

Crown Pastoral Land Tenure Review

Lease name : LONG GULLY

Lease number : PO 055

Conservation Resources Report - Part 2

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.

December 05

4.3 **PHOTOGRAPHS**

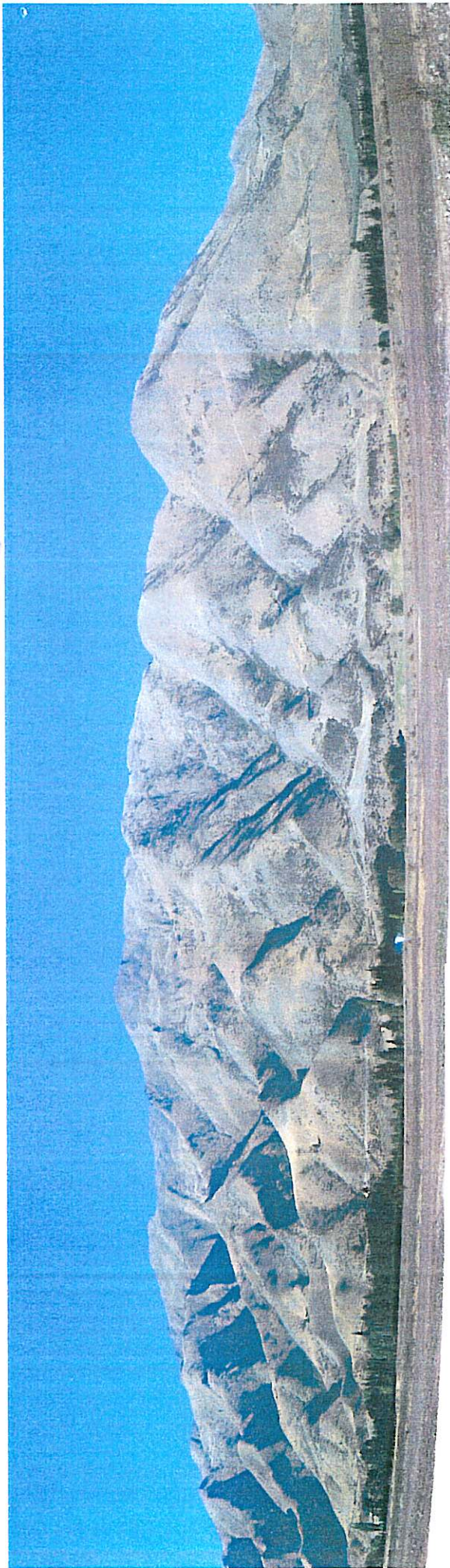


Figure 1 Grandview Range from Clutha Valley



Figure 2 Formed road to transmitter masts continues across ridgeline to northern boundary of PL, providing access to summits of the Grandview Range



Figure 3 View down full length of Long Gully from summit road near the northern boundary of Long Gully PL

