

concluded that organochlorine chemicals are a serious threat to certain bat populations. Concentrations (ppm) of DDE from fresh guano and two samples below roosts collected in 1980 were 0.48, 0.33, and 0.31 respectively. These concentrations are less than those obtained at Bracken Cave by Clark et al. (1975), where no adverse effects due to organochlorine insecticide residues were indicated. D. R. Clark, Jr., (in litt.) noted that these concentrations are trace amounts and pose no serious threat to the bats of the Orient Mine.

Funds for this project were provided by Federal Aid in Wildlife Restoration Pittman-Robertson Projects FW-22R and FW-136-R through the Colorado Division of Wildlife. We thank Dr. D. R. Clark, Jr., of the U.S. Fish and Wildlife Service, Patuxent Research Center, Laurel, Maryland, for the pesticide analysis. W. Graul, S. Bissell, C. Braun, D. M. Armstrong, A. Cruz, and C. Jones commented on the manuscript. S. Bissell, P. Svoboda, B. Webb, and C. Chase assisted in the fieldwork.

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MAMMALIAN PREY SELECTION BY A CAPTIVE BOBCAT

Lagomorphs are the most common prey species found in the bobcat's diet throughout North America (Young, 1958). In southeastern Colorado, bobcat scat analysis revealed that desert cottontail (*Sylvilagus audubonii*) occurred in 67% of the sample, followed by wood rat (*Neotoma* sp.) in 40%, kangaroo rat (*Dipodomys ordii*) in 22%, and deer mice (*Peromyscus* sp.) in 14% (E. M. Anderson, pers. comm.). This trend suggests that bobcats are selecting for lagomorphs. This note describes an experiment to test a bobcat's preference for several prey species. The specific null hypothesis tested was: when presented with a selection of known prey species, a bobcat will not consistently select one species over the others.

Research was conducted on the U.S. Army's 1,040-km² Pinon Canyon Maneuver Site along the Purgatorie River in Las Animas Co., Colorado, about 64 km NE Trinidad. The site consisted of open prairie bordered by canyons to the east and south and uplands to the north, northwest, and southwest. The vegetation was predominantly shortgrass prairie and pinyon-juniper (*Pinus edulis-Juniperus monosperma*) woodland.

A wild bobcat being held in an outdoor pen was presented a selection of desert cottontail, wood rat, kangaroo rat, and deer mice in approximately equal quantities (0.1 kg) of freshly thawed,

TABLE 1—Bobcat prey selection determined by intensity of interest exhibited for four species presented simultaneously ($n = 8$ trials). Passive behaviors (sniffing, pawing) received scores of 1, while active behaviors (tugging, digging) received scores of 2.

Behavior	Species			
	<i>Sylvilagus</i>	<i>Neotoma</i>	<i>Dipodomys</i>	<i>Peromyscus</i>
Passive				
Sniffing	6	5	3	7
Pawing	3	2	0	1
Active				
Tugging	4	2	0	0
Digging	4	0	0	0
Total	17*	9	3*	8
Expected	9	9	9	9

*Significant at 0.1 level.

whole carcasses during each trial. To prevent the bobcat from obtaining prey during the test, prey species were placed in separate, wire-enclosed presentation boxes fixed approximately 20 cm apart on a wooden board. This prevented access to the prey but allowed visual and olfactory inspection. For each trial, the prey species were placed in a different sequence.

Eight trials were conducted during 8 nights. Trials were run after dark following a minimum of 24 h without food. Observations were made from behind a blind 5 m from the pen. The prey presentation boxes were placed in the pen by an assistant who then visibly left the area. An infra-red light was used to illuminate the pen.

Interest shown by the bobcat to prey items during trials was recorded as passive or active based on the intensity of interest in obtaining the prey item. Passive behavior included sniffing or pawing at a prey presentation box and was given a score of 1. Active behavior included tugging, gnawing, or digging and was given a score of 2. The scores for each prey species were summed to obtain a total for all trials. Data were analyzed using a Chi-square test.

There was a significant difference between preference for prey species ($\chi^2 = 10.6$, $d.f. = 3$, $P = 0.015$) with desert cottontail selected the most (Table 1). Individual Chi-square cell tests indicated desert cottontail was selected for, and kangaroo rat was selected against (Neu et al., 1974). This suggests that bobcats select prey items and are not taking prey as it is encountered. Further research is needed to determine if this preference is a result of learned behavior of preferred taste.

I thank E. M. Anderson for his guidance and the U.S. Fish and Wildlife Service, Assistance Office (Golden, Colorado), and the Department of the Army-Environment, Energy, Natural Resources Division (Fort Carson, Colorado), for their cooperation.

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EASTERN HARVEST MOUSE, *REITHRODONTOMYS HUMULIS*, IN ARKANSAS

The distribution of the eastern harvest mouse, *Reithrodontomys humulis*, given by Hall (1981) includes most of Arkansas. However, only two specimens have been reported: one from Fort Smith, Sebastian Co., in extreme western Arkansas (Sealander, 1956) and one from 0.8 km E Big Lake, Mississippi Co., in extreme eastern Arkansas (Sealander, 1977). From January through March 1983, 32 additional specimens (22 males, 10 females) were captured from the campus of