flanks grayer. In fact almæ in this plumage differs from aliciæ in same plumage taken on the same day only in possessing the loral stripe and orbital ring, having the ground color of the throat, chest and auriculars less white, and the edgings of the quills and wing-coverts slightly paler.

In first winter plumage the same difference obtains, almae being distinguishable from aliciae only by the slightly brighter edgings of the quills and wing-coverts, and the orbital ring, loral stripe, and auricular suffusion of cream-buff; and differs greatly from the raw umber upper parts, wings and tail, and bright buff loral stripe, orbital ring and suffusion of breast, throat and auriculars of swainsonii. The dark markings of the breast and the flanks are also darker than in swainsonii.

DESCRIPTION OF A NEW SUBSPECIES OF MELEA-GRIS GALLOPAVO AND PROPOSED CHANGES IN THE NOMENCLATURE OF CERTAIN NORTH AMERICAN BIRDS.

BY E. W. NELSON.

WHILE working on the Mexican birds in the Biological Survey collection, the necessity of certain changes in the nomenclature of several North American species has become evident. These changes refer to Meleagris gallopavo, Colaptes cafer, Sayornis nigricans, Myiozetetes texensis, and Agelaius phæniceus longirostris. The most interesting development of our recent work is the demonstration of the difference between the Wild Turkeys of Arizona and those of the Sierra Madre of western Mexico as detailed below.

All measurements are given in millimeters.

Meleagris gallopavo merriami, subsp. nov. Merriam's Turkey.

Type, No. 165898, & ad., U. S. Nat. Mus., Biological Survey Collection. Collected 47 miles southwest of Winslow, Arizona, Jan. 9, 1900, by E. A. Goldman.

Distribution. — Mountains of Arizona, western New Mexico, and south to the Mexican border and north probably into extreme southwestern Colorado.

Subspecific characters.—Distinguished from M. g. fera by the whitish tips to feathers of lower rump, tail-coverts and tail; from M. g. mexicana by its velvety black rump and the greater amount of rusty rufous succeeding the white tips on tail-coverts and tail, and the distinct black and chestnut barring of middle tail feathers.

Description of adult male in winter. - Neck all around, under side of body to lower abdomen, upper back, scapulars, middle and lesser wingcoverts varying in different lights from rich metallic purplish green to fiery red bronze; feathers of lower back and rump rich velvety black with scarcely any trace of iridescence but tipped with pale rusty white on lower rump; upper tail-coverts broadly tipped with rusty white and with a subterminal band of dark rufous succeeded by a broader band of brilliant iridescent greenish purple, the bases of the feathers narrowly barred black and rufous; the long, outermost upper tail-coverts usually with a broad subterminal rufous band succeeded basally by narrow black and rufous bars; tail including middle feathers tipped with rusty white, with subterminal band of rufous followed by a broad black band and thence to base narrowly barred with black and dark rufous; greater wing-coverts varying from greenish to purplish bronze, with black tips; primaries strongly barred black and white; secondaries similarly marked but white more or less spotted with brown; tertials indistinctly barred and mottled with black, rusty brown and buffy whitish, with purplish and greenish reflections on outer webs; thighs and lower abdomen dull black, feathers narrowly tipped with dull grayish white; feathers of flanks and under tail-coverts tipped with pale rufous (sometimes rusty whitish) with a narrow subterminal band of dark rufous succeeded by a much broader area of iridescent purplish bronze, the base of feathers on flanks dull black, but under tail-coverts barred with black and dark rufous. short and blunt, sometimes one or both absent. Barb on breast well developed.

Dimensions of type. — Wing, 520; tail, 400; culmen, 41; tarsus, 162.

Adult female in winter.— Head and upper neck usually with a strong growth of black, hair-like feathers; the females differ from males mainly in smaller size and the much duller, less iridescent plumage, less pronounced rufous markings about tail and browner wings; feathers of entire back bordered with gray; borders narrower and darker anteriorly, paler and broader posteriorly and shading into broad whitish tips on rump; the dark gray tips on middle and upper back with a peculiar dark greenish gloss in certain lights; feathers on underparts tipped with paler, more rusty gray than on back, the tips broadening posteriorly; under tail-coverts tipped with rusty white with a narrow subterminal bar of dark rufous.

