normal skull, the scar on the left side being shallower than that on the right side, suggesting that the jaw muscles were better developed on the right side than on the left.

With its gross deformity and light weight it seems doubtful that the chick would have survived to maturity. No signs of damage or disease were noted in the dermotheca or bony part of the skull and it seems that the deformity may have resulted from a genetic change or an error in the development of the chick. As stated by Pomeroy (*op. cit.*) it could well be that passerines with abnormal bills adapt their behaviour more readily than many nonpasserines, and are thus more likely to survive and be recorded.

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Weights of Black-billed Magpies from southwestern Montana.[1]—Although Linsdale (*Pacific Coast Avif.*, no. 25, 1937) lists the weights of 28 Black-billed Magpies, *Pica pica hudsonia*, and reviews the literature on the development of nestlings, apparently no information has been recorded on the weights of magpies throughout the year or the weights of nestlings of known age. This paper presents the weights of three age classes of magpies collected over a 1-year period.

From April 1963 to April 1964, 145 Black-billed Magpies were collected within a 1-mile-square area in southwestern Montana, approximately 15 miles northwest of Bozeman, Gallatin County, for a parasitological survey (Todd and Worley, *J. Parasit.*, 53: 364–367, 1967). The magpies were separated into the following age classes: nestlings (individually marked and of known age), first-year birds (fledglings to 1 year old), and adults (1 year or older). The plumage characteristics described by Linsdale (*op. cit.*) and the presence or absence of the bursa of Fabricius were used to determine the ages of adult and first-year birds.

We collected 10 adult or juvenile birds each month of the study period and 25 nestlings in May 1963. During April and May nests in the study area were examined daily, the dates of hatching were recorded, and the individuals were marked by toe clipping. The older birds were collected with a trap, except during March and June when some birds were shot. The trap was a cage of 1-inch-mesh wire 5 feet square and 3 feet high with a funnel-shaped entrance. It was baited with viscera from domestic livestock.

[1] Contribution from the Montana Veterinary Research Laboratory, Agricultural Experimental Station, Bozeman, Montana: Paper No. 852, Journal Series.

TABLE 1
MEAN WEIGHT IN GRAMS OF BLACK-BILLED MAGPIES

Month	Juveniles		Adults		Both groups	
	Females	Males	Females	Males	Females	Males
Jan.	163	206	173	204	166	202
Feb.	171	178	179	191	173	183
Mar.	167	182	163	175	164	180
Apr.	162	210	164	170	164	173
May	162	190	171	195	167	193
Jun.	(180)[1]		183	202	183 (180)	202
Jul.	(179)		179	179	179 (179)	179
Aug.	169 (159)		188	191	174 (159)	191
Sep.	171	216	165	185	167	203
Oct.	198	193	193	194	197	193
Nov.	143	203	167	203	155	203
Dec.	184	191	170	179	176	187
Range	156–210 (153–200)	157–230	131–193	138–213	131–210 (153–200)	138–230
Mean	172 (173)	190	171	188	172 (173)	189
Stand. Dev.	17.9 (13.2)	19.8	15.5	18.1	18.6 (13.2)	19.1

[1] Numbers in parentheses are juvenile birds of which the sex was not determined.

After collection the magpies were either weighed within 24 hours or quick frozen and placed in cold storage in sealed plastic bags. The frozen birds were weighed when returned to room temperature. The longest any bird was kept in cold storage was 4 months. The effect of freezing on weight is thought to be negligible. Banks (*J. Mamm.*, 46: 110, 1965) reports weight loss in four species of small mammals frozen for 1 month or less to be less than 1 per cent.

The sexes of the different age classes examined were: adults—26 females, 29 males; juveniles—24 males, 26 females, 15 undetermined; nestlings—25 undetermined. Table 1 lists the mean weights, range in weight, standard deviation, and monthly mean weights of adult and juvenile birds. Figure 1 plots the weights of individual nestlings.

