

SHORT NOTE

Tomtit killed by a worm

This record describes the unusual cause of death of a male South Island Tōmtit (*Petroica macrocephala macrocephala*) found hanging from a *Coprosma propinqua* twig at the edge of Beer's Pool, Upper Waiau River (45°27' S, 167°41' E) on 4 May 1991. The collector, John Hall-Jones, thought it might have been caught in fishing line. Close inspection revealed that the bird's leg and the twig were bound together by a Gordian worm (Figure 1). The Gordian material recovered was some 16 cm long and a rehydrated portion about 0.5 thick; it was identified from the characteristic pattern of cuticular areols and inner fibrous layer of about 45 strata.

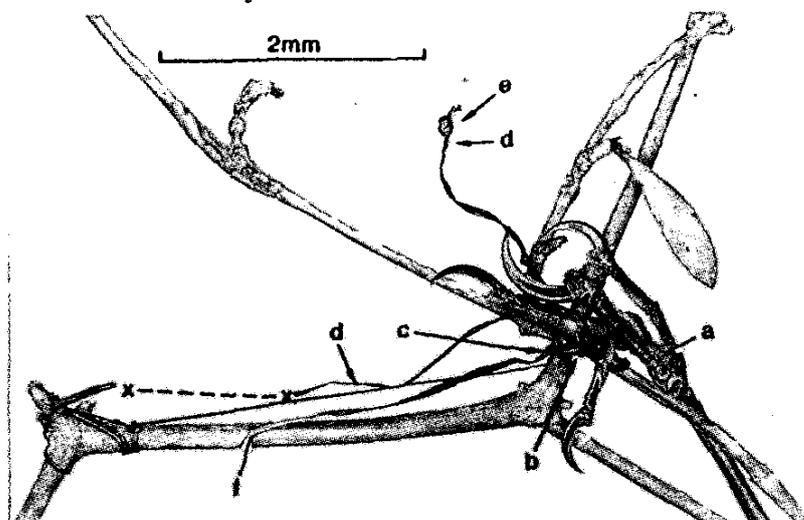


FIGURE 1 — Leg of tomtit and two twigs bound together by a Gordian worm. Arrows indicate the following: (a) turns of Gordian binding toes together, (b) turns of Gordian binding foot of tomtit to twig, (c) twisted threads of Gordian binding twigs together, (d) "knots" constricting the Gordian, (e) bilobed posterior of ?male Gordian, (f) broken end of worm, x - x length of Gordian removed for microscope study.

Gordian worms (Phylum Nematomorpha) are worm-like parasites of invertebrates. In New Zealand, wetas, grasshoppers, spiders and beetles have all been found to be infected. Free-living adults, up to 1 mm wide and 360 mm long, are often found in ponds and quiet streams (Maggenti 1981, *General Nematology*, New York: Springer-Verlag).

The tomtit may have caught the Gordian worm and become entangled as it perched on a twig to eat it, or it may have eaten an insect which was parasitised by the Gordian worm. A tomtit usually breaks up a large insect before eating it, and the worm's movements could then entangle the tomtit.

John Hall-Jones collected the specimen; Dave Crouchley, Department of Conservation, sent it to us; comments were made by Mike Meads.

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