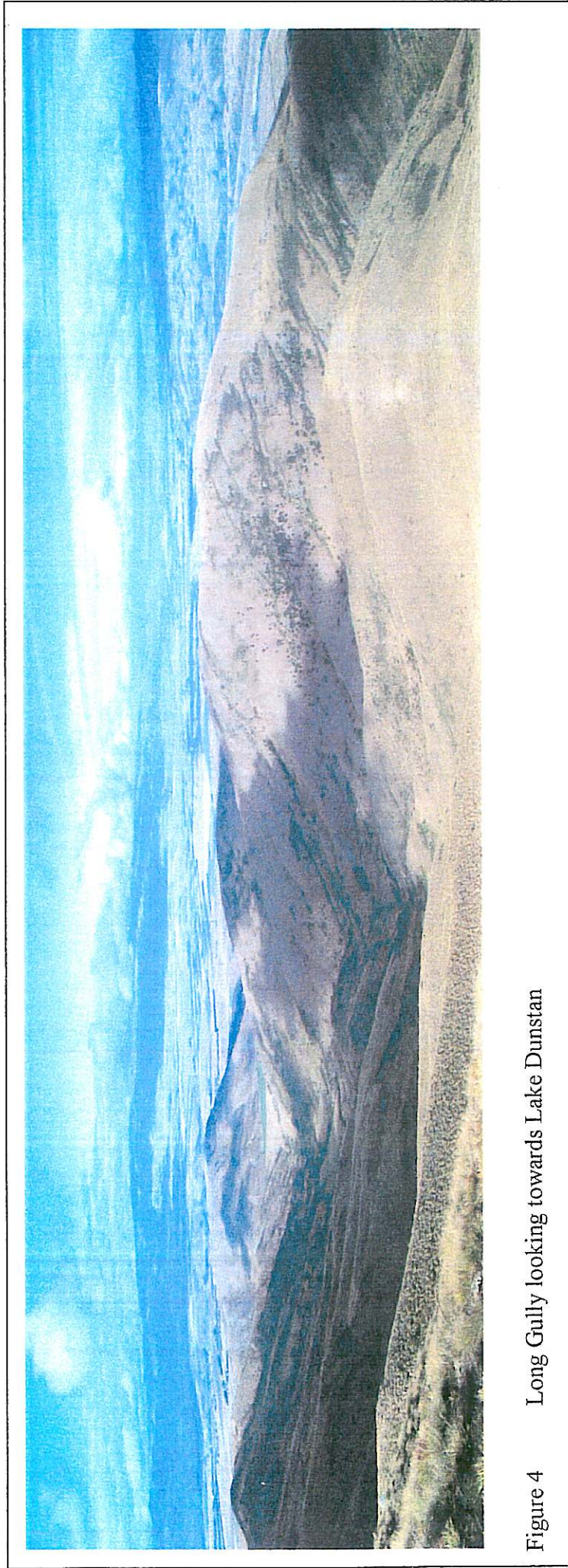


Figure 4 Long Gully looking towards Lake Dunstan

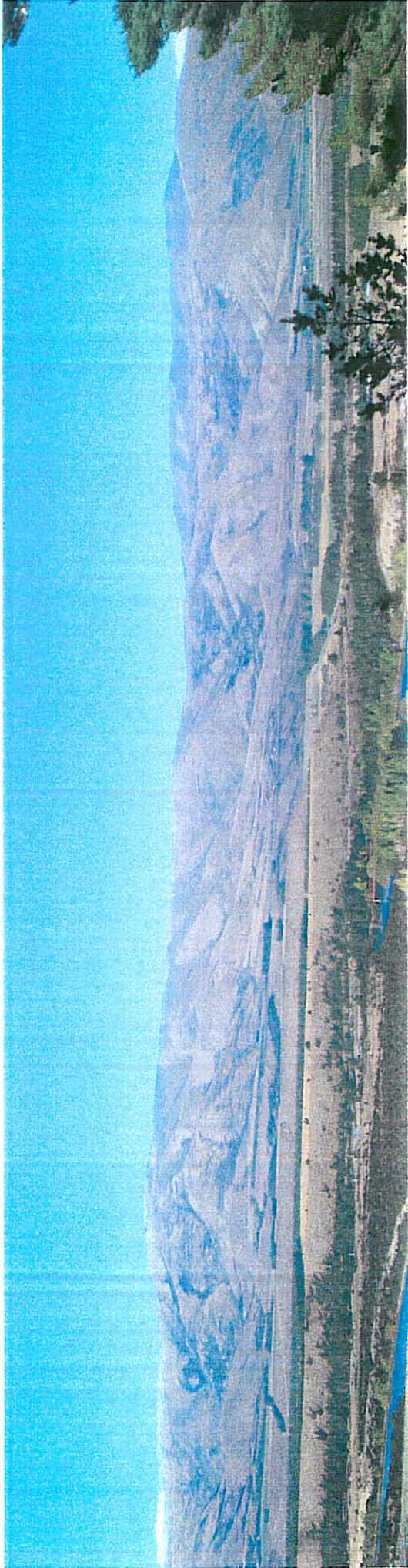


Figure 5 Looking toward Clutha/Mata-au River terraces, escarpment and Grandview Range from west side of Upper Clutha Valley



