

Addressing some inquiry questions about South Island High Country

Nick Hutchinson



Panoramic view from Mt John observatory, Tekapo NZ

Describing the high country of South Island

The late Professor Kenneth Cumberland described the high country as a sixty-four kilometre long strip of mountainous country east of the great divide of the Southern Alps, stretching from the Cook Strait in the north to Te Anau, in Fiordland (McIntyre, 2008, 8). He named the region, on his hand drawn map of New Zealand Soil Erosion Regions as, 'South Island Tussock High Country' (Cumberland, 1943, 120). In short, it is a tract of land sandwiched between the Alpine ranges and the downlands and coastal plains of the east coast. Also known as 'the tussock grasslands', 'rangelands' or 'run country' it has been closely linked with an extensive system of Crown Pastoral Leases that restrict the use of the area to pastoral activity, effectively the extensive grazing of merino sheep, and no significant other landuse (Kearsley & Croy, 2000, 114).

[refer to Crown pastoral Land Maps <http://www.lin.govt.nz/crown-property/pastoral-land-tenure-review/status-of-pastoral-land/lease-maps/index.aspx> and <https://data.lin.govt.nz/layer/1572-south-island-pastoral-leases/>]

It occupies a central part of the Kiwi geographical imagination. It is a special place, 'For the majority of us Kiwis who are not ecologists, artists and run-holders, the South Island high country contains many instantly recognised images of what we think of as 'our place': scenes of snow-clad rocky alps; panoramas of large open tussock and mountain ranges and valleys; vistas of merinos, mustering and farm homesteads in lonely mountain settings; images of waterfalls, rock tors and remnants of seasonal snows; records of alpine vegetation suited to seemingly impossible environmental niches (whether in the permanent mists of waterfalls, clinging to exposed or concealed hard rock surfaces, or sheltering on scree slopes exposed to desiccation, searing heat and enormous cold); tourism, marketing, tramping, snow sports, fishing, adventure experience, alpine lakes, warm chalets and sumptuous red wine' (Cairns, 2005, 1).

[refer to High Country Accord website for traditional images of the high country <http://www.highcountryaccord.co.nz>]

'How do people's connections to places affect their perception of them'? (Year 6)

'The country was the grandest that can be imagined. How often have I sat on the mountain-side and watched the waving downs, with the two white specks of huts in the distance, and the little square of garden behind them; the paddock with a patch of bright green oats above the huts, and the yards and wool-sheds down on the flat below; all seen as through the wrong end of a telescope, so clear and brilliant was the air, or as upon a colossal model or map spread out beneath me' (Butler, 1987(1872), 20, cited in Dominy, 2001, 26).

'Considering high country pastoral land that is close to lakesides, there may seem to be no good land use options' (Parry, 2009).

People and places are imbricated together. They comprise space invested with social meaning. They are mutually constitutive. Undifferentiated space becomes place as our perception deepens. The ways in which high country run-holders are attached to the place has implications for both people and places (Morris, 2009, 93). Grazing families, she explains, 'come to selfhood through an experiential and embodied knowledge of the land they farm' (95). The sheep station, or run, is a place defined by the physical and conceptual landscape of high altitude tussock grasslands and mountainous terrain (Dominy, 2001, 4). It has been described as, 'a tawny tussock outback long celebrated by poets and painters. A dramatic landscape, the high country arouses equally dramatic emotions' (Hutching, 1986, 14-15). The romance of the high country resonates. Most New Zealanders know the names of high country properties such as Mount Algidus, Mesopotamia and Molesworth (Dominy, 2001, 29).

The purple prose flows when coffee table book writers get involved in describing the high country. *'Colours and their contrast are a defining characteristic of Molesworth's moods. It really is one huge changing light show, varying according to the time and the season. In one day the landscape you travel through can pass from golden to green to grey, and then the mountains in evening light will assume a deep azure-blue as they fade off into the night'* (Broad, 2013, 12). Similarly "Messie" (Mesopotamia Station) held a special place in the imagination of journalist, Bruce Ansley and photographer, Peter Bush, who captured the seasonal calendar in his images of *'the autumn muster and tailing of lambs in summer, velvet harvest from the valuable deer herd, the thundering feet of Angus cattle moving to lower country for winter'* (Stone, 2012) in their recently published *A Fabled Land: The story of Canterbury's famous Mesopotamia Station* (Ansley & Bush, 2012). Mesopotamia, 'the land between the rivers', was the subject of Samuel Butler's prose in the opening quotation above.

[refer to map of Mesopotamia country, where Samuel Butler farmed, wrote and set his novel, *Erewhon* <http://www.teara.govt.nz/en/1966/25302/mesopotamia-country-where-samuel-butler-farmed-wrote-and-set-his-novel-erewhon>]

The feeling of belonging to the high country, then, has been enhanced by long engagement with the challenging biophysical environment. A distinctive high country 'culture' emerged from the 1860s onwards, based on the various practices of extensive sheep grazing (Dominy, 2001, 96). Practices that engaged with the vicissitudes of floods, droughts, and snow storms as well as the irruption of rabbit plagues, invasion of woody weeds, sweet brier, gorse and hawkweeds; extensive soil erosion, landslips and fluvial adjustments of braided rivers; and, the see-sawing vagaries of the market for wool across the other side of the world together with ongoing costs of production. As well as adaptations to physical geography, the landscapes run-holders call 'country', Dominy (2001, 19) also refers to the significance of kinship networks and the various ways by which property transactions facilitated intergenerational continuity and intensified attachment to place. Eldred-Grigg (1980) wrote of *Southern Gentry: New Zealanders Who inherited the Earth*. Dominy (2001, 40) articulated an outsider's view of high country people, *'they see private planes, jetboats, and Range Rovers; attractive homesteads and gardens, swimming pools, tennis courts, and pleasure horses; the private boarding-school education provided to many high-country and rural children; fashionable city clothes.'*

Paradoxically, the connections of the graziers to the land have been strengthened as run-holders have perceived

themselves to be under threat from the changes that have occurred since the passage of the Crown Pastoral Land Act 1998. For the previous fifty years run-holders had security of tenure granted by the 1948 Land Act that created a perpetual pastoral lease tenure system that provided occupiers with the confidence to invest in long-term management strategies, and to enable the NZ Government (the Crown) to exercise control over leased lands for soil conservation and erosion control purposes. Leaseholders were granted exclusive occupation rights and fixed rentals but no right of freehold (Sutton, Tamihere & Carter, 2003, 2).

Initially, the pastoralists, together with government and conservation interests, supported tenure review¹. As early as 1982 a government committee concluded that pastoral lease tenure had 'outlived its usefulness' (2003, 2). However, in the first decade of the 21st century graziers, conservation and recreational groups not only expressed serious doubt about tenure review but they also were lobbying hard to change the outcome. The graziers had posted a website, *High Country Accord and conservation and recreation groups one titled Stop Tenure Review*. By 2009, with the advent of the National Government in Wellington the issue appeared to disappear from public discourse. There have been no media releases published on the High Country Accord website since August 2009 (Morris, 2014, 187) and the Stop Tenure review website is no longer operative.

Early in 2010 an overview of a decade of tenure reviews appeared in *Architecture New Zealand*. The article ended: *'Thus, at the dawn of a new decade, we're back to where we started – with the quiet but steady privatisation of the New Zealand high country'* (Brower, 2010, cited in McDonald, 2011, 680).

The debacle² reveals much about how people's connections to places affect their perception of them. The graziers realised that deprived of their occupation

1 Tenure review is the process by which pastoral lease tenure will be phased out. The lessees can freehold much of the more productive lower altitude areas in exchange for the surrender of the higher altitude areas and other lands of significant inherent value (i.e. identified as possessing conservation, heritage, landscape and recreational values worthy of protection) back to the Crown. The surrendered lands pass into the conservation estate (Bray, 2007, 4).

2 Tenure review had been labelled everything from a 'land grab' to a 'carve up' and 'hijack' by the popular media (Beer et al, 2006). When the 2009 government report *Change in the high country* was released TV3, the Country Channel, Radio New Zealand, and at least twenty newspapers and other publications, with a combined circulation of more than 700,000, covered the report. Such was the degree of polarization across the country (Government tenure review update report July 2010).

of the high country peaks, destined to become farmers of the low lying flatter country surrounding the lakes and glacial valleys, their very identity was disrupted. These landholders had been offered the opportunity of entering into an agreement with the government, a voluntary process of tenure review whereby leaseholders have the opportunity to gain freehold title to the most economically productive parts of their property: generally the lower slopes and valley flats. The less productive grazing land with significant historic, scientific, ecological or cultural values is then reinstated as government land, to be managed by the Department of Conservation (DoC) (Morris, 2014, 185).

