

CONTRIBUTIONS TO GRAND CANYON ORNITHOLOGY



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This bulletin is published by the Grand Canyon Natural History Association as a project in keeping with its policy to stimulate interest and to encourage scientific research and investigation in the fields of geology, botany, zoology, ethnology, archeology and related subjects in the Grand Canyon region. This number is one of a series issued at irregular intervals throughout the year.

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Bird Banding

From October 15, 1934, to October 15, 1935

By Russell K. Grater *

SINCE the outset of bird banding work in Grand Canyon National Park in 1932, this project has fast attained a place of major importance among the biological studies in the area. Each year has seen the records of several hundred newly banded birds added to the Park files and a surprising amount of valuable data have been obtained through the capture of previously banded birds.

While banding is carried on at all seasons of the year, the greatest numbers of individuals are banded during the spring and fall. During these two periods birds are not localized as in the nesting season, migratory species are arriving in large bands and more time is available for carrying on banding work.

Eighteen species of birds have been listed in this year's banding records, of which three had not previously been banded in this Park. A summary of banding activities reveals that a total of 718 birds have been banded during the past year and a grand total of 2,085 since October, 1932. These totals are distributed as follows:

Species	Oct. 31, 1934	Total Banded
	to Oct. 15, 1935	Since Oct. 12, 1932
Chestnut-backed Bluebird	39	165
Mountain Chickadee	15	113
Red-shafted Flicker	1	1
Rocky Mountain Grosbeak	2	7
Long-crested Jay	1	9
Woodhouse's Jay	4	5
Junco (Pink-sided group)	102	102
Red-backed Junco	99	521
Shufeldt's Junco	300	548
Pygmy Nuthatch	14	176

* Asst. Wildlife Technician, Grand Canyon National Park.

Rocky Mountain Nuthatch	7	71
Western Robin	43	53
Western Chipping Sparrow	66	122
Pine Siskin	--	1
Townsend's Solitaire	--	1
Gambel's Sparrow	6	119
Lincoln's Sparrow	--	1
White-crowned Sparrow	--	12
White-throated Swift	--	2
Gray Titmouse	8	33
Green-tailed Towhee	--	9
Audubon's Warbler	1	1
Grace's Warbler	1	1
Cedar Waxwing	--	2
White-breasted Woodpecker	9	10
T o t a l s.....	718	2,085

However interesting one may find the trapping of unbanded birds, the most significant and fascinating part of operating a bird banding station is in recording the retakes. For the most part, retakes at the Grand Canyon stations have involved birds previously banded in the area. Through these, a fast mounting fund of information is being accumulated regarding the movements of local birds.



M^r Henry Photo

Removing Bird From Ground Trap

Occasionally one gets a thrill by discovering that he has captured a bird that was banded elsewhere, and no time is lost in sending its number to the Bureau of Biological Survey in order to learn where it was banded. The scarcity of Grand Canyon retakes of birds banded at other stations can be appre-

ciated when one learns that, out of a total of 617 made during the past year, only one represented a bird banded outside of the Park. This bird - a Shufeldt's Junco bearing band number c-88327 - was captured on February 4, 1935, and again on February 6 and 8 and on March 22 and 24 on the South Rim. It had been banded by Mrs. Elinor B. McCabe in western Canada. Regarding this bird, Mrs. McCabe writes: "I banded the bird, still in immature plumage, on August 2, 1934, at my place on Indianpoint Lake, about 25 miles northeast of Barkerville, B. C. It repeated once only, on August 11....."

Retakes often contribute valuable and interesting data regarding the habits of local birds. For example, among the birds retaken on the South Rim during the month of December, 1934, were seven Juncos. Five of these were Shufeldt's Juncos, Junco o. shufeldti; the other two, Red-backed Juncos, Junco p. dorsalis. The complete banding records for these birds are as follows:

Band Number	Date Banded	Species	Date Retaken
H-72626	12-24-32	Shufeldt's Junco	12-11-34
H-72688	12-10-32	Shufeldt's Junco	12-14-34
H-72856	12-16-32	Red-backed Junco	12-16-34
H-72625	12-24-32	Shufeldt's Junco	12-14-34
H-72627	12-24-32	Red-backed Junco	12-13-34
H-72762	1-1-33	Shufeldt's Junco	12-14-34
H-72776	1-18-33	Shufeldt's Junco	12-14-34

It is interesting to note how, apparently, both as a group and as individuals, these birds returned to the identical place at almost the same date in a later year.

