

## **Crown Pastoral Land Tenure Review**

**Lease name : CLUDEN STATION**

**Lease number : PO 213**

### **Due Diligence Report (including Status Report) - Part 3**

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**

L. & S. - F. 2  
"RELEASED UNDER THE OFFICIAL INFORMATION ACT"

# DEPARTMENT OF LANDS AND SURVEY

TELEGRAPHIC ADDRESS: 'LANDS'



OUR REFERENCE: P 28

FOR VERBAL INQUIRIES  
PLEASE ASK FOR M

YOUR REFERENCE:

TELEPHONE No.

Copied for purposes of CPL  
tenure review due diligence from  
file: P 213 Vol 21475

DISTRICT OFFICE, Dunedin

P.O. BOX 896

17 March 1987

Mr N Purvis  
Cluden Station  
TARRAS

Dear Mr Purvis

### PROTECTED NATURAL AREAS PROGRAMME

I refer to the document "Lindis, Pisa and Dunstan Ecological Districts - Draft Survey Report for the Protected Natural Areas Programme", also known as the Lindis-Pisa-Dunstan "PNA report", which was sent to you on 5 February.

You will be aware that in the case of land held under pastoral lease or licence, you require my prior approval for any operations involving soil disturbance (pertaining to Section 66(2) of the Land Act 1948) or for any activities under Sections 106 or 108 of the Land Act 1948 (ie, burning of tussock scrub fern or grass, cultivation, sowing of grass, clearing or planting trees).

The Land Settlement Board at a recent meeting reaffirmed and clarified its policy of restricting authorisation of these discretionary activities on priority areas for protection. Accordingly, I am notifying you that unless there are exceptional circumstances authorisation will not be granted for the above activities on priority areas identified in the Lindis-Pisa-Dunstan PNA report on your pastoral leasehold property. In addition the Land Settlement Board has requested that you refrain from topdressing these areas.

This policy has the explicit support of the Land Corporation and Department of Conservation, and will remain in place beyond 31 March 1987 when the Land Settlement Board and Department of Lands and Survey are disestablished.

The policy applies to the period before formal protection of the priority areas is negotiated with you, or a decision is made to not pursue formal protection of a priority area. The board has asked the Department of Conservation to resolve expeditiously its intention in respect of each priority area, and it should be anticipated that officers of that department will contact you in due course to discuss priority areas Dunstans A1, A2, and B1 on your property.

The board wishes to emphasise that this policy relates to discretionary activities, or in other words, privileges which may or may not be available to you in terms of your lease, and your rights as a pastoral lessee are not affected. It must also be emphasised that the policy relates specifically to the priority areas for protection, and requests for permission to carry out discretionary activities on other parts of your pastoral leasehold property will be considered on their merits.

Yours faithfully



J Rodda  
Commissioner of Crown Lands

DUNEDIN

P 213

Copied for purposes of CPL tenure review due diligence from file: P 213 Vol 2/463
---

24 July 1985

CCL  
OFFICEFIELD NOTES FOR VEGETATION MONITORING SITES ESTABLISHED ON  
CLUDEN STATION

Between 27-29 February this year vegetation monitoring sites were established on a range of low-mid altitude sunny faces and higher altitude native snow tussock blocks on Cluden Station. Cluden is a pastoral property which ranges in altitude from 270m to 1553m. Topographically it comprises of low altitude flats and dissected rolling hill country which rises to the undulating block mountain tops of the Dunstan Range. The predominant aspect is northerly and the property experiences quite extreme seasonal variation in climate.

Most of the erosion problems on the property centre around the low sunny and consequently dry country. Erosion in these areas comprise of gullying on the steeper faces together with widespread sheet and wind erosion. Much of this country has over recent years been revegetated and the erosion potential is now very much reduced. This low altitude dry country is however very rabbit-prone and obviously given appropriate conditions there would again be a high rabbit population which would once again result in the reversion of many areas of scabweed.

