

The following winter there was a remarkable incursion of opossums into huts on or near the timber line along the northern half of the range from No Man's to the Waikamaka, and accompanying this repeated reports of opossum tracks and signs at the timber line, particularly in snow.

Rats and Mice

Rats are commonly established near huts, but over a period of nearly 30 years I have seen little sign of them in the bush or round temporary camps. The first observations of mice were made in the Makaroro area in the winter and spring of 1955. They were repeatedly remarked on all through the forest in October and November of that year, one informant stating that drowned mice were frequently seen in the river and that a bush-line camp was infested with them (W. Romanes, pers. comm.). In the following new year mice were abundant in the Mokai Patea tussock (B. G. Hamlin, pers. comm.) and there was a sizable colony at No Man's Hut. Over this period a similar eruption occurred in the Kaweka and Kaimanawa Ranges, and a connection between this and the mast fall of the previous autumn may be postulated. Numerous mouse plagues, some associated with mast years, are recorded from the South Island, but only one previously from the North Island, at Rangataua and apparently following a mast year in 1949.

Pigs

Fifty years ago pigs are said to have been abundant in some of the eastern valleys of the Southern Ruahine but to have almost completely disappeared since. Over the past 25 years a scattered and apparently fluctuating population has been observed on the lower slopes throughout the range.

Mustelids

Three stoats were observed playing together in the Herrick's hut area in November 1955 (W. Romanes). To my knowledge this is the sole record of any species.

INTRODUCED ANIMALS: EFFECTS

Deer

As early as 1932 mountain-beech forest was already a shell on the slopes of the NE plateau, which was the area of the densest deer population. Nearly all undergrowth had then been browsed out in some basins, even the beech seedlings.

As deer population increased southwards along the range the pattern repeated itself in the forest, and by 1937 damage to alpine scrub was apparent in the headwaters of the Waikamaka and Kawhatau Rivers (Kean and Newcombe). Some of it, such as the browsing of *Olearia colensoi*, is surprising at such an early date, while the barking of *Pittosporum rigidum* is quite unusual, being in fact generally regarded as browse resistant. An observation of importance at that date is that *Blechnum capense* on valley walls was then rapidly disappearing. This fern typically flourishes on steep faces of loose soil which are vulnerable to slipping. There is little evidence today that it was ever an important species.

In the Makaroro area recent investigation shows a marked gap in beech regeneration between 1930 and 1940 which coincides with the apparent peak of deer population (Widdowson, Ellis).