

ABSTRACTS FOR CONDOR 104(1) FEBRUARY 2002 C.E.

SHORT COMMUNICATIONS

NO EXTRA-PAIR FERTILIZATION IN FLAMMULATED OWLS DESPITE AGGREGATED NESTING

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Abstract. We used DNA fingerprinting to estimate the frequency of extra-pair fertilization in the Flammulated Owl (*Otus flammeolus*), a socially monogamous species often found nesting in aggregations. We observed owls on 44 territories, 42 of which were located in aggregations of 3 to 10 territories with a mean nearest-neighbor distance of 539 m (\pm 160 m). We sampled a subset of these nests and compared band sharing and numbers of novel fragments among 17 social pairs and 37 offspring. Like other socially monogamous raptors, the Flammulated Owls we studied were genetically monogamous despite their relatively high breeding density. We suggest that the necessity of male parental care may be an important factor contributing to genetic monogamy in this species.

Key words: extra-pair fertilization, Flammulated Owl, genetic monogamy, male parental care, multilocus DNA fingerprinting, *Otus flammeolus*, breeding aggregations.

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