

# Exotic manure is sure to lure the dung connoisseur

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Although the preference of dung beetles for specific types and conditions of dung has been given substantial attention, little has been done to investigate their preference for dung from exotic mammals found on game farms or rewilding projects.

In "A Comparison of [Dung Beetle](#) (*Coleoptera: Scarabaeidae*) Attraction to Native and Exotic Mammal Dung," an article appearing in the latest edition of *Environmental Entomology*, Sean D. Whipple, a postdoctoral research associate at the University of Nebraska-Lincoln, and W. Wyatt Hoback, a biology professor at the University of Nebraska at Kearney, used pitfall traps baited with various native and exotic herbivore, carnivore, and omnivore dung to evaluate dung beetle preference in the Great Plains of North America.

After spending two years capturing more than 9,000 dung beetles from 15 different species, they found that omnivore dung was the most attractive, with chimpanzee and human dung having the highest mean capture. This can largely be attributed to omnivore dung being more odiferous in comparison to that of herbivore dung.

Surprisingly, native Nebraskan dung beetles which coevolved with bison showed little attraction to bison dung compared with waterbuck, zebra, donkey, and moose dung.

"Our results suggest that even closely related species of generalist-feeding dung beetles differ in their response to novel dung types," said Dr. Whipple. "In addition, preference for a specific manure does not appear to be correlated with dung quality, mammalian diet, or origin of mammal."

"This novel research indicates that native dung beetle species will respond to dung from [exotic animals](#), and that there is an apparent mismatch of species to resources," said Dr. Hoback. "This

mismatch will be addressed in continuing research and may shed light on ecological and evolutionary patterns among detritivores which encounter new resources. As such, there are implications for both conservation and exotic [species](#) biology."

**More information:** A Comparison of Dung Beetle (*Coleoptera: Scarabaeidae*) Attraction to Native and Exotic Mammal Dung - [esa.publisher.ingentaconnect.c ... 41/00000002/art00005](http://esa.publisher.ingentaconnect.com/esa/00000002/art00005)

Provided by Entomological Society of America

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