A NEW RACE OF WILD TURKEY

BY ROBERT T. MOORE

For many years it has been known that Wild Turkeys inhabit the western slopes of the Sierra Madre of northwestern Mexico, but, so far as a fairly exhaustive search of records indicates, no actual specimens had been taken by a zoologist until our 1933 expedition to southeastern Sonora. In May of that year an adult male was observed by the author near Mirasol, Sonora, and on the 19th two females were secured near Barromicon, one on the Sonora side of the Sonora-Chihuahua boundary line and one on the Chihuahua side. On the next year's expedition a female was collected by the author at Guayachi, Chihuahua, on the western slope of the Sierra. These birds prove to be different from Meleagris gallopavo merriami of Arizona and also from the birds of eastern Durango and the eastern slopes of the Sierra Madre in Chihuahua, and are herewith described.

Meleagris gallopavo onusta¹ subsp. nov.

Type.—Female adult, No. 9043, collection of Robert T. Moore; two miles southeast of Guayachi, Chihuahua, twenty miles northeast of junction of Rios Chinipas and Fuerte, western slope of the Sierra Madre (altitude about 6400 feet), May 12, 1934; collected by Robert T. Moore.

Subspecific characters.—Male: nearest to Meleagris gallopavo merriami Nelson, but tips of upper tail coverts and rectrices white, instead of light buff; subterminal narrow cinnamon bar of merriami absent; black bar immediately anterior to it usually or always absent; inner and outer margins of secondaries and primaries less cinnamon, more dull brown and white; iridescence both above and below darker, less brilliantly green and copper. Female: differs in all respects as the male, but the barring of the rectrices characteristic of the males of both races, is less distinct. M. g. onusta differs from M. g. mexicana, if this form must be recognized as covering birds from Jalisco to southern Chihuahua east of the Sierras, in having the median² rectrices barred, instead of mottled or vermiculated, the same distinction generally applying to the other rectrices; and less amount of cinnamon anterior to the white tips on tail and tail coverts. It differs from typical M. g. gallopavo ranging from Vera Cruz to Michoacan, in barring of its rectrices; rump pure black without green iridescence; size larger.

Range.—Breeding range probably confined to the Transition and Lower Canadian Zone of western slope of the Sierra Madre of northwestern Mexico at an altitude of approximately 8500 feet to 4000 feet, descending still lower in the autumn, as it is known to feed on the cornfields of the Indians as low as about 2500 feet.

The boundary of its northern extension along the western slopes of the Sierra in Sonora is not determined, although turkeys are known to occupy the slopes of the mountains of east-central and northeastern Sonora. The southern limit of its

Latin onustus = burdened, referring to the heavy body this very large turkey carries.

²Due to loss or individual variation, the rectrices vary from 16 to 20. The male of *onusta* has 18, the median pair being present. It is easily distinguishable.

range is also in doubt, but it certainly reaches southeastern Sinaloa, since the author was told of its presence by the Indians of Rancho Batel.

Specimens examined.—M. g. onusta: Sonora, 1 Q near Barromicon; Chihuahua, 1 9, Chihuahua side of Chihuahua-Sonora State Line near Barromicon; 1 9, Guayachi (type); 1 9, San José; Durango, 1 3, Muertocito. M. g. merriami: ARIZONA, 7 & (including type), 3 Q, Winslow; 2 Q, White Mts.; 1 &, Sacramento Mts.; 1 &, La Jara; New Mexico, 2 &, Cloudcroft; 1 Q, Pecos Baldy; 1 &, 2 Q, Manzano Mts.; 2 o, San Mateo Mts.; Chihuahua, 1 o, west side San Luis Mts. M. g. intermedia: Texas, 6 ♀, Corpus Christi; 1 ♂, near Newton; Nuevo Leon, Mexico, 1 7, 3 9, Montemorelos; 1 7, Cerra de Silla; Tamaulipas, 1 7, Soto de Marmia; 1 9, Forlon. M. g. silvestris: VIRGINIA, 1 of, Leesburg; South Carolina, 1 9, Jamestown; 1 9, Santee Club; North Carolina, 1 9, Mt. Mitchell State Game Refuge; 1 9, Pisgah Forest; Arkansas, 1 9, Lake Wapanoca; Oklahoma, 1 o, Wichita National Forest. M. g. osceola: Florida, 1 o, New River; 1 o, 1 9, Aucilla River; 1 J, Illahaw. M. gallopavo gallopavo: Vera Cruz, 1 Q, Mirador; 1 ♂, Zacuapam; Michoacan, 4 ♂, 7 ♀, La Salada. Intergrades between merriami and M. g. gallopavo: Durango, 1 &, 1 Q, El Salto; Chihuahua, 3 &, 2 Q, 2 im. &, Colonia Garcia; 1 &, Pacheco River; 1 &, Bonita Creek.

