

# EFFECTS OF DAM SIZE ON WATERBIRDS AT FARM DAMS IN SOUTH-EAST QUEENSLAND

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Waterbirds were counted on 10 farm dams (1.2 to  $25 \times 10^3$  m<sup>2</sup> maximum surface area) in south-east Queensland on 20 days from May 1980 through October 1982. Dams were 10 to 30 years old. Seventeen species (3960 observations) of openwater birds and 14 shoreline species (224 observations) were observed. More than 2.3 individuals of each of Australasian Grebe, Pacific Black Duck, Grey Teal, Hardhead and Eurasian Coot were observed per dam per day, but only 0.3 individuals of Black-winged Stilt, the most numerous shoreline species.

Number of species increased linearly with logarithm of maximum surface area of dams, implying that a maximum area of at least 10 000 m<sup>2</sup> was necessary to consistently attract most of the common waterbird species of the region and that few additional species occurred as area exceeded 10 000 m<sup>2</sup>. Number of individuals increased linearly with increase in maximum surface area: one individual was observed for each 260 m<sup>2</sup> of maximum water surface. Numbers of species were also correlated, less strongly, with maximum depth.