## BIRDS OF THE MOUNT TRUMBULL REGION, ARIZONA

## BY LAURENCE M. HUEY

PERHAPS the least-known part of Arizona from an ornithological standpoint lies north of the Colorado River in the extreme northwestern section of the State. This area, known as the Mount Trumbull region, includes the Dixie National Forest and the western part of the Grand Canyon National Monument. Historically, the section is rich in the lore of pioneers. It was here that the early Mormon settlers cut timber to build the town of Saint George, Utah, seventy miles to the northward in the Virgin River Valley. This valley, owing to its warm climate, was known as Utah's Dixieland, which explains the origin of the name Dixie National Forest. It was but a few miles west of this forested region, too, that the three deserters from Major Powell's celebrated exploration party met their tragic end at the hands of savages, in 1869. Yet in spite of this historic background, the literature of Arizona ornithology apparently contains not a single reference to the birds of the Mount Trumbull region. It was therefore a pleasant opportunity for the writer when he spent the period of July 24 to August 5, 1937, in that section.

The Mount Trumbull region is one of several plateaus that border the Colorado River along the east-to-west portion of its course. Mount Trumbull, Mount Logan and Mount Emma, all three rounded in outline, are the conspicuous peaks of this rather small area. The higher elevations of the plateau are covered with an open stand of western yellow pine, while pinyon and juniper abound on the lower levels. Eastward, the region is bounded by Toroweap valley, a semi-arid valley that reaches from the Colorado River northward to the Arizona boundary. On the north and west, vast grassy plains stretch for miles, broken here and there by low sage-covered hills on whose north slopes are found scattered juniper and pinyon trees; while toward the south lies the mighty chasm of the westernmost part of the Grand Canyon of the Colorado River. The area visited is all within the Transition Zone, though on the higher northern slopes of Mount Trumbull some locust and aspen were found, indicating a tendency toward Boreal. The whole region was ideally illustrative of the influence of climate on vegetation, with the pinyons and junipers reaching up through the pine forests where slope exposure or warm canyon drafts provided conditions favorable to their growth. As in other areas that border the Great Basin which lies to the northward, most of the alluvial soil of the flats and valleys was covered with a dense growth of sagebrush, while in some of the more sheltered canyons large thickets of scrub oak, mountain mahogany and service berries were found. At the time of our visit, the service berries were ripening and were a great attraction to fruit-eating birds. The unspoiled wildness of the region was an added attraction, for, aside from a limited amount of lumbering and a few bands of sheep and cattle, there was little evidence of the devastating activities of man. The roads were dry-weather trails and visitors were rare.

On our way into the Mount Trumbull region, we camped for two days in an area of scattered pinyon and junipers at a point four miles north of Wolf Hole, which is located about thirty miles due south of Saint George, Washington County, Utah, and some twenty miles within the State of Arizona. At this camp a number of interesting birds were found, and mention will be made of this locality when species observed at this camp are listed in the text that follows.

Co-workers with the writer for the San Diego Society of Natural History on the trip were Leroy Arnold, Norris Bloomfield and Richard Neil, and added enjoyment was derived from the companionship of Major E. A. Goldman and Luther G. Goldman of the U. S. Biological Survey, and A. A. Nichol of the University of Arizona, who spent several pleasant days with us in the camps at Wolf Hole and Nixon Spring near Mount Trumbull.

WESTERN COOPER'S HAWK, Accipiter cooperii mexicanus.—On August 1, a Cooper's Hawk whizzed past within a foot of my head, as I was bent over the stove preparing breakfast at Nixon Spring. The bird was in its swift-darting, hunting flight and was no doubt in quest of a Mourning Dove, since these birds at the time were abundant in the small trees about our camp.

WESTERN RED-TAILED HAWK, Buteo borealis calurus.—Red-tailed Hawks were seen at both of our camps and several were also observed along our route. This species was the most common hawk of the region.

GOLDEN EAGLE, Aquila chrysaëtos canadenses.—An eagle was seen flying over Nixon Spring during the afternoon of July 27.

