THE BREEDING OF THE CAROLINA PAROQUET IN CAPTIVITY.¹

BY DR. NOWOTNY.

AT THE end of October, 1878, I bought a pair of Carolina Paroquets in Vienna. At first they were foolishly shy and very much worried, dashing about and huddling together. Soon, however, by quiet, gentle treatment, they became tame, the female sooner than the male; and in three months I had succeeded in taming them to such an extent that both would take to my hand, the female would fly on my head, and both would take their food from my hand or mouth. Gradually they became tamer, and now they fear me very little; and when I return from some trip, they fairly bow, rejoicing, and at the same time raising up their wings. At first their noise was often unbearable, but this has changed completely. Since the close of their breeding period they seldom scream; I hear only faint, pleasing sounds or angry notes from the female, at times a short call or cackling during copulation. Before and during the breeding period they were passionately fond of chewing up soft wood, especially limbs of poplar as thick as a finger. Every day a perching stick of soft wood one and a half times the thickness of a finger was destroyed. The female was the destroyer, the male being less destructive. This, too, has now changed, but I dare not allow them to remain unwatched when I open the cage (which is done every forenoon). The perch is not molested, but the curtains, wall paper, doors, windows, and the like are not safe from the attacks of the female. The male destroys nothing.

They are very fond of music. When my wife places the zither table near the cage in the evening, lights the lamp and begins to play, then rejoicing, headraising, bowing and wing beating takes place without measure. Similar pleasure was expressed by both when we lit the Christmas tree, December, 1878. The male is

¹ Translated for 'The Auk' by PAUL BARTSCH from Die Fremdländischen Stubenvögel, ihre Naturgeschichte, Pflege und Zucht, by DR. KARL RUSS, Vol. III, pt. 10, pp. 838, et seq.

more virtuous than the female. He possesses only good qualities. The female pilfers, is jealous of my attention, jealous of food, and curious. When I hold a hand mirror before her and then move away she flies after it and upon it and gazes at her own picture with great interest. They are both very susceptible to praise. They know exactly whether I praise, threaten, or reprimand them, and fly into the cage as soon as I raise my hand, at times, however, with slight resistance. In the cage they are more confident than they are outside, and permit themselves to be taken by the feet, to have their heads scratched, and allow me to play with their bill with my finger, etc.

As to food, they like variety. I have tried many things, and found that they love to eat occasionally hemp, oats (this they preferred shelled), sunflower seed, senegal, glanzsamen [Phalaris?], beachnuts, seeds of *Pinus abies*, rice (especially in the ear), maize (especially half ripe), bread, the soft parts of light bread, but only when fresh, and not old, and soaked in water or milk; also many kinds of berries, as berberitzen [Berberis vulgaris], schlehen [Prunus spinosa], weissdorn [hawthorn], etc. Tidbits for both are the seeds of Pinus cembra, fresh cherries, grapes, and rose pods. They are especially fond of the fruit of Thuja, but most of all they love the fruit of the sycamore (Platanus); with these I have been feeding them from August until now (December), and they do not tire of them. As soon as I enter the room with these, they leave all other food and fly toward me at once, the female perching on my head, the male on my hand, from which he takes the food and flies away, with it. The other ball I then give to the female; and now they clean them completely with great zest. I have, however, never been able to observe them swallowing anything, although they whet their tongue on the pulled off material. They may eat and waste burdock, apple seeds, maize, and wheat in their native haunts when forced by hunger; mine refused all these, as well as spinach, lettuce, and other vegetables, also white millet, fruit, ant larvæ, and red millet.

In February, 1879, I desired to allow them to nest. They entered the breeding box, and became more shy, but soon the box was demolished, although made of hard wood. As they made no attempt at nesting, I removed the breeding box after about two

