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OBSERVATIONS ON THE NESTING HABITS OF THE PHAINOPEPLA

By HARRIET WILLIAMS MYERS

PHOTOGRAPHS BY LAWRENCE MACOMBER

N May 19th, 1907, I came upon a Phainopepla's nest built on a horizontal crotch of a large pepper tree some fifteen feet from the ground. The placing of the nest in a horizontal crotch differed from any nest that I have ever seen built by these birds, the others being in upright crotches. The limbs selected to hold the nest were large and some distance apart. The nest itself differed not from other nests of this species. It was gray in color and shallow, saucershaped in form. From so far away I could not examine its material but it looked fine.

At 1:47 P. M. the female came to the nest with material in her mouth. This she deposited and left. At 1:55 the male came into the tree but seeing me flew out again with much twitching of the tail and calling. In ten minutes he returned, darted out again, immediately returned and took the nest. For twenty-five minutes he brooded, then left, returning in four minutes. For ten minutes more he sat quietly, then suddenly left the tree giving his harsh "scrat" call and twitching his tail. Presently I heard him singing in a nearby tree. At 2:55, just an hour from the time he had taken the tree, he drove another Phainopepla away. At about the same time the female came to a neighboring tree, and the male flew away. It seemed evident that this pair, like all the other Phainopeplas that I have watched nesting, always guarded the tree. One left, only, when his, or her, mate was near by.

The next morning when I visited the nest shortly after ten o'clock the male was brooding. At 10:16 he took a turn in the air and returned. His actions plainly showed that my presence disturbed him. There was no place where I could see the nest and be entirely obscured. In his shyness he differed from the male I had watched in the pepper tree the year before. This male was quite fearless, the female being the shy one. I found in my watching at this nest that the female was much less shy than her mate.

In the afternoon of this same day when I visited the nest at 4:30 I found the male there. I began to wonder if he were to do all the brooding. At 4:56 the female came and took the nest, the first time I had seen her do so.

On the 26th of the month, seven days after brooding had commenced, I saw the female bring a long piece of stringy gray material and place it in the nest. Later when I learned that Mrs. Olive Thorne Miller had hung southern moss out in her yard near by, I made up my mind that that was what the bird had. In one nest that I watched last year the birds added material after brooding was well commenced. Seemingly this is a custom of these birds.

I find in my note book for May 29th, ten days after I first discovered the nest, the following record:

3:23 P. M., female on nest, did not fly when I came; 3:30, female left nest; 3:34, male took nest, is very shy; 4:02, male left nest, gave call; 4:03, male came back; 4:30, female flew over tree and male left; 4:31, male came back, then left again; 4:33, male took nest; 4:48, female catching insects nearby; male left nest with low call; 4:50, female took nest.

When the male was not brooding he spent much time in singing. It was not

always the low song that the male so often sings, but generally it was loud enough for me to plainly hear it at my home across the street.

On the morning of June 4th, when I visited the nest the female was brooding, the male nowhere in sight. This morning the female was unusually shy. She moved about in the nest giving her call note with much twitching of the tail and bobbing of her head. It was sixteen days since I first found the male on the nest, but tho I had been watching the birds closely of late, I had seen no evidence of young. At four P. M. I found the female on the nest. At 4:53 she left the nest and with the mate was about in the tree. In a few minutes the male flew away and the female went to catching insects near the tree. At just five o'clock she came to the nest and fed once. For a moment she stood on the edge of the nest, then slipped onto it without feeding again, tho she had swallowed once or twice and her throat had swelled as tho she were going to do so. At 5:12 the male came to the tree and the female left. In his mouth he carried a round, dark substance which I believe was a nightshade berry. As he reached the nest I saw this disappear into his throat, come up into his bill, disappear and come up again. This was repeated four times, when it was fed to something in the nest in one



FEMALE PARENT AND YOUNG OF PHAINOPEPLA

feeding. Then the male took the nest.

In half an hour the female came in

In half an hour the female came into the She was met by her mate who drove He twitched and called, and her away. acted so distressed that I went back out of sight when he allowed his mate to come back, feed, and take the nest. In five minutes the male came to the nest and the female left. This time the male fed several times, then for one minute sat and just looked at the young before taking the nest. At 5:46 he left the tree: at 5:47 the female came but was driven away by her mate who went to the nest twice and looked at the young. At 5:50 the male At six o'clock when I left took the nest. he was still there.

The next day I watched at the nest one hour and nineteen minutes commencing at 9:07 o'clock. During that time the male fed twice and the female three times, the longest interval being twenty-two minutes, the shortest four. The manner of feeding the young seemed not to change from the beginning until they left the nest. As near as I could tell, berries and tiny insects formed the chief part of the diet. When the birds fed pepper berries, or nightshade, the berries were taken from the mouth down into the neck, and back several times before feeding. In the case of the insects they seemed to be carried in the throat, extending down into the neck, from which they were brought up by a sort of pumping motion, not violent, however, like the finches.

Three days after feeding commenced, at 2:30, I found the young alone. In nine minutes both birds came and fed several times, and the female took the nest. In the two hours and twenty minutes that I watched this day the old birds each fed twice, the longest interval being forty minutes, the shortest eleven.