General Notes. - All recent ornithologists have considered the

Wild Turkeys of Mexico and the southwestern United States (aside from M. gallopavo intermedia) as one form which was the ancestor of the domesticated bird. This idea is certainly erroneous as is shown by the series of specimens now in the collection of the Biological Survey. When the Spaniards first entered Mexico, they landed near the present city of Vera Cruz and made their way thence to the City of Mexico. At this time they found domesticated Turkeys among the Indians of that region and within a very few years the birds were introduced in Spain. The only part of the country occupied by the Spanish during the first few years of the Conquest, in which Wild Turkeys occur, is the eastern slope of the Cordillera in Vera Cruz, and there is every reason to suppose that this must have been the original home of the birds domesticated by the natives of that region.

In the 'Proceedings' of the Zoölogical Society for 1856 (page 61), Gould described Meleagris mexicana from a specimen obtained by Floresi. Mr. Floresi lived for some time at Bolaños, Jalisco, Mexico, where he had charge of a large mining plant for an English company also operating mines at Real del Monte, Hidalgo. Among the birds sent to England by Floresi, was the type of Selasphorus floresi, known to have come from Bolaños, and specimens of Campephilus imperialis and Euptilotis neoxenus, for which no locality was given, but as both species occur on the mountains within a few miles of Bolaños, it is altogether probable that they came from that place. Gould's description of the type of Meleagris mexicana is not sufficiently detailed to determine the exact character of his bird, but fortunately the type was figured in Elliot's 'Birds of North America' (Part X, pl. 1, with text, 1868), and the most distinctive characteristics -- the green iridescence on the rump, the maculated and mottled (instead of barred) tail, and the absence of rufous about the tail and tail-coverts --- are well shown. In addition Gould's type apparently served for the description of the adult male of M. gallopavo in the 'Catalogue of Birds of the British Museum' (XXII, page 387), and an adult female is described in the same volume from Ciudad Ranch, Durango.

These descriptions agree so closely with an adult male and

female obtained by me at El Salto, Durango, that there is little doubt Floresi's specimens came from near Bolaños, which is a little farther south in the same part of the Sierra Madre. Although there are no specimens at hand from the State of Vera Cruz, whence must have come the original *M. gallopavo*, yet the climatic conditions are so different between the cold pine-covered mountain tops on the western side of the tableland frequented by Gould's *M. mexicana*, and the hot, humid tropical and subtropical mountain slopes on the eastern side of the tableland in Vera Cruz, the home of *M. gallopavo*, that there is scarcely a chance of the birds being the same.

Thus it will become necessary to treat M. gallopavo and M. mexicana as at least subspecifically distinct. Whatever may be the relationship of M. mexicana to M. gallopavo, the M. g. merriami is easily separable from M. g. mexicana of the Sierra Madre of western Mexico, from Chihuahua to Colima. Birds from northern Chihuahua are intermediate. In working out these two forms, I have had a fine series of thirteen specimens of M. g. merriami, including the type, obtained by Mr. E. A. Goldman near Winslow, Arizona, and nearly as many others representing intermediates from the Mexican border, and typical M. gallopavo mexicana from southern Durango.

I take pleasure in naming this handsome bird in honor of Dr. C. Hart Merriam, whose well-known biological survey of San Francisco Mountain was made within sight of the type locality.

Colaptes cafer collaris (Vig.).

Colaptes collaris Vigors, Zool. Journ. IV, p. 354 (1829). Type from near Monterey, California.

General Notes. — The comparison of our large series of Mexican red-shafted Flickers with birds from California and the Rocky Mountain region demonstrates the truth of Mr. Ridgway's idea ¹ that they represent two geographic races.

True C. cafer is restricted to the tablelands and mountains of Mexico, from near the northern border south to the State of Oaxaca. The birds of California and the Rocky Mountain

¹ Man. N. Am. Birds, 1887, p. 296, footnote.

region of the United States (except range of *C. c. saturatior*) may be distinguished from true *C. cafer* by their larger size, decidedly longer bills, paler upper parts, more sparsely spotted under parts, and broader black tips to tail-feathers. Specimens from northern Mexico are intermediate. *C. cafer saturatior* differs from *C. cafer* mainly in its larger size, less spotted breast, and paler gray on under side of neck.

Myiozetetes similis superciliosus (Bp.). Texas Fly-Catcher.

Tyrannus superciliosus BONAPARTE, P. Z. S. 1837, 118. Described from specimens taken in Guatemala. Bonaparte credits this name to Swainson but I have been unable to find any justification for this and must, therefore, cite Bonaparte as the authority for the name.

