



STRETCHING FROM the broken greywacke ranges of Marlborough and Canterbury to the rounded schist summits of Otago, the South Island high country is a special part of the natural and cultural heritage of New Zealand. The legendary names of Molesworth, Mesopotamia, Mackenzie, and Mavora evoke images of dramatic open landscapes, tawny tussock grasslands, and a rugged back country life. But a century of pastoralism has taken its toll on this unique and fragile land, and now the survival of these native tussock grasslands, and the fine wool industry based upon them, is seriously threatened.

The South Island high country spans over 3 million hectares of the South Island's eastern flank - 10 percent of New Zealand's land area. Spreading between the low country of the hills and plains and the broken snow-capped ranges of the Southern Alps, this spectacular landscape has been sculptured by glaciers

and cut by great rivers. Its distinctive vegetation is conditioned by the extremes of a harsh inland climate.

Windswept snow tussock grasslands, fragile cushion bogs and other wetlands, rich native shrublands, and beech and totara forests are its characteristic images. But today stark bright squares of green pasture stand out where there was once an unbroken sward of tussock. On the barren flats of the dry inland basins, native wildlife has been displaced by sheep and rabbits.

Country in crisis

There is a crisis in the high country. The main problem areas are the grasslands of the dry basins of Central Otago, the Mackenzie and Molesworth. Dramatic changes in management, attitudes, and expectations are required to prevent these areas turning into permanent wastelands, to protect their natural features, and to ensure a long term future for

pastoralism.

Native tussock grasslands once covered millions of hectares, predominantly in the eastern South Island high country, the alpine tops of the main divide, and on the volcanic plateau and axial ranges of the North Island. Thousands of years of evolution has adapted the tussock grasses to the harsh conditions of the high country climate. The long-lived bunched tussock grasses can cope with strong winds, snow, periodic drought, fire and extremes of temperature. They are as characteristic of the New Zealand flora as the cabbage tree or the kauri.

Tussocks flourished in the eastern South Island high country, dominating the main grassland communities. Their natural distribution was determined by rainfall, temperature, soil fertility, and past disturbance, reflecting the phases of vegetation change dating from the last glaciation. Metre-high snow tussocks formed extensive grass-