

Crown Pastoral Land Tenure Review

Lease name :Ribbonwood

Lease number :PO 247

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.

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

Copied October 2002



**DOC CONSERVATION RESOURCES REPORT ON TENURE REVIEW OF
RIBBONWOOD PASTORAL LEASE**

PART 1

1.1 INTRODUCTION

Ribbonwood pastoral lease covers 7289 ha of land stretching from a corner of the outwash plains south of Lake Ohau (the "Ohau Basin") west across the Diadem Range to the river terraces of the Ahuriri River. The station buildings are on the Quailburn Road approximately 18 km north west of Omarama.

Land adjoining to the north is Quailburn pastoral lease, to the north-east Tarnbrae freehold and Glen Eyrie Downs pastoral lease (part of Quailburn), to the south are the pastoral leases of BenDhu, Ahuriri Downs and Birdwood, and to the west is the Ahuriri River. The Ohau Conservation Area is located to the north separated by Quailburn Pastoral Lease.

The property lies across two ecological districts – Omarama and Ahuriri Districts, within the Mackenzie Ecological Region. The Omarama Ecological District is characterised by glacial till, outwash and basin fill covered in scattered fescue tussock grasslands with a significant proportion of exotic inter-tussock cover and many areas converted to pasture. The part of the property in this District is the flats and downlands at the eastern end of the property, extending out from the base of the Diadem Range. The Ahuriri Ecological District is mainly glaciated mountain ranges with large river valleys (eg. Ahuriri River) with tall tussock grasslands above about 1200m, and extensive oversowing and topdressing of lower slopes. This covers the Diadem Range and the terraces of the Ahuriri River. Both of these districts have been surveyed as part of the Protected Natural Areas Programme in 1982/83. Two RAPs were identified on the property – a small corner of Ahuriri 8 (East Diadem Range) and Omarama 6 (Glen Eyrie Downs tussock). Both of these were reassessed during the preparation and submission on the Waitaki District Plan and the boundaries of both have been significantly modified because of the deterioration of natural values since the survey. Neither have so far been endorsed by the Waitaki District for inclusion in the plan.

PART 2

**INHERENT VALUES: DESCRIPTION OF CONSERVATION RESOURCES AND
ASSESSMENT OF SIGNIFICANCE**

2.1 Landscape

2.1.1 Landscape Context

The property lies within a broad Waitaki/Mackenzie "Range and Basin" landscape

character type. While there are subtle differences between the Ahuriri Valley and the Ohau Basin, the essential underlying characteristics are similar. The differences are mainly culturally induced and due to the degree of land development that has occurred on the Ohau Basin side.

Landscape character in these broad open landscapes closely reflects geomorphic processes. The processes responsible for shaping the landscape are highly legible. Essentially the flats and lowlands at both ends of the property are derived from glacial till and outwash gravels. The Diadem Range and surrounding ranges are derived from greywacke and argillite and are extensively folded and eroded over long periods of time.

2.1.2 Landscape Character - Description of Property

Ribbonwood is broadly consistent in character and considered to be a part of one landscape character type. For descriptive purposes, the property has been divided into seven separate **topographic land units**. These units do not represent landscape units but relate to changes in landform.

The topographic land units are:

1 Ohau Basin Flats

Comprises all of the flat to undulating farmland from the foot of East Diadem to the eastern boundary. Here the natural landscape has been transformed into a productive agricultural landscape of conifer shelter-belts, plantation forestry, "improved" pasture and paddocks. The property boundary is clearly differentiated from surrounding land by tree planting and pasture improvement. It has an "oasis" like quality.

The farm buildings and the homestead are nestled within a variety of mature exotic trees. Tree spread on the surrounding undeveloped land to the north and east is occurring and has an impact on the natural and landscape values. Views framed by tree plantings and productive pasture, from the homestead complex to the surrounding ranges, mountains and the basin are visually impressive.