The higher altitude tussock country is generally well covered although at the time the property was visited several localised areas of very heavy grazing were observed. The Top Richmond Block was one such area and the localised over grazing of the blue and snow tussock in particular presumably results from stock preferring to camp on the lower warm face adjacent to the track. This block has however just been fenced out of Harleys and Shaws and as such, grazing pressure on this particular face will be far more controlled in the future.

The OCB presently have a Run Plan agreement operating on Cluden and several stages of this plan have so far been completed. Under the present stage (Stage III), safe grazing levels are specified for particular blocks. These stocking restrictions have been approved by this Department and most subsequently adopted as formal block stock limitations in December 1984 (others will be formalised upon the completion of fencing proposed in the Run Plan). At present the Department has advised the lessee of the following block stock limitations:

- (1) All low altitude sunny blocks (Appletree, Lethbridge, Lower Ewe, Lower Richmond and Roughneck) are to be spelled during the Nov-March period each year).
- (2) In addition to spelling, the Roughneck block will have a maximum of 200 su of annual grazing.
- (3) A maximum annual grazing will apply to: Harleys and Shaws of 530 su and Dunstan 215 su.

- CAL 20/7  
- DPO 20/7  
- LA - Copy to Alex.

Description of Monitoring Work Carried Out

Time did not permit monitoring sites to be established on all six low altitude sunny blocks, instead coverage was spread to try and obtain a good range of sites characteristic of much larger areas. This was achieved by the establishment of 5 x 100m transects. One ~~additional~~ transect was established in the high altitude snow tussock grassland and although this level of coverage could not be considered adequate on its own, the OCB have a number of photo plots in this area and the data from these will be made available to the Department.

The 100m transects are marked with fibreglass poles at each end, the lower pole having a plastic eartag attached on which details of the transect have been printed. Ground cover, species composition and dry matter rankings were recorded using a 50 x 50cm quadrat placed at 2m intervals along each line. In addition stereo photos were taken at the 10, 30, 50, 70 and 90m marks along each transect. These points are marked with small round alloy pegs which project about 10cm above ground level. General photos were also taken from four permanent photo points and by repeating these photos over a number of years it should be possible to detect any gross changes in vegetative cover and/or slope stability which may occur.

1 TRANSECTS

Transect 1

GR: NZMS 1 S117 374021

ALTITUDE: 677m

ASPECT: NNW

BEARING: 146°

LOCATION: Lower Richmond Block

Follow top track along back boundary of block until a small spur is reached with a hummocky face beyond. T.1 runs down this hummocky face just beyond the spur that the track comes up and over before it skirts along the back boundary fence at the head of the basin. Top peg is located approx 120-150m below the track with the base peg in the centre of a small basin. Vegetative cover on this hummocky face appears to be better than average for the block because there are a number of seepage zones and hollows which remain moist for longer than many of the adjacent sunny faces. Major species present include: Trifolium arv., Aira cary., Hypochoeris rad., Bromus mol., Dichelachne crin., centaurium eryth., Carex sp, Poa laevis, Lachnagrostis, Hieracium pil., and patches of Trifolium rep.

Little evidence of any recent grazing on this block as it is used principally for stock access and occasionally as an over night holding paddock.

FILM: DB  
 26 Location T.1 from photo point 1  
 28 T.P. - view down line  
 29 Location T.P. from NE of peg  
 30 BP view up line  
 31 Location BP  
 32 BP - view along face - this is photo point 2  
 33, 34 Stereo photos, 10m mark, angle 6°  
 35, 36 " " 30m " " 6°

DC  
 1, 2 " " 50m " " 14°  
 3, 4 " " 70m " " 13°  
 5, 6 " " 90m " " 12°

Transect 2

GR: NZMS 1 S177 371023  
 ALTITUDE: 585m  
 ASPECT: NNW  
 BEARING: 162°  
 LOCATION: Lower Richmond Block

From T.1 drive back down to the bottom track at the W end of the block - follow this track up the valley until a large willow tree is seen growing beside the stream below a small rock bluff. Walk up the face opposite the willow. BP of T.2 is located beside a small isolated rock next to an old vehicle track about 100' above the stream. The line runs up the ridge towards some rocks on the skyline. This site is also extremely dry and exposed with a high level of depletion.