The high country run-holders had established a pioneer myth as early as 1890 (Morris, 2009, 99). This discourse became ever more powerful as run holders were threatened with the prospect of losing their sovereignty over the high country under the tenure review process. This pioneering discourse was as influential as Paterson's *Man From Snowy River* or Clint Eastwood's *High Plains Drifter*. The mystique of the high country every bit as evocative as schoolroom geographies of the Great Steppe stretching from Ukraine to the Tian Shan ranges, the Canadian prairies, and, the Pampas of Argentina and Uruguay. The 'back in the day' image of the high country run-holder is a portrayal of the early settler battling against the elements to earn a living (Morris, 2009, 99). Such pioneering families are reconstructed as being hardworking, thrifty, resilient, flexible, independent and self-reliant (Morris, 2009, 99). Morris explains, *'Not all of the land, however, on a high country station carries the same symbolic weight. It is the land that is the highest, the most remote—the tops, the back country—that bears the greatest symbolic load. It is the possession of this land that forms the foundation of high country farmer subjectivity, and farmers are aware that its loss will necessarily transform identity'* (2009, 100).

The high country is a precious jewel, one dear to the heart of all Kiwis, part of a shared cultural heritage, 'no matter how deep in suburbia we dwell'. (White 2006, 42). For many the discourse had to contain *'musterers on horse back with a team of dogs guiding a flock of merino sheep through tussock-clad mountains'* (Wallace, 2004, 36–7 quoted in McIntyre, 2008, 299). Just who the musterers were deserves some attention. Pascoe (1945, 20) explained that the workers on the runs were called musterers not shepherds. They may be quite distinctively different from the masculinist Australian or North American metonym of the stock rider/cowboy. *'Most musterers are little men, almost weedy in city clothes. But they can stand days of shingle sliding, nights of sleeping in wet clothes (not without a growl) and be quizzical*



A Central Otago vineyard. Source: Wikimedia Commons

through it all. They spend more on boots than a bowler-hatted man will pay for his shoes. Their coats are rough tweed, their trousers denim, their shirts grey wool, and their ice-axes manuka poles' (Pascoe, 1945, 27).

Connection to place becomes a citizenship issue when rural places are subject to significant changes. New political actors challenge the prevailing views of agricultural elites, rural-leaning political policies and government ministries (Yarwood, 2014, 177). Who decides? Who should decide the destinies of the high country? The run holders are faced with new political actors with a grab bag of different agendas for the high country.

Some of the actors are rurally inclined to the extent that 'pinot' has replaced 'merino' (Morris, 2009, 107) in the basins and ranges of Central Otago. Generally, there are fewer sheep, more dairy cows, avocado orchards and olive groves (Morris, 2009, 95). In addition, there are more hang-gliders, hunters, shooters, fishers and off-road vehicles, more rural subdivisions into 'lifestyle blocks' and sprawling suburbs of *McMansions*. Baby boomers are buying up lands with a view. Moreover, the distinctive Kiwi sense of place and belonging of the high country portrayed in 'Southern Man' beer promotions or Toyota advertisements (Kearsley & Croy, 2000, 114) is a vanishing illusion without the musterers, horses and sheep. The run-holders feel that they have lost their ascendancy as guardians of the nation and they rail against their inability to control the outcomes of the tenure review process. New Zealanders in general are in two minds about the tourist invasion. Tourist information describing Glenorchy at the head of Lake Wakitipu, 48 kilometres north of Queenstown lists, *'Jet boats, eco tourism, conservation, recreation opportunities, accommodation, cafes and restaurants, horse trekking, galleries, retail outlets, camping, biking, kite surfing, kayaking and ski activities are a few related businesses to stem from increasing tourist numbers'* (glenorchy-nz-com, 2009).



Panoramic view of Queenstown from Bob's Peak by Steve Collis. Source: Wikimedia Commons

The notion that Pakeha pastoralists are no longer pivotal to national life is reinforced by the success of Māori in seeking reparation under the provisions of the Treaty of Waitangi. The high country stations the head of Lake Wakatipu known as the Routeburn, Greenstone, Elfin Bay and Caples stations were bought for Ngāi Tahu, the dominant South Island tribe, by the government as part of the \$NZ170 million settlement in 1996 for historic breaches of the Treaty of Waitangi between Maori and the Crown (Dick, 2010). The mountainous tops of the Greenstone, Elfin Bay and Routeburn were subsequently gifted to the people of New Zealand (Scoop Media, 2006). The gifted lands, known as Ka Whenua Roimata – Land of Tears, were named to commemorate the long fight of Ngāi Tahu to reclaim their rightful territory (glenorchy-nz-com, 2009). The bulk of the remaining area of beech forest, mountain lands and the huge Marorua Valley – comprising about 90% of the total area has been leased back in perpetuity to the Department of Conservation at a peppercorn rental for conservation purposes. Ngāi Tahu has retained a right to veto any commercial activities on these lands. Ngāi Tahu also has the right to farm all the freehold titles Ngāi Tahu also has the right to farm all the freehold titles, on the valley flats and lake shores. Trampers, fishers and hunters are assured public access through these freehold lands (Te Rūnanga o Ngāi Tahu³, ND).

There is an ambivalence expressed to towards the high country and its inhabitants for many Pakeha. They are resentful with regards to both Ngāi Tahu and the leaseholders because they believe that the high country belongs to the nation. They feel a sense of visual ownership of the high country. 'The visual reminder is there, not only across the plains from wherever one stands in Canterbury, but also as a symbol of New Zealand nationhood and, more particularly, of South Island identity. Such negative sentiment toward high-country people and the mystique their habitation embodies emerges over issues of access and land use, of ownership and control, of power and privilege' (Dominy, 1993).

'Why are interconnections and interdependencies important for the future of places and environments'? (Year 9)

The high country is ever more interconnected worldwide through the international movements of tourists, investment capital and various forces of cultural integration. Historically, the high country has always been an interconnected place. Kevin O'Connor, Emeritus Professor of Range Management, Lincoln University, Christchurch, spoke of the role of venture capitalism in the high country, *'The story of pastoralism is a story of dwindling capitalism, overshadowed early by the glistering of gold, steadily superseded in town by the new oligarchies of High Street and Hereford Street⁴, supplanted on the rural lowlands by the spread of husbandry and the new venture of refrigeration, gnawed at in the wake of mining decay by irrigation for small- holdings and orchards, eventually overwhelmed by the incursions of roads, electrical engineers, and a growing tumult of ideas of soil conservation, pasture improvement, farm forestry, holidays in the sunshine and rain in the mountains, and a new spurt of venture capitalism in tourism'* (O'Connor, 2005, 41). The new scourge of venture capitalism was the advent housing subdivision, peri-urban developments, or rural lifestyle blocks, into the high country.

Mcintyre (2008, 131) explains that foreign ownership of New Zealand, including the high country, is a long-standing tradition. Early colonial New Zealand has been described as being more like a British corporation than an embryonic nation (131). Some of the interconnections were Scottish. In 1877 two Scottish companies held huge swathes of land in the southern parts of South Island. Run holders varied in origin from former poor Scottish shepherds to mercantile and upper middle class Britons. And, they soon set themselves apart from workers and smaller farmers, with their spacious homes, servants, musterers and leisured pursuits organising tennis, shooting and hunting parties (132).

3 Ngāi Tahu tribal council, the relevant iwi authority for almost all pastoral leases in the high country

4 The main commercial streets in Christchurch: there is possibly a parallel with 'Pitt Street farmers' in NSW?

More recently post-productivist activities threaten the rural quietude of the high country. Geographers know that a shift from an emphasis on extensive grazing to rural tourism⁵, for example, changes the character of the place, changing a sense of place and place identity as the high country undergoes rural restructuring (Rosin et al 2013). McIntyre describes the South Island high country as having become *'a new frontier for the domestic and international film, advertising, hunting, tourism, wine, dairy and property industries'* (McIntyre, 2008:348-9).

For some this has been termed 'high country hijack'. Referring to the advantages conferred on run-holders by the process of tenure review journalist White opined, *'It's a process whereby 10 per cent of New Zealand's most remote but most beautiful country, owned by the Crown, is being divided up, with much of it effectively given away to farmers, who until now have only leased this land'* (White, 2006, 42, cited in Morris, 2009, 103). The conservation/recreational lobby group *Stop tenure Review* explained that land converted to freehold on the shores of Lake Wakitipu, close to Queenstown was subsequently on sold by the landowner as rural housing subdivisions for massive profits.

