her back even if it is not visible, because she generally swims higher in the water.

As I was lying low in the reeds, another pair of grebes swam past. The

back of one bird was high out of the water. She was carrying two young, but at the time neither was visible. But soon one of the youngsters got anxious to crawl out on the hurricane deck, as it were. Each time his head appeared, the mother would reach back and cover him up. Finally one of the little fellows crawled clear out in full view and she let him sit there for a moment. I could see this was not the customary way of riding, for she soon raised her wing and Occasionally she picked up covered him. bits of something from the surface and reaching back, fed her babies. later, while the father was swimming near by, I saw one chick slip off the mother's back and go paddling toward him. seemed to lower his body slightly in the water and the youngster floated aboard.

The old grebes dive and swim readily under water with the young on their backs. But occasionally when they are frightened, they lose their chicks. Several times while we were rowing about the Lake, we came unexpectedly upon old grebes that were carrying young. At such times, when the old birds are scared, it seems very difficult for them to hold the chicks in place when they dive. In most cases, the young birds come to the top of the water after the mother dives. When we approached the little fellows they tried to



ADULT WESTERN GREBE

dive, but could not stay under long or go very deep, so they were easily caught.

Portland, Oregon.

## NESTING HABITS OF PHAINOPEPLA NITENS

## By HARRIET WILLIAMS MYERS

N the evening of June ninth, 1906, I came upon a female Phainopepla engaged in catching insects from the top of a tall sycamore tree that grew part way up the bank of the Arroyo Seco at Garvanza. Her mate was equally busy building a nest in a small, half dead sycamore tree not far away. The nest, which was probably half finished, was placed about twelve feet from the ground in an upright crotch formed by the main trunk and a small limb. It was in plain

sight in what seemed to me a very exposed place, there being no leaves near it, and the old scraggly tree seemed to afford poor protection.

On that evening when I first found the nest, I watched until nearly dark and finally left the male still building and the female catching insects. Not once had she offered to assist in the nest building. At six A. M. the next morning the male was at work, but the female was nowhere in sight. I was unable to stay long at that time, but when I returned at nine-thirty the male was still working, tho there was a longer interval between his coming than there had been in the early morning or the night before.

His manner of approaching the tree was in a half or three-quarter circle. He would come flying along on about a level with the tree top, and just before reaching the tree would descend in a circular sweep, sometimes alighting on a twig near the nest, sometimes landing in the nest itself.

At twenty minutes to ten, when the male came, he deposited his mouthful of fine material in the nest, then reached over and worked upon the outside. Having arranged this to his satisfaction, he turned about in the nest to shape it; then, still sitting squarely in it, he sang his low warbling song. It was scarcely more than a whisper and had I not seen the throat move I might have doubted its coming from a bird. Twice that morning I saw him sing on the nest.

Shortly before ten the female bird appeared in the tree for the first time, to my knowledge. She came from the top but did not circle as was the custom of the male. Before she could reach the nest her mate drove her away. However, when the male had gone, she slipped onto the nest with a mouthful, shaping it before she left. Soon after this, both birds came at once and the female got the nest. The male settled down beside her and both worked upon it. The material the female brought at this time was long and looked like white sage.

In an hour and a half that morning both birds came to the nest fourteen times, the male nine and the female five times. The longest interval was thirty minutes, the shortest three. This was one of the hottest mornings of the year, and at eleven o'clock the sun beat down upon the nest. Both birds came panting and it was at this time that work was slackened.

After the nest was finished and the eggs laid, the birds for some unknown reason deserted it. From the top of the Arroyo I could see that there were eggs in the nest but could not tell how many. Later when I was sure that the nest was deserted and I went to get a photograph I found it torn and the eggs gone. An examination proved it to be made of fine gray material. There was one old piece of soiled gray twine, some leaves and stems of white sage, and short, fine fibers. It was a firm, compact, saucer-shaped nest.

On June eleventh another male Phainopepla commenced building in a very scraggly, open, pepper tree that grew in the Parkway on Avenue Sixty-six, just across from my home. Tho from my porch I could watch their comings and goings I could not see the nest plainly. There was no place where I could conceal myself and I was so afraid that I would scare them away that I did not attempt to watch at the nest as I had at the Arroyo one. However, I was able to see that, as in the case of the other nest, the male did most of the building. The female helped some, but the most of the time she was about on the wires in the neighborhood, and nest-building concerned her not. The male had the same way of circling the tree when he came to it as in the other case.

I thought the material of this nest was finer than that of the other. Once the male came into the yard and stripped the fibers off from a castor bean tree, and twice I saw him taking something from the bark of the pepper tree. The nest

itself was ten or twelve feet from the ground in an upright crotch formed by several small branches. It exactly matched the bark and was inconspicuous until the birds stuck a piece of white cotton on one side of its upper edge. This was added after sitting had commenced.

Whether the male Phainopepla sang on the nest I know not; but often during the nest building he came to the wires directly in front of the house and sang the same sort of a song the Arroyo bird sang, only it was much louder. He also gave several different call notes.

On June sixteenth, five days after nest building began, the female first went to the nest and remained for any length of time. Toward night I saw her skimming thru the air, swallow fashion. The next day it was evident that brooding had commenced; for twice, as I passed near the tree, I scared the female off. I found in the subsequent watching that she was shyer than the male and would never stay on the nest when I came near the tree. On the other hand the male did not mind, and stayed by the nest under the closest scrutiny.

The work of incubation was very equally divided between the two birds. Seldom was the nest left alone. When the female left it, as she frequently did, the male took her place and kept it until she returned.

On the afternoon of July first, fourteen days after sitting had commenced, I saw the male Phainopepla go to the nest, feed, and then slip onto it. In five minutes the female came and the male left; the female fed, then brooded until the return of the male in about five minutes. This alternating was kept up until seven o'clock when the female took the nest for the night. In five minutes the male flew into the tree and out again without stopping. Three minutes later he did the same thing, flying near the nest as if to see that all was well for the night, then flying out and away into the Arroyo until out of sight.

In the morning I watched at the nest for over an hour and no birds came near it. At noon a male bird sang on the wire before the house, and gave his two notes, "beck" and "scat", but no female was anywhere about. Once the male flew thru the nest tree. Of course, I cannot know what was the tragedy of the nest, but I have always thought that some cat took mother and young in the night.

At four P. M., June twenty-six, I found another Phainopepla's nest in a small upright crotch high up in a sycamore tree on the Arroyo bank only a few yards from the first nest I had found. I believe it was the same pair of birds. The male was on the nest, and for ten minutes he stayed there; then he slipped off and was about on the tree near the nest for five minutes, when he returned and remained ten more minutes until the female returned and took his place. Fifteen minutes after the male had left the nest and the tree, I heard his liquid call note. In five minutes more he drove another male away from the vicinity of the nest, and in another five minutes (twenty-five from the time he left) he returned and took the female's place.

The next morning when I visited the tree the female was brooding. Soon she left, and for thirty-five minutes the male had charge of affairs. During this time he was on and off the nest four times. The first twenty minutes were spent in quietly sitting on the nest; the rest of the time in slipping on and off at short intervals. I imagined I could feel his relief when his dallying spouse finally came.

I have every reason to believe that this pair of birds raised their young; but unfortunately I was away at the time of nest leaving. When I returned, a female and at least two birds that resembled her were about in the sycamores, and I doubt not that they belonged to the sycamore nest.

Los Angeles, California.