

are several not typical as compared with Colorado examples. These show in varying degree an approach toward *merrilli*, and doubtless came from the northwestern part of the Great Basin region, where the breeding ranges of *montana* and *merrilli* merge. The *cooperi* individuals doubtless invaded northward along the Mojave River from the San Diegan district. If any song sparrow at all breeds along the Mojave River it is surely *cooperi*.

Melospiza lincolni striata. Forbush Sparrow. A large specimen (δ , No. 6267 Coll. J. & J. W. M.) shot by Pinger, Jan. 1, was the only one found. It presents the characters of typical *striata*, the breeding grounds of which is in the Sitkan district of southeastern Alaska.

Ampelis garrulus. Bohemian Waxwing. A single male specimen of this circum-boreal species was shot by Pinger in the afternoon of Dec. 31, and is now No. 6258, Coll. J. & J. W. M. The bird was alone, feeding on mistletoe berries in a cottonwood near the railroad station. A storm had prevailed during the previous night and forenoon, and the distant mountains were whitened with snow. The only other known instance of the occurrence of the Bohemian waxwing in the southwest was just forty-four years ago, when Dr. Cooper obtained a specimen near Fort Mojave on the Arizona side of the Colorado River. "It appeared on January 10th [1871], after a stormy period which had whitened the tops of the mountains with snow, and was alone feeding on the berries of the mistletoe, when I shot it." (Orn. Cal. I, 1870, 128.) Note the coincidence of circumstances! As a bird of California the Bohemian waxwing has been previously recorded only from Plumas and Lassen counties in the northeastern corner of the State. It may also be worthy of remark that the present record is apparently the southernmost ($34\frac{1}{2}^{\circ}$) for North America, and even for the world!

Ampelis cedrorum. Cedar waxwing. Several small flocks were encountered among the cottonwoods, where the birds were feeding on mistletoe berries.

Phainopepla nitens. Phainopepla. Fairly common among the cottonwoods, feeding on mistletoe berries.

Lanius ludovicianus gambeli. California Shrike. Shrikes were not at all common. Individuals were noted far out on the desert, and an occasional one on the telegraph wires along the railroad. The two specimens secured have smallish bills, faintly brownish and dusky-vermiculated breasts, and dark tints generally. They thus seem most nearly referable to *gambeli*, being probably visitants to this locality from a northwesterly direction.

(To be concluded.)

Summer Birds of the Papago Indian Reservation and of the Santa Rita Mountains, Arizona

BY HARRY S. SWARTH

(Concluded from page 50)

BIRDS SEEN IN THE SANTA RITA MOUNTAINS

Callipepla squamata. Scaled Partridge. A few individuals, not over half a dozen adults, were seen at different times on the mesa just below the mountains. A pair with a brood of young about the size of sparrows were seen on June 26.

Lophortyx gambeli. Gambel Partridge. Frequently seen and oftener heard calling in the ravine below the mountains.

Columba fasciata. Band-tailed Pigeon. A pair or two were frequently seen in the vicinity of our camp. Towards the end of our stay they became much more abundant, and the last day or two a number of quite large flocks were seen.

Zenaidura macroura. Mourning Dove. Very abundant along the lower canyons. Most of the birds seen were young of the year, full grown.

Melopelia leucoptera. White-winged Dove. Very common in the lower parts of the mountains, hardly any being seen about our camp. But one nest was found, and of the specimens secured hardly any had the appearance of being breeding birds.

Cathartes aura. Turkey Vulture. Frequently seen flying overhead.

Accipiter v. pacificus. Western Sharp-shinned Hawk. One or two seen.

Accipiter cooperi. Cooper Hawk. Several seen. A nest containing young was found in the canyon; but an adult female taken on June 23 was evidently not breeding.

Buteo b. calurus. Western Red-tail. One or two seen. Not common.

Buteo abbreviatus. Zone-tailed Hawk. Two specimens were secured by Mr. Stephens. One was a fine old female, but the second, a male, probably of the previous year, lacks the pure white bands across the tail, but has the tail feathers numerous and irregularly banded with ashy white, and with numerous white spots showing through the black of the breast. The resemblance that this hawk bears to a turkey buzzard while flying, both in style of coloration and manner of flight, is so close that it is exceedingly difficult to distinguish between the two.

Buteo swainsoni. Swainson Hawk. A few seen, one in the canyon at an altitude of about 6000 feet.

Falco s. phalæna. Desert Sparrow Hawk. Fairly common along the foothills.

Geococcyx californianus. Rood-runner. Seen occasionally but not at all common.

Dryobates s. bairdi. Texas Woodpecker. Fairly common along the lower ravine and out on the mesa.

Dryobates arizonæ. Arizona Woodpecker. Very few of the birds seen. Probably in better years they would be found in abundance, as the country is admirably suited to their wants.

Melanerpes f. aculeatus. Ant-eating Woodpecker. Fairly common in the lower parts of the mountains.

Colaptes c. collaris. Red-shafted Flicker. A few of the birds seen. Not very common.

