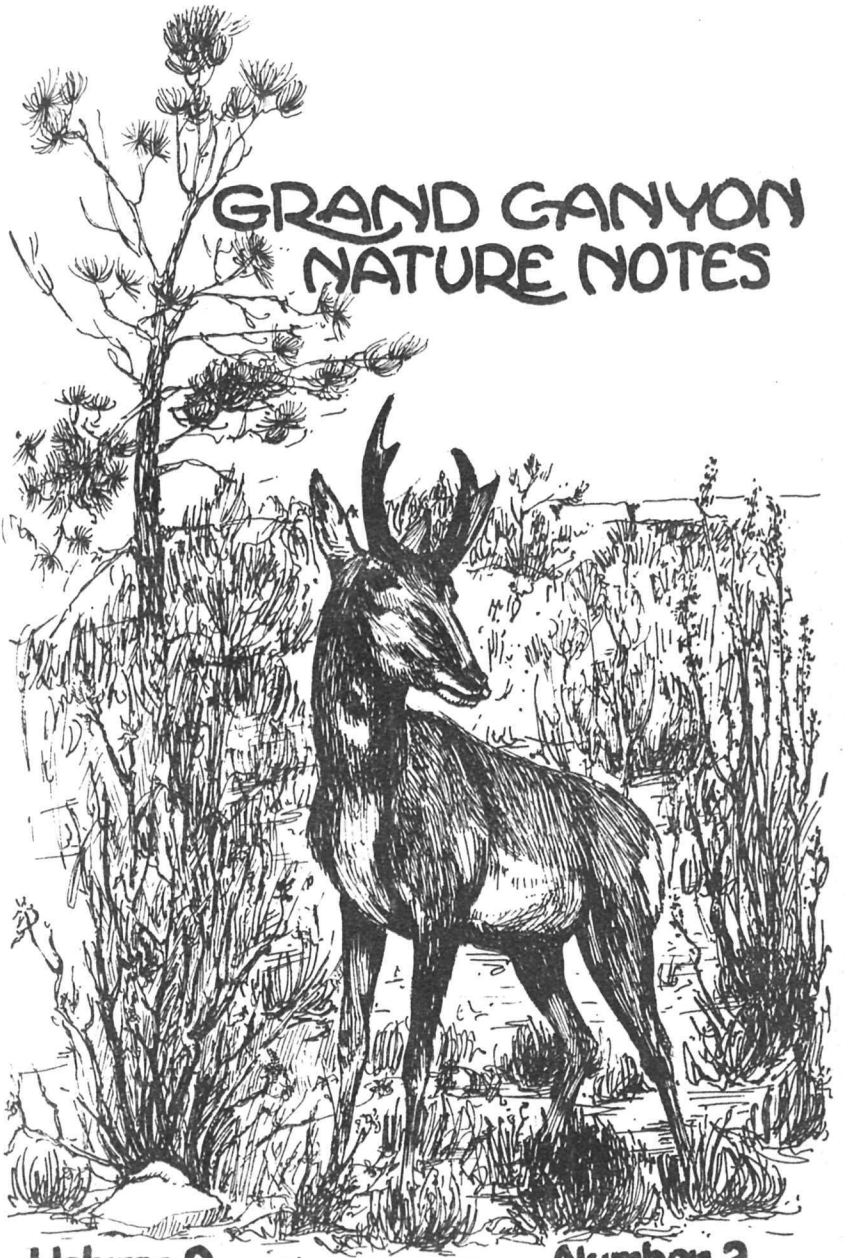
GRAND CANYON NATURE NOTES



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M. R. Tillotson,
Superintendent.

Edwin D. McKee,
Park Naturalist

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Illustrations by Florence Satterwhite.

PINYON NUTS AS BIRD FEED

By Park Naturalist Edwin D. McKee.

IN the Southwest where Pinyon Pines grow, it is generally recognized that the seeds or "nuts" of these trees constitute a very important native food product. Much has been said and written about how man and beast alike, how white man as well as Indian, relish the flavor of this food. Much description also has been devoted to the various ways in which this nut is prepared for use by native Indians and how various rodents and certain birds suchas chickadees, titmice, and nuthatches will fight for and store away in great quantity, this delicacy. It is probable, nevertheless, that few people really know how widespread is the desire for the pinyon nut and how general is the preference for it above all other foods among the native birds at least.