2 East Diadem

Includes part of the East Diadem Creek catchment that occurs within the property boundary. This unit includes the mountain slopes of the Diadem Range from the toe of the slope at around 700 metres to the ridge. Below approximately 1000 metres the hillslopes have been oversown and top-dressed. Responding to fertiliser, low patchy matagouri shrubland has been burnt to control its vigour. Two douglas fir plantations are well established at the base of the hill. Snow tussock is retained on the upper slopes above approximately 1000 metres. Bare ground, erosion and scree is common on the upper reaches.

A variety of trees, mainly pines, planted by the Catchment Board in the 1960's and 1970's in an attempt to halt erosion, occur in scattered groupings and lines. The trees

have been planted in unusual configurations across the slope. Apart from being ecologically misplaced, visually they appear incongruous and disrupt natural character and pattern.

3 *Diadem Range Summit*

The unit loosely overlaps with other lower topographical land units. The boundary equates to approximately the 1600 metre contour. Tussock intersects with rocky scree and gravel. Reddish brown *Dracophyllum* provides a contrast to tussock on shady faces. The combination of rocky scree, outcrops, gravel, islands of tussock and the distinctive conical landforms of Diadem and False Diadem forms a rather impressive "lunar" like landscape. Views out to surrounding ranges, peaks, lakes and basins are outstanding and spectacular.

4 *Ribbonwood Creek*

Ribbonwood Creek is a narrow catchment incised into the west face of the Diadem Range. It is a tributary of the Ahuriri River and drains to the south-west. The upper reaches are hidden from view. Snow tussock is the dominant cover in the upper catchment. There is marked contrast in the better condition of tussock cover on shady faces compared to sunny faces (north-facing slopes). Hieracium is a major component on north faces. The upper catchment is reasonably intact and in visual terms appears as extensive tussock grassland.

Areas of rocky scree amongst extensive snow tussock are characteristics of the upper catchment. Occasionally, small islands of shrubland are protected by the scree and have escaped fire. Species present include *Brachyglottis cassinioides*, tauhinu, snow tussock, celery pine and Coprosmas. In the mid-section the valley narrows and dense grey scrub is associated with a rocky blockfield close to the stream. Scattered short tussock, pasture, hieracium and grey shrub species are dominant in the lower catchment. One or two ribbonwoods occur along the stream margin but do not appear to be increasing in extent.

5 *West Diadem*

West Diadem includes the west faces of Diadem within the Ahuriri Valley. The west face has a series of gullies cut into the Diadem Range. The largest is West Diadem Creek. Terrace and fan formations are characteristic landforms at the base of the slope.

Vegetation is predominantly tall tussock down to about 1000 - 1100 metres on the sunny faces and about 800 metres on shady faces. Speargrass, native broom, *Pimelea* are common native species on the lower slopes, along with short tussock and exotic grasses.

Patchy shrubland is associated with drainage lines and watercourses. The tell-tale grey of mouse-ear hieracium is extensive over large tracts of West Diadem, particularly on sunny faces.

6 *Ahuriri Valley Floor - Flats and Terraces*

Outwash flats and terraces characterise the valley floor. Two main terrace levels occur. A higher terrace on the western boundary above the main stem of the Ahuriri River extends across to a lower terrace associated with the East Branch. The lower terrace is wetter at the southern end with extensive *Bulbinella*, sedges, and rushes along water courses with patchy matagouri. Conifer shelterbelts criss-cross the drier upper terrace flats forming a strong cultural pattern. The southern boundary is also clearly defined by a conifer shelterbelt. Blocks of plantation forestry have been planted more recently bringing a major change to the natural landscape character.

Sparse short tussock, mouse-ear hieracium and exotic grasses are the main low level ground cover.

Overall the flats are highly modified.

7 *Diadem North Face*

The main farm access track linking the front and rear of the property traverses the lower slopes of the north face. A saddle midway along divides the drainage east to the Ahuriri East Branch and west to the Quailburn Stream.

The lower slopes are oversown and topdressed with sparse short tussock, briar, matagouri, scattered speargrass, grey shrubland species and exotic grasses. Tall tussock comes in at about 900 metres with significant bare ground and scree with altitude. Views from the access road across the Mackenzie Basin and Lake Ohau are expansive and visually impressive.

