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RED-BILLED OXPECKERS REALLY DO INCREASE PREDATOR AWARENESS IN BLACK RHINOCEROS

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The Swahili name for the red-billed oxpecker, *Buphagus erythrorhynchus*, is "Askari wa kifaru" and means the rhino's guard. We tested the widely held, but untested, belief that oxpeckers warn rhinoceros of approaching predators. Sixty-one unconcealed approaches by a person to seven marked adult female black rhinoceros, *Diceros bicornis*, were monitored. We recorded detection and detection distances that could be related to the presence-absence and number of oxpeckers resident on the rhinoceros and corresponded to their alarm calling. When oxpeckers were absent black rhinos were able to detect the person on 23% (7/31) of occasions at a detection distance of $\pm 27.74\text{m} \pm 4 \text{ SE}$. However, oxpecker presence increased the rhino's detection rate to 97% (29/30) and improved detection distance by more than two fold ($\pm 66.07\text{m} \pm 6 \text{ SE}$). The 29 detections were an immediate response to an oxpecker alarm call. There was also a significant positive relationship between number of oxpecker on a rhino's back and detection distance. We confirm that red-billed oxpeckers really do act as an anti-predator warning to black rhinoceros. We discuss these results in the context of the wider mutualistic-parasitic oxpecker-rhino relationship.