

## **Crown Pastoral Land Tenure Review**

**Lease name : BRANCH CREEK**

**Lease number : PO 052**

### **Conservation Resources Report - Part 4**

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.

These documents are all released under the Official information Act 1982.

**July**

**06**

APPENDIX 3

UPPER CLUTHA FOREST AND BIRD SUBMISSION

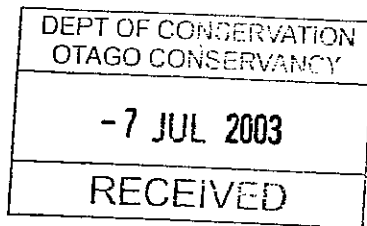
## ROYAL FOREST AND BIRD PROTECTION SOCIETY OF NEW ZEALAND INCORPORATED

## Upper Clutha Branch

PO Box 38  
LAKE HAWEA

29th June 2003

Mr T Perrett  
The Tenure Review Manager  
Department of Conservation  
77 Stuart Street  
DUNEDIN



CONS	
A.M. Centre-Tim	(2)
C.R.M.	
B.S.M.	
T.S.M.	
H.R.A.	
H.C.T.R.M. Debbie	(1)
K.A.M.	
OTHER	

Dear Tony

**BRANCH CREEK - EARLY REPORT FOR TENURE REVIEW**

This property was brought to our attention and introduced when Hunter Valley withdrew from the tenure review process last year. It was discussed at the NGO meeting held in Alexandra on 22<sup>nd</sup> May 2003.

We inspected the property on the 6<sup>th</sup> May accompanied by the lessee Mr R Anderson. We thank him for his co-operation.

We would be pleased if you would consider the following points and issues we make here, when you make your own report to the Commissioner of Crown Lands, as required under Section 26 of the CPL Act 1998.

We would also like to thank you for this opportunity to have this input at this stage of the process.

**1. GENERAL:**

- This property rises from 450masl. on the Cardrona valley floor to Mt Cardrona 1936masl. on the Cardrona-Motatapu watershed, then extends north along this watershed to Middle Peak 1837masl.
- The majority of the property has a south-easterly aspect. Consequently the higher basins on the eastern side of the watershed carry a considerable amount of snow in the winter.
- There is some natural sheet and scree erosion on these higher back boundary areas. However the tussock cover is in reasonable order on this country.
- Sweet Briar is the dominant woody plant present with matagouri a close second. These plants are present to around 600masl. a little higher on the sunnier faces, and dense in the bottoms of the gullies. There is some die-back of the briar in a few places, see Photo (5)
- Cassinia and dracophyllum are present on the higher and darker faces.
- Olearia lineata and Olearia odorata we seen in the bottom of the south branch of the Branch Burn, and to a lesser extent elsewhere on favoured sites.
- Silver tussock was the dominant short tussock below 900masl. This together with browntop and sweet vernal made up the bulk of the pasture. We understand this has all been aerial top-dressed, up to about 1200masl in places.

-2-

- With fine wool sheep and the steep nature of the country the transference of fertility is evident. This is particularly noticeable where sheep camp on a high point of a block which happens to boundary the bottom edge of a higher block: this transference is also subject to the fencing arrangements.

## **2. LAND WITH SIGNIFICANT INHERENT CONSERVATION VALUES TO BE RETURNED TO FULL CROWN OWNERSHIP AND CONTROL:**

1. The Motatapu/Cardrona watershed is sometimes known as the "Cardrona Range". The land to the east of this part of the range, which makes up the western boundary of Branch Creek, is steep and rugged. The boundary starts from Mt Cardrona (1936ms), goes over Macdonalds Peak (1398ms), then spot heights .1341, .1481, .1625, .1700, .1782, to reach Middle Peak (1837ms) to the north. It is high and well above the generally accepted altitude of 1000masl as the upper limit of freeholding land.
2. This land on the Cardrona Range forming the western boundary of the property has significant landscape values, as it makes up part of the western backdrop to the Cardrona valley. It is very visible from the Waiorau Snow Farm road.
3. There are significant inherent values in its indigenous vegetation on this back country.
4. Although yet to be fully appreciated its recreational values are very high. A high level walk traversing the Cardrona Range from the Crown Range in the south, traversing through Branch Creek and on to Mt Roy and Wanaka in the north, will become one of the classic walks of the district in the future. It will also become a high level cross-country ski route.
5. It is mostly Class VII land which would make it uneconomical to fertilize from the air to replace the nutrients taken out by way of wool and meat. Therefore if it is uneconomic for pastoral purposes; then pastoralism is not an ecologically sustainable use for the land. It should, on this basis alone, be returned to full Crown ownership and control.
6. At the time of Spotts Creek tenure review, POL 093 was returned to full Crown ownership and control. POL 093 took in the high basin to the east of Middle Peak: the basin to the west of which, lies in Branch Creek at the head of one of the tributaries of the Branch Burn, below Highland Saddle. Therefore it is logical that this basin be returned to the Crown.
7. It is becoming more and more evident, that aside from the truly high country, there is a great need to protect also, through the tenure review process, some of the lower country for its significant inherent conservation values so that we can obtain an altitudinal sequence of biodiversity from valley floors to the tops of the mountains for future generations to appreciate. On nearly all the properties that have gone through tenure review process so far most of these significant inherent values on the lower country are regularly being lost to the nation through being disposed of by way of freehold title. The time has come for efforts to be made to reverse this trend and reserve some of these areas of lower country with significant inherent conservation values even though they may be economically viable and therefore ecologically sustainable - it may be necessary to compromise in some instances.

