

# THE DAYBREAK SONG OF THE SCISSORTAIL FLYCATCHER<sup>1</sup>

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The time at which birds begin to sing in the morning has attracted attention for some years. The actual time at which they begin to sing has been studied by a host of investigators in England, Germany, and America. These writers merely recorded the kind of bird and the time at which it began singing, no attempt being made to describe or distinguish the morning song.

Wright (1912) distinguished between the morning awakening and evening song. This awakening song has been studied somewhat as to light intensity relation (Walker, 1928), but there seems to be very little known as to whether some birds have a special song that they sing just before dawn. Craig (1926) described the morning song of the Wood Pewee as a remarkably beautiful "twilight song" sung just before dawn. Mrs. Nice (1931, p. 122), in speaking of the Wood Pewee song, says that it has ordinarily two phases, but in the twilight song a third is added and the three are combined into an intricate and lovely composition. She also calls attention to the fact that "in May and June the male Crested Flycatcher sings a real song before dawn, which, while it cannot be compared with the twilight song of the Wood Pewee, is nevertheless more musical than one would deem possible, judging from the usual utterances of the bird." Mrs. Nice furthermore remarks that "like the Kingbirds, Crested Flycatcher, and Wood Pewee, the 'Texas Bird of Paradise' has a 'twilight song' given just before dawn during the nesting season." It would seem that this "twilight-dawn song" is peculiar to the Tyrannidae family.

The "Texas Bird of Paradise" or Scissortail Flycatcher (*Muscivora forficata* (Gmelin)) is one of our most exotic flycatchers. It breeds from southern Kansas (sometimes southern Nebraska) to southern Texas, is casual in southwestern Missouri, western Arkansas, and western Louisiana, and in eastern New Mexico, but is almost entirely confined to a row of States—Kansas, Oklahoma, and Texas (Bailey, 1928). Chapman (1932, p. 366) mentions that "it has occurred accidentally near Hudson Bay in Manitoba, Ontario, New Brunswick, Connecticut, New Jersey, Virginia, and Florida. There are two records for the Washington, D. C., region."

Simmons (1925, p. 152) describes the scissortail thus: "Pale ashy-gray, shading to blackish on wings and to whitish on throat; concealed red spot of crown; prominently, striking salmon on under wing-coverts, armpit feathers, and under tail-coverts. Tail long, deeply

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forked, middle feathers blackish, outer feathers white tipped with black. Female, smaller, with shorter tail and duller colors. L. 12.15."

Perhaps the best description of the bird's habits is by Florence Merriam Bailey (1904, pp. 246-247). She says: "In visiting the southwestern prairie country the scissortail is one of the first new birds you notice. Discovering him perched on the chaparral you are struck by his long white tail and glistening black, white, and salmon plumage. In perching the tail is closed thin and the black of the wings contrasts well with the bright salmon sides. He sits quietly like any everyday bird, giving only an occasional bee-bird like note till suddenly he darts into the air and with delighted wonder you watch his odd figure and odder gyrations in the sky.

"One of his favorite performances is to fly up and with rattling wings execute an aerial see-saw, a line of sharp angled vvvvvvv's, helping himself at the short turns by rapidly opening and shutting his long white scissors. As he goes up and down he utters all the while a penetrating scream 'ka-quee'-ka-quee'-ka-quee,' the emphasis being given each time at the top of the ascending line.

"Frequently when he is passing along with the even flight of a sober-minded crow and you are quietly admiring the salmon lining of his wings, he shoots rattling into the air, and as you stare at him he drops back as suddenly as he rose. He does this apparently because the spirit moves him, as a boy slings a stone into the sky, but fervor is added by the appearance of a rival or an enemy, for he is much like *Tyrannus* in his masterful way of controlling his landscape."

Mrs. Bailey does not mention the dawn song and one would suppose from her account, as well as most others, that his only song was this screaming flight song.

Simmons describes three songs, the flight song as described by Mrs. Bailey, the fall flocking call (a low, rather rapid conversational chitter), and the dawn call, uttered usually in the dim light at break of day, and usually only in the spring. Howell (1911), in his "Birds of Arkansas," likewise does not mention the dawn song.

Strecker (1927) in describing the birds of McLennan County, Texas, did not describe the dawn song, but speaks thus of the bird's vocal ability. "In districts where Scissortail Flycatchers are common, their cries can be heard at all hours of the night. While camped in a live-oak motte in southern Texas, I have often wondered whether or not the birds ever slept, for they were even more of a slumber disturbing element than the Western Horned and Texan Barred Owls."

It hardly seems possible that Dr. Strecker was referring to the dawn song, for one who has listened to that magic lilting music could surely never refer to it as a "disturbing element." Other bulletins and magazine articles have been carefully examined, and while one finds much valuable information on the scissortail the dawn song is not mentioned, the sound described being the flycatcher-like scream as he catches his prey (Beal, 1912; Ridgway, 1907; Allen, 1928).

Mrs. Nice (Nice, 1931, p. 118) thus describes the song: "I have only one record of the 'twilight song' given just before dawn during the nesting season. This record was obtained at Cashion, Oklahoma, June 2, 1929, where a pair had a nest containing one egg. At 5:01 A. M. (26 minutes before sunrise) the male began to shout *pup-pup-pup-pup-pup-perle'ep*, 16 times a minute for about four minutes. Then for three more minutes nothing was heard but a few *pups*. At 5:07 he began with a new note, *pup-pup-pup-pero'o*, lower and less loud than the first phrase, the number of *pups* varying from one to three, the most common number being two. A minute later he began to fly about, but kept up a continuous chatter of *pup-per'o* till 5:12."

