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Jackson's Hartebeest, *Alcelaphus buselaphus jacksoni*

The following species information is adapted from the North American Regional Jackson's Hartebeest Studbook, First Edition, 2002, Jeffrey Spratt, Studbook Keeper.

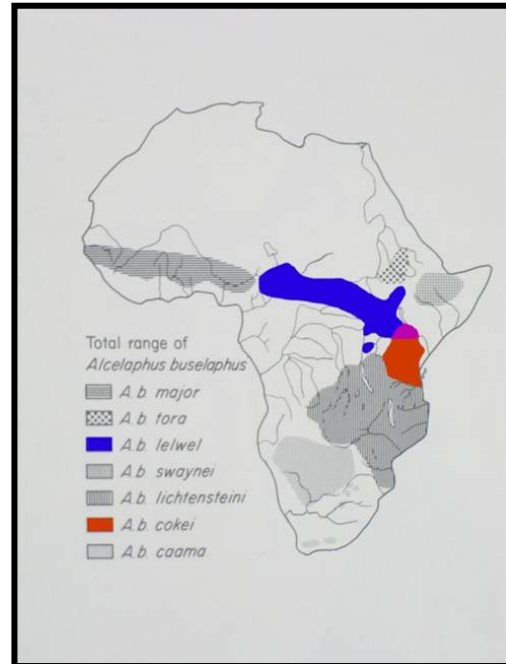
Taxonomy

There is some debate regarding the taxonomy of the Jackson's hartebeest. *Alcelaphus buselaphus jacksoni* has been described as a hybrid between the lelwel, *A.b. lelwel*, and the Coke's hartebeest, *A.b. cokei*. Kingdon (1982) refers to the hybridization between these two races of hartebeest and the local forms as *jacksoni*, *kongoni*, *nakurae*, *keniae* and *richtiei*. The resulting hybrids exhibit parental characteristics in the shape of the horns, body type and behaviors. Other publications including the IUCN/SSC Antelope Specialist Group (ASG) Reports; African Antelope Database (1998), Antelopes Global Survey and Regional Action Plans Part 1. East and Northeast Africa (1988) and Antelope Survey Update Number 5: June 1997, refer to the lelwel hartebeest in Uganda as synonymous with the Jackson's hartebeest. The ASG considers the Ugandan lelwel hartebeest as identical to the Jackson's hartebeest. The ASG recognizes the hybrid between the lelwel and Coke's hartebeest in Kenya as the Kenyan hartebeest. Current

genetic research exploring the uniqueness of the hybrid forms of lelwel and Coke's in the Lakipia ranchlands of Kenya should reveal the actual status of this hybrid. (Georgiadis, pers. comm.)

Range and Status

The Jackson's hartebeest is found in the region of distribution overlap between the lelwel and Coke's hartebeest. This range is generally regarded to extend from western Kenya through the Karamoja district of northeastern Uganda. The ASG in 1998 stated that the lelwel hartebeest is now extinct in Kenya with less than 4,000 remaining in Uganda. The Coke's hartebeest has a declining population in Kenya of approximately 12,000. The Kenyan hartebeest (*A.b. lelwel* X *A.b. cokei* cross) has a population estimate of 220 in the protected lands and 2200 in other areas. The hartebeest population is determined to be stable to declining throughout the range, and is prone to local extinction. If current trends continue, by 2005 the lelwel hartebeest of Uganda, also referenced as the Jackson' hartebeest, will decline to threatened (Vulnerable) status (East, 1998). The major threats to the hartebeest throughout their range are habitat degradation, drought, and poaching.



Natural History

The hartebeest, *Alcelaphus* (cow face) and *buselaphus* (Boer for 'tough ox') are widespread in the grassland and savanna habitats of sub-Saharan African. Members of this genus are capable of surviving on low-quality grasses. Hartebeest tend to be highly gregarious throughout most of the year. During breeding season however males tend to occupy territories that are contiguous to that of other males and to water sources (Gosling, 1974). The males form defecation sites that mark the boundaries of their territories. These boundaries are defended against neighboring and non-territorial males. Females form small herds that pass through these contiguous male territories (Kingdon, 1997). These female herds show a form of hierarchy by aggressive posturing and display of their horns (Kingdon, 1997). The territorial males will investigate the female's receptiveness and either herd them in his territory until all receptive females have been covered or tolerate them in his territory. Young males tend to form bachelor herds and are also tolerated by the resident bull (Gosling, 1974). Females are known to be very aggressive in the defense of their offspring.

