

THE DISCOVERY OF THE NEST AND EGGS OF THE
WESTERN GOSHAWK IN CALIFORNIA

WITH TWO ILLUSTRATIONS

By MILTON S. RAY

WHILE on several occasions I had noted the Western Goshawk (*Astur atricapillus striatulus*) during the summer in the high Sierras, it was not until June 19, 1922, that I found my first nest of this species. We gained the higher altitudes of Eldorado County that year on June 4, at a time when the stage road, lying beneath deep snow, was still closed to general traffic. In a light buckboard, drawn by a powerful dray horse, Mr. Elmer Donckel and I, but only with considerable difficulty, succeeded in reaching the very summit of the pass.

A few days later in this region, at an elevation of about 6,300 feet, while slowly penetrating a dense forest of tamaracks that rose out of a boggy meadowland which was made almost impassable everywhere by fallen timber, I heard the loud, clear call of a Western Goshawk. Glancing above, I had but a fleeting glimpse of one of those graceful birds as it swept through the lofty, light-filtering pines and disappeared from view.

On June 19, in another part of this same forest, Mrs. Ray caught sight of a goshawk perched at the top of a lofty pine, whence it intermittently called, and where later it was joined by its mate. The cry of this hawk is a loud *keah, keah, kull, kull, kull*, in quick succession; sometimes it is limited to only the last three call notes. We now began an extended search, with both birds circling and screaming above and at times swooping uncomfortably close to our heads. At last, in a thickly timbered and very swampy section of the wood, twenty-five feet up in a rather small and slender tamarack, I located the nest. As I climbed the tree three small, white, downy young slowly, awkwardly and silently came to the edge of the nest and cautiously peered over its brink. On nearing the structure one of the parents almost brushed me with her wings as she dashed frantically by. The nest was a rough-looking affair, made entirely of small, smooth, uniform sized twigs, and it measured two and one-half feet across.

On May 19, 1923, I was again in the goshawk's forest. The former nest, however, was not in use and a most careful search for miles around revealed no trace of any other nest nor of the birds themselves. Early in May, 1924, Mr. Charles R. Young revisited the locality and found the birds occupying the original nest; but the latter already held three very small young.

At the beginning of the year 1925, Mr. Young and I determined that we would not allow the goshawks to elude us again through any lack of vigilance on our part. The first trip to the region was made on April 17, and while both birds were noted in the vicinity, the old nest was not looked into, as the pair remained in the air continuously.

On the 24th, the occupied nest was discovered in a new locality. It was placed against the trunk of a lodgepole pine, thirty-five feet up. The tree was about sixty-five feet in height and most of its lower branches were dead. The nest held a single, and apparently fresh, egg.

On the last day of the month after the parent had been seen on the nest for several days, the completed set of three very slightly incubated eggs was collected. All three eggs are unmarked, although one is very slightly stained by the green pine needles in the nest lining. The specimens are lichen green (Ridgway, *Color Standards and*

Nomenclature, plate no. 33) in color; they measure in inches: 2.25x1.75, 2.30x1.76, 2.31x1.70. This nest, like the one found previously, was located in the heart of a swampy forest of pines. Surrounding the nest tree were blackish, inhospitable pools of snow water, deep beds of pine needles, and thickets of fallen and standing dead timber. Ever there, below, was the dark, cool shade of the lofty pines and ever, above, the ceaseless roar of the wind in their swaying tops.



Fig. 80. NEST OF THE WESTERN GOSHAWK. The nest was placed against the trunk of a lodgepole pine, 35 feet up, in a dense forest of firs and pines. This nest contained the type set of eggs, for California, of this rare hawk.

The nest, a gray, weatherworn, ragged-looking structure, was oval in shape and measured, in inches, 20 by 33; the long side was placed against the trunk of the tree. By measuring, the odd projecting twigs gave it a size of 34 by 60. The cavity proper was 9 by 2, and a very rough, uneven affair it was, with its lining of green tamarack sprays, strips of tamarack bark, and a few scattered goshawk feathers. The nest distinctly tapered towards its almost flat top and was 29 inches in height (or 39 inches, counting certain projecting twigs). The composition was entirely of small, smooth, dead tamarack twigs and branches. Most of these were one-quarter inch in diameter,

some were three-quarters and some one-half, while a few were only one-eighth of an inch in diameter. I found, however, that the coarse-looking nest was very compactly built, and being supported by four branches of the tree and sheltered against the trunk, was well fitted to withstand the snow and gales that sweep through these altitudes in April and May.



Fig. 81. Encircling the foot of the tree that contained the Goshawk's nest was a complete ring of twigs dropped by the birds while engaged in nest-building. The extreme density of the forest is well shown in this illustration.

The two accompanying photographs (figs. 80, 81) well illustrate the nest and its location. Encircling the foot of the tree was a complete ring of twigs, dropped by the birds while engaged in nest-building. The lighting in the wood was so peculiar that I found that it was only possible to take a successful picture of the nest around 3 o'clock in the afternoon, at which time a weak, declining sun would peek through the chilly foliage for a short time.

As far as known, the Western Goshawk is the only form breeding in California, as the Eastern bird (*A. atricapillus atricapillus*), according to Dr. Joseph Grinnell, can only be considered a migrant. During past years, a number of our well-

known western ornithologists have located nests of this hawk, but all of these contained young. It is usually, of course, rather easy to find any nest of the larger raptores after it contains young birds, as the parents can be watched as they carry food to the juveniles. To locate a nest of the Western Goshawk while the birds are still sitting, however, is by no means a simple matter, for at such times these hawks are extremely wary; and in the dense forests they inhabit, the great lofty firs and pines stretch in endless succession in all directions as far as the eye can reach. But aside from this, there are two almost insurmountable difficulties that will always prevent many sets of this bird's eggs being taken in its thickly wooded alpine haunts: First, the lofty nesting sites selected, some of which are almost impossible to reach; and, secondly, and by far the most difficult, the great risk and hardship often necessary to gain, in late April or early May, the summer home of this hawk amid the storm-swept, snowy solitudes of the high Sierras.

In recording the discovery of the type set of eggs of this hawk for California it seems a fitting time to mention the nests containing young that have been found by other ornithologists. Grinnell and Storer, in their *Animal Life in the Yosemite*, record a nest found on June 22, 1915, in Yosemite National Park. This was placed in a red fir, approximately sixty feet up, and looking very difficult of access, the tree was not climbed. Mr. Henry W. Carriger informs me that he found a nest near Cisco, in Placer County, during June, 1918. This nest, sixty feet up in an almost limbless conifer, was also practically inaccessible and held large young.

James Moffitt writes me regarding this bird, as follows: "The enclosed notes cover observations over a period of fifteen years in the Tahoe region and from the paucity of same it can readily be seen that the Western Goshawk is a very scarce bird in this section." Mr. Moffitt's notes are as follows: "The Western Goshawk is a rare breeding species in the Canadian and Hudsonian zones, appearing about the shores of Lake Tahoe in the fall. An adult was seen near Tahoe City, August 3, 1919, and another was noted one mile south of Tahoe Tavern, October 14, 15, and 19, 1924. Another adult was seen in the woods bordering Rowlands Marsh, Lake Tahoe, October 23, 1925. Adult and young able to fly were noted August 7, 1919, near the head of General Creek, El Dorado County, elevation 7,000 feet. The young bird was shot and proved to be a female. A nest was found in a large fir, forty feet from the ground, saddled over the lowest limb of the tree and close to the trunk. This was in a dense red fir forest where conditions were typically of the Canadian zone. Efforts were made to reach the nesting site in the latter part of May, 1921, and again in 1923, but deep snow in the country and storms prevented. The nest was visited in early July, 1923, and showed evidences of having recently been occupied, but no birds were seen. In July, 1924, it was again visited and had apparently been occupied that season. On July 9, 1923, an adult was seen at Upper Velma Lake (elevation 8,000 feet), and from its behavior, I believe it had a nest in a heavy red fir forest nearby. R. M. Watson, who is familiar with this bird and who was with me when the nest above was found, states that a pair has bred near Antone Meadows at the head of Barton Creek (elevation 6,900 feet) for a number of years, nesting on a large red fir similar to the nesting site above described."

San Francisco, California, December 17, 1925.