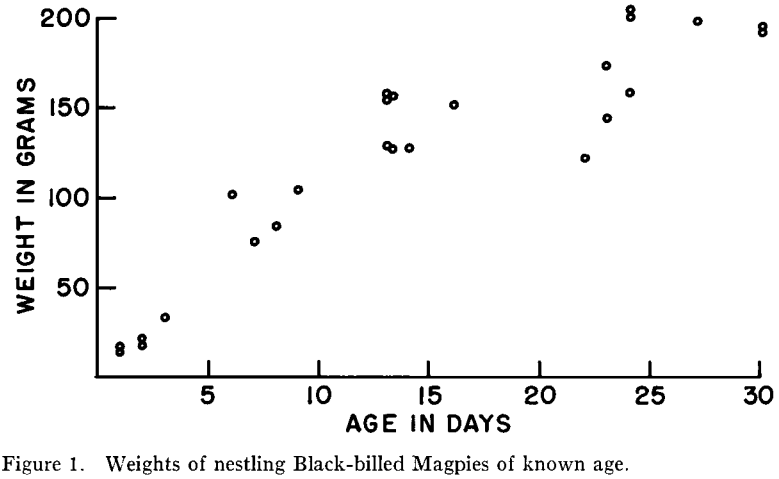

Figure 1. Weights of nestling Black-billed Magpies of known age.

The mean weight of adults was 180.0 g, that of juveniles 179.9 g. Although males had a higher mean weight than females throughout the year (except in the October sample), some females outweighed some males. The considerable variation in weights suggests that the sample size probably was not large enough to reflect any trend in the population. Todd and Worley (*op. cit.*) found no correlation between weight and intensity of infection with intestinal helminths. As Saunders (*Pacific Coast Avif.*, no. 14, 1921), Bent (*U. S. Natl. Mus., Bull.* 191, 1946), Houston (*Blue Jay*, 20: 155, 1961), and Millar (*Bird-Banding*, 35: 265, 1965) have shown that Black-billed Magpies make long-range movements, the weights reported here should not be interpreted as those of a local population of magpies, even though all the birds were collected within a small area.

No decrease in weight was noted during the severe winter months. This may have been due to the ready availability of grain and carrion in the study area. Most of the birds collected during the winter had stomachs full of grain and carrion and in some the esophagus was packed with food. The amount eaten in the trap probably contributed little to the weights of birds; most birds were removed from the trap shortly after they entered, yet their stomachs and intestinal tracts were well filled.—KENNETH S. TODD, JR., *Department of Veterinary Pathology and Hygiene, College of Veterinary Medicine, Urbana, Illinois 61801.*

Audubon's Warbler and Red-breasted Nuthatch breeding in North Dakota.—The morning of 21 June 1967, Calvin L. Cink and Roger L. Kroodsma discovered eight Audubon's Warblers (*Dendroica auduboni*) and one Red-breasted Nuthatch (*Sitta canadensis*) singing in ponderosa pine (*Pinus ponderosa*) forests 12 miles northwest of Amidon, Slope County, southwestern North Dakota. These were found in two of several stands representing the northeasternmost extension of ponderosa pine down the valley of the Little Missouri River, which are quite isolated from those in the vicinity of the Black Hills of South Dakota (130 miles) and the Bighorn Mountains of Wyoming (220 miles) (Potter and Green, *Ecology*, 45: 10–23, 1964). One of six warblers in the more western stand was collected and deposited in the North Dakota State University vertebrate museum (NDSU no. 2149). Two other warblers and the nuthatch were found in the other stand. Kroodsma visited this stand again in the afternoon, and all three birds appeared to be on territory. When Cassel visited this stand 19 July 1967 he observed an Audubon's Warbler still singing. He also collected a Red-breasted Nuthatch (NDSU no. 2150). While both species breed in the Black Hills (Pettingill and Whitney, *Birds of the Black Hills*, Cornell Lab. Ornithol., Spec. Publ. No. 1, 1965), these are apparently the first records for the Audubon's Warbler and Red-breasted Nuthatch in North Dakota during the breeding season.—ROGER L. KROODSMA and J. FRANK CASSEL, *Zoology Department, North Dakota State University, Fargo, North Dakota.*

Records of *Falco sparverius* from the John River valley, Arctic Alaska.—Laurence Irving (*Auk*, 82: 270, 1965), in a review of records of the Sparrow Hawk in north Alaska, reports one collected and another observed near the summit of Anaktuvuk Pass, central Brooks Range, and another that I took on the John River near the mouth of Hunt Fork (67° 44′ N, 152° 25′ W), 30 air miles southwest of the summit of Anaktuvuk Pass. From these and the few other records of this species from arctic Alaska he concludes that its occurrence there is probably "unusual".

The above noted Sparrow Hawk (in my collection) was taken just within the