

Crown Pastoral Land Tenure Review

Lease name : CLUDEN STATION

Lease number : PO 213

Due Diligence Report (including Status Report) - Part 2

This report and attachments results from a pre-Tenure Review assessment of the pastoral lease for the purpose of confirming land available for Tenure Review and any issues, rights or obligations attaching to it. The information is gathered from files and other sources available to the LINZ contractor.

Part of the information relates to research on the status of the land, resulting in a Status Report that is signed off by a LINZ approving officer. The remainder of the information is not analysed for relevancy or possible action until required, and LINZ does not guarantee its accuracy or completeness as presented.

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

March

05

"RELEASED UNDER THE OFFICIAL INFORMATION ACT"

Our reference: P 213

Copied for purposes of CPL
tenure review due diligence from
file: P 213 Vol 2/502.

5 May 1992



Mr N A Purvis
Cluden Station
R D
TARRAS

Dear Mr Purvis

PASTORAL LEASE RENEWAL: CLUDEN STATION

I refer to my letters of 20 December 1990 and December 1991.

Thankyou for your cooperation with the surveyors when they visited your property.

I can now advise that Section 24 of the Conservation Act 1987 deems marginal strips to be reserved on the renewal of pastoral leases. These strips are to be 20 metres wide adjoining rivers or streams greater than 3 metres wide or lakes greater than 8 ha in area. The purpose of such strips is to; maintain water courses, maintain water quality, maintain aquatic life, protect natural values on the strip, enable public access to watercourses and recreational use of watercourses and the marginal strip.

These strips will not normally be fenced and will continue to be managed by the adjoining landholder. Where they are fenced this will be at the cost of the Crown as will ongoing costs (eg weed and pest) within the strip. Should a watercourse shift the marginal strip will shift with it. There are some opportunities to seek an exemption from the legislation and I would be willing to discuss any request with you.

The survey inspection recently undertaken will clarify the need or otherwise for marginal strips. In the case of your property the surveyor considered a marginal strip necessary on two portions of Cluden Stream, Big Spur Creek and an Unnamed Stream in addition to the existing Crown land strip on the Lindis River.

I have now arranged for preparation of your lease renewal and your solicitor should receive documents to sign (and a request for fees) in the near future. When this is registered the requirement for marginal strips will also be noted.

Please contact either myself or your Landcorp Consultant should you have any further questions.

Yours faithfully

K R Taylor
Manager
LANDCORP MANAGEMENT SERVICES LTD

① Demand ✓
② File

INCORPORATING LANDCORP INVESTMENTS LIMITED & LANDCORP MANAGEMENT SERVICES LIMITED

Alexandra Branch Office
1 Limerick Street
PO Box 27
ALEXANDRA, N.Z.
Tel: (03) 448-6935
Fax: (03) 448-9099

Action: Renewal
"RELEASED UNDER THE OFFICIAL INFORMATION ACT"

Selector: EL ALEXANDER PURVIS (3/8 share), TRUSTEES, EXECUTORS & AGENCY COMPANY OF NEAL & AND LIMITED & WILLIAM FRANCIS PEDDESKY (5/8 share)

Postal Address: N.A. PURVIS, CLUDEN STATION, RD., CROMWELL
RTE 5, DUNING, MARQUETTE, GRIFFIN, DUNOCHIE

Land: Run 236m & 237 F St BATHONS & CLUDEN SURVEY DISTRICTS

Area: 12403.0218 Local Body: Central Otago District SO Plan No.: 28250/147
Valn. Ref.: 2841/32

Classification: <u>RESIDUAL</u>	DEFERRED PAYMENT	RENEWABLE LEASE/LICENCE TO OCCUPY
Status: <u>Crown Land</u>	Interest Commences:/.../...	Rent Commences: <u>1/7/92</u>
Issued Under: <u>Section 66 Land Act 1948</u>	Term:years from/.../...	Term: <u>33</u> years from <u>1/7/92</u>
CASH	Expires on:/.../...	Expires on: <u>30/6/2025</u>
Entitlement Date:/.../...	Purchase Price: \$.....	Rental Value: \$ <u>20000</u>
Purchase Price: \$.....	Deposit: \$.....	Annual Rental: \$ <u>12500</u>
D.L. 'S REFERENCE	Balance: \$.....	Rental Rate: <u>15</u> Review on <u>30/6/20</u>
Doc. No.	lyly Instal No. \$.....	Ex Servicemens Concession Yes/No
C.T.-Part Bal Can. <u>386/36</u>	Interest rate Review on/.../...	Concession is <u>Nil</u>

Crown Improvements or Timber Being ---
In Price or Rental Value of \$ Nil

PAYMENTS REQUIRED				<u>SEE - PLEASE REQUEST RENEWAL FEE</u>	
Deposit on DP	\$.....	Paid/.../...			
Bal/Purchase Price	\$.....	Paid/.../...	Fees	\$.....	Paid/.../...
B/P rent or interest	\$.....	Paid/.../...	Bal Fees	\$.....	Paid/.../...
Rent for 1/2 yr or term	\$.....	Paid/.../...	GST	\$.....	Paid/.../...

Special Conditions and Restrictions

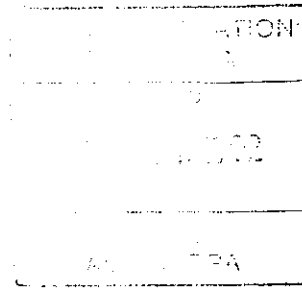
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Remarks

Prepared by [Signature] 8/1/92

PROPERTY DIVISION	ACCOUNTS ACTION	RECORDS SECTION
Advice Slips Sent/.../...	Input Slip/.../...	File/.../...
Crown Lands Register/.../...	Rent/DP Register/.../...	Index/.../...
Documents/.../...	Accounts Check / /	

27 January 1992



The District Manager/Chief Surveyor
Department of Survey and Land Information
P O Box 896
DUNEDIN

Dear Sir

MARGINAL STRIPS ON PASTORAL LEASE RENEWAL

I wish to advise that the following pastoral lease expires on 30 June 1992:

LEASE NUMBER: P213
LEASE NAME: Cluden Station
LESSEE: NA Purvis, Trustees Executors & Agency Co of NZ Ltd and
WF Pedofsky.
TITLE REFERENCE: 386/106
LEGAL DESCRIPTION: Run 236M and 237F St Bathans & Cluden Survey Districts.

As we intend effecting the renewal by memorandum could you please advise this office at your early convenience of any requirement regards marginal strips. Could you please also advise of any other title requirements which you believe should be attended to at this time.

Yours faithfully

for Managing Consultant

Reply to:

Managing Consultant
Landcorp
P O Box 27
ALEXANDRA

Dear Sir

MARGINAL STRIPS P213

Marginal strips are required, details attached.
~~Marginal strips are not required~~

Cluden Stream - 2 portions
Big Spur Creek
Unnamed Stream

Other title work is required, details attached.
~~No other title work is required~~

Correct description: shown above
Expiry list incorrect.

We wish to show marginal strips on the lease diagrams.

for District Manager/Chief Surveyor
12/3/1992

Enlarge to Original

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NEW ZEALAND.

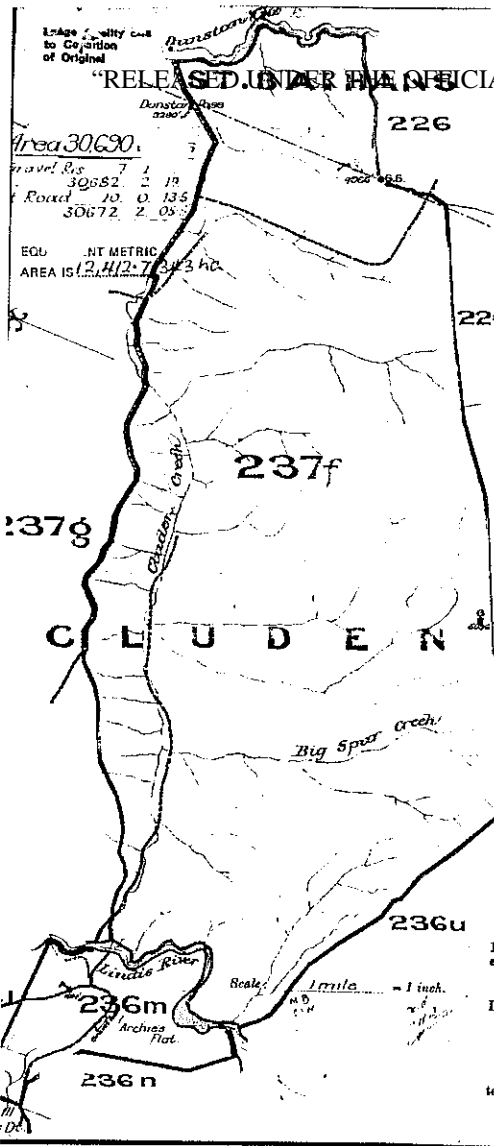
(Crown Lands B.-2.)



Reference, Vol. 335, page 166

No. 1684 National Endowment.

License to occupy Crown Lands for Pastoral Purposes.



Whereas JOHN J. JENKINS, of TARRAS, SHEPPARD has been granted a license to occupy for Pastoral Purposes that area of Crown lands containing by estimation thirty thousand six hundred and ninety (30,690) acres, more or less, and being renumbered Two hundred and thirty-six M and Two hundred and thirty-seven Y, classed as Pastoral - Agricultural Land, in terms of section 225 thereof, situate in the County of Victoria in the Land District of Otago, New Zealand, as the same is delineated on the plan in the District Lands and Survey Office, Dunedin, as shown in the margin hereof, and hath paid the sum of One hundred and seventy pounds (£ 170 : 0 : 0), being the first half-year's rent in advance for each Run: The said JOHN J. JENKINS is hereby licensed to occupy the said land for pastoral purposes for the term of thirty-five (35) years, to be computed from the first day of March 1924, subject to all the provisions and conditions of the Land Act, 1908, and its amendments, so far as applicable hereto, and subject also to the payment of an annual rent of Three hundred and forty pounds (£ 300 : 0 : 0), in equal parts, half-yearly in advance, on the first day of March and the first day of September in each and every year, payment for the first half-year's rent having already been made, and the next of such half-yearly payments to be made on the first day of September 1924.

Subject also to the conditions following, viz:—

- (1) That if the licensee or any person claiming an interest through or under him shall make or cause to be made any agreement or contract, or shall give or cause to be given or taken any negotiable security for the purpose of defesting or evading the provisions of, or shall in any way whatsoever directly or indirectly commit or be privy to a fraud upon, the Land Act, 1908, and its amendments, this license shall be liable to be forfeited and revoked;
- (2) That the licensee shall prevent the destruction or burning of timber or bush on the land comprised in this license, except as provided by section 237 of the Land Act, 1908;
- (3) That the licensee shall prevent the growth or spread of gorse, broom, and sweetbrier, on the land comprised in this license, and shall with all reasonable speed remove or cause to be removed all gorse, sweetbrier, broom, or other noxious weeds or plants, as may be directed by the Commissioner of Crown Lands; and
- (4) That the licensee shall destroy all rabbits on the land comprised in this license, and shall prevent their increase or spread, to the satisfaction of the Commissioner or an officer appointed by him to inspect the ground.

This license is granted as a renewal of Pastoral Licence No. 1392 in terms of Section 56 of The Land Laws Amendment Act, 1913.

And it is hereby declared that these presents are intended to take effect as a pasturage license only under the Land Act, 1908, and its amendments, and the provisions of those Acts applicable to such licenses shall apply hereto as fully and effectually as if the same had been set out herein at length.

In witness whereof the Commissioner of Crown Lands, on behalf of the Land Board of the Otago Land District, hath herewith set his hand, this first day of March 1924.

Residential
Commissioner of Crown Lands

I, JOHN JENKINS, the above-named licensee, hereby accept this license on the terms and conditions specified therein.
John Jenkins
Licensed.

DISCHARGED

RELEASED UNDER THE OFFICIAL INFORMATION ACT

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COMMISSIONER OF CROWN LANDS

The Land Board of the Stago Land District has this day consented to the mortgage of the within described lands from George Arthur Collins of Warrack, sheepfarmer to the Bank of New South Wales.

Dated at Dominion this 18th day of August 1924

191

Announcement & notice of the discharge of the mortgage from John Jenkins of Tarras, sheepfarmer to the Bank of New South Wales.

Announcement & notice of the mortgage of the within described lands from George Arthur Collins of Warrack, sheepfarmer to the Bank of New South Wales.

192

An investigation agreement between the King and John Jenkins of Tarras, sheepfarmer in respect of Part of Run 236 M. produced 27th August 1922.

The Land Board of the Stago Land District has this day consented to the mortgage of the within described lands from John Jenkins of Tarras, sheepfarmer to the Bank of New South Wales.

193

The Land Board of the Stago Land District has this day consented to the mortgage of the within described lands from John Jenkins of Tarras, sheepfarmer to the Bank of New South Wales.

The Land Board of the Stago Land District has this day consented to the mortgage of the within described lands from John Jenkins of Tarras, sheepfarmer to the Bank of New South Wales.

