

Avian Gut Passage Time

Borja, Kloe Kate

The Brown Tree Snake (*Boiga irregularis*) was accidentally brought to Guam post-World War II, where it managed to extirpate numerous native species and substantially decrease the numbers of others. However, avian seed dispersers are important components of a thriving forest. In their decline, many forests have suffered a loss of interspecies relationships and species diversity; degradation that hinders ecological function. The unstable ecosystem presses for the introduction of a resilient disperser. Gut passage time is an important factor in determining an effective disperser, as a longer gut retention typically suggests a greater range of dispersal. In this study, captive birds were fed fruits native and non-native to the CNMI (Commonwealth of the Northern Mariana Islands) and gut retention times were recorded. Of the birds studied thus far, the Mariana Fruit Dove (*Ptilinopus roseicapilla*), Micronesian Starling (*Aplonis opaca*), and White-throated Ground Dove (*Gallicolumba xanthonura*), the Mariana Fruit Dove has shown the greatest aptitude for effective seed dispersal in terms of distance. Key words: gut passage time, avian seed dispersers, Brown Tree Snake, Guam, CNMI, Mariana Fruit Dove, Micronesian Starling, White-throated Ground Dove

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