



A *vision* for the *high* C O U N T R Y

Its scenery is spectacular, its landscape immense, its landforms descriptive, its vegetation and wildlife fascinating, and its terrain challenging. The high country has a wildness, naturalness and scale that is unique and inspirational.

MIKE HARDING takes a long-term look at what the future might hold for this great area of the public estate.

THE SOUTH ISLAND high country looms large in the eyes of New Zealanders. Its impressionable images are well known. Wide open vistas, tawny tussock slopes, deep glacial lakes, rugged mountain tops, and sparse scattered settlements. If people have not experienced this remarkable landscape first-hand, they have at least savoured these characteristic images in books, advertisements and tourist promotions. But, while it is very much part of our heritage, anyone



Trampers on Castle Hill station in Canterbury. The wonderful open landscapes of the high country, even on modified grassland, have long been important for outdoor recreation.

could be forgiven for being confused about the changes affecting this part of the South Island: proposed reserves for nature conservation; the development of regional plans; rabbit control; the dramatic spread of hawkweeds; land sales to overseas investors; tourism development; treaty claim settlements; the review of grazing leases; and – most recently – proposed changes to the 1948 Land Act (see box page 18).

All these initiatives arise from years of investigation, debate, and political manoeuvring. All are important in determining the future of this spectacular part of the country. But what is needed is a coordinated vision for this unique region. Not a statement about what should happen over the next five years, or about the appropriate tenure for a particular property, but a vision for what the high country should look like in 100 or even 500 years time.

It is time to step back from the



ANDY DENNIS

Recently burned areas of Blairich station in the Awatere valley. Fire, a traditional component of high country grazing, can promote a short-term growth spurt but also long-term degradation as the tussock is robbed of vigour and the soil of nutrients. Blairich is one of four Marlborough properties currently going through the process of tenure review.

complexities and conflicts of land-use change in the high country and consider what we would like to be there after we have gone. Tenure review should consider whole ecosystems, catchments, and landscapes. And legislation should have, as its primary purpose, the implementation of contemporary concepts of nature conservation. The era of extensive pastoralism in the high country is drawing to a close. The economic future of the region lies in the protection of its exceptional natural qualities – not least its spectacular landscapes – and a transition to smaller-scale land uses utilising localised areas of modified land. And its future for conservation lies in the creation of a comprehensive network of protected natural areas.

The South Island high country – the mountains, valleys and intermontane basins east of the main divide from Marlborough to Southland – is different to the rest of New Zealand. The landform, altitude, and climate is challenging and it has required great effort to tame. However, the soils and vegetation of this region are fragile and vulnerable. For this reason, successive governments have shied away from relinquishing control over this vast area, and it remains the largest area of land in public ownership in New Zealand outside the public conservation estate.

The high country still clearly displays its birth-scars. Part of one of the fastest-rising mountain chains in the world, it has been tortured and twisted by earthquakes, carved by glaciers, and washed clean by powerful rivers. Its climate is the closest this island nation has to continental extremes: cold winters; hot summers; and,

in places, a very low rainfall. The most recent of the Pleistocene glaciations relinquished its grip on this landscape only 15,000 years ago – a wink in geological time. It is even debatable whether the post-glacial vegetation had reached any sort of stable state before being ravaged by humans.

The most spectacular plant communities are the – now much reduced – tall tussock grasslands. Admirably adapted to the inland climate and relatively poor soils, these have always dominated large areas, and increased in extent when forest cover was removed by both natural and human-induced fires.

Also important are the shrublands, including straggly low matagouri forests, dense kanuka shrublands, or mixed shrublands dominated by small-leaved, spiny, divaricating plants. These woody plants often represent the main stage in a succession from open (post-glacial, or post-fire) landscapes to forest.

And forests were once widespread in the high country – dominated by beech in the higher rainfall areas, and by mountain totara in drier landscapes. Wetlands, cushion bogs, lake and river margins, open riverbeds, and alpine areas all support distinct high country plant and animal communities.

Unusual insects, lizards, and birds have their homes here. New species of weta and lizard have been identified recently, and the high country provides extensive and important habitat for the kea, our most inquisitive and entertaining parrot, as well as the falcon, New Zealand's only surviving endemic day-time bird of prey.

