THE CONDOR

A Bi-Monthly Magazine of Western Ornithology

Volume XXIII | May-June, 1921 | Number 3

[Issued June 3, 1921]

NOTES ON THE NESTING OF THE YOSEMITE FOX SPARROW, CALLIOPE HUMMINGBIRD AND WESTERN WOOD PEWEE AT LAKE TAHOE, CALIFORNIA

By JOHN W. MAILLIARD

WITH ONE PHOTO

IN company with my daughter-in-law, Mrs. John W. Mailliard, Jr., whose aptitude for observation and persevering interest in the work enabled me to secure many of my notes, daily field trips were undertaken at Lake Tahoe in 1920 from May 29 until July 13, the area thus covered being that portion of the lake front extending from Blackwood Creek on the south to the meadows of Burton Creek on the north, and the immediate back country thereof. Our first desire was to observe the nesting habits of the Yosemite Fox Sparrow, which was much in evidence in that neighborhood. Partial success in this soon led us to make similar observations upon the ever-present, teasing little Calliope Hummingbird, and while at first these were unavailing, success finally rewarded our fast ebbing patience.

YOSEMITE FOX SPARROW

This bird (*Passerella iliaca mariposæ*), as already intimated, was found in great abundance in all suitable localities. The expression "suitable" is to be taken in a very broad sense in this instance, as the bird was by no means confined to the ceanothus association, but was also quite abundant in willow and aspen, at least in the Burton Creek meadows. Apparently the ground is as attractive to this species for nesting purposes as are more elevated sites, and in either case no general rule seems tenable. Of the fourteen nests which came under our observation six were on the ground, but in such variety of detail that short descriptions of them seem excusable.

Two of the nests of the Yosemite Fox Sparrow were placed at the foot of fairly well isolated Douglas fir seedlings two and three feet high, respectively, one of which was within stone's throw of occupied human habitations on the one side and of a much used highway on the other. Another nest was well concealed under an almost impenetrable thicket of chinquapin and some feet from its edge. One was under the leaning main limb and near the center of a spreading goldencup oak, near an unoccupied bungalow. Another was under a small, isolated ceanothus bush, but a few feet from a large boathouse in which work was being accomplished almost daily, while still another was in an aspen grove, under a piece of lodged bark.

Of the eight nests built above the ground three were placed in ceanothus or buckthorn bushes at heights ranging from eight inches to one and a half feet, the nesting site varying from the edge of a thicket well into the interior. One nest was placed on a mass of fallen and drooping dead willow limbs, about two feet and a half above the ground, and was soon well hidden by the rapid growth of the wild gooseberries interspersed throughout the accumulation of dead branches. Another was situated two feet from the ground in the fork formed by a two-inch shoot and the main trunk of a large willow, the nest being placed against the latter. Yet another was on a mass of dead branches and debris under a clump of willows, and was also two feet from the ground. A nest was found in a gooseberry tangle under a willow, about four and a half feet from the ground, while a further variation was found in the last one of this species for the season, discovered on July 5, in course of construction. This was upon the dead branches of an aspen, over, and three feet above, a small running stream, eighteen inches out from, and twelve inches above, the level of the stream bank. While quite open above, it was well shaded by gooseberry bushes.

Whatever the situation of the nest, all seemed to follow a well established form of construction, variations being practically limited to the amount and kind of material used in the wall of the structure. In the case of nests in elevated positions this material consisted of varying quantities of dead twigs, often of remarkable length considering the size of the builder. In one instance a twig of fourteen inches, and in another of twelve and a half inches, was used, with diameters at the base of over a quarter of an inch. Nests on the ground were often banked up with vegetable debris in place of twigs.

In all instances the nest proper was composed of combinations of shreds of old bark, small dead twigs, old chips and small chunks of wood and dead leaves. All of this material, more or less decayed and very light in weight, was used in varying proportions in the different nests, sometimes one or two of these constituents being omitted. The wall of one nest contained several chips of wood, the largest of which was five and a half inches long by one and a quarter wide, and very thin, possibly a piece of berry basket. The lining of the nests was of finely shredded bark, dead rootlets, old dry grasses and sometimes horsehair.