194

PASTURAGE LICENSE

COMMISSIONER OF CROWN LANDS

JOHN JENKINS

INSURE

THE

Produced 1st March 1924

The Land Board of the Stago Land District has this day consented to the mortgage of the within described lands from John Jenkins of Tarras, sheepfarmer to the Bank of New South Wales.

The Land Board of the Stago Land District has this day consented to the mortgage of the within described lands from John Jenkins of Tarras, sheepfarmer to the Bank of New South Wales.

Proclamation published in the Gazette of 11th September 1941, page 2749, taking as a road the area of 10 acres 13.5 perches coloured red on plan drawn hereon and Proclamation published in the Gazette of 12th March 1942, page 653, taking for a gravel pit the area of 1 acre 10 rods 21 perches coloured red on plan drawn hereon recorded against the within written license this 16th day of July 1943.

Transfer 175094 John Jenkins of 1/4 rd interest to Stewart Douglas Jenkins of Tarras, sheepfarmer produced 2nd October 1951 at 2.250/-

Transfer 191617 of his interest John Jenkins to Stewart Douglas Jenkins & Charles James produced 30 November 1954 at 2.38/-

see new Pastoral License No 58

form 106

©

Facsimile

To: David Abercrombie
Company: Abercrombie & Assoc
Fax No: 471 9455
From: Joan Taylor
Date: 13 September 2001
Page 1 of: 2
Our Ref: Your manual request 18004
Our Ref: As above



Land Information NZ
John Wickliffe House
Princes Street
Private Bag 1929
Dunedin
New Zealand
Tel 03-477 0650
Fax 03-477 3547
[HTTP://www.linz.govt.nz](http://www.linz.govt.nz)

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Subject: Manual request 18004

Dear Mr Abercrombie

We have been unable to locate the number of the Irrigation Agreement you require – the only thing we can suggest is that someone from your office search the Historical Records on the 4th floor. Sorry, we are unable to help you further.

Thank you

A handwritten signature in cursive script, appearing to read "Joan", written in black ink.

CDE_S15 - Request Manual Copy

Document Type	Instrument	Request Id	19004
Reference Number	CT DT 386/106	User Id	dsbercrombiadu
Land District	Otago	Request Date	12/09/2001 16:10:28
Method of Delivery	Post	Client Reference	dsbercrombiadu
Requested By		Status	Pending

Certified Copy

Comments: Irrigation agreement registered with no number (first reference) against Run 236M on CT DT 386/106

Delivery Details

Firm	Abercrombie & Assoc. Ltd
Primary Contact	Mr David Abercrombie
Street	P O Box 5056
Town	Dunedin
Country	New Zealand
Postcode	9001
Fax Number	03 471 9455

Fee: [] OK Cancel

Facsimile

To: David Abercrombie

Company: _____

Fax No: 03 471.9455

From: Joan Taylor

Date: 28.11.01

Page 1 of: 2

Our Ref: Your manual LOL request/s 28455

Your Ref: As above



Land Information NZ
John Wickliffe House
Princes Street
Private Bag 1929
Dunedin
New Zealand
Tel 03-477 0650
Fax 03-477 3547
[HTTP://www.linz.govt.nz](http://www.linz.govt.nz)

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Subject: Manual request/s

Dear Client

Please find following copy/s of manual requests received at this office.

We have searched extensively for your request/s but it cannot be found – Sorry.

CDE_S15 - Request Manual Copy

Document Type:	Instrument	Request Id:	28455
Reference Number:	885911	User Id:	dabercrombledu
Land District:	Otago	Request Date:	27/11/2001 13:16:25
Method of Delivery:	Post	Client Reference:	dabercrombledu
Requested By:		Status:	Pending

Certified Copy

Comments: Transfer as registered against CT DT 366/106 [historical image copy only]

Delivery Details

Firm:	Abercrombie & Assoc. Ltd
Primary Contact:	Mr David Abercrombie
Street:	P.O. Box 5056
Town:	Dunedin
Country:	New Zealand
Postcode:	9001
Fax Number:	03 471 9455

Fees:

NF (909, 913)



**COMPUTER INTEREST REGISTER
UNDER LAND TRANSFER ACT 1952**



Search Copy


R.W. Muir
Registrar-General
of Land

Identifier OT16D/724
Land Registration District Otago
Date Registered 03 July 1995 09:31 am

Type As described in the instrument
Area 12403.0218 hectares more or less
Legal Description Run 236M and Run 237F
Proprietors
Her Majesty The Queen

Interests

Memorandum of Transfer

160/724

(herein called "the Transferor") being registered as proprietor of an estate

subject however to such encumbrances, liens and interests as are notified by memoranda underwritten or endorsed hereon in the piece or pieces of land situated in the Land District of
containing ~~more or less being~~

160/724

Checketts McKay

Lawyers Central Otago

Alexandra Office:

Address 31 Tairāwhiti Street, Alexandra
Post P.O. Box 41, Alexandra, New Zealand
Phone (03) 448-6969
Fax (03) 448-8960
Trust Account BNZ 820915 0207675 00
G.S.T. Number 30 217 955

29 June 1995

Please ask for

John Williamson/
Bernadette Lanham

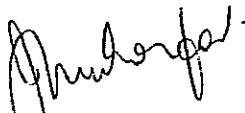
The District Land Registrar
Private Bag
DUNEDIN

Dear Sir

RE: REGISTRATION OF IRRIGATION COMPANY EASEMENTS
OVER PASTORAL LEASES

Please register the within easement over the Crown's interest as owner of the land.

Yours faithfully
CHECKETTS McKAY


J A Williamson LLB
Partner

DJL-29-06-3

1.0 BACKGROUND

- 1.1 Lindis Irrigation Limited, a duly incorporated company having its registered office at Cromwell (called "the Irrigation Company") has purchased the Tarras Ardgour Irrigation Scheme pursuant to a Sale and Purchase Agreement between Noel George Trevathan, Alastair Askin Rutherford and David Mackie Templeton all of Tarras, Farmers as agents for the Irrigation Company then yet to be incorporated and Ruth Margaret Richardson, Minister of Finance and John Howard Falloon, Minister of Agriculture on behalf of the Crown, dated 15 August 1991 and subsequently adopted by the Irrigation Company as the Purchaser. The Tarras Ardgour Irrigation Scheme (called "the Irrigation Scheme") is defined by notices in the New Zealand Gazette Order dated 6 August 1923 Number 62 Page 182 (Tarras portion) and New Zealand Gazette Order dated 24 January 1923 Page 197 (Ardgour portion) and is described in the said Sale and Purchase Agreement.
- 1.2 HER MAJESTY THE QUEEN acting by and through the Commissioner of Crown Lands (called "the Crown") is the proprietor of that land containing 12403.0218 hectares more or less being Runs 236M and 237F, Cluden and St Bathans Survey Districts subject to Pastoral Lease Number P.213 comprised in Register Book Volume 386 Folio 106 (Otago Land Registry). (called "the Crown's land").
- 1.3 NEIL ALEXANDER PURVIS of Tarras Farmer, HUGH JAMES ROSS of Dunedin Solicitor and PHILIP BLAIR PEDOFSKY of Alexandra Chartered Accountant (called "the Lessee") is registered as the lessee of the said Pastoral Lease.
- 1.4 The Minister of Agriculture (called "the Minister") had the right immediately before the date of sale of the Irrigation Scheme to the Irrigation Company, pursuant to Section 223 of the Public Works Act 1981 or the corresponding provisions of any former enactment relating to irrigation, to enter, use, occupy, carry out work on, store water on, or convey water over the Crown's land and

NP *PH* *HR* *BDST*
BDST

in the manner, detailed in this Instrument, for the purposes of the Irrigation Scheme.

1.5 Section 4 of the Irrigation Schemes Act 1990 provides the statutory mechanism to transfer from the Landowners to the Irrigation Company, the same easement rights as the Crown previously had over the Crown's land, and the Crown, lessee and the Irrigation Company have agreed to the transfer of these easement rights to the Irrigation Company.

2.0 GRANT OF EASEMENT

2.1 The Crown pursuant to section 60 of the Land Act 1948 and section 4 of the Irrigation Schemes Act 1990 TRANSFERS AND GRANTS to the Irrigation Company as an easement in gross forever, the right to convey water over the said Crown's land as marked "____" on the plans of the lands annexed which right to convey water shall have attached to it the rights, powers and obligations detailed in the following clause 3.0.

3.0 RIGHTS AND POWERS RELATING TO THE GRANT OF EASEMENT

3.1 The Irrigation Company together with any person (as defined in Section 4 of the Acts Interpretation Act 1924) acting with the authority, or on the instructions, of the Irrigation Company and together with all tools, implements, machinery, vehicles, equipment and materials of whatsoever nature shall have the uninterrupted and unrestricted rights:

(a) To situate and maintain water works and convey water unimpeded along the stipulated course on the Crown's land shown on the plan attached

B.D. [Signature] [Signature] [Signature] BDSJ [Signature]

and for this purpose to have the right to use, occupy, construct, maintain, reconstruct and carry out such works (in this Instrument called "water works") as the Irrigation Company considers necessary or desirable on the Crown's land along the stipulated course including, but without limitation, structures and works for; intakes, conveying water, water flow control and supply, turnouts, monitoring and discharges.

- (b) To monitor and control its waterflows and the water source flows and to carry out viewing, surveillance and monitoring of its water works on the Crown's land.
- (c) To enter the Crown's land and to have access across the Crown's land by the most practicable route.
- (d) To erect and maintain such fixtures or markers as may be necessary to indicate the location of any pipeline and associated works provided that such fixtures or markers do not interfere with the reasonable management of the Crown's land.
- (e) To generally do anything necessary or convenient for the full exercise of the rights under this Instrument and to give full effect to the purposes of this Instrument.

It being acknowledged that the words "convey water" and "conveying water" include "bye-wash water" and "bye-washing water".

3.2 In exercising its rights and powers under this Instrument, the Irrigation Company shall:

P.S.F. *[Handwritten initials]* *[Handwritten initials]*

BDST
[Handwritten initials]

- (a) Cause as little disruption and disturbance to the occupation and enjoyment by the Crown and the lessee of the Crown's land, as is reasonably possible.
 - (b) Cause as little damage to the Crown's land and the fixtures on it and the surface of it as is reasonably possible.
 - (c) Make good any damage caused by it, during the exercise of its rights and powers under this Instrument, to any pasture, cultivation, crop or trees of any kind for the time being sown or growing or in the course of being harvested upon the Crown's land or to any buildings, erections and fences on such land.
- 3.3 (a) When the Irrigation Company requires entry with machinery on the Crown's land to carry out maintenance or construction works, it shall take reasonable steps to give to the lessee or occupier of the land not less than 24 hours notice by direct personal contact, ordinary letter, facsimile transmission, or telephone prior to such entry and works being undertaken, unless there is an emergency and in which case no notice shall be required.
- (b) If the lessee or occupier has received such notice the lessee or occupier shall notify the Irrigation Company, prior to the entry and work being undertaken, of the presence of pipes or other underground facilities in the Crown's land and if the lessee or occupier fails to notify the Irrigation Company then the Irrigation Company will not be liable for any damage it may cause to such underground pipes or underground facilities.

P.S. NP ml JJS
BDSJ
NSI

- 3.4 (a) It is acknowledged that the Irrigation Company shall not fence the boundaries of the easements.
- (b) The Crown and lessee shall not do, or permit to be done, anything, including planting trees or constructing works or buildings, which will prevent or interfere with the free passage of water along the stipulated course or prevent or interfere with the Irrigation Company's full rights of access and full use by it of its rights created by this Instrument and shall not interfere, or permit any interference, or allow trees, tree roots or other vegetation growing on or from the landowners land or stock pastured on the crown's land to interfere with the support, structure or integrity of the Irrigation Company's water works.
- (c) Without limiting the extent of this clause 3.4, the Crown and lessee shall not, without the prior written consent of the Company, plant or permit to be planted trees or construct or permit to be constructed works or buildings within 4 metres of the centre line of a pipe or within 3 metres from the edge of a water race or other water works.
- 3.5 The rights and powers contained in paragraphs 2 and 5 of the Seventh Schedule to the Land Transfer Act 1952 shall apply except insofar as they are varied by this instrument and with the deletion from both paragraphs 2 and 5 of the words "(in common with the grantor, his tenants and any other person lawfully entitled so to do)".
- 3.6 Any right of action or remedy which shall at any time after the date of this instrument accrue to the irrigation company because of any breach or non-observance by or on behalf of the Lessee of any of the covenants expressed or implied in this instrument and to be observed or performed by the Crown, shall be enforced only against the registered proprietor for the time

P.S. NR inl S BOST

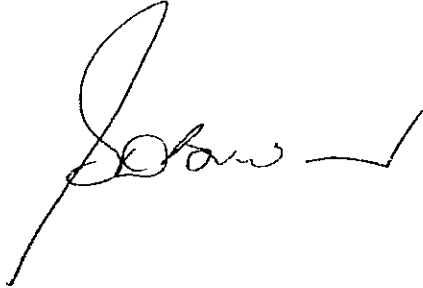
being of the Pastoral Lease in respect of which such breach or non-observance shall occur or against the lessee of the Pastoral Lease at the time of such occurrence aforesaid but to the intent that any lessee of the Pastoral Lease shall only be liable for acts or defaults occurring while that person is so registered.

