

My singer was so tiny and the woods he loved so dense that it was easy for him to elude close investigation, so I came to call him my little "sweet, sweet, sweet." The school children frequently said: "Miss Getty, what bird says, 'sweet, sweet, sweet'?" So I redoubled my efforts to satisfy them and me.

As the land birds of this region, one after another, became familiar to me, by the process of exclusion I concluded that "sweet, sweet, sweet" must be the Anthony Vireo, but I hesitated to give my convictions to others until last summer.

I was making a bird excursion in company with Mr. D. E. Brown, an ornithologist of Tacoma, in the vicinity of that city, when he found the most artistic nest I have ever seen. The dainty bird was upon the nest, and it contained but one egg. This was the 5th of June, 1910. On the 7th, Mr. Brown collected it with three eggs, raising the record by one egg. Up to this time, there had been but one nesting record for this bird—the one described by Mr. Bowles in *Birds of Washington* and in *Hand-Book of Birds of the Western United States*. The nest owned by Mr. Bowles contained but two eggs.

I had been detailed by Mr. Brown to watch a Hermit Warbler's nest for a couple of hours. In this interval, little Anthony came singing several times; so when Mr. Brown found the nest in the vicinity, the secret of "sweet" was truly out.

Another woodland song was just as exasperating in its solution. "Chip, chip, chip", came from the tree tops of the thickets. It usually came to my ears later in the season. That is, I heard it as a summer song. It did not appear to be a call note of the half grown birds, but rather a part of the general mature joy of the woods. So clear and strong was the note that I concluded it must come from the throat of a finch, whose language I had not yet learned.

This summer, while crossing Anthony's haunts, I heard the familiar "chip, chip, chip". Upon the top of a second growth fir sat Anthony repeating over and over "chip", when suddenly he changed to "tchweet". The following day I heard him alternate "tchweet" with "chip," or give two notes of one to one of the other, according to his fancy. He has another sweet note which he sometimes gives when in distress.

On the 23rd of June, 1910, while following a pair of Blackheaded Grosbeaks into a fir thicket of Kirkland, a suburb of Seattle, I came upon an Anthony Vireo nest with the male bird upon it. It contained four eggs, thus raising the record to where it now stands. On the 23rd of June of this year I found another nest about a mile from last year's. It contained four eggs.

In addition to these, I found several nests either unoccupied or just building. The female is exceedingly sensitive. Her peevish "ank, ank, ank", from the thickets may mean one of several things, namely, she may be hunting a home site, building, incubating, or feeding young in the trees. She reminds me of an adolescent school girl who screams upon any and all occasions for the mere pleasure of being actively protected. At her cry of alarm, the male is almost certain to appear. Sometimes he sings to quiet and reassure her. Again he comes almost to the bird-lover, looks him earnestly in the eye as though he would determine the intruder's mission there. A nest found before it contains eggs is likely to be deserted.

Although the Anthony Vireo still deserves the title of "Sphinx of the Forest" given it by Mr. Dawson, we have data enough to arrive at certain conclusions. This year in early June, I saw a pair defending young as large as themselves. At the same time other pairs were building or incubating. This would indicate a late April set, or, two sets a season.

While not limited botanically, the birds appear to favor second growth fir. Of the seven nests seen by me *in situ*, five were attached to fir branches from six to fifteen feet high and from one-eighth to one-half mile from a lake. The nest is most artistically constructed of lichens, usually some species of *usnea*. The lining is made of grass stems. The nest hangs from forking twigs.

Little Anthony is a resident here. His song season is unusually long. The bird clans are gathering preparatory to making their yearly social assemblages or their migrations. While most of them today, August 13, *chatted* sweetly with one another, Anthony *sang* "tchweet, tchweet" or "chip, chip!"—JENNIE V. GETTY.

The Costa Hummingbird.—This bright-colored little bird is, with the exception of the Black-chinned Hummingbird, our most common member of this family in this part of San Diego County. Individuals are first to be noticed in the spring in the forepart of the month of April, and are most often found on the brushy hillsides where there are plenty

of flowers among which they can disport themselves and from which they secure the nectar and small insects which compose most of their food supply.