On approaching the saddle the view opens to the west into Ahuriri East Branch and the impressive mountain country behind. It has a more remote back country feel with the general appearance of a tussock grassland from top to bottom. Unfortunately a small douglas fir plantation disrupts the coherence of the tussock landscape.

2.1.3 Visual and Scenic Values

Ribbonwood's primary visual and scenic values are related to its place within the wider landscape. There are no individually outstanding natural landscapes or features on Ribbonwood itself, except the screes and tussockland of the high altitude areas. Its main value, however, is in that it forms part of a wider landscape that has significant visual and scenic values.

The Diadem Range is important as part of the enclosing ranges of both the Ohau Basin and within the Ahuriri Valley. From the distance the range is not visually distinctive but a part of the continuum of enclosing hills and as a backdrop to their respective basins and valleys.

The developed flats on the Ohau basin side have high visual and scenic values in the sense of an agricultural landscape. The appropriateness of this type of landscape in the open treeless Mackenzie Basin could be argued. It represents a major change from the indigenous character of the area. There is no doubt however, that the combination of productive farmland and trees with views to surrounding mountains, ranges and basin, is visually impressive and equates to high scenic value.

The saddle area linking the Diadem Range to the Ohau Range is considered visually significant. Visually it forms part of the Ahuriri East Branch and is contiguous with the mountain landscape of the Ohau and Barrier Range rising to the north.

The Diadem Range summit has the greatest level of intactness and is also visually impressive. The combination of the distinctive landforms of Diadem and False Diadem (seen at close range), rocky outcrops, screes and gravel, the pattern and condition of vegetation and the magnificent views out are contributing factors.

On the Ahuriri side the shelterbelt plantings have imposed a rigid new landscape pattern which has drastically altered natural landscape character and to my mind visual and scenic values.

An important aspect of visual and scenic values on Ribbonwood is the outstanding views out from many parts of the property, significant for recreation.

Detractors

The property is very well tracked. While this makes access easy, few views are without tracks. In many instances they disrupt landscape coherence. Some have eroding side cuts and fills, the worst example being on the Diadem north face.

The catchment board plantings at high altitude disrupt natural pattern and character and detract from visual and scenic values. As discussed above the pine plantings on the Ahuriri Valley floor also detract from the 'indigenous' backcountry valley landscape.

2.1.4 Evaluation and Conclusion

Apart from the high altitude land (above approximately 1100-1200 metres) 'indigenous' landscape character has been extensively modified on Ribbonwood through the modification of indigenous vegetation resulting from pastoralism and land development.

The Ohau flats represent a culturally modified agricultural landscape with its own landscape values but with little left of its indigenous character.

The Diadem land units below about 1100 metres have been oversown and top-dressed but still retain an indigenous component in the form of scattered shrubland and short tussock.

Grazing, but more significantly the planting of shelterbelts and plantation forestry, has also modified the Ahuriri flats.

The Diadem Range summit and tall tussock landscape are the least modified land units on Ribbonwood. Another area of high landscape value is the northern flank of the Diadem Range from the saddle west to the point where the Ahuriri East Branch enters the Ahuriri Valley. This area has a degree of intactness and visually relates to the Ahuriri East Branch and to the impressive mountain landscape of the Ohau and Barrier Range to the north.

2.2 Landforms & Geology

The "flat" lands of the Ohau Basin side of the property are made up of thick deposits of greywacke outwash gravels with some glacial till and subdued morainic topography. These were formed down-valley from the glacier fronts when water was abundant with glacial melt and the glacier-eroded material was carried forward by outwash rivers, building up aggradation surfaces that extended from the terminal moraines down to the maximum of each ice advance. Downcutting followed the retreat of the glaciers, terracing the outwash gravels. The Ahuriri River terraces are more a valley fill system with alluvial and swamp deposits and outwash gravels. The Diadem Range is made up of colluvial greywacke mountain slopes with bare ground and screes typically common at high altitudes.