- 3.7 The lessee agrees to the terms of this instrument and is bound by them to the extent that the terms apply to the lessee and the lessee consents, without payment of compensation, to the terms of this instrument.
- 3.8 A reference to any party to this instrument includes that party and that parties transferees and successors.

P.S. NR ML JB BSS
R.S.

Dated the 30th day of May 1995

SIGNED by and on behalf)
of HER MAJESTY THE)
QUEEN by the)
Commissioner of Crown)
Lands as landowner)
in the presence of:)



Witness de Borchs
Occupation Team member General Services
Address Dept. of Survey & Land Information
Wilmington

SIGNED by the LINDIS)
IRRIGATION LIMITED by)
the affixing of its common)
seal in the presence of:)




Director [Signature]

Director [Signature]

SIGNED by HUGH JAMES)
ROSS as lessee)
in the presence of:)

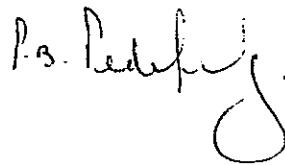


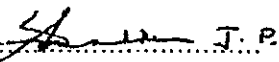
Witness.....

Occupation.....

Address.....

SIGNED by PHILIP BLAIR)
PEDOFISKY as lessee)
in the presence of:)



Witness.....
M. W. SHADDEN.

Occupation.....RETIRED.....

Address.....CLYDE CENTRAL OTAGO.



BDSJ
1955

SIGNED by NEIL)
ALEXANDER PURVIS as)
lessee in the presence of:)

N Purvis

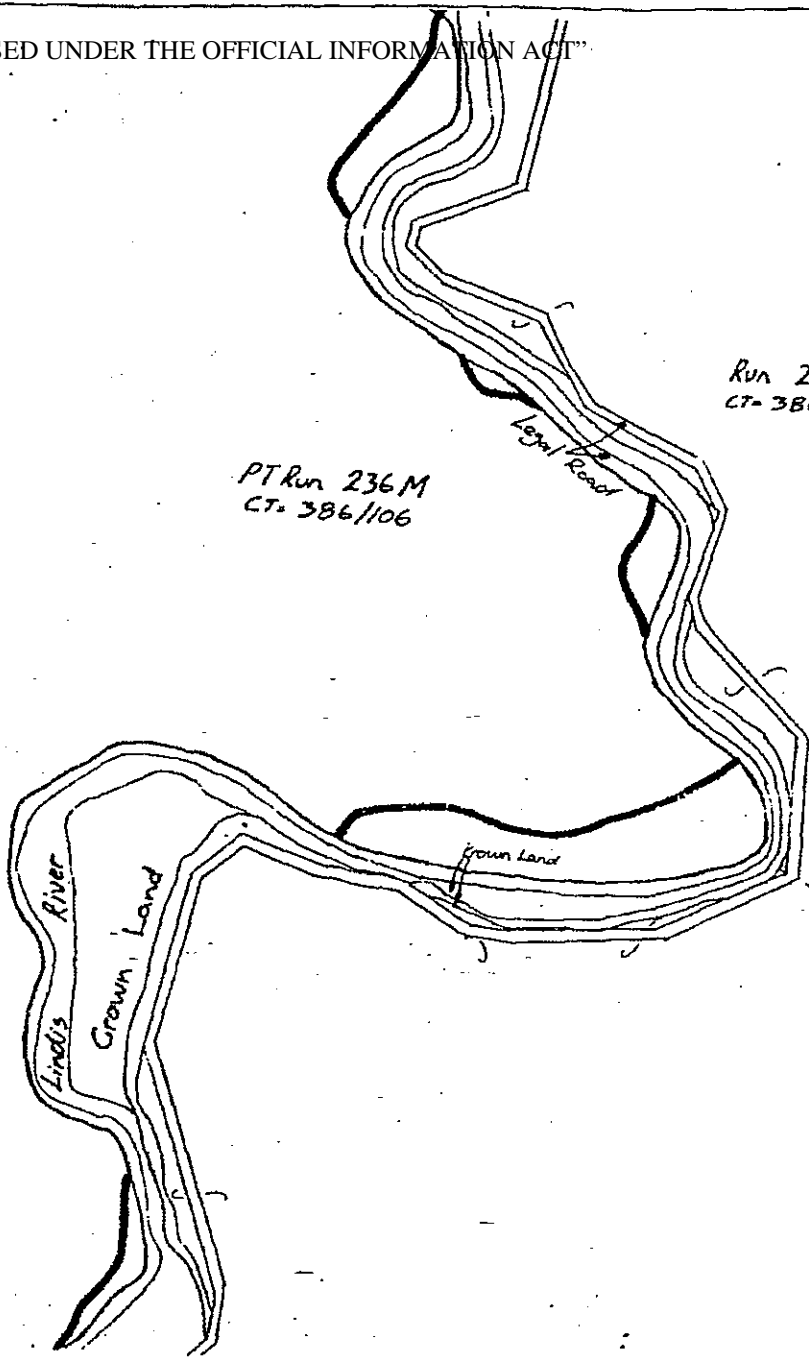
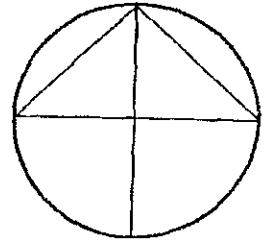
Witness... *J.P. Shaw J.P.*

Occupation... *Garage Proprietress*

Address... *Main Road*
Tarras

GJD-584/25

J.P.
BDSJ
145



OPTIONAL EASEMENTS IN GROSS

Purpose	Comprised in	Shown	Servient Tenement	Grantee
Right to Convey Water	CT386/106	—	Pt Run236M Cluden S.D	Lindis Irrigation Company

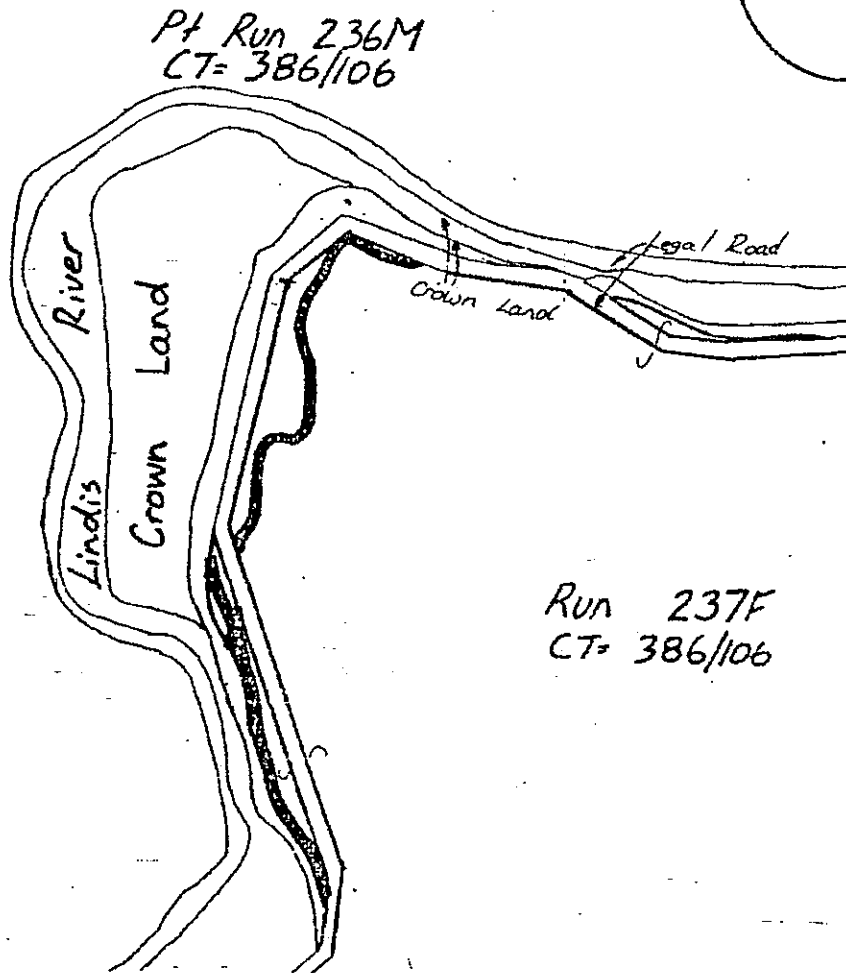
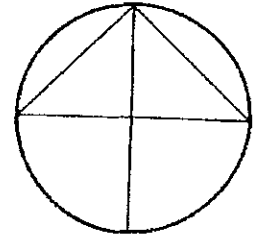
Plan of Easements Over Pt Run 236M Cluden S.D.

OTAGO LAND DISTRICT
CENTRAL OTAGO D.C.

DATE: December 1994

Prepared by PATERSON PITTS PARTNERS LTD
SURVEYING CONSULTANTS

P.S.P. *MR* *inf* *DB* *BPST*



OPTIONAL EASEMENTS IN GROSS

Purpose	Comprised in	Shown	Servient Tenement	Grantee
Right to Convey Water	CT386/106	—	Run 237F Cluden S.D and St Bathans S.D.	Lindis Irrigation Company

Plan of Easements Over Run 237F Cluden S.D. and St Bathans S.D.

OTAGO LAND DISTRICT
CENTRAL OTAGO D.C.

DATE: December 1994

Prepared by PATERSON PITTS PARTNERS LTD
SURVEYING CONSULTANTS

P.S.P. *[Handwritten initials]* *[Handwritten initials]* *[Handwritten initials]* *[Handwritten initials]* *[Handwritten initials]*

Consideration of the sum of

paid to the Transferor by

(herein called "the Transferee") the receipt of which sum is hereby acknowledged **Hereby Transfers** to the Transferee all the Transferor's estate and interest in the said piece or pieces of land

In witness whereof these presents have been executed this day of 19

Signed by the Transferor

(by the affixing of its common seal)

in the presence of:

MEMORANDUM OF TRANSFER
EASMENTS IN GROSS FOR IRRIGATION
WORKS

PURVIS NA, ROSS HJ &-Transferor
PEDOFKY PB

Correct for the purposes of the Land Transfer Act 1952

SOLICITOR FOR THE TRANSFEREE

I hereby certify that this transaction does not contravene the provisions of Part IIA of the Land Settlement Promotion and Land Acquisition Act 1952.

LINDIS IRRIGATION LIMITED Transferee

16D/1724

SOLICITOR FOR THE TRANSFEREE

Particulars entered in the Register as shown herein on the date and at the time endorsed below.

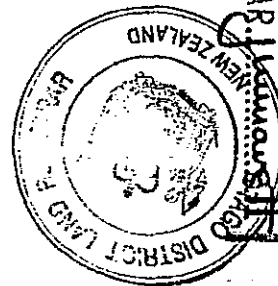
I hereby certify for the purposes of the Stamp and Cheque Duties Act 1971 that no conveyance duty is payable on this instrument by reason of the application of Section 24(1) of the Act and that the provisions of subsection (2) of that section do not apply.

Assistant / District Land Registrar of the

District of ... OTAGO

SOLICITOR FOR THE TRANSFEREE

9.37 03.JUL.95 885911
PARTICULARS ENTERED IN REGISTER
LAND REGISTRY OTAGO
ASST. LAND REGISTRAR J. J. [Signature]
Index



16D/1724

CHECKETTS MCKAY
WYERS
CENTRAL OTAGO

CDE_S15 - Request Manual Copy		X	
Document Type	Instrument	Request Id	18001
Reference Number	816274 <i>AG</i>	User Id	dabercrombiedu
Land District	Otago	Request Date	12/09/2001 16:08:52
Method of Delivery	Post	Client Reference	dabercrombiedu
Requested By		Status	Pending
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Comments			
Delivery Details			
Firm	Abercrombie & Assoc. Ltd		
Primary Contact	Mr David Abercrombie		
Street	P O Box 5056		
Town	Dunedin		
Country	New Zealand		
Postcode	9001		
Fax Number	03 471 9455		
Fees...	OK	Cancel	

LAND IMPROVEMENT AGREEMENT

T4736

This agreement is made the 14 day of October 1992

BETWEEN THE OTAGO REGIONAL COUNCIL a body corporate under the Local Government Act 1974 (called "the Council")

AND NEIL ALEXANDER PURVIS of TARRAS, HUGH JAMES ROSS of DUNEDIN, and PHILIP BLAIR PEDOFSKY of ALEXANDRA (called "the Farmer")

WHEREAS

- (i) The Farmer is the owner or lessee of the land described in the First Schedule ("the land").
- (ii) The Farmer farms the land.
- (iii) The Council and the Farmer have agreed to the rabbit and land management plan ("the plan") set out in the Second Schedule for the purposes of:
 - (a) controlling or eradicating rabbits on the land; and
 - (b) conserving the soil and vegetation on the land.
- (iv) The Council has agreed under Section 30 of the Soil Conservation and Rivers Control Act 1941 to pay grants towards the cost of implementing the plan.
- (v) The parties have agreed that the payment of grants will be made on the terms set out in this agreement.
- (vi) The parties have also agreed that the terms of this agreement will bind the Farmer and any successors in title to perform and observe the terms of this agreement.
- (vii) The agreement is to be registered against the title to the land under Section 30A of the Soil Conservation and Rivers Control Act 1941.
- (viii) The plan is part of the Rabbit and Land Management Programme being undertaken by the Crown and the Council in the Otago region.
- (ix) All grants paid by the Council under the plan are wholly funded by the Crown.
- (x) the plan is conditional upon:
 - (i) continuing Crown funding of the Rabbit and Land Management Programme in the Otago region; and
 - (ii) the payment to the Council by the Crown of money necessary for the Council to make the grants payable by the Council under the plan.
- (xi) The Ministry of Agriculture and Fisheries ("MAF") is responsible for implementing monitoring and overseeing the Rabbit and Land Management Programme for the Otago Region on behalf of the Crown.
- (xii) The plan has been approved by the Ministry of Agriculture and Fisheries.
- (xiii) The parties wish to record their agreement in writing.