On June 15th, eleven days after I first was sure that there were young in the nest, for the first time I caught a glimpse of them. Two gray heads, from which stuck up stiff bristling feathers that would some day be crests, were visible above

the rim of the shallow nest. Their eyes were dark and their mouths a dull yellow. When the old birds brought food the young set up a harsh, hoarse call; a sort of "scrat," as if something grated.

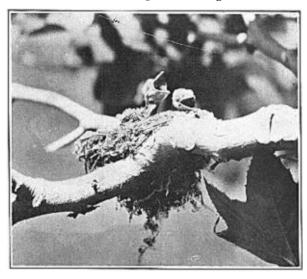
On the afternoon of this same day the male Phainopepla came into a tree near the nest, carrying a white substance about the size of a bean. What it was I could not tell. The female saw him and flew into his tree. Her mate bristled up and as she made a dive at him in an effort to get the morsel he carried, he evaded her and left the tree; nor did he bring it to the nest while I watched.

When the young were twelve days old, I first saw them beg for food. On this day, also, they were seen to preen their feathers. Two days later they sat well up in the nest. Their crests were well started being, perhaps, one third their natural hight. As one of them preened his feathers his wing was outstretched and a light patch was plainly visible on it. The youngsters were, for the most part, quiet, dignified little fellows, but they opened orange lined mouths

and begged with a harsh purring noise when the old ones were about.

My record for June 18th, 9:30, young alone; reads: 9:45, female fed several times, and left; 10:05, female fed; 10:15, female fed each bird two or three times, bringing food from the throat as at first. Male singing near by; young roused up, twitched short tails, and cried "scrat." 10:25, male fed each bird several times what looked like nightshade: 10:25, female came to nest but did not feed tho young begged; 10:50, female fed; 10:58, male fed.

Not until nineteen days after I had seen the old birds



NEST OF PHAINOPEPLA ON SYCAMORE_BOUGH

feed them did the young leave the nest. At eleven A. M., June 23d, while I watched at the nest, one young bird hopped out onto the limb about a foot from the nest, paused a moment, then flew about four feet higher up. In less than a minute the other bird followed his mate up into the tree, both birds keeping up the harsh call. At 11:15 the female came to the empty nest, paused there a moment, then flew up to one of the birds and fed it. Her mate fed the other one in two minutes. In color the young birds resembled their mother; in size they were more like a cedar waxwing. Their eyes were dark, not red like the adults.

Shortly after seven o'clock that night I went over to the pepper tree thinking I would see if they were anywhere about. To my astonishment I found them back in the nest. In the short time in which I watched them that night the male came and fed them twice.

The next morning at 7:15 I was at the tree. One young bird was still in the nest, the other was about five feet higher up in the tree. While I watched the female came and fed the young in the nest twice, then the other one twice, and

then the one in the nest once more. When she had left, the nestling in the tree flew down on the edge of the nest beside his mate. The male came and fed him once but did not feed the bird in the nest. When he had left, both young flew up into the tree. There I left them. That night they were not in the tree nor did I see them again.

Los Angeles, California.

SOME DATA AND RECORDS FROM THE WHETSTONE MOUNTAINS, ARIZONA **

By AUSTIN PAUL SMITH

BSERVATION by contemporaries, ascribes Junco phaeonotus palliatus almost exclusively to the pine zone of such regions as it inhabits. Yet it was the first Junco I recorded from this range—a single individual, \$\foatig\$ adult, altitude 4800 feet. This happened on the 26th of September. Next day I flushed a flock of perhaps fifteen, a very few feet from the original location. They were then feeding in and about a growth of Ceanothus and poison oak, for which at most times they showed a preference. Thereafter the Arizona Junco could be noted regularly in the Transition zone, during my stay.

The Gray-headed Junco (*Junco caniceps*) became noticeable several days later, generally associated with the Arizona variety. However, one might chance at any time upon small flocks in the same general locality, but composed entirely of the one species.

Here is a record that strikes me as unusual, when altitude be considered: *Piranga rubra cooperi*, enjoying certain caterpillars that were defoliating the few trees of western walnut that had managed to gain a foothold in a canyon, a little above 4000 feet on September 27; a male in full plumage, and the third of its kind that had been noted that high during the season. Paradoxically, this date also stands for my last Western Tanager (*Piranga ludoviciana*), with an added 1000 feet in elevation. Of the Hepatic Tanager (*Piranga hepatica*) nothing was recorded after July.

As Swarth in his "Birds of the Huachuca Mountains," lays stress on the early departure from that group of *Icterus parisorum*, its persistence in remaining a resident of the Whetstones up to the day of my departure (October 5) is worth setting down. During August the adult birds were but seldom in evidence. Undoubtedly this was due to that month covering their molt period, as the few birds (five or six) I chanced upon, were all in such condition. September brought them forth again, the male birds to my mind, boasting quite as regal plumage as in the spring, the scaly appearance, caused by the gray edgings (occasionally white) of the feathers of the back, detracting in nowise from their splendor. Opuntia fruit ripened during September, and I imagine the Scott Oriole was carefree then, for they seem to feed on little else when these juicy cacti are available. Their sharp clear whistle gains a second life after the molt, and is super-enjoyable because of its solitariness in the forests of this range at such time.

I This range lies thirty-five miles due north of the Huachuca Mountains .- A. P. S.