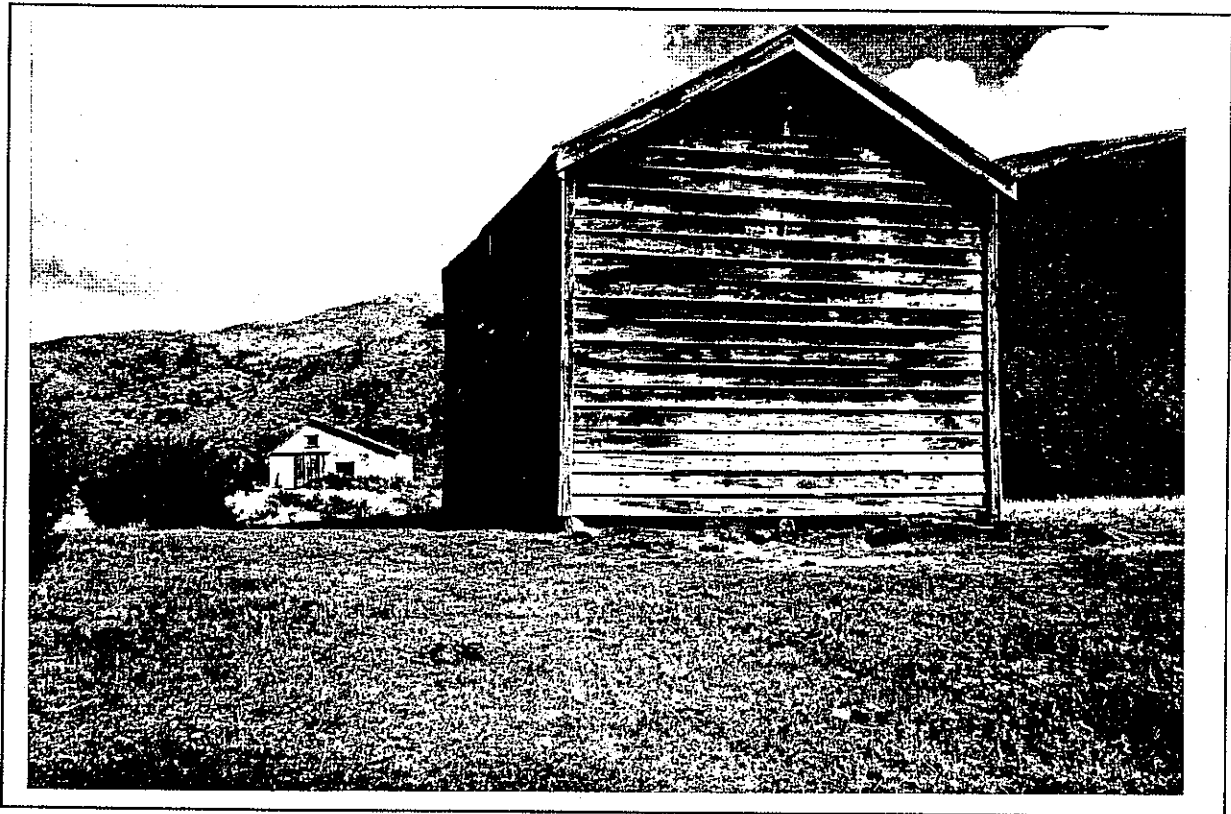
Note: Plans which form part of the Conservation Resources Report are published separately.

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December 05

CONSERVATION RESOURCES REPORT

MT. CECIL PASTORAL LEASE



DOC CONSERVATION RESOURCES REPORT ON TENURE REVIEW OF MT
CECIL PASTORAL LEASE

PART 1

INTRODUCTION

Mt. Cecil pastoral lease lies at the southern end of the Hunters Hills. The lease covers 2453 hectares and is run in conjunction with adjoining freehold and the Mt. Studholme pastoral lease. The lease part of Mt. Cecil has been known as Glenview but here is referred to as the Mt. Cecil pastoral lease. The lessee's homestead is on the eastern side of the hills some 20km from Waimate.