Remarks.—In Peters's 'Birds of the World' (vol. 2, p. 140, footnote) an excusable error occurs, due to the apparent absence of a formal recording of a specimen, taken by Major Goldman at Mirador, Vera Cruz, namely, that "the occurrence of this form on the eastern slopes of the cordillera in Vera Cruz has never been proved." Major Goldman secured his specimen in November 1903, and another specimen, now in the U. S. Biological Survey collection, Washington, was obtained by Sartorius at Zacuapam. Major Goldman tells me that at the time of his visit turkeys were known in Vera Cruz, but had already become rather scarce. These records probably indicate that a Wild Turkey was at one time much more common in the mountains of Vera Cruz, for in the first place it is now universally agreed that the turkey, which the Spanish explorers conveyed to Spain, originated either from wild turkeys or turkeys already domesticated, in eastern Mexico; and in the second place, if turkeys can exist in a wild state in the mountains of Vera Cruz today, it is logical to infer that a wider distribution occurred three centuries ago and undoubtedly included these mountains. It is also generally accepted that the Wild Turkey of southern Mexico should receive Linnaeus's name of gallopavo. Therefore, in view of these additional records it seems logical to go one step farther: I herewith suggest that the type locality of Meleagris gallopavo gallopavo Linnaeus be restricted to Mirador, Vera Cruz, where it could have occurred in the wild. I have compared these two specimens with a good series from Michoacan, with which they are identical. The range of M. g. gallopavo therefore extends from Vera Cruz to Michoacan. In making the above suggestion I am not overlooking the possibility that the present wild bird of Mexico has some admixture of domesticated blood, but I think this can be properly disregarded, for the following reasons: (1) all of the races of *M. gallopavo* in the wild state in the United States also show this same admixture; (2) the presence of domestic blood has not modified the characters of any of the wild races today, so that they cannot be readily distinguished from one another and this admixture is so weak a factor, that it appears only in a few individuals and can be easily separated; (3) the birds of Vera Cruz and Michoacan (true gallopavo), taken in the wild state, are more clearly differentiated from all the other races than these latter races are from one another. All these specimens have pure-white tips to the rectrices and upper tail coverts, markedly distinguishing them from the birds of the United States, even from merriami, in which this area is buffy.

The above designation of the type locality of *M. g. gallopavo* makes it necessary to consider the possibility of resurrecting Gould's name, *mexicana*, based on a bird probably taken by Floresi at Bolaños, Jalisco. As Nelson (Auk, vol. 17, p. 122, 1900) has pointed out, it is possible that the two specimens from El Salto, Durango, represent *mexicana*; nevertheless, I feel that these individuals and others from the east slope of the Sierra of Chihuahua are nothing but intergrades between true *gallopavo* and *merriami* and I deem it wiser to leave *mexicana* buried as a synonym of *gallopavo*, at least until a series can be taken from Bolaños.

Following the present distribution of the turkeys of North America from the northeast to the southwest, we find a distinctly 'reddish' bird in northeastern United States with tail and upper tail coverts largely chocolate red. As we proceed toward the southwest, we discover the chocolate turning to cincamon, and becoming less prominent. *M. g. onusta* is the extreme dark form of the species.

KEY TO RACES OF Meleagris gallopavo

(Based chiefly on males)

- A. Upper tail coverts and rectrices (to a less extent) largely Chocolate¹ or Cinnamon, the tips Chocolate.
 - B. Tips of upper tail coverts Chocolate.
 - C. White bars on outer primaries and outer secondaries broad and conspicuous; inner secondaries barred. M. g. silvestris—eastern United States,—central Pennsylvania to Oklahoma, eastern Texas and northern Florida.
 - CC. White bars much restricted and often broken; inner secondaries without bars, dirty grayish brown. M. g. osceola—central and southern Florida.
- BB. Tips of upper tail coverts dirty brown. M. g. intermedia—middle northern Texas, south to Tamaulipas.
- AA. Cinnamon on upper tail coverts much reduced, the tips white or light buff.
 - B'. Rectrices barred with cinnamon and black; rump black with faint or no green iridescence; size larger.

¹Capitalized names of colors in this paper taken from Ridgway, 'Color Standards and Color Nomenclature,' 1912.

- C'. A subterminal cinnamon bar next to tip of rectrices, including median pair, and generally a wide black bar anterior to it; tips of upper tail coverts light buff; margins of secondaries and primaries more cinnamon. M. g. merriami—southern Colorado, Arizona, New Mexico, western Texas and northern Chihuahua east of Sierra Madre.
- CC'. No cinnamon subterminal bar on rectrices and black bar generally absent on median pair; tips of upper tail coverts and rectrices pure white; margins of secondaries and primaries less cinnamon and duller brown. M. g. onusta—western slopes of Sierra Madre in southeastern Sonora and Sinaloa.
- BB'. Rectrices vermiculated or mottled, not barred; rump distinctly marked or barred by green iridescence; size smaller. *M. g. gallopavo*—Vera Cruz to Michoacan and in intergrading form to Durango and southern Chihuahua east of Sierra Madre.

California Institute of Technology Pasadena, California