Toitu te Land whenua Information New Zealand

Crown Pastoral Land Tenure Review

Lease name :Little Mt Ida

Lease number :PO 321

Conservation resources report

As part of the process of tenure review, advice on significant inherent values within the pastoral lease is provided by Department of Conservation officials in the form of a conservation resources report. This report is the result of outdoor survey and inspection. It is a key piece of information for the development of a preliminary consultation document.

Copied October 2002

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DOC REPORT TO COMMISSIONER OF CROWN LANDS

ON TENURE REVIEW OF

LITTLE MT IDA PASTORAL LEASE

PART 1

INTRODUCTION

Little Mt Ida (P 321) is a 2340 ha pastoral lease located between Wedderburn and Idaburn on the Palmerston-Ranfurly main highway. The lease is run in conjunction with other land and is not large enough to be an economic unit on its own.

The lower one-third of the lease is in the Maniototo Ecological District which was surveyed under the PNA programme in 1994. No Recommended Areas for Protection were identified on the property, however approximately 10 ha of the 20 ha Idaburn Wetland, an Area of Interest, is included.

The lease was inspected by Department of Conservation staff in November 1996 to evaluate the conservation resource for tenure review.

There are no existing reserves or formally protected areas on the property, although a 315 ha conservation area at the back of the property was originally part of the lease.

PART 2

CONSERVATION RESOURCE DESCRIPTION AND ASSESSMENT OF SIGNIFICANCE

1 LANDSCAPE

As adopted for other assessments of pastoral leases, Little Mount Ida has been divided into a number of landscape units. The boundaries for each of these units follow marked changes in the local topography, as well as distinguishable changes in the ground cover and landuse patterns.

Besides describing the physical attributes and important landscape values, each unit has been placed into three broad categories:

1	Natural Landscapes:	Natural ecosystems, containing unspoilt and distinctive geological/physiographic features.
2	Managed natural landscapes:	Still a predominantly natural ecosystem, but where some modifications have occurred to the native vegetation through mainly extensive sheep grazing.
3	Cultural landscapes:	Land influenced by human uses. This includes historic and intrinsic values.

Landscape Unit 1

This landscape unit includes the series of prominent ridges that extend out from the south side of the Hawkdun Range. The top of these ridges and side slopes are covered with continual snow tussock while the scree slopes and eroding gullies have been colonised with woody species, particularly matagouri. Between the ridges are deep gullies which form the headwaters of both the Ida Burn and Wether Burn. Along the bottom edges of these gullies and stream verges is a diversity of native shrubs. The species include cottonwood, matagouri, native broom (two types), golden Spaniard and *Olearia* spp.

.ttle Mount Ida is a striking landform which can be viewed from many parts of the Maniototo. Its strategic position has been capitalised on as a major installation has been sited on its summit: the BCL tower is serviced by an all weather track.

Landscape Unit 2

This unit encompasses all the outwashed terrace below Little Mount Ida and extends out towards the water race. The vegetation is dominated by tall healthy snow tussock while the inter-tussock species include silver tussock, matagouri, native heaths, and the distinctive coral broom.

Due to the lack of topography, the scale of this unit is quite deceptive and from some positions gives the impression of being within a vast tussock plain, whereas it is quite a compact area. The water race acts as s demarcation point regarding vegetative cover, as south of this line much of the terrace has been cultivated and OSTD, although some residual natural areas still remain in the deeper gullies and wet seepage areas.

Landscape Unit 3

This LU comprises the mid and lower sections of the Wether Burn. This typical back country stream is contained within a well defined valley system that extends to the base of Little Mount Ida. The unit's vegetative cover changes quite gradually from being predominantly snow tussock over 690 m to a mosaic of tussock, exotic grasses, and patches of matagouri. A prominent feature is the nutrient transfer areas where stock tend to camp and over the years have created patches of vivid green on the warm hill faces.

Landscape Unit 4

The balance of the property has been converted into intensive farmland characterised by recent shelter planting though some of the paddocks along the Little Mount Ida road have not been cultivated and still have a representative mixture of native grasses.

SIGNIFICANCE

Landscape units 1 and 2 because of their intactness have local significance in their own right. Being a section of the highly visible Hawkdun Range backdrop to the Maniototo Valley they form part of a landscape of regional significance.

