

During the 1914-18 war an upsurge of rabbits over the Inland Patea affected both Mangaohane and Otupae seriously. On Otupae it took an intensive three-year campaign to suppress them and a further four years before they were completely eliminated (J. B. Campbell, pers. comm.).

Within the range small colonies of rabbits have been seen intermittently over the past 25 years, mainly on the NE plateau and on Weka Flat in the upper Kawhatau valley. My most recent records are No Man's (October 1956) and Weka Flat (January 1961), and rabbits have also been glimpsed at the head of the Mokai Patea plateau just below Rongotea trig (January 1961).

### *Red Deer (Cervus elaphus)*

The two earliest red deer liberations in the North Island were in the Wairarapa (3) in 1862, and at Matapiro (11) in 1883. The latter, only six miles east of the range on the northern bank of the Ngaruroro, is clearly enough the main source of the Ruahine herds, though it must be noted that as early as 1867 or 1868 a stray stag which could only have come from the Wairarapa herd had appeared on Tutira, well to the north of the Ruahines (Guthrie-Smith, p. 336).

By 1890 a few deer had reached the spurs of the range behind Kereru, the nearest point to the Matapiro liberation (L. Masters), while a cast antler on Deer Horn Hill (1900) farther south was equidistant from both liberations (K. Severinsen, pers. comm.).

On Whanawhana, immediately north of the range and across the Ngaruroro, the first deer were not seen until 1906, were becoming a menace by 1910, and reached their peak of population in the late 1920s; numbers started to decline in the mid-1930s (E. H. Beamish, pers. comm.).

On the range itself deer were reported above the timber line on No Man's Land by 1910, and tracks were seen as far south as Tiraha at the head of the Tukituki in that or the following year. Deer were also reported on the western side of the range (Mokai Patea, Mangaohane) from 1910 onwards (L. Masters, F. Severinsen, T. V. Morrin).

There were three small liberations on the western side about this time, in the Kauwhatau (5) in 1908, in the Oroua (4) in 1914 and south of the Pohangina at Delaware (4) in 1922. These can have been little in advance of the first spread of animals from the northern end of the range.

By the mid 1920s there was a dense population on the northern plateau; the forest floor was bared and roots were exposed (L. Masters). Between 1933 and 1935 there was evidence of a fairly rapid southward shift accompanied by the development of a strong track system, particularly towards the head of the Waipawa River. By 1935 there was sign of deer along the whole line of tops from the Ngamoko Range to Kereru, with a steady increase as one proceeded from south to north. In this year exposure of the forest floor by trampling became particularly noticeable in the head of the Waipawa, and from 1939 onwards new slips in both the Waipawa and the Makaroro Rivers have been frequent.

Kean and Newcombe's report (1937) on a crossing of the range early in that year shows clearly that deer had then reached a more advanced stage of occupation in the extensive western valleys than on the divide itself and the eastern slopes. This report repays close study at the present day as it gives detail about browsing patterns and preferences from evidence which is no longer available.