

The genetic rescue of black rhinoceros (*Diceros bicornis*): redressing translocation bias for longer-term meta-population management

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As the black rhino species recovery progresses, it will be necessary for meta-population management priorities to change from an emphasis on population size and growth to population quality. In particular, sustained recoveries require the maintenance of genetic diversity within reintroduced populations that is representative of source populations. Nevertheless, after 25 years of black rhinoceros translocation, we still do not know the degree to which capture is genetically biased or how many rhino need to be captured in order to translocate a representative genetic sample. Here, I will present results to date from analyses of the mitochondrial control region (n = 71) and the first four of ten neutral microsatellite markers we intend to study of black rhinos from Hluhluwe-iMfolozi Game Park (source population) and founder populations in South Africa (2004 - 2008). These results will eventually be used to conduct genetic sustainability analyses for founder populations of various sizes subject to supplementary releases of varying frequency and size using VORTEX software to recommend translocation strategies for genetic rescue.