pitched into the meal with a vigor and energy that would have amazed a litter of young pigs.

When you climb anywhere near a nest after the youngsters have had a good meal, they will begin to "unswallow" as fast as they have gobbled it down. On account of this habit, especially common among the young night herons, we found it always safe to keep out of the way as much as possible, or at least not approach a nest full of young birds from below.

A young night heron is well adapted to climbing from limb to limb by reason of his long, angling toes and the ability to hook his neck or bill, over a limb and draw himself up as a parrot does. Not so with the young blue herons; they are as awkward about the limbs of the trees as their parents are stately in moving thru the air. When overbalanced on a limb, they often fall to the ground.

The young birds of both species seem instinctively to know that falling from the trees to the ground below means death. Not because they are hurt in the least by the fall, but because the old birds never descend to the ground beneath the nest-tree. The ground under the trees was strewn with the dead bodies of young birds. The young are fed only in the tree top and those below starve in the very sight of their parents.

Several times we saw young night herons hanging dead in the branches of the trees. In one tree we found two of these youngsters hanging side by side only a foot apart. In walking about the limbs, the larger of the two birds had caught its foot in a crotch and hung itself head downward. That, in itself, was not unusual, but the second bird hung by the neck only a few inches away. It seems that this smaller heron had hung himself dead, rather than fall to the ground; he had fallen or overbalanced on the small limb and, as is the custom, had hooked his chin over the branch to keep from falling to the ground. His clutched right foot showed that the death struggle had been a reaching and clutching to gain the limb. The head was not caught between the branches as the other bird's foot, but was simply hooked over a bend in the twig. Had he thrown his head back a trifle, he would have dropped to the ground. We demonstrated this by turning the bill to an ankle of forty-five degrees and it dropped to the bushes twenty feet below. How the bird could have held the rigid position of the neck thruout its death struggle, I do not understand, unless it was a case where the force of instinct was strong even to death.

Portland, Oregon.

The Hermit Warbler in Washington

BY J. H. BOWLES

A N experience covering eight years in northwestern Washington has convinced me that the hermit warbler (Dendroica occidentalis) is a regular summer resident. The bird student however, must consider himself doubly fortunate if he can find some easily accessible location where he can study these birds at any time thruout the summer, for it is far from common even in the most favored districts and is exceedingly local in distribution. As an example, I may quote Mr. S. F. Rathbun, of Seattle, who tells me that D. occidentalis is practically unknown in his locality. On the contrary, around Tacoma the birds are of regular occurrence as summer residents, altho the two places are only twenty-five miles apart, and are situated at the same altitude and on the same body of water.

The hermits make their first appearance early in May and the fact is only to be known thru their notes; for they frequent the tops of the giant firs which cover large sections of our flat prairie country. The song was described by my brother, Mr. C. W. Bowles, while summering in the mountains of southern Oregon, and later quoted in an article by the late Chester Barlow. It consists of four distinct notes, as a rule, and is described as, "zeegle-zeegle, zeegle-zeek," uttered somewhat slowly at first but ending rather sharply.

About the middle of July both young and old assemble in good-sized flocks and frequent the water holes in the smaller growths of timber. At such times I have never seen them associating with any other kinds of birds.

In the midst of the dense foliage of the fir branches, and at a distance of from two hundred to three hundred feet from the ground, these birds cannot be satisfactorily studied even with the aid of the best glasses. They are so small and active that one is continually losing them, and it was only by the merest accident that I happened on a method of getting into close touch with them. I had found a nest of the Cassin vireo containing young, and stood watching the different small birds that always gather to inquire into the vigorous scolding of these most solicitous of parents. Suddenly from the towering firs overhead a small bird swooped down and joined the rest, soon to be followed by another. My suspicions were immediately aroused, and, carefully keeping them distinguished from the others, the black throat and yellow hermit's cowl quickly identified the newcomers as male and female *D. occidentalis*. Soon they became the most inquisitive of all, and hopping close around me were truly "the observed of all observers."

