

ABSTRACTS FOR *CONDOR* 103(2) MAY 2001

SHORT COMMUNICATIONS

SEX RATIO BIAS AT HATCHING AND FLEDGING IN THE ROSEATE TERN¹

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Abstract. Several hypotheses have been proposed to explain facultative manipulation of sex ratios in birds, but existing data are inconsistent within and among species, and do not clearly support any one of the hypotheses. The sex ratio among breeding roseate terns (*Sterna dougallii*) at bird island, Massachusetts is female-biased (56%). We sought to determine at what stage of the life cycle this sex ratio bias is established. We monitored 461 eggs from 252 nests and, using molecular markers, we sexed 342 chicks at hatching and followed them to a stage when survival (or non-survival) to fledging could be inferred. We found that the sex ratio at hatching (and, by inference, at fertilization) was biased toward females (55%). This bias was significant in chicks from first-laid eggs (58%) but not second-laid eggs (48%). We also found that the overall bias increased (to 56.6%) during the chick stage through differential loss of male chicks.

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