The Mt. Studholme pastoral lease lies to the south of Mt. Cecil. To the west is freehold land while to the north is the Kaiwarua pastoral lease. On the eastern side of Mt. Cecil is the Noondale forestry block and, in the north-eastern corner, the lease joins with the freehold Mt. Cecil land.

The Hook River Conservation Area adjoins the lease on the lease's south-eastern corner. To the east of the lease, in the Noondale Forest, there is two conservation covenants over native bush blocks. Neither of the covenants joins the Mt. Cecil lease.

The pastoral lease lies in the Hunters Ecological District of the Pareora Ecological Region and is characterised by non-glaciated low ranges to 1525 metres a.s.l. No assessment has been made of the ecological district as part of the Protected Natural Areas programme.

PART 2

INHERENT VALUES, DESCRIPTION OF CONSERVATION RESOURCES
AND ASSESSMENT OF SIGNIFICANCE

2.1 Landscape

The Hunters Hills can be divided into two landscape types. The first type is the eastern faces characterised by the downlands rising gradually from the plains into the dissected high hills and low mountains which contain deeply incised valleys such as the Otaio Gorge. The second type is the western flanks which are characterised by a series of valleys that run directly towards the North Branch of the Waihao River which is contained within a broad valley.

Mt. Cecil lease can be divided into two units based on the landscape types. The units are described below.

Landscape Unit 1:

This unit covers all of land in the lease which forms the headwaters of the Otaio River. Two prominent ridgelines define the unit, the first being the ridge that forks out from the north-east side of Mt. Studholme and terminates at Mt. Cecil (1005 metres). The other ridgeline forms the main axis of the Hunters Hills with the highest point being Trig T (863 metres). In between these ridgelines is a large tract of dissected hills where the waterways form tributaries of the Otaio River.

A distinctive feature of the eastern ridgeline is the large rocky outcrops that form a local landmark. Much of the high altitude land at the head of the Otaio shows signs of natural wind erosion. A conspicuous feature on the more severe slopes, close to the ridgelines, is the presence of sheet erosion.

There are a number of major earth disturbances around the edges of the unit. A dozed firebreak and fenceline have been put in along the eastern boundary and there is a zig-zag road descending the prominent ridge off Mt. Studholme. However, the unit retains most of its coherence through the presence of homogenous tussocklands in the mid-altitude zone. The unit is also contiguous with the area already protected in the Hook River catchment.

Landscape Unit 2.

This unit incorporates all of the ridges that descend off the main axis of the Hunters Hills towards the Waihao River. The unit has been subdivided into three grazing blocks where the degree of modification to the original cover is dictated by slope and aspect. Overall, the unit can be best described as a representative landscape forming an integral part of the character of the Hunters Hills.

2.2. Landforms and Geology

The lease lies across the top of the Otaio River catchment and on the western side of the Hunters Hills. The Hunters Fault runs north/south on the eastern edge of the range and has been instrumental in causing the uplift of the range. A subsidiary fault runs along the range itself and the Otaio River follows this fault initially before forcing its way out through the gorge to the plains.

The headwaters of the Otaio River are in the lease. The catchment is bounded by the Hunters Hills and the subsidiary range which includes Mt Cecil itself. Mt Studholme is at the head of the catchment. West of the Hunters Hills four streams flow into the North Branch of the Waihao River. All the catchments for these streams are contained within the lease.

The underlying rock is predominantly dark greywacke, black argillite and conglomerate with interspersed beds of red and green spilite. These rocks belong to the Torlesse group from the Permian (Paleozoic) age and are about 270 million years old. Metamorphic semi-schist rocks of the Haast group from the Middle Triassic period underlie the lower western faces of the property.

