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 $A\ Guide\ to\ Authors\ is\ displayed\ at\ the\ Queensland\ Museum\ web\ site\ www.qm.qld.gov.au/organisation/publications/memoirs/guidetoauthors.pdf$

A Queensland Government Project Typeset at the Queensland Museum SPOTTED-TAILED NORTHERN QUOLLS, *DASYURUS HALLUCATUS*: A PRECAUTIONARY TALE. *Memoirs of the Queensland Museum 49(2): 760. 2004:*- All Quoll, Dasyurus species are characterised by their pale-spotted pelage. Only the Spotted-tailed or Tiger Quoll Dasyurus maculatus, is acknowledged as having spots on its tail as well as its body, and this is used as a defining characteristic of the species in all field guides and reference works (e.g. Strahan, 1995; Queensland Museum, 2000; Menkhorst, 2001). In this note we report upon the prevalence of spotted tails on Northern Quolls *D. hallucatus* from a population at Cape Cleveland (147°03E' 19°16'S), near Townsville, north Queensland and within the collections of the Queensland Museum. No specimens from the Northern Territory or

Western Australia have been examined. Nineteen *D. hallucatus* (15 females: 4 males) were live trapped at Cape Cleveland during 120 trap nights during 1-4 June 1999. Of these, 5 females had spotted tails. The spots on these tails were typical of the dorsal and lateral spots on the body of D. hallucatus, being for the most part small and fleck-like compared to larger and more prominent spots on D. maculatus. The spotting was none-the-less obvious when the animals were being handled and in 2 cases while still in the trap, prior to handling. In 3 of the 5 spotted-tailed individuals, the spotting consisted of 1 or 2 small but discrete white flecks on the dorsal and/or lateral surface about mid-way down the tail. In 2 other individuals, 2 conspicuous spots occurred on the dorsal and lateral surface of the tail at its base and about

mid-way down its length respectively.

Of 37 dry and spirit specimens of *D. hallucatus* in the Queensland Museum 7 (3 males, 3 females and one unsexable specimen), also exhibited spotting on the base and midway along their tails, similar to that described above. These spotted-tailed individuals originated from Gympie (SE Qld), Walkamin, Shiptons Flat, and the Cooktown area (NE Qld). The paratype of D. h. predator, locality Cape York Peninsula, is also among these spotted-tailed individuals.

While the extent of spotting on the tails of these D. hallucatus is not nearly as intense or prominent as the tail spotting of D. maculatus (Fig. 1), spotted tails are not unique to D. maculatus. Field guides need to take this into account to avoid misidentification of Northern and Spotted-tailed Quolls. With experience, the two quoll species are easily distinguished on the basis of body size, patterning and head shape, however to the uninitiated, the length of the pes provides an infallible method for identification of the 2 species. In *D. maculatus* pes length (measured from the back of the heel to the end of the longest toe but not including the nail), is never less than 57mm (n = 53), in D. hallucatus never more than 51mm (n = 26).

Acknowledgments

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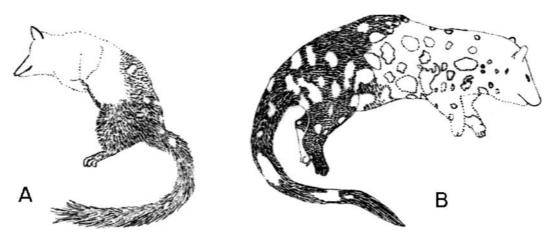


FIG. 1. Tails of (A) D. hallucatus and (B) D. maculatus showing the nature of spotting in both species. Drawings taken from photographs of anaesthetised quolls captured on the Mt Windsor Tableland, north Queensland.