It is readily conceded by nearly everyone that jays are among the most greedy devourers of pinyon nuts and yet it can not be taken for granted that they always knew the secret of this important food. In support of this statement, is the interesting fact that a friend living in eastern United States where pinyon pines are unknown tried feeding the "nut" of this tree to the native jays. These birds paid no attention to the offers of food for several days, apparently not realizing that the nuts were good to eat. Some days later, however, they found the nuts cracked open and after once tasting them seemed to enjoy this new food as thoroughly as do their western relatives.

At the large and much patronized bird-feeding station on the South Rim of Grand Canyon operated by Chief Ranger and Mrs. J. P. Brooks a surprisingly great varietyl as well as large number of birds come daily to feed and here many experiments with types of food have been tried out from time to time. It has been found that every species of bird that vis-

its the station will not only eat pinyon nuts but even likes them as well if not better than any other food offered. This was not always the case, however. To begin with, many species apparently were unable either to crack them open or to eat them unshelled, while certain others that very probably could have broken the shells did not realize the advantage in so doing.

When cracked nuts are put out it has been found, strangely enough, that natural seed-eaters such as juncos and chipping sparrows actually prefer them to various types of grain and that robins hold them in equal esteem with their much-loved raisins. Even bluebirds, Cedar Waxwings, and Cassin's Purple Finches will eat them with relish.

Two especially interesting advocates of a pinyon nut diet are Mr. and Mrs. Raven who have made headquarters near the Brook's feeding station for several years. At the start one of the pair was very shy. It so happened that one day Mrs. Brooks observed its more fearless mate scoop-up a regular "cup-full" of cracked pinyon nuts with its huge bill, carry them about fifty feet through the woods to the shy companion and dump them in the snow at its feet. Thus, the raven showed that the pinyon nut was in its opinion a prize worth undergoing dangers to obtain and a royal gift for its mate.

1. McKee, E. D., "Feathered Friends", Grand Canyon Nature Notes, Vol. 4, No. 3, pp. 15 - 16, November 1929.

STATISTICAL REPORT of BIRD BANDING

By Lester Stein, C. C. C. Camp 819.

EDITORS NOTE: This statistical report summarizing Bird-Banding at Grand Canyon National Park from the period of its inception, October 1932 to March 1934, was kindly prepared by Mr. Lester Stein of C. C. C. Company 819, who, as a member of the Museum Detail, has been recording bird-banding for the Park.