Figure 6 Clutha Terraces viewed from transmitter masts. Pisa Range in background



Clutha Terraces

4.4 APPENDICES

APPENDIX ONE Long Gully Station - Native plant species list

	Habitat abundance	
Ferns		
<i>Asplenium flabellifolium</i>	R	o *
<i>Asplenium richardii</i>	R	o *
<i>Blechnum penna-marina</i>	T	o *
<i>Hypolepis millefolium</i>	Ru	o *
<i>Polystichum vestitum</i>	S	o *
<i>Pteridium esculentum</i>	T	o *
Trees and shrubs		
<i>Carmichaelia crassicaule</i>	T	o *
<i>Carmichaelia petriei</i>	T,S,L	a *
<i>Carmichaelia vexillata</i>	T	o *
<i>Coprosma ciliata</i>	Ru	o *
<i>Coprosma crassifolia</i>	S	o *
<i>Coprosma aff. parviflora</i>	S	o *
<i>Coprosma petriei</i>	T,C	c *
<i>Coprosma propinqua</i>	S,L	f *
<i>Discaria toumatou</i>	S,T	a *
<i>Gaultheria depressa var. novae-zelandiae</i>	T	o *
<i>Hebe buchananii</i>	R	o *
<i>Hebe pimeleoides var. rupestris</i>	R	o *
<i>Hebe rakaiensis</i>	Ru	o *
<i>Hebe salicifolia</i>	S	o *
<i>Helichrysum aggregatum</i>	S	lf *
<i>Kelleria dieffenbachii</i>	T	o *
<i>Kelleria villosa</i>	T	o *
<i>Kunzea ericoides</i>	S,L	f *
<i>Leptospermum scoparium</i>	#	o
<i>Leucopogon fraseri var. fraseri</i>	T,C	a *
<i>Leucopogon fraseri var. muscosa</i>	L	c *
<i>Leucopogon suaveolens</i>	T	o *
<i>Melicytus aff. alpinus</i>	T,S,L	o *
<i>Muehlenbeckia axillaris</i>	T,L	o *
<i>Myrsine nummularia</i>	R	o *
<i>Olearia cymbifolia</i>	R	o *
<i>Olearia odorata</i>	S	o *
<i>Ozothamnus vauvilliersii</i>	T	o *
<i>Pimelea oreophila</i>	T,L	o *
<i>Pimelea pulvinaris</i>	L	c *
<i>Pimelea traversii</i>	R	o *
<i>Sophora microphylla</i>	S	o *
Climbers & vines		
<i>Clematis quadribracteolata/marata</i>	S	o *
<i>Muehlenbeckia australis</i>	S	lc *
<i>Muehlenbeckia complexa</i>	S	f *
<i>Muehlenbeckia ephedroides</i>	#	o
<i>Rubus schmidelioides</i>	S	c *
Herbs		
<i>Acaena anserinifolia</i>	S	o *

<i>Acaena buchananii</i>	T	o*
<i>Acaena caesiiglauca</i>	T	o*
<i>Acaena novae-zelandiae</i>	T	o
<i>Aciphylla aurea</i>	T	o*
<i>Anaphalioides bellidioides</i>	T	o*
<i>Anisotome aromatica</i>	T	o*
<i>Brachyglottis haastii</i>	R	c*
<i>Celmisia gracilentia</i>	T	c*
<i>Celmisia lyallii</i>	T	o*
<i>Colobanthus brevisepalus</i>	C,L	c*
<i>Colobanthus strictus</i>	C	o*
<i>Dichondra repens</i>	S	o*
<i>Epilobium alsinoides</i>	T	o*
<i>Epilobium melanocaulon</i>	L	lc*
<i>Epilobium rosulatum?</i>	L	o*
<i>Euchiton audax</i>	T,L	o*
<i>Geranium microphyllum</i>	T	o*
<i>Geranium sessiliflorum</i>	T,C,L	c*
<i>Helichrysum filicaule</i>	T	o*
<i>Lagenifera cuneata</i>	T	o*
<i>Leptinella perpusilla/serrulata</i>	C	o*
<i>Oreomyrrhis colensoi</i>	T	o*
<i>Oreomyrrhis ramosa</i>	S	o*
<i>Oreomyrrhis rigida</i>	C	o*
<i>Oxalis exilis</i>	S	c*
<i>Ranunculus gracilipes</i>	T	o*
<i>Ranunculus multiscapus</i>	T	o*
<i>Raoulia australis</i>	C,L	a*
<i>Raoulia beauverdii</i>	C,L	f*
<i>Raoulia parkii</i>	C,L	c*
<i>Raoulia subsericea</i>	T	c*
<i>Scleranthus uniflorus</i>	T,C,L	o*
<i>Senecio quadridentatus</i>	R	o*
<i>Stackhousia minima</i>	T	o*
<i>Stellaria gracilentia</i>	R,C,L	c*
<i>Urtica aspera?</i>	S	o*
<i>Viola cunninghamii</i>	T	o*
<i>Vittadinia australis</i>	C,L	o*
<i>Wahlenbergia albomarginata</i>	T,L	o*
<i>Wahlenbergia gracilis/colensoi</i>	R	o*

