Bill broad and much depressed; second quill longest, third a little shorter, first shorter than fourth; tail scarcely emarginate, upper parts dull greenish-olive, the head darker; wings and tail dusky-brown; two bands of dull pale yellow on the wing, the secondary quills broadly edged and tipped with the same; a narrow ring of yellowish-white round the eye; throat greyish-white; sides of neck and fore part of breast greyish-olive, the rest of the lower parts yellowish-white.

Male, $5\frac{1}{2}$, $8\frac{1}{2}$.

From Texas northward. Migratory.

SASSAFRAS.

Laurus sassafras, Willd. Sp. Pl., vol. ii. p. 485. Pursh, Fl. Amer. Sept., vol. i. p. 277.

—Enneandria Monogynia, Linn. Lauri, Juss.

The Sassafras grows on almost every kind of soil in the Southern and Western States, where it is of common occurrence. Along the Atlantic States it extends as far as New Hampshire, and still farther north in the western country. The beauty of its foliage and its medicinal properties render it one of our most interesting trees. It attains a height of fifty or sixty feet, with a proportionate diameter. The leaves are alternate, petiolate, oval, and undivided, or three-lobed. The flowers, which appear before the leaves, are of a greenish-yellow colour, and the berries are of an oval form and bluish-black tint, supported on cups of a bright red, having long filiform peduncles.

THE PEWEE FLYCATCHER.

+ Muscicapa fusca, Gmel.

PLATE LXIII.-MALE AND FEMALE.

Connected with the biography of this bird are so many incidents relative to my own, that could I with propriety deviate from my proposed method, the present number would contain less of the habits of birds than of those of the youthful days of an American woodsman. While young, I had a plantation that lay on the sloping declivities of the Perkiomen Creek. I was extremely fond of rambling along its rocky banks, for it would have been difficult to do so either without meeting with a sweet flower, spreading open its

beauties to the sun, or observing the watchful King-fisher perched on some projecting stone over the clear water of the stream. Nay, now and then, the Fish Hawk itself, followed by a White-headed Eagle, would make his appearance, and by his graceful aërial motions, raise my thoughts far above them into the heavens, silently leading me to the admiration of the sublime Creator of all. These impressive, and always delightful, reveries often accompanied my steps to the entrance of a small cave scooped out of the solid rock by the hand of nature. It was, I then thought, quite large enough for my study. My paper and pencils, with now and then a volume of Edgeworth's natural and fascinating Tales or Lafontaine's Fables, afforded me ample pleasures. It was in that place, kind reader, that I first saw with advantage the force of parental affection in birds. There it was that I studied the habits of the Pewee; and there I was taught most forcibly, that to destroy the nest of a bird, or to deprive it of its eggs or young, is an act of great cruelty.

I had observed the nest of this plain-coloured Flycatcher fastened, as it were, to the rock immediately over the arched entrance of this calm retreat. I had peeped into it: although empty, it was yet clean, as if the absent owner intended to revisit it with the return of spring. The buds were already much swelled, and some of the trees were ornamented with blossoms, yet the ground was still partially covered with snow, and the air retained the piercing chill of winter. I chanced one morning early to go to my retreat. The sun's glowing rays gave a rich colouring to every object around. tered the cave, a rustling sound over my head attracted my attention, and, on turning, I saw two birds fly off, and alight on a tree close by:-the Pewees had arrived! I felt delighted, and fearing that my sudden appearance might disturb the gentle pair, I walked off; not, however, without frequently looking at them. I concluded that they must have just come, for they seemed fatigued:—their plaintive note was not heard, their crests were not erected, and the vibration of the tail, so very conspicuous in this species, appeared to be wanting in power. Insects were yet few, and the return of the birds looked to me as prompted more by their affection to the place, than by any other motive. No sooner had I gone a few steps than the Pewees, with one accord, glided down from their perches and entered the cave. I did not return to it any more that day, and as I saw none about it, or in the neighbourhood, I supposed that they must have spent the day within it. I concluded also that these birds must have reached this haven, either during the night, or at the very dawn of that morn. Hundreds of observations have since proved to me that this species always migrates by night.

