## Gone to rabbits and ruin



The now-barren flats of the Mackenzie Basin are a sorry reminder of what were once spectacular short tussock grasslands. They have now succumbed to the combined effects of grazing, rabbits and Hieracium. Photo: Mike Harding.

PINIONS VARY over the causes of the recent explosion in rabbit numbers. The most commonly cited reason is that efforts to control rabbits were reduced following the removal of taxpayer subsidies during the 1980s.

Rabbits now thrive in the drier basins and valleys where conditions are particularly favourable, resulting in uncontrolled overgrazing of grasslands. About 280,000 hectares of high country land is regarded as 'rabbit prone' and 100,000 hectares of this is considered to be severely infested.

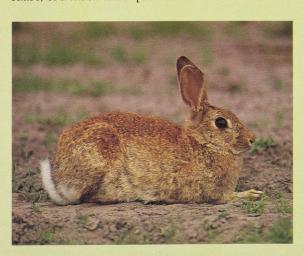
Calls for the introduction of myxomatosis led the Parliamentary Commissioner for the Environment to recommend, in 1987, that a five-year integrated programme of rabbit control and land management be established. The Rabbit and Land Management Programme has targeted rabbit-prone properties, establishing integrated land management methods through property plans. It is too early to judge its success but it has arrested and reduced rabbit numbers in some areas and sown the seed of future sustainable land use. Most importantly, it has changed attitudes towards pest control and land management.

It is now clearly acknowledged that rabbits are a symptom, rather than the cause, of a much wider problem of land

degradation. Any response to high pest numbers must also address the decisions that led to the high population in the first place.

The cost of rabbit control, and the development of bait shyness in some areas, has led to renewed calls for the introduction of myxomatosis. But, as Morgan Williams, Director of the MAF Rabbit and Land Management Programme, puts it, "The real debate is not about the kindest way to kill a rabbit. It is about how we prevent the death of a fragile piece of New Zealand. We will leave future generations the corpse of an entire region if we continue to argue about which painkiller to use on a near terminal patient when what is needed is some swift medical surgery followed by a change of lifestyle."

Regional councils and high country farmers have teamed together to apply for the introduction of myxomatosis, a process which will involve feasibility studies and an Environmental Impact Report. There is no guarantee that it will be effective, and its introduction would be about three years away at the earliest. Myxomatosis is only another control method, not the solution to the problem. In the end land management techniques will have to be adopted that do not favour rabbits. We may as well start now



Rabbits are a major pest in the drier areas of the high country. Mismanagement of the land through stock overgrazing has created the ideal rabbit habitat. Photo: Andris Apse (MAF Technology)

ism may no longer be feasible in many areas. Anyone visiting the Mackenzie Basin today could not help but agree that we are now witnessing land degradation on a scale not seen before in this country.

Burning and grazing have not been the only causes of change in the high country. Many of the more fertile productive flats and terraces have been cultivated for pasture or cropping, often accompanied by irrigation and shelter belts. Grasslands on montane slopes have been oversown with introduced grasses and legumes, and topdressed with fertiliser, promoting a green flush across the golden tussock slopes. Wetlands have been drained or damaged by unrestricted stock access, leading to enrichment of water bodies and the loss of habitat for fish and water birds. Exotic trees have been planted for shelter or commercial forestry; large areas of tussockland are now threatened by uncontrolled wilding tree spread.

Gigantic hydro-electricity schemes have transformed the Mackenzie Basin and Clutha Valley, and there is increasing pressure for tourist development at key scenic and recreation sites. These changes have been at great cost to the native vegetation and to the distinctive high country landscapes.

Native grasslands, forest remnants and shrublands have been destroyed and populations of rare and endangered plants and animals threatened. Central Otago lizards have been decimated by modification of their habitat and predation by introduced cats and ferrets. Bog pine shrublands and rare plants found within them, such as *Hebe arm-strongii*, are now confined to very small areas. Specialised plants of limestone substrates, such as the Castle Hill buttercup, a variety of *Ranunculus crithmifolius*, and delicate turf plants have, in many places, been browsed or trampled to death.

The whole tussockland ecosystem has been, and continues to be, altered by the introduction of plants and animals. No longer is there the proliferation of ground birds that the Maori and early runholders spoke of, or the extensive wetlands supporting an abundance of eels and other fish. Continued landscape modification by thoughtless design and insensitive development is creating a clashing patchwork of contrast, and gradually consuming a scenic landscape unique to New Zealand.

Sadly neglected

Protection of the great tussock grasslands of the high country has been sadly neglected. The sweeping high country scenery, so frequently painted and photographed, is gradually disappearing in many areas.

The problems of sustaining pastoralism and yet protecting the natural values of the high country have been with us since the first runs were taken up about 140 years ago. Most high country land is Crown land, owned by the people of New Zealand, and leased for grazing under the Land Act 1948. In 1990 this totalled 2.85 million ha, contained in 349 pastoral leases and 29 pastoral occupation licences.

Pastoral lease tenure gives the lessee the exclusive right of pasturage within prescribed stock limits, exclusive rights of occupation, and perpetual rights of lease renewal. The leases are administered by Landcorp, on con-