IT IS AGREED:

1. Commencement

1.1 This agreement shall be deemed to have commenced on 1 April 1990.

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2 The Farmer shall:

- 1. implement the plan
- 2. carry out the works in the plan to be undertaken by the Farmer
- 3. adopt and maintain land management practices described in the plan
- 4. carry out any maintenance required by the plan
- 5. use any rabbit control or eradication measures described in the plan
- 6. establish and maintain land uses prescribed by the plan
- 7. make on demand the payments to be made by the Farmer under the plan

2.2 The Farmer shall carry out his obligations according to the specifications in the plan.

3. The Councils Obligations

3.1 The Council shall:

- 1. carry out any works in the plan to be undertaken by the Council
- 2. make the grants to be paid by the Council under the plan
- 3. provide the Farmer with technical advice and assistance until 30 June 1995 (any technical advice and assistance and monitoring after that date shall be on terms and conditions to be agreed by the Council and the Farmer).

3.2 The Council shall carry out its obligations in accordance with the specifications in the plan.

4. Grants

4.1 Subject to 4.3 grants shall be paid by the Council at the percentage rates set out in the plan.

4.2 Any dollar figures (other than the property cap) shown in the plan are illustrative only and not binding on the Council or the Farmer.

4.3 The grant payable by the Council shall not exceed (in dollars) the property cap set out in the plan. If further funds become available from the Crown, the Council may in its discretion make additional grants on the same terms and conditions that are set in this agreement and the plan.

5. Financial Records

5.1 The Council shall open and operate a property account to record all transactions for implementation of the plan and send quarterly statements to the Farmer.

6. Information

6.1 The Farmer shall, on request, supply any information requested by the Council on:

- 1. implementation of the plan
- 2. execution of the works described in the plan
- 3. maintenance of the works
- 4. the Farmers land management practices
- 5. pest and noxious plant levels on the land
- 6. rabbit control or eradication measures undertaken by the Farmer
- 7. the costs of implementing the plan
- 8. the costs of undertaking further or additional rabbit control or eradication measures
- 9. the costs and benefits of the plan

9

Right of Entry

After giving notice (orally or in writing) to the Farmer whenever practicable, the Council or MAF may, at any time, enter the land to:

1. inspect the land
2. monitor the implementation of the plan
3. evaluate the success of the plan
4. take samples.

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7.2 In carrying out an inspection the Council and MAF may use any vehicles and other equipment it considers necessary.

7.3 If the Council or MAF has been unable to give notice to the Farmer before entering the land, the Council or MAF shall give the Farmer written notice of entry immediately afterwards and in the notice tell the Farmer what was done.

7.4 Nothing in this clause shall apply to the exercise by the Council of its powers under Section 56 (1) (b) Agricultural Pests Destruction Act 1967. Rabbit control and eradication measures shall only be undertaken by the Council on the land with the consent of the Farmer or after notice has first been given in accordance with Sections 56 (2) and 117 of that Act.

8. Disclaimer

8.1 The Farmer acknowledges:

1. the Farmer has been offered an opportunity of receiving independent financial and management advice on the plan and its effects and implications
2. the Farmer has entered into this agreement solely in reliance upon the Farmers own judgement
3. the Farmer has not entered into this agreement in reliance upon or in consideration of any advice given or statement made by MAF or the Council
4. the Farmer has been advised to obtain and has had the opportunity of receiving independent legal advice of the terms of this agreement and its effects and implications.

9. Duration

9.1 Subject to clauses 9.2 and 9.3 the Farmers obligations under this agreement shall end on 30 June 2010.

9.2 The Farmer shall not remove or damage any trees planted under the plan without the Council's written consent before 30 June 2010.

9.3 The Farmer shall carry out the land management practices stipulated in the plan until 30 June 2000 unless the Council and the Farmer otherwise agree.

10 Further Rabbit Control, Eradication and Land Management

10.1 It is the Farmer's responsibility to prevent rabbit populations increasing and maintain rabbit control and eradication measures after 30 June 1995. If the Farmer fails to prevent rabbit populations increasing or fails to maintain rabbit control or eradication measures after that date Council reserves the right to exercise its powers under the Agricultural Pest Destruction Act 1967, the Noxious Plants Act 1978, the Rating Powers Act 1988 and any other legislation administered by the Council. In particular (but without limiting the Councils powers) the Council may enter the land and carry out rabbit control or eradication measures, works, or maintenance of works, make and levy rates and recover any costs incurred by the Council from the Farmer.

11. Default by the Farmer

11.1 If the Farmer breaches this agreement and the breach is capable of being remedied then the Council shall serve a written notice on the Farmer describing the breach and requiring the Farmer to remedy the breach within the time specified in the notice.

11.2 The time given to remedy the breach shall be a reasonable time having regard to the nature and effect of the breach and the means by which the breach can be remedied.

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11.3 If the breach cannot be remedied the Council shall give notice of the breach to the Farmer.
"RELEASED UNDER THE OFFICIAL INFORMATION ACT" 

11.4 If the Farmer fails to remedy the breach within the time specified in the notice or if the breach is incapable of remedy the Farmer shall, upon demand, pay to the Council the amount of the grant actually paid by the Council under the plan to the date of demand by the Council under this agreement or such lesser sum as the Council decides should be repaid to the Council.

11.5 The amount recoverable by the Council under the preceding subclause shall be a reasonable sum having regard to the nature and effect of the breach.

11.6 If the Farmer is dissatisfied with

1. Council's finding that the Farmer is in breach of the agreement
2. the time fixed by the Council to remedy any breach
3. the sum payable by the Farmer under clause 11.4

the Farmer may, within 14 days of receiving notice of the breach, or as the case may be, the notice of demand he may by written notice to the Council refer the matter to arbitration for determination.

12. Arbitration

12.1 Any dispute between the Council and the Farmer under this agreement shall be referred to arbitration.

12.2 The dispute shall be determined by a single arbitrator appointed by the parties, or failing agreement the nominee of the Minister of the Environment or the Minister's delegate.

12.3 Any reference to arbitration shall be deemed to be a submission to arbitration in terms of the Arbitration Act 1908.

12.4 The Arbitration Act 1908 shall apply to any arbitration under this agreement.

12.5 The award of the Arbitrator shall be final and binding on the parties.

13. Service

13.1 Notices may be served on the Council by being delivered to the Council's principal office.

13.2 Notices may be served on the Farmer either

1. personally; or
2. by post; a notice sent by post shall be deemed to be served on the Farmer on the 7th day after posting unless the contrary is proved. It is sufficient that the notice be addressed to the Farmer's last known address or to the address of the land.

14. Enforcement

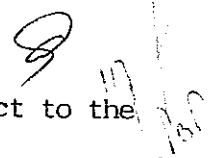
14.1 This agreement is a land improvement agreement under Sections 30(3) and 30A of the Soil Conservation and Rivers Control Act 1941.

14.2 All the provisions of those Sections shall apply to this agreement.

14.3 Any sum payable to the Council under clause 11.4 may be recovered by the Council under Section 30A of the Soil Conservation and Rivers Control Act 1941.

14.4 This agreement shall bind the Farmer and the Farmer's successors in title.

14.5 The Council shall register this agreement against the title to the land.

15. **Personal Liability of the Farmer** The provisions of this clause are subject to the provisions of clause 20 hereof. 

15.1 The Farmer shall be personally liable under this agreement to the extent provided by this agreement and Section 30A of the Soil Conservation and Rivers Control Act 1941.

15.2 If the Farmer is two or more persons then the liability shall be joint and several.

15.3 If the Farmer is a company the Farmer's obligations shall be guaranteed by the Directors of the company. The liability of the guarantors shall be joint and several.

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16. Variations

- 16.1 This agreement (including the plan) may be varied by the parties.
- 16.2 Any variation shall be in writing.
- 16.3 No variation shall have effect until approved by MAF.
- 16.4 Any variation may be registered against the title to the land.

17. Agreement Conditional upon Government Funding

- 17.1 This agreement is conditional upon the Crown paying to the Council annually during the period 1 April 1990 to 30 June 1995 the money necessary to enable the Council to pay the grants set out in the plan up to the level of the property cap.
- 17.2 This condition is a condition subsequent.
- 17.3 If the Crown fails to provide the Council with funds then the Council shall give notice to the Farmer. This notice shall relieve the Farmer and the Council from further performance of this agreement except that:
 - 1. works commenced shall be completed to the extent that the Council has received funds for those work from the Crown
 - 2. works (excluding removal or planting of vegetation) completed shall be maintained by the Farmer until 30 June 2010
 - 3. any trees already planted shall not be removed without the Council's written consent before 30 June 2010
 - 4. the Farmer shall continue land management practices and land uses already adopted in accordance with the plan until 30 June 2000 provided that they are not part of an integrated farming programme under the plan in which other parts of that programme have not been completed or put in place.
 - 5. the Farmer shall maintain any areas stripped of or planted with vegetation until 30 June 2000
 - 6. the provisions of clauses 5, 6, 7, 8, 10, 11, 12, 13, 14, 15, 16, 18 and 19 of this agreement shall continue to apply.

18. MAF's Rights

- 18.1 The rights, powers and immunities conferred on MAF by clauses 7, 8, 13 and 16 of this agreement are "benefits" and MAF is "a beneficiary" for the purposes of the contracts (Privity) Act 1982.
- 18.2 MAF may enforce those provisions as if it were a party to this agreement in accordance with the terms of this agreement and the provisions of the Contracts (Privity) Act 1982.

19. Interpretation

- 19.1 "Council" includes its officers, employees, agents and independent contractors.
- 19.2 "Farmer" includes any person acquiring the Farmer's interest in the land; and includes any guarantor.
- 19.3 "Grant" means the money payable by the Council under the plan.
- 19.4 "Guarantor" means the person or persons who sign the guarantee annexed and if more than one, both or either of those persons.
- 19.5 "Land management" includes:
 - 1. adhering to specific livestock levels
 - 2. using particular feed production techniques
 - 3. using particular livestock types and breeds
 - 4. implementing specific grazing programmes
 - 5. supplying livestock with specified feed
 - 6. retiring land from use by livestock

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- .6 "MAF" is the Ministry of Agriculture and Fisheries and includes its officers, employees , agents and independent contractors.
- 19.7 "The "Property cap" is the maximum dollar amount of the grants payable by the Council under MAF approval of the plan; the property cap is set out in the plan.
- 19.8 "Rabbit control and eradication measures" include
 - 1. aerial and ground poisoning or shooting
 - 2. fumigation
 - 3. trapping
 - 4. any authorised biological methods
 - 5. any other control or eradication measures approved by the Council and MAF
 and includes both primary and secondary control or eradication operations.
- 19.9 The "Rabbit and Land Management Programme" is the programme created by agreement between the Council and Crown dated 19 December 1990.
- 19.10 "Works" include
 - 1. access tracking
 - 2. fencing and erection of structures
 - 3. removal of vegetation
 - 4. planting of vegetation
 - 5. repair and replacement of existing works
 - 6. upgrading existing works
- 19.11 References to the singular include the plural and vice versa.
- 19.12 References to any statutes include any Acts amending or replacing any statutes.

NOTE:
This agreement and the plan in the Second Schedule are based on Rabbit and Land Management Plan No. 36 a copy of which maybe inspected at the Otago Regional Council office, 70 Stafford Street, Dunedin.

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20. Hugh James Ross of Dunedin, Solicitor and Philip Blair Pedofsky of Alexandra, Chartered Accountant have executed the agreement as Trustees of the Purvis Childrens Trust created by a certain Deed of Settlement dated the 19th day of October 1982 and it is hereby acknowledged that the liability of the said Hugh James Ross and Philip Blair Pedofsky hereunder is not a personal liability but is confined to the assets for the time being of the said Trust.

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Legal Description

C.T. 386/106

Runs 236m and 237f, Cluden and St Bathans Survey Districts.