I went early next morning to the cave, yet not early enough to surprise them in it. Long before I reached the spot, my ears were agreeably saluted



Tewee Flycatcher! Cotton Plant Gossypium Herbaceum!

by their well-known note, and I saw them darting about through the air, giving chase to some insects close over the water. They were full of gaiety, frequently flew into and out of the cave, and while alighted on a favourite tree near it, seemed engaged in the most interesting converse. The light fluttering or tremulous motions of their wings, the jetting of their tail, the erection of their crest, and the neatness of their attitudes, all indicated that they were no longer fatigued, but on the contrary refreshed and happy. On my going into the cave, the male flew violently towards the entrance, snapped his bill sharply and repeatedly, accompanying this action with a tremulous rolling note, the import of which I soon guessed. Presently he flew into the cave and out of it again, with a swiftness scarcely credible: it was like the passing of a shadow.

Several days in succession I went to the spot, and saw with pleasure that as my visits increased in frequency, the birds became more familiarized to me, and, before a week had elapsed, the Pewees and myself were quite on terms of intimacy. It was now the 10th of April; the spring was forward that season, no more snow was to be seen, Redwings and Grakles were to be found here and there. The Pewees, I observed, began working at their old nest. Desirous of judging for myself, and anxious to enjoy the company of this friendly pair, I determined to spend the greater part of each day in the cave. My presence no longer alarmed either of them. They brought a few fresh materials, lined the nest anew, and rendered it warm by adding a few large soft feathers of the common goose, which they found strewn along the edge of the water in the creek. There was a remarkable and curious twittering in their note while both sat on the edge of the nest at those meetings, and which is never heard on any other occasion. It was the soft, tender expression, I thought, of the pleasure they both appeared to anticipate of the future. Their mutual caresses, simple as they might have seemed to another, and the delicate manner used by the male to please his mate, rivetted my eyes on these birds, and excited sensations which I can never forget.

The female one day spent the greater part of the time in her nest; she frequently changed her position; her mate exhibited much uneasiness, he would alight by her sometimes, sit by her side for a moment, and suddenly flying out, would return with an insect, which she took from his bill with apparent gratification. About three o'clock in the afternoon, I saw the uneasiness of the female increase; the male showed an unusual appearance of despondence, when, of a sudden, the female rose on her feet, looked sidewise under her, and flying out, followed by her attentive consort, left the cave, rose high in the air, performing evolutions more curious to me than any I had seen before. They flew about over the water, the female leading her mate, as it were, through her own meanderings. Leaving the Pewees to

their avocations, I peeped into their nest, and saw there their first egg, so white and so transparent—for I believe, reader, that eggs soon loose this peculiar transparency after being laid—that to me the sight was more pleasant than if I had met with a diamond of the same size. The knowledge that in an enclosure so frail, life already existed, and that ere many weeks would elapse, a weak, delicate, and helpless creature, but perfect in all its parts, would burst the shell, and immediately call for the most tender care and attention of its anxious parents, filled my mind with as much wonder as when, looking towards the heavens, I searched, alas! in vain, for the true import of all that I saw.

In six days, six eggs were deposited; but I observed that as they increased in number, the bird remained a shorter time in the nest. The last she deposited in a few minutes after alighting. Perhaps, thought I, this is a law of nature, intended for keeping the eggs fresh to the last. About an hour after laying the last egg, the female Pewee returned, settled in her nest, and, after arranging the eggs, as I thought, several times under her body, expanded her wings a little, and fairly commenced the arduous task of incubation.

Day after day passed by. I gave strict orders that no one should go near the cave, much less enter it, or indeed destroy any bird's nest on the plantation. Whenever I visited the Pewees, one or other of them was on the nest, while its mate was either searching for food, or perched in the vicinity, filling the air with its loudest notes. I not unfrequently reached out my hand near the sitting bird; and so gentle had they both become, or rather so well acquainted were we, that neither moved on such occasions, even when my hand was quite close to it. Now and then the female would shrink back into the nest, but the male frequently snapped at my fingers, and once left the nest as if in great anger, flew round the cave a few times, emitting his querulous whining notes, and alighted again to resume his labours.

