



Captive Animals May Be Better Problem Solvers Than Their Wild Counterparts

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[April Flowers](#) for redOrbit.com – Your Universe Online

Historically, tests on an animal’s ability to problem solve have been conducted on captive animals. Recently, however, a shift has been made among researchers who are now trying to run those tests on animals in their native habitats. A new study from scientists at Michigan State University and the University of California, Berkeley has found vast differences between the behavior and intelligence of captive and wild spotted hyenas.

Using only captive animals for intelligence and behavioral studies is problematic because they may not accurately portray how wild animals respond to new challenges in the wild, according to former MSU zoology graduate student [Sarah Benson-Amram](#).

“We have to be careful when interpreting results from captive animals, as there may be extreme differences between how animals behave in captivity and in the wild,” said Benson-Amram, who is now a research fellow at the University of St. Andrews in Scotland. “An animal that is successful at solving problems in the comfort of its cage may be unwilling to engage in similar problem-solving behavior in the wild.”

For Benson-Amram’s study, wild and captive spotted hyenas were presented with the same novel problem – finding a way to get to a tasty piece of fresh meat hidden inside a steel puzzle box. The captive hyenas were significantly better at opening their boxed lunches and less afraid of the manmade puzzle than their wild counterparts, explained Benson-Amram and her colleagues [Kay Holekamp](#), MSU zoologist and co-principal investigator at the [BEACON](#) Center for the Study of Evolution in Action, and [Mary Weldele](#) with the University of California Berkeley noted.

The team noted that the captive animals were also more creative and were more willing to try a variety of solutions to get to the reward.

“It doesn’t appear that these differences result from captive hyenas having more time or energy,” Benson-Amram said. “We conclude they were more successful because they were more willing to tackle the problem and were more exploratory.”

The findings of this study were recently published in the zoology journal [Animal Behaviour](#).