One of the problems at Grand Canyon that the bird banding work seems likely to solve is that of the migration route used from the South Rim to the North Rim or visa versa. At the present time, it is not known whether birds fly directly across the canyon or follow the side canyons down to the Colorado River and then up to the opposite rim. Hoping to obtain some enlightening facts, banding stations have been operated from time to time at various points in the canyon. In 1933, a total of 71 birds, mostly Shufeldt's Juncos, were banded at Indian Gardens, 3500 feet below the South Rim and since then others have been banded both at this station and at Phantom Ranch in the bottom of the Canyon. Interestingly enough,

none of these birds has ever been retaken at either the North or South Rim banding stations, but one Shufeldt's Junco, banded in November, 1934, on the South Rim, was retaken at Indian Gardens in December, 1935. Does this imply that perhaps some migratory bands in going south travel through the Canyon instead of taking the direct route from rim to rim? Does it indicate a north-south course rather than one along the Colorado River for this species? That again is an interesting phase of the migration problem that we hope to solve as time goes on.

A third type of problem which has been taken up in connection with banding work consists of a study of the local movements of certain species. Through the Bureau of Biological Survey we have obtained small, brightly colored celluloid bands. These tiny bands come in three colors and each band is adjustable in size. It is hoped that by banding certain species of resident birds with these colored bands arranged in definite sequence (for example, two red bands above one blue), individuals may be easily identified in the field without the necessity of trapping. The time of arrival of any individual



Dodge Photo

Banding Pygmy Nuthatch

at a feeding platform can then be ascertained. Some studies have already been made on the regularity of movement of certain species, but the necessity of trapping a bird every time it was to be identified has in the past limited the efficiency of the work. Information on the consistency with which any individual associates with others of its kind is another of the questions we hope to answer as a result of this work. For this experiment we are thus far utilizing the Pygmy Nuthatches, but, if sufficient results are obtained to warrant it, other species will be banded in a similar manner.

An Unusual Nesting Habit

By Welland A. Watson *

DURING the spring of 1935 birds of two species were frequently noticed flying aimlessly about near the mule barns of C.C.C. Camp 819 in Grand Canyon Village. One of these birds - a Chestnut-backed Bluebird - was seen to pause often, catch part of a meal or, perhaps, listen to some sound coming from the industrial area. The graceful manner in which it would glide from tree to tree and its attractive colors glistening in the sunshine, were fascinating. Another species, the Pygmy Nuthatch, was also much in evidence. It would dart about and just as it would gain a foothold and seem about to go up a trunk or branch, it would turn and go down or move sideways.

When nesting season came in May, the bluebirds and nuthatches near the mule barns were observed more closely. One morning a bluebird was seen to fly leisurely to the top of a young pine tree and pause, not to procure food, but apparently to look for enemies before flying to a hole in an old pine and, soon afterwards, a Pygmy Nuthatch was noticed darting to the same tree and leisurely walking up and into the hole with the bluebird, just as though it too were sole owner. Observations indicated that the two different types of birds were using the same nest.



Nesthole Of Bluebird
And Nuthatch

To confirm his suspicions of an unusual nesting habit, the discoverer, Mr. D. Ramsey of C.C.C. Camp 819, took a pocket knife and carefully cut the entrance hole longer (see picture) so that he could see to the bottom. A Pygmy Nuthatch and a Chestnut-backed

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Bluebird were actually sitting on the nest. Moreover, they did not become greatly alarmed at Mr. Ramsey's enlarging the entrance.