At this very time, a Pewee's nest was attached to one of the rafters of my mill, and there was another under a shed in the cattle-yard. Each pair, any one would have felt assured, had laid out the limits of its own domain, and it was seldom that one trespassed on the grounds of its neighbour. The Pewee of the cave generally fed or spent its time so far above the mill on the creek, that he of the mill never came in contact with it. The Pewee of the cattle-yard confined himself to the orchard, and never disturbed the rest. Yet I sometimes could hear distinctly the notes of the three at the same moment. I had at that period an idea that the whole of these birds were descended from the same stock. If not correct in this supposition, I had ample proof afterwards that the brood of young Pewees, raised in the cave, returned the following spring, and established themselves farther up on the creek, and among the outhouses in the neighbourhood.

On some other occasion, I will give you such instances of the return of birds, accompanied by their progeny, to the place of their nativity, that perhaps you will become convinced, as I am at this moment, that to this propensity every country owes the augmentation of new species, whether of birds or of quadrupeds, attracted by the many benefits met with, as countries become more open and better cultivated: but now I will, with your leave, return to the Pewees of the cave.

On the thirteenth day, the little ones were hatched. One egg was unproductive, and the female, on the second day after the birth of her brood, very deliberately pushed it out of the nest. On examining this egg, I found it containing the embryo of a bird partly dried up, with its vertebræ quite fast to the shell, which had probably occasioned its death. Never have I since so closely witnessed the attention of birds to their young. Their entrance with insects was so frequently repeated, that I thought I saw the little ones grow as I gazed upon them. The old birds no longer looked upon me as an enemy, and would often come in close by me, as if I had been a post. now took upon me to handle the young frequently; nay, several times I took the whole family out, and blew off the exuviæ of the feathers from the nest. I attached light threads to their legs: these they invariably removed, either with their bills, or with the assistance of their parents. I renewed them, however, until I found the little fellows habituated to them; and at last, when they were about to leave the nest, I fixed a light silver thread to the leg of each, loose enough not to hurt the part, but so fastened that no exertions of theirs could remove it.

Sixteen days had passed, when the brood took to wing; and the old birds, dividing the time with caution, began to arrange the nest anew. A second set of eggs were laid, and in the beginning of August a new brood made its appearance.

The young birds took much to the woods, as if feeling themselves more secure there than in the open fields; but before they departed, they all appeared strong, and minded not making long sorties into the open air, over the whole creek, and the fields around it. On the 8th of October, not a Pewee could I find on the plantation: my little companions had all set off on their travels. For weeks afterwards, however, I saw Pewees arriving from the north, and lingering a short time, as if to rest, when they also moved southward.

At the season when the Pewee returns to Pennsylvania, I had the satisfaction to observe those of the cave in and about it. There again, in the very same nest, two broods were raised. I found several Pewees nests at some distance up the creek, particularly under a bridge, and several others in the adjoining meadows, attached to the inner part of sheds erected for the

protection of hay and grain. Having caught several of these birds on the nest, I had the pleasure of finding that two of them had the little ring on the leg.

I was now obliged to go to France, where I remained two years. On my return, which happened early in August, I had the satisfaction of finding three young Pewees in the nest of the cave; but it was not the nest which I had left in it. The old one had been torn off from the roof, and the one which I found there was placed above where it stood. I observed at once that one of the parent birds was as shy as possible, while the other allowed me to approach within a few yards. This was the male bird, and I felt confident that the old female had paid the debt of nature. Having inquired of the miller's son, I found that he had killed the old Pewee and four young ones, to make bait for the purpose of catching fish. Then the male Pewee had brought another female to the cave! As long as the plantation of Mill Grove belonged to me, there continued to be a Pewee's nest in my favourite retreat; but after I had sold it, the cave was destroyed, as were nearly all the beautiful rocks along the shores of the creek, to build a new dam across the Perkiomen.

