

tic; thus two adult male specimens from Surinam (in Amer. Mus. Nat. Hist.), evidently nominate *chalybea*, have a glossy blue-black chest (but not throat). Conceivably the two assumed hybrids might be melanistic examples of *domestica*. One reason for rejecting this view is that they agree with certain specimens from a series (also in Amer. Mus. Nat. Hist.) taken at Leones, Córdoba, central Argentina, including numerous typical *elegans* but no typical *domestica*. The collector, the late W. H. Partridge, expressed (in litt.) the opinion that his series of birds, variably intermediate between *elegans* and *domestica*, were hybrids. In January, when they were collected in Argentina, these martins were already on migration. While the literature gives the impression that *elegans* and *domestica* are broadly sympatric, this is almost surely not the case, although their ranges evidently touch and may overlap narrowly. During transience one form may enter the range of the other, and on migration they evidently associate to some extent. Probably, as with all members of the *Progne subis* superspecies, they are allopatric representatives. The hybridization noted raises the question whether *elegans* may not be more closely related to *P. chalybea domestica* than to the much smaller *P. modesta* of the Galápagos Archipelago, with which it has customarily been associated specifically. The isolated Galápagos population is, in both sexes, the darkest of the entire superspecies; the adult males are wholly blue-black, even lacking the (usually concealed) white back tufts possessed to a varying degree by all other forms, and the females are uniformly sooty below. Wholly blue-black plumage in adult males is shared not only by *modesta* and *elegans*, and by *murphyi*, endemic to the Peruvian coast (generally considered conspecific with *P. modesta*), but also by the distant, temperate North American, *P. subis*. The increased melanization in the extreme

northern and southern forms, the most migratory members of the superspecies, and also in the sedentary populations of the Galápagos and coastal Perú, may have evolved independently (serving different functions) from the white-bellied, broadly distributed, tropical *P. chalybea* stock, in which the two sexes are essentially alike. In *subis* and *elegans*, of North and South Temperate Zones respectively, the melanization of the adult males has produced a striking sexual dimorphism, which may facilitate rapid pair formation and procuring of nest sites in these long distance migrants with a relatively short breeding season. The blackness of the sedentary Galápagos and Peruvian forms may have developed as a cryptic adaptation to living in crevices of dark rock cliffs; but the possibility does exist that the peripheral populations were derived from migrant *elegans* carried off course, rather than from *P. chalybea* of the continental tropics.

Food. The abundance of martins in the cane fields at Marienburg in 1967 may have reflected an infestation of froghoppers (Homoptera: Cercopidae). The gizzards of the birds were filled with these insects, which Dr. G. C. Geyskes of the Leiden Museum identified as of two species, *Aeneolama flavilatera* (Urich) and *Delassor tristis* F. In addition, stomach contents included Hymenoptera (Braconidae, Stephaniidae, and Formicidae: Attinae). One of the *elegans* had swallowed four large dragonflies (Odonata: Aeschnidae: *Coryphaeschna viriditas* Calv.), a species so big that Dr. Geyskes thought it could only have been caught when emerging.

We are indebted to Th. Renssen for collecting the martins, to G. C. Geyskes for identification of stomach contents, and to W. B. Robertson, Jr., for calling attention to the Florida specimen.

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THE FOX SPARROW ON THE WEST SLOPE OF THE OREGON CASCADES

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Fox Sparrows, *Passerella iliaca*, of three subspecies breed in the state of Oregon (Gabrielson and Jewett, Birds of Oregon. Oregon State Monogr. 2:588, 1940). One race, *P. i. megarhyncha* (*mariposae* of Gabrielson and Jewett, op. cit.), nests on the west slope of the Cascades in extreme southern Oregon. Another form, *P. i. fulva*, occurs on the east slope of the Cascades in southern and central Oregon. The third, *P. i. schistacea*, occurs in the eastern portion of the state. None has been reported on the west slope of the Cascades in the central part of Oregon.

On 21 June 1960 I collected a male Fox Sparrow in breeding condition along the North Santiam River near the junction of Bugaboo Creek, at an elevation of 2500 ft, in Linn County, Oregon, on the west slope of the Cascades. The specimen was identified as a representative of the race *fulva*, and was deposited in the Museum of Vertebrate Zoology. Although I realized that this represented a considerable extension of the accepted range of this subspecies, no report was made.

On 24 July 1968 Harry B. Nehls and William Thackaberry obtained a Fox Sparrow near the confluence of Park Creek and Danny Creek in the Santiam

Pass area of the central Cascades in Linn County, some 20 miles south of my 1960 collecting locality. That specimen, a female in breeding condition (brood patch present, oviduct convoluted), was sent to the Bird and Mammal Laboratories of the Bureau of Sport Fisheries and Wildlife, where it was prepared by Roxie C. Laybourne and deposited in the U. S. National Museum. The bird represents the race *P. i. megarhyncha*. At the time of identification of this specimen, the bird taken earlier was re-examined, through the courtesy of Ned K. Johnson, and its identity as *P. i. fulva* was confirmed.

Thus it appears that Fox Sparrows of two subspecies were breeding some 20 miles and eight years apart on the west slopes of the Cascades in central Oregon, where the species has not previously been reported.

Rather extensive logging operations have been carried on in this region for a number of years. In the area which I visited in 1960, small tracts were clear-cut and burned; the areas then began a slow recovery while other areas were cut. This resulted in a mosaic of small tracts of various successional stages interspersed with tracts of mature forest. The brushy areas of new growth represented a habitat not previously present, at least to any extent, in that portion of the west slope of the Cascades.