In another example the freehold section of a property on the shores of Lake Wanaka was sold by the Crown to the run holders for some \$265 000 and the owners then collected over \$10 million when they on sold a portion of their land for housing subdivision (Gorman, 2013).

In another instance the value of leasehold land on the shores of Lake Tekapo was valued under the tenure review process as 'very definitely deer farming' land (McDonald, 2011, 613) whereas environmentalists visualised residential subdivisions similar to those in the Lake Wakitipu case. Dr Ann Brower revealed in her book, *Who Owns the High Country*, that during the period of tenure review, 1994–2007, *'the Crown [gave] high country farmers hundreds of thousands of hectares of valuable land and millions of dollars in a flawed process that was partly hidden from public view'* (Brower, 2008, 25).

By the end of 2006 public opinion began to change in New Zealand and there was a groundswell of resentment concerning run-holders and their windfall profits from the land reform program. The run-holders were faced with urban-based nature conservation and recreation organisations forcefully seeking political and economic control over the high country, wresting power from the pastoralists and breaking up their self-contained social and cultural world forever.

The enormous social, economic and cultural power that the pastoral leaseholders wielded in New Zealand was exposed in Brower's book

There are other important actors, other interconnected threads that will alter the high country as an iconic place. Firstly, the baby boomers are 'returning home'. They are Kiwis born between 1946 and 1964, who have aspired to live in the scenic parts of Central Otago. The Mayor of Central Otago explained, *'If you're sitting in London or Sydney or even Auckland, and you want somewhere to retire and park your money, this is increasingly where your investment advisors are telling you to come'* (Macpherson, 1985, 21).

Then, there are the foreigners. Foreign ownership of high country properties is an anathema to many New Zealanders. *'In a sense, all New Zealanders feel that they own the high country. Many South Islanders can see the Alps from their windows'* (McIntyre, 2008, 336). New Zealand was also an early adopter of privatisation.

Lilybank, a former merino run was taken over by the infamous Indonesian, Tommy Suharto in 1992 and his luxurious lodge on sold to his Singapore business partner in 1999 (McIntyre, 2008, 338). In 1998, Glenhope Station adjacent to two national parks was bought by North American interests and turned into a private game, fishing and safari park, complete with restocked herds of deer and other animals (McIntyre, 2008, 340-41). In 2001, Allen Evans, the Federated Mountain Club's patron asserted that about 160 000 hectares of high country were under foreign control (McIntyre, 2008, 340). A year later, the editor of *Forest & Bird* complained that foreign owners were denying New Zealanders access to the high country and were setting up exclusive commercial tourist ventures (McIntyre, 2008, 342).

McIntyre sums up, *'The story of the Pakeha era begins with foreign speculators investing in the high country and continues similarly. The difference is that whereas formerly foreign owners were of British stock, in recent years they have been members of a global elite'* (McIntyre, 2008, 347).

*Below: Snow covered peaks of the New Zealand high country.
Source: Wikimedia Commons*



5 Geographer, David Relph wrote a book titled from tussocks to tourists: The story of the central Canterbury high country, 2007, Christchurch: Canterbury University Press

‘What are the causes and consequences of change to places and environments and how can this change be managed’? (Year 9)

‘Increasingly, the High Country is becoming marginal land with invasions of hieracium (hawkweed), wilding pines, rabbits and possums, among others. Many soils are eroded and degraded; much land has been retired from production’ (Kearsley & Croy, 2000).

A case study of Molesworth Station illustrates the causes and consequences of change to places and environments in the high country and ways that this change has been managed. Molesworth is the largest farm in New Zealand extending over 180 000 hectares. It is situated west of the Inland Kaikoura Ranges, one of the two parallel mountain ranges in the northeast of South Island, in Marlborough district. Transferred from Land Information NZ to the Department of Conservation management in 2005 it combines the attributes of a working farm operated by Landcorp Farming Limited, a state-owned enterprise, with outstanding recreational and conservation characteristics. It personifies environmental change in the high country and offers several lessons in managing places and environments.

[maps of Molesworth Station can be found at Land Information New Zealand (2013). *Molesworth Map*, Wellington: LINZ. Retrieved May 2014 from <http://www.linz.govt.nz/sites/default/files/docs/crownproperty/review-of-molesworth-mgmt-plan/molesworth-opening-map.pdf> and using the search function at <http://www.topomap.co.nz>]

The headwaters of the Clarence, Wairau and Acheron Rivers were all formerly glaciated and glacial features abound, including moraines, outwash plains, hanging valleys, cirques and arêtes. The soils are thin and poor derived from (greywacke) dark grey sandstones, mudstones and claystones in the hill country with more fertile soils on the river terraces, flood plains and lower rainfall eastern areas. Landslides and rock falls are common in the scree-covered slopes, frequently triggered by tectonic action. The climate is continental in character in the rain shadow of the main divide: hot and dry in summer, precipitation in the form of snow in relatively cold dry winters. The former beech forests have been burnt off following human occupation leaving montane tussock grasslands and scree on mountain slopes⁶. Over seventy threatened plant



Molesworth Station gate and fence. Source: Wikimedia Commons

species, mainly herbs, currently grow on the Station and Molesworth supports one of New Zealand’s most diverse lizard faunas.

Early written accounts, drawings and paintings of Marlborough high country, from the 1840s onwards, portray a treeless landscape (Peden & Holland, 92). British settlers brought with them experiences of open hill country pastoral farming where burning off vegetation was the norm. The triumvirate of burning, grazing and trampling transformed the high country. Burning, overstocking with sheep and irruptions of rabbit plagues, were thought to be a particular environmental problems at Molesworth but more recently historians studying station records and diaries have been more circumspect about the deleterious effects of burning, insisting that pastoralists, elsewhere in the high country, were quite prudent with their burning practices (Peden, 2011). They burned in early spring giving the plants every chance to recover, where the early evening dew prevented fires from spreading too widely. In addition there are some doubts expressed about the role of burning and the incidence of rock falls and slides on the scree covered slopes of Marlborough. Natural erosion rather than accelerated erosion and mass wasting occurs readily in precipitous scree covered slopes in relatively recently formed mountainous landscapes.

However, the evidence from Molesworth suggests that burning was a significant contributor to environmental degradation. By 1860 tussock burning was a widespread land management technique but soils were left exposed and extremely vulnerable to erosion. Burning had ceased to be a major management practice on Molesworth by 1919 (DoC, ND, 3).

A detailed examination of the suite of environmental changes that have occurred on Molesworth is most instructive. In 1852 some 1800 sheep were driven across Barefell Pass en route for the Canterbury Plains from Nelson. Travelling up the Awatare Valley towards

⁶ In Polynesian times forest and other woody vegetation was destroyed, native plants spread across the high country expanding the extent of tussock grasses (Molloy, 2005, 62).

Molesworth the sheep were making heavy going. The thorny bush, Matagouri (Wild Irishman) and Fierce Spaniard (or speargrass) injured the sheep's feet so the musterers set fire to the bush to provide better access for the stock (McIntyre, 2008 39). Between 1857 and 1858 over 24,000 sheep were driven from Nelson to Canterbury across Molesworth (DoC, ND, 2). The land that was to become Molesworth, at first called Barefell Run, became sheep country in 1854. By the early 1860s perceptive botanists and naturalists had observed that pastoralism was altering the biophysical environment of the high country irreversibly (McIntyre, 2008, 50-51).

[early maps of Molesworth and adjacent stations can be found at <http://www.doc.govt.nz/Documents/parks-and-recreation/places-to-visit/nelson-marlborough/acheron-accommodation-house-interp-info.pdf>]

The 1870s saw the first arrival of rabbits on Molesworth, where the open grassland resulting from burning practices encouraged rabbit numbers to rapidly increase. Thirty years later the properties that currently make up Molesworth were stocked with as many as 95 000 sheep. (DoC, ND, 4). The run holders, and Pakeha generally, introduced a variety of animals to the high country, many of which became feral. As early as the 1850s herds of feral pigs roamed the Marlborough high country (Mcintyre, 2008, 51) rooting up the tussock and speargrass and honeycombing the flatter land with water holes. Feral dogs attacked the flocks. In August 1860, to the east of Molesworth, over the Kaikoura Ranges, at St Leonards Station twenty-eight dead sheep were found drowned in a small creek. They had been herded together by feral dogs (Mcintyre, 2008, 51). However, rabbits were public enemy number one, with nine million rabbit skins exported from the Marlborough region in 1882 (Stephens, 2009).