DUCK HAWK, Falco peregrinus anatum.—A lone female Duck Hawk flew directly over my head at Nixon Spring on the evening of July 28. No doubt it was attracted by the hordes of Mourning Doves that assembled each evening to drink from the reservoir. The next morning, shortly after sunrise, I had two shots at the bird as it flew over in easy range, but missed.

EASTERN SPARROW HAWK, *Falco sparverius sparverius*.—A pair of Sparrow Hawks lived about some large dead-topped pines that bordered a small field of rye near Nixon Spring. They were seen there every time the place was visited.

SAGE HEN, Centrocercus urophasianus.—During the afternoon of July 29, while hunting about two miles west of Nixon Spring, Leroy Arnold flushed a Sage Hen from under a juniper, which was growing on a ridge near a large area covered with sagebrush. He was within twenty feet of the bird when it walked rather slowly from under the tree. This is, as far as I am aware, the first report of this species for Arizona. Repeated attempts to collect a specimen were made by all members of the party, but Arnold was the only person fortunate enough to see this bird.

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KILLDEER, Oxyechus vociferus vociferus.—This ubiquitous bird was seen at Wolf Hole, at several points along the route and at Nixon Spring. In fact, wherever there was a pool of water or a cow-trough, the Killdeer was present.

SPOTTED SANDPIPER, Actitis macularia.—A single individual, still in the spotted nuptial plumage, was taken on the bank of the small reservoir at Nixon Spring on August 2.

BAND-TAILED PIGEON, Columba fasciata fasciata.—Numbers of Band-tailed Pigeons lived on the wooded slopes of Mount Trumbull and were seen by all members of our party, when they explored that section.

WESTERN MOURNING DOVE, Zenaidura macroura marginella.—Mourning Doves were by far the most abundant bird of the region about Nixon Spring. Great numbers came each evening to drink at the reservoir and doves could be found or heard cooing about the place during any daylight hour of our stay.

SCREECH OWL, Olus asio, subsp.—I was awakened during the night of August 3, when an automobile came into Nixon Spring. During this time I heard a Screech Owl trilling in the woods up the mountain slope from camp. As no specimen of this species was collected, the identity is unknown.

MONTANA HORNED OWL, Bubo virginianus occidentalis.—Horned Owls were heard almost every night of our stay, both at our camp at "four miles north of Wolf Hole" and at Nixon Spring. One immature specimen was collected July 30 at Nixon Spring. It is very grayish and dark dorsally and seems to belong to the race occidentalis, rather than to the desert race pallescens.

WESTERN BURROWING OWL, Specity cunicularia hypugaea.—Two birds of this species were seen perched on fence posts along our route between Wolf Hole and Mount Trumbull post-office.

NUTTALL'S POOR-WILL, *Phalaenoptilus nuttalli nuttalli*.—On July 24, a pair of these birds was heard calling just after sunset near our camp "four miles north of Wolf Hole" and a male specimen was collected. The condition of the plumage about its face indicated that the bird had been feeding young.

PACIFIC NIGHTHAWK, Chordeiles minor hesperis.—Each evening during three nights spent at "four miles north of Wolf Hole" nighthawks were 'booming' over our camp in numbers. All were presumably of the minor group, since the single specimen taken proved to be of this race.

WHITE-THROATED SWIFT, Aëronautes saxatilis saxatilis.—The great cliffs of the western part of the Grand Canyon and Toroweap Wash, which are the summer homes of countless White-throated Swifts, were not far distant from Nixon Spring, and these birds came almost daily to feed over the forested region, where insect life was plentiful. White-throated Swifts were especially abundant during the afternoon of August 4, when a large number fed close to the surface of the small reservoir.

BROAD-TAILED HUMMINGBIRD, Selasphorus platycercus platycercus.—Hummingbirds were not common, though an occasional one was seen darting through the woods. The only specimen secured was taken at Nixon Spring on July 24 and proved to be of this species.