IT IS NOT SURPRISING that the high country had such a lasting impression on its first Maori inhabitants (see box opposite) and that it has inspired generations of visitors: explorers, gold prospectors, farmers, poets, writers, painters, trampers, climbers, fishers, hunters, holiday-makers, and (increasingly) overseas visitors. Its conservation and recreational importance is undisputed.

But it is important for other reasons. It includes the upper catchments of the largest rivers in the South Island, providing vast quantities of clean water to lowland and urban areas. Its intact plant communities help trap, store and release this water, regulating both quality and quantity. It also buffers the protected areas along the main divide from the intensive farming of the low-altitude valleys and plains.

And, of course, it supports an important industry based on fine wool, beef, and venison. The first permanent European occupants of the high country were farmers, the originators of a rugged backcountry farming life now part of our heritage. It is pastoralism, however, that has wrought the most change on the high country. Repeated burning, grazing by sheep and cattle, cultivation, farm tracking, irrigation, tree planting, and introduced weeds and animal pests, have had a devastating impact on the original plant and animal communities, and have transformed the high country landscape. It is

pastoralism that has caught the attention of conservationists, policy makers, and government officials.

The impacts of present farming methods have been investigated in several recent reports, notably that of Basher, Meurk and Tate in 1990, the Parliamentary Commissioner for the Environment in 1991 and 1995, and the Working Party on Sustainable Land Management (the "Martin" report) in 1994. These reports have questioned the sustainability of the traditional extensive pastoralism in the high country and often recommended change, notably diversification to other land uses.

Previous attempts to address perceived problems in these lands have suffered from their limited scope, compromised objectives, or lack of political will. Soil and water conservation plans retired areas of high-altitude or steep land from grazing in exchange for the intensification of farming on lower-altitude country, with dramatic impacts on landscape character.

The Protected Natural Areas Programme – a government initiative to survey and protect representative natural areas throughout the country – has, in most areas, faltered due to lack of funds and political backing and has often resulted in proposals for small fragmented reserves.

And now, tenure review of individual properties offers some opportunities but may, in some areas, preclude initiatives for

wider ecosystem or catchment protection. Attempts to implement the sustainability provisions of the Resource Management Act have encountered difficulty – differing interpretations of sustainability, a tardiness in local government to confront land degradation, and in some cases a lack of political will, have limited the effectiveness of this much-heralded legislation.

FOREST AND BIRD'S aspirations for the high country have long been clear:

"to ensure the plant communities, natural landscapes and indigenous flora and fauna of the South Island high country are adequately protected in a comprehensive network of parks, reserves and permanent covenants" (high country policy, adopted in 1992).

This goal acknowledges that the ecological and landscape values of the high country are nationally important and that they deserve protection. Whole ecosystems, habitats, and plant and animal populations remain poorly conserved. Adequate protection for this area, covering ten percent of New Zealand's land mass, has been neglected and left in the too-hard-basket for too long. Piece-meal nature conservation and public access gains have been made, largely due to the efforts of Forest and Bird and Federated Mountain Clubs, but the achievement of Forest and Bird's policy goal remains elusive.

Tall tussock was widespread in the high country, particularly after the removal of forests, and is able to recolonise many montane slopes. Individual plants may be decades old.



MIKE HARDING

The high country: an ancient vision

THE OLD ONES

IN THE ANCIENT traditions of Aotearoa, the South Island is a waka, a mighty canoe plunging into restless, turbulent waters born of Antarctica. In the beginning it had two beautiful hulls but one was holed on a reef by a terrible storm, and was cut adrift to sink beneath the waves.

The gods took pity on the survivors, turning them to stone to shield them from the pain surrounding the hull that remained. That valiant crew forms the Southern Alps and each peak reveals an ancestor frozen forever in stone. They are the tupuna, the "old ones", revered ancestors adorned in wonderful white cloaks of mana, a mantle of everlasting snow. Some hold their heads high while others slump with ex-

haustion from the struggle with the storm tides.

This beautiful myth of the High Places comes to us from the teachings of the Nation of Waitaha, the descendants of those who first sailed to this land. It says:

"Respect the mountains for they are primeval – timeless – born of the moment of creation, bearers of the spirit of the beginning of all.

"Honour them as we honour our elders for they carry the wisdom of time beyond time. Walk across their shoulders with respect and travel with care, be gentle with the land."