2.3 Vegetation

Introduction

Tussock-grassland is the dominant vegetation cover on Ribbonwood with developed pasture on the eastern flat lands and a small area of remnant tussock in the wet, north-east corner of the property. Exotic grassland with much mouse-ear hawkweed and mixtures of hard tussock-exotic grassland are found on the Ahuriri River terraces to the west and on some lower slopes with short tussockland at mid-altitudes and snow tussockland above about 900m depending on aspect. Screes and boulder fields are extensive and cushion vegetation covers parts of the upper ridges. In places shrubland is returning to lower slopes after burning with well-developed shrubland in the lower Ribbonwood and West Diadem Creek gorges.

The Catchment Board planted a variety of *Pinus* species on the property over 20 years ago. These form long, irregular lines in parts of the East Diadem catchment, along the west ridge at 1360m and at 1480m. The previous lessee has also planted *Pinus mugo* on part of the flat summit area at 1600m. A line of pine trees runs uphill, along the ridge below point 1505m north of False Diadem and planted trees occur along the 4WD track above the southern edge of the East Diadem catchment. In more detail the vegetation on the property is made up of:

Exotic grassland

Most of the extensive flat land running north-east from the foot of the Diadem Range, has been developed as pasture or is planted in plantation forest. Its altitude lies between 600 and 700m and, with the exception of the wetlands, its value to conservation is nil.

Mixed exotic-native grassland and hard tussock-exotic grassland

These communities form a mosaic on the Ahuriri River terraces and lower slopes of the Diadem Range extending up to about 900m on slopes with a northern aspect, with occasional patches up to about 1100m. There are large areas dominated by brown top (*Agrostis capillaris*) and sweet vernal (*Anthoxanthum odoratum*) with much mouse-eared hawkweed (*Hieracium pilosella*). King devil hawkweed (*Hieracium praealtum*) is also sometimes present. Hard tussock (*Festuca novae-zelandiae*) is generally present to varying degrees and can be co-dominant with the exotic grasses and more occasionally dominant, but with both indigenous and introduced species in the inter-tussock spaces. As well as mouse-ear hawkweed, a number of indigenous small shrubs, herbs, grasses and sedges make up the ground cover. These include patotara (*Leucopogon fraseri*), *Raoulia subsericea*, snowberry (*Gaultheria novae-zelandiae*), *Coprosma petriei*, *Luzula rufa*, *Pimelea oreophila*, *Celmisia gracilentia*, the bidibid *Acaena caesiiglauca*, the grasses *Poa colensoi*, *Rytidosperma pumilum* as well as *Scleranthus uniflorus* and harebell (*Wahlenbergia albomarginata*). In places bracken (*Pteridium esculentum*) forms patches, and matagouri (*Discaria toumatou*) is frequently present especially on the northern slopes where it is recovering from fire. Other shrubs which are scattered across this grassland, but in low numbers, are coral broom (*Carmichaelia crassicaule*), tawhini (*Ozothamnus fulvida*), *Coprosma propinqua*, *Melicytus* sp. and in places with more moisture *Olearia bullata*. Speargrass (*Aciphylla aurea*) can also be present.

Red tussockland

A small remnant of red tussockland (*Chionochloa rubra*) grassland is found in the north-east corner of the lease. It shows signs of having been burnt in the past and pugging by cattle is obvious leaving a very lumpy surface in places. Although modified, it still has a good representation of indigenous plants which show that this was once a red tussock/sphagnum wetland at its wettest with comb sedge (*Oreobolus pectinatus*) communities, and shrubland containing manuka (*Leptospermum scoparium*), *Coprosma* species and bog pine (*Halocarpus bidwillii*) on drier sites.

