

very much desired." We trust the present recital of records (not usually encountered in the normal course of ornithologic investigations) will be only one of many answers to this earnest appeal, an incentive to greater search both for other records and for living representatives, and a worthy supplement of the interesting articles already published.

NOTES ON PALMER'S THRASHER (*TOXOSTOMA
CURVIROSTRE PALMERI*).

BY EARLE F. STAFFORD.

AMONG the most noticeable and interesting birds about the ranch I had taken in Tucson, Arizona, were a pair of Palmer's Thrashers. The ranch was situated on the border of the creosote and cactus-grown desert, of which this species is characteristic; and while the birds were abundantly scattered among the cholla cactus portions of the desert, especially about the ranches, each of which appeared to have its two, these notes are based, in their details, wholly upon the observation of my own pair.

The Palmer's Thrasher resembles the eastern Brown Thrasher (*Toxostoma rufum*) in carriage, flight and general traits of behavior, having the same nervous vivacity; flying low and rapidly, and running with extraordinary speed on the ground, where most of its food is obtained. I have seen my birds spend much time in the yard half squatting, with braced feet, digging holes of considerable depth (some as deep as two and a half inches) with quick, powerful blows of their sickle-like beaks; or casting aside the mould and parched soil with nervous sidewise thrusts, in search of grubs. On those parts of the desert, too, affected by the birds the ground usually shows plentiful signs of their probing.

The song of this species suggests that of the eastern Thrasher, but lacks its variety and separation into distinct phrases, and is more in the nature of a loud, interrupted carol, clear, and melodious.

Its two or three note call is sharp and startling, like the "sing" of a whip stroke echoing upon itself. These, together with low trills and Wren-like chatters, uttered at times when the birds are together, were the only notes I heard; and the song is not to be confused with the feverish, rollicking music of the Bendire's Thrasher (*Toxostoma bendirei*) — a bird nearly as common in this region as *palmeri*.

For its nesting site the Palmer's Thrasher, selects the cholla cactus (*Opuntia cholla*) almost exclusively, so that one finds it difficult to think of the one apart from the other. This cactus is a formidable plant of light green color, which is scattered now thickly now sparsely over the desert and low mesas, and fairly bristles with barbed spines. In almost every one of good dimension I found a Thrasher's nest, or the remnants of one. Most of the nests are quite unconcealed, for concealment in such a site is both difficult and apparently unnecessary. I have noticed, however, that the nests were usually overhung by some portion of the cactus, possibly for shade. The birds perch readily on the bristling cactus branches, and somehow manage to step between, or gingerly over, the thickset spines. I seemed to have observed a certain cautiousness exercised in the performance, but it is skilfully and easily accomplished without mishap. The Thrashers are fully aware of the danger, however, for the branches in the immediate neighborhood of the nest are completely disarmed, the spines having been bent at the tip or broken off, so that comfortable roosts and safe passage to and from the nest are assured — obviously the work of the bird's bill.

When I arrived at the ranch on January 16, 1912, the pair were conspicuous daily about the yard, usually appearing together and seldom wandering far from each other in their various activities. The male was in song, his favorite perch being the roof-end of the shed whence he could view his nest and domain, and where I was able to photograph him from as near as ten feet while he alternately carolled and preened in the sun, totally indifferent to me. My very gradual approach, gentle movements, and appearance of distraction disarmed his suspicion, and the click of the shutter was the cause of only mild and transient interest. I was surprised to observe how little man as an enemy is feared by many of the birds

in this part of the country. When motionless or moving carelessly about one occasions no more fear than a sheep or a horse, to be merely avoided rather than feared. Commenting on this fearlessness my notes say: "Last night as we sat motionless on the porch one of the Thrashers approached by stages to within five feet of us, caught a moth beneath the umbrella trees, flew up into one of the trees just before me, and then to the tap and bent over again and again for the drops of water that collected just within the mouth of the faucet. All of these acts he performed utterly unconscious of us as living and observing creatures."

The nest which I supposed belonged to them — although I had not seen them near it — I had discovered in one of the two chollas on the ranch ground. It was bulky, yet neat: a deep cup lined with feathers, string, rootlets, straws and many horse hairs, sunk in a large structure of mesquite twigs lodged between the cactus branches. The top of the nest is some three and a half feet from the ground. In regard to this nest I verified a suspicion as thus recorded by my notes: "Jan. 26, 1912 — Last night at about eight o'clock was interested to visit the cholla wherein the Thrashers' nest is, and found one, and possibly both, of the birds at home. I flashed an electric light on the cactus as I approached, and one Thrasher at least flew out whistling shrilly in alarm. Whether the nest itself is occupied during the night is yet a question of doubt."

The next night I settled the question as told in this further extract from my notebook: "At about sunset, and while it was yet quite fully light, I took a small chair and seated myself almost within arm's reach and in full view of the cholla cactus back of the sheds. For twenty minutes nothing appeared save a troop of Desert and Brewer's Sparrows flying by, cheeping, to their roost in the low mesquites. As yet there was no sign of the Thrashers. Suddenly, as the gloom was faintly beginning to gather, one of the birds, without previous warning, arrived from the east and lighted on a fence post near me. I sat quite motionless, but he evidently regarded this unwonted object near his home with suspicion. I felt that he was examining me. Then he uttered, fairly in my ear, a volley of his whip-like whistles, which, after a moment, was loudly answered upon a sudden from the second bird, which seemed to come from the south. The two, thus joined for the night, flew

about in the vicinity of the chollas, though not yet to them, singing and purring softly to each other. One sat just beyond a bush in front of me, on the ground, for ten or more minutes. It was still so light that I contented myself with glances through nearly closed lids. However the birds seemed oblivious of my presence—indeed accepted it as an inanimate feature of the place, and I was quite prepared to have one light upon my head as readily as on the nearby post. I fancied at times, however, that they were watchful.