In this respect there are no other corridors of altitudinal sequence from the valley floor to the tops of the mountains being agreed upon through the tenure review process in the Cardrona valley, or for that matter, in the Upper Clutha basin. It is important that one be established. We have on Branch Creek the opportunity to do so.

The whole length of the back lying face of Round Hill Spur, from the bottom at the junction of Branch Burn and Back Creek, up the spur to Middle Peak would give an ideal sequence of altitudinal biodiversity.

-3-

Taking into consideration all these known facts our recommended split between that land to be returned to the Crown as Conservation land, and that to be disposed of by of freehold title, is shown on the accompanying map outlined in green. Some fencing for this is already in place.

### 3. LAND THAT COULD BE DISPOSED OF BY WAY OF FREEHOLD TITLE:

The land that should be returned to full Crown ownership and control is considerably higher than that which could be disposed of by way of freehold title. The lower remainder would in the main be land below 1000masl.

This could be divided into three distinct areas marked (I), (II) and (III) on the plan:-

- I. The rolling downland country – which could be described as being made up of alluvial gravel – lies between the Homestead and the main road up the Cardrona valley. This is the lowest country on the property and although somewhat infested with sweet briar, could be the most productive.
- II. The south-east facing country above this, is carrying a good cover of grasses and silver tussock, with a few tall tussocks present at the top.
- III. The two valley systems containing Macdonalds Creek and the Branch Burn with Macdonalds Spur in the middle. The two faces on the true right of these two streams have considerable woody vegetation on them but lying to the sun as they do, could be very useful. This will be balanced by the darker, or true left side of MacDonalds stream.

The pasture on these three areas could be described as being made up of "introduced" grasses, plus some short native tussock, mostly silver on the better sites.

If this lower country were to be regularly fertilized it would be reasonable to believe that it could be both ecologically sustainable and economically viable.

### 4. ACCESS:

Walking access will be required from the main Cardrona valley road to the Cardrona Range to the west.

With Spotts Creek and Hillend having completed the tenure review process there is now an area of conservation land on the top of the Cardrona Range available for the public to enjoy. This is already accessed from the northern boundary of Hillend to the Mt Roy/Mt Alpha main ridge. There is access on the true left of Spotts Creek to this conservation area above.

When the marginal strip is created up the Branch Burn, as required of this tenure review from the main Cardrona valley road - access will then be available to the proposed Conservation area at the foot of Round Hill Spur. With access from the Cardrona Ski Field added to those mentioned above there should be scope for round trips of various durations.

With the access point coming out of this review there should be a satisfactory number of entrances and exits to the Cardrona range. It is essential however that this access point be one of those to make sure there is "safe" access. It is extremely important to remember in this context that "access" also means "exit" from the tops if the weather becomes inclement.

-4-

**5. PLAN AND LIST OF PHOTOGRAPHS:**

Plan showing the area to be returned to full Crown ownership and control and that to be freehold. Also shows photo points and access route marked blue.

Photo (1) View from spot height .1302 looking towards Mt Cardrona 1936 ms. And the head of Boundary creek. This also shows the type of vegetation at the bottom end of a block.

Photo (2) View from spot height .1302 looking north towards McDonalds spur, in the middle distance. And Round Hill Spur behind it. This also shows the type of vegetation at the top end of a block.

Photo (3) View up the spur from spot height .1302 looking towards Mt Cardrona.

Photo (4) View from spot height .1302 looking over the top end of McDonalds spur. Shows the rugged, nature of the Cardrona range.

Photo (5) Dead briar bushes on downland country. Spur in the background is on the north side Of Boundary creek and runs up to spot height .1302

Photo (6) The downland country in the middle distance taken from fence across track to spot Height .1302 at 900ms.

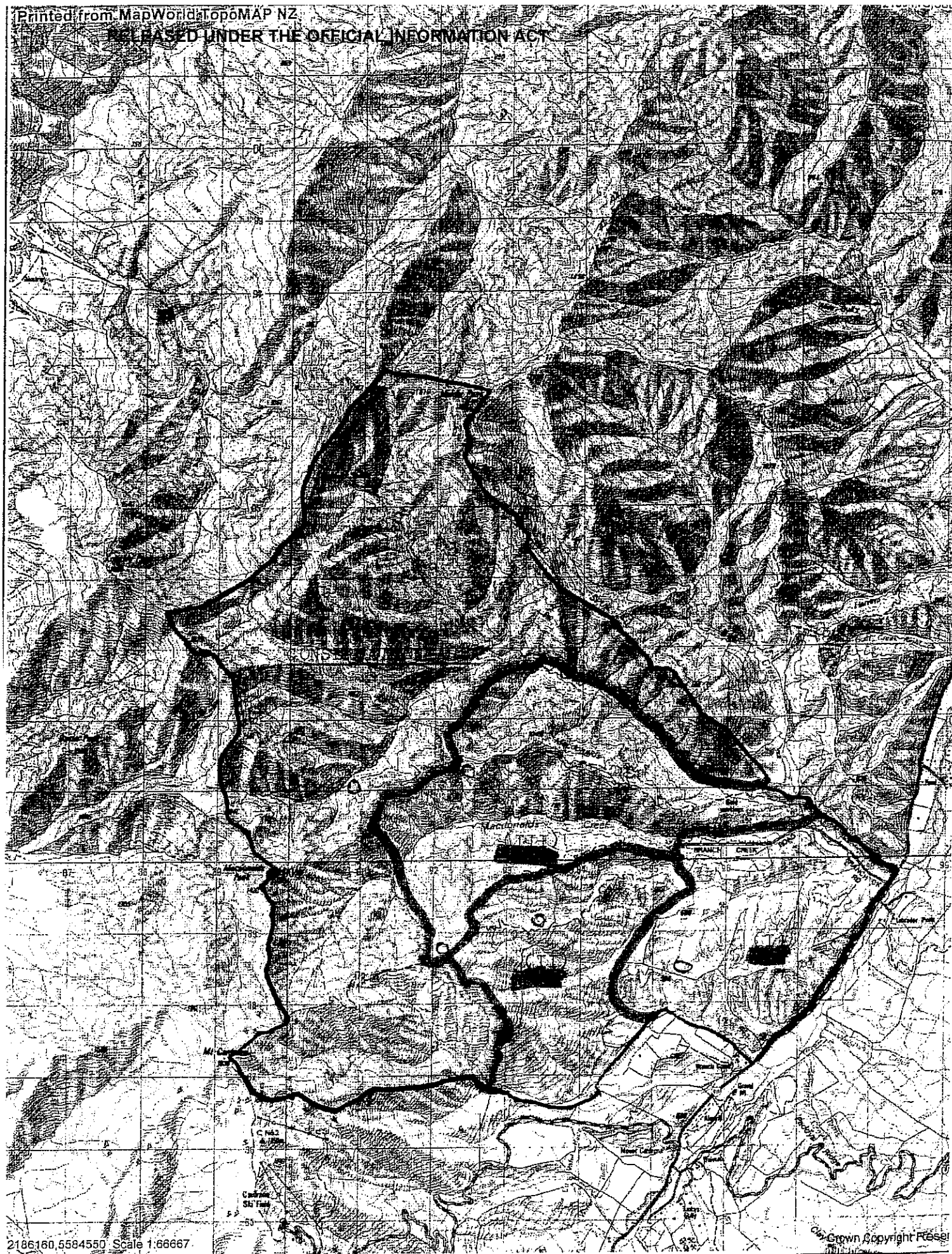
Photo (7) View from vicinity of spot height .1070 on McDonalds spur, showing head o McDonalds creek.