This species is so peculiarly fond of attaching its nest to rocky caves, that, were it called the Rock Flycatcher, it would be appropriately named. Indeed I seldom have passed near such a place, particularly during the breeding season, without seeing the Pewee, or hearing its notes. I recollect that, while travelling in Virginia with a friend, he desired that I would go somewhat out of our intended route, to visit the renowned Rock Bridge of that State. My companion, who had passed over this natural bridge before, proposed a wager that he could lead me across it before I should be aware of its existence. It was early in April; and, from the descriptions of this place which I had read, I felt confident that the Pewee Flycatcher must be about it. I accepted the proposal of my friend and trotted on, intent on proving to myself that, by constantly attending to one subject, a person must sooner or later become acquainted with it. I listened to the notes of the different birds, which at intervals came to my ear, and at last had the satisfaction to distinguish those of the Pewee. I stopped my horse, to judge of the distance at which the bird might be, and a moment after told my friend that the bridge was short of a hundred yards from us, although it was impossible for us to see the spot itself. The surprise of my companion was great. "How do you know this?" he asked, "for," continued he, "you are correct."-"Simply," answered I, "because I hear the notes of the Pewee, and know that a cave, or a deep rocky creek, is at hand." We moved on; the Pewees rose from under the bridge in numbers; I pointed to the spot and won the wager.

This rule of observation I have almost always found to work, as arithmeticians say, both ways. Thus the nature of the woods or place in which the observer may be, whether high or low, moist or dry, sloping north or south, with whatever kind of vegetation, tall trees of particular species, or low shrubs, will generally disclose the nature of their inhabitants.

The flight of the Pewee Flycatcher is performed by a fluttering light motion, frequently interrupted by sailings. It is slow when the bird is proceeding to some distance, rather rapid when in pursuit of prey. It often mounts perpendicularly from its perch after an insect, and returns to some dry twig, from which it can see around to a considerable distance. swallows the insect whole, unless it happens to be large. It will at times pursue an insect to a considerable distance, and seldom without success. alights with great firmness, immediately erects itself in the manner of Hawks, glances all around, shakes its wings with a tremulous motion, and vibrates its tail upwards as if by a spring. Its tufty crest is generally erected, and its whole appearance is neat, if not elegant. The Pewee has its particular stands, from which it seldom rambles far. The top of a fence stake near the road is often selected by it, from which it sweeps off in all directions, returning at intervals, and thus remaining the greater part of the morning and evening. The corner of the roof of the barn suits it equally well, and if the weather requires it, it may be seen perched on the highest dead twig of a tall tree. During the heat of the day it reposes in the shade of the woods. In the autumn it will choose the stalk of the mullein for its stand, and sometimes the projecting angle of a rock jutting over a stream. It now and then alights on the ground for an instant, but this happens principally during winter, or while engaged during spring in collecting the materials of which its nest is composed, in our Southern States, where many spend their time at this season.

I have found this species abundant in the Floridas in winter, in full song, and as lively as ever, also in Louisiana and the Carolinas, particularly in the cotton fields. None, however, to my knowledge, breed south of Charleston in South Carolina, and very few in the lower parts of that State. They leave Louisiana in February, and return to it in October. Occasionally during winter they feed on berries of different kinds, and are quite expert at discovering the insects impaled on thorns by the Loggerhead Shrike, and which they devour with avidity. I met with a few of these birds on the Magdeleine Islands, on the coast of Labrador, and in Newfoundland.

The nest of this species bears some resemblance to that of the Barn Swallow, the outside consisting of mud, with which are firmly impacted grasses or mosses of various kinds deposited in regular strata. It is lined with delicate fibrous roots, or shreds of vine bark, wool, horse-hair, and sometimes a

few feathers. The greatest diameter across the open mouth is from five to six inches, and the depth from four to five. Both birds work alternately, bringing pellets of mud or damp earth, mixed with moss, the latter of which is mostly disposed on the outer parts, and in some instances the whole exterior looks as if entirely formed of it. The fabric is firmly attached to a rock, or a wall, the rafter of a house, &c. In the barrens of Kentucky I have found the nests fixed to the side of those curious places called sink-holes, and as much as twenty feet below the surface of the ground. I have observed that when the Pewees return in spring, they strengthen their tenement by adding to the external parts attached to the rock, as if to prevent it from falling, which after all it sometimes does when several years old. Instances of their taking possession of the nest of the Republican Swallow (Hirundo fulva) have been observed in the State of Maine. The eggs are from four to six, rather elongated, pure white, generally with a few reddish spots near the larger end.

In Virginia, and probably as far as New York, they not unfrequently raise two broods, sometimes three, in a season.

This species ejects the hard particles of the wings, legs, abdomen, and other parts of insects, in small pellets, in the manner of owls, goatsuckers and swallows.