12403.0218ha

Schedule 2

Part I Programme Works Summary

Rabbit and Land Management Programme Aims:

1. To maximise ground cover on all classes of land.
2. To ensure the retention of ground cover on those areas where an improvement has been achieved.
3. Reduce the rabbit population on extreme and high prone areas to permanent low levels that will be economically and ecologically sustainable in the long term.
4. Prevent the spread of rabbits from the above areas.
5. Prevent cross infestation between neighbouring properties.
6. To jointly agree on land use and management systems to ensure the long term protection of the land resource system. In particular to identify the agreed grazing loads and spelling regimes that will be applied to low and mid-altitude Class VII lands within the land resource.
7. To develop flexible stock management and grazing systems to allow application of contingency measures during significant dry periods.
8. To implement a monitoring programme to assess vegetative recovery in association with rabbit control and land management practices.

Programme:

The programme must be kept flexible due to:

- often unpredictable nature of rabbit, its population increase and spread coupled with climatic conditions.
- possibility of poison and/or Secondary Control failure due to a number of factors.
- take into account scientific improvements, new technology, and improvements in field knowledge.

The identified aims will be achieved by the following:

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Physical Works:

1.1 Rabbit Netting Jobs 1-5

Rabbit Netting will comprise:

25.95km

The rabbit netting will:

- (a) Establish isolation primary poison units that will minimise reinfestation from adjacent areas.
- (b) Assist secondary control operations.

Costings are detailed within the Annual Works Programme and the works identified on the associated map.

1.2 Pest Control Operations

A prime aim of the programme is the reduction of rabbits to permanent low base levels to provide long term protection of the land resource. The combination of both primary and secondary control operations is required to achieve this aim.

1.3 Primary Control

Primary Control operations have been implemented on all R&LM land during 1990 and 1991 winter poisoning period. Poison kills were in the order of 95% or better for a high proportion of the total area. **Jobs 11 and 20**

1.4 Secondary Control

Secondary control operations will comprise a combination of nightshooting daywork and helicopter shooting. **Jobs 12, 21, 22, 23, 31, 32, 33, 41, 42, 43, 51, 52 and 53.**

Nightshooting may comprise both vehicle and portable means.. Motorcycle use is actively encouraged for vehicle nightshooting due to its greater cost efficiency. Strategic use of 4 x 4 Trucks is still eligible for payment where there is an identified practical advantage. Portable nightshooting is directed at areas adjacent to vehicle nightshooting terrain.

Daywork includes a range of method types and is more applicable to those areas where nightshooting is not feasible.

Helicopter shooting is applied as a strategic tool to gully systems within nightshooting terrain as well as areas restricted to predominantly manpower daywork.

The reduction of rabbits to low levels will be more effective where a mix of secondary control methods is applied. It is important to integrate all possible methods where feasible rather than becoming reliant on any one method.

Estimates for individual secondary control methods may require modifications as the scheme progresses. Where appropriate costings may be exchanged between secondary methods.

Pest Control Costings are detailed within the annual works programme and summarised on the associated map.

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2. General
"RELEASED UNDER THE OFFICIAL INFORMATION ACT"

- 2.1 All works and rabbit control and eradication measures shall be carried out in accordance with the specifications annexed to this plan or specifications supplied by the Council.
- 2.2 All works and rabbit control and eradication measures shall be carried out in accordance with the annual works programme in Part I and Part IV of this plan.
- 2.3 All works and rabbit control and eradication measures actually carried out shall attract grants up to the rates set out in Part IV of this plan but subject to clause 4.3 of the Agreement. The Property cap is \$ 243,813.
- 2.4 All costs set out in Part IV are purely illustrative. The prices are estimates in 1990 dollar terms only and do not include GST. Grants will be based on costs actually incurred.
- 2.5 The location of works is shown on the attached map.
- 2.6 The area or areas in which rabbit control and eradication measures are to be carried out are shown on the attached map.
- 2.7 The programme or specifications may be varied by the Council.

3. Consents

- 3.1 No part of the programme shall be implemented without the Farmer first obtaining any necessary consent, licence, permit or other legal authority ("consent").
- 3.2 It may be necessary for the Farmer to obtain a consent from the Council. The Farmer shall consult with the Council to find out whether any consent is required.
- 3.3 Neither the agreement nor this plan are a waiver by Council of the need to obtain any necessary consent nor a representation that such consent is unnecessary nor that any necessary consent will be granted.
- 3.4 The programme shall be carried out in accordance with all consents.

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Part II Land Management:

1. Assessment of Grazing Load for the Class VII Zone

The future grazing chart identifies the total stock numbers and stock units/hectare (s.u./ha) that would be accommodated after making the required allowances for;

- recovery to a good vegetative cover (where required)
- periodic spelling for the complete growing season.
- minimum level spelling requirements in the year of poison.

Indicative stock units per hectare and stock units per year are identified for each Block down the left hand side of the future grazing chart as well as below.

Stocking rates for the Class VII intergrade zone range between .4 s.u./ha for predominantly unimproved blocks to 1.2s.u./ha for improved blocks.

Grazing Limitations have been assigned as follows:

Apple Tree	.4 s.u./ha
Lethbridges	.4 s.u./ha
Lower Ewe	1.2 s.u./ha
Blue Slip	1.2 s.u./ha
Lower Richmond	.4 s.u./ha

Joint Vegetation Monitoring will be implemented to verify the accuracy of agreed rates (see Sec 5.3. (b) of the full programme text).

The owner has agreed to the grazing conditions outlined within this section.

2. The Farmer shall follow the grazing management programme set out in the grazing management chart.

Periodically significant dry periods will occur that require modification to the normal grazing pattern (see Section 5.3 of the full property programme text titled "Contingency Measures during Significant Dry Periods").

3. The blocks and paddocks referred to in the grazing management chart are identified on the attached map.

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Part IV Summary of Works Programme - 1990-1995

Year	Total Cost	Grant	Farmer Cost
1	160344	118352	41992
2	734661	84405	30256
3	85827	63507	22320
4	64960	47560	17400
5	64960	47560	17400
Total	490752	361384	129368

Breakdown of Five Year Programme

Works	Est Cost	Grant Rate	Grant
Primary Control 3390ha	105318	70	73723
Secondary Daywork 500ha	34000	70	23800
Nightshooting 300ha	9000	70	6300
Helicopter 3900ha	194530	70	136171
Nightcount 3900ha			
Monitoring 3900ha	19600	70	13720
Annual Inspections 3900ha	9847		6893
Subtotal	372295		260607
Net Existing Fence 25.95km (materials only)	68842	100%	51162
Subtotal	68842		51162
Planning & Supervision	49615	100	49615
TOTAL	490752		361384

NOTE: FUNDING

MAF have approved grant funding for this property based on the area of high or extreme land.

The property funding cap at approval is \$243,813.00 which will be subject to annual appropriation from government.

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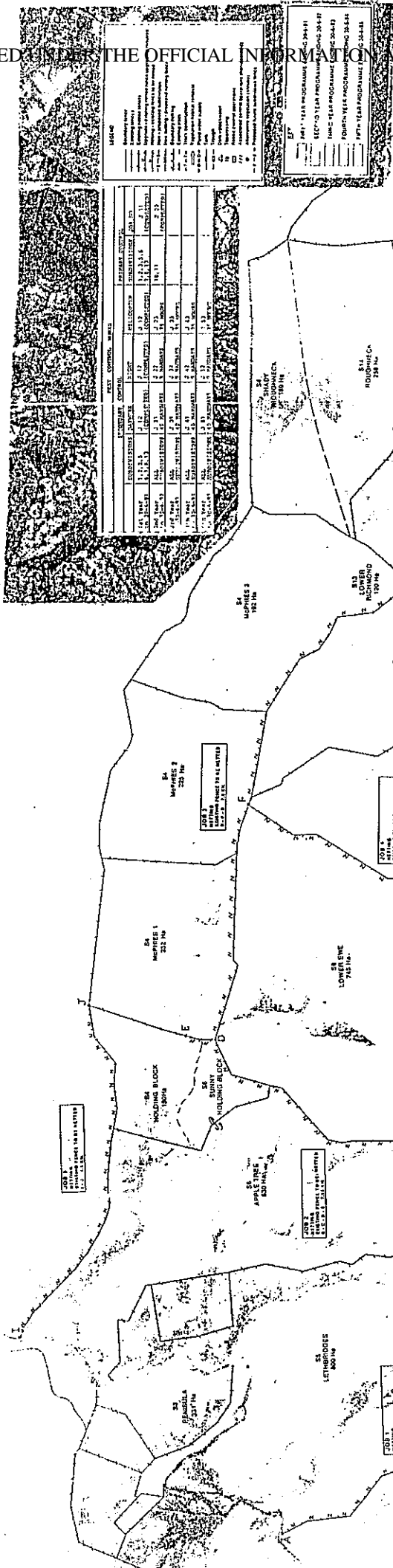
PLAN NO 36		PROPOSED GRAZING MANAGEMENT -- CIUDEN STATION													
su/ha	su/yr	PADDOCK NAME	AREA	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR
.4	252	*APPLETREES	630					#####							
		CLARKYS	368			1800									
1.2	464	*BLUESLIP	387			1500									
1.2	894	*LORDER EWE	745			1600		8800							
.4	320	*LETHBRIDGES	800	1100 LH											
		RATTAIL	711			2000			2000						
		THREE CORNERS	1356												
		MCPHIES NO 3	192								5000		3500		
		MCPHIES NO 2	225												
		MCPHIES NO 1	232												
		HOLDING BLOCK	150												
		LITTLE CIUDEN	635	2400EH	3500	H							3500		
.4	48	*LOWER RICHMOND	120							1800	27E				
		ROUGHNECK	449	2500	E				900						
		BREAMNECK	625			2500	E		900				2000	E	
		VERCOES	508										1800	E	
		FARIS KNOB	190												
		HUT	489												
		CAPLES	762												
		GREENOS	210												
		DUNSTAN	535												
		SHAMS	546												
		HARLEYS	490												
		TOP RICHMOND	470												
		JENKINS	377												
		TARRAS	175												

* CONSERVATION GRAZING CONDITIONS ARE ASSIGNED TO THESE BLOCKS
 CONDITIONS ARE IDENTIFIED DOWN THE LH SIDE (REFER SEC 5.3(a))

////// AVAILABLE FOR EWE AND LAMBS DURING DRY SPRINGS

NO SPECIFIC STOCK CLASS FOR THE PERIOD IDENTIFIED

Handwritten initials at the bottom right.



PEST CONTROL		PERSIAN GIN		SUNNY BREEKNECK		BATTAL	
DATE	TYPE	DATE	TYPE	DATE	TYPE	DATE	TYPE
1.1.1.1	1.1.1.1	1.1.1.1	1.1.1.1	1.1.1.1	1.1.1.1	1.1.1.1	1.1.1.1
1.1.1.2	1.1.1.2	1.1.1.2	1.1.1.2	1.1.1.2	1.1.1.2	1.1.1.2	1.1.1.2
1.1.1.3	1.1.1.3	1.1.1.3	1.1.1.3	1.1.1.3	1.1.1.3	1.1.1.3	1.1.1.3
1.1.1.4	1.1.1.4	1.1.1.4	1.1.1.4	1.1.1.4	1.1.1.4	1.1.1.4	1.1.1.4
1.1.1.5	1.1.1.5	1.1.1.5	1.1.1.5	1.1.1.5	1.1.1.5	1.1.1.5	1.1.1.5
1.1.1.6	1.1.1.6	1.1.1.6	1.1.1.6	1.1.1.6	1.1.1.6	1.1.1.6	1.1.1.6
1.1.1.7	1.1.1.7	1.1.1.7	1.1.1.7	1.1.1.7	1.1.1.7	1.1.1.7	1.1.1.7
1.1.1.8	1.1.1.8	1.1.1.8	1.1.1.8	1.1.1.8	1.1.1.8	1.1.1.8	1.1.1.8
1.1.1.9	1.1.1.9	1.1.1.9	1.1.1.9	1.1.1.9	1.1.1.9	1.1.1.9	1.1.1.9
1.1.1.10	1.1.1.10	1.1.1.10	1.1.1.10	1.1.1.10	1.1.1.10	1.1.1.10	1.1.1.10
1.1.1.11	1.1.1.11	1.1.1.11	1.1.1.11	1.1.1.11	1.1.1.11	1.1.1.11	1.1.1.11
1.1.1.12	1.1.1.12	1.1.1.12	1.1.1.12	1.1.1.12	1.1.1.12	1.1.1.12	1.1.1.12

74756
112974/4

RABBIT AND LAND MANAGEMENT PROGRAMME
CLUEN STATION
N. PURVIS - PRIVATE BAG TARRAS
ANNUAL WORKS AND PEST CONTROL

"RELEASED UNDER THE OFFICIAL INFORMATION ACT"

THE COMMON SEAL of
THE OTAGO REGIONAL COUNCIL
was attached in the presence of:



J. H. Seaman

)
)
)
Chairman

[Signature]

)
)
)
Director

SIGNED by
NEIL ALEXANDER PURVIS of TARRAS,
HUGH JAMES ROSS of DUNEDIN, and PHILIP
BLAIR PEDOFFSKY of ALEXANDRA
in the presence of:

)
) Neil A. Purvis
)
)
) H. J. Ross
)
) P. B. Pedoffsky

Witness: [Signature]


Occupation: Administrative Officer

Address: [Signature]

1. **RUSSELL WAYNE SCOTT** of Dunedin, Director of Corporate Services of the Otago Regional Council certify:

1. this agreement is a duplicate of the land improvement agreement made under Section 30(3) and 30A Soil Conservation and Rivers Control Act 1941 between the Otago Regional Council and Neil Alexander Purvis of Tarras, Hugh James Ross of Dunedin, and Philip Blair Pedofsky of Alexandra called the Farmer
2. this agreement may be registered against the land described in the First Schedule of this agreement

and I apply for registration of the agreement against the title to the land described in the First Schedule.



