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Abstracts

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PATTERNS OF PROLACTIN SECRETION IN RELATION TO INCUBATION FAILURE IN A TROPICAL SEABIRD, THE RED-FOOTED BOOBY

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Abstract. Prolactin levels rapidly drop after breeding failure in several terrestrial bird species, but in penguins prolactin secretion can be maintained well after failure. We measured prolactin secretion in relation to reproductive failure in a tropical seabird, the Red-footed Booby (*Sula sula*). Incubation failure was recorded in 7 nests (2 accidental losses, 5 desertions). Prolactin titers significantly decreased after incubation failure. In birds that accidentally lost their egg, prolactin titers declined but measurements 12 to 24 hr after failure were still above basal levels. Birds naturally deserting their egg exhibited prolactin titers typical of basal levels 6–24 hr after abandonment. Two birds showed lower prolactin concentration as early as 4–8 days before nest desertion, suggesting that a decline in prolactin levels may precede egg desertion. This study shows that in this tropical seabird, incubation failure results in a rapid cessation of prolactin secretion, as it does for terrestrial birds.

Key words: *Sula sula, prolactin, incubation failure, spontaneous egg desertion, seabirds, Red-footed Booby.*