Molesworth and adjoining stations were severely rabbit infested. In 1873, ferrets were released in the Kaikoura Ranges to prey on rabbits. At Shades Station, on the East Coast hundreds of cats were bred to prey on rabbits. In 1883 the government facilitated the release of thousands of stoats, ferrets and weasels (McIntyre, 2008, 155). By the 1890s the high country had been completely transformed. In 1891, the owner of Molesworth Station described the surface of the upper slopes, *'peeling away through the rabbits and dry weather and large patches of land are becoming useless'* (McIntyre, 2008, 161).

'Stock numbers fell, but the rabbits continued to thrive. The run holders frequently suffered very heavy losses in the winter snows. These losses, in combination with economic recessions, meant that funds were not always available to spend on rabbit control. The cycle of deterioration

continued and by the mid-1930s the four runs [that make up Molesworth] were desolate properties – rabbit infested, denuded of vegetation and suffering from severe erosion' (DoC, 2003, 2).

During this cycle of deterioration Molesworth run holders needed very deep pockets to attempt to manage this degraded land. In 1911, members of the wealthy Rutherford family took up the leases of the runs that would eventually be consolidated into Molesworth. Particularly harsh winters in 1911 and 1912 caused devastating losses of sheep and lambs but Duncan Rutherford believed that investment in the leases could redress the problems of burning at the wrong time of year and the proliferation of rabbits through *'careful handling and surface sowing'*.

In 1915, Eva Rutherford the actual lessee of Molesworth, seeking tenure on the Station, promised the Land Boards that rabbit proof fencing would be erected, trees planted and experimental grasses would be sown on the loose shingle country (McIntyre, 2008, 217). Tragically, Duncan Rutherford died in 1917 and the leases were sold off to the Nicholls family of Belfast, in order to pay off death duties. This family, in turn, lost many sheep in the snowstorms of 1918 and parts of the run were so overrun by deer that that sheep grazing became impossible in certain areas (McIntyre, 2008, 218).

After Nicholls death in 1920 absentee landlords from the New Zealand Farmers' Cooperative Association took over the leases. Molesworth was in such a degraded state that, when the Association offered the land up as runs to the government for soldier settlement, subsequent inspections by the Land Boards and the Commissioners of Crown Lands deemed the area to be *'quite unsuitable for soldier settlement owing to the altitude and heavy losses of sheep in winter'* (McIntyre, 2008, 218). By 1931, stocking rates had been reduced but the rabbits were allowed to run free. The country was alive with rabbits with 30 000 rabbit skins being taken from adjacent Rainbow, Tarndale and Molesworth Stations between 1930 and 32 (McIntyre, 2008, 219).

Despite all this, in 1937, the station manager believed that rabbits were not the primary problem to be managed. He spoke of the damage caused by burning the tussock on the sunny slopes where the fire would take hold and burn deep into the root structure of the grasses leaving bare soil exposed. Heavy storms caused the unconsolidated shingle to slide. *'Rabbits did a lot of damage'* he said, *'but they didn't range as high as where the shingle first started to slide'* (McIntyre, 2008, 220). The prescient manager believed that the only hope for Molesworth lay in cattle grazing.

In 1938 the Department of Lands took over the Molesworth and Tarndale-Rainbow runs, described then as degraded country covered by some 95 000 widely scattered sheep, suffering from soil erosion, with rabbits rampant and the built environment in a sore state of repair (McIntyre, 2008, 220). In 1949 St Helens Station, including the Dillon Run was added to the property now called Molesworth.

The biophysical environment was gradually restored through careful management practices that included rabbit and deer control, revegetation and the replacement of sheep with cattle (DoC, 2013-14, 2; McIntyre, 2008, 228)). A program of grass sowing commenced in 1940 and the station restocked with Angus-Aberdeen and Hereford cattle. Wild pigs, deer and goats were shot to the extent that one shooter killed at least 700 deer in one year, 1939. Returned servicemen were employed to shoot the feral animals. Gradually, rabbit numbers were controlled, burning off was curtailed, the cattle were more selective grazers than the sheep had been, and more and more grassland was sown. Molesworth is often cited as one of New Zealand's conservation and farming success stories (McIntyre, 2008, 231). By 1946 the local press reported that tussock was seeding again all over the station and even some of the shingle slides were becoming revegetated (McIntyre, 2008, 230).

Rabbit control was difficult. In the early 1950s the Marlborough Aero Club dropped strategically placed tins of poisoned oats and carrots in an aerial baiting program (McIntyre, 2008, 242). In 1957 a large-scale trial of baiting of rabbits, deer, goats and pigs was started using 1080 poison. This successful program was followed by extensive tree planting schemes carried out by the Forest Service. Some 15 000 trees were planted in sixteen years but as early as 1959 the problem of wilding pines was detected. As the rabbit population dwindled young pine saplings accumulated in the gullies. In the late 1980s and early 1990s rabbit populations began to surge in Molesworth. The numbers were very difficult to control. However, the introduction of rabbit haemorrhagic disease (RHD) in 1996 brought about a significant decrease in the rabbit population. Since then the lessee and the department of Conservation has kept numbers in check through shooting programs. Eternal vigilance is the watchword on Molesworth.

There are other animal problems to be managed on Molesworth. The lessees and the New Zealand Animal Health Board, the Department of Conservation and the managers of other adjacent properties are engaged in tuberculosis vector control and the eradication of

bovine TB on the Station (DoC, 2003, 15). There has been an increase in vector numbers (possums, pigs, ferrets and goats) possibly as a result of the decline in rabbit numbers. The Nelson Marlborough Fish and Game Council are responsible for the control of Canada geese flocks that threaten pasture production and native plants.

There are a number of problems connected to introduced plants, apart from those referred to above as wilding pines. Two species of hawkweed became dominant across 22 000 hectares of valley bottomland, fans and foot slopes on Molesworth Station (McIntyre, 2008, 266-7). Other plants that threaten Molesworth's productivity and conservation values are sweet brier, thistle, and ragwort but the most threatening weeds are now woody ones: broom, pines, rowan and willow (DoC, 2003, 12).

Soils and water resources are managed with two main strategies:

- the restoration of vegetative cover where pasture on the lower slopes and valley floors have been aerially sown and top-dressed with fertilizer and stock numbers are carefully controlled to mitigate environmental damage
- strengthening the link between land use and land capability where extensive cattle grazing takes place on the valley floors and gentle slopes and a rotational grazing system is practiced (DoC, 2003, 9).

Another management issue that has arisen is the intrusion electricity pylons and associated infrastructure across Molesworth Station (McIntyre, 2008, 267-268). The former droving routes from Nelson to the Canterbury Plain that crossed the Station are now used by Transpower New Zealand Ltd. to site electricity transmission lines with strings of tall power poles that link up hydroelectric power stations at Roxburgh in Central Otago with Nelson Province and the Waitaki power scheme, in Canterbury, with North Island via a submarine cable across Cook Strait.

With the power pylons and transmission lines came access roads. The first piece of infrastructure completed in the 1950s traversed the western boundary of Molesworth Station bringing in the curious, the sightseers and recreational users as well as undesirable visitors. In the late 1950s visitors to the tarns at Tarndale, in the west, disturbed the grazing cattle and made extra work for the musterers. As the Station manager at the time remarked that it took only a few careless shots from unthinking visitors to scatter the cattle. The second power line and road, the Acheron Road, developed in the 1960s, allowed further access. The sightseers and anglers were not a real problem

but those with guns and dogs spooked the cattle to the extent that the stock stampeded from their allotted winter pastures along the river flats to higher terrain where sudden snowstorms could have fatal consequences.

Dogs are no longer permitted to roam on Molesworth. They must remain in vehicles for the entire journey across the Station; although hunters may apply for written consent to bring a dog into some areas (DoC, 2013-14, 34). Because Molesworth is a working farm, and as a consequence of severe winter conditions, the Acheron Road is closed during calving from November 1st to April 10th, may be closed as a result of to unfavourable weather conditions or fire danger, but is generally open from October 26th to April 21st. A permit is required, from the Department of Conservation, for access to the central part of the station, because of potential disturbances to the farming operation. However, permits are not required for visitors who wish to drive straight through the Station on the Acheron Road during the period when the road is open (DoC, 2013-14, 19).