“At length I heard them enter the chollas close at hand, uttering low notes; and then silence. I looked and saw one perched crouched, I think on a certain de-spined branch above the nest. The other I could not see. For a half hour the bird sat, facing the sunset, and motionless, and I could see its long curved beak and slim body outlined against the sky. As it grew darker I opened my eyes more freely, and I imagined it regarding me the while. At length it moved, and turned about—I thought it had detected me and was on the point of flight—but instead it slid gently down into the big nest and disappeared in its ample cup.

“After another quarter hour I softly started to rise, hoping to escape without disturbing the sleeping bird, but the other Thrasher, which had meanwhile been perching amidst the ruins of a nest in the second cactus, moved uneasily, and when I stood up both darted out whistling in great fright.” I have not been able to make out which one of the pair is honored with the comfortable home nest, and which one makes shift in the unsheltered ruins in the adjacent cactus; or whether there is turn-about. I rather think the female is the favored one, however.

“After sunset and before sunrise every day a few sharp whistles from the direction of the chollas announced the roost-going and the waking of the Thrashers with precise punctuality. “They come to the yard” say my notes under January 29, “usually in the morning and again toward evening, drinking at the tub or tap, digging in different places, flying from tree to fence post, or roof top, full of ceaseless energy, and alertness. I have no notion where they spend the rest of their time; but they disappear utterly.”

On February 14, I observed signs of courtship in the Thrashers: “One sidled along the fence, and the other followed at a respectful

distance, singing a little, *sotto voce*." They were constantly in company after this, having little pursuits and "tiffs," and the male, after two weeks of silence, sang oftener and with greater force than before.

On February 16 I watched the female gathering nesting material in the yard — a big beak load of straws, strings and odd bits. Having collected a full freight she flew up to a fence post, paused to look suspiciously at me, and then took flight over the shed and to the cholla where their nest is. On examination it proved that she was replenishing the old lining, which much use had deprived of softness. Twice afterward, on the 22nd and again on the 27th, I saw the female with nesting material. Regarding the latter occasion my notes say: "Just saw the female Thrasher with a small collection of straws and what-not in her beak. The male ran into the middle of the yard, snatched a piece of dry bread, and, running back to the wood-pile with it, began eating it by hammering off bits. Seeing this the female quietly let fall the nesting material and approached her mate with low begging notes. He avoided her at first, but as she followed begging he finally permitted her to carry off the greater part of the piece. She made no further pretense of gathering material, appearing to have forgotten the matter for the afternoon." In this easy and desultory fashion did the Thrashers enter upon their nesting duties. While instinct appeared to overcome any propensity for delay they may have had, they did not seem to have the active enthusiasm characteristic of birds that select a new site and build year after year.

The next day, February 28, was exceptionally spring-like, and on going to the cholla I flushed the female from the nest. She dropped silently to the ground and ran a few paces, turning to look back anxiously. During the next few days I flushed her in like manner, and the male was oftener seen on fence posts near the nest, although both birds continued to make visits to the yard.

Although the pair continued to use the nest at night, and the female was found on it frequently during the day for the following week or so, no eggs were laid, and I was obliged to leave the ranch, on March 9, without seeing their nesting underway. No doubt they were somewhat delayed by a very backward season. How long these birds had been on the ranch I do not know, but its

owner said that a pair had been about the place for years, season in and season out.

As far as I can conclude, then, two Palmer's Thrashers, having mated for life, select a suitable cholla, and build a nest that shall serve indefinitely with such yearly repair as it requires, for the rearing of young in the breeding season, and for sleeping quarters the rest of the year. That the young return to the parental nest I do not believe, but I should be interested to know what becomes of them. At any rate it is clear that after the young are launched, the old pair, while remaining inseparable, lapse into a condition of conjugal camaraderie, and that the male quietly courts his mate anew each spring in anticipation of nesting.

NOTES ON THE BIRDS OBSERVED ON A TRIP THROUGH THE MOUNTAINS OF WESTERN NORTH CAROLINA.

BY STEPHEN C. BRUNER AND ALEXANDER L. FEILD.

THIS paper is the outcome of a trip made by the authors through the mountains of western North Carolina. Our purpose in taking this trip, which was made in the summer of 1911, was to study the birds characteristic of this section and to secure additional information, if possible, concerning their occurrence. Before giving the ornithological records and observations made during this time, a short introduction will serve to give some idea of the character of the country visited and the nature of the trip.

Our route lay through the heart of the Appalachian mountain region and covered a distance of over one hundred miles. Seven counties were visited, one of which was in Tennessee. Only records from North Carolina are included in this paper. The six North Carolina counties traversed were Caldwell, Avery, Mitchell, McDowell, Yancey, and Buncombe. The scenery of this portion of the state is unsurpassed in its beauty and grandeur by any in eastern North America. To give some idea of its superiority to