GEOLOGY AND GEOMORPHOLOGY

The extensive lower terrace between the Ida Burn and Wether Burn is a remnant of the once more widespread Manuherikia sedimentary formation, deposited in the early Tertiary throughout Otago. Exposure of the deeply weathered sandstones, siltstones, and mudstones that constitute the formation occurs in the two flanking streams. More recent, Quaternary, alluvial gravels are deposited over the sedimentary unit. A thin veneer of loess tops the terrace parent materials. Small wetlands have developed on the terrace surface at the base of Little Mt Ida, resulting partly from the downslope wash from the adjacent hill country. There is an area of Tengawai yellow grey earth hill soils in the lower Wether Burn but otherwise the soils are, in the higher and steep back part, Kaikoura steepland yellow brown earths and on the terrace and lower country Naseby dry-hydrous yellow grey earths.

There are no geopreservation sites recorded on the property.

3 CLIMATE

Typical Central Otago climate with hot summers and cold winters. Rainfall varies from 500 mm on the lower country to over 1000 mm on the higher country. The normal summer moisture deficit is aggravated by frequent NW winds. With altitude ranging between 600 m and 1200 m frosts or snow can occur at any time of the year.

4 VEGETATION

The vegetation is described according to the following zones:

River plains

The braided river beds of the Ida Burn and the Wether Burn are associated with greywacke rock and periodic flooding. The vegetation is a mosaic of grass and shrubland with some herbfield. Species include silver tussock (*Poa cita*) and hard tussock (*Festuca novae-zealandiae*) with shrubland dominated by matagouri *Discaria toumatou* but *including Olearia bullata*, *Coprosma rugosa*, *Melicytus alpinus*, native broom *Carmichaela petrei*, *Cassinia fulvida* and.brier rose *Rosa rubiginosa*. Native herbs such as the mat forming *Gaultheria macrostigma*, *Pratia angulata*, *uccaena* spp. and *Epilobium melanocalum* exist in patches along with mouse-eared hawk weed *Hieracium pilosella*.

rraces

Partly degraded narrow-leaved snow tussock dominates the planar surface of the terrace, with scattered hard tussock, matagouri, *Corallospartium*, and *Brachyglottis haastii*. Although of low stature, snow tussocks cover remains healthy, despite much scattered mouse-eared hawkweed. Shallowly incised streams on the terrace surface commence as seepages, and there cover includes; comb sedge, *Gnaphalium delicatulum*, sphagnum, *Carex coriacea*, *Celmisia setacea*, *Utricularia monanthus*, and *Gonocarpus micranthus*. The mires fed by downslope wash are dominated by *Schoenus pauciflorus*, *Juncus* sp., *Olearia bullata*, *Bulbinella angustifolia*, *Carex sinclairii*, and *Potentilla anserinoides*. The riparian or seepage herbfields are quite distinctive from the mires at the foot of the hillslopes and also the valley floor wetland represented by Area of Interest AOI 16 of the Manlototo PNA report (Grove 1994).

The narrow-leaved snow tussock community survives as one of the last (if not the last) remnants of tall tussock vegetation on yellow grey earth soils on the floor of the Manlototo Ecological District (Grove 1994). Elsewhere only red tussock survives in the Manuherikia Valley. It therefore has outstanding representative and relictual value.

Montane slopes

A good cover of narrow leaved snow tussock *Chionocloa rigida* and tussock litter occurs throughout. The presence of exotic species is minor with *H. lepidulum* and sweet vernal *Anthoxanthum odoratum* being most obvious. On drier faces there are bare intertussock spaces and *Cassinia fulvida*, *Pimelia oreophila*, *P. traversii*, *Dracophyllum longifolium*, *Kelleria spp. Carex breviculmis*, *Charmichaelia vexillata* and *H. lepidulum* are common. Various shrubs are a feature where slopes are wetter, south facing or approach the creeks. These areas often have rock and rock scree colonised by shrubs. In addition to those mentioned above *Coprosma rugosa*, *C. cheesmanii*, *Dracophyllum uniflorum*, *Corokia cottonester*, *Gaultheria crassa*, *Aristotelia fruiticosa* add diversity. Some shrubs were rare. *Hebe pauciramosa* is in isolated shady or wet areas and only one individual each of manuka *Leptospermum scoparium* and tree daisy *Olearia nummulariifolia* were located.

The riparian vegetation includes a rich array of herbs in addition to the shrubs mentioned above. *Bulbinella angustifolia*, Tutu species (*Coriaria plumosa*, *C. sarmentosa*) and *Anisotome flexuosa* are most noticeable. *Myosotis* n.sp. was discovered here during the survey. This *Myosotis* is known from six sites in Otago, is believed to be threatened and is a significant botanical asset.

