

SHORT COMMUNICATIONS

**PATTERN OF DAMAGE TO ALBINO GREAT FRIGATEBIRD FLIGHT FEATHERS
SUPPORTS HYPOTHESIS OF ABRASION BY AIRBORNE PARTICLES**

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Abstract. On 11 July 1985, an albino juvenile Great Frigatebird (*Fregata minor*) was collected by RWS and EAS on Christmas Island (2°N, 157°W) in the tropical Pacific. First observed on 13 July 1984 as a 55–60-day-old chick, the albino was seen flying about the colony on 4 November 1984 and again in February 1985. In July 1985 the juvenile was at its nest with such badly abraded plumage that it could not fly. Burt (1986) proposed an aerodynamic model that predicts the distribution of melanic feathers in response to abrasion from airborne particles in a flying bird. The albino frigatebird provides a test of this model, since frigatebirds spend most of their time flying and rarely contact water, ground, or objects. Abrasion of the primaries and tail of this albino Great Frigatebird follows the pattern predicted by Burt (1986). Furthermore, the pattern of damage to secondaries and tertiaries suggests that friction of feathers against each other is another important source of wear.

Key words: albino, color, feather wear, frigatebird, melanin.