## NESTING OF THE HAMMOND FLYCATCHER IN ELDORADO COUNTY, CALIFORNIA

## WITH TWO PHOTOGRAPHS BY MILTON S. RAY By ROSE CAROLYN RAY

Probably no two species of birds in California are more difficult to separate afield than the Hammond and Wright flycatchers. In our endeavor to secure the first set of eggs from California of the first-named species Mr. Ray has taken, over a long period of years, numerous flycatchers with their nests and eggs at various altitudes in the high Sierra Nevada from Lake Tahoe south to East Lake in the Kings River Cañon country. In every instance, however, until the year 1929, all birds collected proved to be *Empidonax wrightii*.

Dr. Joseph Grinnell, in his "Distributional List of the Birds of California", summed up the situation as it stood in 1915 when he stated, on page 92, "Of the many records of the breeding of this species [E. hammondii] along the Sierras, not one has been authenticated.... I am confident that all breeding records from southern California, and central California west of the Sierras, are erroneous.... In these and doubtless most other cases E. griseus or E. wrightii was mistaken for it. Breeding of hammondii in the high central and northern Sierras is not improbable, but the records to this effect need verification."



Fig. 10. NESTING SITE OF HAMMOND FLYCATCHER ON THE SIERRAN SUMMIT IN ELDORADO COUNTY, CALIFORNIA.

When, some time later, Dr. Tracy I. Storer wrote us that a breeding female of *Empidonax hammondii* had been taken in the Yosemite region on June 20, 1915, he not only proved the prediction of Dr. Grinnell to be well founded but he likewise caused us to redouble our efforts to find the nest and eggs of this elusive species. For well over a decade, however, our field work proved futile; for it was not until fourteen years later that success was at last attained.

While endeavoring on June 21, 1929, to locate a nest of that diminutive rara avis, the Western Ruby-crowned Kinglet, in a forest of pines and firs on the Sierran summit at an altitude of 7600 feet, I came upon a newly completed nest in a tamarack six feet up. It was placed where several small trees and a slanting sapling came together and thereby offered concealment, but it was not woven to the limb as the nests of the Wright Flycatcher are. As both in construction and location it differed from any nest that I had previously found, I later returned with Mr. Ray; but he, also, was unable definitely to determine the identity of the absent builders. On a third visit, two days later, although no birds were about, the nest contained two buffcolored eggs. As the final visit was made by Mr. Ray, alone, I take the following notes from his field book and the technical description of the nest and eggs that follows from his records in the Pacific Museum of Analytical Oology, San Francisco.

"Arrived on the summit at noon today [June 27, 1929], and I was thrilled, some time later, on reaching the puzzling nest previously found by Mrs. Ray, to see



Fig. 11. NEST OF THE HAMMOND FLYCATCHER (IN SITU) SIX FEET UP IN A TAMARACK OR LODGEPOLE PINE ON THE SIERRAN SUMMIT (AT AN ELEVATION OF 7600 FEET) IN ELDORADO COUNTY, CALIFORNIA.

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the tail of a sitting bird projecting over the rim. Approaching still nearer, a small flycatcher fluttered off and disappeared in the dense forest, disclosing a beautiful set of four rich buffy eggs, one of which was lightly spotted with cinnamon-rufous and liver-brown. After a long interval the bird returned to the vicinity but remained well up in adjacent conifers, flitting from branch to branch close to the trunks of the trees and occasionally uttering a feeble *pit*. I tried a long-distance shot but missed and sent the fine shot scattering and rattling through the lofty boughs.

"As the only time the bird had come within range was when it was in the vicinity of the nest, I now, as a precautionary measure, collected the set and substituted four eggs of E. traillii in their place. This later proved a wise measure as one of the substituted eggs was destroyed by one of the stray, scattering shot.

"After half an hour the wary little flycatcher was again approaching, and taking a quick aim at the flitting, feathery target I fired and by a fortunate shot, the specimen was secured and the mystery solved. The bird, a male, proved to be the longsought Hammond Flycatcher (*Empidonax hammondii*) and the first I had ever taken, or definitely identified afield, of this, at once the rarest, wildest, and most silent of all the flycatchers inhabiting the great Sierran woodland."

The nest was rather loosely made for a flycatcher and is basically composed of dark red bark strips, together with light gray bark strips, rootlets, grasses, stems, feathers, string, cocoons and woolly substances, and thickly lined with feathers. The outside measurements are, top,  $3\frac{1}{4} \times 4\frac{1}{2}$  inches; depth,  $2\frac{1}{4}$  inches. The nest cavity is two inches in diameter by one inch in depth. Compared with our score of nests of the Wright Flycatcher it is easily distinguishable at a glance, as the latter are all similar, being compactly woven of grayish bark strips and lined with fibres, rootlets, and some with a few feathers in addition. The four eggs, which showed but a very slight trace of incubation, have an ivory yellow ground color (Ridgway, 1912, pl. xxx). Two are unmarked; a third has a few fine specks of cinnamon-rufous, while the fourth is clearly but lightly spotted, chiefly around the major end, with cinnamon-rufous (Ridgway, pl. XIV) mixed with minute pin points of liver-brown (Ridgway, pl. XIV), in some cases even darker than the plate.

In shape they are elongage ovate, fine in texture, without gloss, and with a considerable lack of uniformity in size. They measure in inches .63 x .48, .65 x .49, .68 x .50, .70 x 56. Compared with our series of eggs of *E. wrightii* the difference does not lie in the size or shape but in the peculiar, clear, rich, yellowish tint of the ground color and the minute specks of dark liver-brown; but whether either of these characteristics would remain constant in a large series of eggs of both species is, of course, extremely doubtful.

Major Charles Bendire, in his matchless work, "Life Histories of North American Birds", vol. II, page 320, says, speaking of the eggs of the Wright Flycatcher, "eggs without luster and unspotted". With this statement, however, we disagree as we have a number of sets of eggs of the Wright Flycatcher whose surface has a decided gloss, and in one set (no. 5), taken at East Lake at an altitude of nearly 10000 feet, one of the three eggs is finely and rather generally spotted with cinnamon-rufous. Peculiarly the coloration of these spots is the same as on the eggs in our set of *E.* hammondii, excepting, of course, that the pin-point-like spots of liver-brown are absent. In collecting this set it was necessary to tramp to our base-camp and back, a total distance of sixteen miles, to get a gun to secure the parent and thus definitely establish the bird's identity.

In size we have eggs of *E. wrightii* (with which *E. hammondii* is most often confused) that are both smaller and larger than the eggs in the type set of the latter.

## THE CONDOR

An egg of *E. wrightii* in set number 4 measures .62 x .51, and one in set number 8, .75 x .51. Major Bendire gives the range in size for eggs of the two species as follows: *E. wrightii*, .60 x .50, .70 x .54; *E. hammondii*, .60 x .48, .73 x .56.

Elated with my good fortune in discovering the eggs of this rare denizen of the Sierran wilds and hoping possibly to find another nest we spent many weeks during the summers of 1930 and 1931 making our way over hundreds of miles in the higher altitudes, in the vicinity of Lake Tahoe; but not a single bird was even seen.

San Francisco, California, December 21, 1931.