



MIKE HARDING

Cattle cause severe damage to the banks of lakes and rivers, pugging soil, trampling plants and reducing water quality.

very expensive. Besides, fences and gates are usually the last thing people want to see when they leave the farmland to venture into backcountry parks and reserves. The role domestic stock play in maintaining favourable grazing conditions for other introduced animals is unclear, though possums will travel long distances from adjoining forest to feed on short grassland.

Introduced predators may also benefit from domestic

stock. Animal carcasses provide a ready meal for wild cats and stoats, sustaining higher populations of these predators. The short-cropped grasslands may also aid predator dispersal.

Domestic stock also spread weed seeds. Small hard seeds pass through the gut of grazing animals to be deposited elsewhere in dung. The occurrence of sheep's sorrel (*Rumex acetosella*) throughout the eastern South Island, from valley grasslands to alpine shingle screes, is a good example. White clover (*Trifolium repens*) is also spread by grazing animals. Pasturing stock on grassland with white clover before sending them out to backcountry blocks is a traditional method of establishing this important grazing plant in remote areas. Ground bared by trampling provides favourable sites for weed invasion, and increased fertility from dung often benefits introduced species. Wool, hair and hooves can carry seeds long distances and have been implicated in the spread of ragwort (*Senecio jacobaea*) in river valleys. Some grazed areas within parks have even been oversown with introduced pasture grasses to improve grazing.

maintain tussock cover by preferentially browsing competitive introduced grasses. Tussock grasslands are also susceptible to the invasion of introduced woody shrubs or herbaceous weeds. Controlled grazing may be a cost-efficient way of limiting shrub or weed growth. However, there is increasing evidence that grazing patterns influence the susceptibility of a grassland to the invasion of hawkweeds (*Hieracium* spp.). These opportunistic plants exploit exposed ground and out-compete native species. Increased long-term monitoring is required to determine whether grazing is beneficial in conserving particular values, such as maintaining tussock cover.

Grazing at Glenorchy, Mt Aspiring National Park

THE FOREST up valley from the fence was inspected and found to be in a very poor state due to excessive browsing from cattle. There is the main beech canopy but no sub-canopy or replacement forest.

Regeneration and seedlings on the forest floor are virtually non-existent. There are the occasional subspecies of horopito, coprosma, and totara which have been heavily browsed.

As the canopy forest matures and falls there is no replacement regeneration to provide an acceptable healthy cycle . . . Regeneration is establishing well in areas where cattle have difficult access e.g. steep banks.

The track has suffered as a result of stock movement but this would have been the normal situation over many years.

Mud holes are common with deep ruts in soft erodible soils."

Report by Senior Ranger B. Ahern, February 1977

EACH YEAR millions of dollars are spent controlling wild animal populations. Yet domestic stock continue to graze within some of the most important protected natural areas in the country. Most of this grazing occurs under DoC licences or permits.

In its recently-released draft grazing policy DoC proposes to restrict grazing to 5-year licences with reassessment before renewal (see panel, page 35).

Light grazing by sheep can sometimes be beneficial to native plant communities. Monitoring of silver tussock grasslands has shown that sheep help

SEVERAL CONSERVATION boards and DoC conservancies are presently tackling the issue of grazing on conservation lands. At Mavora Lakes Park the Southland Conservation Board has decided that grazing is inappropriate and has recommended that grazing cease (see panel).

Also in Southland, debate over grazing in the Eglinton Valley has raged in the local papers. Farmers have backed the owners of Te Anau Downs, who graze the adjoining Eglinton Valley, claiming they are dependent on continued grazing of the national park. However, the lack of regeneration at the forest margin and the presence of sheep within the beech forest have alarmed conservationists and park managers. The red and silver beech forests of the Eglinton Valley are an important refuge for the endangered yellowhead and the site of important research into the ecology of forest birds and predators. Continued grazing of the park by domestic stock begs the question whether the park's primary purpose is nature conservation or to provide off-site benefits for