Tall red tussock dominates with the exotic grasses browntop and Yorkshire fog (*Holcus lanatus**) and the herb *Lotus major** prominent. Where it is slightly drier such as humps, sweet vernal and tall fescue (*Festuca arundinacea**) occur while the native bog rush *Schoenus pauciflorus* can also be important in the hollows. The native plants present include the grass *Rytidosperma gracile*, several sedges (*Carex* sp.) and herbs such as the buttercup *Ranunculus gracilipes*, *Gonocarpus micranthus*, *Gaultheria parvula*, *Celmisia graminifolia*, sundew (*Drosera arcturi*), *Stackhousia minima*, Maori onion (*Bulbinella angustifolia*), *Epilobium pallidiflorum*, a fern *Blechnum penna-marina* and mosses including *Sphagnum cristatum*. Open patches of water contain the floating plant *Potamogeton cheesemanii*. Several species of

introduced sedges and rushes occur throughout and are prominent in places with mouse-ear hawkweed occasionally present. Other native shrubs include *Hebe pauciramosa*. Towards the outer edges, the red tussock opens up with more exotic grasses and sedges present before giving way to exotic grassland near the surrounding fence lines.

Snow tussockland

The occurrence of narrow-leaved snow tussock varies with altitude and aspect. On north, north-west and west faces which bear the brunt of drying north-west winds and the often intense sunshine, snow tussock dominates above about 1000m. It is generally quite open with less than 50% cover. Bare ground can form as much as 50% of the cover with few inter-tussock species particularly where the ground is stony with skeletal soils. By contrast, on south and east facing slopes, the snow tussock is more dense, in places such as damp gullies and valley floors, it can be more than 90% cover and dominates to as low as 800m. Scattered tussocks can be found to the valley floor on all aspects giving a clue to its previous distribution before extensive burning and grazing took place. Slip scars and gully erosion can be seen at all altitudes and aspects but are more prominent on northern aspects and at higher altitudes.

On the right hand side of the valley there are dense snow tussocks on the south-facing slope, while on the left, north face there are open tussocks with much more bare ground and erosion scars. Note also the extensive screes in the valley head and boulder fields, the darker (stable, lichen covered rocks) rocks along the ridge top left and towards the valley bottom, left side. These blockfields have their own specialised community described below. Introduced species are few until well down valley where a mosaic of plant communities including large patches of introduced grasses and a whole range of indigenous plants not found higher. A fence crosses the valley and 4 w.d. track

The tops of side ridges tend to have similar cover to the northern slopes. A typical site at 1140m has rock and bare ground up to 30% cover, narrow-leaved snow tussock 25%, mouse-eared hawkweed 15-40% in patches, king devil hawkweed 5% with numerous minor indigenous species which in areas can form up to 5% of the cover and include hard tussock, the speargrass (*Aciphylla aurea*), *Leucopogon colensoi*, *Carmichaelia vexillata*, *Raoulia subsericea*, matagouri and *Celmisia gracilentia*. An east face at the same altitude had similar vegetation except the tussock cover was up to 50% with less bare ground and a more diverse community with additional species such as *Pimelea oreophila*, *Kelleria villosa*, *Gaultheria novae-zelandiae*, clubmoss (*Lycopodium fastigiatum*), and scattered shrubs of cassinia (*Ozothamnus fulvida*) and *Dracophyllum uniflorum*. Brown top, sweet vernal and mouse-ear hawkweed are also common. The introduced species become less important at higher altitudes but both hawkweed species occur sporadically in all communities including the summit area.

A south face at 1240m in Ribbonwood Creek has a cover of narrow-leaved snow tussock of > 80% and little bare ground (I THINK THIS WAS CHIMAC – need to check). Common species here are *Celmisia lyalli*, *Poa colensoi* and *Gaultheria novae-zelandiae* along with hard tussock, *Lycopodium fastigiatum*, *Celmisia gracilentia*,

Acaena inermis, *Anisotome flexuosus* and *Raoulia subsericea*. Where the ground is more stoney, *Dracophyllum pronum*, *Blechnum penna-marina*, *Leucopogon fraseri*, and *Coprosma petriei* are found and in the damper gully bottoms *Bulbinella angustifolia*, *Coprosma atropurpurea*, *Gaultheria parvula*, *Schoenus pauciflorus*, *Isolepis aucklandica* and *Epilobium macropus* can be seen.

