

FEATURE ARTICLES

**CHICK GROWTH VARIABILITY AND PARENTAL PROVISIONING IN THE
MAGNIFICENT FRIGATEBIRD**

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Abstract. In two contrasting breeding seasons, we investigated the effects of provisioning on chick growth and survival of the Magnificent Frigatebird (*Fregata magnificens*), a socially monogamous, dimorphic seabird that rears a single chick for more than a year, shows specialized feeding techniques, and depends on unpredictable food sources. We hypothesized that chicks of this seabird would increase their chances of survival by varying their growth in relation to food availability. We estimated the amount of food ingested by a chick using electronic scales placed at the nest and recorded feeding rates, growth rate, fledging size, and fledging age. Body mass and bill and ulna lengths were also measured. Not surprisingly, provisioning and growth were higher in the year with apparently higher food availability; however, developmental variables did not show the same pattern. This work shows a clear relationship between provisioning and growth and that growth variability occurs in this species. Understanding the relationship between provisioning and growth provides insight into life histories and elucidates the influence of variation in provisioning on fitness.

Key words: chick growth, food availability, food provisioning, *Fregata magnificens*, growth variability, life history.