In captivity, female herd dynamics have been investigated. The females show a linear dominance hierarchy in herd situations. The hierarchy is both behaviorally and hormonally influenced. The female herd also shows indication of estrous cycle synchrony in the absence of a male. Intra-gender as well as inter-gender aggression has been the major concern for morbidity and mortality in captivity (Spratt, 1999). Male introductions to the female herd tend to be extremely combative. Sparring between females and males is common; the sparring does not usually escalate to a full fight. There does not seem to be any seasonality to breeding, and calves are born throughout the year. Gestation was shown to be 202 days (Spratt, 1999). The calves tend to be hidlers for the first week after parturition and associate in loose neonatal groups after this point.

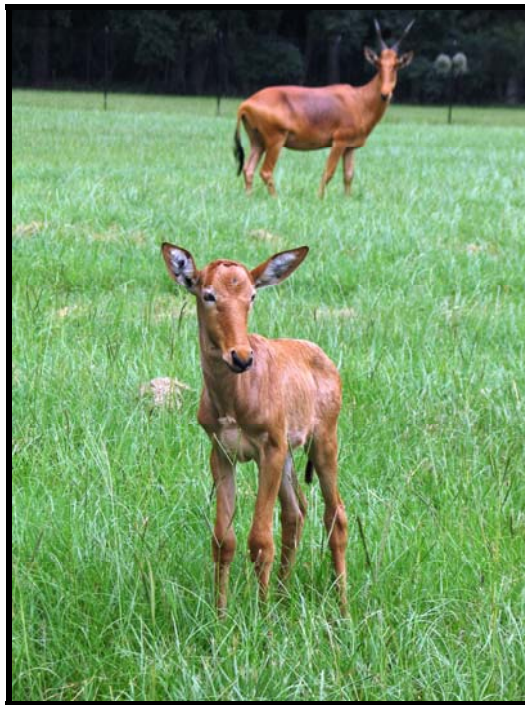


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Captive Husbandry

The first record of Jackson's hartebeest in a North American zoological institution was at the Bronx zoo in 1913. The first captive birth in North America occurred at the Bronx Zoo in July of 1965. At the time the 2002 studbook was prepared, 89.113.5 offspring had been produced in four North American institutions. They are currently held at only two North American facilities. Additionally, a sizeable number of animals have been moved over the years into the private sector with poor results.

Medical challenges with the Jackson's hartebeest are associated with their aggression. Broken horns and gore wounds from sparring are commonplace in herd situations. Testing for Malignant Catarrhal Fever is recommended for all Alcelaphinae and should be incorporated in the health assessment profile.

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Bibliography

Literature Cited

East, R. 1999. African Antelope Database 1998. IUCN/SSC Antelope Specialist Group. IUCN, Gland Switzerland and Cambridge, UK.

East, R. 1997. African Survey Update Number 5: June 1997. IUCN/SSC Antelope Specialist Group. IUCN, Gland Switzerland and Cambridge, UK.

East, R. 1988. Antelopes, Global Survey and Regional Action Plans, Part 1. East and Northeast Africa. IUCN, Gland Switzerland and Cambridge, UK.

Gosling, L.M. 1974. The social behavior of Coke's hartebeest. *The Behavior of Ungulates and its Relation to Management*, Vol. I:448-510. Morges, Switzerland.

Kingdon, J. 1997. *The Kingdon Field Guide to African Mammals*. Academic Press, San Diego, p 428-431.

Kingdon, J. 1982. *East African Mammals, Volume IIID*. The University of Chicago Press, p 502-523.

Spratt, K. 1999. Behavioral and Endocrine Correlates of Dominance Rank in Female Jackson's Hartebeest (*Alcelaphus buselaphus jacksoni*). Georgia Southern University Master's Thesis.

Additional References

Iaderos, J.F. and Portillo, T.P. 1990. Captive Husbandry of Jackson's Hartebeest at the New York Zoological Society's Wildlife Survival Center. Proceedings of the Annual Conference of the AAZPA.

Iaderos, J.F. and Beetem, D.D. 1996. Captive Husbandry of Jackson's Hartebeest (*Alcelaphus buselaphus jacksoni*) at the St. Catherine's Island Wildlife Survival Center. Proceedings of the AZA Regional Conference.