

## NESTING OF VIRGINIA'S WARBLER

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*Plate 8*

THE summer home of Virginia's Warbler (*Vermivora virginiae*) in the eastern portion of Colorado seems to be restricted to the Transition Zone. In the early spring when they first arrive from the south, they may be found along the cottonwood creek-bottoms of the prairies in company with other migrants, but after the first leaves of the scrub oaks appear, they are seldom found away from their favorite habitat. In the broken prairie where the yellow pines have taken their stand upon the crest of the tableland, and in the rocky canyons clothed with the scraggly scrub oaks slipping down to narrow grass-grown creek-bottoms, Virginia's Warbler chooses its nesting grounds.

Plants seem to burst into life during the early weeks in May. The worn limestone and conglomerate boulders have long been jutting out from among the gaunt bare areas of tangled scrub oaks, whose dead leaves of the year before still rustle with every breeze. The walls of the valleys are gray-brown; only the male Spurred Towhees sing from the tips of these shrub-like trees, while the inconspicuous Virginia's Warblers seem to have faith that better times are coming. But warm rains and Colorado sunshine perform miracles overnight. The flowers of the scrub oaks tinge the hillsides with a greenish-yellow bloom; the green of bursting leaves and grasses soon blends with the nodding blossoms of the pasque-flower; the beautiful pink plume sways on the hillside, and yellow blossoms of the Oregon grape thrust forth among the holly-like leaves, making one think of flowering Christmas wreaths. It is then that the Virginia's Warblers are at the height of their activity. Their colors are the grays and yellows of the new vegetation. The males perch among scrub-oak branches and yellow pines, where they are usually concealed, and do their utmost to outsing their towhee neighbors. Their song is much like that of the Yellow Warbler. The females seem to pay scant attention for they are busily engaged in gathering root fibers to line their nesting cavities. It is fairly easy to discover a nesting site at this time, for vegetation is still dwarfed, and the birds may be watched from a distance as they carry material to build their ground nest among the roots of the scraggly growth. In a few days' time the nest is completely concealed by fast-growing vegetation, and then it is a fortunate person, indeed, who discovers the eggs of this secretive little warbler.

We have known Virginia's Warbler for many years and have liked to roam along the broken canyon walls searching for it, but we have found very few nests. Spring comes with such rapidity that before one is aware,

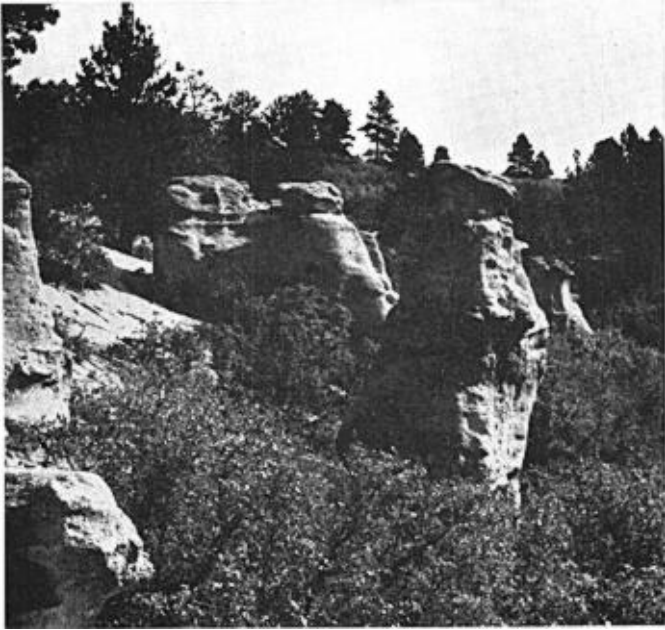
it is too late to watch the warblers at their construction work. Although it is such a common bird, we have found but one set of eggs, beautiful white ones with a ring of chestnut dots upon the larger end. We have had to be content, for the most part, in watching the adults, and listening to them scold, as the constant monotonous *chitting* of the pair most concerned is passed on by other pairs in the same canyon. It is surprising how difficult they are to see, even when close at hand, as their dull-gray feathers blend with the shadows. When the observer is content to rest and watch, hoping the birds will reveal a nesting site near at hand, they seem equally content to sit and watch, and in the end it is usually the bird that has the most patience. Later, however, after the young are hatched, the photographer is more likely to find a nest, for the adults are busy at all hours carrying the large caterpillars that feed upon the leaves of the scrub oaks. The hatching time of many species of Colorado birds seems to coincide with an abundance of larvae feeding upon plants among which the birds are nesting. We have noticed time and again, that pests are numerous upon the vegetation when fledglings are in the nest, but a few weeks later, after the little fellows have taken wing and are able to move to other parts, the caterpillars have gone into the pupa stage. Probably this is just a coincidence, but we have often commented upon it. Be that as it may, a warbler with beak crammed with wriggling larvae is evidence enough that a nest is somewhere in the near vicinity, and a bird dropping into a tangled growth will usually reveal its location.