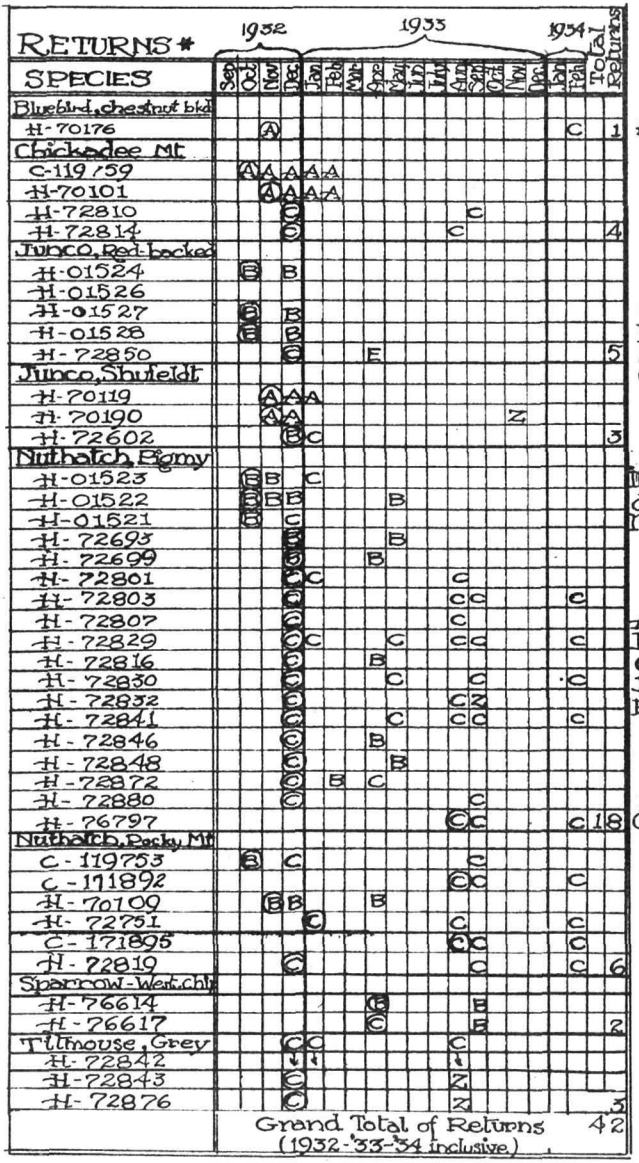
The value of this type of data is well shown in the following quotation from Mr. Frederick C. Lincoln of the Bureau of Biological Survey - "Any new field of research is usually divisible into three periods: First, experimentation, when methods are developed; second, data accumulation; and third, interpretation and report. Properly speaking, none of these has an ending, as the perfection of technique and the testing of new methods and refinements continue indefinitely, as may also the collection of usuable data. A starting point for the third period is, however, dependent wholly upon the successful prosecution of the other two, as obviously, no interpretation can be prepared until sufficient material has been obtained to permit proper evaluation."

Mountain Chickadee c-119759 established the record of returning to its trap 11 times in a single week.

SUMMARY OF BIRD BANDING

	Species Banded	1932 Oct	Nov	Dec	Species total	19 Jan	Feb	Mar	Apr	May	
1	Bluebirds, Chestnut-backed		81	1	82						
2	Chickadee, Mountain	2	1	17	20	6	8				
3	Jay, Long-crested						2				
4	Jay, Woodhouse's						1				chart continued.
5	Junco, Red-backed	7	17	66	90	24	18		4		
6	Junco, Shufeldt	1	27	67	95	35	62				
7	Nuthatch, Pygmy	3	22	48	73						
8	Nuthatch, Rocky Mountain	1	1	8	10	1	2		1	1	
9	Robin, Western		1		1					4	
10	Sparrow, Western Chipping									7	
11	Titmouse, Grey		2	7	9					1	
12	Towhees, Green-tailed										
13	Waxwing, Cedar		2		2						
	Total (monthly)	14	154	214		66	93		5	13	
	Total (yearly)				382						

	33 June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Specie Total '33	1934 Jan	Feb	Specie to March '34	Grand total of Species	Grand total of Returns	Percentage of Returns
1												82	1	1.22
2			1	6				21		9	9	50	4	8.00
3								2				2		
4								1				1		
5				14				60				150	5	3.33
6								97				192	3	1.56
7			1	2				3	8	11	19	95	18	18.95
8			5	1				11				21	6	28.57
9								4				5		
10				3				10				10	2	20.00
11								1				10	3	30.00
12				1				1				1		
13												2		
			7	27					8	20				
								211			28	621	42	6.76



LEGEND

* Return is defined as a bird recaptured no less than three months after capture.

Circle around letter indicates time and place of banding.

Letters on chart indicate substations at which birds repeated or returned

A - Yavapai Point
B - Mc Kee residence
C - Mc Henry residence
D - Indian Gardens
E - North Rim Ranger Sta

Z indicates close of bird record. (due to death)

HERMIT CAMP TODAY

By Ian Campbell*

TO establish camp in a place deserted for some years is a prospect unpleasant to many; but to geologists who have had none too frequent opportunities to compare the comforts of a solid roof to the uncertainties of a tent or a cloud-ridden sky, a headquarters at Hermit Camp[1], especially at the beginning of the winter season, proved most attractive. The further item of being able to place all camp gear in the aerial tram car near Pima Point, rather than on one's own back or the back of a mule, constituted another propitious feature.

