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Are black rhinoceros *Diceros bicornis* home range sizes in Hluhluwe-iMfolozi Park increasing in response to deteriorating range conditions?

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Home range size in black rhinoceros is used as a proxy for range condition and to detect deterioration of ranges through time. Since Hluhluwe-iMfolozi Park (HiP) serves as a strategic source population for black rhinoceros range expansion, an accurate estimate of home range size is critical for management of the species. Reid *et al*. (2007) report a mean home range size of 23.07 km^2 for HiP, 54% larger than historical estimates (Emslie, 1999). Based on their findings they conclude deteriorating range condition and reduced carrying capacity for black rhinoceros in HiP. Unfortunately, Reid *et al*. (2007) estimates are based on a small number of locations recorded over ten years meaning their estimates may be inflated. Home ranges calculated using data gathered over 10 years where the sighting rate is extremely low (i.e. 1-3 sightings per year) but then compared to estimates over shorter periods with higher sighting frequencies (Emslie 1999) will inevitably lead to different sized home ranges. Lent and Fike (2003) have warned about the dangers of comparing black rhinoceros home range estimates using different sighting rates over varying periods of time and appropriately advocate for annual home ranges for inter-study comparison. We present preliminary data on a cohort of black rhinoceros (n = 10) with VHF radio transmitters that were regularly located in random stratified fashion to estimate annual home range size in HiP. Our findings from years 2004 – 2007 show annual mean home range sizes of 6.40 km^2, which are 72% smaller than the 23.07 km^2 estimates of Reid *et al*. (2007). Therefore, based on our findings, there is no evidence for deteriorating range condition.