;GNIFICANCE

The upper part of the property on the rolling hill country from about 700 m and parts of the stream margins although modified are still largely natural. The hill country tussock grassland has some local significance though still well represented elsewhere. The stream margin vegetation has been largely removed throughout the Maniototo Ecological District and what remains here is of local significance. The terrace landscape as a representative remnant of tussock grassland and wetland ecosystems on the Manuherikia formations is of outstanding conservation value and high significance in terms of the ecological district.

The Idaburn wetland (A01 16, Grove 1994) is also of ecological district significance and ecologically.

PROBLEM PLANTS

The property is directly downwind (SE) of Naseby Forest and wilding pines are an ongoing significant problem requiring regular attention. Hawkweeds, although present, are unlikely to impede recovery of snow tussock in a healthy grassland.

5 FAUNA

INSECTS

Insects of grasslands and herbfield are widespread on the lease and insects of wetlands and shrub remnants indicate that some integrity has been maintained through past fire and mining activity.

The area between Mount Ida and Wedderburn has a long history of insect collecting with new species being described and a diversity of species being recorded (e.g. Lewis 1901, Hudson 1927, Patrick 1994a, 1994b). The small areas of wetland and extensive narrow-leaved snow tussock of the terraces on this lease are some of the few remaining of the terrace habitats from which these insects were historically recorded.

Modern records of wetland and grassland invertebrates are usually from the valley and mountain systems such as Little Mount Ida and Mount Ida (e.g. Patrick 1994b). Thus insects such as the grasshoppers *Paprides dugdali* and *Sigaus australis*, manuka beetle *Pyronota* species, bug *Nysius huttoni* and tussock butterfly *Argyrophenga janitae* are found on both terraces and slopes. An undescribed ground weta *Hemiandrus* species was found in the upper Wether Burn

id is considered likely to be present on the terraces (see Wyngaarten 1995). The threatened flightless chafer beetle *Prodontria modesta* is special to Maniototo terraces (Emerson 1994) and is also likely to be found in October which is the time of greatest adult abundance.

Aquatic insects were not sampled, however, the deep hyporeic zone (gravels under the streams) will provide habitat and refuge for aquatic macro-invertebrates in streams whose communities are uniquely structured by climate and schist/greywacke alluvium which is mobile during flood flows (Scarsbrook 1995). Additional diversity of habitats is apparent in the backwaters and seeps fed by springing flows. Despite the activities of gold mining and water diversion in races, the Ida Burn and Wether Burn appear hydrologically intact with naturally evolving channel forms. The floodplain areas associated with these two streams are similar to others where streams emerge from the toe of the Ida and western Kakanui Ranges. None of these are protected from flood control work and grazing. The periodic flood disturbances and skeletal soils provide for a community that is different in character to the adjacent terraces and slopes.

LIZARDS

Five species are recorded for the lease (Whitaker 1985, Ian Southey pers. comm.). these are common gecko *Hoplodactylus maculatus*, common skinks *Oligosoma maccani* and *O. nigriplantare polychroma*, green skink *O. chloronoton* and the scree skink *Leiolopisma otagense waimatense*. Thus Little Mount Ida is a rich area for skinks.

Scree Skinks

Distribution

Scree skinks (*Oligosoma waimatense*) are endemic to the eastern South Island from the Seward Kaikouras and Balaclava Ridge, Molesworth to the Mt Ida and Mt St Bathans. There are less than twelve known locations covering an altitude range of 700-1400 asl.

Almost all known locations are in unstable moving screes of the eastern South Island greywacke mountains.

The distribution of scree skinks shares a similar characteristic to the distribution of Otago skinks and grand skinks. They are apparently confined to a specific habitat, in this case unstable screes. There is an abundance of that kind of habitat but very few screes have scree skinks and the screes that do are not clearly different to those that do not have skinks. These characteristics suggest

,iat their rarity is not a function of habitat but some other source of decline such as predator impacts.

The Little Mt Ida location discovered in 1985 is one of six discovered on contiguous properties on the southern slopes of Mt Ida in the Ida and Wether Burn catchments. These sites were found after following up an historic report by W Martin in 1929 of grand skinks occurring on Mt Ida.