Above about 1500m slim-leaved snow tussock (*Chionochloa macra*) takes over from narrow leaved snow tussock and becomes the dominant cover. There is often a zone between the two species where they intergrade and hybridism occurs between the two. A north facing, shallow slope at about 1600m had a cover of slim leaved snow tussock of 40 to 50%, rock 30 to 40% with *Pentachondra pumila*, *Raoulia grandiflora*, *R. subsericea*, *Kelleria villosa*, *Gentiana* sp., *Rytidosperma pumilum*, *Celmisia lyalli*, *Aciphylla aurea*, *A. montana*, *Anisotome flexuosa*, harebell (*Wahlenbergia albomarginata*), *Pimelea oreophila* and hard tussock. King devil hawkweed and sheep's sorrel (*Rumex acetosella**) were the only introduced species.

The relatively flat summit areas have patches of slim leaved snow tussock where a thin soil can accumulate but scree and boulder fields are extensive. Cushion vegetation also occurs here.

Cushion plant communities

Small areas of cushion plants are found on the higher ridges and exposed summit areas and are often associated with slim-leaved snow tussock. Plants present in this community include *Raoulia hectorii*, *Phyllachne colensoi*, *Kelleria villosa*, *Chionohebe thomsonii*, *Raoulia grandiflora*, *Dracophyllum muscoides*, *Aciphylla montana*, *Anisotome flexuosa*, *Leptinella pectinata*, *Luzula pumila* and blue tussock (*Poa colensoi*). The forget-me-not *Myosotis suavis* and a *Gentiana* species were growing on False Diadem.

Boulderfields and scree communities

Dotted throughout the mid and higher altitude slopes of the property are boulderfields which have protected a number of shrubs from fire. Snow totara (*Podocarpus nivalis*) is the most common plant of boulder-fields, occurring at all elevations. Other common plants associated with these boulders at higher altitude are *Dracophyllum pronum*, *D. muscoides*, *Hebe buchananii*, *Melicytus alpina* and *Chionochloa macra* (mainly around the edges). These plants are joined at mid-altitude by *Brachyglottis cassinioides*, *Leucopogon colensoi*, *Carmichaelia crassicaule*, *cassinia* (*Ozothamnus fulvida*), *Pimelea traversii*, mountain celery pine (*Phyllocladus alpinus*), *Aciphylla aurea* and *Gaultheria crassa*. At lower levels matagouri, *Coprosma propinqua*, *Aristotelia fruticosa*, *Corokia cotoneaster*, *Hebe rakaiensis*, *Hoheria lyallii* (in gullies) with the climbers bush lawyer (*Rubus schmidelioides*), *Clematis marata* and *Muehlenbeckia complexa* and introduced briar and gooseberry are usually associated with these boulderfields. These later species also form the **shrublands** at lower altitudes, in the lower gullies, narrow valley bottoms and on bluffs.

Specialised scree plants are few but include *Myosotis traversii* var. *cantabrica*, *Hebe haastii* var. *humilis*, *Epilobium pychnostachyum*, *Trisetum youngii*, *Lobelia roughii* and *Haastia pulvinaris* with *Celmisia angustifolia*, *C. densiflora*, *Colobanthus brevifolia*, *Koeleria cheesemanii* and *Raoulia eximia* on rock ribs.

Stream edge and seepage communities

In places, small flush zones develop where water seeps from the ground. Here *Schoenus pauciflorus* dominates with *Carex coriacea*, comb sedge and few other small plants associated with wet land. On mid to high altitude slopes of the Diadem Range stream edges carry a diverse community with species such as *Dolichoglottis lyalli*, *Forstera tenella*, *Ourisia caespitosa*, *Polystichum cystostegia*, *caltha* (*Psychrophila obtusa*), *Pratia angulata*, *Epilobium macropus*, *Acaena fissistipula*, *Raoulia tenuicaulis*, *Schizeilema sulcata*, *Coprosma perpusilla* and others.

Shrubland

Shrubland is found on the boulderfields, lower bluffs and valley bottoms as mentioned above. Matagouri dominates on lower slopes especially where frequent fire has reduced the seed source of other species. As well as those species mentioned above, *cassinia*, *Carmichaelia petriei*, *Dracophyllum uniflorum*, the ferns *Hypolepis millefolium*, and *Polystichum vestitum* as well as the herb *Brachyglottis haastii* often form part of the shrublands.