Photo (8) View from vicinity of spot height .1070 on McDonalds spur, looking north east, showing . Back faces of McDonalds spur.

Yours faithfully



JL Turnbull  
For Upper Clutha Branch Forest and Bird



2186160,5584550 Scale 1:66667

Copyright Crown

[Return to Crown](#)

[Suggest Freehold](#)



[Access](#)

BRANCH CREEK

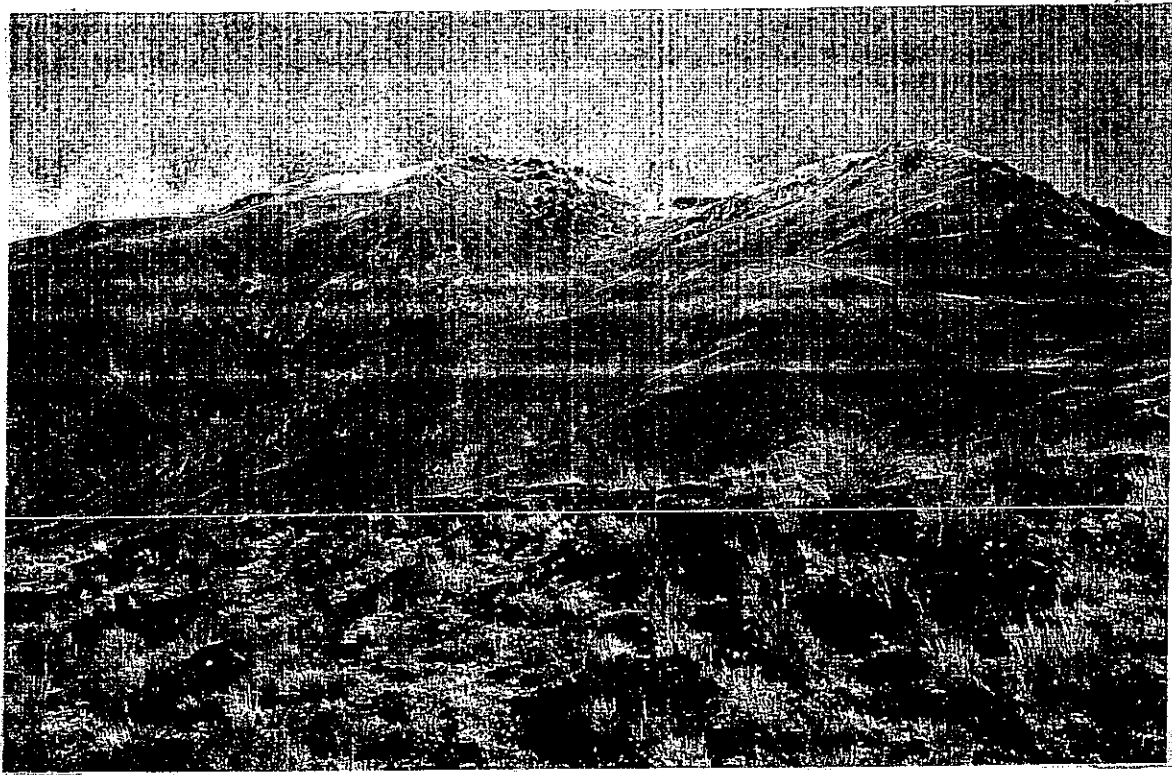


Photo (1) View from spot height .1302 towards Mt Cardrona 1936 ms.  
and head of Boundary Creek