Threats

- They are vulnerable to the predators typical of that landscape, cats ferrets stoats weasels rats, may be mice, may be magpies and other birds.
- The screes are unstable and stock trampling impacts on their form. Stock could trample lizards sheltering in the scree. Improvement of the pasture by oversowing and top dressing would increase the stock and so the level of disturbance. Pasture improvement would also favour higher rabbit numbers and sustain a greater number of predators.
- Wilding pines are already present, establishment of pine cover would detrimentally shade scree.
- Fire, while common, will not do anything good for native vegetation quality and the production of fruit and insects for the skinks.

The back block of the property has seven recorded scree skink locations and is therefore one of the most important known locations for this species.

AQUATIC FAUNA

Previous records indicate that brown trout (*Salmo trutta*) and brook char (*Salvelinus fontinalis*) are present in the Ida Burn and no native fish species have been recorded in this stream or its tributaries. Surveys of the Wether Burn collected only brown trout and brook char and no native fish species and only a few invertebrate species were observed.

SIGNIFICANCE

The fauna associated with more intact areas and the outwash terraces in particular are of district significance.

The scree skink was given a category B "Second priority species for conservation action" listing by B Molloy and Davis in 1994. It was not listed in the 1992 edition. It has gained this ranking because few new sites have been discovered in recent years and it appears to have disappeared from several known sites in the last 10 years. Populations are small and very scattered.

O. chloronotos is widely distributed in Southland but very sparse (with few records) in Otago and South Canterbury (Pickard and Towns 1988). Its Otago distribution is very fragmented.

PROBLEM ANIMALS

Transient populations of deer, pigs and goats occasionally pass through the area and probably through this property. These animals are not a problem but if it became necessary, numbers could be effectively controlled with a minimal hunting effort.

Rabbits occur on the property. Regular control by shooting is required on the lower country, and they are a potential problem if control were not maintained.

6 HISTORIC

No European sites are recorded by the NZ Archaeological Association for this property but the Mines Department annual report for 1896 noted that Wheeler and party were mining in the basin of the Little Idaburn above the government (Mt Ida water race) race. No Maori sites are known to DOC though the Central Otago file of New Zealand Archaeological Assn site recording scheme contains a note that stone flakes had been found near the Mt Ida race in the Idaburn Hills.

While the present homestead is on what was probably part of Highfield run, the pastoral lease is part of the earlier Eden Creek station which also included Eweburn.

In 1896 Eden Creek was subdivided, a block being taken for Naseby township and 10460 Ac becoming Little Mt Ida. In 1919 3490 Ac was transferred from Little Mt Ida to Kyeburn station and at this time the McKnight family purchased the property and have held it since.

The only historic building site found on the lease in the Ida Burn Valley was a sod walled enclosure approximately 30 m by 40 m in area (grid ref 769 791). According to Mr McKnight Snr, there was an old musterers' hut in the vicinity but no sign of it was found. The enclosure may have been the horse paddock.

The most prominent feature of the area is the Mt Ida race. The race brings water from the upper Manuherikia catchment to Naseby where it was originally used in sluicing claims. The race was opened in 1877 and was used solely for mining purposes until the 1920s when there were only 10-15 miners left at Naseby. The race was then used by farmers for irrigation purposes. The modern race is now highly modified and regularly maintained by machinery but a section of the

Original hand dug race still exists in the valley of the Wether Burn above the siphon in which the race crosses the valley. The old race at this point is 3-4 m wide and about 1 m deep. Both the siphon (pipe line) and the old race line are shown on the location may. This race formation is excluded from the title.

The only other historic features observed in the Wether Burn Valley were the remains of a stone wool shed (GR 761 738) and a concrete house (GR 762 736). The woolshed was a two-roomed rectangular structure with a larger room about 8 m by 14 m in area and a smaller room about 8 m by 6 m in area. The stone walls have largely collapsed apart from the dividing wall and short sections of the long walls (sites (b) and (c) on the map).

The concrete house was approximately 10.5 m by 16 m in area and built of poured concrete. The concrete structure surrounds and incorporates and earlier mud brick one. The house was originally surrounded by a large fenced area. This house was occupied within the memory of Mr McKnight Snr (circa 1950s) and the presence of what appears to be a garage at the western end of the building confirms that it is of comparatively recent origins.

SIGNIFICANCE

Given that the Mt Ida water race is not on the title none of the historic features here are considered to be significant. Protection of the Historic Places Act exists for sites pre-dating 1900.

