

ABSTRACTS FOR *CONDOR* 103(3) AUGUST 2001

FEATURE ARTICLES

EFFECT OF INSTRUMENT ATTACHMENT AND OTHER FACTORS ON FORAGING TRIP DURATION AND NESTING SUCCESS OF ADÉLIE PENGUINS

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Abstract. We compared foraging-trip duration of Adélie Penguins (*Pygoscelis adeliae*) carrying various combinations of radio-telemetry transmitters: implanted, passively interrogated transponder (PIT) tags and time-depth recorders at two widely separated colonies of different size on Ross Island, Antarctica, during three austral summers. Trip duration was measured by electronic devices rather than human observation. Instrumentation had no significant effect on foraging trip duration. Most of the variation in foraging trip duration was attributed to individual and year. Males' trips were significantly shorter than females' in a subset of known-sex birds. No effect was evident in nesting success even for birds that wore instruments for >20 days. We recommend use of small, hydrodynamically designed and placed instruments to researchers who wish to collect data unaffected by instrument attachment.

Key words: foraging, penguin, recorder, radio-transmitter, seabird, sea ice, weighbridge.

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