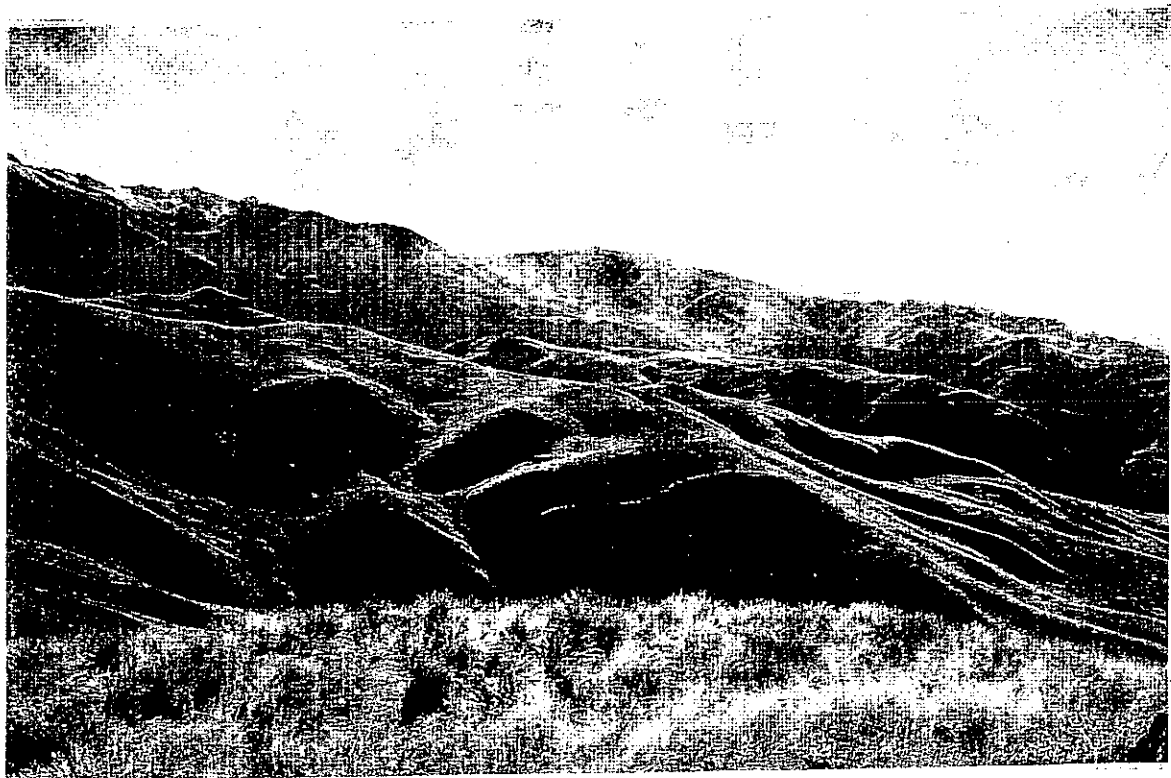


Photo (2) View from spot height .1302 looking north towards Macdonalds  
Spur, middle distance. This shows lower mainly silver tussock  
country.



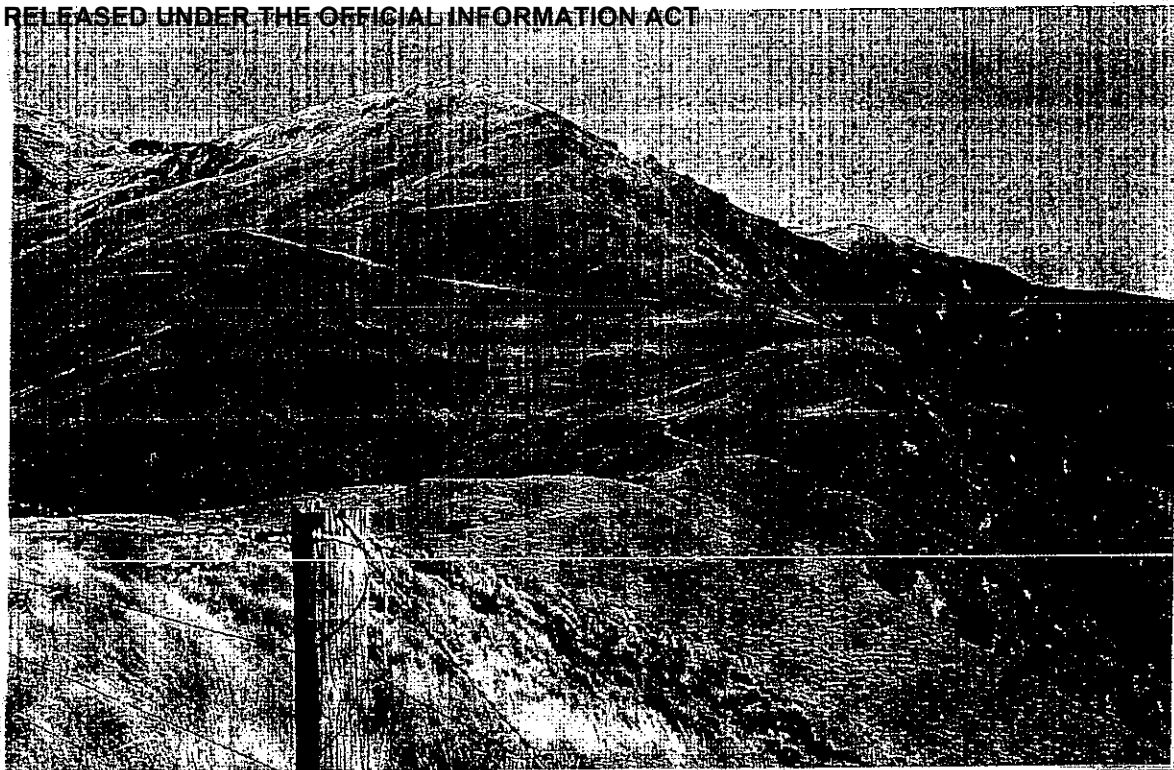


Photo (3) View up spur from spot height.1302 towards Mt Cardrona.



