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The Language of Chameleons: how the animals, which cannot talk and do not hear, communicate

Bad or Great Smell

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Note: this text is an example from the book dealing exactly with this topic, this is just a sample

BAD OR GREAT SMELL

LURE THE PREY BY USING THE TERRIBLE SMELL FROM THE MOUTH ANGLES!

The smell produced by the temporal glands of some chameleons is terrible and disgusting for the predators. But there are other animals that actually feel attracted by the smell of rotten meat: flies, wasps and carrion beetles. The chameleons make use of the smelly secret in a spectacular way. They smear the secret on a branch while rubbing their mouth angles on a twig, then make a few steps backwards

and sit and wait until the insects that are attracted by the smell come to investigate the place. Once they land on the branch, the chameleons shoot them with their long tongue and eat them. It is an extremely rare behavior in reptiles, to luring prey with the products of own metabolism. As an addition, in captivity, it is often observed, that the chameleons defecate on same spot for a long time. It has not yet been observed in the wild and might be an artifact of the limited space available in the captive environment, but an aggregation of feces and urine could potentially play same role as that of the temporal gland product.







Fig 2. Trioceros deremensis, Trioceros jacksonii and Chamaeleo cf. roperi show the spectacular temporal gland while threat display; Photo PETR NEČAS





A Bale Mountains Two-Horned chameleon (*Trioceros balebicornutus*) is sitting in a canopy and singing a song...

"I am the smart chameleon
I have a magic pouch
When I smear it on a branch
Miracles happen, and so on...
Hey, dear wasps and flies,
Do not wait too long
Sitting here and along
Will stop fears at nights!"

"Heeey, come here, There is something to eat for you!"





(And once the first two flies come, they are shot and eaten)

Drawings Anastasiia Shiriaeva