Monocots

Grasses		
<i>Chionochloa rigida</i>	T	f*
<i>Festuca novae-zelandiae</i>	T	a*
<i>Poa cita</i>	T	o*
<i>Poa colensoi</i>	T	f*
<i>Poa maniototo</i>	C,L	o*
<i>Rytidosperma gracile</i>	S	o*
<i>Rytidosperma pumilum</i>	T,L	o*
<i>Trisetum tenellum</i>	T	o*

Sedges

<i>Carex breviculmis</i>	T,L	c*
<i>Carex buchananii</i>	W	o
<i>Carex comans</i>	T	o
<i>Carex flagellifera</i>	T	o*
<i>Carex inopinata</i>	R	o*
<i>Carex secta</i>	W	o
<i>Carex wakatipu</i>	T	o*

<i>Eleocharis acuta</i>	W	o
<i>Uncinia caespitosa?</i>	T	o*
<i>Uncinia sinclairii?</i>	T	o*
Other monocots		
<i>Bulbinella angustifolia</i>	T	o*
<i>Luzula banksiana var. migrata</i>	R	c*
<i>Luzula rufa var. rufa</i>	T	o*
<i>Luzula rufa var. albicomans</i>	L	o*
<i>Luzula ulophylla</i>	C,L	o*
<i>Prasophyllum colensoi</i>	T	o*
<i>Thelymitra sp.</i>	L	o*

Habitat

T	Tussockland
S	Shrubland
R	Rock outcrop
Ru	Rubblefield
C	Cushionfield and sunny depleted slopes
L	Lower terraces adjacent to the Clutha /Mata-au River
W	Wet areas
#	Riverside terrace outside of the property boundary

Abundance

A	abundant
F	frequent
C	common
O	occasional
U	uncommon
L	local

* found within identified area

B. D. Rance
30/3-1/4/2003

APPENDIX TWO Long Gully PL invertebrate records

Long Gully Pastoral Lease tenure review invertebrate survey lists 7-8 Dec 2002, 2-April 2003
 Collectors; E. Edwards, B. Patrick and B. Rance