Photo (4) View from spot height .1302 looking over Macdonalds spur, showing rugged nature of Cardrona range

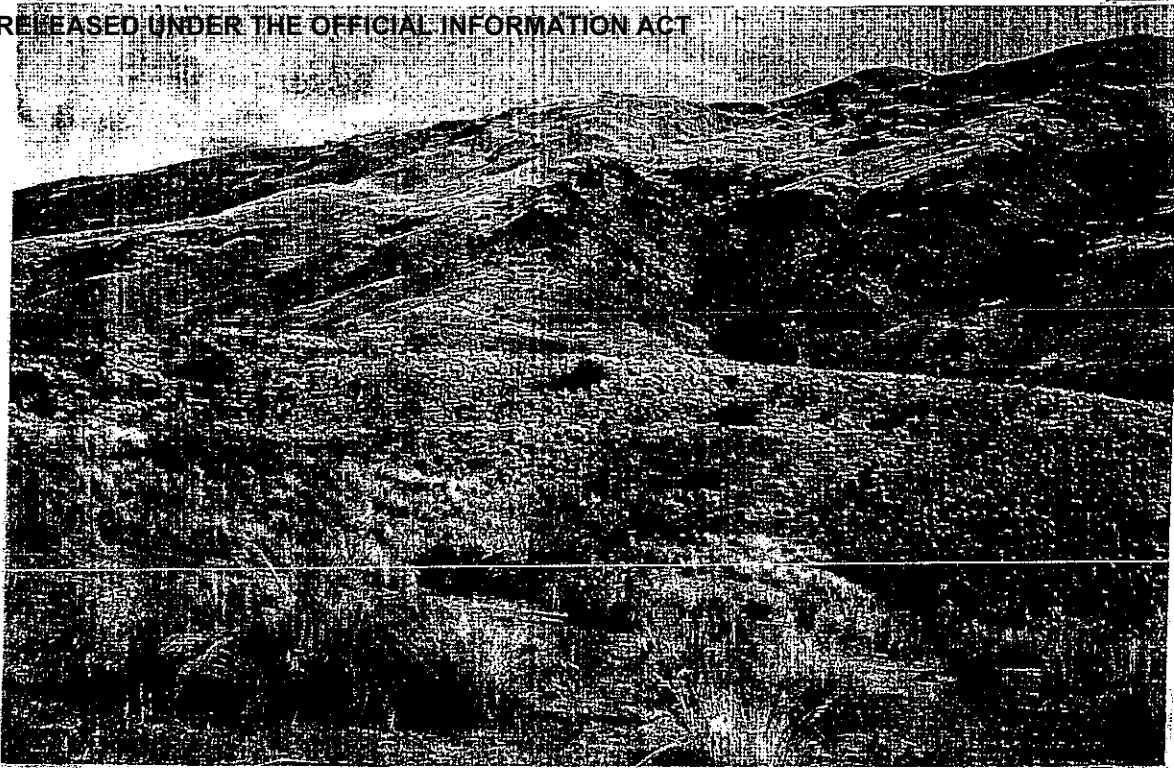


Photo (5) Dead briar bushes on downland country. Spur in background is on north side of Boundary creek and runs up to spot height .1302

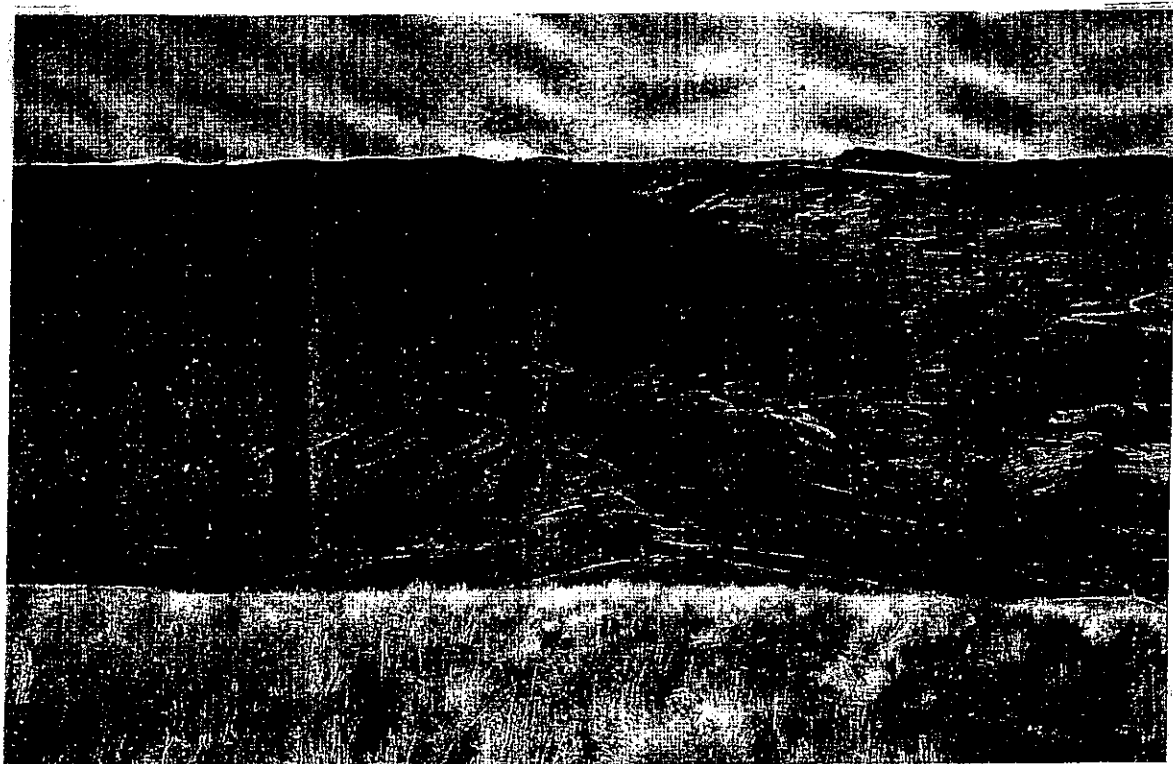


Photo (6) The downland country in middle distance, view taken from fence at 900ms.

