General Notes

drinking at the Gobabeb water hole. On a subsequent day, Greenwald observed 10 mousebirds at the water hole from a blind at a distance of about 20 feet through 7×50 binoculars. In each case, the bird drank by immersing its beak to the base and sucking in water seemingly by a pumping action of the hyoid apparatus. At no time did a bird remove its beak from the water before it was finished drinking and tip up in the manner of a typical passerine. Later, we were able to confirm these field observations by close study of our 21 captive mousebirds. By exposing the birds to the full impact of the midday sun, we could induce hyperthermia and panting, which were soon followed by bouts of drinking. We never saw one of these mouse-birds take water in any other way than described above, and we think that this method of drinking is typical for this species.

The question naturally arises whether sucking is typical of the entire order Coliiformes. An individual of *Colius striatus*, which we obtained from the Cleveland Zoo, drinks the same way as *Colius indicus*. Unfortunately, we have no data on the other four species. Such information would be of considerable theoretical importance for phylogenetic interpretations. If sucking proves to be characteristic for all species of mousebirds, then it will be necessary to decide whether their drinking behavior is homologous with that of the Columbiformes and indicates relationship between these orders or, as seems more likely to us, represents another example of a striking convergence between unrelated groups.

Our observations on mousebirds were made during field work supported by a grant from the Public Health Service (Environmental Health) ES 00008.—Tom J. CADE and LEWIS I. GREENWALD, Department of Zoology, Syracuse University, Syracuse, New York.

Observations on a hybrid between the Sharp-tailed Grouse and the Greater Prairie Chicken.—A male hybrid between a Sharp-tailed Grouse (*Pedioecetes phasianellus jamesi*) and a Greater Prairie Chicken (*Tympanuchus cupido pinnatus*) was repeatedly observed on a prairie chicken booming ground 10 miles north of Wray, Yuma County, Colorado in April, 1963.¹ No dancing grounds of the Sharp-tailed Grouse are known to exist in Yuma County, but Sharp-tails have been reported occasionally near Bonny Reservoir, 34 miles south of Wray.

The characteristics of the hybrid were divided between those of the two parental genera, and were not dominated by either. It was smaller and lighter in color than the male prairie chickens on the display ground, and had the barred breast, rounded tail, and very short pinnae characteristic of the prairie chicken. The barring on the breast faded into a spotted or checked pattern on the belly. The air sacs were purple, as they are in the male Sharp-tailed Grouse, but were much larger than those of a Sharp-tail. The two central tail feathers were slightly elongated (Figure 1).

The hybrid exhibited behavioral characteristics of both genera. During display, the wings were held out farther than is usual for prairie chickens, but were not extended as far as those of the Sharp-tailed Grouse. The hybrid seemed to stamp its feet faster and for a longer period than does a prairie chicken, but it ran less than a Sharp-tailed Grouse does during the display. This hybrid controlled a larger territory than the male prairie chickens, but the territory was not in the center of the booming

¹ These observations were made while the author was a graduate student at Colorado State University, Fort Collins, Colorado.

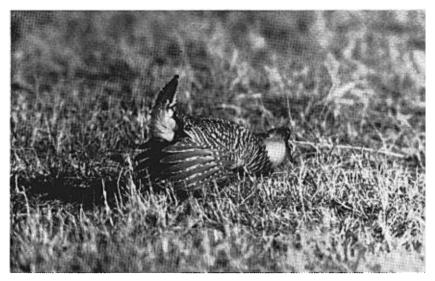


Figure 1. Male hybrid between Sharp-tailed Grouse and Greater Prairie Chicken.

ground. When female prairie chickens were present on the display area, the hybrid repeatedly left its territory in pursuit of the hens. The male prairie chickens on adjacent territories would chase the hybrid back to its own territory, sometimes so vigorously that the hybrid would be forced to fly to avoid combat.

Dr. R. A. Ryder (pers. comm.), of Colorado State University, Fort Collins, observed a male hybrid between the Greater Prairie Chicken and Sharp-tailed Grouse on the same booming ground in the spring of 1964. This hybrid was very similar to the one I observed, and I think it was probably the same bird.—KEITH EVANS, Rocky Mountain Forest and Range Experiment Station, Forest Service, U.S. Department of Agriculture, Fort Collins, Colorado.

Cassin's Sparrow in New Jersey.—On 22 September 1961 a Cassin's Sparrow (*Aimophila cassinii*) was netted at Island Beach, Ocean County, New Jersey, by Mrs. Mabel Warburton. Mrs. Warburton is a participant and co-director of the Island Beach Station of Operation Recovery. She recognized the bird as unusual and sent it to Department of Biological Sciences, Douglass College, Rutgers University, where a tentative identification was made. The specimen was preserved in alcohol and sent to Wesley E. Lanyon, at the American Museum of Natural History (AMNH 366768), where its identity was confirmed. Judging from the worn condition of the rectrices in comparison with the relatively less worn contour feathers, the bird is immature, but the nature of preservation precluded a check of skull ossification for certain determination of age. The sex could not be determined.

According to Lanyon (pers. comm.) this is probably the only specimen of Aimophila cassinii from the eastern United States.—JEFF SWINEBROAD, Department of Biological Sciences, Rutgers University, New Brunswick, New Jersey.