We hiked down the Hermit Trail and arrived in time to see the cables move and the wheels start turning at the lower terminus. Presently the tram car with its load of food, instruments and other impedimenta, made a perfect landing. We had just begun to unload when a sudden screaming along the cable announced the arrival of a belated package. Suspended on a wire hook over the cable, it had completed in a little over 30 seconds the perilous journey for which the tram car had taken 30 minutes.

It might be mentioned, incidentally, that the Hermit Trail is in good condition for the most part. It is easily traversable on foot and while there are several places that would offer difficulty to animals, there is none that is really impassible. The worst place is about 1/4 mile up the trail from the top of Cathedral Stairs. This would require careful handling and perhaps moving of some rocks, in order

* Balch Graduate School of the Geological Sciences, California Institute of Technology, Pasadena, California.

1. This headquarters was made available through the courtesy of the Fred Harvey organization.

to get pack animals past.

The tram landed and unloaded; we took stock of our surroundings. All of the cabins are standing and still in quite good state of repair, both as regards externals and furnishings. These buildings have been the almost undisturbed haunt of mice for some three years. Consequently our first day was spent in the arduous task of packing water from Hermit Creek, some 1500 feet along and some 150 feet up a none too good trail, and then trying to make this water go as far as possible in the cleansing process. Of course, we explored the old water intake pipe for the camp reservoir, but found too many sections cracked or disjointed by freezing to offer hope of amateur repairs.

This section of the Tonto is distinctly lonely as compared to a camp at Indian Gardens. From there one can see the friendly lights of El Tovar and Bright Angel on the rim almost any night. Here one feels almost cut off from the world of living things; one sees no rangers, no cowboys, no antelope, no deer. Even insect life practically disappears at this season. Only a very occasional hiker ever comes through here, either from the rim, or from Indian Gardens to the east. We saw none during our stay. To the west the Tonto Trail is all but obliterated, except where wild burros[2] have seen fit to adopt it for their own comings and goings, but more often than not this results in a confusion of many trails, rather than the maintenance of one. The burros are more often heard than seen and this mostly in the more distant parts. It would have seemed a dead world indeed, around the Hermit Cabins, had it not been for the mice which were, of course, our ubiquitous companions in camp. But it is a rare individual who would look with any favor or friendship on the creature that gnaws into his flour sack or drowns in his water pail. Imagine our pleasant surprise, then, on our first trip down lower Hermit Creek, to find two Dippers or Water Ouzels (Cinclus mexicanus

2. In a forthcoming paper by Dr. Maxson, "New Workers on the Old Tonto Trail," this interesting development will be discussed.

unicolor) which, seeing a pair of geologists clumsily working their way down the gorge, proceeded to put on a demonstration of how really to traverse the Archean areas. From thenceforth the theme song of this field season became the well known refrain: "Had I the Wings of an Ouzel." On every subsequent trip up and down to the Colorado we did not fail to see these most characteristic birds, almost alone among the water-loving birds in their power of song.

In Hermit and Monument Canyons, and indeed in almost every large gulch where a cluster of acacias is to be found, we have seen one or more of the small Shufeldt's Juncos (Junco oreganus shufeldti) flitting about. A solitary Hermit Thrust (Hylociohla guttate auduboni) shared the bottom fastnesses of Hermit Creek with the Ouzels.

Those living on the rim will recall the first big snow of the season. It came the day before Thanksgiving. We had early warning of that, for two days previous a small group of Western Robins (Turdus migratorius propinquus) alighted in the cottonwood grove that surrounds the camp, and evidently laid plans to last out the winter in this favorable spot. There was a neglected bird bath in front of one of the cabins, and we should have liked to have filled it for these friendly birds, but on second thought, it seemed easier for the robins to fly down to Hermit Creek than for us to climb back up, loaded down with water buckets.

Even without the attraction of interesting work upon interesting rocks, a stay at Hermit Camp today would be a pleasant one. It has features found in no other camps located within the walls of the great Colorado River gorge. It is sad to think that some day the deserted buildings will eventually collapse or be destroyed; it is sadder still to think that the tall-standing cottonwoods and the grape vines will have to die for lack of the water that once made possible their growth at this place on the dry Tonto Platform.