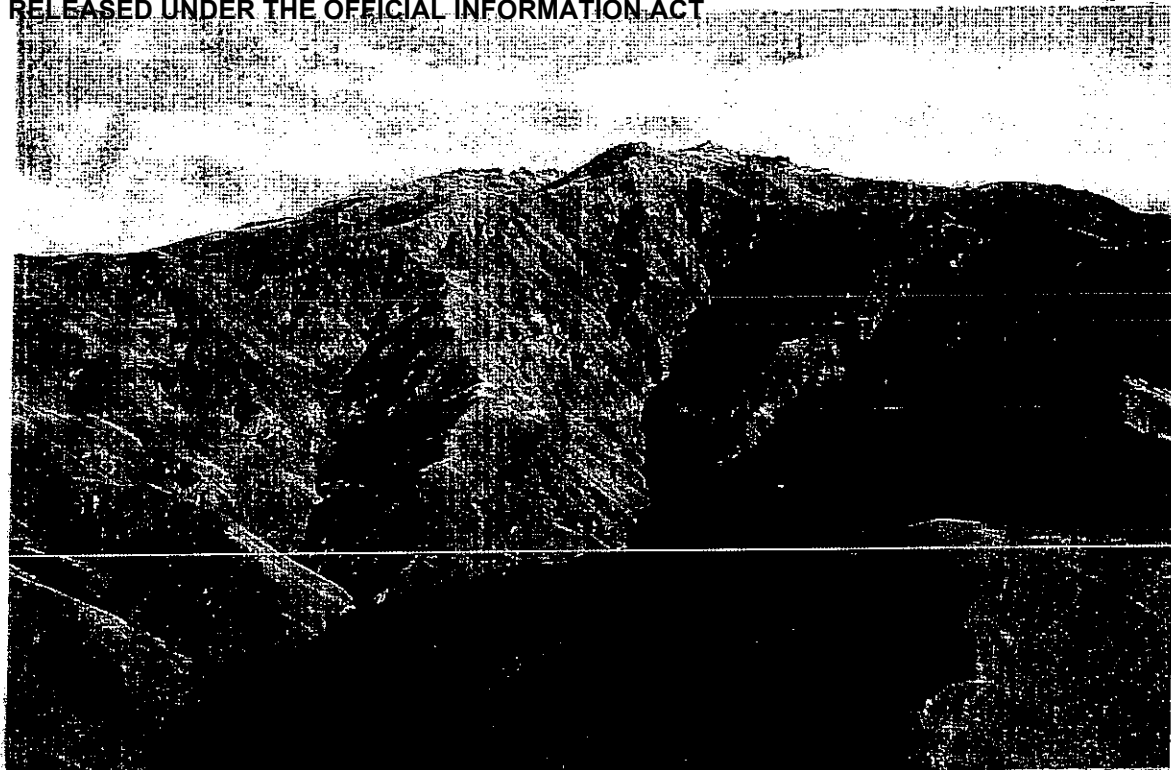


Photo (7) View from vicinity of spot height.1070 on Macdonalds spur, showing head of Macdonalds Creek



Photo (8) View from vicinity of spot height .1070 on Macdonalds Spur, looking north east, showing back faces of Macdonalds spur

## APPENDIX 4

## BIRD LIST: BRANCH BURN

SPECIES	LOCATION	STATUS IN NEW ZEALAND	CONSERVATION ASSESSMENT (Hitchmough)
Blackbird	Branch Burn, Macdonalds Creek, Boundary Creek	Introduced	
Californian Quail	Branch Burn	Introduced	
Chaffinch	Branch Burn, Boundary Creek	Introduced	
Dunnock	Branch Burn	Introduced	
Goldfinch	Macdonalds Creek, Branch Burn	Introduced	
Greenfinch	Boundary Creek	Introduced	
Grey Warbler	Branch Burn, Boundary Creek	Endemic	
Harrier Hawk	Branch Burn, Boundary Creek	Native	
Kea	Macdonalds Creek	Endemic	Nationally Endangered
Magpie	Boundary Creek	Introduced	
NZ Falcon	Branch Burn	Endemic	Gradual Decline
Pipit	Branch Burn	Native	
Redpoll	Branch Burn	Introduced	
S Black backed Gull	Branch Burn, Boundary Creek	Native	
Silvereye	Macdonalds Creek	Native	
Song Thrush	Branch Burn, Macdonalds Creek	Introduced	
Spur-winged Plover	Macdonalds Creek, Boundary Creek	Native	
Tomtit	Macdonalds Creek, Branch Burn	Endemic	
Yellowhammer	Branch Burn, Boundary Creek	Introduced	