Major species present are: Raoulia aust., Trifolium arv., Bromus mol., Hypochoeris rad., Vulpia, Aira cary., Vittadinia, Crepis and Dichelachne crin.

FILM: DC  
 7 Base peg view up line  
 8 Location base peg from SW  
 9 Top peg view down line  
 10 Top peg - view up and across face  
 11 Location top peg from SW  
 12, 13 Stereo photos, 10m mark, angle 19°  
 14, 15 " " 30m " " 23°  
 16, 17 " " 50m " " 22°  
 18, 19 " " 70m " " 22°  
 20, 21 " " 90m " " 22°

Transect 3

GR: NZMS 1 S117 391034

ALTITUDE: 770m

ASPECT: WNW

BEARING: 113°

LOCATION: Roughneck Block

Follow track up Cluden Creek through Lower Richmond and on into Roughneck. The track climbs up onto the sunny faces on the true left bank of Cluden Creek - follow this until a new track is reached on the right. This new track cuts back up the hill. T.3 runs up and over a small face to the left of this new track approx 100m from the junction of the two tracks. The B.P. is located approx 120m from the track and just above a damp hollow which is well vegetated with matagouri, briar and grass species:

This site is presently well vegetated and certainly in better condition than the sunny faces on Lower Richmond. Sheep were grazing the block at the time this transect was established. There were also large mobs on the shady faces opposite - the shady faces looked to be in excellent condition.

Major species present include: Trifolium arv., Poa laevis, Dichelachne crin., Agrostis cap., Raoulia aust., Vittaninia, Poa col., Aira cary., and also a reasonable amount of Alsike and Red Clover.

FILM: DC

- 22 Base peg - view up line
- 23 Location base peg from NE
- 24 Top Peg - view down line
- 25 Location top peg from SW
- 26 55m mark - view up line
- 27 55m mark - view down line
- 28 30m mark - view SW to sunny faces on Lower Richmond
- 29, 30 Stereo photos, 10m mark, angle 19°
- 31, 32 " " 30m " " 14°
- 33, 34 " " 50m " " 15°
- 35, 36 " " 70m " " 13°

CP

- 1, 2 " " 90m " " 12°
- 3 Location T.3 from track on spur.

Transect 4

GR: NZMS 1 S117 406046  
ALTITUDE: 770m  
ASPECT: NNW  
BEARING: 156°  
LOCATION: Roughneck Block

From T.3 carry on up the Cluden Stream until the gate at the NE corner of the block is reached. There are two small holding paddocks beside this gate. T.4 is located in a small valley directly above the gate. The base peg is located approx 200' above the gate - almost in the centre of the valley above the matagouri and other scrub growing on the valley floor. The line runs straight up slope to a small rock outcrop.

Again this site is dry and exposed - it is however also relatively well vegetated - particularly the moist gullies.

This site is really a small rounded ridge between two larger ridges and hence there is probably a little more moisture here than on the adjacent ridges.

Vegetation consists of scattered patches of Poa laevis, FNZ and intertussock species such as Trifolium arv., Rumex acet., Vittadinia, Raoulia hook., R. aust., Crepis cap and Aira cary. There are also a number of oversown species present, many of which have dried off on the face but are persisting in valley bases.