Again, when one is prowling along brushy hillsides with other affairs in mind, he will sometimes flush incubating birds under foot. The first family we photographed was found in such a manner on June 5, 1935. The female continued to brood her small young until a descending foot brushed the entrance to her nesting depression; there was a little call of alarm and a flutter of wings as she departed, revealing the site, and we had our first opportunity to film a Virginia's Warbler. As the location of the nest was not suitable for the erection of a photographer's blind, we fastened our motion-camera within four feet of the young, concealed it with green oak leaves and worked the shutter with a string. We reclined thirty feet away and watched our adults with glasses; they were concerned, and scolded continuously, but did not drop a caterpillar during the process. The male would cease his scolding occasionally to give his song, flashing his tail sidewise in characteristic manner. Finally the female worked her way to the ground by a circuitous route and with one eye on us, slowly approached the nest. As she came within the field of the camera, we pulled the string but at the first movement of the film, she sprang into the air. It was only after many attempts, with long intermissions, that we finally made a picture record of our quiet-colored, nervous little warbler feeding her young.

This past season, while photographing a Cooper's Hawk, from a blind high in a yellow pine, we enjoyed the spring song of the Virginia's Warblers. They seem to revel in singing late into the season. The second week in June we saw a pair of birds carrying caterpillars and so, whenever our hawks were away from their nest, we watched the dense thickets for our warblers. On the 17th the young were large enough to keep the adults busy, and we finally located the nesting cavity among the roots of a scrub oak. It was beautifully concealed and contained four young birds all dressed to go into the world. They were fully feathered and closely resembled the female; we realized the youngsters would probably leave the nest if disturbed, so we erected a blind with as little commotion as possible, tied the branches aside to allow light to filter in, and hoped the warblers would take kindly to our hiding-place. It did not take the female long to become accustomed to the blind for within twenty minutes she was hanging head down from a small branch, passing caterpillars to eager youngsters. But she flushed when the camera was started and refused to come to the nest during the next two hours, although she sat within a few feet, continuously *chitting* as she eyed the shelter.

The blind was left overnight and the warblers seemed well satisfied the next morning for they came readily to feed their large young. We observed them for some time without attempting to make photographs and found that both adults shared the work, averaging a trip every six minutes. But when we tried to take motion-film they objected; they were dignified about their scolding, but were persistent in their refusal to pose near the nest. They showed plainly that they realized someone was concealed behind the canvas. Occasionally one would dart in and drop a wriggling caterpillar into a wide-open mouth, but the performance was always too fast to make a satisfactory motion-film. We had to be satisfied with still shots—rather poor ones to be sure, for the intense light overexposed the vegetation about the nest and we could not hope to cut into the deep shadows. The young were taken from their nest and held in hand that we might have a pictorial record of our visit. The adults did not take kindly to our efforts; they scolded and darted near, occasionally fluttering to the ground with outstretched wings and piteous cries, feigning injury as do many other birds. Our young birds were not friendly and posed under protest. When replaced in their nest, they promptly took wing, following their anxious parents down the brush-covered hillside. Our efforts to secure a photographic story were none too successful, but at least we had had a chance to visit this common, but little-known warbler and had learned something of its housekeeping among the Colorado scrub oaks.

*Colorado Museum of Natural History*  
*Denver, Colorado*



HABITAT OF VIRGINIA'S WARBLER



VIRGINIA'S WARBLER AT THE NEST