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DESCRIPTION OF WHITE-SPOTTING OCCURRENCE IN A WOODCHUCK *MARMOTA MONAX*

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Abstract.--A woodchuck (*Marmota monax*) with unusual coloration from southern Illinois is described.

In the spring of 1971 while doing a research project at Southern Illinois University, two uniquely marked woodchucks, *Marmota monax* were observed in a pasture 5 miles southeast of Carbondale, Illinois. When seeing the first woodchuck, the animal was thought to be carrying a light colored object in its mouth, like a stick. After closer observation, the light object was seen to be the undersides of the feet. Continued viewing showed that all four feet were white, both tops and bottoms. This animal had a large white triangular patch on its right side. Soon after the appearance of the first, another woodchuck was seen. It too had white feet, but no white spots were noted on its sides or back. Other individuals seen in the vicinity were normally colored.

Following the study, the second animal seen was collected. It was a female, weighed an estimated 3-4 kilograms and was lactating. No young were noted in the vicinity during the study. Examination of the specimen showed all four feet to be completely white, including claws. The upper lip and nose were white, except for a tip of black. The chin also had a white patch, 2.5 x 3.75 centimeters extending posteriorly. The ventral body surface was almost devoid of normal pigmentation. Not only were the hairs white, but also the underlying skin. The white area fromed a V in the chest region between the thoracic nipples. The sides of the specimen were white only on the lower and posterior one-third. All other areas of the body were normally pigmented. Eye color was not noted during the examination. Comparisons were made by using a normally pigmented adult from the SIU-C Zoology Department collection. Photographs showing various structures and comparisons were taken (Figures 1 and 2).

References were reviewed to find previously reported cases of this condition in *M. monax*, but without success. Several mentioned albinism, "white-tipped hairs" or "gray buff" (Amundson, 1950; Black, 1935; Hamilton, 1934). Dunn (1921) mentions white-spotting in rodents, but does not list *M. monax* as one of the cases. McKeever (1962) talks of observing and collecting several pale mutant marmots (*M. flaviventris*) with a few white spots around the head region.

The animal observed and collected is now in the Department of Zoology (Southern Illinois University, Carbondale) collection (number M-1486).

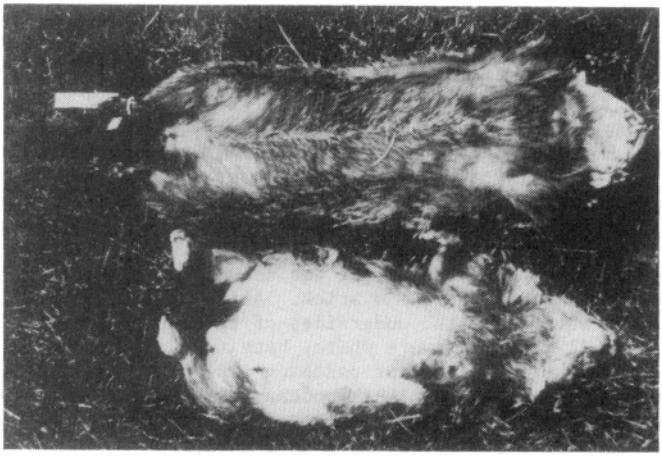

Figure 1. Ventral surfaces of normally pigmented adult (top) and abnormal woodchuck.

Figure 2. Left forepaw of abnormal specimen and right forepaw of normal adult.

LITERATURE CITED

AMUNDSON, R. 1950. The groundhog. Wildl. in North Carolina, 14:4-7.

BLACK, J. D. 1935. A new woodchuck from Kansas. J. Mamm., 16:318-320.

DUNN, L. C. 1921. Unit character variation in rodents. J. Mamm., 2: 125-140.

HAMILTON, W. J. Jr. 1934. Life of the rufescent woodchuck Marmota monax rufescens (Howell). Ann. Carn. Mus. 23:85-178.

MCKEEVER, S. 1962. A pale mutation in the marmot. J. Hered., 53:195-196.