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Abstracts

SHORT COMMUNICATIONS

PARENTAGE IN AN OKLAHOMA POPULATION OF LOGGERHEAD SHRIKES ASSESSED USING NUCLEAR MICROSATELLITES

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Abstract. I used six nuclear microsatellites to assess rates of intraspecific brood parasitism and extra-pair paternity in relationship to conspecific density in 218 offspring from 44 broods of Loggerhead Shrikes (*Lanius ludovicianus*). I also estimated statistical power associated with these markers for each parentage test and suggest a method for adjusting power estimates when individuals are incompletely genotyped. No offspring were the result of intraspecific brood parasitism. Eight offspring from five families (4% of all offspring; 14% of families) were sired by extra-pair fertilization. Average exclusionary power was 0.94 when adjusted to account for incomplete genotyping. Assuming a 1% genotyping error rate, this power drops to 0.91. This is the first genetic assessment of parentage in a wild population of Loggerhead Shrikes.

Key words: extra-pair fertilization, *Lanius ludovicianus*, *Loggerhead Shrike*, parentage exclusion, power.