# Birds Queensland

**Rare Bird Report Form** 

Please complete and mail to: P O Box 3784 South Brisbane BC Qld 4101 or email to David Stewart	Birds Queensland Records Appraisal Committee,					
Observer's Name: Gus Daly (GD)						
Address:						
STATE: QLD Post Code:						
Email:						
Contact phone:						
Other observers present:						
Elliot Leach (EL) –	(sighting 4)					
Andy Jensen (AJ) –	(sighting 3, 5 and 6)					
Ged Tranter (GT) –	(sighting 7)					
Species name:						

Peregrine Falcon (Tundra) Falco peregrinus calidus

# **Observation details:**

This submission relates to seven separate observations of what is assumed to be the same individual Peregrine Falcon over the 2021/2022 austral summer. The records span approximately 20 km from the Brisbane River north to the suburb of Griffin. Observation details are summarised below in Table 1. A brief observation of a Peregrine Falcon with a noticeably pale dorsum was also made at Tinchi Tamba Wetland Reserve on 27 November 2021.

Table 1: Observation details							
Observation	Date	Observer(s)	Location	Latitude/Long itude	General habitat description		
1	20/10/21	GD	Shorncliffe 'headland'	-27.326952, 153.087778	Coastal margin of Moreton Bay adjacent to the entrance of Cabbage Tree Creek.		
2	30/10/21	GD	Sandgate CBD	-27.319819, 153.068321	Urban environment <1km from marine zone.		
3	14/12/21	AJ	Korman Rd, Griffin	-27.262379, 153.043121	Peri-urban environment with extensive areas of surrounding grasslands, woodlands, and both		

					freshwater and tidal wetlands.
4	09/01/22	EL/GD	Luggage Point sewage treatment plant	-27.377771, 153.154234	Treatment plant with extensive infrastructure including artificial drains and wetlands. Adjacent areas consisting of extensive mangrove forests, coastal swamp oak woodlands and tidal wetlands.
5	10/01/22	AJ	Rivermint St, Griffin	-27.258936, 153.038379	Peri-urban environment with extensive areas of surrounding grasslands, woodlands and both freshwater and tidal wetlands.
6	16/01/22	AJ	Elderflower Cct, Griffin	-27.259370, 153.032532	Peri-urban environment with extensive areas of surrounding grasslands, woodlands and both freshwater and tidal wetlands.
7	20/02/22	GT	Kedron Brook Wetlands	-27.400500, 153.084077	Large saline wetland with areas of mangroves and dense grassland.

# Optical or other aids used:

Swarovski Optik EL 8.5 x 42 binoculars.

Swarovski Optik ATX 95 spotting scope.

**Prior experience with this species:** All observers have previous experience with both the resident *Falco peregrinus macropus* and *F. p. calidus*, as well as experience with other northern hemisphere subspecies.

#### How confident are you of your identification (%): 99.9 %.

#### **Description of bird:**

Size: A relatively large, moderately built falcon with long narrow wings and tail. Although no direct size comparisons were made with other species the subject bird was estimated to be smaller than *F. p. macropus* but larger than Australian Hobby (*Falco longipennis*).

Dorsal plumage: mostly grey with noticeably pale lower-back, rump and uppertail coverts, with a darker upper mantle and cap. Dark barring throughout.

Ventral plumage: pale-cream to white with dark barring extending from the abdomen to the undertail coverts, including the flanks.

Remiges and rectrices: Primaries, secondaries and rectrices mostly dark dorsally, and pale with prominent barring ventrally.

Facial pattern: Prominent, dark, relatively narrow moustachial stripe with an aft pale intrusion reaching the auriculars.

Bare parts: bright yellow including legs and feet, orbital ring and cere. Upper and lower mandibles pale grey with distal darkening.

Photos of the subject bird are provided on pages 5 to 9.

#### Behaviour of bird:

The behaviour of the subject bird over the multiple observations included low direct flight (1), unsuccessful hunting of hirundines (2), soaring/direct flight over the suburb in general direction of north to south from Hays Inlet toward Pine River (3, 5, 6), soaring/circling (4), direct flight and perched (7).

#### How was it distinguished from similar species?

Multiple field marks were used to distinguish the subject bird from the non-migratory *F. p. macropus*. The subject bird is considered an adult due to observed active moult as well as the strong yellow colouration of bare parts. As such, juvenile and immature plumages are omitted from subsequent identification rationale.