The situation apparently is quite similar where the second bird was obtained. Nehls (in litt.) stated, "The area in which this colony was found was recently cut over leaving almost no trees. The ground cover is almost all low brush and bushes of the 'mountain laurel' type, few being over eight feet high. Heavy timber still surrounds the area. . . ." Other breeding

colonies of Fox Sparrows were found in the vicinity, and Nehls mentioned that "we found all of the fox sparrows up on the hot, dry slopes and not along the streams. . . . The two or three meadows that we checked did not produce any fox sparrows."

It appears that the logging operations there have opened up a new habitat suitable for Fox Sparrows, and that colonization by that species has occurred. Further, colonization has come from two directions and from two separate populations, *megarhyncha* to the south and *fulva* to the east. It is of interest to note that White-crowned Sparrows (*Zonotrichia leucophrys*) have also colonized suitable areas there, but that the source of that species was from the west (Banks, Univ. California Publ. Zool. 70:41, 1964).

Several questions of interest cannot be answered with the material on hand. One wonders when the colonization of this newly opened habitat occurred. In 1941 Alden H. Miller and Ward C. Russell, of the Museum of Vertebrate Zoology, collected along the North Santiam River near the locality I later visited. According to Russell's notes, logging and burning were taking place at that time (see Banks, loc. cit.), although certainly the area affected was much less extensive than 19 years later. They obtained several

specimens of White-crowned Sparrows, but no Fox Sparrows; the latter species was not observed by these two reliable field men, and presumably was not present. Thus, at least along that portion of the North Santiam River, colonization by the race *fulva*, normally found on the other side of the Cascades, apparently took place between 1941 and 1960.

Eight years passed between the collection of the two specimens, of different subspecies, reported here. Has *megarhyncha* extended northward, replacing *fulva*, or do both forms exist in the newly formed habitat? If the latter situation prevails, are there ecological differences, perhaps in the successional stage of regrowth, which permit both to occur? To what extent do they interbreed, or remain separate? Some of these questions may be answerable with study now or in the near future. The question of the fate of this "new" population over the longer term is of no less interest, and should be kept in mind by future investigators.

I thank H. B. Nehls for making his specimen available to me and for permitting me to report on it, and W. C. Russell for providing information from his and Miller's field notes from 1941.

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APPARENT LACK OF THE DOUBLE-SCRATCH IN TWO SPECIES OF *SPIZELLA*

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A foraging method called the double-scratch occurs in numerous New World emberizines (see Nice, Trans. Linnaean Soc. New York 6:42, 1943; Harrison, Wilson Bull. 79:22, 1967). The double-scratch involves a hop forward and then a jump backward; in the latter movement both feet drag so as to scrape away the substrate (e.g., leaf litter or snow). A strongly genetic basis for this behavior is indicated by its apparent occurrence in all individuals of those species having the trait. Moreover, as I have noted, individuals of species not showing this behavior (e.g., *Cyanocitta cristata*, *Passer domesticus*, *Richmondia cardinalis*) apparently fail to learn it, despite their occasional opportunities to observe other species using the double-scratch. Recently Harrison has suggested applying the double-scratch as a taxonomic character in classifying emberizines. I here report an apparent exception to the

taxonomic distribution of the double-scratch as summarized by Harrison (op. cit., p. 23).

Nice (op. cit., p. 42) commented that the double-scratch "does not seem to occur in the Field Sparrow" (*Spizella pusilla*). Furthermore, despite a deliberate effort to observe such behavior, I have failed to see the double-scratch used by either Field Sparrows or Chipping Sparrows (*S. passerina*). In contrast, I have repeatedly noted this behavior in wintering Tree Sparrows (*S. arborea*) and have also confirmed the occurrence of the double-scratch for *Pipilo erythrophthalmus*, *Passerculus sandwichensis*, *Junco hyemalis*, *Zonotrichia albicollis*, *Passerella iliaca*, and *Melospiza melodia*. The double-scratch does not appear to characterize *Spizella*, having been reported for only one species of that genus.

If the genus *Spizella* is monophyletic, then presumably the loss or reduction in double-scratch has evolved within the genus, for this trait occurs widely in the emberizines, and there is no evidence that *Spizella* is primitive in the subfamily. Harrison (op. cit.) has suggested a possible correlation between the loss of the double-scratch and the evolution of walking from hopping, but this correlation does not seem to apply to *Spizella*, for Tree, Chipping, and Field Sparrows all typically hop over the substrate.

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PSEUDO-SLEEPING ATTITUDE IN LESSER SCAUP AND RING-NECKED DUCKS

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Cornwell and Bartonex [Bartonek] (Condor 65:444, 1963) have summarized field observations concerning what they described as pseudo-sleeping in two species of waterfowl (Canvasback, *Aythya valisineria*, and Ruddy Duck, *Oxyura jamaicensis*) and several other bird species. Brackbill (Condor 66:309, 1964) has re-

ported an apparent case of the same phenomenon in a Herring Gull (*Larus argentatus*). The speculation by Cornwell and Bartonex (op. cit.) that this phenomenon exists among other species of anatids prompted me to report an incident I observed on 27 April 1969.

While photographing waterfowl on the northern shore of Lake Mendota near Madison, Wisconsin, I approached a mixed flock (about 15 birds) of Lesser Scaup (*A. affinis*) and Ring-necked Ducks (*A. collaris*). Males and females of both species were present. The weather was cold and windy (about 15°F with northerly, offshore winds). These birds had been feeding in a loose group about 30 ft offshore in a relatively calm zone of water for the previous hour or so. When I was about 50 ft from the birds, I took a partially exposed position behind a beached boat.