THE GREENSTONE TRAILS

The most remarkable stone in this land is pounamu – greenstone – a jade of great beauty. It was found on the west of the Southern Alps, in the rivers, and along the shores of Tai Poutini, the west coast of the South Island. No other stone equalled it for tool making, for chisels and adzes, and

for amulets.

Yet it was far more. Pounamu was the stone of peace, the stone that healed the land and the people. Every year it was carried on "the trail of the stone" from west to east. The long journey over the Alps gave it mana.

Those who serviced the high trail of the greenstone lived in villages in the alpine basins. For century upon century those iwi dedicated to moving the stone took their sustenance from the forests and the waters and ensured the precious stone moved safely from coast to coast.

Yet while these people of the mountains and the trails lived out their days in the service of the stone, none laid claim to the land. They were merely guardians of the realms of the earth mother – "none but the gods could have domain over the realms of the gods".

BARRY BRAILSFORD

(Author of *The Tattooed Land, Greenstone Trails and Song of Waitaha.*)

It is time to re-state this vision. It is also time to acknowledge that the South Island high country provides the best remaining opportunity for large-scale ecosystem protection on land in New Zealand, and perhaps one of the best opportunities in the world. It presents a one-off chance to incorporate contemporary concepts of nature conservation into a long-term vision that will yield, in the future, a representative and viable (sustainable) system of protected areas.

The ingredients of this vision are not as complex as they sound. They are commonsense ideas that are already part of nature conservation theory – already enshrined in the 1977 Reserves Act and in conservation initiatives overseas. The concepts have endured even though the language may be changing.

But the concepts have so often been sacrificed because reserves are usually created in a climate of political (and commercial) compromise, rather than to meet ecological objectives. A clear long-term vision will help put the present-day conflicts in perspective and ensure that our efforts result in a sustainable network of parks and reserves, rather than the fragmented and compromised collection of reserves present in so many lowland parts of the country.

It is a bold vision, but not a completely new one. For several years a loose coalition of conservationists and scientists in the USA has been promoting a similar



Aciphylla or speargrass is one of the most distinctive high country plant genera. Apart from one species in Australia and one in the Chathams, the remaining 40 or so species only occur on mainland New Zealand.

concept for North America, which they have called the Wildlands Project.

The aim of this project is to protect and restore ecological richness and native biodiversity through the establishment of a connected system of reserves. Its key features are a long-term vision and focus on the restoration of natural ecosystems. The project signals a moving on from the era of "monumentalism" – where discrete sites with inspirational scenery were protected – to the protection of the ecologi-

cal integrity and richness of indigenous landscapes.

So, what would it take to achieve Forest and Bird's high country vision? It would require:

- immediate protection of all intact plant and animal communities that are representative of the indigenous flora and fauna of the high country;
- protection of adequate buffers around these intact areas, to ensure that these

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The grey-green areas of these slopes on the Hossack station in north Canterbury have been invaded by Hieracium species or hawkweed. The grey patch in the centre of the photo has been totally taken over. Hawkweed is widely accepted as a symptom of land degradation where the stressed tussock partly dies back and the hawkweed moves in. The future is uncertain for lands which have been badly overgrazed and repeatedly burnt. They have low conservation value and long-term pastoralism is not sustainable. Ideally they should be retired and rehabilitated.

The big steal

SUCCESSIVE GOVERNMENTS have contemplated amending the 1948 Land Act and retreated, undone by the disproportionate political clout of a handful of runholders, bureaucratic inertia, and conflicting objectives for reform.

When the Act was drafted, the distinctiveness of the high country's native plants and animals was not widely appreciated. Sustainable management was neither part of the lawmaker's lexicon nor an aspiration of land managers. Forest and Bird has thus long called for changes to the Land Act to recognise and protect the high country's remaining indigenous character and prevent further degradation.

Hopes were therefore high among conservationists when a Minister of Lands (Denis Marshall) who also held the conservation portfolio, began to make serious moves to reform the Act. We thought he might finally crack the pastoral lease nut and open up these lands to conservation and recreation.

Hopes evaporated, however, when the Crown Pastoral Land Bill was introduced to Parliament in April.

