Urban corvids on the move: habitat use and movement ecology of the Little Raven *Corvus mellori* at a peri-urban wetland

Kasun B. Ekanayake¹, Desley A. Whisson¹, Thomas A. Schlacher² and Michael A. Weston¹

¹Deakin University, Geelong, Australia. Centre for Integrative Ecology, School of Life and Environmental Sciences, Faculty of Science, Engineering and Built Environment, Melbourne Campus, 221 Burwood Highway, Burwood, Victoria 3125, Australia.

²School of Science & Engineering, University of the Sunshine Coast, Maroochydore DC, Queensland 4558, Australia. Email: kasun.irawana@gmail.com

Corvids can prey intensely on threatened birds, such that this process is difficult to manage and represents a significant conservation challenge. Fundamental to developing any management intervention is the need to understand habitat use and movement of the target species. Global Positioning System (GPS) tracking devices were fitted to Little Ravens Corvus mellori in a wetland complex where they were known to prey extensively on ground-nesting Red-capped Plover Charadrius ruficapillus eggs. Movement data of nine Little Ravens were acquired between June and July 2013. Movements were recorded for a mean of 7.70 ± 0.56 days (range 4.79 – 9.94 days). Data on sightings of colour-banded birds also were collected to investigate dispersal from the trapping site (total number of birds banded = 112 during October 2011 -July 2013). Little Ravens used large areas [mean 53.41 \pm 21.17 se km² (range 1.90 – 206.78 km^2 , n = 9], within which they were highly mobile, moving up to 10.6 km in an hour (n = 1272) movements). Most birds used both human-modified and natural habitats, preferring open (56.2%) and urban habitats (28.8%). The mean dispersal distance of males from the trapping site was 42.3 percent shorter than that of females. The use of large areas and variation among individuals in habitat use may render localised management of Little Raven populations problematic. Management options, such as the use of small scale raven exclusion cages, may be effective in protecting populations of their prey.