7 PUBLIC RECREATION

There is a good all weather road to the radio and TV facilities on Little Mt Ida which is almost at the back of the property. The first three-quarters of this access is approximately on the line of a legal road. The road gets moderately heavy use by the public throughout the year, mainly for sightseeing, with spectacular views south over the Maniototo from Little Mt Ida, but also as an important access route on to the Hawkdun Range crest and into the conservation lands in the area. There is good foot access on to the main crest from Little Mt Ida which is also one of the more popular sites in the district for paragliding.

In addition, there is some potential for increased day walk use of the back part of the property with a significant area of largely natural setting and alternatives of either very easy or moderately steep and difficult routes.

The legal roads are shown on the attached cadastral map. There are no marginal strips on the property.

PART 3

CONSULTATION AND DISTRICT PLANS

A meeting was held with NGOs on 11 February 1997 to discuss, amongst other properties, Little Mt Ida. They considered there was only limited public interest value in the property itself but greater interest in the context of the Hawkdun Range in general and access to that area.

The Mt Ida water race was also raised in discussions but is unfortunately not on the title and under different ownership.

A copy of the submission from Federated Mountains Clubs is attached below:

> "The Little Mt Ida property appears to be another example of a property with limited recreational and public interest value in its own right, but considerably greater opportunity when considered in the wider Hawkdun context.
>
> Little Mt Ida itself does provide a destination for day walks and offers extensive views across the Maniototo and Rough Ridge country. Rather longer, but much better trips are to be had by extending travel beyond the boundaries of Little Mt Ida Station to Mt Ida and the Ida Range. A good round trip would include the Tourist Spur and the Ewe Burn. Foot and mountain bike access to Little Mount Ida and the property boundary should be negotiated as part of tenure review.
>
> Historical interest centres on the Mt Ida water race which crosses the property on its 70 mile journey from the headwaters of the Manuherikia to the Naseby gold workings. Provision should be made during tenure review to link access along the whole length of the water race.

DISTRICT PLAN

Little Mt Ida Pastoral Lease is covered under the provisions of the Maniototo Section of the Central Otago Transitional District Plan. The property is situated within the Rural A (Ru A) in the plan.

The Rural A (Ru A) zone is designed to recognise those parts of the former Maniototo District which contain the natural resource to support economic and social well-being of the people living within it. This generally equates to what could accurately be described as the primary productive

.nd of the former district. Consequently, the objectives, policies and rules of the plan associated with the Ru A zone tend to revolve around providing for this key focus.

Permitted activities include:

- farming;
- forestry;
- stalls for the sale of produce;
- recreation, scenic and historic reserves; and,
- buildings and dwellings associated with these activities.

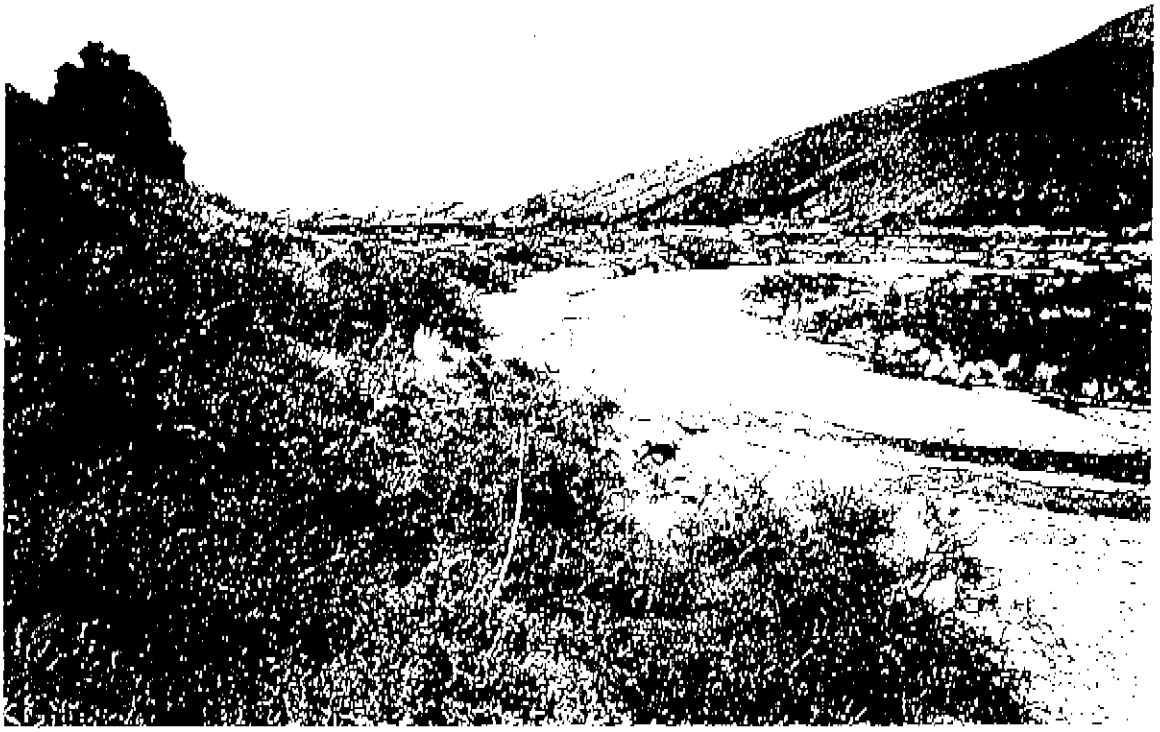
Controlled activities include:

