

and in this a pair of Red-tailed Hawks had built their bulky aerie in a tall white ash tree, seventy-five feet from the ground. Following the custom of most of their tribe when suitable hollow trees are no longer to be had, the big owls appropriated this new refuge and in it, in spite of rain, sleet, snow, and wind, successfully raised their brood. To be sure we had no exact proof that these were the very owls with which we had dealt in other years, nevertheless we felt morally certain. The new locality was the nearest available one and for many years, until 1908, had not boasted its pair of owls.

The years 1909 and 1910 add nothing new to the history of the owls except that, in the former year, a January gale destroyed the nest in the ash tree and the valiant pair were apparently forced to a new, but similar, retreat. Their history, so far as we were concerned, was a closed one. During the season of 1907 I had located five pairs of Great Horned Owls within a radius of seven miles of Mt. Vernon. None of these could be intimately studied except the pair whose history I have tried to trace. In February of 1910 I again tried to locate breeding birds of this species, but without success. In spite of the big fellow's tenacity in clinging to a locality once chosen, in spite of his cleverness in escaping observation, it almost seems now that the coming of the wanton shot-gun army and the going of the protecting forests were gradually making the Great Horned Owl, along with many another species without which the woods are stiller and humanity poorer, in the more settled parts of our country at least, a member of a vanishing race.

NESTING OF THE CALIFORNIA CUCKOO

By ALFRED C. SHELTON

WITH ONE PHOTO

RUSSIAN River, flowing through northern Sonoma County, and emptying into the Pacific Ocean at Duncan's Mills, receives one small tributary from the south, designated on the map as Laguna de Santa Rosa. In the locality of which I write, about five miles southeast of Sebastopol, this stream, known locally as the "Lagoon", becomes, after some winter storm, a turbulent river, flooding acres upon acres of bottom land. In summer its course is marked by a chain of long, rather narrow ponds, many of which are deep. The banks, and much of the intervening space between these ponds, are covered with a thick growth of willow, small ash and scrub oak, while the whole is tangled together with an undergrowth of poison-oak, wild blackberry and various creepers, forming, as it were, an impenetrable jungle, hanging far out over the water. Occasionally there is an opening in the brush, and in such a case, the bank is fringed with pond-lilies and tall rushes, and here may be caught black bass and cat-fish, together with an occasional trout. To one who may perchance take an interest in the feathered inhabitants, this old lagoon has an especial attraction, for it is a breeding home of the California Cuckoo.

Of all migratory birds breeding in this vicinity, the Cuckoo is the last to arrive in the spring, usually appearing during the latter part of May or the first week of June. Upon its arrival, this bird keeps to the higher land, among the oaks and other timber, for a period of two or three weeks before retiring to the willow bottoms to breed. During this period it is wild and shy and difficult to

approach. Most active in the early morning, its characteristic note, a loud, clear "kow-kow-kow," may be heard coming from some tree or group of trees, and perchance an answering "kow-kow-kow," may come from another tree, some distance away. When heard a few times, this note is easily imitated and is readily answered by the adults. Cautiously approaching the tree from which the call has come, the bird may be seen sitting among the topmost branches, or as is far more likely, may be seen to dash forth and fly with a swift and graceful flight to another tree some distance away. Again may the tree be approached and again may the bird be seen to fly, but this time not to stop until well beyond reach, and only a distant "kow-kow-kow" comes floating back on the still morning air to let you know whence the bird has gone.

After the birds retire to the willow bottoms to breed, their entire attitude changes. When watched and studied in the seclusion of their brush grown haunts, while engrossed with the cares of their domestic duties, the Cuckoos cease to be



Fig. 14. HAUNTS OF THE CALIFORNIA CUCKOO, IN SONOMA COUNTY

the wild, shy birds of the upland timber. The familiar "kow-kow-kow" is now forsaken for another note, a low guttural note, "kuk-kuk-kuk," always uttered by a brooding bird and is the most common call of the cuckoo during the breeding season. One other note they have, uttered like the foregoing, only during the nesting period. This note I have never been able to imitate. It has a wonderfully ventriloquistic power, and when heard at a distance of fifty yards, often seems to be half a mile or more away. When uttered, this particular call begins with the low "kuk-kuk" but gradually changes to more of the "kow-kow-kow" note, and, just before the end, closely resembles a dull, heavy drumming on a resonant limb.

On the 26th of June, 1909, while hunting through a portion of the above mentioned lagoon, in search of belated nests of the Russet-backed Thrush, I found a nest of the California Cuckoo which was a very substantial structure, considering the inefficiency of Cuckoos in general, as nest builders. It was placed upon a

large horizontal limb of a willow tree, at a point where two small limbs joined the larger one, and these held the nest firm. It was composed of long dry twigs, to which clung a little moss, and this, when the material was woven into a platform, held the structure together. It was deeply cupped, for the species, and contained two fresh eggs. The bird was brooding and showed no signs of fear as I climbed the tree. She did not leave her post, but sat watching me intently as I approached. She neither uttered a sound, nor ruffled a feather, but as I reached out to touch her, she dropped from her nest and glided away among the willows.