Order/Family	Taxon	Locality	Elevation	Date	comment
Coleoptera	Beetles				
Carabidae	<i>Megadromus</i> sp.	Long Gully tops	1100 m	2-Apr-03	
	<i>Megadromus</i> sp.	Luggate-Tarras Rd	700 m	8-Dec-02	
	<i>Oregus aureus</i> complex	Luggate-Tarras Rd	350 m	2-Apr-03	
Chrysomelidae	<i>Chrysolina hyperici</i>	tce. Luggate-Tarras Rd	240 m	2-Apr-03	St.Johns Wort Beetle
	<i>Chrysolina hyperici</i>	tce. Luggate-Tarras Rd	260 m	7-Dec-02	
Histeridae	<i>Suplinus</i> sp.	Luggate-Tarras Rd	700 m	8-Dec-02	Predator of carrion insects Very local in intermontane sandy soils
Scarabaeidae	<i>Pericoptis frontalis</i>	tce. Luggate-Tarras Rd	250 m	7-Dec-02	
	<i>Pyronota</i> sp.	tce. Luggate-Tarras Rd	260 m	7-Dec-02	
Diptera	Flies				
Therevidae	<i>Anabarynychus</i> sp. 1	Luggate-Tarras Rd	700 m	8-Dec-02	Larvae predators in loamy soils
	<i>Anabarynychus</i> sp. 2	tce. Luggate-Tarras Rd	240 m	2-Apr-03	x2
Hemiptera	Bugs & cicada				
Cicadidae	<i>Amphipsalta strepitans</i>	Luggate-Tarras Rd	700 m	8-Dec-02	Inhabits tall shrubland Inhabits open cushions
Ligaeidae	<i>Nysius huttoni</i>	Long Gully tops	950 m	8-Dec-02	
	<i>Nysius huttoni</i>	tce. Luggate-Tarras Rd	260 m	7-Dec-02	
	<i>Nysius huttoni</i>	tce. Luggate-Tarras Rd	260 m	2-Apr-03	
Pentatomidae	<i>Rhopalimorpha lineolaris</i>	Long Gully tops	950 m	8-Dec-02	Inhabits dry open native vegetation of valley floors
Tibicinidae	<i>Maoricicada campbelli</i>	tce. Luggate-Tarras Rd	260 m	7-Dec-02	
Hymenoptera	Wasps				
Pompilidae	<i>Priocnemis conformis</i>	tce. Luggate-Tarras Rd	260 m	7-Dec-02	
	<i>Priocnemis monachus</i>	Luggate-Tarras Rd	700 m	8-Dec-02	feed on tunnelweb spiders
Sphecidae	<i>Podagritus albipes</i>	tce. Luggate-Tarras Rd	260 m	7-Dec-02	feed on flies
	<i>Podagritus cora</i>	Luggate-Tarras Rd	700 m	8-Dec-02	feed on flies
	<i>Podagritus cora</i>	tce. Luggate-Tarras Rd	260 m	7-Dec-02	
Lepidoptera	Moths and butterflies				
Arctiidae	<i>Metacrias huttoni</i>	Long Gully tops	950 m	8-Dec-02	x3 Alpine tiger moth, flightless females
Crambidae	<i>Orocrambus cyclopicus</i>	Luggate-Tarras Rd	350 m	2-Apr-03	
	<i>Orocrambus cyclopicus</i>	Luggate-Tarras Rd	600 M	2-Apr-03	
	<i>Orocrambus cyclopicus</i>	tce. Luggate-Tarras Rd	260 m	7-Dec-02	
	<i>Orocrambus lewisi</i>	Luggate-Tarras Rd	700 m	8-Dec-02	
	<i>Orocrambus lewisi</i>	tce. Luggate-Tarras Rd	260 m	7-Dec-02	
	<i>Orocrambus ramosellus</i>	Luggate-Tarras Rd	700 m	8-Dec-02	
Gelechiidae	<i>Athrips zophochalca</i>	tce. Luggate-Tarras Rd	260 m	7-Dec-02	Larvae bore in <i>Charmichaelia petriei</i> x2, Larvae eat <i>Raoulia</i>
	<i>Kiwaia lithodes</i>	tce. Luggate-Tarras Rd	260 m	7-Dec-02	
	<i>Kiwaia schematica</i>	Luggate-Tarras Rd	700 m	8-Dec-02	x2
	<i>Kiwaia schematica</i>	tce. Luggate-Tarras Rd	250 m	7-Dec-02	x4
Geometridae	<i>Arctesthes catapyrrha</i>	Long Gully tops	940 m	2-Apr-03	Inhabits open prostrate vegetation
	<i>Arctesthes catapyrrha</i>	Luggate-Tarras Rd	700 m	8-Dec-02	
	<i>Asaphodes aegrota</i>	tce. Luggate-Tarras Rd	250 m	7-Dec-02	x2

<i>Austrocidaria gobiata</i>	tce. Luggate-Tarras Rd	250 m	7-Dec-02	Larvae eat <i>Coprosma</i>
<i>Helastia corcularia</i>	tce. Luggate-Tarras Rd	250 m	7-Dec-02	
<i>Homodotis rufescens</i>	tce. Luggate-Tarras Rd	250 m	7-Dec-02	
<i>Leptomeris rubraria</i>	Luggate-Tarras Rd	350 m	2-Apr-03	Larvae eat <i>Plantago</i>
<i>Notoreas paradelpha</i>	Long Gully tops	950 m	8-Dec-02	Larvae eat <i>Kellaria</i>

