

CONSERVATION & RESEARCH

RHINO EYESIGHT

Rhinos have historically been reported to be quite near-sighted and to generally have poor vision overall. These researchers examined the cells of one eye of an adult male black rhinoceros that was humanely euthanized for veterinary reasons. Their calculations indicated the visual resolution of the rhino to be 6 cycles/degree, which is 1/10 that of humans (60 cycles/degree), slightly less than domestic cats (9 cycles/degree), comparable to that of rabbits (6 cycles/degree), and better than other mammals including rats, dolphins, and seals. With this level of visual resolution, a rhino should be able to detect a person standing 200 meters away from them given clear conditions. They also found increased density of ganglion cells (indicating better vision) in the upper regions of the retina, which indicates that rhinos have better vision in the lower half of their visual field.

PETTIGREW, JD, MANGER, PR. 2008. Retinal ganglion cell density of

the black rhinoceros (*Diceros bicornis*): *Calculating visual acuity. Visual Neuroscience* 25: 215-220. Correspondence to Paul Manger at paul.manger@wits.ac.za.

WHEN CHIMPANZEES WEAR CLOTHES

In most U.S. states, chimpanzees can be owned by private individuals as pets and/or performers in visual media ranging from print advertisements to television shows and feature films. In these media appearances chimpanzees are almost invariably presented as caricatures of humans: they strike poses typical of humans, wear clothes, and appear to perform tasks such as driving automobiles. Two recent studies of visitors to AZA member institutions included survey questions about the endangered status of gorillas, chimpanzees, and orangutans. The results were startling and similar between the two institutions. More than 90 percent of visitors understood that gorillas and orangutans are endangered. However, only 66-72 percent of visitors believed

chimpanzees are endangered, citing as evidence the frequent use of chimpanzees in advertisements, on television, and in feature films.

ROSS, SR, LUKAS, KE, LONSDORF, EV, STOINSKI, TS, HARE, B, SCHUMAKER, R, GOODALL, J. 2008. Inappropriate use and portrayal of chimpanzees. *Science* 319: 1497. Correspondence to Stephen R. Ross at sross@lpzoo.org.

CLIMATE CHANGE AND THE DECLINE OF THE POLAR BEAR

Polar bears are dependent on sea ice for much of their life cycle. Conjectures abound as to the impact of climate change, as reflected by a long-term decline in sea ice, on the future conservation status of polar bears. This study provided important insights into the future of polar bears by using several predictive modeling approaches to link polar bear demography with environmental effects such as sea ice, and potential future environmental conditions. The study used

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