Summer Explorer Series: Answers from African Antelope

Student Field Worker Asks Questions about Mammal Diets



Did you know...

antelope store information about what they've eaten in their horns? Neither did we.

Matthew Rafferty found field work comes to an almost-crashing halt when an elephant lumbers out of the bush and stops right in front of your truck. During summer 2019, the senior, along with a team of researchers, traveled to Gorongosa National Park in Mozambique to take horn samples from antelope, specimens that will tell Rafferty about the animals' lifelong diets. He hopes his findings provide insight into the variability of the animals' diets and how they might evolve. Assistant Professor Ryan Long, who specializes in the ecology of large mammals in the <u>College of Natural Resources</u>, led the U of I contingent of researchers. Rafferty lives in Moscow and is studying animal and veterinary science in the College of Agricultural and Life Sciences.

Matthew Rafferty, Ryan Long and doctoral student Hallie Walker are investigating how diets vary within a species.

Rafferty hypothesizes animals of the same species have different diets, and this diet specialization can lead to new species.

The team spotted and tranquilized antelope from a helicopter. They focused on sampling kudu, bushbuck and nyala antelope.

The chemical composition of horn samples captures the chemical signature of food the animal eats over its entire lifespan.

Article by Leigh Cooper, University Communications and Marketing.

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