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POPULATION GENETICS OF THE BLACK RHINOCEROS (*DICEROS BICORNIS*) IN ETOSHA NATIONAL PARK

Widespread poaching throughout the latter half of the 20th century has led to a marked decline in black rhinoceros (*Diceros bicornis*) populations; however, some populations of these animals have begun to recover. The largest endemic population of black rhinos are the *D.b. bicornis* of Etosha National Park, Namibia ($N \approx 450$). To assist in the conservation of this population we: 1) characterize microsatellite variability in Etosha National Park and 2) determine if genetic structure exists within this semi-arid 22,270-km² park. We determined microsatellite polymorphism at 9 dinucleotide loci for 126 individuals. Observed heterozygosity ($H_o = 0.415$) was lower than expected ($H_e = 0.464$), and lower than previously published reports found in *D.b. minor* and *D.b. michaeli* subspecies. In a fixed model analysis using 7 aggregates of individuals, we found some groups were genetically valid, contradicting previous observations that individuals are solitary. For example, individuals sampled from groups 2, 3 and 4 were assigned correctly; however, individuals sampled from putative groups 1, 5, 6 and 7 were not assigned to their subpopulation of origin. Thus, we conclude that 1) a lower amount of genetic variability exists in individuals found in Etosha National Park compared to other subspecies and 2) population genetic structure exists for some clusters assessed.

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