Supplementary material

Prey identification

Because the cheetahs were habituated to human presence, we were able to track them and observe them from ~50 m without disturbing their normal behavior. Behavioral observations were made by one of us (BdW) for about two weeks each month, primarily during daylight hours, during which time hunting behavior and prey characteristics were recorded.

We were able to identify the prey after 38 successful hunts, and the results are shown in Table S1. Kudu (*Tragelaphus strepsiceros*), impala (*Aepyceros melampus*) and warthog (*Phacochoerus aethiopicus*) together made up more than half the prey. The majority (63%) of kills were juvenile animals.

Table S1. Prey identified after 38 successful hunts

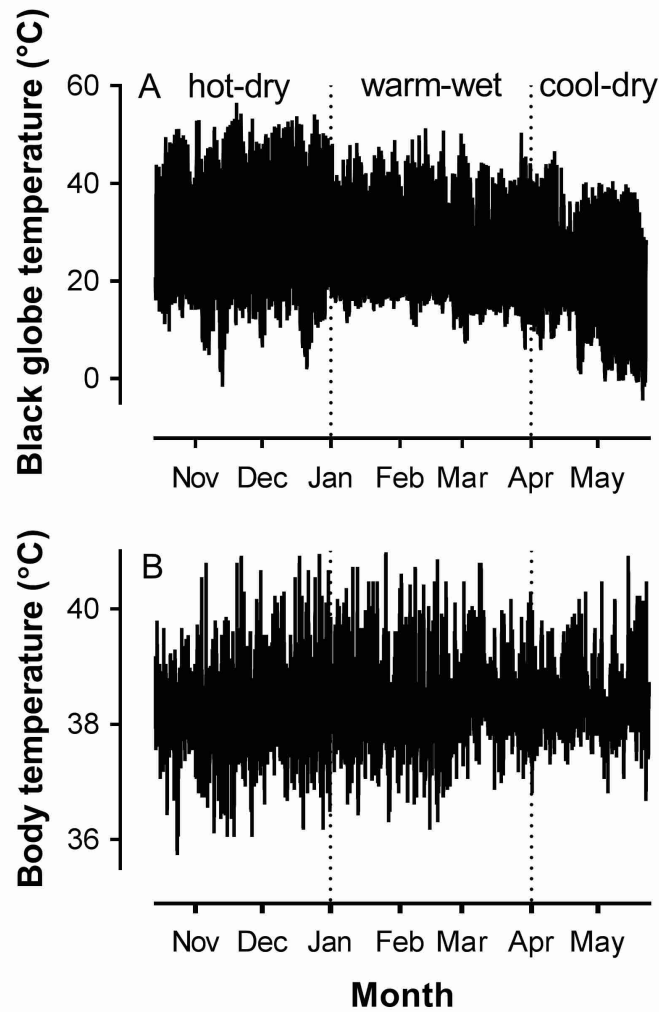| Prey	Percentage of kills
Tragelaphus strepsiceros (greater kudu)	21
Aepyceros melampus (impala)	18
Phacochoerus africanus (common warthog)	13
Connochaetes taurinus (blue wildebeest)	10
Raphicerus campestris (steenbok)	10
Equus sp. (zebra)	7
Oryx gazella (gemsbok)	5
Alcelaphus buselaphus caama (red hartebeest)	5
Lepus sp. (hares)	5
Madoqua kirkii (dik-dik)	5

Fig. S1. An original record of 10-min recordings of body temperature from a single free-living female cheetah (female 1, panel B) and the prevailing black globe temperature recorded at a nearby weather station (panel A) over the 7-month study period (October to May). The dotted lines separate the data into the three seasonal periods analyzed, namely hot-dry, warm-wet, and cool-dry.