It was on this occasion that I noticed a peculiar habit of these warblers, and my brother has since seen them do the same thing. After examining me closely and apparently deciding that I was a new kind of stump, the female commenced feeding, but her attention was soon attracted to a last year's nest of the russet-backed thrush. She at once flew to it and, hopping in, crouched down and commenced trampling the bottom, turning around, putting the material on the sides into shape with her bill, and altogether acting as if she had nest-building well under way. This was about the middle of May and, as I subsequently discovered, almost a month too early for her to lay her eggs. Nevertheless the nest was carefully watched, tho with no further results.

Their food consists of small spiders, caterpillars, tiny beetles, and flying insects which they dart out and capture in a manner worthy of that peer of flycatchers the Audubon warbler.

What might be called a typical nesting site is purely a matter of conjecture, though the few nests that have been taken in California were built rather low down. In Washington, however, it is probable that the nest is placed one hundred or more feet up in the great Douglas firs. The only nest I have ever seen, either old or new—the nest cannot be mistaken for anything else—was found during the past season, on June 11th, 1905. I was looking for nests of the black-throated gray warbler in a grove of young hundred-foot firs near a small swamp, when I caught sight of what looked to be a typical nest of the Audubon warbler on an overhead limb. The bird's tail showed plainly over the edge of the nest, and while climbing up I was surprised that she did not come to meet me as D. auduboni always does. Instead she allowed me to sit on the limb and look down at her, and my feelings may be better imagined than described when, instead of the small yellow-crown patch of an Audubon, I saw the lemon-yellow head of a hermit. She sat so close that I was forced to lift her from the nest with my hand; and she then flew only a few feet where she remained chipping and spreading her

wings and tail. Mr. Ed L. Currier, of Tacoma, was with me and the bird did not seem at all afraid of either of us. The male did not appear at any time, which is surprising as he is usually in close attendance upon his mate.

The nest was placed twenty feet from the ground in a young fir, and was securely saddled on a good sized limb at a distance of six feet from the trunk of the tree. It is a compact structure composed externally of small dead fir twigs, various kinds of dry moss, and down from the cotton-wood flowers, showing a strong outward resemblance to nests of *D. auduboni*. But here the likeness between the two is at an end; for the lining consists of fine dried grasses, and horsehair, with only a single feather from the wing of a western bluebird. The measurements are, externally, four inches in diameter and two and three-quarters inches deep; internally, two inches in diameter by one and a quarter inches deep.

The eggs, which are five in number, were incubated about four days. They have a rather dull white ground with the slightest suggestion of flesh color, heavily blotched and spotted with varying shades of red, brown and lavender. Their dimensions in inches are .68 x .53, .69 x .52, .69 x .52, .69 x .53 and .69 x .53.

Without any of a rather natural partiality on account of their rarity, I think they may be considered the handsomest of all the warbler's eggs.

Tacoma, Washington.

Summer Birds of San Francisco County, California

BY MILTON S. RAY

WRITER in The Condor recently stated: "San Francisco County being very small and covering not much more than the city limits, cuts but little figure ornithologically." Yet the following list of the birds found during the breeding season shows our little peninsula to be by no means devoid of bird-life, and as the county fronts on both the bay and ocean quite a formidable list of migrants and winter residents could be made. The county is nearly square in shape being about seven miles each way. The western half is only thinly populated, the Presidio Reservation, Golden Gate Park and a number of smaller districts to the south being the principal wooded sections. Introduced trees, such as pine, eucalyptus and cypress form the bulk of the timber. The balance of the unsettled portion is either barren or sparsely covered with the native scrub oak, willow or lupine bushes. Owing to the cool climate there are practically no shade trees in the city itself and as gardens of any extent are likewise scarce, the only bird which occurs and breeds within the city proper, with a very few exceptions, is the European house sparrow.

- 1. Fulica americana. American Coot. About the fresh water ponds of the park and elsewhere in the western half of the county the coot is a common breeder.
- 2. Lophortyx californicus californicus. California Partridge. A common resident especially in the park where, owing to the protection they receive, they have become exceedingly tame. Largest set of eggs noted, twenty-three.
 - 3. Zenaidura macroura. Mourning Dove. A fairly abundant summer resident.
 - 4. Cathartes aura. Turkey Vulture. Seen during spring and summer.
 - 5. Elanus leucurus. White-tailed Kite. One seen in May, 1900.
- 6. Buteo borealis calurus. Western Red-tailed Hawk. Noticed in spring and summer as well as at other seasons.