Based on the mounting evidence that extensive pastoralism in much of the high country is not sustainable, the Bill should provide the tools to phase it out. Last year the government's own working party (the Martin Report) described the resource depletion and ecological collapse associated with continuing pastoral use on lands

which have not been "improved" by topdressing and over-sowing with pasture grasses. In particular, the report documented a gradual but significant decline in soil organic matter, soil fertility and nutrient levels, soil pH and vegetation cover. These "unimproved" lands comprise 80 percent of the high country.

But instead of pastoral downsizing, the proposed legislation provides a legal basis for widespread and unconstrained freeholding of public lands and an intensification of development pressure. It repeals the safeguards in section 51 of the existing Land Act which ensure that only developed, modified farmland (generally with few conservation values) can be freeholded. No alternative criteria are provided.

Freeholding "land capable of productive use" becomes a key objective of tenure review (see box page 20-21). Any land which can generate a dollar through farming, forestry, commercial recreation, private safari hunting or tourism would potentially be available for sale.

Diversification away from sheep and cattle into viticulture or tourism is welcome – where this occurs on lands which have been transformed by pastoralism and lost their tussock or native plant cover. Unlike the carve-up of public land in 1986, however, when the Department of Conservation and SOEs were established, the Bill fails to give priority to the public interest in conservation,

recreation and landscape diversity. DoC will have to compete with lessees and third parties for lands which are capable of (regardless of their suitability for) commercial use.

The Bill's minimalist approach to nature is a prescription for postage stamp reserves, not ecosystem protection. Clause 20 only allows lands with "high inherent values" to be allocated to DoC. Areas which would meet the criteria for scientific reserve status or which provide habitat for threatened species may qualify. But large areas, the equivalent of today's national and conservation parks and stewardship land, risk being freeholded and developed, not protected for their natural values. There is no analogous restriction which limits freeholding to land with "high" productive value.

At present, lessees only have the right to graze pastoral lease land. They need permission from the Commissioner of Crown Lands to cultivate, plant exotic trees, burn or clear vegetation. Until the early 1990s, the commissioner took advice from DoC about the impact of such activities on native flora and fauna. Lessees successfully challenged this, claiming the Land Act did



not require such consultation or any consideration of nature conservation. This is an area where the current Act does need changing to ensure the commissioner takes account of native vegetation, habitat, wildlife and landscape values when considering applications for discretionary consents.

But the Bill's provisions here are weak and heavily qualified. The commissioner is only required to "have regard to the desirability of ensuring (as far as is practicable) the protection of the inherent values of the land" (except recreation). This contrasts with the stronger directive in the Resource Management Act which requires councils to "recognise and provide for" the preservation of natural character, and significant indigenous vegetation. The phrase "as far as is practicable" also gives lessees a generous lever to argue that inability to burn or cultivate would impede farm management. Nor does the Bill provide any formal role for DoC in providing advice to the commissioner, a legal gap which the proposed legislation was expected to fill.

Widespread use of covenants as an alternative to land being managed by DoC would be possible under the Bill.

Covenant conditions are difficult to monitor and enforce, and no agency currently does this in any comprehensive way. There is little accountability, and public access is rarely available to covenanted land. Denis Marshall has acknowledged the shortcomings of covenants and claimed they would be used "sparingly". But this has not been carried through into the Bill.

The Bill's tragedy is that it threatens to overwhelm the tenure review process and its tentative steps towards new parks and reserves.

Questions loom over the future of lands degraded by repeated burning and over-grazing by stock and rabbits, or over-run with briar and broom. In the Mackenzie Basin, extensive areas have been denuded of their original tussock cover and support little more than hieracium or native scabweeds. Hefty pest and weed control costs mean these lands are not wanted by DoC or the lessee. The Bill's requirement that the commissioner try to dispose of such lands means that

government would be shrugging off its responsibility for rehabilitation.

Forest and Bird has called for the withdrawal of the Bill and a fresh start. Any new amendments to the Land Act need to:

- make the protection of the remaining indigenous character of the high country the central objective for tenure review;
- establish strict criteria to guide what land can be freeholded;
- ensure the retirement of steeper, high altitude, fragile Class VIIe and VIII lands in accordance with former Land Settlement Board policy;
- protect the public interest in nature and soil conservation, recreation and historic values when applications are considered for burning, forestry and other discretionary consents on pastoral leases;
- establish criteria for sustainable management across all 340 pastoral leases, not just those going through tenure review; and
- ensure the Crown takes responsibility for degraded lands and their rehabilitation.