weeks. On May 22, 1879, I separated them, and placed each in a separate cage. This caused much lamentation. May 24 I hung another breeding box in a new square tinned cage; the edges which were turned toward to the cage, as well as its opening, were capped with tin. I lined it with wood shavings mixed with insect powder. I placed the cage, as well as the breeding box, in a gloomy place, and the pair soon became reconciled. On June 17 I noticed a sagging on the female; from this time until the beginning of August she ate much mortar in the morning before she touched food, preferring this to sepia, which she only bedaubed; she also eagerly crushed limbs of poplar (less so those of willow, and other kinds not at all), but scarcely touched soaked feed and ant larvæ. During the entire breeding time she favored the above mentioned food. She lost many feathers from the 17th to the 29th of June, almost daily two or three large ones, and on the 28th of June eight ventral feathers. On June 29 I found two eggs on the bottom of the cage (not in the breeding-box). Both birds sat outside of the box in the cage upon the perch. I placed the eggs in the breeding box, they watching. In the afternoon of the same day, the female sat on the bottom of the cage (the male beside her), having a third egg beneath her. I also took this and placed it in the box, where I found three eggs, four in all. On this day the female lost about twenty ventral feathers. On June 30 a fifth egg lay on the bottom of the cage, and this I likewise removed to the breeding box. At ten A. M. the female bathed her head, and both birds remained outside of the box, as well as the whole day of the 1st of July. This was very aggravating to me. I looked into the breeding box and found that all the eggs had been picked and sucked; very likely this was the first set. They were unable to effect copulation in the beginning, in January, which was now accomplished with ease. Between the 2d and 6th of July the female deposited two more eggs, these being the sixth and seventh. These I took away from them, as I was in doubt of good results, to have them hatched by a hen; they were destroyed, however, through carelessness.

On July 19 the female laid another egg, and soon after, I do not know when, a ninth and tenth. These three were deposited in the breeding box and now both birds sat on them assiduously,

especially the female who was never seen to leave the box. August o I heard a young one scream, and on the 10th two were calling; I do not know when the third was hatched. On the 6th of September I found the smaller of the three young ones on the floor of the cage. I returned it to the breeding box. Soon after I saw the larger one lying on the floor. It is very likely that the old birds had thrown them out of the box. I now removed the nesting box entirely, thinking that the parents did not wish to have them in there and fearing that, if I left them on the floor of the cage and allowed the box to remain, the old ones would remain in it and leave the young ones to perish. I therefore constructed a nest of wood shavings for them on the bottom of the cage and placed both young ones on it (the third one had died in the meantime, perhaps of starvation). The old ones immediately sat near them and fed them well until the 17th of September.

On this day we departed from Vienna for Meran. The two had already attained green wings and tails; the older one also had red feathers above the bill and on the under parts. I placed all four in a transportation box supplied with shavings, and did not allow them to leave my hands during the entire trip, which, however, only lasted twenty-four hours. They arrived very well in Meran, but, alas! the parents refused to feed the young. I now fed them with shelled hemp, light bread and shelled and cut sunflower seed. All seemed well, but on the morning of the 23d of September the younger one appeared as if dead. We warmed it and fed it but the feet remained lax and motionless. it was dead. It had a yellow blister in the throat. The oldest one was lively and well. It moved about in the sun and ate heartily. But on the eve of the 24th it was taken sick, presenting similar symptons, and also died. The old ones remained well; they mated again on the 2nd of October.

My female does not differ from the male either in the color of the inner vane or in the distribution of the orange red; I have only noticed a difference in the fact that its head is round, while that of the male is somewhat flattened; further differences can be noted in their ways, eyes and manner, which cannot be described. The oldest young one had already attained many

dense strong red feathers above the bill at the age of eight weeks. It was very tame at this age and when I placed it on the ground and walked away ten steps, it followed me and crawled upon my shoe. It partook by itself of the offered food. The old birds are very devoted to each other and are always together, and if one flies away the other follows immediately. They stand cold very well, but enjoy having their under parts touched by warm breath, for which purpose they cling to the wires and permit me to breath upon them, pecking me on the nose tenderly at the same time. In the cage I can play with them as I wish and even take them in my hands, but I dare not grasp or close the hand, for then they slip away at once, screaming.¹

DESCRIPTION OF A NEW AMAZILIA.

BY HARRY C. OBERHOLSER.

A COMPARISON of specimens of Amazilia cerviniventris Gould, from Texas, with examples from the State of Vera Cruz, Mexico, seems to indicate that there exist two geographical races of this species, one of which is without a name. As the type of A. cerviniventris came from Cordova, Vera Cruz, it is proposed to characterize the Texas form as

Amazilia cerviniventris chalconota, subsp. nov.

Chars. Subsp.— Amazilia A. cerviniventri affinis, sed abdomine crisso que conspicue dilutioribus; notaeo paulo magis aureo tincto.

Al., 52-59 (55.2) mm.; caud., 31-38 (33.9) mm.; culm. exp., 20-22 (21) mm.

Habitat.—Valley of the Lower Rio Grande, with the coast region of southern Texas, north to Bee County, and south in winter into eastern Mexico.

¹Carolina Paroquets have been living in the Zoölogical Garden at Frankfort a. M. for ten to twelve years (according to the report of Dr. Max Schmidt).

—Karl Russ.

² Gould, Proc. Zoöl. Soc. Lond., 1856, 150.