RED-SHAFTED FLICKER, Colaptes cafer collaris.—An immature male Red-shafted Flicker was collected from a family of seven at Nixon Spring on July 28. These birds had probably been reared nearby. WHITE-BREASTED WOODPECKER, Dryobates villosus leucothorectis.—White-breasted Woodpeckers were not common. The two specimens collected were both taken in the yellow-pine forest near Nixon Spring.

CASSIN'S KINGBIRD, *Tyrannus vociferans.*—Cassin's Kingbirds were found at both our stopping places. Two specimens collected, one at each camp, proved to be both of this species.

ASH-THROATED FLYCATCHER, Myiarchus cinerascens cinerascens.—Several pairs of this species were found living in the junipers near our camp "four miles north of Wolf Hole," where they were breeding. A male specimen collected on July 25 was one of a pair that was still caring for their young which were fully grown and on the wing.

GRAY FLYCATCHER, *Empidonax griseus.*—The collecting of three immature specimens of the Gray Flycatcher in the neighborhood of Nixon Spring offers considerable evidence that the species breeds in this section of Arizona. However, until either a nest or birds too young to travel are taken, this status must remain questionable.

WESTERN FLYCATCHER, *Empidonax difficilis difficilis*.—A single female specimen of this species was collected at Nixon Spring on August 2. Its bare abdomen showed definitely that it had recently been incubating eggs.

OLIVE-SIDED FLYCATCHER, Nuttallornis borealis borealis.—The only Olive-sided Flycatcher seen was shot from the top of a small pine tree at Nixon Spring on August 1. Unfortunately the specimen was lost when it fell into a dense thicket on a side hill.

VIOLET-GREEN SWALLOW, *Tachycineta thalassina lepida*.—This swallow was abundant every day during our stay in the vicinity of Nixon Spring. The birds were attracted by the abundance of insects over the surface of a small reservoir of water. The presence of immatures gave evidence of their possible breeding in the pine forest earlier in the season.

PURPLE MARTIN, *Progne subis subis.*—A colony of about forty pairs of martins occupied two large dead pine trees near Nixon Spring and birds were seen every day during our stay.

LONG-CRESTED JAY, Cyanocitta stelleri diademata.—Long-crested Jays were not nearly as abundant as was the following species. Four specimens collected were definitely of the Rocky Mountain form.

WOODHOUSE'S JAY, Aphelocoma californica woodhousei.—This species was one of the more common birds of the region and was found in the pinyons and junipers near Wolf Hole and throughout the forested region about Mount Trumbull.

PINYON JAY, Cyanocephalus cyanocephalus.—Several flocks of Pinyon Jays ranged about the forests of the Mount Trumbull region. They were heard or seen by members of the party every day of our stay.

AMERICAN RAVEN, Corvus corax sinuatus.—Late in the afternoon of July 29, a few Ravens were seen straggling into the tall pines south of Nixon Spring. Toward evening a rather large congregation had assembled. The next morning, amid much cawing, small detachments were seen flying about or perched in the tops of the trees where they had roosted during the night. Suddenly, as if by prearrangement, they all took to the air. Forty-seven were counted as they left in a southeasterly direction. This was the only observation made of this species at Nixon Spring, and gave the impression of a vagrant band moving over the countryside.

MOUNTAIN CHICKADEE, Parus gambeli gambeli.—Chickadees were found in small numbers in the yellow-pine association on the higher parts of the region about Mount Trumbull.

GRAY TITMOUSE, Parus inornatus ridgwayi.—Titmice were found sparingly in the scrub oak that was growing on the dryer slopes of the Mount Trumbull region.

ROCKY MOUNTAIN NUTHATCH, Sitta carolinensis nelsoni.—This large nuthatch was not common. It was found as often in the juniper association as it was in the yellow pines.

BLACK-EARED NUTHATCH, Sitta pygmaea melanotis.—This diminutive nuthatch was much more abundant than its larger relative, and companies of young on the wing were seen on nearly every excursion through the forest about Nixon Spring.