R W Scott
Director of Corporate Services
Otago Regional Council

To: The District Land Registrar
Otago Land Registration District.

Dated

1992

BETWEEN THE OTAGO REGIONAL COUNCIL a body corporate under the Local Government Act 1974 (called "the Council")

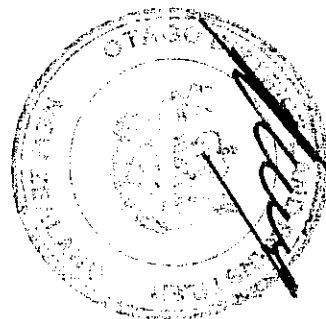
AND NEIL ALEXANDER PURVIS of TARRAS, HUGH JAMES ROSS of DUNEDIN, and PHILIP BLAIR PEDOFFSKY of ALEXANDRA (called "the Farmer")

LAND IMPROVEMENT AGREEMENT

MWP_0013289

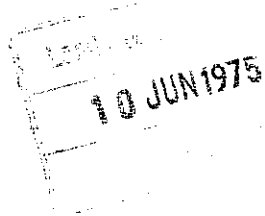


3/24/92



REGISTER

"RELEASED UNDER THE OFFICIAL INFORMATION ACT"

**New Zealand
Electricity**TELEX WATPWRCR NZ4252
New Zealand Electricity Department.
CHRISTCHURCH.

Telegraphic address: Waterpower

P.O. Box 1251

Telephone 488-859

Our ref: 22/229/2

Your ref:

9 June 1975

The Commissioner of Crown Lands,
Lands & Survey Dept.,
P.O. Box 896,
DUNEDIN.RE: CROMWELL-TWIZEL 220kV TRANSMISSION LINE
AND RUN 236M, CLUDEN S.D.

Following construction of the Cromwell-Twizel 220kV transmission line, it was arranged that Mr I.A. Purvis of Cluden Station, Tarras, re-grass an airstrip which had been reformed because of this line construction work. A payment of \$188.50 by this Department has been approved for this work, and it was also recommended that structure compensation at the rate of \$20.00 per tower for the seven towers on the property should be paid at the same time.

A search of the title shows that the land is held under a Pastoral Lease for 33 years with rights of renewal, the present lessees being I.A. Purvis, M.C. Purvis and F.J.M. Gibson, of Tarras. ... Certificate of title 386/106 refers and the attached sketch shows the relative position of the transmission line crossing this Run 236M.

Would you please advise if you require any part of the \$140.00 structure compensation which has been tentatively agreed on, to be paid to your Department under the terms of the Transmission Line ... Compensation Agreement (copy attached), and if not, please give your consent to the payment of the full amount to the lessees.

G.B. COLLIE
District Manager

Per:

(P.E. Dunn)

*No problems re management -
airstrip reformed. Pay to lessees*

PED/EDP
...Encls.

TRANSMISSION LINE COMPENSATION AGREEMENT

RELEASED UNDER THE OFFICIAL INFORMATION ACT

→/We Ian Alexander Purvis, Molly Constance Purvis and Frances Jessie Margaret Gibson of Tarras

being the Lessee^S/Owner of Runs 236M and 237T situated in the Cluden and St Batlans Survey District of the Otago Land District and entered in Register book 386/106,

hereby offer to accept the sum of Three hundred and twenty-eight dollars, fifty cents (\$328.50) in full and final settlement of all claims

and demands for compensation in respect of the above land in connection with or arising out of the construction of the transmission line known as the Cromwell-Twizel 220kV

line as shown on the attached plan.

The above sum includes all allowances by way of costs or expenses. AND →/We hereby authorise the Crown to retain and pay to the person entitled (if demanded) the whole or a sufficient part of the compensation to release the above land from all claims by the holder of any mortgage lien or charge in respect of the construction of the said transmission line insofar as it affects the above property and for this purpose the owner shall obtain statements signed by each mortgagee and holder of the lien or charge setting out the amount required to be paid to him in reduction or discharge of the mortgage debt or for the release of the lien or charge, or consenting to payment of the whole of the compensation to the owner.*

THE CROWN shall pay and make good to the Owner any loss or damage which the Owner may sustain by reason of any stock being destroyed by the escape of electrical energy from the transmission lines in consequence of any accident whatsoever to such transmission lines, subject to the Owner giving to the Crown by registered letter, within seven days after such damage, injury, or destruction shall have come to the Owner's knowledge, notice containing particulars of the nature and extent of the loss or damage so sustained.

THE CROWN shall erect and maintain gates at its own cost where it so requires them for the construction and maintenance and patrol of the transmission lines: Provided that any gates erected on boundaries of the land owned by the Owner shall be kept securely locked by the Crown when such gates are not in actual use.

SIGNED BY THE SAID

I.A. Purvis
M.C. Purvis
F.J.M. Gibson
in the presence of:

(Lessee/Owner)

Witness:

Occupation:

Address:

Acting on behalf of Her Majesty the Queen pursuant to Section 12 of the Electricity Act 1968 and pursuant to an authority given to me by the Minister of Electricity/General Manager of the New Zealand Electricity Department I hereby accept the above offer.

Dated at this day of 19

SIGNED BY

In the presence of:

Person authorized by the Minister of Electricity/General Manager of the New Zealand Electricity Department.

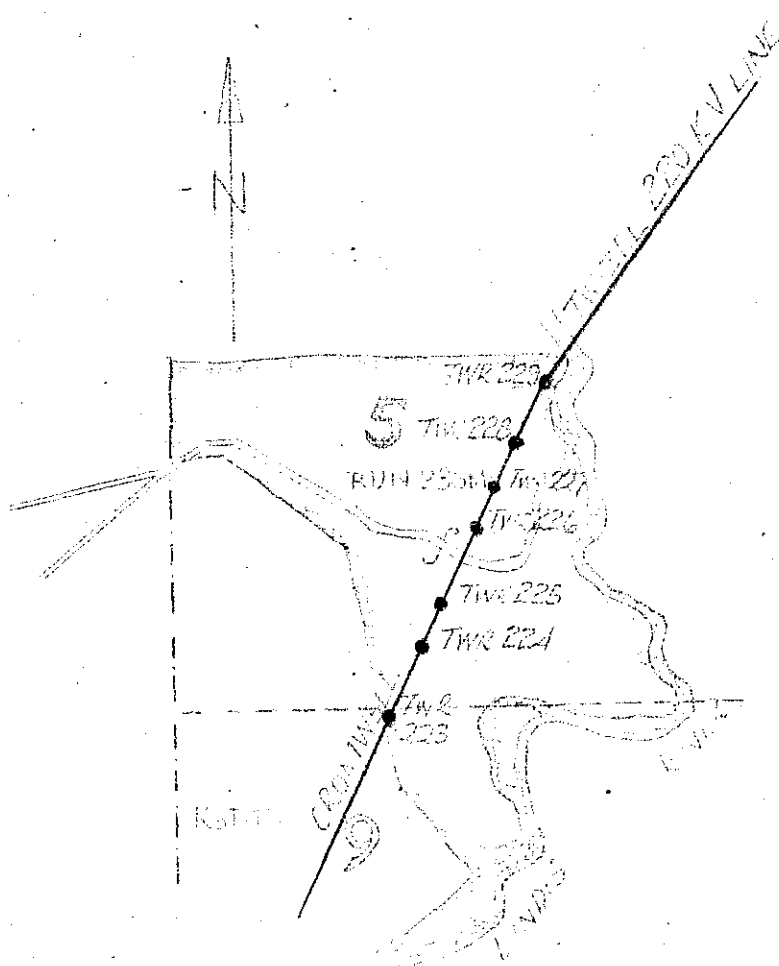
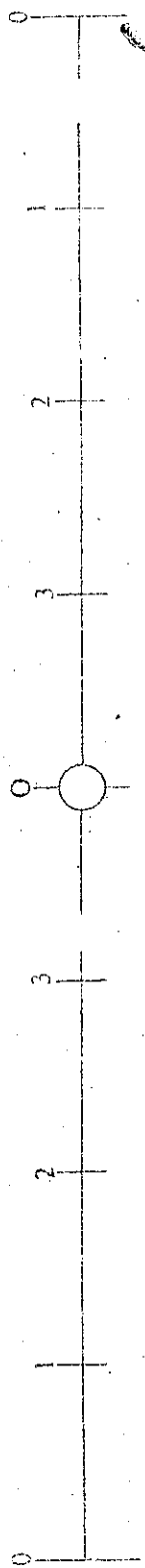
Witness:

Occupation:

Address:

* Note: Sometimes persons other than the claimant have a right to the compensation money or part of it. The procedure in this paragraph is to ensure prompt payment to the correct person.

M.C. PURVIS, J.A. PURVIS & F.J.M. GIBSON (LISSETTS)
 RUN 236M. CLUDEN S D



GRAPHIC SCALE

AMENDMENT				By	Date	Chg	App	DRAWN	Checked	Record	Approved	Released for Issue	Approved for Issue

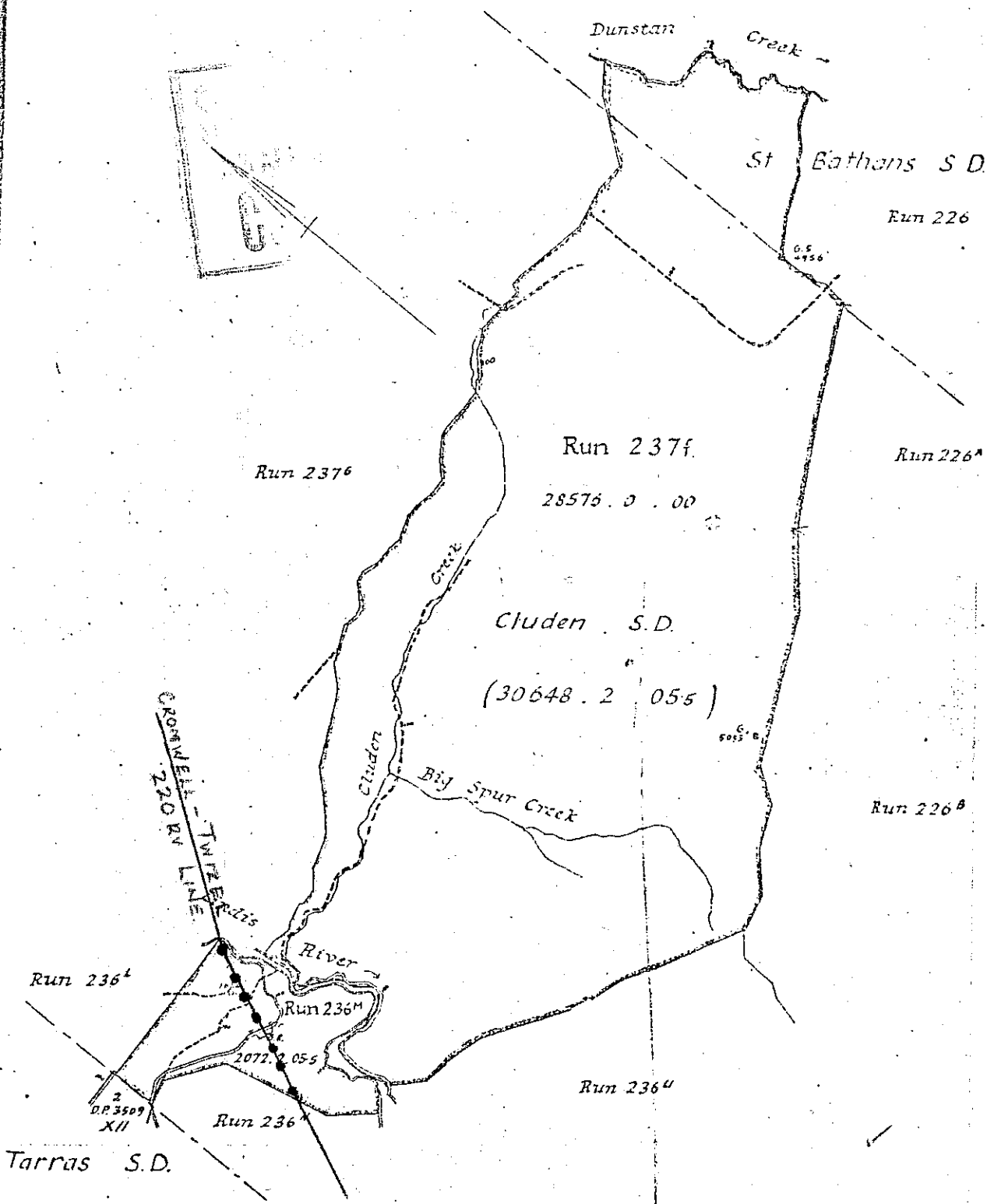
R.Z. ELECTRICITY
 DEPARTMENT
 E. B. RACKENZIE
 S.E. (E.E.), A.P.M. (E.E.)
 GENERAL MANAGER

CLUDEN S D
 RUN 236M. CLUDEN S D

DATE: [] [] [] [] [] []
 TIME: [] [] [] [] [] []

386/106

Cluden & St. Bathans S. D's



Total Area: 30648 ac. 2r. 05sp.