Unlike the Black-chinned Hummingbird or their larger cousin, the Anna Hummingbird, they seem to enjoy each other's company, and it is nothing unusual to find them almost in colonies, as many as five nests being located in a radius of fifty feet in an unusually well situated grove of oaks.

For the most part they are quiet; but prior to the nesting season a short time are quite noisy, chasing each other up, down and around through the surrounding bushes and trees. Their note consists of a few sharp squeaks, given out more often when in very rapid flight than otherwise. During the breeding season the male has a very peculiar way of disporting himself before the female. When he locates his mate sitting on a tree, or more often on a low bush, he will ascend to an elevation of about one hundred feet and to one side of the female and will then turn and swoop down at a fearful speed, passing perhaps within a few inches of the watching female and ascending in the air to complete a half circle. This he keeps up until the female becomes impatient and endeavors to escape; then perhaps all that



Fig. 27. FEMALE COSTA HUMMINGBIRD; NEST IN LEMON-TREE AT ESCONDIDO, APRIL, 1911

one will see is a streak, and a sharp squeak or two is heard as they flash up the hillside. The noise that the male makes in doing his fancy dive is easily heard at some distance and quite often heard when the bird himself is not visible on account of the extreme speed at which he travels on his downward plunge.

For nesting places Costa Hummingbirds most commonly select some bush on a cliff, or steep bank on a hillside, but they are also to be found nesting in the orange and lemon groves, in olive trees, in dead cockle burrs in a river bottom or in dead trees; in fact they seem to prefer a dead limb rather than a live one for a nesting site. I think that is due to the fact that the nesting material they use harmonizes better with the dead branches.

The nest is made of plant down and weed leaves principally, bound together with cobwebs and lined with plant down and an occasional feather. A typical nest measures: inside depth, one half inch; outside depth, one and one-quarter inches; inside diameter, three-fourths of an inch; outside diameter, one and one-half inches. The female selects the nesting site and as far as I have observed, does all the work on it, also all of the incubating, the

male being very rarely if ever seen after incubation commences. Incubation takes a period of from nine to ten days and seemingly starts with the first egg, since in several nests watched the eggs did not hatch the same day, but were usually one day apart. In one instance, however, there was an interval of over two days between the hatching of the two eggs. The eggs are two in number, white, and a set taken as typical measures .52 by .32, and .52 by .35 inches.



Fig. 28. FEMALE COSTA HUMMINGBIRD; NEST IN OAK TREE AT ESCONDIDO, MAY, 1911

The young when first hatched look like a couple of black bugs; but they grow very fast and in from ten to fourteen days they leave the nest. They are for a time far from self-supporting. It is difficult to determine just how long they are dependent on their parents. The wonderful construction of the nest is shown by seeing two youngsters almost as large as the old bird occupying the same nest; the nest does not break but keeps expanding to make room as it is needed.—J. B. DIXON.

Early Nesting of Allen Hummingbird at Santa Barbara.—The past winter has been unusually warm and dry in southern California, and so far 1912 has been like mid-summer. Consequently I was not surprised, while walking up one of our many little canyons, to find a nest containing two well incubated eggs of the Anna Hummingbird (*Calypte anna*). This was on February 10, so I certainly was surprised, some hundred yards farther along, to come upon an Allen Hummingbird (*Selasphorus alleni*) gathering nesting material. The nest was soon located, about six feet up in a tiny live-oak, and upon returning on the 13th I found it to contain two fresh eggs. Only a short distance from this one I found another nest of *alleni* on the 13th containing two slightly incubated eggs, while on the 14th Mr. W. Leon Dawson found still another that was ready for eggs. These last two nests were in very typical situations, in blackberry vines that hung suspended over a steep bank on the edge of a running stream. It may be of additional interest to state that the middle of February has previously been my earliest record for the Allen Hummer in its arrival from the south.—J. H. BOWLES.