The Department of Conservation grants concessions to a small number, but expert, tour operators with specialist tours that include cycling, rafting, kayaking and horse trekking. A lot of other visitors come for fishing. Some are Canada geese hunters. Others game hunters. The scenery enthralled all. Each tour operator needs the approval of the Commissioner of Crown Lands and Department of Conservation. Te Rūnanga o Ngāi Tahu is to be consulted with respect to applications for permits for interpretive visits to Molesworth that may include sites relating to Māori cultural values (DoC, 2003, 26).

Molesworth is a remarkable example of where environmental devastation, conservation practices, farming, recreation and the imperatives of power industry combine to teach us much about managing places and environments.

The multiple use management practices are put forward as a model for other high country stations or catchments in Crown control. (Parry, 2009, 68)



Hydropower pipeline, McKenzie country, New Zealand.
Source: Wikimedia Commons

'How do worldviews influence decisions on how to manage environmental and social change'? (Year 10)

'The traditional use of the High Country was very much part of the Kiwi way of life and self image. Hunting for deer, thar, chamois and goats was widespread, while excellent fishing is available in rivers, lakes and high altitude irrigation dams. Tramping and camping is also popular, together with fossicking and gold-panning. . . . More modern activities include 4WD and trail bike trips, a growing involvement in cross-country skiing and limited snow-mobiling. Commercial tourism includes skiing and heli-skiing, rafting and kayaking, 4WD safaris and farm stays, but much activity is constrained by the terms of the Crown Pastoral leases' (Kearsley & Croy, 2000).

'After a prolonged battle, including the Minaret case in the Land Valuation Court, New Zealand's High Country farmers celebrated the passing of the Crown Pastoral Land (Rent for Pastoral Leases) Amendment Act in 2012. This clarifies pastoral lease farm rents are to be based on pastoral rather than landscape values. It is a major win for High Country pastoral leaseholders' (Federated Farmers of NZ, 2014).

There are numerous individuals and actors with a plethora of worldviews about the high country. The complexities that underpin worldviews have been examined elsewhere (Hutchinson, 2013, 12–24). Here



Blue Lake, Otago. Source: Wikimedia Commons

the worldviews of New Zealanders both from within and without the high country are observed.

Environmental geographers have frequently made an over simplistic division between worldviews that express eco-centric versus urban- based 'green' inclinations. Swaffield (1998) offers another perspective on worldviews and these are usefully applied to management issues in the high country.

Those who espouse multiple use management approaches, typically planners, scientists or advocates for Maori, were different from those favouring conservation management. The latter comprised a diverse group of scientists and consultants, including a number of individuals with strong personal views about the high country (Swaffield, 1998, 207). Urban-based lobby groups tended to favour strong government intervention from Wellington whereas those that with a preference for individual improvements were largely run holders or their advisers. Local councillors and some run holders were more prone to esteem local governments as forces of mediation. Then there were several national politicians and government policy advisers that wanted to reform the system of decision making based on arguments and legislation about property rights (Swaffield, 1998, 208).

Firstly, the unashamed and quite romantic view of a high country run holder is presented.

'The Scott family has farmed at the head of Lake Wakatipu for a hundred years. My three kids are the fourth generation to work on the land. ...

Our mountain landscapes have kept their unspoilt character because they have been extensively farmed. Extensive farming is the art of spreading people and domestic animals thinly over large areas and fits well with the native vegetation. It allows for the native habitats to remain essentially intact over large areas of land, while still permitting economic use. Farming, by definition, means controlling the actions of stock and replacing with fertiliser what is extracted from the land by the harvests.

Contrast this with the philosophy behind Fish and Game NZ, whose predecessors, the Acclimatisation Societies, released all sorts of species for sport with very little intention of managing them, other than ensuring their successful establishment. Degradation of land is much more likely from feral animals than domestic stock and any high country farmer whose stock are degrading their range is not going to gain much at shearing time' (Scott, 2005, 111).

An Emeritus Professor of Range Management tends to agree that run holders are more benign than a number of current developments, 'we are at this stage in history set to have much greater mischief wrought on high country

landscapes by peri-urban subdivision and development, second-homing, recreational and touristic developments of one kind and another than was ever likely to come from merino wethers' (O'Connor, 2005, 37).

Journalist, Bruce Ansley, writing in the New Zealand Listener, 1992, savaged the run holders, 'They've been living off the public purse for years by cheap rentals, then by subsidies. And what have they given us in return? They've occupied some of the choicest parts of the mountains and exercised seigneurial rights: the masses enter at the farmers' pleasure. They've steadily run down those beautiful, fragile tracts of country until they're overrun by rabbits and weed' (cited in McIntyre, 2008, 307).

The worldviews of the run holders are difficult to ascertain and they were certainly different worldviews held by such fiercely independent New Zealanders. The New Zealand Historic places Trust (Bray, 2007) explained that some run holders saw that merino wool prices were in decline and the lower parts of the high country were potentially productive and lucrative assets. 'Some also, no doubt aware of the burgeoning growth in tourism and settlement, particularly in the Queenstown/Wanaka area, foresaw other opportunities which could surely be more easily realised on freehold property. At the same time, however, many feared that with tenure review would come the passing of the High Country lifestyle' (Bray, 2007, 18). They were also very wary of the motives of the Department of Conservation and doubted that DoC could cope with weed and pest control over an enlarged conservation estate that comprised over 30 per cent of the country.

The worldview of a botanist may be pointed to by the remarks of Alan Mark, Emeritus Professor of Botany, University of Otago when he describes the snow tussock as being very slow growing taking at least fifty years to reach flowering. The snow tussock is described as a perennial plant having many of the 'characteristics of a forest and few of those of a short rotation pasture' (Mark, 2005, 52-3). Similarly environmental consultant, Kelvin

Below: Tussock grass, NZ high country. Source: Wikimedia Commons



Lloyd, explains that effects of fire on snow tussock grassland vegetation have received considerable research (Lloyd, 2008, 6). Spring burning does stimulate leaf growth but it also sets back further leaf growth, nitrogen concentration levels and flowering for at least fourteen years.

In 2005, the Royal Forest and Bird Protection Society clarified its ideas about stock grazing in the high country, maintaining that, '*stock are being allowed to graze fragile alpine herbfields, and extensive areas of tussock grasslands and shrubland remnants*' (McDonald, 2011, 610). Forest & Bird and other conservation and recreational lobby groups were more inclined to support the intervention of DoC over land deemed unsuitable for grazing.

A former mountain guide, bush walker and dedicated conservationist received the following eulogy from Forest & Bird, '*The natural quietness of the mountains was important to him, and he disliked the growing numbers of aircraft filling the skies around the Southern Alps. Even though he could have enriched his guiding business by flying clients to remote huts, he stuck to the longer – and quieter – on-foot route*' (Forest & Bird, 2005, cited in McDonald, 374).

Individual worldviews are important and some worldviews are bound to be in conflict. Obviously Forest & Bird would be at odds with the New Zealand Deerstalkers' Association when deer culling programs were under discussion. Similarly, Forest & Bird was in vociferous disagreement with Outdoor Recreation New Zealand, the hunting, shooting and fishing lobby, over the use of 1080 poison (McDonald, 511).

Then there are the clashes between the vast coalitions of interest groups concerned about the future of the high country. The two main protagonists, referred to above, are represented by the graziers website, *High Country Accord* and conservation and recreation groups website titled *Stop Tenure Review*.

Governments of various persuasions too, hold different worldviews. The coalition government, dominated by the Labour Party and supported by the Greens, 1999 to 2008, was generally more favourably inclined towards conservation interests with regard to tenure review whereas the National Party, elected in 2008 have been more amenable to the worldviews of the high country run-holders.

More recent geographical and historical scholarship has looked more favourably on the stewardship of the early run-holders in the high country and have partially redressed the balance from those that espouse conservation values towards the interests of graziers



High country trampng, New Zealand.
Source: Wikimedia Commons

and land developers (Peden & Holland, 2013, Holland, 2013 & Peden, 2011). Robert Peden, in particular, questions the 'self-perpetuating' view (2011, 48) that pastoralists' misunderstanding of the landscape, 'indiscriminate burning' and overstocking have led to ecological disaster across the entire high country. This, he shows, is based on selective evidence that has been accepted by eminent botanists and historians without sufficient interrogation. Peden argues that initial burning off as a pasture management tool was inevitable because dominant tall tussock was unpalatable to sheep, but thereafter fire was generally used in a more controlled manner. Again natural erosion rates have been demonstrated as very potent forces of denudation in precipitous scree covered slopes prone to tectonic forces.

