

Now narrow-leaved snow tussock (Chionochloa rigida) is mainly found south of the Rakaia river; slim snow tussock (Chionochloa macra) is dominant north of the Rakaia, and at higher altitudes on the South Canterbury and flat-topped Central Otago mountains. Broad-leaved snow tussock (Chionochloa flavescens) is widespread on rubbly slopes of the Canterbury mountains. Further west, on the wet Main Divide mountains, mid-ribbed snow tussock (Chionochloa pallens) and curled snow tussock (Chionochloa crassiuscula) dominate above the treeline. More widespread is red tussock (Chionochloa rubra) which favours damp valley floors or poorly drained rolling country and old moraines. Once covering most of the Southland Plains, it has now been all but eliminated from lowland sites. Short (fescue) tussock grasslands, dominated by Festuca, but often with Rytidosperma and Poa species, are pre-

sent on low altitude or well drained sites such as basins, riverbeds and plains.

The distribution of tussock grasslands today results from a complex history of succession following the retreat of the glaciers, widespread fire, and then accelerated change through the development of pastoralism. Botanist Colin Burrows' analyses of pollen and macro fossils from deposits near Cass in Canterbury show that tussock grass-

The high country is home to the world's only alpine parrot, the inquisitive kea. In the last 140 years sheep have invaded the kea's habitat, causing tensions to rise between environmentalists and runholders when the birds are shot for harrassing sheep. This adult bird yawns after feeding on flax nectar. Photo: Mike Harding.