On different occasions before May 15, one of the adult bluebirds and one of the adult nuthatches actually came out and sat on Mr. Ramsey's shoulder. Sometimes he would pick the birds up in the palm of his hand and return them to the nest, apparently without greatly exciting or disturbing them.

On May 15, Mr. Ramsey observed the first broods of both species. The following day he left on a vacation, returning May 26. No observations were made in the meantime. Whether or not these broods had become full grown and left the nest during this interval is not known.

On July 16, two months after the discovery of the first broods, Mr. Don Williams, Technical Enrollee of C.C.C. Camp 819, observed that the nest was again in use - parent bluebirds and nuthatches alternately flying into the hole with bits of food in their beaks. The old birds, in their haste to bring food to their precious young, were not alarmed by being looked at or by having the nest visited when they left for more food.

The baby birds in the nest by the mule barns were not counted on the occasion of Mr. William's visit on July 16, for fear of injuring their small, delicate bodies, but on July 24, there were four bluebird and nuthatch young left in the nest. They looked to be about full grown and ready to fly. On July 25, the last bluebird left the nest. There was one unhatched egg left, the identity of which was not ascertained.

This series of observations is interesting and unique since, so far as I know, birds of these species have not previously been known to share the same nest. Its joint use indicates, however, that in this instance relations were entirely harmonious.

Preliminary Survey

Of the Status of the Dusky Grouse

On the Kaibab Plateau

By Russell K. Grater *

ALTHOUGH the Dusky Grouse is one of the most interesting birds found in Grand Canyon National Park, oddly enough our knowledge regarding its present status and distribution within the Park is extremely limited. While it is known that Dusky Grouse are found over the major portion of the Kaibab Plateau, no figures are available regarding their abundance. During the past summer, I attempted to compile information on their numbers and distribution in that area.

The Park records show that, with one exception, all our grouse observations are from the North Rim. The exception was recorded in 1928 when Ranger George N. Niles reported seeing four adult Dusky Grouse at Lipan Point on the South Rim.¹ Strangely enough, no additional observations have since been recorded from this area, although Lipan Point has been visited daily by numerous people since that time.

In compiling the following data, only actual observations of grouse were utilized. The table presents not only records showing numbers and distribution of this species over the north rim area within the park, but also contributes some interesting facts regarding the breeding habits of the grouse:-

Locality	No.	Kind	Date	Observer.
Entrance of Walhalla Plat.	1	Adult	June 8	W. Behle
Two River Junction	1	Adult	June 12	W. Behle
Near Greenland Lake	1	Adult	June 18	R. Grater
Near Cape Final	2	Adult	June 19	R. Grater
Near Obi Point	1	Adult	June 20	R. Grater
Entrance to Walhalla Plat.	1	Adult	June 21	W. Behle

*Asst. Wildlife Technician, Grand Canyon National Park.

¹ Niles, George M., Grand Canyon Nature Notes, Vol. 3, No. 2, July 1928. (Mimeographed Bulletin)

Near Cape Royal	9	Hen and Chicks	July 5	W. Bradley
On Walhalla Plateau	3	Adult	July 7	W. Behle
Near Cape Royal	3	Hen and Chicks	July 7	W. Bradley
Neal Spring	1	Young	July 9	R. Grater
Outlet Canyon	2	Adult	July 11	R. Grater
Powell Plateau	6	Young	July 17	D. Frost
Head of B. A. Canyon	9	Hen and Chicks	July 21	C. Sevey
Administrative Area	2	Adult	July 22	C. Sevey
Two River Junction	2	Adult	July 25	D. E. McHenry
Powell Plateau	4	Hen and Chicks	July 28	A. Hawbecker
Powell Plateau	2	(Seen July) (per day 27-30)		C.A.Wagner, Jr.
Near Basin Springs	1	Adult	July 30	R. Grater
Point Imperial	1	Adult	Aug. 1	W. Behle
3 mi. So. Cape Royal	1	Adult	Aug. 7	W. Behle
Near Fire Point	9	(Hen and Chicks)	Aug. 15	Observer's) name lost.)
Cliff Springs	7	Young	Aug. 28	N. Dodge
Administrative Area	2	Adult	Aug. 29	Mrs. W. Bradley
Fuller Canyon	2	Adult	Aug. 30	R. Grater

Total of 38 adults, 43 young reported during season.

