A SECOND NORTH ISLAND LOCALITY FOR PACHYORNIS ELEPHANTOPUS (OWEN)

R. J. SCARLETT, Canterbury Museum

Some years ago excavations for a road in the Waipukurau area revealed a number of Moa skeletons beneath an accumulation of pumice. I have examined many bones which were recovered from this site. Unfortunately, before scientific work could be done and the birds removed as skeletons, the bones were scattered so that now one deals with odd bones. Among them, however, were many specimens of a *Pachyornis,* far bigger than *Pachyornis mappini* Archey, the larger of the two hitherto recorded for the North Island. *Pachyornis elephantopus* was a very variable bird and in the past was split into several "species" which modern workers regard as invalid.

The Waipukurau bones range from the lower bracket of South Island *elephantopus* to slightly smaller. I had been thinking in terms of a small population of this species migrating across the old Cook Strait land-bridge and remaining as an isolated breeding group in the Waipukurau area. However; on 21 October, 1967, with David and Carol Medway and other members of the Taranaki Caving Club, I was in Skyline Cave, in the Mahoenui district, North Taranaki, and while there we removed a number of scattered moa bones. Among them were two pieces of a right tibio-tarsus encrusted with limestone and mud. After the bones had dried somewhat David sent them to me at Canterbury Museum and, after cleaning, the two pieces were joined to form a complete bone. The break, an old one, is about mid-shaft and joined very nicely. To my surprise it proved to be *Pachyornis elephantopus,* now C.M.AV. 21,480. The measurements are: length 48.6; proximal width 13.6+ (the bone is slightly abraded); mean 4.6; distal width 7.7 c.m. The range of South Island tibio-tarsi of *Pachyornis elephantopus* is from:

	L.61	P.20.3	M.6.1	D.11.3	maximum
to	45.7	14.3	4.3	8.4	minimum

It will be seen that the Skyline Cave bone fits well within this range. It must be stressed that many other factors besides size are used in determining species from odd bones. The tibio-tarsus under consideration is a typical *Pachyornis* in curvature of shaft, of the pronounced "bulge" of the inner surface at the distal end and other features.

The find has already attracted some newspaper publicity but it seems desirable to place such an extension of the range of this species in a scientific journal.