NOTE: With his colleague, Dr. John H. Maxson, the writer of this article has been engaged in studies of the Archean rocks

of the Grand Canyon under the auspices of the Carnegie Institution of Washington. During the previous season they worked from Indian Gardens and from a camp at the mouth of Bright Angel Creek. In extending the mapping this season to the western edge of the Bright Angel Quandrangle, they had occasion to use Hermit Creek camp for a headquarters for some weeks.

Tramway hoist for Hermit Camp.

FIELD OBSERVATIONS

A Western Chipping Sparrow (No.-H76614) was banded at the McKee residence on the South Rim of Grand Canyon on June 4, 1933. It reappeared at the same place on the eleventh of September and then this spring (March 29, 1934) was found there again.

E. D. McKee

Results of the early spring this year are seen in the following two reports. On April 16, Mrs J. P. Brooks noted a female Abert Squirrel near her residence that apparently had just been nursing young. On April 18, the C. C. C. telephone crew found a Pigmy Nuthatch with a nest in a tree near the Yavapai road.

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Three native American Pronghorn Antelope were seen at Buggeln Hill, South Rim, on April 12. They were very wild and loped off through the sagebrush toward the Canyon rim.

R. E. Laws

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A specimen of Western Goshawk (female), one of the most destructive of American hawks, was collected on April 14 while in the act of carrying off a chicken from the Berry Ranch which borders on the south boundary of Grand Canyon National Park. This species has been recorded numerous times from around Jacob's Lake in the Kaibab Forest, where it was found nesting in 1931. Apparently this is the first definite record of it from the South Rim area, although H. S. and W. W. Swarth reported the Eastern Goshawk on December 18, 1929. "An adult bird seen at close range, at the rim of the Canyon near Hermit's Rest trail".

E. D. McKee

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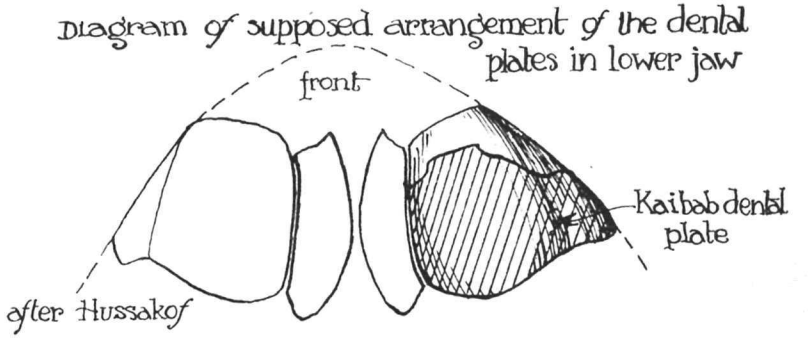
The White-throated Swift was seen darting about Grand View Point in Grand Canyon on March 25, this year. This is a full week ahead of the earliest previous date on record of the arrival of this species, April 4, 1932.

E. D. McKee

A shark's tooth was found embedded in sandstone of the Kaibab formation below Desert View Point in March. The specimen was referred to Dr. L. Hussakof of the American Museum of Natural History who kindly identified it. He writes - "The specimen is Deltodus mercurii, Newberry, 1876."

"The form of the shark of this and related genera (family Cochliodontidae) is not yet known. We know only the crushing dental plates, which as a rule are found singly. Your specimen lacks the front third; it is from the right side of the lower jaw." (see sketch) Dental plates of this shark have previously been found in the Coal Measures at Santa Fe, New Mexico, and in the Embar formation of Wyoming.



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A squadron of about twenty five White Pelicans (Pelecanus erythrorhynchos) was seen flying with labored beat across a meadow south of Kanab, Utah, on April 9. Although well beyond the park boundaries, it is thought that the proximity of these birds to it makes the record of sufficient interest to warrant mention here.

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"A yellow-headed Blackbird was seen in company with five Brewer's Blackbirds at the Grand Canyon Airport for several days, April 18 - 20." There are very few records of this species from in or near the park.

Irving Kravitz