

cific Grove, on June 21, 1918. Each of these had a large squarish white blotch symmetrically located near the angle of each wing, in some cases more definitely and more extensively developed on the one side than on the other. It is probable that these variants are "sporadically recurring" mutants, as suggested by Mr. Taverner.—CARL L. HUBBS, *Field Museum of Natural History, Chicago, Illinois, January 23, 1919.*

**An Albino Black-chinned Hummingbird.**—Albino hummingbirds are of comparatively rare occurrence, and it seems, therefore, worth while to put on record an individual *Archilochus alexandri* of this character. It was taken at the ranch of Mr. Howard Lacey, on Turtle Creek, a few miles southwest of Kerrville, Texas, by Mr. Shirley Coppock, on July 20, 1913, and was presented to the Biological Survey collection, in which it is no. 241043, U. S. Nat. Mus. It is an adult female and is entirely pure white without a dark feather anywhere.—HARRY C. OBERHOLSER, *Washington, D. C., February 3, 1919.*

**Relative Abundance of Ducks in the Rio Grande Valley.**—An observer who hunts ducks regularly, in the same general locality, by the same general methods, ought to find in the record of his daily bag a very reliable indication of the relative abundance of the various species. The following is such a record, based on two years hunting in that part of the Rio Grande Valley within 50 miles of Albuquerque, New Mexico.

Species	Killed	Relative abundance on basis of 100	Relative abundance (corrected)
Mallard	77	43	40
Green-winged Teal	28	16	18
Pintail	20	11	12
Spoonbill	19	11	10
Baldpate	9	5	5
Mottled Duck (?)	9	5	5
Red-breasted Merganser	0	0	5
Blue-winged Teal	7	4	1
Gadwall	4	2	1
Canvasback	2	1	1
Redhead	2	1	1
Golden-eye	1	1	1
	178	100	100

In the third column I have made estimated allowances for certain extraneous factors. For instance: Mallards are reduced because they winter here, and hence are available for hunting during a longer period. Green-winged Teal are raised because they are mostly gone by November 5. Pintails are raised because only a very few winter. Spoonbills are reduced because they always occur in small flocks, and the number killed is for this reason relatively great as compared with the number seen. Their stupidity is about offset by the fact that when Mallards are abundant, they are not often shot at. Mottled Ducks pass southward early in the season and accordingly are not reduced, as was done with Mallards. Red-breasted Mergansers are not killed, but are common in winter,—their relative abundance is estimated. The remaining species are not common. The table does not include the Cinnamon Teal, since this is a spring but not a fall migrant here, and is not seen during the hunting season.

The hunting was done about equally over river, ponds, sloughs, and flooded fields, and about equally as pass shooting, jump shooting, and decoy shooting, so that the figures given should not be particularly affected by specific habits or habitat.

This table is offered as a suggested method, rather than as a final conclusion. Based on five years instead of two, it ought to be quite the most accurate possible method of determining relative abundance of species.—ALDO LEOPOLD, *Albuquerque, New Mexico, February 1, 1919.*

**The California Shrike Probably Mates for Life.**—The recent article by Mr. F. C. Willard (*CONDOR*, xx, 1918, p. 167), suggesting the probability that many pairs of birds remain mated for life, has brought to light considerable information on this subject;