FILM: CP

- 6 Top peg - view down the line
- 7 Location top peg from rock outcrop to left
- 8 Base peg - view up the line
- 9 Location base peg - from SW
- 10, 11 Stereo photos, 10m mark, angle 23°
- 12, 13 " " 30m " " 23°
- 14, 15 " " 50m " " 24°
- 16, 17 " " 70m " " 20°
- 18, 19 " " 90m " " 25°

Transect 5

GR: NZMS 1 S117 390978  
ALTITUDE: 1,385m  
ASPECT: Flat - NE  
BEARING: 346°  
LOCATION: Harleys and Shaws Block

From T.4 carry on up the track right out to the back boundary fence on the Dunstan Mountains. Turn SW at the boundary fence and carry on to the end of the block. Follow the track down the block boundary for approximately 1.5km until the junction of the fence which forms the lower boundary. At this point there is a number of large rock out-



"RELEASED UNDER THE OFFICIAL INFORMATION ACT"

crops. Go through the cyclone gate into the block and the base peg of T.5 is on the top side of a rock outcrop about 50m from the gate. The line runs slightly across the slope, parallel to a fence approx 40m to the left. Major species present are: Chion. macra, FNZ, Poa col., P. lindsayi, Koeleria, Gaultheria dep., Raoulia sub., Hypochoeris rad, Luzula ruf., Celmisia lyalli and moss.

There is evidence of a relatively recent burn in the top 3/4 of the transect.

FILM: CP  
 23 Top peg - view down line  
 24 Location top peg from left (looking back down line)  
 25 47m mark - view up line  
 26 47m mark - view down line  
 27 Base peg - view up line  
 28 Base peg - view back to gate  
 29 Location - gate to rock which BP is beside  
 30 Location Base peg from 10m mark  
 31, 32 Stereo photos, 10m mark, angle 0°  
 33, 34 " " 30m " " 5°  
 35, 36 " " 50m " " -3°  
 CG  
 1, 2 " " 70m " " -3°  
 3, 4 " " 90m " " 1°

#### Transect 6

GR: NZMS 1 S117 30199

ALTITUDE: 430m

ASPECT: N

BEARING: 193°

LOCATION: Apple Tree Block

Follow track up Cluden Stream turning right up the face approx 0.5km before the old hut and stone yards. Carry on up this track for about 0.5km to point just before a hard left corner. Stop here and walk across the small gully to a rounded ridge approx 300m from the track.

T.6 runs up this rounded ridge. Base peg is located on the upslope side of a prominent rock low down on the ridge about 100' above the track up the main valley. The line runs straight up the hill towards a small rock on the skyline.

This site appears to be typical of the lower sunny faces of this block and probably others. It is reasonably stony with only a very thin skeletal layer of soil.

Major species are: Trifolium arv., Vulpia, Raoulia aust., R. hookerii, Crepis cap., Vittadinia, Elymus rec., Rhytidosperma, Aira cary., Dichelachne crin., Hypericum and some Bromus tec. There is little sign of any recent grazing apart from rabbits.

FILM: CG

- 5 Location top peg from the SW - 20mm
- 6, 7 Stereo photos, 10m mark, angle 22°
- 8, 9 " " 30m " " 19°
- 10, 11 " " 50m " " 15°
- 12, 13 " " 70m " " 19°
- 14, 15 " " 90m " " 22°
- 16 Top peg - view down line
- 17 Location top peg from SW
- 18 Base peg - view up line
- 19 Location base peg from SW
- 20 Location T.6 from track up hill - centred on BP.

2 PHOTO POINTS

Photo Point 1

LOCATION: Lower Richmond Block - a rock outcrop on the ridge beside the track above T.1

FILM: DB  
 26 T.1 from photo point  
 27 View along face

Photo Point 2

LOCATION: Lower Richmond Block - base peg of T.1

FILM: DB  
 32 View NE along face

Photo Point 3

LOCATION: Lower Richmond Block - top peg T.2

FILM: DC  
 10 View up and across face

Photo Point 4

LOCATION: Roughneck block - 30m mark T.3

FILM: DC  
 28 view SW of sunny faces on Lower Richmond Block

D M G Payton  
Field Officer (RM)

VEGETATION MONITORING SITES

ESTABLISHED CLUDEN STN