Extreme measurements of nests, in inches, are as follows:

	Maximum	Minimum
Diameter	outside 14	6
	inside 3	2½
Depth	outside 5½	3
	inside 1¾	1

Owing to the great shyness of this species but few opportunities for observing the actual nest building presented themselves. In one instance a bird was watched as it dragged a twig, at least eight inches in length, along the ground and up through and over the mass of dead branches and debris upon which, at a height of two feet from the ground, the nest was placed. Previously, the same bird had been seen carrying a small twig to its nest by direct flight. In another instance, where a nest was four feet and a half from the ground in a gooseberry tangle, the bird picked up twigs but a few yards from the nesting site and carried them to it by direct flight. These twigs varied greatly in length, the longest being estimated at ten inches, and several were dropped on the way. In a heroic effort to maintain a proper balance with a coveted twig while striving to reach its destination, the bird's body was almost perpendicular, its attitude and rapid

wing movement reminding one of a hummingbird at a long-necked flower.

The continual song of the male, from his favorite perch near the nest site, and the fact that the sitting bird, while feeding nearby, is not replaced by its mate, leads to the belief that the female alone attends to the duties of nest construction and incubation. Sometimes, while near the nest, the male breaks into song, not only when standing on the ground but when he is scratching or hopping about in the brush as well.

In spite of the startling amount of general destruction of eggs, young and nests of birds, presumably by chipmunks, predatory birds, snakes, etc., prevalent in the Lake Tahoe region, no nests of this fox sparrow were molested before the

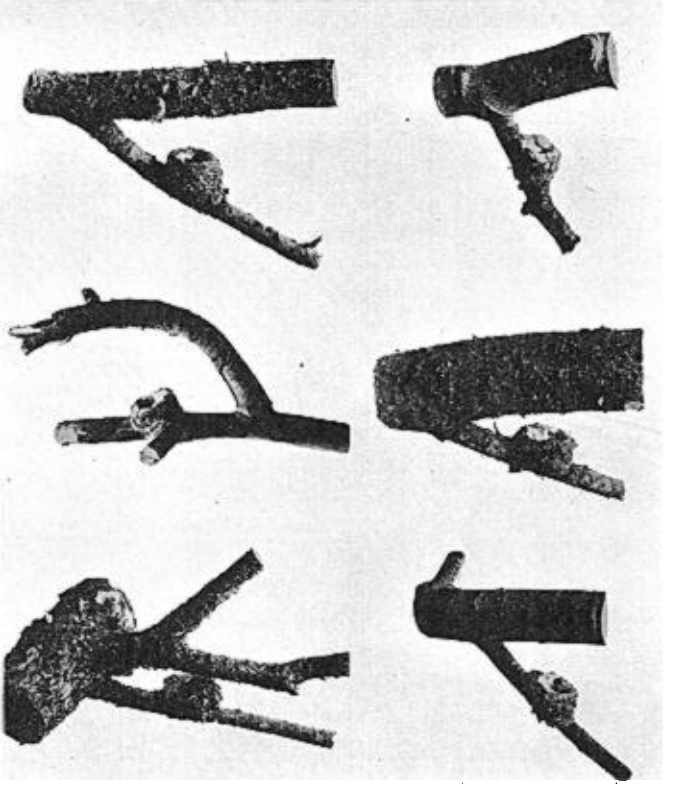

Fig. 15. NESTS OF CALLIOPE HUMMINGBIRD SHOWING, IN EACH CASE, PROTECTING LIMB OVERHEAD.

eggs were hatched. This was probably due to the facts (established by careful observation) that incubation commences with the laying of the first egg, and that the sitting bird never goes far from the nest.

CALLIOPE HUMMINGBIRD

While this species (*Stellula calliope*) was present in all the suitable localities we visited, no evidence of its nesting was observed, in spite of most painstaking work, until June 12, when three nests, all containing young, were located in a small belt of timber in the meadows of Burton Creek and not far distant from the shore of Lake Tahoe. As eight of the nine nests which ultimately came

under our observation were in this same belt, a bit of description thereof seems advisable. Beginning at the mouth of a small stream this belt, perhaps one hundred yards in width, extended along both sides of the stream for some three hundred yards, to where the latter made a sharp turn into an open portion of the meadows in which only willows grew. Not far distant the forest of the mountain slopes extended to the meadow to within a few rods of the above described timber belt, and in one of the nearest trees of this forest the ninth nest was discovered.

