



Hyenas Solve Problems Faster When They Think Outside The Box

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Trying many different solutions is required for solving innovative problems. That's true for humans and now researchers from [Michigan State University](#) show that it is also true for hyenas

Steel puzzle boxes with raw meat inside were presented to wild spotted hyenas in Kenya. The hyenas had to slide open a bolt latch to get the meat. Only nine out of 62 hyenas succeeded even though most of the animals had many opportunities to open the box. Sarah Benson-Amram, a MSU zoology graduate student, said that the successful hyenas tried more solutions than the ones that failed. This included biting, flipping or pushing the box. The study is published in the current issue of the [Proceedings of the Royal Society B](#).

Not being afraid to approach new things was another requirement for success. A steel puzzle box had never been seen by the wild hyenas before. The hyenas that immediately contacted the box when they first saw it were more successful solving the problem than those that had a slower approach. Coming in contact with unknown objects can be quite dangerous for wild animals, but this research shows there are some benefits in taking chances.

Surprisingly, persistence was not a trait that that lead to victory, said Benson-Amram.

“While those who gave up quickly were more likely to fail, some hyenas that spent more time with the puzzle box appeared to get stuck in a rut and would often try the same solutions over and over again,” she said.

Hyenas have relatively large brains like humans and other primates, said Kay Holekamp, MSU zoologist and co-author of the paper.

“A likely benefit of large brains is the ability to think flexibly about new situations and come up with solutions to novel problems,” said Holekamp, co-principal investigator at the [BEACON Center for the Study of Evolution in Action](#).

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