EUGENIE SAGE

Glenariffe station in the Rakai valley shows some of the difficulties encountered during tenure review. There should be little disagreement about freeholding areas similar to the highly modified river flats (which are already freeholded) or passing the area of healthy tussock in the foreground (adjoining a recommended area for protection) to the Department of Conservation. The arguments will be over where to draw the line in between.



EUGENIE SAGE

communities can continue to evolve and expand, free from the disturbance of adjoining land uses;

- effective linking of these areas by corridors of intact or regenerating native vegetation;
- effective control of introduced plant and animal pests;
- protection of full altitudinal sequences to allow movement of species and communities in response to climate change;
- recognition, and adequate protection, of ecosystem processes – nutrient flows, energy gradients, and hydrological regimes – so that the integrity of these high country ecosystems is fully protected; and
- retention of these lands in public ownership, to provide opportunities for free public access for people to gain inspiration and enjoyment from this remarkable area.

ACHIEVING THIS vision is possible. Many alpine and montane areas in the high country are relatively intact. The vegetation has often been modified by burning and grazing but the original components are still there and regeneration is occurring, especially in the higher-rainfall areas. Valley floors and basins have suffered much greater modification, and it is the protection of these low altitude systems that is the key to sustainable nature conservation in the high country. Some of these areas are modified beyond easy repair (and would remain as commercially productive lands) but many simply need a break. If grazing

is removed, and there is adequate weed and pest control, they have the potential to recover. In practice, this will mean that any land with any inherent natural values, or important potential values, should remain in public ownership.

Human settlement and commercial activities would still continue of course – albeit on a reduced and more focussed scale – within a network of protected natural areas, rather than protected areas existing as small isolated remnants fighting for survival amidst a modified pastoral landscape.

The eventual rewards – economic, social and spiritual – will exceed the likely benefits from continued extensive pastoralism, particularly when the sustainability of traditional farming is so uncertain. Wild and natural areas are becoming increasingly scarce and valuable, whereas food and fibre production can be adapted to occur on many other more seriously-modified landscapes.

The high country offers our last opportunity to achieve such a goal in New Zealand. A goal worth striving for when the potential rewards are so high. There will never be a better opportunity to achieve this vision. All it requires is the will. ♦



MIKE HARDING
was formerly a field officer for Forest and Bird, and is now a conservation consultant based at Arthur's Pass.



Lake Tennyson, part of the headwaters of the Clarence River, abuts the huge St James station in Canterbury. This property is currently going through the process of tenure review. Major parts of the lease deserve to be part of the conservation estate including the Spenser Mountains, Opera and St James Ranges, large stands of beech forest in the Ada and Henry valleys, and the glacial moraine communities in the foreground.

Redrawing the boundaries

DRAWING LINES on maps is at the heart of tenure review – the process at the centre of the movement for change in the high country. Runholders wanting to diversify their activities through freeholding parts of their runs; conservationists wanting to protect natural areas.