The most prominent feature separating *F. p. macropus* from *F. p. calidus* is the facial pattern. Adult *F. p. macropus* shows an extensive, solid dark 'hood' with a triangular-shaped lower portion that spans from the lower jaw to the auriculars. Comparatively, *F. p. calidus* shows a reduced 'hood' with a greyish crown that extends to a narrow, dark moustachial stripe with a prominent aft pale intrusion that includes the lower half of the auriculars. Other noticeably plumage features not shown in typical *F. p. Macropus* but shown in the subject bird include the pale dorsal 'blaze' of the lower back, rump and uppertail coverts, as well as a greyish crown.

The subject bird also exhibited a lighter build than typical *F. p. macropus* including longer more slender wings and tail - proportionally closer to Australian Hobby rather than *F. p. macropus*. This lighter build also results in a differing flight style with more languid wing beats reminiscent of Crested Tern (*Thalasseus bergii*).

# Other potential subspecies

Although *F. p. calidus* is straightforward to identify from *F. p. macropus*, field identification from the relatively poorly known *F. p. japonensis* can be problematic. *F. p. japonensis* breeds from Japan to NE Siberia and is thought to winter primarily in SE Asia with putative birds recorded in northern Australia (See BARC Case No. 1044). Published identification features of *F. p. japonensis* are limited but typically include the width and shape of the dark moustachial stripe which is broader and squarer than in *F. p. calidus* (Menkhorst et al. 2017). Additionally, typical *F. p. japonensis* are darker overall with a reduced pale dorsal 'blaze' in comparison to *F. p. calidus* (Dixon et al 2012, White et al 2020). However, these features are thought to be clinal between the relatively more restricted and easterly distributed *F. p. japonensis* and the widespread Palearctic *F. p. calidus* (Dixon et al 2012). As such, some individuals of these taxa when observed in wintering areas may not be identifiable to subspecies.

The Nearctic *F. p. tundrius* (typically included in the 'Tundra' Peregrine group) is also similar to both *F. p. japonensis* and *F. p. calidus*. However, typical *F. p. tundrius* shows critical plumage features more similar to *F. p. japonensis* (broader moustachial stripe and darker dorsum) as well as a prominent pale forecrown and slightly warmer coloured underparts (Varland et al. 2008, White et al. 2020). *F. p. tundrius* would also be considered extralimital in Australia with no known observation claims west of the Bering Sea.

Due to the relatively narrow dark moustachial stripe and prominent pale dorsal 'blaze' the subject bird is considered to be a typical example of *F. p. calidus*. Refer to photos on pages 5 to 9.

#### **References:**

Dixon A., Sokolov, A., & Sokolov, V. (2012), The subspecies and migration of breeding Peregrines in northern Eurasia. *Falco*, No. 39.

Menkhorst, P., Rogers, D., Clarke, R., Davies, J., Marsack, P. & Franklin, K. (2017), The Australian Bird Guide, CSIRO, Victoria, Australia.

Varland, D. E., Fleming, T. L., & Buchanan J. B. (2017), Tundra Peregrine Falcon (*Falco peregrinus tundrius*) Occurrence in Washington. *Washington Birds*, 10:48-57.

White, C. M., Clum, N. J., Cade, T. J., and Hunt W. G. (2020), Peregrine Falcon (*Falco peregrinus*), version 1.0. In Birds of the World (S. M. Billerman, Editor). Cornell Lab of Ornithology, Ithaca, NY, USA. <u>https://doi.org/10.2173/bow.perfal.01</u>

# Photos:



**Photo 1:** Ventral view of the subject bird from observation 4 at Luggage Point sewage treatment plant (09/01/2022).



**Photo 2:** Ventral view of the subject bird from observation 4 at Luggage Point sewage treatment plant (09/01/2022).



**Photo 3:** Dorsal view of the perched subject bird from observation 7 at Kedron Brook Wetlands (20/02/2022).



**Photo 4**: Lateral view of the subject bird showing the obvious pale 'blaze' of the lower back, rump and uppertail coverts, as well as the narrow moustachial stripe - observation 7 at Kedron Brook Wetlands (20/02/2022).



**Photo 5:** Lateral view of the subject bird showing the heavily barred and white based underparts, as well as the narrow moustachial stripe - observation 7 at Kedron Brook Wetlands (20/02/2022).

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Recommendation: