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Shorebird use of the Port of Brisbane, Queensland: insights from 30 years of monitoring

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For over 30 years, Port of Brisbane (Port) lands on Fisherman Island have been used as high tide roosting habitat by large numbers of shorebirds. Since January 2003, the Queensland Wader Study Group has been commissioned by Port of Brisbane Pty Ltd to undertake regular (typically monthly) counts of birds at roost sites on Fisherman Island. This paper reviews the long-term monitoring data to examine the importance of the Port roost sites to shorebirds in the adjoining Moreton Bay Ramsar site and assess seasonal and long-term variation in shorebird abundance. The annual average total migratory shorebird count on Fisherman Island over the period 2002 to 2023 was 7,110±917 (range 5,436 to 8,607) during the summer (non-breeding) period and 1,299±570 (528 to 2,820) during the winter (breeding) period. The annual average total resident shorebird count was 457±123 (277 to 797). Trends in the summer counts over the past 21 years were significantly negative for three species (Far Eastern Curlew, Grey Plover and Red-necked Stint) and significantly positive for three species (Bar-tailed Godwit, Great Knot and Broad-billed Sandpiper). Fisherman Island regularly supported around 20% and up to 39% of migratory shorebirds in Moreton Bay, including nationally significant numbers (greater than 0.1% of the East Asian-Australasian Flyway population) of 16 migratory shorebird species and internationally significant numbers (greater than 1% of the EAAF population) of six of these since 2002. Dredge reclamation ponds consistently supported 79-94% of the migratory shorebirds roosting at the Port, highlighting the important role that artificially created sites can play in shorebird conservation.

KEY WORDS: Conservation, East Asian–Australasian Flyway, Moreton Bay, artificial roost