Antrostomus v. macromystax. Stephens Whip-poor-will. A single bird seen at an altitude of about 7000 feet. None were heard calling at any time, the drought having apparently driven them away almost entirely.

Phalænoptilus nuttalli. Poorwill. Frequently heard calling about camp of an evening.

Chordeiles a. texensis. Texas Nighthawk. Every evening dozens of night-hawks appeared flying about the camp. None were flushed from the ground, and no eggs were found. *Henryi* was not observed at any time.

Aeronautes melanoleucus. White-throated Swift. Frequently seen flying overhead. Some distance from our camp was a projecting spur of the mountain, ending in a huge cliff, so precipitous that viewed from a point ten or fifteen miles to the northward, the mountain range presents the appearance of having been abruptly chopped off with a huge hatchet; and here, doubtless, the swifts find an abundance of nesting sites. We did not feel encouraged to look for their eggs.

Trochilus alexandri. Black-chinned Hummingbird. Seen along the canyon streams. This was the only hummingbird that was at all common in the Santa Ritas. Mr. Stephens had secured specimens of *Iache latirostris* and *Eugenes fulgens* on a previous visit to the mountains, years before; and I had found both species in other ranges visited in the territory, so we confidently expected to find them both in the Santa Ritas, but were disappointed, none being seen of either species. This was undoubtedly due to the disastrous series of dry years.

Calypte costæ. Costa Hummingbird. A few seen along the canyons. Not common.

Basilinna leucotis. White-eared Hummingbird. On June 24 Mr. Stephens secured a single bird, a male, but not adult; probably a bird of the previous year. (For a detailed description of this bird see Pacific Coast Avifauna No. 4, Birds of the Huachuca Mountains, Arizona, page 19.)

Tyrannus verticalis. Arkansas Kingbird. Not common. Seen mostly below the mountains.

Tyrannus vociferans. Cassin Kingbird. Quite common; much more so than the last.

Myiarchus cinerascens. Ash-throated Flycatcher. Seen along the canyon streams. Not very common.

Myiarchus l. olivascens. Olivaceous Flycatcher. Probably fairly abundant, though not so much so as should have been the case. As usual their note was heard, issuing from some wooded hillside, far more often than the birds themselves were seen.

Sayornis saya. Say Phoebe. A few seen along the base of the mountains.

Contopus p. pallidiventris. Coues Flycatcher. Seen only on one or two occasions. None observed below 6000 feet.

Contopus richardsoni. Western Wood Pewee. Quite common along the lower canyons. Several specimens were taken which were most undoubtedly not breeding.

Empidonax f. pygmaeus. Buff-breasted Flycatcher. A few birds seen in the pines in the very highest parts of the range. They were shy and hard to approach, and no nests were found.

Pyrocephalus r. mexicanus. Vermilion Flycatcher. Fairly common in the lower canyons.

Otocoris a. adusta. Scorched Horned Lark. Out on the barren mesa, just below the mountains a few horned larks were seen on one or two occasions. They were exceedingly shy, so much so as to be utterly unapproachable, and no specimens were secured; but in all probability they belonged to this subspecies.

Aphelocoma c. arizonæ. Arizona Jay. Very abundant. The dry seasons seemed to have had little effect on them, for they were at this time through with their breeding, and the troops of juveniles, accompanied by their parents, were in evidence everywhere.

Molothrus a. obscurus. Dwarf Cowbird. Fairly abundant, though not nearly so common as in the lowlands. I saw one young bird being fed by a plumbeous gnatcatcher not quite half his size.

Icterus parisorum. Scott Oriole. A few seen, but they were not at all common.

Icterus c. nelsoni. Arizona Hooded Oriole. Much more abundant than the last mentioned species, but found generally at a lower altitude, most of those seen being in the deep ravine below the mountains.

Carpodacus m. frontalis. House Finch. Very abundant along the lower canyons, particularly in the deep ravine before mentioned. I think the house finches were more abundant here than in any other place I have visited in south-

ern Arizona, where I have never seen them in anything like the large numbers occurring in California.

Junco p. palliatus. Arizona Junco. A few seen, none below 6000 feet. Some juveniles were secured.

Amphispiza b. desertyicola. Black-throated Sparrow. Very common everywhere along the foothills and out on the mesa. Full grown juveniles were secured.

Aimophila r. scotti. Scott Sparrow. Fairly common on the rock-strewn foothills.

Pipilo m. megalonyx. Spurred Towhee. Quite common; seen mostly along the canyons.

Pipilo f. mesoleucus. Canyon Towhee. Fairly common in the lower parts of the mountains. I found one nest containing young just hatched, but full grown juveniles were also seen.

Zamelodia melanocephala. Black-headed Grosbeak. Seen in the higher parts of the range, but not very abundantly. Some birds were also seen in the lower foothills, where they certainly were not breeding.

Piranga hepatica. Hepatic Tanager. A few seen in the higher parts of the mountains. Adults and juveniles were secured.