## APPENDIX 5

## ELECTRIC FISHING SITES:

Location	G.P.S Reading	Species Recorded
Macdonalds Creek	2195339/5590297	Galaxiid
Branch Burn	2192194/5592598	Galaxiid
Trib of Branch Burn	2193439/5592731	Galaxiid
Branch Burn	2194842/5591873	Brown trout, rainbow trout, Galaxiid
Branch Burn	2195596/5591095	Brown trout, galaxiid
Macdonalds Creek	2191581/5590045	No Fish
Boundary Creek	2194329/5587053	Brown trout, galaxiid
Boundary Creek	2192808/5586836	No Fish
Trib of Boundary Creek	2192772/5586810	No Fish
Trib of Branch Burn	2195099/5589922	Galaxiids
Trib of Branch Burn	2195444/5589525	Galaxiids
Boundary Creek	2196365/5587158	No Fish
Boundary Creek	2196077/5587446	Brown trout, Galaxiid
Branch Burn	2198012/5589999	Brown trout, Galaxiids
Branch Burn	2191166/5595257	No Fish
Branch Burn	2189679/5593239	No Fish
Branch Burn	2191304/5591497	No Fish

## APPENDIX 6

## INVERTEBRATE LIST: BRANCH BURN

ORDER	FAMILY	SCIENTIFIC NAME	COMMON NAME	LOCATION	ALTITUDE (M)
COLEOPTERA	BYRRIHIDAE	<i>Pedilophorus lewisi</i>	Moss beetle	Mt Cardrona	1936
COLEOPTERA	CARABIDAE	<i>Mecodema n.sp.</i>	byrrhid	Branch Burn	1100
COLEOPTERA	CARABIDAE	<i>Mecodema n.sp.</i>	carabid beetle	Mt Cardrona	1360
COLEOPTERA	CARABIDAE	<i>Mecodema n.sp.</i>	carabid beetle	Branch Burn	1400
COLEOPTERA	CARABIDAE	<i>Megadromus sandageri</i>	carabid beetle	Mt Cardrona	1360
COLEOPTERA	CARABIDAE	<i>Megadromus sp.</i>	carabid beetle	Mt Cardrona	1360
COLEOPTERA	CARABIDAE	<i>Metaglymma sp.</i>	carabid beetle	Mt Cardrona	1360
COLEOPTERA	CARABIDAE	<i>Metaglymma</i>	carabid beetle	Highland Saddle	1400
COLEOPTERA	CARABIDAE	<i>Neocicindella dunedinensis</i>	Tiger Beetle	Mt Cardrona	1600
COLEOPTERA	CARABIDAE	<i>Neocicindella dunedinensis</i>	Tiger Beetle	Branch Burn	550
COLEOPTERA	CURCULIONIDAE	<i>Anagotus latirostris</i>	weevil	Mt Cardrona	1936
COLEOPTERA	CURCULIONIDAE	<i>Lyperobius hudsoni</i>	speargrass weevil	Mt Cardrona	1750
COLEOPTERA	CURCULIONIDAE	<i>Lyperobius spedenii (two ii's)</i>	speargrass weevil	Mt Cardrona	1500
COLEOPTERA	CURCULIONIDAE	<i>Lyperobius spedenii</i>	speargrass weevil	Highland Saddle	1400
COLEOPTERA	CURCULIONIDAE	<i>Sargon species</i>	weevil	Branch Burn	1100, 1400
COLEOPTERA	SCARABAEIDAE	<i>Prodontria capito</i>	flightless chafer	Mt Cardrona	1500
COLEOPTERA	SCARABAEIDAE	<i>Pyronota laeta</i>	green chafer	Mt Cardrona	1500

COLEOPTERA	TENEBRIONIDAE	<i>Mimopeus opaculus</i>		darkling beetle	Branch Burn	550
COLEOPTERA	TENEBRIONIDAE	<i>Mimopeus opaculus</i>		darkling beetle	Mt Cardrona	1360
DICTYOPTERA	BLATTIDAE	<i>Celatoblatta quinque maculata</i>		Alpine cockroach	Mt Cardrona	1600
DICTYOPTERA	BLATTIDAE	<i>Celatoblatta quinque maculata</i>		Alpine cockroach	Branch Burn	1400
DIPTERA	TACHNIDAE	<i>Protophystricia</i> sp.		Tachnid fly	Branch Burn	1300
DIPTERA	TACHNIDAE	<i>Protophystricia</i> sp.		tachnid fly	Mt Cardrona	1500, 1750
DIPTERA		<i>Neioitamus melanopogon</i>		Robber fly	Mt Cardrona	1600
DIPTERA	TIPLIDAE			Crane Flies	Mt Cardrona	1700
DIPTERA	SYRPHIDAE	<i>Melangyna novaezealandiae</i>				
HEMIPTERA	CICADIDAE	<i>Kikihia angusta</i>		grassland cicada	Branch Burn	550
HEMIPTERA	CICADIDAE	<i>Kikihia subalpina</i>		green cicada	Branch Burn	550
HEMIPTERA	CICADIDAE	<i>Maoricicada nigra</i>		black cicada	Branch Burn	1400
HEMIPTERA	CICADIDAE	<i>Maoricicada campelli</i>		black cicada	MacDonalds Ck	760
HEMIPTERA	CICADIDAE	<i>Maoricicada campelli</i>		black cicada	Branch Burn	550
HEMIPTERA	CICADIDAE	<i>Maoricicada oromelaena</i>		black cicada	Branch Burn	550
HEMIPTERA	LYGAEDIDAE	<i>Rhyppodes</i> sp		bug	MacDonalds Ck	660
HEMIPTERA	MIRIDAE	<i>Romna species</i>		bug	Branch Burn	550
HEMIPTERA		<i>Hypsithocus hudsonae</i>		shield bug	Branch Burn	1300
HEMIPTERA		<i>Hypsithocus hudsonae</i>		shield bug	Mt Cardrona	1360
HYMENOPTERA	COLLETIDAE	<i>Leioproctus fulvessens</i>		native bee	Branch Burn	550
HYMENOPTERA	ICHNEUMONIDAE	<i>Degithina</i> sp.		ichneumonid wasp	Branch Burn	1400
HYMENOPTERA	POMPIDIDAE	<i>Priocnemis monachus</i>		pompilid	Branch Burn	550
HYMENOPTERA	POMPIDIDAE	<i>Priocnemis ordishi</i>		spider wasp	MacDonalds Ck	660
HYMENOPTERA	POMPIDIDAE	<i>Priocnemis ordishi</i>		spider wasp	Mt Cardrona	1360
LEPIDOPTERA	CRAMBIDAE	<i>Diasemia grammalis</i>		arrowhead	Branch Burn	550

