

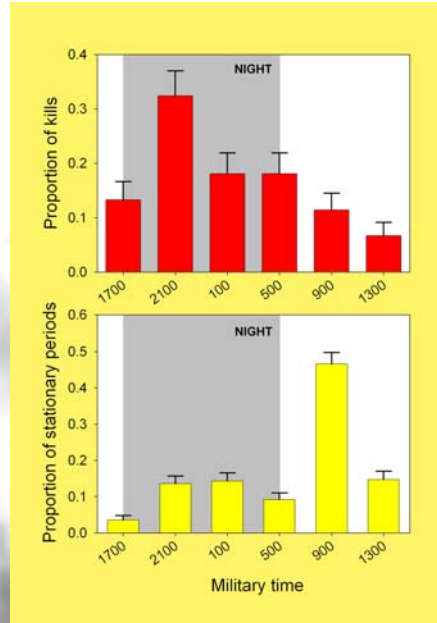
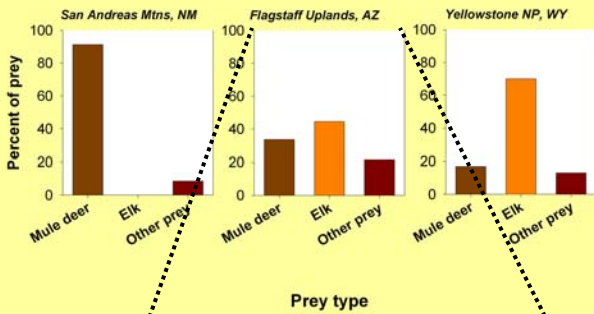
Kills by Cougars in the Flagstaff Uplands of Northern Arizona, July 2003-February 2005

Investigators
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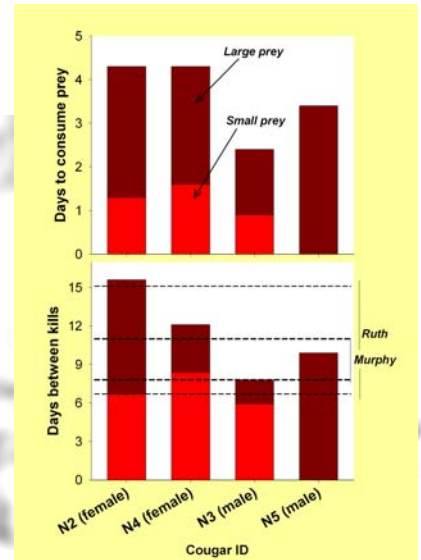


Cooperators/Collaborators
Flagstaff Area National Monuments
Grand Canyon Trust
USDA Wildlife Services
Arizona Game & Fish Department
Coconino National Forest

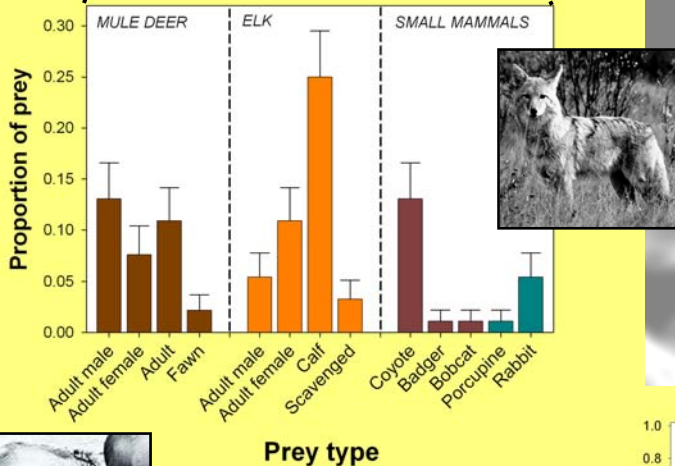
Comparison of prey composition with other study areas.



Diel distribution of cougar kills (top) & inactive periods (bottom).

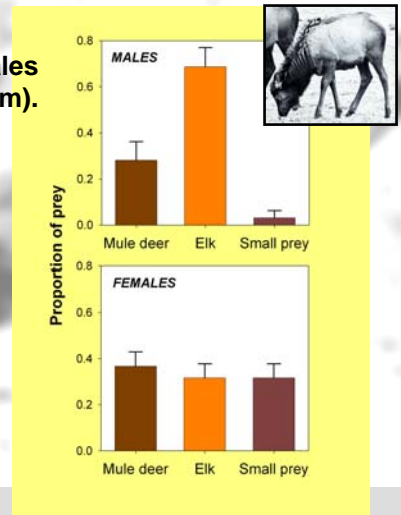
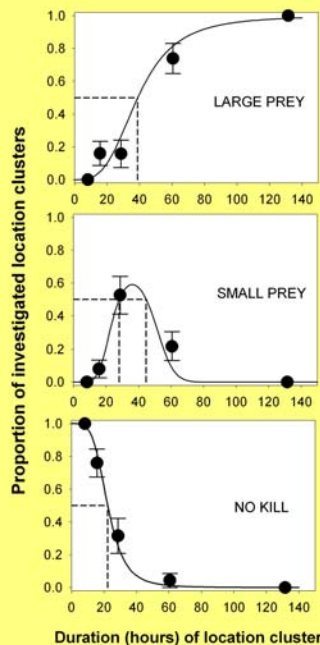


Days to consume kills (top) & intervals between kills (bottom) for 4 individual cougars.



Prey composition for males (top) & females (bottom).

Probability of different activities as a function of the time a cougar was stationary.



Results

These results represent 96 kills by 7 cougars fitted with GPS/Argos collars, for July 2003-February 2005. We investigated a total of 140 locations where >2 GPS fixes collected at 4 hour intervals had clustered within roughly 200 m of each other. Adult mule deer (*Odocoileus hemionus*), calf (<1 yr) elk (*Cervus elaphus*), and coyotes (*Canis latrans*) were most commonly killed. We observed difference between genders in prey composition, kill rates, and prey consumption. Almost all (>80%) kills occurred at night. The probability that a cougar had killed large prey was >50% if a cougar had been stationary >40 hours.

Methods

We captured 7 cougars between July 2003 and December 2004 and fitted them with collars that collected up to 6 GPS locations per day. These locations were transmitted daily to Argos satellites and delivered the next morning to our office in an email message from Argos Inc. This daily delivery allowed us to visit clusters of GPS locations (see right) to determine cougar activities shortly after the marked cougars had departed. The 7 marked cougars included 3 adult males and 4 adult females.



Total prey composition

Prey type