- rural industries;
- quarrying and mining;
- reserves (other than recreation, scenic and historic reserves); and,
- a number of other sundry activities associated with providing the infrastructure of a rural community (eg veterinary clinics, country stores, licensed premises etc).

The provisions relating to subdivision focus primarily on allowing properties to be subdivided into independent and/or "stepping" farming units. There are also controls for subdivision of existing dwellings and for individuals who have retired from a rural activity and wish to remain living within the rural environment. Subdivision for the purpose of establishing a reserve is not specifically addressed in the plan. However, it is considered that a case could successfully be argued to allow the subdivision of properties for the purposes of establishing a reserve or conservation area in much the same way as you could argue for permission to subdivide for the purpose of establishing a number of other permitted activities that are not specifically mentioned under the subdivision provisions (presuming that this is an issue which needs to be overcome).

From Little Mt Ida: tussock grassland foothills and terrace
Wether Burn on left; Ida Burn on right

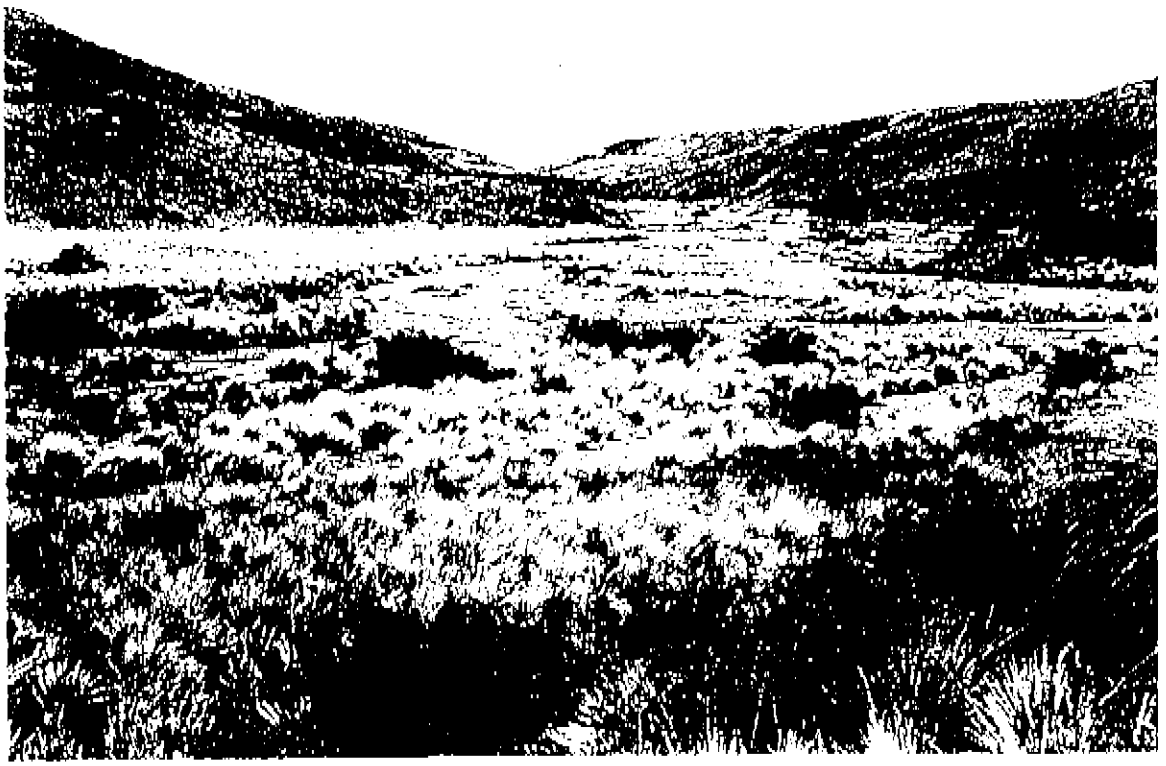
From terrace scarp, upper Wether Burn
Little Mt Ida and Hawkdun range in background



