

geology (the Castle Hill Nature Reserve in Broken River Basin is a notable example).

□ large *representative* reserves, where some extensive pastoralism may be managed along with recreation and soil, water and nature conservation objectives.

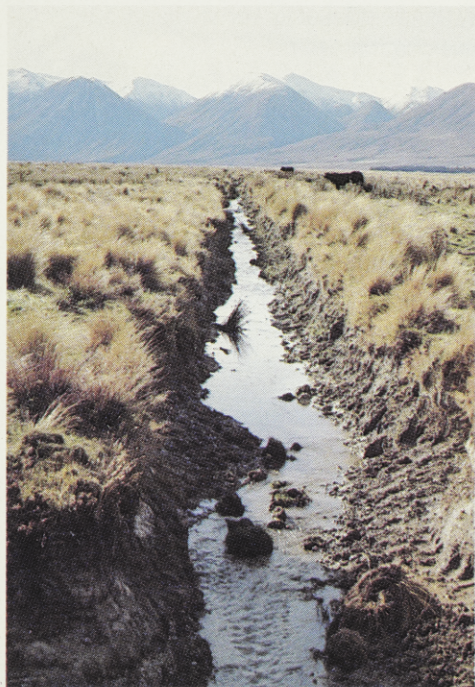
□ ensuring that where possible development of high country land outside the reserve areas takes account of landscape and conservation values.

To show the diversity of tussockland landscapes and biota we have invited the following brief articles on six areas from Marlborough to Southland. The Torlesse Range, Lake Heron basin and Two Thumb Range in Canterbury also deserve consideration as National Reserves. Each area represents different facets of high country landscapes and ecology.

One of the greatest challenges we face in seeking protection for these outstanding areas is to first make people aware of these places. If this and other difficulties can be surmounted there is no doubt that a network of national reserves can be established through the South Island high country to rival even our National Park system. What a wonderful way to celebrate our 1987 National Park Centennial!

References:

- (1) Blashke, P. M.; Hunter, G. G.; Eyles, G. O.; Van Berkel, P. R.; 1981: Analysis of New Zealand's vegetation cover using land resource inventory data. *N.Z.J. Ecology* 4: 1-9.



High country wetlands are threatened by agricultural development. The Lake Heron wetland shown here is part of the Mt Arrowsmith pastoral lease. Development assisted by a Rural Bank loan involved construction of this illegal drain (no water right), cultivation and mob stocking with cattle. The Cameron Fan wetlands are now protected by the Rakaia river draft conservation order and this drain should immediately be filled in.

Photo: G McSweeney.

Public or private interest? Pastoral lease land and the Land Settlement Board

Crown land is administered under the Land Act 1948 by the Land Settlement Board. There is currently around 5,500,000 hectares (22% of New Zealand's land area) of Crown land, including many of our finest natural areas.

The Land Settlement Board's composition is Chairman (Minister of Lands); 3 reps of Department of Lands and Survey; 1 rep each from Treasury, MAF, Valuation Department and Rural Bank; 4 private members all farmers. [N.B. Professor Alan Mark, and Alan Evans have just been invited to attend LSB meetings.]

Pastoral Lease high country of the South Island, the largest single category of Crown land, comprises 2,700,000 hectares (10% of New Zealand's land area).

The remaining 2,800,000 hectares of Crown land consists of Unalienated Crown Land (UCL), mostly mountain crests in the South Island, land development blocks and a variety of leased Crown land (for farm, urban and industrial purposes).

Pastoral leases confer the following rights and obligations on the lessee:

- a perpetually renewable lease, at 33-year intervals
- no right to freehold
- exclusive right to pasturage but *no* right to: soil and water, trees (and shrubs), wild, introduced animals, and scenery.
- de facto trespass control
- restrictions on stock numbers
- restrictions on burning and cultivation.

In 1983 there were 369 runs under pastoral lease; 15 in Marlborough, 122 in Canterbury, 200 in Otago and 25 in Southland — the average run size being 6,850 hectares.

Crown income from this leasehold land is very low: \$172,000 in 1982/83 (ie, 0.68¢ per hectare). The imposition of more realistic rentals has been widely criticised by lessees.



Unlucky lizards and other animals may fall prey to New Zealand falcon which range across the South Island tussocklands. Earnsclough Station, Central Otago.

Photo: G Loh.

Vast areas of rock scree support specially adapted succulent scree plants and animals. The scree skink, *Leiopisma ottagense* var. *waimatense* is known from only a few localities, including the Clarence Valley in Marlborough shown here.

Photo: B W Thomas, DSIR Ecology Division.