Such close sitters were the birds that all the nests were discovered purely by sight. Two of them were looked for because of the birds' actions toward other birds in the vicinity, the first nest found having given us an intimation of where to look for others.

The favorite nesting site is very clearly shown in the accompanying illustration, all the nests having been collected (in most cases after the young had left them) for photographic purposes. Whether in a tamarack (lodge-pole pine) or in an aspen, the only two kinds of trees in which nests were found, every nest discovered by us was upon an under limb near where it forked from a larger one above, the latter giving good protection, not only from the sun, snow and rain, but, as well, from the too inquisitive eyes of would-be marauders. In elevation from the ground the nests varied from fourteen to thirty feet, and in distance from the main tree trunk, from four to ten feet.

It was noticed that when females were disturbed from their nests they showed much more apprehension for their eggs than, later on, for their young. Nevertheless, they were much concerned over the latter also and would resume brooding even when a person remained within a foot or so of the nest. In one instance, when a nest containing eggs was being collected, a rope was passed over a higher branch for the purpose of balancing the long, protecting limb, just below which the nest was placed, and to assist in lowering it to the ground. The bird remained upon the nest during the proceeding until it was actually being lowered. At one stage the limb turned until the nest was at an angle of about forty-five degrees, but by fluttering her wings the bird succeeded in maintaining her position thereon. Evidently ornamentation of the nest begins with the laying of eggs, as a female was observed busily engaged in this occupation, although the eggs were perfectly fresh.

WESTERN WOOD PEWEE

Unusual opportunities were offered by this very abundant species (*Myiochanes richardsoni richardsoni*) for the study of its nest-building activities, which, in several instances, were conducted under most favorable conditions for the observer. One female gathered its building material by pecking small bits of bark from the branches of a dead willow, which was but a few yards from the large yellow pine in which the nest was placed. At times small bits of this material could be distinguished in the bill of the busy bird, while at other times nothing was discerned, the presence of such only being evidenced by the operations of the bird upon its return to the nest. Meantime the male perched in the near vicinity, or darted after its prey, sometimes perching in, or darting from, the very tree in which the nest was being constructed.

Another pair built three nests in rapid succession, each of which was watched daily, often many times in a day. Number one was discovered on June 4 at a very early stage, a mere lump of material saddled upon a small dead limb of an aspen and about twelve feet from the ground. A heavy storm, on the night of

June 15, washed it from its moorings and it was found the following morning at the foot of the tree, waterlogged. No egg shells were in evidence and I am reasonably sure that it contained no eggs, so at least fourteen days were consumed in its construction. Nothing daunted, the bird started nest number two on June 18, in another aspen only a few rods from the previous site, but this time twenty feet from the ground. The first egg was laid June 26, and another on each of the two days following. On the 29th the nest, with its three eggs, was collected. Only eight days were thus required for its construction. Again showing its perseverance this bird started number three on July 2, once more in an aspen, but much nearer site number one than was the last. This time it was fifteen feet from the ground. The first egg was laid on July 9, seven days having been required for building the nest.

Although frequently watched at short range, with and without field glasses, at no time was any building material visible in this bird's bill, nor was she ever discovered in the act of gathering any. At no time was the male in evidence. Occasionally others of this species would appear, only to be promptly driven off by the nest builder. Possibly a lone bird in sole possession of a beat on the lake front a few rods distant may have been its mate.

Building operations seemed to consist solely in a constant pecking-weaving process, and the shaping of the nest was accomplished by the bird twisting its body while in the nest, and by arching its neck so that its throat was over the rim and against the side of the nest. The head was then moved back and forth along the rim much as one sharpens a razor on a strop. With a similar effect the tail was often thrown down and compressed against the outside of the nest, but no lateral motion could ever be discerned.

While numerous other nests were found, none of them was so located as to permit of such intimate study as the above, so in this connection I will only mention that the Douglas fir and red cedar, as well as the aspen and yellow pine already mentioned, were acceptable to this interesting little flycatcher for housekeeping purposes.

San Francisco, California, February 24, 1921.