Study finds wolves are better hunters when monkeys are around

June 22 2015

Through a rare mixed-species association observed between a carnivorous predator and a potential prey, Dartmouth-led research has identified that solitary Ethiopian wolves will forage for rodents among grazing gelada monkey herds. Through consistent non-threatening behavior, the Ethiopian wolves have habituated gelada herds to their presence, foregoing opportunities to attack the juvenile geladas in order to better capture the rodents.

Gelada monkeys are a close relative of baboons. As grazing primates, they eat grass and some herbs. They live in large herds, between 200-1000 individuals. Ethiopian wolves are the rarest canids in the world, with only between 300-500 individuals remaining in the wild. These wolves are rodent specialists. Both geladas and Ethiopian wolves are endangered and endemic to the Ethiopian highlands.

Through extensive data collection from all-day follows on the Guassa Plateau in north central Ethiopia from 2006 to 2011, researchers studied a band of approximately 200 gelada monkeys, who regularly associate with the wolves living in the area.

According to the study's findings, gelada monkeys would not typically move upon encountering Ethiopian wolves, even when they were in the middle of the herd—68 percent of encounters resulted in no movement and only 11 percent resulted in a movement of greater than 10 meters. In stark contrast, the geladas always fled great distances to the cliffs for safety whenever they encountered aggressive domestic dogs.

The Ethiopian wolves experienced a foraging advantage on subterranean rodents when among the gelada monkeys—Ethiopian wolves foraged successfully in 66.7 percent of attempts among the gelada monkeys v. a success rate of only 25 percent when wolves foraged by themselves. The success rate may be attributed to the rodents being flushed out by the monkey herd, which disturb the vegetation as they graze or to what may be a diminished ability for the rodents to detect predators due to a visual or auditory interference posed by the grazing monkeys.

The Ethiopian wolves' role as foraging commensals to the gelada monkeys reveals what may be an adaptive strategy within a broader complex set of community dynamics.

More information: *Journal of Mammalogy*: jmammal.oxfordjournals.org/content/96/1/129

Provided by Dartmouth College