Soils are from the yellow-brown group and are predominantly Kaikoura steepland soils comprising silt, sandy and stony loams developed under snow tussock grasslands and Hurunui steepland soils developed under fescue tussock grassland. Both these types of soil are susceptible to wind and sheet erosion if the vegetation cover is reduced.

2.3. Climate

The annual rainfall is between 1000 and 1100 mm and is mainly from the southerly quarter. Easterly cloud drift often results in fog remaining around the tops, providing cold, moist conditions. Heavy frosts are common during winter and the occasional snowfall may cover the whole area, but usually lies only on the higher faces. The area is exposed to strong, dry, north-west winds which dry the vegetation and soils and lead to wind erosion.

2.4 Vegetation

All slopes over about 700 m. have a good cover of narrow-leaved snow tussock (*Chionochloa rigida*). On upper, flat ridge tops and along parts of the main divide boundary there are areas of closely grazed turf with scattered tussocks and large patches of *Celmisia spectabilis*. Eroded areas, and where the ground is rocky, contain open vegetation with *Celmisia* and small native shrubs. Areas of hard (*Festuca novae-zelandiae*) and silver tussock (*Poa cita*) are found on many drier faces with blue tussock (*Poa colensoi*) and exotic grasses. The broad, damp, valley bottoms of the central area contain silver tussock /rushland/ sedgeland vegetation with some shrubland. Shrubland is not well developed or extensive anywhere but occupies small areas of the steep, rocky valley bottoms of the Otaio catchment and the lower slopes of the valleys feeding westwards into the Waihao river. The lower slopes to the west are primarily in exotic grassland with hard tussock occasionally dominant.

The main vegetation communities are described below:

Snow Tussock Grassland

Narrow-leaved snow tussock forms the dominant cover on all slopes above about 700 m and extending down to about 500 m on some south and east faces. Cover varies from 50% on the drier slopes (600 mm to 800 mm tall) to quite dense on shaded slopes and in gullies where the soil is deeper and the soil moisture higher. Here the cover can be 80% to 100% and the tussock up to 1.7 m tall with scattered plants of speargrass (*Aciphylla aurea*), mountain flax (*Phormium cookianum*), *Juncus gregiflorus* and patches of *Celmisia spectabilis*. Numerous small shrubs and herbs occur in the inter-tussock spaces of the more open tussock areas. They include three species of snow berry (*Gaultheria* sp.) *Celmisia lyallii*, *Celmisia gracilentia*, *Geum leiospermum*, *Geranium microphyllum* *Viola cunninghamii*, *Kellaria dieffenbachii*, *Anisotome aromatica*, *Uncinia* sp. "fine" aff. *rubra*, several native grass and sedge species. Brown top (*Agrostis capillaris*), cats ear (*Hypochaeris radicata*) and mouse-ear hawkweed (*Hieracium pilosella*) are often present as minor components of the community.

In places where the rock is exposed, the tussock cover is very open and the vegetative cover 60 % to 80%. Mosses and lichens are important with up to 30% cover, *Celmisia* forms large

clumps also to 30% cover with small shrubs such as *Pimelea pseudobyalii*, *Gaultheria crassa*, *Pentachondra pumila*, and *Leucopogon fraseri* more prominent. *Dracophyllum uniflorum* is prominent on some rocky south ridges and spurs.

Patches of gorse and a few scattered broom plants occur in the upper tussock grassland.

Herbfields of ridge top and some fence lines

Intensive grazing along some upper fence lines and ridge top sheep camp areas form an induced turf zone with scattered clumps of snow tussock and *Celmisia*. Here more than 30 species of native species plus several mosses and lichens make up this closely grazed turf. Only four exotic species were found here and include the three mentioned above (brown top, cats ear and mouse-ear hawkweed) and sweet vernal (*Anthoxanthum odoratum*). Native species include *Acaena caesiiglauca*, *Brachyscome sinclairii*, *Helichrysum filicaule*, *Anaphaloides bellidioides*, *Oxalis lactea*, *Forstera tenella*, *Epilobium alsinoides* and *Lycopodium fastigiatum*.