On July 4, of the same year, while bass fishing in one of the ponds of the lagoon, my mind was often diverted from my rod by a low "kuk-kuk-kuk" in the brush near by. When an adult bird dashed from the willows and glided away down stream, skimming along just above the surface of the water, I laid aside my rod and began to investigate. Entering the brush for a distance of perhaps thirty yards, I found the object of my search, a frail platform of twigs, placed about seven feet from the ground in a bunch of poison oak. The female was brooding and watched me intently as I approached. An old log was lying upon the ground directly beneath the nest, and as I stood upon it, and reached up to pull down the branch upon which the nest was built, the bird dropped from her nest and glided away among the willows, in exactly the same manner as the first. This nest was one of the frailest examples of bird architecture I have ever seen. It contained one fresh egg which could easily be seen from beneath. As I stood there, wondering what law of nature prevented the wind from scattering that home and its contents upon the ground, I heard something rustle in the branches above me, and glancing up, beheld the anxious parent hopping from branch to branch, holding in her beak a large yellow caterpillar. I then left for about ten minutes and upon returning, saw her again brooding upon her nest. Again I flushed her, as I wished to determine whether or not she would easily desert her nest. Just before leaving for home, I quietly returned to the spot and saw her contentedly brooding. One week later I revisited the place and found the set to consist of two large, greenish blue eggs. Soon after this the cuckoos began their regular migration, and the last one seen in 1909 was about the middle of July. One evening as I was doing my chores one passed over flying low. She went directly to a clump of willows, in which I have reason to believe she had a nest though I was unable to find it.

On the 31st of May, 1910, came the first of the California Cuckoos. On the morning of that date, about five o'clock, a loud, clear "kow-kow-kow" came floating from the top of a large pine near by. As I glanced in that direction, two birds flew from the tree and sailed across a small valley to the hills beyond. From that day on they became more and more numerous, and for two weeks remained in the uplands and then, as abruptly as they had come, all disappeared, having retired to their nesting haunts. Pressure of ranch work prevented my visiting the old lagoon until July 7. On that date, as I approached the willow thickets, a few birds were heard calling from time to time, from different parts of the brush. As I began to work my way through the tangle, the first bird I saw was a nearly fledged young one. It hopped around the branches above my head and seemed to have no fear. It was much the same as the old birds, except that its tail had attained only about half the normal length, and this, with its large body made the bird seem awkward in the extreme. The birds were not as plentiful as they had been in the spring. One adult, which I soon located, readily answered my calls. She was in the topmost branches of a willow, and, as I stood below, would hop

from limb to limb, uttering from time to time, a low "kuk-kuk". She was unusually gentle and her attitude was one of curiosity more than fear. She soon satisfied her curiosity, however, and glided away into the brush. Not another glimpse could I get of her, though she answered my call several times.

On July 26 I again visited the lagoon. For nearly two hours I searched the brush in vain. From time to time I heard a bird calling a long distance up stream. At last one answered my call near by, and I quietly approached the spot from which the note came. I then repeated the call, only to have it answered farther on up stream. This continued; in all the time I was there, not a glimpse of a Cuckoo did I obtain. The cares of nesting were over and the Cuckoo was once more the wild shy bird of the upland timber. From the depths of the brush-grown banks, out over the deep still ponds of the old lagoon, floated an occasional "wandering voice", and another season of nesting troubles and paternal duties in the life of the California Cuckoo was over.

COURTSHIP OF THE AMERICAN GOLDEN-EYE OR WHISTLER (*CLANGULA CLANGULA AMERICANA*)

By WILLIAM BREWSTER ¹

WITH DRAWINGS BY L. A. FUERTES

ALTHOUGH Dr. C. W. Townsend has given us a recent and admirable account² of the manner in which the males of the American Golden-eye pay court to the females, this subject is still comparatively novel and so very full of interest that I am tempted to offer some observations of my own regarding it. They were noted briefly on loose slips of paper when I was making them, and written out more fully in my journal only a few hours later. As the journal description records them exactly as they impressed me at a time when they were fresh in my mind and recollection, I shall quote from it almost literally, making, indeed, no changes save such as seem absolutely necessary. The figures illustrating some of the poses assumed by the birds when "showing off" have been kindly drawn for me by Mr. Fuertes from rough sketches in my note book. The journal runs as follows:

Back Bay Basin, Boston, Massachusetts, Feb. 27, 1909. I saw and heard today for the first time, under exceptionally favorable conditions, the courting actions and love notes of the American Golden-eye (*Clangula clangula americana*). Dr. C. W. Townsend gave me some account of them last year, just after he had witnessed them in February or March. On February 24 of the present year he was kind enough to notify me that the birds had already begun to perform (on the 22nd I think). I have therefore taken advantage of the first favorable opportunity to learn something of the matter at first hand.

When I left our house about nine o'clock this morning the sky was cloudless, but a thin mist or haze obscured distant objects. The air had a sharp, frosty "tang", although the thermometer had already risen from 26° to 34° Fahrenheit. There was a light easterly wind, but it began to die away soon after I reached my

¹ Read before the American Ornithologists' Union Congress at Washington, November 13, 1910.

² Auk XXVII, no. 2, April 1910, pp. 177-179.