Scale: 80 chains to an inch.

300 112 105 100
200 200 200

S.P.D.
A

Po 213 Cluden

See photos 98/1 & 98/2

Inspected Cluden with Neil Purvis 21/1/98. Met Lesley and son Sam.

The objective was to become more familiar with the property, gain a better understanding of the grazing mgmt, look at the RAP area adjoining the Lauder conservation area. Also wanted to look at the over grazed sites, especially the one next to transect 5 which I reported on January '97 as a suspected burn.

The Season

A very trying "El nino" season with constant strong winds. Have had some good rainfalls around Christmas but is negated by the winds very quickly. Frequent southerlies which have brought some rain and snow on the tops. Spring too cold, dry & windy hence no spring flush. Still working ground to get winter crops in -has been to dry to even cultivate. Cluden is a huge ppty so the scope allows them to get through adverse seasons quite well. The stock are looking great and the season suits them quite well.

The RAP areas

A 2

Some confusion as to which gully this is. Neil thinks it is in the Lower Ewe block and the DOC map indicates that it is in the Near Blueslip block. *Coprosma & olearia + native climbing broom*. Didn't inspect either of the steep gullies. Will have to be aware of both sites when giving burning permits.

A 1

Includes the very top of the Blueslip & Top Richmond and part of the Harley's and Three Corners blocks.

The top of the Dunstan Range is in very good order, appears to be *C. macra*. The top blocks (Harleys and Three Corners) receive very little grazing pressure but the corners near gate ways have poor tussock (chewed or dead) and spear grass. On the northerly aspects, poorer tussock cover and more bare ground. The top of Bluecliffs and Top Richmond, esp. at the top around the gate ways is very chewed out with dead tussocks. The block improves a little further down. I suspect the RAP area in Bluecliffs & Top Richmond was in much better condition when the RAP study was done. But Neil said most of the damage was done before the contour fence was put in (early-mid '90's) subdividing the top of Bluecliffs.

PNA report ID'ed C. macra down to 1400 m asl going abruptly into C. rigida. Bogs,

Richmond Valley

A lovely valley, good OSTD grazing country. Would possibly be a good access way walking/ horse.

Over grazed sites

Generally these areas are making a good recovery with a reasonable ground cover -small grasses *Rhizitesperma* continuation of recovery is dependant on future grazing pressure. Seem to date back to when wethers were caught in early snow and the tops or places where the snow clears first was thrashed.

Looked at the area next to transect 5, it looks much better with some regrowth around the perimeter of the dead snow tussock bases. General cover is far better than last season, the dominant clover we saw last year has diminished and not even flowering - seasonal effect?? Wind erosion creating pedestalled tussocks is very bad in places. The spear grass a useful cover crop in places where the wind erosion is worst.

Boundary fences

The top boundary between Cambrian Hill, DOC and Lauder is poor (see photos). Some stragglers -esp from Cambrian Hill. None from Lauder as they have put up a new fence and don't graze the tops. Boundary with Mt. St Bathans across Dunstan Ck not all that secure. Looses very few Cluden stock the other way as is on the dark side. Timburn boundary is OK but will be up for renewal at some stage. Gets a lot of pressure from the Cluden side. Only the first couple of km's were rabbit fenced with R & LM \$ (under Timburn's programme) which surprised me as I thought securing boundaries would be important. Raised the fence height a few years ago for cattle. The Timburn boundary is not on the legal line in several places, Neil happy with the give and takes. Mentioned that if there were any glaringly obvious places where lessee wanted to change the boundary line when going through tenure review, it can be done at survey. Am thinking of Timburn's problem in not having any good stock access out of the Dunstan Ck. Would be solved if the boundary was moved to the leading ridge next door but that initiative has to come from the lessees.

Boundary with Cambrian hill in the eastern corner is really odd in that it doesn't follow up to the top of the ridge but traverses the head of the Richmond valley and goes straight up a scree slope.

Fertiliser, tracking, subdivision

Puts fertiliser on the good mid altitude OSTD country only -to 1000 m. It is here were most of the stock are grazed. A 3 to 4 year fertiliser cycle.

A huge amount of fencing was done in the LIS & LDEL days when the blocks were OSTD. Level of subdivision very good for mob sizes.

Cluden is very well tracked, will not be doing any more.

Rabbits, hawkweed, weeds

Rabbit numbers have been massively reduced from levels observed last year. I believe it has made a significant difference to the warm, stock camp sites that were bare last season. One block -the lower far Blueslip still has a problem where RCD has not been so effective. The rabbit netted fence line effect is very marked. Will continue use RCD as a biocide with carrot.

Mostly H. pilosella, is prevalent but not as bad as I expected i.e. there are few areas of grey (pilosella dominant) on the sunny faces. Didn't do enough walking to get a really good handle on hieracium, saw a bit of praealtum near the exclosures.

Briar is not bad. A few spots with matagouri, spray then burning has been very successful in the past for control. Otherwise very clean country.

Exclosures in the Top Richmond block

Looked at 2 sets of exclosures, each has one sheep fenced and one rabbit proofed. Don't know who put them there, the fences look to be older, are not monitored. They show how non grazed esp. rabbit proofed exclosure has a POORER vege cover than the surrounding grazed. Inside the exclosure is mouse eared dominant, the fescue tussocks are sparse and poor. The range and vigour of species outside was far better.

Grazing Pattern

Winters ewes on warm bare front faces, is enough feed in gullies, spreads out around mid-alt for lambing after pre-lamb. Old ewes put to the black face and lambed at Tarras, weaned Jan. and some sent fat off mothers, finishes the balance at Tarras. Merino lambs weaned 2nd wk Feb., keep wthr & ewe reps and balance are sold and on a truck to Hinds. Calves and hgts winter fed on turnips etc on flats next to Lindis R.

Ewes on higher mid altitude, gradually flush up on same blocks.

On movement control. Cows kept on Richmond blks, doesn't sell any weaners, winters everything twice to sell fat. Hereford/Simintal mix.

Wthrs, wintered around the Richmond area?? spread out around top summer blocks - overgrazings from when trapped by snow before autumn muster.

Stock & Production

As at January 1998 carrying 15500 su on the Pastoral Lease.

The deer unit takes up most of the irrigated freehold at Tarras. Some transfer of R 2 yr cattle to finish at Tarras. Water from the Lindis race originating from near the Cluden ck - Lindis R. confluence.

9500 ewes

3000 wthrs

3500 hgts wintered -1500 wthr, 2000 ewe (culls esp. wethers not kept for rep. in spring)

100 cows

200 odd ylgs & 2 yr -simintal cross

lambings variable 85 to 100% at tailing
preg tests cows

wthrs 19 mic doing 5-6 kg
ewes 20-22 4.5-5 kg
hgts 17-18 mic

Cluden's stock are the best looking merinos I've seen. Are big framed sheep, the 2 toothed and lambs on mothers looked very good. Even if production is a bit exaggerated, is still excellent. Cows in great condition, calves good but very young -is late calving here
Rams from Stonehenge

Tenure Review

Asked about tenure review and how to apply. Motivation mostly to get away from PL restrictions but has had little difficulty in doing what he wants in the past. Suspect not every track and OSTD area has a consent.

Is aware that the tops are very tradable esp bounding as existing DOC area. I think that is why the fence has not been maintained or replaced.

Tenure review would work well on Cluden and secure great access ways, conservation land and pockets of interesting scrub. I feel Neil is only at the initial stages of thinking seriously of applying.

To do

- keep in contact, esp. with regard to tenure review, would strongly encourage him to apply if he shows some interest.
- use every opportunity to look around the place -esp the over grazed corners
- am very wary of burning on this country, an escaped patch matagouri burn would do immense damage. Inspect any burn applications thoroughly, even with DOC to determine which gully the RAP A2 is in.

Caroline Crawford

27 January 1998

12
Copied for purposes of CPL
tenure review due diligence from
file: P213 Vol 3/12.

Land condition monitoring.
Vegetation monitoring on six Otago Block Limit sites:

1983 - 1997

(part report 254, Cluden)

Prepared by: Carol Jensen

Knight Frank (NZ) Limited
Land Resources Division
PO Box 142
CHRISTCHURCH

September 1997

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1. INTRODUCTION

2. METHODS.....

 2.1Field methods

 2.2Analysis.....

3. CLUDEN RESULTS

4. COMBINED RESULTS

5. DISCUSSION.....

SUMMARY

Between 1983 and 1986, monitoring was established on 35 Otago pastoral leases where block limits had been set. As part of a 5 year programme to remonitor most of these sites, a subset of 26 transects on six properties in the Lindis Pass area were remonitored in the summer of 1996/97. Transects on one property have not been grazed in recent years and the other sites had limited sheep grazing. Several sites have been oversown and top dressed. Transects were located on a diverse range of sites from sunny, dry rabbit prone faces to short tussock grassland and snow tussock at higher altitudes.

A summary of the combined results from the six properties suggest the following trends.

In terms of frequency there has been an:

-
- increase in snow tussock
- increase in mouse-ear hawkweed, king devil and tussock hawkweed
- increase in sweet vernal
- decrease in blue tussock
- decrease in catsear
- decrease in some other herbs

There has also been an overall increase in vegetation cover and corresponding decrease in bare ground. Most of these trends are consistent with results obtained from other areas in the previous year and appear to be of widespread occurrence, over a range of grazing intensities.

On Cluden an increase in hawkweeds and sweet vernal and a decrease in blue tussock and catsear conformed to the wider trends, while some other trends were observed which were specific to conditions and management on this property.

1. INTRODUCTION

In Otago in the mid 1980's, stock limits for individual blocks within a number of pastoral leases were established to better effect control over grazing on specific blocks. Block stock limits were negotiated because of the risk of depleting vegetation cover on the land due to altitude, erosion proneness, or climatic factors such as snow risk. 142 transects on 35 properties covering a range of Ecological Districts in Otago were established to monitor the effect of specified stocking rates on these lands. As part of Knight Frank's land condition monitoring (Section 4.2.1, Draft Vegetation Monitoring Strategy for the Commissioner of Crown Lands, 1995) it is planned to remonitor most of these sites over five years. When all the block limit sites have been remonitored, data analysis should allow some assessment of overall trends in land condition

Over the 1996/97 season, block limit transects on six pastoral leases in the Lindis Pass area were remonitored. The properties are all in the Central Otago ecological region and are located around the Lindis Pass/Tarras area. The 26 transects remonitored this season range in altitude from 430m to 1470m and range from lower dry rabbit prone sites to snow tussock grassland at higher altitudes. OSTD has been carried out on some properties and stock numbers may have increased since the original monitoring was established. Other blocks have generally been grazed within their stock limits up to the present day. With the introduction of block stock limits in the early 1980's stock numbers tended to be reduced.

This preliminary report presents the Cluden data obtained over the 1996/97 season and considers trends that have emerged on these sites over the last decade. These results are then presented in the context of other block limit transects remeasured in the 1996/97 season.

2. METHODS

2.1 Field methods

Vegetation monitoring was based on permanently marked transects, complimented by photographs. Transect locations were defined by New Zealand map grid references. Site variables including altitude (above sea level), aspect and slope were recorded. Transects were generally sited to be representative of the blocks. The transects ran parallel to the slope (up and down) and were permanently marked with two fibreglass poles. Five short alloy pegs were placed at 20 m intervals along the tape, starting at 10 m, to mark stereophoto positions. A 100 m tape was laid between the two fibreglass poles, and a 50 x 50 cm quadrat was used to sample vegetation at 2 m intervals along the true left of the tape, starting at 1 m, sampling a total of 50 quadrats. Measurement details are described below.

Ground cover was estimated to the nearest 5% in each quadrat for:

- rock and rubble (> 5 cent coin).
- bare ground (< 5 cent coin).
- litter (detached vegetation, organic matter).

- vegetation (live).

The mean percent ground cover was obtained by averaging the percent ground cover for each of the 50 quadrats over the transect.

Species frequency is the percentage of quadrats in which a species occurred.

Species cover was not recorded in the original sampling. In 1996/7 species cover of all species was estimated in six classes: 1 = <1%; 2 = 1-5%; 3 = 6-25%; 4 = 26-50%; 5 = 51-75%; 6 = 76-100%. Mean percent cover values were calculated by averaging the midpoint values for each species.

Photographs (55mm) were taken viewing each transect from the top and bottom pegs respectively. Five wide angle (20mm) photos were taken from a tripod set at 1 m above the ground at 10, 30, 50, 70 and 90 metres, as marked by alloy photo pegs.