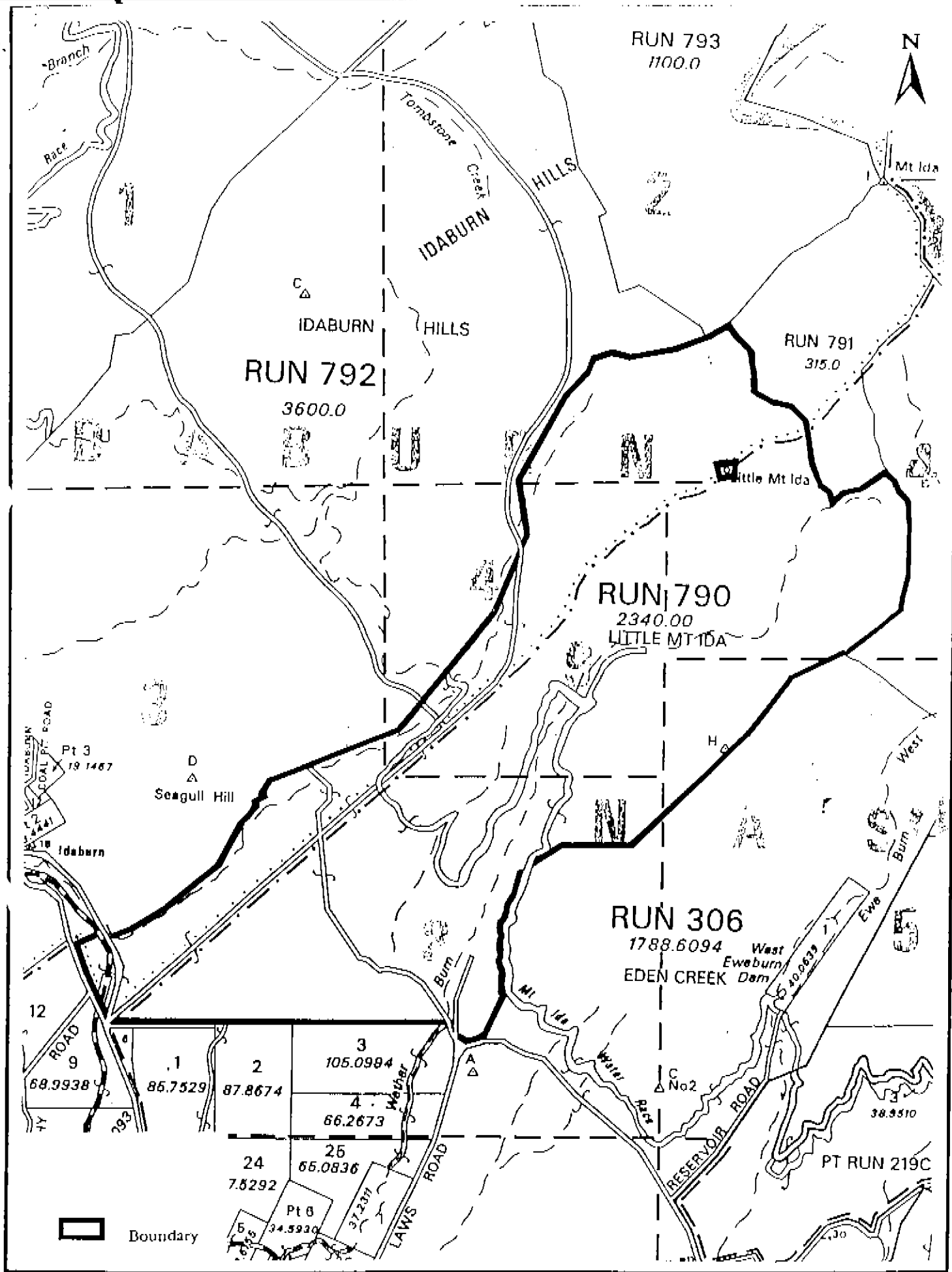
Mixed shrubland in upper Ida burn at 700m altitude