Appendix of invertebrates continued

Order/Family	Taxon	Locality	Elevation	Date	comment
Lepidoptera	Moths & butterflies				
Geometridae	<i>Paranotoreas brephosata</i>	Luggate-Tarras Rd	700 m	8-Dec-02	
	<i>Pasiphila sandycias</i>	tce. Luggate-Tarras Rd	250 m	7-Dec-02	Larvae eat <i>Coprosma</i>
Hepialidae	<i>Wiseana copularis</i>	tce. Luggate-Tarras Rd	250 m	7-Dec-02	
Lycaenidae	<i>Antipodalycaena</i> nsp.	Luggate-Tarras Rd	350 m	2-Apr-03	x2 Larvae eat <i>Muehlenbeckia</i>
	<i>Antipodalycaena</i> nsp.	tce. Luggate-Tarras Rd	260 m	7-Dec-02	
	<i>Boldenaria</i> nsp.	Long Gully tops	950 m	8-Dec-02	x2 Larvae eat <i>Muehlenbeckia</i> <i>axillaries</i>
	<i>Boldenaria</i> nsp.	tce. Luggate-Tarras Rd	260 m	7-Dec-02	x5
	<i>Boldenaria</i> nsp.	tce. Luggate-Tarras Rd	700 m	8-Dec-02	Larvae eat <i>Charmichalia</i> <i>vexillata</i> and exotic clovers
	<i>Zizina oxleyi</i>	Long Gully	600 m	2-Apr-03	
	<i>Zizina oxleyi</i>	Long Gully tops	950 m	8-Dec-02	
Noctuidae	<i>Euxoa admirationis</i>	tce. Luggate-Tarras Rd	250 m	7-Dec-02	inland dry climate areas
	<i>Graphania lithias</i>	tce. Luggate-Tarras Rd	250 m	7-Dec-02	Larvae eat <i>Melycyttis</i> <i>alpinus</i>
	<i>Graphania mutans</i>	tce. Luggate-Tarras Rd	260 m	7-Dec-02	
	<i>Rictonis comma</i>	tce. Luggate-Tarras Rd	250 m	7-Dec-02	
Pterophoridae	<i>Pterophorus innotatalis</i>	tce. Luggate-Tarras Rd	260 m	7-Dec-02	x2, Larvae eat <i>Dichondra</i>
Pyralidae	<i>Crocodypora cinigerella</i>	tce. Luggate-Tarras Rd	260 m	2-Apr-03	x4, Native NZ, Australia dry areas
	<i>Eudonia sabulosella</i>	tce. Luggate-Tarras Rd	260 m	7-Dec-02	
	<i>Eudonia submarginalis</i>	tce. Luggate-Tarras Rd	260 m	7-Dec-02	x2 Central Otago basins, Larvae eat litter in shrubs
	<i>Hieroderis</i> nsp.	tce. Luggate-Tarras Rd	260 m	7-Dec-02	
	<i>Scoparia rotuella</i>	Long Gully tops	1100 m	2-Apr-03	
	<i>Urisophita maoralis</i>	Luggate-Tarras Rd	350 m	2-Apr-03	Larvae eat <i>Sophora</i> and some exotic woody legumes
Satyridae	<i>Argyrophenga antipodum</i>	Luggate-Tarras Rd	700 m	8-Dec-02	
Tineidae	<i>Monopis ethella</i>	tce. Luggate-Tarras Rd	260 m	7-Dec-02	Sheeps wool moth
Tortricidae	<i>Capua semiferana</i>	Luggate-Tarras Rd	700 m	8-Dec-02	
	<i>Capua semiferana</i>	tce. Luggate-Tarras Rd	250 m	7-Dec-02	
	<i>Epiphyas postvittana</i>	Luggate-Tarras Rd	700 m	8-Dec-02	
	<i>Epiphyas postvittana</i>	tce. Luggate-Tarras Rd	260 m	7-Dec-02	x2
	<i>Harmaloga amplexana</i>	tce. Luggate-Tarras Rd	260 m	7-Dec-02	Larvae eat <i>Muehlenbeckia</i>
	<i>Harmaloga oblongana</i>	tce. Luggate-Tarras Rd	250 m	7-Dec-02	
	<i>Harmaloga scoliastes</i>	tce. Luggate-Tarras Rd	250 m	7-Dec-02	x2, Larvae eat <i>Matagouri</i> , <i>Muehlenbeckia</i> etc.
Neuroptera	Lacewing				
Hemerobiidae	<i>Micromus tasmaniae</i>	tce. Luggate-Tarras Rd	260 m	7-Dec-02	
Orthoptera	Grasshoppers & cricket				
Acrididae	<i>Phaulacridium otagense</i>	Luggate-Tarras Rd	350 m	2-Apr-03	
	<i>Sigaus australis</i>	Long Gully tops	950 m	8-Dec-02	
	<i>Sigaus australis</i>	Luggate-Tarras Rd	600 m	2-Apr-03	
Gryllidae	<i>Teleogryllus</i> sp.	tce. Luggate-Tarras Rd	260 m	7-Dec-02	
Trichoptera	Caddis				
Hydropsychidae	<i>Aoteapsyche tepoka</i>	tce. Luggate-Tarras Rd	260 m	7-Dec-02	large net caddis from Clutha/Mata-au R.