2.2 Analysis

Determination of trends over time has been based on the percent frequency data as there was no initial species cover data. Most of the trends that have occurred have been quite subtle, and photographic evidence mostly reflects this slow rate of change.

A general summary of changes over time was provided by calculating, for each survey area, the difference in the sum of frequency estimates for each species.

3. CLUDEN RESULTS

Site description

The lower sunny faces on Cluden are subject to moisture stress and fluctuating rabbit numbers hence vegetation cover is likely to vary from year to year. Five transects were sited on sunny, lowland (430-740m) rabbit prone blocks where scabweed was often the dominant vegetation. Transect 5 was the only transect located in snow tussock grassland at higher altitude (1385m) where rabbits and moisture stress have less impact. Monitoring was established in 1985 and the transects have been remonitored in 1990 and 1997.

Transect	Block	Grid reference NZMS 260	Altitude (m)	Aspect (°)	Block stock limit (su/ha/yr)
1	Lower Richmond	G40 428 966	680	340	
2	Lower Richmond	423 969	550	340	
3	Roughneck	443 982	740	290	0.4
4	Roughneck	456 990	730	340	0.4
5	Harleys and Shaws	444 928	1385	45	0.5
6	Appletree	362 946	430	0	0.4

Table 1: Cluden site details.

Although accurate grazing records are not available sheep grazing has generally been within the set stock limits (Table 1) over the past 10 years.

Results

There was a consistent drop in vegetation cover on all transects from 1985 to 1990 followed by some recovery in 1997 (Fig. 1). As all sites have a generally northerly aspect, fluctuations in vegetation cover can be expected due to varying climatic conditions and fluctuating rabbit numbers.

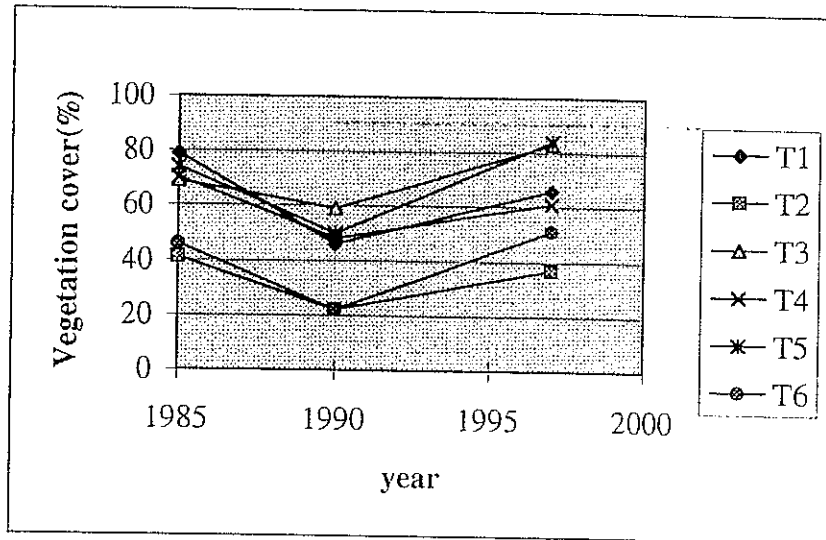


Figure 1: Vegetation cover on Cluden

The dry rabbit prone sites transects 1,2,3,4,6

Scabweed was the dominant species on the dry rabbit prone sites and has declined slightly on most transects on which it was present (Table 2).

Mouse-ear hawkweed increased on the transects in which it occurred but cover remained low (0-3%).

The short tussocks (blue tussock and hard tussock) decreased whereas sweet vernal increased on all transects.

Transect 3 had improved vegetation cover due to an increase in clover and sweet vernal and a decline in scabweed.

Snow tussock vegetation on transect 5

Vegetation cover on transect 5 changed considerably over 10 years. In 1985 vegetation cover was 74%, dropped to 50% in 1990 then increased again to 84% in 1997. In 1990 the area around transect 5 was severely overgrazed (see report P213 and photos) and this was reflected in the drop in vegetation cover. By 1997 the vegetation cover had improved but the frequency of snow tussock had decreased from 94% in 1985 to 52% in 1997 (Table 2). Snow tussock cover was 4% in 1997. White clover frequency has increased from 0-76% and covered 9% of the ground. The decrease in snow tussock frequency, observed

Blackened snow tussock bases and increase in white clover frequency was consistent with results observed following burning and oversowing and top dressing in other parts of the high country.

Hard tussock also declined in frequency. The transect was dominated by blue tussock (41% cover in 1997). Blue tussock frequency was 100% in all years.

Transect 5 had the highest concentration of hawkweeds on Cluden. Especially mouse-ear hawkweed which was not recorded in 1985 but in 1997 was recorded on 86% of the quadrats and covered 17% of the ground.

In the 12 years since monitoring was established the species composition on transect 5 has changed dramatically. In 1985 snow tussock formed the dominant vegetation, followed by blue tussock and hard tussock. In 1997 blue tussock was the dominant vegetation followed by mouse-ear hawkweed, white clover and then snow tussock.

	Transect 1			Transect 2			Transect 3			Transect 4			Transect 5			Transect 6		
	Freq.	C.		Freq.	C.		Freq.	C.		Freq.	C.		Freq.	C.		Freq.	C.	
	85	97	97	85	97	97	85	97	97	85	97	97	85	97	97	85	97	97
Snow tussock													94	52	4			
Hard tussock	0	4	<1				20	10	4	34	28	5	80	42	3			
Blue tussock				4	0	<1	20	12	2	24	18	2	100	100	41			
Sweet vernal	6	80	31	0	2	<1	0	78	24	0	20	3	0	24	2	4	34	3
Hawkweeds:																		
- tussock													4	32	1			
- mouse-ear	2	36	1							4	14	3	0	86	17	0	12	<1
- king devil													2	24	2			
Catsear	84	36	1	86	2	<1	84	0	<1	50	4	<1	26	14	<1	78	28	<1
White clover	46	10	<1	4	0	<1	0	70	8	0	16	<1	0	76	9	6	0	<1
Scabweed	74	56	17	94	96	30	26	2	1	42	24	5				84	82	20

Table 2: Cluden data summary of main species.

4. COMBINED RESULTS

The 26 transects on 6 properties covered a range of sites from sunny dry rabbit prone faces at lower altitude up through short tussock grassland into snow tussock at higher altitude. Snow tussock was recorded on eleven transects, short tussocks were present on 24 transects and 4 transects were sited on dry sunny rabbit prone faces with little or no short tussock. Although stock limits were known at the time monitoring was established, recent grazing figures are not available, but it is likely that sheep grazing has been kept below the stock limits. Only where oversowing and top dressing has taken place are stock numbers likely to have increased.

	Sig	# of transects			Mean change in frequency (%)					
		Dec	NC	Inc	Area 1	Area 2	Area 3	Cluden	Area 5	Area 6
Increasing species										
Snow tussock		2	1	8	6.7	-2.0	1.3		9.3	
Hawkweeds:										
- tussock	**	3		12	74.7	.7	10.4	4.7	14.0	6.0
- mouse-ear	***	2		20	70.0	18.7	13.3	23.0	29.3	15.0
- king devil	**	2	1	11	14.0	20.0	.4	3.7	5.3	3.0
Sweet vernal	***	3		20	35.3	46.0	37.1	38.0	-21.3	27.0
Vegetation cover	***	6		20	25.7	21.0	11.0	0.4	6.9	26.2
Decreasing species										
Blue tussock	***	21	1	2	-16.0	-33.3	-15.1	-3.0	-12.0	-19.0
Hard tussock		15		7	8.0	2.0	-13.6	-2.0	-4.7	-5.0
Elymus solandri	***	20	1		-5.3	-26.0	-16.7	-12.3	-18.0	-24.0
Acaena caesiiglauca	**	11	1	2	-23.3	-.7	-7.1	-.3	-15.3	
Epilobium sp.	**	10			-24.0			-29.3	-8.0	-1.0
Geranium sessiliflor	**	16		5	-9.3	-12.7	-2.2	-11.3	-14.7	-16.0
Catsear	***	21	1	3	-44.0	-25.3	-20.9	-54.0	-42.7	-73.0
Leucopogon fraseri	*	8	3	3	-6.0	.7	-1.8	.3	-5.3	-20.0
Luzula rufa	**	12	2		-46.7	-3.3	-14.4	-0.7	-3.3	
Raoulia australis	**					-20.7	-2.2	-10.0		-20.0
Viola cunninghamii	***	14		1	-30.7	-5.3	-14.0	-8.7	-2.7	
Wahlenbergia albo	*	11	1	3	-46.7	-18.7	-8.7	1.0	0.7	-1.0

Table 3: Summaries of changes in mean percent frequency between initial and last monitoring, on each property for selected species. The significance test lists the significance of each species trend over time, based on the Wilcoxon signed-rank test, where * = P < 0.05; ** = P < 0.01; *** = P < 0.001. The number of transects where the species has decreased (Dec), has not changed (N/C) or has increased (Inc) is listed.

The transects sampled vegetation on land covering a wide range of grazing pressures. Although sheep grazing was generally of low intensity (ranging from 0.5su/ha/yr to little or no grazing in recent years on some sites) the impact of rabbits may have caused high grazing pressure on the dry sunny faces. Consequently, the actual range in grazing pressure maybe much greater than the stated range of stocking rates. Although grazing pressure was variable, the major trends identified for some species appears to be independent of grazing pressure, with same the changes happening throughout the whole range of sites.)

Increasers

Vegetation cover showed a significant increase overall. However, management factors such as oversowing and top dressing, burning and rabbit numbers have had an influence on this result. The greatest increases were recorded on the properties where oversowing and top dressing had been carried out with the resulting increase in matagouri, clovers, introduced grasses and hawkweeds. One area had been burnt prior to the original monitoring hence the most recent result reflects recovery after burning. The dry rabbit prone transects showed little change in vegetation cover over the time period. However, the lower altitude rabbit prone country is likely to show seasonal fluctuations in vegetation cover due to climatic variability and changing pressure from rabbits. At higher altitudes where moisture stress and rabbits are not so much of a problem there is less variability in vegetation cover.

Although snow tussock frequency increased slightly on most areas where it was present the changes were not significant. This increase although slight is consistent with results from the 1995/96 subset where there was a significant increase in snow tussock frequency.

Three species of hawkweed were commonly recorded on the transects, mouse-ear hawkweed, tussock hawkweed and king devil. The frequency of all three species increased significantly, in particular, mouse-ear hawkweed. The only sites where mouse-ear hawkweed was not recorded were the dry sunny rabbit prone sites too dry for hawkweeds. Mouse-ear hawkweed was recorded on 22 transects in 1997 compared to 13 transects in the establishment year. Mouse-ear hawkweed cover ranged from <1-40% in 1997. The significant increases in the hawkweed species is consistent with similar increases in the data from the 1995/96 transects.

Sweet vernal increased significantly on most transects where it was present. Sweet vernal also increased significantly on the 1995/96 transects.

Decreasers

Blue tussock was present on 24 of the 26 transects and declined over the whole range of sites. Overall, blue tussock showed a highly significant decrease (Table 3). Blue tussock also showed a significant decrease in the 1995/96 group of block limit transects.

Although present on 22 of the 26 transects hard tussock showed no consistent trend overall, increasing on some sites and decreasing on others. Similar results from the 1995/96 sites showed hard tussock similarly variable.

Catsear decreased on 21 of the 25 transects on which it was present. It was a strong decreaser on all 6 properties.

Scabweed, although only present on the dry rabbit prone sites declined significantly at these sites.

Overall bare ground decreased significantly corresponding to the overall increase in vegetation.

Overall trends

Several significant trends are apparent when the data from the six areas are combined (Table 3). There was a significant increase in vegetation cover with a corresponding

significant decrease in bare ground over a time period of 11-14 years. Snow tussocks, hawkweeds and sweet vernal all tended to increase in terms of frequency. Blue tussock, catsear and the low growing native herbs and sedges *Leucopogon fraseri*, *Luzula rufa*, *Viola cunninghamii* and *Wahlenbergia albomarginata* all tended to decrease. These results are consistent with the results from other Otago properties monitored in the 1995/96 season (report 213) and recent work on retired sites (unpublished Department of Conservation report).

Blue tussock and catsear were ubiquitous throughout the whole range of transect sites from snow tussock grassland to the dry rabbit prone sites at lower altitude. Both species declined significantly throughout the whole range of sites regardless of varying altitude, vegetation community and grazing pressure. Similarly, hawkweeds increased significantly across a range of grazing pressures although hawkweeds tended to be absent from the very dry rabbit prone sites.

More extensive analysis, based on management, vegetation communities and species relationships will be appropriate when remonitoring of the block limit sites is completed.

5. DISCUSSION

Reviewing the Cluden results in the context of overall trends, amongst the 1996/97 block limit subset the Cluden results represent more rabbit prone /drier sites which are likely to exhibit moisture and rabbit related fluctuations.

Several patterns observed on Cluden conform to the wider scene. This includes an increase in hawkweeds and sweet vernal and decrease in catsear and blue tussock.

Cluden differs from the overall pattern in the decrease in snow tussock where found, and the increase in clover (on 3 transects) which are likely to relate to specific management factors on this property.