The following characters presented by the digestive organs and trachea, are common to all the North American small Flycatchers, varying only in their relative dimensions. The roof of the mouth is flat and somewhat diaphanous; its anterior part with three prominent lines, the palate with longitudinal ridges; the posterior aperture of the nares linear-oblong, margined with papillæ. The tongue is 41 twelfths long, rather broad, very thin, emarginate and papillate at the base, the tip slit. The mouth is rather wide, measuring $4\frac{3}{4}$ twelfths across. There is a very narrow oblong salivary gland in the usual place, and opening by three ducts. The œsophagus is 2 inches 1 twelfth long, $2\frac{1}{2}$ twelfths wide, without dilatation. The stomach is rather small, 6 twelfths long, 5 twelfths broad, considerably compressed, the lateral muscles distinct and of moderate size, the lower very thin; the epithelium thin, tough, longitudinally rugous, brownish-red. The stomach filled with insects. The intestine is $6\frac{1}{2}$ inches long, from $1\frac{3}{4}$ twelfths to 1 twelfth in width; the cœca 1½ twelfths long, ½ twelfth broad, 1 inch distant from the extremity; the rectum gradually dilates into an ovate cloaca.

The trachea is 1 inch 7 twelfths long, from 1 twelfth to $\frac{3}{4}$ twelfth in breadth, considerably flattened; the rings 78, with two additional dimidiate rings. The bronchi are of moderate length, with 12 half rings. The lateral muscles are very slender, as are the sterno-tracheales; the inferior laryngeal are very small, and seem to form only a single pair.

PEWIT FLYCATCHER, Muscicapa nunciola, Wils. Amer. Orn., vol. ii. p. 78.

Muscicapa fusca, Bonap. Syn., p. 68.

PEWIT FLYCATCHER or PHŒBE, Nutt. Man., vol. i. p. 278.

Pewee Flycatcher, Muscicapa fusca, Aud. Orn. Biog., vol. ii. p. 122; vol. v. p. 424.

Wing much rounded, third quill longest, fourth scarcely shorter, but considerably longer than second, first intermediate between sixth and seventh; tail emarginate; upper parts dull olive, the head much darker; quills and tail dusky brown, secondaries and their coverts edged with pale brown; outer tail-feathers whitish on the outer edge, unless toward the tip; lower parts dull yellowish-white, the breast tinged with grey.

Male, 7, $9\frac{1}{2}$.

Throughout the United States, and northward. Spends the winter in vast numbers in the southern parts.

THE COTTON PLANT.

Gossypium Herbaceum, Linn., Syst. Nat., vol. ii. p. 462.—Monadelphia Polyandria, Linn. Malvaceæ, Juss.

This species, commonly known in America, is distinguished by its fivelobed leaves and herbaceous stem.

THE WOOD PEWEE.

+ Muscicapa virens, Linn.

PLATE LXIV.-MALE.

It is in the darkest and most gloomy retreats of the forest that the Wood Pewee is generally to be found, during the season which it spends with us. You may find it, however, lurking for awhile in the shade of an overgrown orchard; or, as autumn advances, you may see it gleaning the benumbed insects over the slimy pools, or gliding on the outskirts of the woods, when, for the last time, the piping notes of the bullfrog are heard mingling with its own plaintive tones. In all these places, it exhibits the simplicity and freedom of its natural-habits, dashing after the insects on which it principally feeds, with a remarkable degree of inattention to surrounding objects. Its sallies have also the appearance of being careless, although at times protract-



Tewee Flycatcher! Cotton Plant Gossypium Herbaceum!



Audubon, John James. 1840. "The Pewee Flycatcher, Muscicapa fusca, Gmel. [Pl. 63]." *The birds of America : from drawings made in the United States and their territories* 1, 223–231. https://doi.org/10.5962/p.319176.

View This Item Online: https://www.biodiversitylibrary.org/item/124833

DOI: https://doi.org/10.5962/p.319176

Permalink: https://www.biodiversitylibrary.org/partpdf/319176

Holding Institution

Smithsonian Libraries and Archives

Sponsored by

Biodiversity Heritage Library

Copyright & Reuse

Copyright Status: NOT_IN_COPYRIGHT

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at https://www.biodiversitylibrary.org.