Nevertheless, the conservation and recreational lobby is a forceful one. In 2009 a media release was issued that announced that eight conservation and outdoor-recreation groups had combined to call for stronger protection for New Zealand's remaining wild rivers, many of which are found in the high country. According to Pete McDonald 100,000 Kiwis (McDonald, 2011, 730) were represented by:

- Fish and Game New Zealand,
- Federated Mountain Clubs of New Zealand,
- Royal Forest and Bird Protection Society of New Zealand,
- Whitewater New Zealand,
- Council of Outdoor Recreation Associations of New Zealand,
- New Zealand Rafting Association,
- New Zealand Federation of Freshwater Anglers,
- Environment and Conservation Organisations of New Zealand

Obviously these conservation and outdoor-recreation bodies were expressing similar worldviews on this environmental issue. They were supported in 2012

when the Parliamentary Commissioner for the Environment, Dr Jan Wright, released an investigation into the conflict between hydroelectric power schemes and the irreversible environmental damage caused to wild and scenic rivers (Wright, 2012). Dr Wright explained that hydroelectric power schemes contributed towards the Government's goal of 90 per cent of the country's electricity coming from renewable sources by 2025 (Wright, 2012, 5), a potentially conflicting worldview from those of the conservation and outdoor-recreation bodies. Urban electricity consumers may value cheap, abundant and relatively carbon friendly power supplies but those involved in the tourism industry, New Zealand's number one export earner (Wright, 2012, 53) may well be persuaded to espouse alternative worldviews.

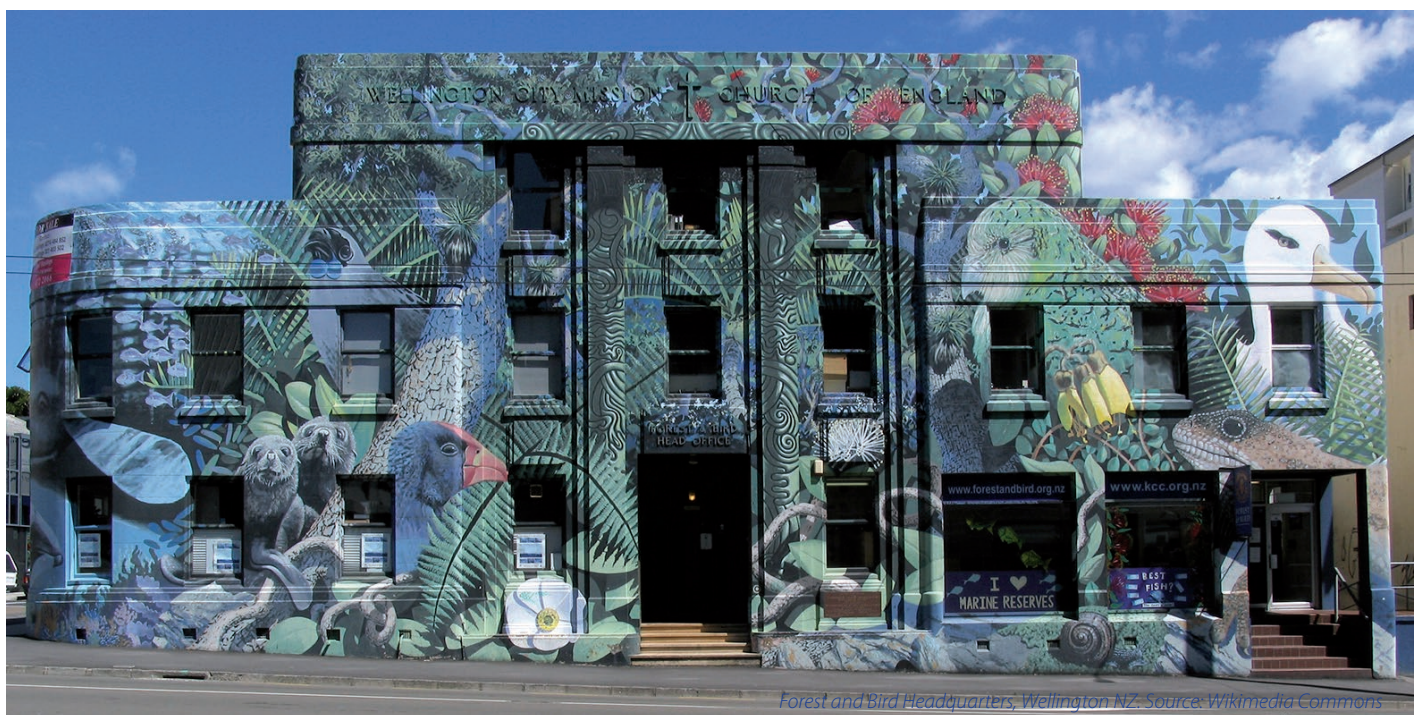
Dr Wright identified a number of environmental values associated with a wild and scenic river (Wright, 2012, 49):

- different forms of the river itself such as waterfalls, gorges, oxbows, and estuaries
- the native plants and animals that live in the river
- the native plants and animals that live alongside the river
- geological features such as layers of different coloured strata
- recreational opportunities such as kayaking, rafting, and hiking
- the historical significance of the river
- the spiritual significance to iwi.

Some of these attributes would be more appealing to the worldviews of Fish and Game New Zealand where

their members wish to fish trout and salmon others would be more appropriate for outdoor-recreation bodies. Some, such as the Council of Outdoor Recreation Associations of New Zealand represented the collective interests of national bodies in deerstalking, recreational canoeing, salmon and trout fishing, recreational skiing and hunting (McDonald, 2011, 225). The Federated Mountain Clubs of New Zealand was established principally to promote 'freedom of the hills' (Bray, 2007, 17). The Royal Forest and Bird Protection Society of New Zealand represents somewhat different worldviews. The country's largest conservation NGO, with a mission 'to preserve and protect the native plants and animals and natural features of New Zealand' (McDonald, 2011, 426) is a very powerful lobby group. Forest & Bird explains, *'The public has made it clear that it does not want the iconic high country landscape ruined with lakeside subdivision or inappropriate tourism development. They want assurance that significant high country habitats and wildlife are protected and managed in the public interest'* (Forest and Bird, ND).

In 2012 a similar coalition of conservation and outdoor-recreation groups to those enumerated above were leading a campaign to raise awareness of Water Conservation Orders (WCOs) which protect some of the country's most outstanding rivers 'for all New Zealanders' (Fish & Game, 2012). A year later the Government appeared to be bent on weakening the WCOs, 'It's appalling that this Government is trying to dupe the public by saying it is 'improving' the WCO process, when in reality its plans will render WCOs useless as a tool to protect rivers from a greedy few for increased irrigation and intensive farming' (Johnson, 2013). Later in 2013



Forest and Bird Headquarters, Wellington NZ. Source: Wikimedia Commons

the Government seemed to acquiesce towards the worldviews of the conservation lobby and the Minister for the environment declared that no changes were to be made to WCO protection mechanisms (Deans, 2013).

The contrasting worldviews of the trust, Public Access New Zealand (PANZ) and many of the run holders is instructive. PANZ broad aim was to promote the preservation and improvement of public access to public lands and waters throughout New Zealand, particularly those with public recreation and conservation values (McDonald, 2011, 211–212). As far as the high country was concerned PANZ was worried about *'run holders pushing for total freeholding [sic] of the land or the privatisation of natural and recreational values such as fishing, walking and skiing opportunities'* (McDonald, 2011, 213).

As early as the 1980s many pastoral leaseholders 'had come to see themselves almost as de facto owners of the land' (McIntyre, 2008, 318). Federated Farmers, a professionally staffed landholders' group was a powerful lobby group, representing 18 500 farmers and rural families throughout the country (McDonald, 2011, 287). It distilled its message into a series of concise statements, *'farmland is a place for production, not recreation; agriculture is the backbone of our economy; property rights form a cornerstone of society; what is good for farmers is good for the nation; walking tracks across farms are a nuisance; walkers are a threat; the Queen's Chain⁷ is bad; there are few real access problems; a third of New Zealand is national park; there's nothing wrong with asking for permission⁸; it's always been done this way; it's common courtesy; access is a privilege; we are farmers, we know best'* (McDonald, 2011, 269).

Of course, there are a variety of worldviews held by rural landholders. Pete McDonald, a committed walker, explained that some, perhaps many, who have had their voices subdued in the recent debates over public access to leasehold land, 'accepted the need for change and was not antagonistic towards walkers' (McDonald, 2011, 290).