Otaio Basin Area

A large area of low, rolling hills with broad valley bottoms forms the central part of Mt. Cecil P L. Narrow-leaved snow tussock dominates over much of this area except where intensive grazing has occurred on some slopes and along fence lines. Here the dominant cover is hard tussock and/or exotic grasses and white clover, with scattered snow tussock. Patches of silver tussock occur on the more fertile areas and in the damper valley bottom. Shrubs of native broom (*Carmichaelia petriei*) and *Olearia bullata* are present in low numbers. Wetter areas contain swamp sedge (*Carex secta*), *Schoenus pauciflorus*, *Aciphylla scott-thompsonii*, *Polystichum vestitum* and other rush and sedge species as well as exotic grasses and clover. A kowhai tree (*Sophora microphylla*) was seen at 750 m.

Hard tussock grassland

Below about 800 m hard tussock becomes more important and dominates on some slopes with scattered snow tussock. It is also important on heavily grazed areas such as ridge tops, fence lines and some of the flatter areas of the Otaio Basin. Exotic grasses are generally also present and in places dominate such as along access tracks. Below about 700 m the exotic component increases and hard tussock decreases but can be locally dominant as can snow tussock on shady slopes.

Shrubland

Shrubland is poorly developed on Mt. Cecil with fewer species than adjacent properties and much less dense. Small patches occur near the bottom of the deep, rocky gorges of the Otaio River and include *Dracophyllum longifolium*, while large areas of open, poorly developed shrubland occur in the catchment draining into the Waihao River from Mt. Studholm. Small areas of dense shrubland are found on the lower, rocky slopes above the Waihao River. The main species are matagouri, *Coprosma propinqua* and *Melicytus* sp. A few broadleaf (*Griselinia littoralis*), kowhai and cabbage trees occur in the bottom of the valley along with bracken.

2.5 Fauna

Birds appear to favour the shrubland areas with bellbird, tomtit, silver-eye and fantail noted. N Z falcon have also been seen and red polls and N Z pipit are seen in the open country. Hook Bush, which is adjacent to the lease, is a S.S.W.I (Site of Significant Wildlife Interest) and, as well as some of the above birds, contains rifleman and NZ pigeon. The covenants in the Noondale Forest also, presumably, contain similar species.

The open grasslands, shrublands, rock faces and wet grasslands/seepages are key habitats for a variety of invertebrates particularly diurnal moth species. The *Notoreas* species found here are known only from Mt. Cook southwards.

The lease incorporates the headwaters of the Otaio River which contains numerous small fish including *Gallaxias*, upland bully *Gobiomorphus breviceps*, longfinned eel and brown trout. In some of the smaller tributaries koura and brook char may also be present. The Waihao River supports a significant local fishery for brown trout in its upper reaches.

In the past, wallabies (*Macropus rufogrisea*) have been a problem with there being almost as many wallabies present as sheep. Poisoning and hunting have dramatically reduced the number of wallabies but they are still present. Hares, rabbits and opossums are present in the area but in low numbers. Chamois have been occasionally seen in the area.

2.6 Historic

The run was originally part of the Otaio Station which, at one time, took in all the country from the Otaio River to Hook Creek and from the sea to the Waihao Valley, some 120,000 acres. The first licences were taken up by Miss Jeannie Collier in 1854 and transferred to her nephews, Leslie, James and Andrew Thomson by 1861. Hard times in 1868 saw the splitting up of the station and the Teschemaker brothers and Henry Le Cren bought the leasehold country. The brothers bought out Le Cren's interest in 1878 and after F.W. Teschemaker's death in 1878 Thomas Teschemaker owned the property until 1907.