From the above table it is apparent that observations were made more or less throughout the region, thus indicating that grouse are generally distributed and relatively common over the major portion of the North Rim. Several areas, such as the Powell Plateau to the west and the Walhalla Plateau to the east, stand out as known areas of abundance but this does not mean that in other sectors over the plateau grouse are necessarily restricted in numbers. An investigation of the more isolated areas may and probably will reveal that grouse are equally common in them. The table also shows the significant fact that young grouse were not observed before July 5, but that several young were seen between that date and August 28.

While not as extensive as desired, the material accumulated gives concrete evidence regarding distribution and relative abundance of grouse in various localities. It is hoped that similar data will be compiled each year to supplement the above figures and to aid in portraying the true status of the Dusky Grouse at Grand Canyon.

Bird Observations in Grand Canyon Nat'l Park

From October 1, 1934 to October 1, 1935

By Edwin D. McKee *

I N the field of ornithology the naturalist staff at Grand Canyon National Park has for some years been systematically accumulating data and carefully recording observations and facts of many types. Elaborate file systems for compiling material on local bird banding operations, on specimens in the collection and on observations of all types, have been carefully kept up to date. A wealth of material has been accumulated but as none of it has been published since the "Grand Canyon Nature Notes" were discontinued a year ago, we have failed to attain the maximum value of this important systematic work. It is the purpose of this paper to inaugurate a practice of annually summarizing in print the more significant additions to our knowledge of birds of this park as obtained through observations.

NEW SPECIES RECORDED IN AREA

During the past year the addition to Park records of the names of three species of birds heretofore unreported from Grand Canyon National Park is of outstanding interest. One of these was the beautiful white egret, Egretta thula, first seen by R. E. Laws on April 23 near the Colorado River below the Kaibab Suspension Bridge where it "perched on a rock for a moment, then flew up the gorge". Twenty-five days later, five of these large shore birds were seen in about the same locality by Howard Leak who was stationed at the U. S. Geological Survey gaging station. Judging from its normal range and from the fact that a specimen collected near Flagstaff to the south was determined to be brewsteri, it is probable that these were also of that subspecies.¹

* Park Naturalist, Grand Canyon National Park.

¹ Grater, Russell K., "Brewster's Egret at Grand Canyon National Park"; *The Auk*, vol. 52, No. 4, p. 443, 1935.

Another record of a species of bird heretofore unreported from the Park is that of the Pileated Woodpecker, Ceophloeus pileatus. Fresh workings and holes, thought because of their size to be attributable to this species, were seen by R. K. Grater in some fir trees near Saddle Mountain, North Rim, on August 5. On the thirtieth of the same month, Grater's suspicions were confirmed when he observed one of these monarchs of the woodpecker tribe near Fuller Canyon, about one mile northwest of Pt. Imperial.



The American Pipit, Anthis spinol-
etta rubescens, is a species known to occur not uncommonly during certain seasons in areas adjacent to the Grand Canyon, however, it was not until this

season that it was actually reported from within the Park boundaries. On October 26, 1934, it was observed at a tank near the recreation field, Grand Canyon village, by A. E. Borell, Regional Wildlife Technician.

In addition to the three new bird names added to the list of species recorded from Grand Canyon National Park, a number of species were reported for the second time. They are the following:

- Chickadee, Long-tailed: Jan. 2, 1935,
Grand Canyon Village, R. K. Grater,
Previous record: July 1, 1927, Grand Canyon Village.

Grater Photo
Pileated Woodpecker Holes
North Rim Of Grand Canyon

Goldfinch, Arkansas: Several records, Phantom Ranch,
Previous record: Dec. 9, 1924, Hermit Camp.

Oriole, Scotts: August 18, 1935,
S.E. Boundary of Park, E. D. McKee and R. K. Grater,
Previous record: May 17, 1929, Slide Canyon,
Kaibab Plateau.