The concessions offered in the new pastoral lands policies of the current National Government in Wellington, were greeted according to the prevailing worldviews of the two main interest groups. The landowners 'High Country Accord' welcomed the new plan, saying that it would *'put to an end an unfortunate*



An emergency shelter hut at the top of McKinnon Saddle, Fiordland National Park
Source: Wikimedia Commons

era in which farming families were under constant attack by their own government' (High Country Accord, 2009). Forest and Bird said that *'the Government [had] set back progress in protecting New Zealand's iconic high country by a decade'* (Forest & Bird, 2009). The policy change, according to Forest and Bird's general manager Mike Britton, would mean that leasehold properties with significant landscapes would come *'under threat from subdivision, intensive agriculture and other inappropriate development if they [were] privatised'* (Forest & Bird, 2009).

The tension between the two worldviews are amplified because what is at stake is not just ownership of land, or even conservation, but control over the way in which the high country and New Zealand as a nation is imagined (Morris, 2009, 97). The run holders are losing their place as guardians of the nation. Their worldviews have been severely challenged as they assume a position that is no longer pivotal in the national identity. Perhaps, unspoiled nature is replacing a productive ruralism as the morally correct relationship of New Zealanders to the high country (Morris, 2009, 100).

Although high country pastoralists continue to constitute themselves through the discourse of the pioneer myth, a portrayal of the early settler battling against the elements to earn a living (Morris, 2009, 99) they are under siege from urban-based nature conservation and recreational organisations, global and local urban elites, overseas venture capital, film and advertising interests, hunters, shooters and fishers, cashed up tourists, dairy farmers, wine growers, electricity suppliers as well rabbits, invading hawkweed and wilding pines. Nevertheless, the image remains of down to earth values in contrast to city sophistication.

'Autumn musters; the desiccated Otago tors; the Mackenzie Country's tawny tussock carpet; the remote corrugated iron huts with names of sheltering shepherds scratched in their rafters; the 'red-gold cirrus/Over snow mountain shine' of James K. Baxter are part of a cultural heritage we all share and celebrate, no matter how deep in suburbia we dwell' (White, 2006, 42).

7 The New Zealand Oxford Dictionary (2004) defines it as 'a strip of public-access land (orig. one chain wide, now 10 to 20 metres) along coasts, lake-shores, and river-banks' (815)

8 Federated Farmers maintained that research shows 92% of farmers provide access to the public if first asked (McDonald, 2011, 276). However a 2001 Government paper explained that free public access had been curtailed in the 1990s with an increasing application of the user pays principle (McDonald, 2011, 277).

References

- Ansley, B. & Bush, P. (2012). *A Fabled Land: Mesopotamia Station*. Auckland: Random House Books New Zealand
- Beer, K., Caldwell, P., Gordon, F. & Hunter, B. (2006). *High Country Tenure Review: Implications for the conservation of braided river systems*. A report submitted in partial fulfilment of the Post-graduate Diploma in Wildlife Management. Dunedin: University of Otago. Retrieved May 2014 from <http://www.otago.ac.nz/wildlife/otago016044.pdf>
- Boland, J. (1995). *A Review of the Government System for Managing The South Island Tussock Grasslands: With Particular Reference to Tussock Burning*. Wellington: Office of the Parliamentary Commissioner for the Environment. Retrieved May 2014 from <http://www.pce.parliament.nz/assets/Uploads/Reports/pdf/Pre97-reports/A-Review-of-the-Government-System-for-Managing-the-South-Island-Tussock-Grasslands-with-particular-ref-to-Tussock-Burning-Oct-1995.pdf>
- Bray, D., McLean, R. & Wallace, P. (2007). *Sustainable Management of Historic Heritage Guidelines Discussion Paper No.5, High Country Tenure Review – Implications for Historic Heritage and Landscapes in the South Island High Country*, Wellington, NZ: New Zealand Historic Places Trust Pouhere Taonga. Retrieved May 2014 from <http://www.heritage.org.nz/-/media/heritage/documents/publications/smhh%20guidelines/discussion%20paper%20no5%20tenure%20review.pdf>
- Broad, H. (2013). *Molesworth: Stories from New Zealand's Largest High-Country Station*. Nelson: Craig Potton Publishing
- Brower, A. (2010). Land Rort Pakeha Style, *Architecture in New Zealand*, 1.42–5
- Brower, A. (2008). *Who Owns the High Country? The Controversial Story of Tenure Review in New Zealand*, Nelson, NZ: Craig Potton Publishing
- Butler, S. (1987). [1872] *Erewhon or Over the Range*. Auckland: Viking Press.
- Cairns, S. (2005). Welcome: opening the theme, in R. Lough (ed.) *High Country Landscape Management Forum: Proceedings*, Dunedin, NZ: Otago Regional Council. pp. 1–4, Retrieved May 2014 from <http://www.orc.govt.nz/Documents/Publications/Farming%20and%20Land%20Management/Final%20proceedings%20screen.pdf>
- Cumberland, K. (1943). A geographic approach to soil erosion in New Zealand, *Australian Geographer*, 4.5.120–131
- Deans, N. (2013). *National Parks? of our waterways? do they have any future under proposed Govt reform?* Retrieved May 2014 from <http://www.outstandingrivers.org.nz/events.html>
- Department of Conservation (2014) *Molesworth 2013–2014 season South Marlborough*. Retrieved May 2014 from <http://www.doc.govt.nz/Documents/parks-and-recreation/places-to-visit/nelson-marlborough/molesworth-brochure.pdf>
- Department of Conservation (2013). *Molesworth Management Plan*. Wellington: Department of Conservation. Retrieved May 2014 from <http://www.doc.govt.nz/Documents/about-doc/role/policies-and-plans/molesworth-management-plan.pdf>
- Department of Conservation (2013). *Map of Molesworth Station*. Wellington: Department of Conservation. Retrieved May 2014 from <http://www.doc.govt.nz/parks-and-recreation/places-to-visit/marlborough/south-marlborough/molesworth-station/plan-and-prepare/map-of-molesworth-station/>
- Department of Conservation (ND) *Molesworth Station, Acheron Accommodation House Interpretation Panels 1,2,3 & 4*. Retrieved May 2014 from <http://www.doc.govt.nz/Documents/parks-and-recreation/places-to-visit/nelson-marlborough/acheron-accommodation-house-interp-info.pdf>
- Dick, T. (2010). A walk in the woods. *Sydney Morning Herald*, May 15. Retrieved May 2014 from <http://www.smh.com.au/travel/activity/great-outdoors/a-walk-in-the-woods-20100514-v2xb.html>
- Dominy, M. (2001). *Calling the Station Home: Place and Identity in New Zealand's High Country*. Lanham, USA: Rowman & Littlefield Publishers
- Dominy, M. (1993). Photojournalism, Anthropology, and Ethnographic Authority, *Cultural Anthropology*, 8.3.317–337. Retrieved May 2014 from <http://www.academicroom.com/article/photojournalism-anthropology-and-ethnographic-authority>
- Eldred-Grigg, S. (1980) *A Southern Gentry: New Zealanders who inherited the earth*. Wellington: A.H. & A. W. Reed
- Federated farmers of New Zealand (2014). *Securing sensible high country pastoral rentals*. Retrieved May 2014 from <http://www.fedfarm.org.nz/advocacy/Successes/>
- Fish & Game New Zealand (2012). Forces unite to protect wild rivers, August 9. Retrieved May 2014 from <http://www.fishandgame.org.nz/newsitem/forces-unite-protect-wild-rivers>
- glenorchy-nz-com (2009). Retrieved May 2014 from <http://www.glenorchy-nz.com/VisitorInfo/HistoryoftheHeadoftheLake/tabid/80/Default.aspx>
- Gorman, P. (2013). High-country farmer subdivision profits released, *Fairfax NZ News*. Retrieved May 2014 from <http://www.stuff.co.nz/business/money/8659998/High-country-farmer-subdivision-profits-released>
- High Country Accord (ND) *The High Country of New Zealand: Help us protect our amazing heritage*. Retrieved May 2014 from <http://www.highcountryaccord.co.nz>
- High Country Accord (2009). *Farmers Welcome New High Country Policy*, 26 August. Retrieved May 2014 from <http://www.highcountrccord.co.nz/index.php?page=11>
- Holland, P. (2013). *Home in the Howling Wilderness: Settlers and the Environment in Southern New Zealand*, Auckland: Auckland University Press
- Hutching, Gerard 1986 High Country, High Drama, *New Zealand Listener*, March 1, pp. 14–16
- Hutchinson, N. (2013). World Views, A Story About how the World Works: Their Significance in the Australian Curriculum: Geography, *Geographical Education*, 26.12–24
- Johnson, B. (2013). *Govt plans will wreck river protection*, 22 March. Retrieved May 2014 from <http://www.outstandingrivers.org.nz/events.html>
- Kearsley, G. & Croy, W. (2000). 'Land Tenure Change in the South Island High Country and Its Implications for Recreation and Tourism in New Zealand', in M. Robinson, J. Swarbrooke, N. Evans, P. Long & R.Sharpley (eds.) *Environmental Management and Pathways to Sustainable Tourism, Reflections on International Tourism*, Sunderland, UK: Centre for Travel and Tourism and