In a letter written April 9, 1935, Mrs. Nice supplied me with three more unpublished (so far as I know) records.

"Lincoln County: on hill top prairie. June 23, 1933. Clear. 4:08, *pup-pup-pup-pup-perlecep*. 4:10, *pup-pup-pup-pup-perlecep*. 4:15, *pup-pup-pup-pup-perlecep*. 4:20, continuous song; always same notes till 4:27. Stopped for three minutes, then starts again. No *pup-pup-pup-peroo* from this bird.

"Near Lawton: June 26. Comanche County. 4:10, scissortail started with *pup-pup-pup-pup-perlecep*; kept up with it. Too far away to hear satisfactorily. 4:22, scissortail gives 20 *pup-pup-perleeps* in the minute.

"Washita County: July 27. 4:25, *pup-pup-pup-pup-perlecep*; *pup-pup-perlecep*. That was all."

She comments on her records as follows: "There are two things that are unusual about the first record. One is the time, about which there is a slight uncertainty. It certainly seems later than the other records, even counting the difference in time of sunrise. The other is that unusual note—*pup-pup-pkeroo*."

"Probably there is a difference between different birds; the Lincoln County and Comanche County birds gave only *pup-pup-pup-perlecep*. Of course it was later in the season."

Mr. H. B. Parks, Secretary of the Texas Academy of Science, and Chief of the Division of Apiculture, Research Laboratory, Texas Agriculture Experiment Station, San Antonio, Texas, very kindly sent me the following description of the song from his own personal observation. He does not give the date of his observations, but his letter is dated April 18, 1935.

"To call the note made by a scissortail a song is a misnomer. This bird, like all of its ilk, is a tremendous talker. Differing from the Great Crested Flycatcher, who preaches and shrieks, the scissortail talks baby talk and his gurgling and murmuring commences as soon as he arrives in the spring and continues until the last flock has journeyed to the southward. The female also has the same love of conversation, but her voice is not quite so loud and she is somewhat short of wind. In attempting to give the conversation of the scissor-

tail the notes are recorded phonetically, but one must remember that the 'E' is always long.

"When the eggs are laid and the female commences to incubate the time of the morning song is at hand. After having repeated the syllables *tlu-uu* for two or three hours in the late evening the male scissortail awakens about four o'clock in the morning. He commences his morning song with repeatedly calling *tlu-uu* many times, then he starts with a different sound which can be represented by *com-her* which is repeated probably fifty times. Then he suddenly flies straight upward into the early dawn, giving vent to this same call of *com-her*. Then on arriving at a point of probably fifty to sixty feet, he starts with a very peculiar and consoling note which can be represented only by the expression of *tucke' tucke'* repeated over and over again as he turns somersaults and makes side dives, finally returning to the tree top. Then he rests a few minutes and makes the most endearing sounds known to flycatchers, *tucke-tucke-tlu-tlu*, *com-her-com-her*, and then flies into the air as if shot by a gun and goes through the performance all over again.

"The scissortail could not as a whole be classed with the singing birds, but as a talker he is a wonder. The Mexican children call him the *tucke* bird."

My first time to hear the morning song was May 24, 1933, about four miles from the town of Mesquite in Dallas County, Texas. I was awakened early in the morning with the impression that the air was suddenly filled with gnomes, sprites, and dryades from another world. Questions the next morning at the breakfast table brought forth no information as to the authors of the daybreak song.

On the morning of June 1, the first real record was made at the same location as above. About one hour before sunrise (exact time was not noted), the same fantastic sounds were heard. The notes proceeded from a shrubby mesquite tree near by. As I had not the slightest idea as to its source I drew near. A slight movement on my part caused a pair of Scissortail Flycatchers to fly out of the tree and the music stopped. They alighted on a fence nearby and awaited developments in perfect silence. As I hastily retreated they at last took courage and as soon as it was barely daylight began making trips back and forth to the mesquite tree uttering short flycatcher-like notes from time to time. A later investigation revealed a well-made nest containing four nearly grown young apparently about the size of young robins nearly ready to fly.

The next morning a real record was made. June 2, 1935, 4:00 A. M. (sunrise 4:33). I had previously taken a position under the nest. The male began a series of rapidly repeated notes, but I did not attempt any phonetic representation of them. The notes died away in a Pewee-like wail, reminding one of the *peroo* of Mrs. Nice's description. Then a lower answering note which I took to be the female, but was unable to decide due to the dim light. As the light increased both birds could be distinguished one on either side of the nest. Sometimes it sounded as though both birds were talking at once, each trying to vie with the other in endearing notes. To my

mind the sounds could not be designated in any other way than by calling it a "song," a marvelous daybreak song. By 4:15 the birds began flying about and were soon at the work of feeding, both birds taking turns. The only sound was the excited conversation brought about by the choice of a recipient of the food morsels brought on the average of one a minute.

On June 3 the observation was repeated. At 4:01 the birds began and as it still seemed to be in the form of a duet I still recorded the song as from both birds. The time was shorter, however, this time; and, possibly due to my presence, the birds flew out at 4:10 and again the feeding work continued until well up into the day. Observations continued throughout the day, but there was no flight song and only the cries emitted, as the work of flycatching went on, could be heard.

I was unable, due to school duties, to again visit the nest until July 4. The young had flown and the pair had apparently vacated this particular territory. A male was holding forth a short distance away, but I was unable to prove his identity.

The study of the morning bird-song seems to be a wide open field, and from every standpoint one is intrigued to study not only the daybreak song of the scissortail but also the others of his tribe.

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