WESTERN MOCKINGBIRD, Mimus polyglottos leucopterus.—A pair of mockingbirds was seen on July 27 at a ranch called "Little Tank" near Diamond Butte, as we were en route to Nixon Spring.

SAGE THRASHER, Oreoscoptes montanus.—Sage Thrashers were seen in several places along the road between Wolf Hole and Mount Trumbull post-office.

CHESTNUT-BACKED BLUEBIRD, Sialia mexicana bairdi.—Bluebirds were common about the timbered region of Mount Trumbull. At the time of our visit, family parties were scattered all about and the spotted-breasted young were still being fed by their parents.

WESTERN GNATCATCHER, *Polioptila caerulea amoenissima.*—Western Gnatcatchers were found at both camps, "four miles north of Wolf Hole" and Nixon Spring. Birds of the year were taken at both localities.

GRAY VIREO, Vireo vicinior.—The song of this vireo was heard in the junipers near our camp "four miles north of Wolf Hole," and on July 25 a female was collected. Her bare abdomen gave proof of recent incubation and marked this bird as a breeding species for the juniper region.

PLUMBEOUS VIREO, Vireo solitarius plumbeus.—A single Plumbeous Vireo was collected on August 2 at Nixon Spring. Further collecting failed to reveal another bird of this species.

VIRGINIA'S WARBLER, Vermivora virginiae.—A single individual of this species was collected at Nixon Spring on August 2. It was an immature female and in all probability had been hatched in the region.

BLACK-THROATED GRAY WARBLER, Dendroica nigrescens.—Black-throated Gray Warblers were seen several times in the scrub oaks on the mountainside above Nixon Spring. Two specimens collected were both immature and were probably reared in the vicinity.

GRACE'S WARBLER, *Dendroica graciae graciae*.—On August 1, a pair of Grace's Warblers was found feeding a brood of three young out of the nest. The male and one young one were collected. They were in a dense growth of young yellow pines that bordered an open sage flat near Nixon Spring. On August 2, a second pair was seen feeding young in another section of the Mount Trumbull forest.

WESTERN TANAGER, *Piranga ludoviciana.*—A single immature male bird was taken at Nixon Spring on August 4. This bird proved to be the only Western Tanager seen or heard during our stay and it was probably a migrant.

ROCKY MOUNTAIN BLACK-HEADED GROSBEAK, Hedymeles melanocephalus melanocephalus.—On August 2, while we were exploring the north slope of Mount Logan, which lies some four miles south-by-west of Mount Trumbull, several thickets of service berries full of ripe fruit were found. Numbers of birds were feasting on these berries and among them were several Black-headed Grosbeaks.

NORTHERN PINE SISKIN, Spinus pinus pinus.—Three Pine Siskins were seen on a fence near the reservoir at Nixon Spring on July 29.

GRINNELL'S CROSSBILL, Loxia curvirostra grinnelli.—A small population of crossbills was found in the yellow-pine forest near Nixon Spring and three specimens were collected. Oddly enough, a mated pair taken on August 2 were in beautiful feather. The female of this pair was in laying condition, with an egg in her oviduct ready to be laid. The third specimen, a female taken August 3, was in the middle of the molt. Not only were the body feathers partly shed, but also those of the wings and tail.

SPURRED TOWHEE, *Pipilo maculatus montanus*.—Spurred Towhees were fairly common in the sage-yellow pine association about Mount Trumbull. Several families of young birds were found about the sage-covered glades that were interspersed in the yellow-pine forest.

WESTERN LARK SPARROW, Chondestes grammacus strigatus.—Numbers of Lark Sparrows were seen on the grassy plains that were traversed between Wolf Hole and Mount Trumbull.

DESERT SPARROW, Amphispiza bilineata deserticola.—Several pairs of Desert Sparrows were found near our camp "four miles north of Wolf Hole." A young bird in juvenal striped plumage was collected on July 25.

WESTERN CHIPPING SPARROW, Spizella passerina arizonae.—Chipping Sparrows were fairly common about Nixon Spring, where they came each day to drink. A young bird in striped immature plumage was collected.

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