Mackenzie Country and the Southern Alps. Source: Wikimedia Commons

- Business Education Publishers Ltd, pp. 113–123. Retrieved May 2014 from <http://divcom.otago.ac.nz/tourism/research/electronicpubs/highcountry/index.html>
- Land Information New Zealand (2013). *Molesworth Map*, Wellington: LINZ. Retrieved May 2014 from <http://www.linz.govt.nz/sites/default/files/docs/crownproperty/review-of-molesworth-mgmt-plan/molesworth-opening-map.pdf>
- Land Information New Zealand (2013). *South Island Pastoral Leases*, Wellington: LINZ. Retrieved May 2014 from <https://data.linz.govt.nz/layer/1572-south-island-pastoral-leases/>
- Land Information New Zealand (2003). *Molesworth Management Plan*, Wellington: LINZ. Retrieved May 2014 from <http://www.linz.govt.nz/docs/crownproperty/review-of-molesworth-mgmt-plan/molesworth-management-plan.pdf>
- Lloyd, K. (2008). *Ecological Processes in the South Island Pastoral High Country, Report no. 1955 prepared for the Parliamentary Commissioner for the Environment*, Dunedin: Wildland Consultants Ltd.
- Lough, R. (2005). (ed.) *High Country Landscape Management Forum: Proceedings*, Dunedin, NZ: Otago Regional Council. Retrieved May 2014 from <http://www.orc.govt.nz/Documents/Publications/Farming%20and%20Land%20Management/Final%20proceedingsscreen.pdf>
- McDonald, P. (2011). *Foot-tracks in New Zealand: Origins, Access Issues and Recent Developments*, Self published. Retrieved May 2014 from <http://homepages.vodafone.co.nz/~pete.mcd/ft/ft.pdf>
- McIntyre, R. (2008). *Whose High Country?: A History of the South Island High Country of New Zealand*, North Shore, NZ: Penguin Books
- Mark, A. (2005). Fifty years of snow tussock grassland research applied to high country landscape management, in R. Lough (ed.) *High Country Landscape Management Forum: Proceedings*, Dunedin, NZ: Otago Regional Council. pp. 43–54, Retrieved May 2014 from <http://www.orc.govt.nz/Documents/Publications/Farming%20and%20Land%20Management/Final%20proceedingsscreen.pdf>
- Molloy, B. (2005). Some impressions of high country landscapes 1950–2005, in R. Lough (ed.) *High Country Landscape Management Forum: Proceedings*, Dunedin, NZ: Otago Regional Council. pp. 61–44, Retrieved May 2014 from <http://www.orc.govt.nz/Documents/Publications/Farming%20and%20Land%20Management/Final%20proceedingsscreen.pdf>
- Morris, C. (2014). Art, action and tenure review: Landscape and politics in the high country of Aotearoa New Zealand, *Journal of Rural Studies*, 34. 184–192
- Morris, C. (2009). Land tenure and identity in the New Zealand high country, in F. Merlan & D. Raftery (eds.) *Tracking Rural Change: Community, Policy and Technology in Australia, New Zealand and Europe*, Canberra: ANU E Press, pp. 93–110. Retrieved May 2014 from <http://press.anu.edu.au/tracking/pdf/ch05.pdf>
- O'Connor, K. (2005). Lanship in landscape: some implications of people in acknowledging they belong to biotic communities in R. Lough (ed.) *High Country Landscape Management Forum: Proceedings*, Dunedin, NZ: Otago Regional Council. pp. 25–42, Retrieved May 2014 from <http://www.orc.govt.nz/Documents/Publications/Farming%20and%20Land%20Management/Final%20proceedingsscreen.pdf>
- Parry, V. (2009). (ed.) *Change in the high country: Environmental stewardship and tenure review*, Wellington: Parliamentary Commissioner for the Environment. Retrieved May 2014 from http://www.pce.parliament.nz/assets/Uploads/Reports/pdf/Change_in_the_high_country.pdf
- Pascoe, J. (1945). Canterbury high country: the sheep and sheepmen of the mountains, *New Zealand Geographer*, 1. 1, 19–39
- Pawson, E. & Brooking, T. (2013). (eds.) *Making a New Land: Environmental Histories of New Zealand*, Dunedin, NZ: Otago University Press
- Peden, R. & Holland, P. (2013). Settlers transforming the Open Country, in E. Pawson & T. Brooking (eds.) *Making a New Land: Environmental Histories of New Zealand*, Dunedin, NZ: Otago University Press, pp. 89–105
- Peden, R. (2011). *Making Sheep Country: Mt Peel Station and the Transformation of the Tussock Lands*, Auckland, NZ: Auckland University Press
- Relph, D. (2007). *From tussocks to tourists: The story of the central Canterbury high country*, Christchurch, NZ: Canterbury University Press
- Rosin, C., Dwiartama, A., Grant, D. & Hopkins, D. (2013). Using provenance to create stability: State-led territorialisation of Central Otago as assemblage, *New Zealand Geographer*, 69. 235–248
- Royal Forest and Bird Protection Society of New Zealand (2009). *Government Undermines High Country Protection*. 26 August 2009. Retrieved May 2014 from <http://www.forestandbird.org.nz/what-we-do/publications/media-releases/government-undermines-high-country-protection#.U37ZQcbArRo>
- Royal Forest and Bird Protection Society of New Zealand, (2005). *Tenure Review Fact Sheet*. 18 April 2005. Cited in P. McDonald (2011) *Foot-tracks in New Zealand*, p. 942
- Royal Forest and Bird Protection Society of New Zealand (ND). *New Zealand's high country – the case for continued public ownership*. Retrieved May 2014 from <http://www.forestandbird.org.nz/files/file/HighCountry.pdf>
- Scoop Media (2006). *Ngāi Tahu gifts Land of Tears to New Zealanders*, Wellington: Scoop Media Services Ltd. Retrieved May 2014 from <http://www.scoop.co.nz/stories/PA0607/S00135.htm>
- Scott, I. (2005). Where to now? in R. Lough (ed.) *High Country Landscape Management Forum: Proceedings*, Dunedin, NZ: Otago Regional Council. pp. 111–114, Retrieved May 2014 from <http://www.orc.govt.nz/Documents/Publications/Farming%20and%20Land%20Management/Final%20proceedingsscreen.pdf>
- Stephens, J. (2009). *Early Pastoralism in Marlborough*. Retrieved May 2014 from <http://www.theprow.org.nz/enterprise/early-pastoralism-in-marlborough/#.U30z7sbArRo>
- Swaffield, S. (1998). Contextual meaning in policy discourse: A case study of language use concerning resource policy in the New Zealand high country, *Policy Sciences*, 31: 199–224
- Stone, A. (2012). Storied lens on fabled land, *Otago Daily Times*, October 6. Retrieved May 2014 from <http://www.odt.co.nz/lifestyle/magazine/229100/storied-lens-fabled-land>
- Sutton, J., Tamihere, J. & Carter, C. (2003). *Government Objectives for South Island high Country*, NZ Cabinet Paper, August. Retrieved May 2014 from <http://www.linz.govt.nz/docs/supporting-info/about-linz/oia-hc-objectives.pdf>
- Te Rūnanga o Ngāi Tahu (ND). *High Country Stations*. Retrieved May 2014 from <http://ngaitahu.iwi.nz/ngai-tahu/the-settlement/settlement-offer/cultural-redress/ownership-and-control/high-country-stations/>
- Wallace, N. (2004). Options for farmers on leaseholds, *Otago Daily Times*, 17 November, pp. 36–7
- White, M. (2006) High Country Hijack, *North & South*, November, pp. 40–52
- Wright, J. (2012) Hydroelectricity or wild rivers? Climate change versus natural heritage. Wellington: Parliamentary Commissioner for the Environment
- Yarwood, M. (2014). *Citizenship*, London: Routledge