SHORT NOTES

A beach-wrecked Red-tailed Tropicbird

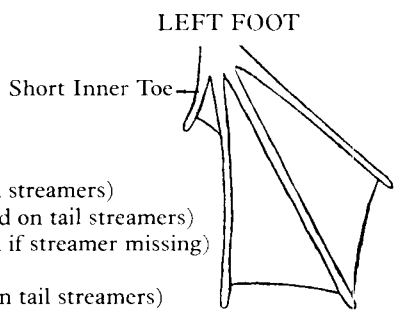
On 14 April 1984, we found a Red-tailed Tropicbird (*Phaethon rubricauda*) washed up on Northland's west coast half-way between the Schick's Road access and Tikinui Stream, south of Te Kopuru. The bird was dead but in good condition.

Description: White with pink tinge. A black mark extending from gape, up in front of eye, through eye and 12-13 mm behind eye. Feathers on top and back of head with black bases when parted (feather and quill base). These are not visible normally. Underwing white. Black markings on longer feathers at back of elbow (tertiaries). A few grey and black marked feathers on flanks under wings. Eight primaries. Primary quills white below, black above, except for the thin tips (last 25-35 mm of quill). Quills of tail feathers white below and black above, except for the streamers which have black quills above and below. The tail streamers are white at the base and red on the part that protrudes beyond the rest of the tail feathers. A few black marked feathers on rump and sides of tail. Feet black. Webbing between all four toes as in shags, gannets and pelicans, but the innermost toe is reduced in length compared with other Pelecaniformes (see sketch).

Bill red with black nostrils and nasal groove.

Measurements (mm)

Bill:	Length:	69.16
	Width:	14.80
	Depth:	24.02
Foot:	Tarsus:	32.85
	Mid-toe & claw:	50.80
Body:	Wing:	358
	Wing span:	1170
	Length:	770 (to end of tail streamers)
		536 (to start of red on tail streamers)
		521 (to end of tail if streamer missing)
	Tail:	100 (tail proper)
		115 (start of red on tail streamers)
		348 (end of streamer)



Ectoparasites

Two species of ectoparasites were collected and sent to the DSIR for identification.

1 *Saemundssonia hexagona* (Giebel 1874), a species of Mallophaga or bird louse. The sample contained four males, nine females and four nymphs. It "represents the first record for the New Zealand mainland and the second for the New Zealand subregion, the first being a single female from the Kermadecs. Actually *S. hexagona* has never been found in large numbers and the *total* holdings among major museums of the world are not more than a few dozen!" (Ricardo Palma, pers. comm.)

2 *Laminalloptes simplex* (Trouessart 1885), a feather mite. This species' genus is currently placed in the superfamily Analgoidea family Alloptidae. The

genus *Laminalloptes* is ectoparasitic on tropicbirds (*Phaethon* spp.) and frigatebirds (*Fregata* spp.) but this species has only been found on the three tropicbird species *P. aethereus*, *P. lepturus*, and *P. rubricauda*. "Nothing has been documented from field work," but it is suspected "that these mites occur on the ventral surfaces of the flight (and possibly tail) feathers" (W. T. Atyeo).

We are grateful to Ruud Kleinpaste of the MAF Plant Protection Centre for organising the identification of the ectoparasites and to Ricardo Palma of the National Museum and Professor Warren Atyeo of Georgia University, USA, for identifying them.

PAT and KAREN MILLER, *29 Murdoch Crescent, Whangarei*

A case of co-operative rearing in wekas

Polygamous associations are frequent in some species of gallinules (Craig 1974, Garnett 1980), and polygamy or helping has been observed in other species, including the Inaccessible Island Rail *Atlantisia rogersi* (Watson 1975), the European Coot *Fulica atra*, the Red and White Crake *Laterallus leucopyrrhus*, and the Black Crake *Porzana flavirostra* (Krekorian 1978). Guthrie-Smith (1914) is the only author to report a non-monogamous association in wekas. He found a male with two females and thought that they might be raising chicks.

In the first four years of a study of the weka *Gallirallus australis* on Kapiti Island (Beauchamp 1986) no polygamous matings were found in the 36, 47, 48 and 49 bonds examined in the respective years. Breeding and parental care seldom overlapped and subadults generally deserted parental territories before their parents' later breeding attempts. Any chicks of the previous clutch that stayed in the parental territory were chased out by their parents when chicks appeared, precluding helping.

When I returned to the study area for a quarterly visit in December 1983 I found a trio of colour-banded birds together raising a chick 18 ± 3 days old. The male, which had occupied the territory for at least 6 years, was associated with two females. The older was a 4-year-old bird he had paired with in March-April 1980 and remained with since, raising a chick in the summer of 1981-82. The other female had entered the population as a subadult in January 1981 and thereafter maintained a home range which included part of this territory.

During December 1983, all three exchanged contact and territory calls together, performed the well-known evening-chorus spacing call as a trio and uttered contact and distress calls to the chick. The older female undertook most of the immediate parental care.

To my knowledge the adults had no close kin relationship. The younger female was not a chick of the older birds as they had not bred successfully the year she was raised. However, there is a slight possibility that the adults were fairly closely related, as my previous work has shown that some young take up territorial positions near their parents' territory. Most of the young dispersed further.