Owl, Western Burrowing: September 14, 1935,
Nankoweap Canyon; R. K. Grater,
Previous record: June 22, 1932, Pasture Wash
(Also Anita; House Rock Valley.)

Sapsucker, Red-naped: Four records, from Indian Gardens
and Phantom Ranch.
Previous record: October 25, 1935, Hull Tank, South Rim.

Swallow, Rough-winged: September 15, 1934,
Neal Spring, North Rim, A. E. Borell,
Previous record: September 1, 1929, V.T.Ranch.

Warbler, Northern Pileolated: October 1, 1935,
Indian Gardens, A. E. Borell,
Previous record: May 10-11-18, 1929, Phantom Ranch.

Woodpecker, Batchelder's: Six records: South Rim, North
Rim, Indian Gardens.
Previous record: August 23, 1927, Yaki Point.

It is interesting to note that three of these species, although previously recorded only once each from the Park area, were observed a number of times during the year. The Red-winged Blackbird, not listed because the subspecies could not be determined, comes under the same category.

From the North Rim and the Canyon bottom come other records which are of especial interest because they are new to these particular areas. The large number from the bottom having this status may at first seem remarkable but can easily be explained by the fact that in previous seasons few competent observers have been in that area except on short or hurried trips while, during the past spring, Mrs. George Shields was located at Phantom Ranch continuously for several months and Mr. Russell Grater, E.C.W. Wildlife Technician, spent much of his time in the Canyon interior. The following species are recorded from the Canyon bottom for the first time: Mountain Bluebird, Crossbill (ssp?), Killdeer, Pygmy Nuthatch, Redwing

Blackbird (ssp?), Lincoln Sparrow and White-breasted Woodpecker. The Pygmy Nuthatch, seen August, 1935, in Bright Angel Canyon, was reported by W. T. McKean as being "very sick ---scarcely able to fly" which perhaps explains why it was found so far from its normal habitat.

On the North Rim the Lewis' Woodpecker was reported for the first time and the Golden-crowned Kinglet for the second. Dates, localities, and other data on these records will not be given here but are available on the Park records where they are easily accessible.

NOTES ON MIGRATION

The average ornithologist is interested in migration dates since they represent positive data on one of the most fascinating phases of the life history of birds. At Grand Canyon the records of this type for the year may be grouped into three categories - those representing the earliest spring arrivals of either migrants or summer residents, those representing the latest dates when seen in the summer or fall of either of these classes and, lastly, the earliest dates of arrival of species passing through or arriving for the winter from the north. A fourth classification might be made consisting of the latest spring dates on which these northern species are found before their departure from Grand Canyon, but, no records of importance have been obtained concerning this group.

By far the greatest number of additions to the migration records are those dealing with early dates of arrival of various species. This may be partly due to an early, warm spring but probably even more to the fact that more competent observers were in the field at this season than at other times of the year or than at the same season during previous years. Another factor, also, is that many of this year's records were obtained in lower parts of the Canyon where the earliest arrivals of most species are to be expected. A tabulated summary of the unusually early or late dates in spring migration, with comparative data, follows:

Species	Earliest Date 1935	Previous Earliest Date
Blackbird, Brewer's	April 24	April 24, 1933
Bluebird, Mountain	March 6	March 13, 1934
Bunting, Lazuli	April 24	May 10, 1930
Chat, Long-tailed	May 8	May 10, 1930
Flycatcher, Ash-throated	April 20	May 7, 1929
Hummingbird, Black-chinned	April 7	May 9, 1929
Hummingbird, Broad-tailed	April 6	June , 1929
Killdeer	Feb. 19	No spring records
Mockingbird, Western	April 27	May 9, 1929
Phoebe, Black	April 10	May 9, 1929
Phoebe, Say's	Feb. 12 *	March 10, 1932
Poorwill, Nuttall's	May 8	May 9, 1929
Solitaire, Townsend's	April 17	No spring records
Sparrow, Desert	April 7	May 8, 1929
Swallow, Violet Green	March 5	April 13, 1932
Swift, White-throated	March 7	March 25, 1934
Towhee, Green-tailed	April 25	May 7, 1933
Vireo, Cassin's	April 27	April 28, 1934
Yellowthroat, Western	April 6	April 28, 1929
Warbler, Audubon's	April 14	May 14, 1929

*Possibly a winter resident, November and December records.