LEPIDOPTERA	CRAMBIDAE	<i>Eudonia atmogramma</i>	sod webworm	Branch Burn	1100
LEPIDOPTERA	CRAMBIDAE	<i>Eudonia torodes</i>		Highland Saddle	1400
LEPIDOPTERA	CRAMBIDAE	<i>Eudonia atmogramma</i>		Highland Saddle	1400
LEPIDOPTERA	CRAMBIDAE	<i>Eudonia oreas</i>		Mt Cardrona	1750
LEPIDOPTERA	CRAMBIDAE	<i>Glaucobaris epiphaea</i>		Mt Cardrona	1500
LEPIDOPTERA	CRAMBIDAE	<i>Orocrambus crenaeus</i>	grassmoth	Mt Cardrona	1500, 1750
LEPIDOPTERA	CRAMBIDAE	<i>Orocrambus philpotti</i>	grass moth	Branch Burn	1100
LEPIDOPTERA	CRAMBIDAE	<i>Orocrambus vittellus</i>	grassmoth	Branch Burn	550
LEPIDOPTERA	CRAMBIDAE	<i>Orocrambus lewisi</i>	grassmoth	MacDonalds Ck	760
LEPIDOPTERA	CRAMBIDAE	<i>Tauroscopa gorgopis</i>	diurnal moth	Mt Cardrona	1936
LEPIDOPTERA	CRAMBIDAE	<i>Tawhiia glaucophanes</i>	diurnal moth	Mt Cardrona	1936
LEPIDOPTERA	GEOMETRIDAE	<i>Aponotoreas anthracias</i>	diurnal moth	Highland Saddle	1400
LEPIDOPTERA	GEOMETRIDAE	<i>Aponotoreas anthracias</i>	diurnal moth	Branch Burn	1400
LEPIDOPTERA	GEOMETRIDAE	<i>Aponotoreas insignis</i>	diurnal moth	Branch Burn	1300
LEPIDOPTERA	GEOMETRIDAE	<i>Aponotoreas insignis</i>	diurnal moth	Mt Cardrona	1360
LEPIDOPTERA	GEOMETRIDAE	<i>Asaphodes periphaea</i>		Mt Cardrona	1360, 1500
LEPIDOPTERA	GEOMETRIDAE	<i>Paranotoreas zopyra</i>	orange underwing	Branch Burn	1100
LEPIDOPTERA	LYCAENIDAE	<i>Lycaena sp.</i>	copper butterfly	MacDonalds Ck	660
LEPIDOPTERA	LYCAENIDAE	<i>Lycaena sp.</i>	copper butterfly	Branch Burn	550, 660
LEPIDOPTERA	LYCAENIDAE	<i>Zizina oxleyi</i>	blue butterfly	MacDonalds Ck	760
LEPIDOPTERA	LYCAENIDAE	<i>Zizina oxleyi</i>	blue butterfly	Branch Burn	550
LEPIDOPTERA	NOCTUIDAE	<i>Proteuxoa comma</i>	comma cutworm	MacDonalds Ck	660
LEPIDOPTERA	NOCTUIDAE	<i>Proteuxoa comma</i>	comma cutworm	Branch Burn	550
LEPIDOPTERA	PTEROPHORIDAE	<i>Stenoptilia lithoxestia</i>	plume moth	Branch Burn	1100
LEPIDOPTERA	SATYRTIDAE???	<i>Argyrophenga n.sp.</i>	tussock	Mt Cardrona	1360



					butterfly		
LEPIDOPTERA	SATYRTIDAE		<i>Argyrophenga n.sp.</i>		tussock butterfly	Branch Burn	1300
ODONATA			<i>Uropetala chiltoni</i>		Giant Dragonfly	Branch Burn	1300
ODONATA			<i>Uropetala chiltoni</i>		Giant Dragonfly	Macdonalds Creek	760
ORTHOPTERA	ACRIDIDAE		<i>Alpinacris tumidicauda</i>			Mt Cardrona	1936
ORTHOPTERA	ACRIDIDAE		<i>Alpinacris tumidicauda</i>		grasshopper	Branch Burn	1300
ORTHOPTERA	ACRIDIDAE		<i>Phaulacridium marginale</i>		grasshopper	Branch Burn	550
ORTHOPTERA	ACRIDIDAE		<i>Sigaus australis grp.</i>		grasshopper	Mt Cardrona	1500
ORTHOPTERA	ACRIDIDAE		<i>Sigaus obelisci or nsp.</i>			Mt Cardrona	1936
ORTHOPTERA	GRYLLIDAE		<i>Pteronemobius bigelowi</i>		cricket	Branch Burn	550
ORTHOPTERA	GRYLLIDAE		<i>Pteronemobius bigelowi</i>		cricket	MacDonalds Ck	760
ORTHOPTERA	RHAPHIDOPHORIDAE		<i>Undescribed</i>		cave weta	Mt Cardrona	1500
ORTHOPTERA	STENOPELMATIDAE		<i>Hemiandrus focalis</i>		ground weta	Branch Burn	550, 660
ORTHOPTERA	STENOPELMATIDAE		<i>Hemiandrus focalis</i>		ground weta	Mt Cardrona	1360