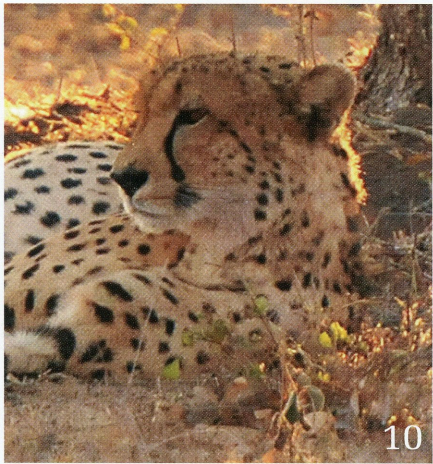
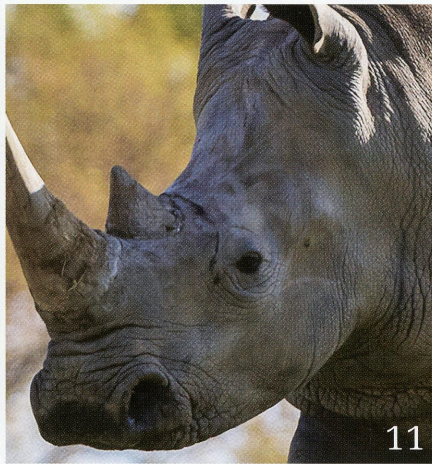


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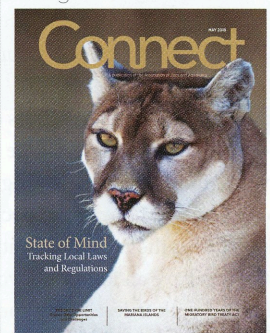
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*Cougar*



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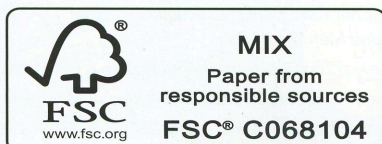
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Research

# Scientific Evaluation of Rhino Diets Improves Zoo Care

Study Highlights Success of Changing Diet for Reproduction in Endangered Species



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A recently published study in the journal *Pachyderm* highlights the ongoing effort of accredited zoos to address challenges and improve the sustainability of endangered species populations in their care. The study, co-authored by scientists from San Diego Zoo Global and Mars Hill University, evaluated fertility issues in captive-born southern white rhinos and determined that diets including soy and alfalfa were likely contributors to breeding challenges.

“The captive southern white rhinoceros population is not currently self-sustaining, due to the reproductive failure of captive-

born females,” said Dr. Christopher Tubbs, San Diego Zoo Global and lead author of the paper. “Our research into this phenomenon points to chemicals produced by plants present in captive diets, such as soy and alfalfa, as likely causes.”

Soy and alfalfa are commonly included in feeds for many herbivorous animals under human care; however these diets have high levels of phytoestrogens that disrupt normal hormone functions in some species. The study reviews historical data on the reproductive success of southern white rhinos in zoos in North America. These studies discovered that

female rhinos born in managed care showed lower reproductive levels. At the San Diego Zoo Safari Park, animal care staff switched to a low phytoestrogen diet for southern white rhinos in their care in 2014. The nutritional change appears to be an effective means of addressing the challenge.

“Following our diet modification, routine monitoring of the reproductive status of our female southern white rhinoceros suggested that the diet change was having a positive impact,” said Tubbs. “Two females that had previously not reproduced have now become pregnant and successfully given birth to healthy calves.”