2.7 Public Recreation

2.7.1. Physical Characteristics

The Mt. Cecil lease includes the headwaters of the Otaio River catchment north of Mt. Studholme. The environment has been modified but is generally dominated by natural vegetation or landscapes. It is accessible by off road vehicles. The area qualifies as a Back Country Experience under the Recreation Opportunity Spectrum.

2.7.2. Legal Access

On the eastern side of the lease a legal unformed roadline passes through the Hook River Conservation Area and both the roadline and the Conservation Area allow walking access from the eastern side of the range to the south-east corner of the Mt. Cecil lease. Another unformed legal roadline follows the boundary of the Noondale Forest and the Mt. Cecil

freehold land to the north-eastern boundary of the lease but is not available as a practical walking route because of deer fencing and forestry operations.

Legal unformed roadlines or marginal strips follow the North Branch of the Waihao River on the western boundary of the lease. There is a legal unformed roadline which follows, for a short distance, the boundary of the Mt. Studholme and Mt. Cecil leases from the Old Kaiwarua Road.

2.7.3. Activities

On the eastern side of the lease the 4wd track across the summit of Mt. Studholme continues on to Mt. Cecil. This is not a legal roadline and there are locked gates near the top of Mt. Studholme and near Mt. Cecil. A 4wd track does, however, divert off the ridgeline track and drops down through the Mt. Cecil lease to the North Waihao River.

Use of the road across the top of Mt. Studholme for walking, mountainbiking and 4wd has been at the discretion of the lessee. The amount of existing use for these purposes is unknown but it is clear that such types of use could be very popular to gain easy access across such a prominent mountain. Wallaby hunting is the other recreational pursuit carried out on the lease.

PART 3

OTHER RELEVANT MATTERS & PLANS

3.1. Consultation

NGO's were notified of the inclusion of Mt. Cecil in the tenure review programme at early warning meetings in August 1998 and August 1999. A submission was received from the Federated Mountain Clubs of NZ. Their submission sought the retention of all legal roads and the provision of legal access to the top of Mt Studholme. If the road across Mt Studholme and into Mt Cecil can be used the F.M.C. believed this could be made available for walking and mountainbiking.

3.2. Regional Policy Statements and Plans

Not applicable.

3.3. District Plans

Mt. Cecil lies within the Waimate District. The proposed District Plan was notified in April 1996 and decisions on the plan were released in May 1998. The lease is all on land zoned rural. The Otaio catchment is further zoned as the Otaio Makikihi Water Supply Protection Area and the Hook catchment as the Hook Waituna Water Supply Protection Area. Objectives of the Rural Zone include:

1. Enhancement and protection of the conservation values of areas of conservation significance;

2. High country land use to be managed to ensure a robust and intact vegetation cover is maintained to assist in sustaining the life supporting capacity of the soil;
3. Protection and enhancement of the outstanding landscape values of the district, and of those natural processes and features and cultural values which contribute to the overall character and amenity; and
4. Maintenance of waterways, wetlands and water supply intakes and their margins to avoid degradation of the natural values of these areas and their associated waterbodies.

There are controls over indigenous vegetation clearance, forestry, earthworks and the erection of structures in areas over 900 metres in altitude (principally the main summit ridge). There are no rules applying to these activities below this altitudinal level. There are no extra rules for the water supply protection areas.

3.4. Conservation Management Strategy

The draft Canterbury Management Strategy recognises the Hunters Hills as the most seaward alpine area in Canterbury. An ecological survey of the Hunters Ecological District is recommended. Wallaby control is to be implemented in the future through a wallaby control plan. In the meantime, control will be undertaken on land managed by the Department and hunting permits will be issued in the Waimate Forest area under a joint permitting arrangement with the Waimate District Council.

3.5 Freshwater Fisheries Plans

Not applicable.

PART 4

MAPS ETC.

4.1 Additional Information

- (i) Terms and conditions of qualified designations
- (ii) Terms and conditions of protective mechanism

4.2 Illustrative Maps

4.2.1 Topo/Cadastral

4.2.2 Values

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