General Notes. - The bird usually recognized by American ornithologists as Myiozetetes texensis (Gir.) ranges from Panama north to the valley of the Rio Grande. After examining a large series from numerous localities within this wide range, I have been unable to detect any difference in color between specimens from the extremes of its habitat, but those from Panama are a little smaller than those from Costa Rica and thence northward. Specimens from Guatemala and Mexico are absolutely indistinguishable. This being the case, Bonaparte's name having four years priority over Giraud's Tyrannula texensis, and applying strictly to this bird, should replace the latter. From Panama south, there appears to be a direct gradation into the smaller, darker, more olive-backed Myiozetetes similis (Spix), Av. Bras., II, p. 18, pl. 25, of Brazil, and as a consequence the form north of Panama must stand as a subspecies under the designation given at the head of these notes.

Sayornis nigricans (Sw.) and its subspecies.

Examination of the Black Flycatcher from various parts of its range reveals the existence of three recognizable subspecies. These have each been named, and below are given brief diagnoses of the forms with their ranges.

Sayornis nigricans (Sw.). Under tail-coverts white more or less broadly striped with dusky.

Distribution.—All of Mexico (except Yucatan and the Pacific coast from Colima to the northern border), and north into Texas, New Mexico, and southeastern Arizona.

General Notes.— Swainson described this bird from the "Tableland of Mexico." The type was in the Bullock collection, which was made in the region about the Valley of Mexico, so birds from that district may be considered typical.

Sayornis nigricans semiatra (Vigors). Under tail-coverts pure white. Distribution.—Pacific coast of Mexico and the United States from Colima to Oregon, including most of Arizona.

General Notes.—Vigors described his bird from a specimen collected during the voyage of the 'Blossom' but gives no locality or habitat. The collection of birds made on the west coast of America during this voyage came mainly from near San Blas, Mexico, and Monterey, California; both within the range of the form having the pure white under tail-coverts. This being the case, we may consider birds from near Monterey, California, as typical.

Sayornis nigricans aquatica (Scl. & Salv.). Under tail-coverts dingy blackish.

Distribution. — Guatemala and south to Costa Rica. The type of this form was described from a specimen taken at Dueñas, Guatemala.

General Notes. — Specimens from Chiapas, Mexico, are midway between true S. nigricans and S. aquatica and there appears to be a regular gradation from one to the other. The same state of affairs exists to the north where the ranges of S. nigricans and S. semiatra join. Birds from Texas, New Mexico and Northern Mexico have much less distinctly dusky streaked under tail-coverts than those from Central Mexico, but should be referred to true S. nigricans. Both of these forms are thus found within the border of the United States.

Agelaius phæniceus sonoriensis Ridg.

In his 'Manual' Mr. Ridgway substituted Salvadori's longirostris for his own sonoriensis as a name for the Red-winged Blackbirds of Arizona and western Mexico, mainly because the habitat of A. longirostris was given as western Mexico. Salvadori described A. longirostris from a single adult male, and as the

measurements are about the only means of distinguishing the males of the various forms of A. phaniceus, we must rely upon them to determine this bird's relationship. The measurements given for A. longirostris - wing, 111; tail, 81; culmen, 27; depth of bill, 10; tarsus, 28 - are sufficient to show that it is decidedly smaller with a longer and slenderer bill than the form described by Mr. Ridgway as A. p. sonoriensis. Five males of the latter from Culiacan, Sinaloa, Mexico, average: wing, 127; tail, o1; culmen, 22.5; tarsus, 31; and the smallest of the series measures, wing, 126; tail, 88; culmen, 23; tarsus, 31. of Culiacan in Mexico the birds are still larger and to the north somewhat smaller, especially in Arizona, whence came the type of A. p. sonoriensis, but they never approach the dimensions given by Salvadori. After an examination of the considerable series of birds now available from various points in Arizona and western Mexico, from the Arizona border south to San Blas. Tepic, it is evident that the name A. longirostris cannot be properly applied to the bird named A. p. sonoriensis by Mr. Ridgway. It is very probable that the type of A. longirostris was attributed to western Mexico through some error in labeling.

A REVIEW OF THE THREE-TOED WOODPECKERS OF NORTH AMERICA.

BY OUTRAM BANGS.

In North America, as is well known, two very different kinds of Three-toed Woodpeckers are found. These are the *Picoides arcticus* series (black-backed Three-toed Woodpeckers), and the *Picoides americanus* series (black-and-white-backed Three-toed Woodpeckers). Both are boreal species and over a very large extent of country a representative of each occur together. Both species may be subdivided into geographical races — *P. arcticus* into two, *P. americanus* into four. Of these six races, one of *P. arcticus*, inhabiting the Cascade Mountains, and one of *P. americanus*, found in Labrador, have not before been recognized. There is furthermore a mistake in the synonymy of *P. americanus* which makes it necessary to give the form of northern New Eng-