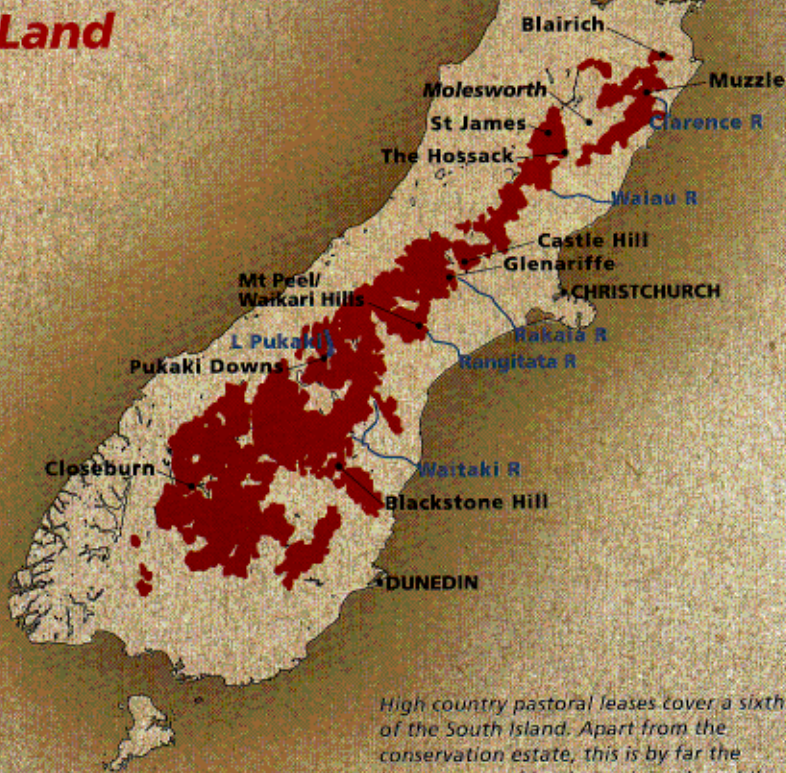
The maps show individual pastoral leases varying in size from several thousand, to tens of thousands of hectares. The exercise requires an understanding of the texture and contours of the land, its vegetative cloak and animal inhabitants, the fall and swing of streams, soil conditions, and its human uses.

Key players around the map are the Commissioner of Crown Lands and his agent Landcorp, DoC, runholders, iwi, conservation and recreation groups and the public. Deciding where the lines should fall is the culmination of a 32-step process. This involves field inspections by DoC and Landcorp staff, assessment of ecological, landscape, cultural and historic values and existing pastoral use, consultation with non-government organisations, negotiations with the lessee, and public submissions on draft proposals. The proposals identify areas which could be freeholded, or returned to full Crown control under the management of DoC, or remain in Crown ownership with continued grazing under a special lease or grazing permit.

In Otago, where the process is most advanced, seven pastoral leases have virtually completed the process with 24,091 hectares being freeholded and 23,656 hectares passing to DoC. Grazing will be allowed on 4,625 hectares of the DoC land. The protected areas include the craggy backdrop to three lakes in the Wakatipu Mountains, formerly part of Closeburn, and Blackstone Hill's slim snow tussockland and bog areas on the Hawkdun Range behind St Bathans. Another 44 runs are part way through tenure review.

The agreements reached to date in Otago have generally been accepted by lessees and recreation and conservation groups, although the latter have opposed the issue of special leases with perpetually renewable grazing rights on some of the newly acquired conservation land.

South Island Pastoral Lease Land



High country pastoral leases cover a sixth of the South Island. Apart from the conservation estate, this is by far the largest area of land remaining in public hands. Some of the pastoral leases mentioned in the article are indicated.

In Marlborough, the map remaking exercise has been completed on the large Clarence Reserve (see *Forest & Bird*, November 1994) and is underway on the Muzzle across the Clarence River. If the areas recommended for protection here are achieved, these and the Clarence Reserve additions should provide the core of a new conservation or national park for the Seaward and Inland Kaikoura Ranges.

After a late start in Canterbury, the process is gathering speed with 11 properties under review.

Runholders have been hospitable in welcoming Forest and Bird and Federated Mountain Clubs survey teams onto runs and allowing the use of mustering huts. Kitchen table discussions about landforms, vegetation, farm management and the aspirations of each of the parties have been amicable and insightful, even if imbued with reserve and caution.

At the time of writing DoC and Landcorp staff were formulating their reports and it was too early to predict outcomes.

Problems with the process of tenure review include the continuing failure to resource DoC adequately. In Canterbury, for example, work is being authorised out

of existing budgets. Constraints here and the pressure of other projects mean DoC inspections are generally limited to four or five days in the field, even on properties of several thousand hectares. Land which deserves protection could be flagged away out of ignorance of some of its conservation importance.

Another problem is that while significant landscapes can extend over several properties, tenure review only deals with properties individually. Thus fragmented protection of these landscapes is a likely result.

In Otago, DoC says the exchange of rights between the lessee and the Crown has been about equal so little money has changed hands. On properties such as Canterbury's 76,500-hectare St James station, where lands with conservation and recreation values heavily outweigh areas suitable for commercial use, finding the cash to buy out the lessee's interest is a likely problem. The department has a limited land acquisition fund and the Forest Heritage Fund budget is already stretched.

EUGENIE SAGE