Mangrove Gerygones *Gerygone levigaster* are short-lived compared to other small Australian passerines

Jonathan T. Coleman¹ and Richard A. Noske²

122 Parker Street, Shailer Park, Queensland, 4128, Australia (Corresponding Author) 2Environmental Futures Research Institute, Griffith University, Nathan, Queensland, 4111, Australia.

Received: 18 July 2015

South temperate Australian passerines are generally long-lived compared to birds of the north temperate region. However, few data are available on the survivorship of tropical and sub-tropical Australian birds. We examined survival in the Mangrove Gerygone *Gerygone laevigaster* at a sub-tropical location in Brisbane, south-east Queensland. Based on a dataset of 414 Mangrove Gerygones banded at three sites separated by a maximum of six kilometres, between 2006 and 2015 we found the species to be highly sedentary, with no movements between sites. No adults were recaptured four or more years after banding, although one bird banded as a juvenile was recaptured 5.5 years after banding. Using a time dependent Cormack-Jolly-Seber live recaptures model for birds banded as adults, the apparent annual survival rate was 43.8 percent. Using a Time Since Marking model resulted in a slightly higher survival rate (46.7%) – excluding potential juveniles and transients. Banding studies in Darwin, Northern Territory, also indicate that this species rarely lives beyond four years of age. As most small Australian passerines studied to date have apparent annual adult survival rates between 55 percent and 85 percent, apparent survival of the Mangrove Gerygone appears atypically low.