Piranga r. cooperi. Cooper Tanager. Fairly common, most of the birds seen being in the deep, wooded, ravines below the mountains. I found myself continually comparing the avifauna of the Santa Ritas with that of the Huachuca Mountains, where I had been collecting earlier in the season, and was surprised at finding many species breeding in the one range and not in the other, though the mountains present much the same general appearance, and at the nearest point cannot be much over twenty miles apart. The Cooper tanager, though an exceedingly rare migrant in the Huachucas, was breeding quite commonly in the Santa Ritas, and it was the same with many other species, mostly those generally found in the lowlands.

Phainopepla nitens. Phainopepla. One of the commonest birds in the lower parts of the mountains, where both adults and juveniles were seen. This is another species that I have not known to breed in the Huachucas.

Lanius l. excubitorides. White-rumped Shrike. Not seen in the canyons but frequently met with out on the mesa. On June 21 I found a nest with five eggs in a scraggly little mesquite bush, perfectly unsheltered and unhidden. As I examined the eggs, both birds sat on the bush, almost within arm's reach, with mouths open, suffering from the heat too much to care what happened. The sun was blazing down so fiercely that had the nest not been low enough down to see into, I should certainly not have investigated its contents, even had it been a much greater rarity; and as I did not care for the eggs, I sat in the shade of the brush for a moment, to see the female slip onto the nest immediately.

Vireo g. swainsoni. Western Warbling Vireo. On June 23 Mr. Stephens secured an adult female of this species. On dissection it did not have any appearance of being a breeding bird; and as I have never found the species breeding any where in southern Arizona, I believe that this was nothing more than a straggler, which, for some reason, had failed to go to its breeding grounds.

Vireo s. plumbeus. Plumbeous Vireo. Seen on various occasions in the higher parts of the mountains.

Vireo h. stephensi. Stephens Vireo. Seen in the oaks of the lower parts of the range. Although in California *huttoni* is found quite commonly in the willow regions of the lowlands, its Arizona prototype, *stephensi* appears to be a bird of the mountains exclusively, and I have never observed it anywhere in the lower valleys.

Vireo pusillus. Least Vireo. Not common, but a few were seen in the lower parts of the range, and in the bush, out on the mesa as well.

Helminthophila luciae. Lucy Warbler. This is another species, that, breeding abundantly in the Santa Ritas, is seldom seen in the neighboring range, the Huachucas, and then only during the migrations. In the neighborhood of our camp, and in the ravine below, it was very common, being one of the few species that was really abundant. Both adults and juveniles were taken.

Dendroica nigrescens. Black-throated Gray Warbler. Quite common everywhere in the oak brush.

Setophaga picta. Painted Redstart. It was in the same canyon, several miles above the location of our camp, that Mr. Stephens took the first known set of eggs of this species years ago. Some of the birds were seen at various points along the canyon, but they were not nearly as abundant as I had found them in the Huachucas shortly before. That they were breeding was evidenced by the number of juveniles seen.

Mimus p. leucopterus. Western Mockingbird. Quite common in the lower parts of the mountains.

Toxostoma c. palmeri. Palmer Thrasher. Very abundant out on the mesa, and frequently seen in the lower canyons.

Toxostoma bendirei. Bendire Thrasher. Common in the mesa just below the mountains, but not seen in any of the canyons.

Heleodytes b. couesi. Cactus Wren. Very abundant on the mesa and along the foothills. Adults and juveniles were seen everywhere, but as usual, they were so shy and wary as to be almost unapproachable.

Salpinctes obsoletus. Rock Wren. Fairly common along the rock-strewn foothills.

Catherpes m. conspersus. Canyon Wren. Quite abundant. Many full grown juveniles were seen, usually two or three together.

Thryomanes b. bairdi. Baird Wren. Seen along the canyons, but not in any numbers.

Troglodytes a. aztecus. Western House Wren. Found here, as in the Huachucas, in the higher parts of the range only. Usually seen about fallen trees or in brush piles.

Sitta c. nelsoni. Rocky Mountain Nuthatch. A few pairs were seen in the higher parts of the mountains, but they were not at all abundant.

Parus wollweberi. Bridled Tit. Very abundant in the oak regions, where troops of young accompanied by the parents, were met with continually.

Psaltriparus plumbeus. Lead-colored Bush-Tit. Quite abundant and occurring in all parts of the mountains. I took several specimens of the so-called *P. santaritæ*, which I believe to be the juvenile, not of *P. lloydi* as has been lately claimed, but of *plumbeus*. I took specimens with fairly well defined dusky lines over the auriculars, from small flocks that were evidently composed of a single family each, the pair of old birds and six or eight juveniles. Some of the young birds had, and others lacked, the lines on the sides of the head, but in every case the adults were *plumbeus*. I have never yet met with *lloydi* in southern Arizona, and doubt if it occurs in either the Santa Rita or the Huachuca Mountains, though *plumbeus* is abundant in both ranges.

Auriparus flaviceps. Verdin. Very common in the foothill regions, and over the mesa below.

Poliophtila plumbea. Plumbeous Gnatcatcher. Not common. Seen occasionally just below the mountains, but not ascending into the canyons at all.