During the fall seasons of the period covered by this article five species of birds were recorded in Grand Canyon National Park later than ever before. These were as indicated on the following table:

Species	Latest Date 1934 & 1935	Latest Previous Date
Blackbird, Brewer's	Oct. 18, 1934	Sept. 28, 1929
Blackbird, Yellow-headed	Oct. 18, 1934	Sept. 20, 1916
Chat, Long-tailed	Oct. 1, 1935	No fall records
Tanager, Western	Oct. 1, 1935	Sept. 21, 1930
Towhee, Green-tailed	Oct. 1, 1935	Sept. 28, 1929

One interesting record of an early fall arrival is that of the White-crowned Sparrow reported on August 29, 1935, by W. H. Behle, who noted several "beside pools of rain water

along the road on the Walhalla Plateau". In contrast to this early record, the first Schufeldt's Juncos to be seen on the South Rim in the fall of 1935 were over a week later than on other years when records have been kept.

One of the most conspicuous features of fall migration noted in the Grand Canyon area is the extreme uniformity in numbers and regularity of individuals (the latter indicated by banding) of certain species, and the marked irregularity of others. In the fall of 1934 Gambel's Sparrows and Green-tailed Towhees were abundant and White-crowned Sparrows fairly common on both rims, while in 1935 and in previous years since records have been kept, none of these species was seen more than occasionally. In the fall of 1935 crossbills, seldom seen during the preceding season, were very common on the South Rim - usually associated with Chestnut-backed Bluebirds. Lincoln's Sparrows - not recorded from Grand Canyon since 1889 - were seen several times on both rims during the fall migration of 1934 and one flock of seventy-five individuals was noted on the South Rim on September 9.

Several species of birds, usually considered to be more or less local in their movements were found congregating in numbers of unprecedented size during the autumn of 1935. On September 8, twenty-two Desert Sparrow Hawks were seen by D. D. Williams in a distance of two miles, fourteen of them in about one quarter of a mile, in an area near the south boundary of the Park along the Santa Fe Railway. Piñon Jays - characteristically gregarious birds - were nevertheless gathered in flocks of more than normal size on the North Rim in the fall of 1935 as reported by several observers. W. H. Behle estimated that about two hundred were together below the narrow confines of Bright Angel Point on August 25.

Both rims of Grand Canyon were included in the extensive areas of the Southwest which were affected by an extraordinarily great influx of Clark's Nutcrackers during September 1935. The apparently unprecedented regional invasion of this species, en masse,



Dodge Photo
Clark's Nutcracker

was recorded from Zion Canyon, Utah, by Presnall¹ and from southwestern Arizona by Taylor and Vorhies.²

On the South Rim of Grand Canyon the first Nutcrackers seen in 1935 were reported on September 1. Thereafter they were seen daily throughout the area - singly and in flocks - in numbers that greatly exceeded those noted at any time during the previous six years, at least. Storms and a sudden change to cold weather in late September did not cause their disappearance. As late as November 5, seventy-five were seen at Hull Tank. North Rim records show a similar massed invasion, starting somewhat earlier.

NOTES ON NESTING AND BREEDING

All too scanty are data on the nesting and breeding of birds in the Grand Canyon area and, concerning many species known to be resident there, little or no information is available. Since numerous interesting observations on family life of certain birds were made during the past season, the more significant of these will be given.

As early as February 13, evidences of nest-building activities were noted in Grand Canyon by Mrs. C. M. Shields. On that date she reports, "A pair of Goldfinches - thought to be the Arkansas - began constructing their nest at Phantom Ranch." On April 12, incubation started, on May 10 the young left the nest and on May 20 the parents began gathering string and other materials for a new nest.

