

TRANSACTIONS
OF THE
ROYAL SOCIETY OF NEW ZEALAND

BOTANY

VOL. 2

No. 1

DECEMBER 7, 1962

Vegetation of the Kaimanawa Ranges

By N. L. ELDER

[Received by the Editor, November 10, 1961.]

Abstract

THE Kaimanawa Ranges occupy an area between the volcanic plateau and the axis ranges of the North Island of New Zealand, and being thus sheltered from prevailing winds are drier and sunnier than the surrounding mountains except at their northern extremity. Most of the surface has been covered with ash to a depth of several feet from the Taupo eruptions, the latest of which occurred within the last 2,000 years and destroyed the previous vegetation over a large part of the area. Regeneration is most advanced nearest the eruption vents where both podocarp and beech forest has re-established itself, but to the south and east forest becomes intermittent and red tussock dominates extensive areas. At the southern extremity, towards the margin of the ash showers, forest islands having affinities with Rangataua and Ruahine forests to the west and east are probably relics of pre-eruption forests.

Maori burning within the last 300–400 years and more recently European burning and grazing and the browsing of introduced deer have affected the vegetation patterns and composition.

LOCALITY

KAIMANAWA is a general term for the series of ranges which lie between the central volcanoes of the North Island and the axis ranges, but the name is loosely applied. The "Kaimanawa Survey District" lies on the southern periphery and the "Kaimanawa" trig is also outside the main mountain system. For the purpose of this survey the Kaimanawa Ranges (Map 1) are considered to be the high country which lies between the Inland Patea Road, the Desert Road, the southern boundary of the exotic plantations on the Kaingaroa Plains, and the trough occupied by the Taharua and Oamaru tributaries of the Mohaka River and the upper courses of the Ngaruroro and Taruarau Rivers. This trough thus separates the Kaweka and Kaimanawa range systems.

This gives an area roughly oblong, 55 miles by 25, extending from 38° 50' S to 39° 30' S and from 175° 45' E to 176° 12' E.

TOPOGRAPHY (Map 2)

Published maps do not fully indicate the topographical patterns, but they can be considered as falling into four topographic units.

(1) The northern portion consists of a continuous narrow greywacke ridge, on the eastern side of which lies a number of conical peaks (Fig. 1) connected by obscure saddles, this portion thus resembling the Ahimanawa Range, which