

Population Status and Monitoring of the Red-Crowned Parrot (*Amazona viridgenalis*) on O'ahu, Hawai'i

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The Red-crowned Parrot (*Amazona viridgenalis*; RCPA) is a monotypic species native to northeastern Mexico, where it is considered endangered by IUCN due to capture for the cagebird trade and habitat loss; however, populations of RCPA, comprised of escaped pet birds and their descendants, have become established in Southern California, Florida, Texas, and O'ahu, Hawai'i (Garrett, 2017; Pranty and Epps, 2002; Kiacz et al, 2020; Pyle & Pyle, 2017). As the only *Amazona* species established on O'ahu, hybridization is highly unlikely, giving the O'ahu population an advantage as an important potential reservoir to the declining Mexico population. Population estimates from the O'ahu population are infrequent, especially in recent years, and sourced from a roost in the Pearl City area. To assess the current RCPA population size, several evening roost counts, counts of parrots entering a communal roost area in the Pearl City area, were conducted. Data from the citizen science eBird database was also downloaded and analyzed for potential trends in RCPA reporting. Using data collected from seven roost counts and a model described by Casagrande and Beissinger (1997), the current O'ahu population is estimated to consist of 792 parrots. However, the highest count of the project was of 948 birds, which is likely more accurate to the true population size. This suggests that the RCPA population on O'ahu has nearly tripled since the last counts of 2010 (Kalodimos 2013). eBird data has also seen an increase in the frequency at which parrots are reported from O'ahu, as well as in the number of parrots being reported per year; however, these increases are likely tied to a recent expansion in eBird usage.

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