Tributary of upper Ida Burn in back block at 800m altitude

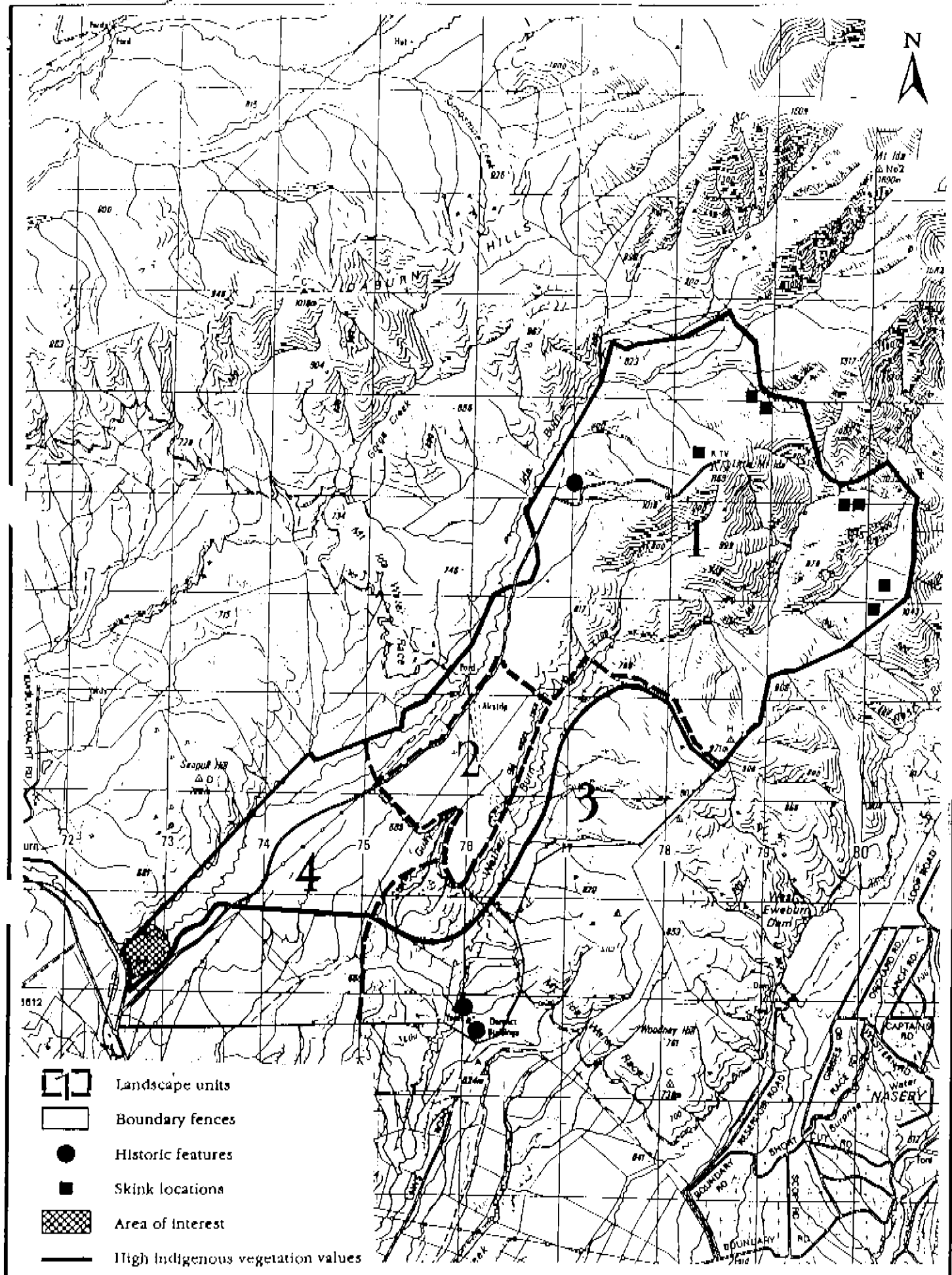
The tussock grassland on the terrace viewed to the north and to the south



Typical mixed vegetation in the upper Wether Burn and in the headwaters



Map 1
Little Mt Ida Pastoral Lease
Cadastral



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Map 2
Little Mt Ida Pastoral Lease
Conservation Resource