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THE FORAGING AND SOCIAL DYNAMICS OF CROWS IN CHILAW: AN INSIGHT FOR URBAN CROW MANAGEMENT

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Two crow species are found in Sri Lanka: *Corvus splendens* (House Crow) and *C. macrorhynchos* (Large‗billed Crow). They are considered nuisance and pests on some occasions despite beneficial ecological roles. Understanding their foraging and social dynamics is crucial for sustainable management of crows in urban environments, where garbage exacerbates the issue. This study, conducted in Chilaw, assessed both crow species together, focusing on habitat preferences, factors influencing abundance, and public perceptions shaped by urban sanitation. The study sites were classified as urban and suburban with five sampling locations each (U1 to U5 and SU1 to SU5). Observations such as the frequency of feeding, procurement of waste, and vigilance, were carried out during two daily sessions: morning (07:00 – 09:00) and evening (16:00 – 18:00) for 10 days between March and May 2025 through fixed‗point counts using a binocular and naked eye. The highest average crow abundance (390±154 individuals/day) among all 10 locations was recorded in Fishery Harbour (U3), which can be attributed to the easy availability of fish waste. Among both urban and suburban locations, crow abundance was notably higher in the evening (U – 203±91 and SU – 164±46 individuals/day) compared to the morning (U – 128±37 and SU – 106±24 individuals/day), though not statistically significant ($p > 0.05$). Crow abundance varied significantly across urban ($F_{(4, 20)} = 8.72$, $p < 0.01$) and suburban locations ($F_{(4, 20)} = 3.41$, $p < 0.05$). U3 recorded the highest vigilance frequency (572 individuals/day) among the locations. The highest level of vigilance was displayed on transmission lines (1022 individuals/day) when all habitats were considered together. Considering the crow diet, the highest proportion comprised processed food (67%), and the most abundant type of procured waste by crows was animal products (25%). Habitat usage by the crows was determined using the Habitat Preference Index, with the highest preference (0.45) exhibited at U3. A perfect positive correlation ($r^2 = 1$, $p < 0.05$) between vigilance and feeding was observed at all urban sites except at the railway station (U4). Of the 20 community members surveyed focusing on public experience with crow-related behaviors along with urban environmental factors, 45% found crows troublesome, and 40% acted by driving away crows and cleaning food scraps frequently. A significant correlation between crow-related disturbances and garbage accumulation levels was evident ($r^2 = 0.526$, $p < 0.05$). The study emphasizes the need to limit the access of crows to fish waste and prevent garbage accumulation to prevent increased crow gatherings by evening via responsible waste disposal and integrated urban planning.

Keywords: Community perception, Habitat preference, Urban crow management, Vigilance, Waste management