2.4 Fauna

As a result of a faunal survey undertaken in late January 1999 35 bird species, 8 butterflies, four endemic fish, four grasshoppers, four reptiles, two dragonflies, two damselflies and two freshwater molluscs were recorded on Ribbonwood.

2.4.1 Birds

The bird species included 13 endemic and 8 native species. The remainder are introduced. The wetlands, streams and flushes on the river terraces and outwash plains as well as the riverbeds are particularly important for bird life. The most important areas for birdlife on Ribbonwood are in the East Branch of the Ahuriri River and associated wetlands, lower Ribbonwood Creek, lower terraces of the main Ahuriri River, and a wetland in the north-eastern corner of the property on the outwash plains of the Ohau basin. The key species inhabiting these wetlands are blackstilt, banded dotterel, and pied oyster catcher which both breed and feed on Ribbonwood Station, as well as Black fronted tern, Pied Stilt, black-billed gull, shoveler duck and grey teal which feed on many of these wetlands.

2.4.2 Freshwater fish and reptiles

The freshwater fish on the property include koaro (*Galaxias brevipinnis*), alpine galaxias (*G. paucispondylus*), Canterbury galaxias (*G. vulgaris*), and upland bully (*Gobiomorphus breviceps*). Some large longfinned eels may also be present but they

have to have been recruited before the installation of the lower Waitaki dams which prevent upstream passage of eelers. The native fish mainly inhabit the braided river channels of the East Branch Ahuriri River, Ribbonwood Creek in the west and the shallow stable gravel bottomed streams making up Serpentine Creek on the eastern side of the property.

The native fish fauna are quite typical for this location and geography. The insects - mayfly, stonefly and caddisflies found on the streambed are also typical. Introduced brown and rainbow trout migrating from the Ahuriri mainstem use these waters for spawning if flows and passage allow. Some large adult fish remain in the waters as residents after spawning and are fished for occasionally by anglers. Large numbers of juvenile trout rear in the Ahuriri East Branch and migrate downstream to the mainstem as fingerlings.

The mountain tops and high altitude slopes of the property are also habitat for a number of native fauna including most insect groups, spotted skink (*Oligosoma lineocellatum*), McCann's skink (*Oligosoma maccanni*), common skink (*Oligosoma nigriplantare polychroma*) and the common gecko (*Hoplodactylus maculatus*).

2.5 Historic

Ribbonwood was originally part of Benmore Station which stretched from the head of the Huxley River to what is now the shores of Lake Benmore. There are no published records of the property and there are no known sites of historic significance on the property.

2.6 Public Recreation

2.6.1 Physical Characteristics

According to the FMC guidelines Ribbonwood is mainly within an "open space recreational experience zoning. For open space the descriptors are semi-natural grasslands under extensive grazing, accessible by roads, off-road vehicles and foot tracks.

According to DOC's recreation opportunity descriptors Ribbonwood has the primary characteristics of a back-country environment - primarily "4 x 4 drive in". This means that the property is a modified environment but one that is generally dominated by natural vegetation or landscapes and is natural looking. It is accessible to all terrain vehicles and is traversed mainly by ungravelled roads, or 4 x 4 accesses. Obvious elements of modification include roads and areas of farming or forestry.

2.7.2 Legal Access

There is legal access into Ribbonwood via legal roads along the formed track that leads to Quailburn Station, and to the south-western corner of the property through Birdwood from the bridge across the Ahuriri River. There is also a marginal strip

along the Ahuriri River providing foot access along the western boundary of the property.

2.7.3 Activities

The Diadem Range has plenty of tracks especially suited to mountain biking, but could be equally used for horse trekking or tramping. Access is good from both sides of the range and there is a very good 4 w.d. track around the base of the East Ahuriri to the Quailburn, almost usable by cars. This is currently used by 4 w.d. vehicles and regularly as a round trip from either direction.