Other early spring records of breeding activities among the birds of Grand Canyon are those of some Ash-throated Flycatchers which on April 20, started nesting in a stove pipe at the C.C.C. Camp near Phantom Ranch and of some Canyon Wrens whose nest containing eggs was found on April 29, beneath an overhanging ledge on the Tonto Platform. Both records were reported by Mrs. Shields. Also on April 7, three Black-chinned Hummingbirds carrying on mating activities were observed by R. K. Grater at the foot of Tamer Trail.

On the South Rim few observations on the breeding activities of birds were reported. Young White-breasted Woodpeckers

¹ Presnall, C. C.: The Condor, Vol. 38, No. 1, p.p. 36-37, 1936.

² Taylor, W. P., and Vorhies, C. D.; Ibid, p. 42.

were seen flying among the pinyons at Grand Canyon village for the first time on June 21 and young Mountain Chickadees were noted three days later - both reported by Barbara H. McKee. At Desert View four young Black-throated Gray Warblers were observed by Evelyn Grater "flying among pinyons and being fed by parents" on June 25. Another South Rim record - and one of extreme interest - is that of the joint use of a nest hole by Bluebirds and Pygmy Nuthatches, recorded by W. A. Watson in this Bulletin.



McHenry Photo

White-breasted Woodpecker

Thanks to the conscientious and careful observations of W. H. Behle, ranger-naturalist stationed on the North Rim, many important notes on the nesting and breeding of birds in that area were recorded during the summer of 1935. Information was obtained by him on the nests of flickers, robins, Pygmy Nuthatches, Audubon's Warblers and others in that area. An immature Golden-crowned Kinglet collected on August 7, two miles northwest of Bright Angel Point suggests that this species may breed on the Kaibab Plateau.

An interesting nesting note from Behle on the Mountain Chickadee is as follows: "On June 11 a nest was located in a Yellow Pine at Vista Encantada. It was in an old woodpecker hole about twelve feet above the ground and about ten feet higher in the same tree was a Red-shafted Flicker's nest. Both holes faced west. Every day as the auto caravan people stood beneath the tree, one or both of the parent chickadees would be coming to the nest. During the latter part of June the birds were evidently bringing food to the young and most of the time they seemed to be carrying grubs of various kinds. After June 25, it was not until July 9 that I again took out a party and at that time I noted a spider web over the hole which indicated desertion of the nest."

MISCELLANEOUS BIRD NOTES

Of outstanding interest is the fact that on four separate occasions during 1934-35 a type of screech owl related to the Aiken's Screech Owl but considered by Dr. Oberholser³ to represent an undescribed race whose range is northern Arizona and Utah was recorded. The first specimen of the variety to be collected in the Grand Canyon area was one found on the South Rim on May 4, 1931. In 1934-35 two good specimens were obtained, one on January 28, 1935, at the railroad depot and another on October 2, 1934,

near Moran Point. Two others, both badly battered, were found dead as the result of having been hit by automobiles on the South Rim approach road during October and November of 1934.



M^s Henry Photo

Screech Owl • South Rim
Ranch near the south boundary of Grand Canyon National Park, August 31, 1934. The owl feathers were identified by Dr. Joseph Grinnell and the bones by Dr. A. H. Miller.

An interesting record of the rare little Flammulated Screech Owl is that of a specimen found in the stomach of a Cooper's Hawk collected at the Berry

A modern Rancho La Brea Pit was discovered in September, 1935, near Grand Canyon Village by Wildlife Technician A. E. Borell⁴ who later described this highly interesting but lamentable death trap. On his first visit 123 individual birds were counted and some 14 species were recognized in the tar pit which had a diameter of only about twenty feet. A month later eight additional birds, representing several other species, were found to have been trapped in the tar even though attempts had been made to bury it with dirt. Following this a more thorough job of covering the pit prevented further losses of bird life.

³ Oberholser, Harry C.: Personal Communication, January 16, 1936.

⁴ Borell, A. E., A Modern La Brea Tar Pit: The Auk. (In manuscript)

