

**A SPECIMEN RECORD OF WHITE-BELLIED STORM-PETREL FROM FRASER ISLAND, SOUTHEAST QUEENSLAND.** *Memoirs of the Queensland Museum* 48(1): 123-124, 2002:- The White-bellied Storm-petrel (*Fregetta grallaria* Vieillot, 1817) lives in Southern Hemisphere subantarctic, subtropical and tropical waters (Marchant & Higgins, 1990). Four subspecies breed on isolated groups of islands and differ primarily in morphometrics (Table 1). The nominate subspecies breeds on Admiralty Island (Roach), Lord Howe Is and Kermadec Group (Macaulay and Curtis Is.) and is the closest known form to E Australia. *F. g. leucogaster* is of similar size to *F. g. grallaria* and breeds on Tristan da Cunha Group, Ill St Paul and Amsterdam Is (Elliot, 1957; Jouventin, 1994.). *F. g. segethi* is small and breeds on Juan Fernandez Is (Marchant & Higgins, 1990). *F. g. tilan* is the largest subspecies, breeding on central Pacific Rapa Is and the Austral Group (Murphy, 1928).

Breeding biology is poorly known; at Lord Howe Is. Egg-laying begins in late January- February (Hindwood, 1940) with offspring fledging in May (Mathews, 1928). *F. g. leucogaster* (Marchant & Higgins, 1990) and *F. g. segethi* (Bent, 1922) are also summer or late summer breeders. After breeding they disperse and become largely pelagic in subtropical and tropical waters feeding on cephalopods and crustaceans (Marchant & Higgins, 1990).

Status of the White-bellied Storm-petrel in Australia is poorly known; sight-records from the Coral Sea (Stokes & Corben, 1985), Tasman Sea (Norris, 1967), offshore SE Qld and N NSW (Marchant & Higgins, 1990) and inshore at Point Lookout, North Stradbroke Is. (Palliser, 1985); and a beach-washed specimen at Eaglehawk Neck, Tasmania in 1928 (Fletcher, 1947).

We describe a bird from 2km S of Poyungan Rocks, Fraser Island (25°25'S, 153°10'E) on 24 March 1999. The intermediate morph in good condition, Queensland Museum specimen Q31230 has uniform sooty black upperparts, with

white uppertail coverts producing a sharply demarked white band above the base of the tail. Upperwings including primaries uniform sooty black; secondaries dark sooty brown. Most feathers on upperparts and wings, including the main flight feather tracts, in advanced stage of wear; some feathers on the mantle black, with white tipping (i.e. freshly moulted) indicating beginning of a body moult.

Head, chin, throat and upper-breast grey-brown shading to a white lower breast and abdomen (Figs 1, 2). Chin and throat feathers uniform grey-brown to their bases. Flanks white with short dark barring and mottling; on the right hand side a dark mark from the flanks separating white uppertail coverts from the underbody. Lateral undertail coverts black with white tipping to the feathers, enclosing the white central under tail covers having broad dark bars; this dark barring and mottling indicating an intermediate phase bird. Undertail sooty dark brown. Undersurface of the primaries and secondaries sooty dark brown, with the underwing lining white. Underwing with a broad but irregular shaped blackish leading edge enclosing the white lining.

Bill black, with a distinct downward curve towards the tip. Legs and feet black; toes not extending beyond tip of the tail.

### Discussion

The White-bellied Storm-petrel specimen found on Fraser Island is clearly a bird of the nominate sub-species, with all except the tail measurements falling within this subspecies range (Table 1). This measurement of the tail was taken by Queensland Museum staff and could not be remeasured due to specimen preparation. If accurate, however this tail measurement is only just out-side the range derived from the data quoted for the subspecies by Marchant & Higgins 1990, and should not change any conclusion of specific identification of the specimen. Intermediate morph White-bellied Storm-Petrels are known only from the nominate subspecies, with the Lord Howe Island Group being the only polymorphic population. On the Lord Howe Island



FIG. 1. Dorsal view of Q31230.



FIG. 2. Ventral view of QMO31230.

Group, the intermediate morph is uncommon, with the polymorphic ratio of light: intermediate: dark birds at 1:4:5 (van Tets & Fullagar, 1984).

Although occasionally recorded in pelagic waters on the east coast of Australia (reviewed in Marchant & Higgins, 1990), the White-bellied Storm-petrel reported here is the first substantiated specimen for mainland Australia.

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TABLE 1. Morphometrics of the four subspecies of White-tailed Storm-Petrels and the specimen from Fraser Island.

	<i>grallaria</i>	<i>leucogaster</i>	<i>segethi</i>	<i>titan</i>	QMO31230
Culmen	13.0-15.0	14.2-17.0	12.6-14.0	15.0-16.3	13.5
Bill depth					5.8
Bill width					5.7
Wing	159-176	158-182	146-163	177-188	175
Tail	66-82	71-90	71-77	78-89	84
Tarsus	35.1-39.6	37-43	33-37	39-43	36
Mid toe	20.2-23.4	22-30	20-22.6	23.6-27.0	21



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