Hang gliding is actively operating further to the east along the range on an adjoining property where access is easier, but it is also done from the tops of Ribbonwood. There are tramping opportunities either using tracks, riverbeds or following ridges, but the area probably lacks the variety other nearby places have. The views of Mt Aspiring from the top of the range are great, well worth the walk or mountain bike ride to the top.

PART 3

CONSULTATION AND OTHER PLANS

3.1 Consultation

NGO meetings were held with representatives of FMC, Forest and Bird, NZ Deerstalkers, NZ Landscape Architects Institute, Tramping Clubs, QEII National Trust and Fish and Game Council on 17th and 18 August 1999 to discuss Ribbonwood along with other properties under tenure review. It was noted that tramping use was low on the property and there was some brief discussion on forestry and the risks of wilding pine spread. The main issues that were raised were to maintain long-term vehicle access to the back of the property, maintain public access up the East Ahuriri from Ahuriri Bridge, and into Ribbonwood Creek. It was also important to retain any wetlands and totara remnants. Another comment was that most of the high altitude land of the Diadem Range should come out of the lease.

In April 1999 Mike Floate compiled a report for FMC on the "Recreation and related significant inherent values" of Ribbonwood. This set out the land resources - related primarily to land capability and soils; accounts of tramping and climbing trips on Ribbonwood and a brief discussion of landscape values. Mike's conclusions listed a number of significant conservation and recreation gains that could be made through tenure review on Ribbonwood. These include the potential recreation opportunities on the property that could be made available including day walking and mountain bike trips over the Diadem Range as well as both fishing and canoeing on the Ahuriri. He also recommended that the 1500 ha of LUC class VIII land which straddles the Diadem Range above about 1100m be returned to full Crown ownership to become Conservation Area and be managed for conservation and recreation purposes. Other recommendations were for formal access easements for foot and mountain bike use of the 4 w.d. tracks (over the top of the Diadem Range and down Ribbonwood Creek) and

consideration given to the need to provide secure parking at or near road ends for recreation users of the new conservation land. There was also a brief discussion on the threat of wilding pine spread from pine plantings on the property and their effect on landscape values.

3.2 District Plans (Matters of National Importance)

Ribbonwood is in the Waitaki District. The Waitaki District Proposed Plan was publicly notified in December 1996. Under this plan Ribbonwood is zoned RS (rural scenic). The Rural Scenic Zone contains areas of the District which have significant scenic values generally being the high country, rangelands and inland basin areas.

There are no significant sites identified on Ribbonwood by the Council in the plan and very few anywhere else in the Waitaki District (i.e. very few of the RAPs identified in PNA surveys or SSWI's in Wildlife Surveys have been recognised).

In this 1996 plan there are controls on buildings, earthworks, indigenous vegetation clearance and forestry – in areas within 20m of a lake, river or wetland. There are also some controls on earthworks (including tracking) on slopes greater than 20° and controls on clearance of indigenous bush.

After calling for submissions and going through a series of hearings the Council has just released its Proposed Plan Amended by Decisions. These decisions have deleted controls on activities on land over 900m, clearance of indigenous bush, and earthworks within rivers and lake beds. The Department of Conservation, along with several other submitters, has referred these matters to the Environment Court. Until this is settled (possibly 1-2 years away) both versions of the "proposed" plan have some status in law.

3.3 Conservation Management Strategies

The Waitaki section of the CMS has several sections relevant to tenure review on Ribbonwood. Under Waitaki Ecosystems and species an objective is to protect a representative range of indigenous biodiversity of the Waitaki unit, and to negotiate with landholders to protect areas of native vegetation/wildlife habitat. For Project River Recovery the objective is to improve the range of viable riparian habitats for indigenous species and to implement this they have recommended seeking the gazettal of key areas of Crown riverbed with high wildlife value as conservation areas. Relevant recreation objectives include providing new facilities where natural and historic resources are not compromised and to liaise with adjacent landowners to help resolve conflicts regarding access to land managed by the Department of Conservation for recreation.

PART 4

MAPS

- 4.1 Topo/cadastral**
- 4.2 Values**