

The young chicks exhibit this movement, but are not at first anywhere near as perfect as the adult birds, showing that an education is necessary to perfect that which without doubt is an instinctive character.

The manager of the Cawston Ostrich Farm informs me that their chicks, the many generations removed from the wild birds, exhibit the dance movement, but very imperfectly, scarcely running any distance before squatting down, as if there were dawning within them an instinct, a reflex of the narrowed horizon permitted by the inclosure in which their parents have been reared. Single birds or a few birds rarely make as good a performance as when there are several together, thus giving proof that there is a factor of suggestion or imitation requisite to make the best actors.

That these movements are the outcome of excessive vitality or playfulness is scarcely to be accepted; there must be utility if not necessity in the action. In this connection I will say that I am strongly attracted to the suggestion of an esteemed colleague, J. E. Duerden, of the Transvaal. Mr. Duerden states that he is of the opinion that the waltz is simply a protective movement calculated to render the bird less liable to be seized by any of its natural enemies that are so common in the habitat of the bird. The ostrich inhabits open or bush-covered lands that are also the home of the lion, the brush cat and the leopard. These animals capture their prey by springing upon it. The ostrich, as was demonstrated by the case cited in my opening remarks, when surprised jerks itself so quickly from side to side that its pursuer finds it almost impossible to arrange its spring, or in case of a human hunter, for him to aim accurately. This is the character of the defence when the bird is first aroused; but let attack press more persistently and the bird darts off with great rapidity for a long distance and then suddenly changes its direction of flight so quickly that no sort of hunter could be prepared for it.

Much less successful is the defence or combat of the captive, or the ostrich at bay. Then the bird depends on kicking forward, hoping that with its powerful foot it will down its enemy and at the same time tear open the body with the claw-like nail on the one great toe. Kicking would be of little avail with the lion or leopard. So the ostrich trusts to nimbleness of legs to dodge the spring, and then by fleetness of foot to get away from the neighborhood.

Alameda, California.

THREE NESTS OF NOTE FROM NORTHERN CALIFORNIA

By HARRY H. SHELDON

WE were camped, the two of us, on the Lagunitas Creek, close to the mouth of the Little Carson, on the first Saturday night in May, 1907, the opening of the trout season. It seemed but a short time after bacon and coffee that our pipes went out and darkness had turned to the gray of early morning. An occasional thrush would give a short whistle as tho just awakening, and, to further tell us the time had come to crawl from our warm blankets, a horned owl gave a series of hoots as a farewell to his night of depredations.

Moving briskly to keep warm we were soon thru with breakfast and wended our way up the Little Carson which by noon had afforded us a nice mess of trout. We then lay ourselves at the base of a hoary pine to have lunch. Up to this instant fishing had been the main feature of the trip, but upon hearing the pleasant

notes of a Western Winter Wren (*Nannus hiemalis pacificus*), we imagined ourselves on a collecting trip and silently waited for this uncommon resident to entertain us again. The song was not repeated but directly in front of us from the upturned end of a charred log, a small ball of brown feathers darted into the brush below and, odd to say, neither bird nor song was seen or heard again. However a nest was evidently in the log, and with little trouble we found a cosy home tucked away in a niche. Altho there were no eggs to greet us the nest was lined and ready to be permanently occupied.

We had planned to take a collecting trip into Sonoma County two weeks from this date, and for this reason were obliged to allow but seven days for a complete set, which we hardly expected. However, on the following Sunday we made the trip again and after a fresh morning drive from San Anselmo of an hour and a half, tied our horse and proceeded to walk for another hour up the "angler's trail" of the Lagunitas to the mouth of the Little Carson where we plodded and climbed our way thru timber and brush until with much anticipation we came to the charred log. After waiting for some time in a secluded spot in hopes of seeing the birds, we approached the log and found that three eggs had been laid during the week.

After waiting over an hour without seeing either of the birds, with the nest and eggs carefully packed we made our way down the canyon to our rig. Before we had gone far, Taylor, my companion, found a nice set of Steller Jay and also a newly built nest of another Winter Wren, which, despite its unusual beauty we left in the expectation of procuring a complete set, should the birds return to the same site the following season, for, as has already been stated, we could not again visit the locality until another year to come. The nest taken was placed in the end of a log five feet from the ground. The material used consisted of redwood bark fibers, pine needles, dead moss, leaves and twigs, and lined with rabbit's fur and hair and a few feathers. The eggs are faintly spotted with a pinkish brown, the ground color being a creamy white resembling the eggs of the Vigors Wren.

In June of 1904 the writer made a collecting trip to the South Fork of the Gualala River, a small stream about forty feet in width slowly winding itself down a deep thickly wooded canyon. Its banks are bordered with a dense growth of huckleberry, and at their extreme edge the sweet azalia grows in myriads from a tangle of various ferns and lilies. In such places as this the Monterey Hermit Thrush (*Hylocichla guttata slevini*) makes his summer home.

It was all due to luck that I first became acquainted with this mountain songster. While scanning the trunk of a pine tree endeavoring to get a shot at a creeper, I tripped on a branch of a fallen laurel and flushed a bird from her nest. The creeper was immediately forgotten; for the bird, as she stood frozen to the fence post, proved to be a Monterey Hermit Thrush, and within reach of me in the suckers of the stump was her green mossy nest and three sky-blue eggs. As much as I wanted to stand and gaze at my fortunate discovery I was obliged to leave the vicinity instantly to assure myself of obtaining a full set. Sad to relate, on my return the next day, the nest was empty, not even a shell was left to furnish a description of the eggs for future reference. And as I stared into the vacant nest, the harsh hote of a Jay in a nearby thicket easily explained the cause of the disaster, and with the nest as a token I departed for camp.

About the end of June, while fishing, I found another nest situated on the bank of the river in a bush of huckleberry. Four fledglings scattered into the brush as I was about to reach up to the nest. The parents were soon on the scene and were not at all shy, as I expected they would be, even tho under such circumstances.

With sharp whistling notes they endeavored to drive me away from their home, and I obliged them by retreating to a log, where I sat watching their maneuvers. Nothing more interesting happened than the usual procedure of locating their terrified young, which in a few minutes were in evidence from the subdued tone of their notes; so continuing my way down stream I thought of another season to come when I would again make the trip to the South Fork for the sole purpose of obtaining the nest and eggs of this very desirable bird.

The opportunity arrived in May of last year, 1907, when in the company of "Fy" Taylor, my usual companion upon such expeditions, I returned to the same locality. And the 27th of May found us on the South Fork up to our necks in patches of huckleberry. A few nests found of the year previous told us we were on the right track and this was verified later by a bleached chip of rotten wood showing thru a bush of huckleberry which revealed a new nest empty, but apparently in readiness for the bird to take possession. On the following day upon our return the nest contained an egg. The bird being away we quickly left not caring to meet her at this period of the game. On our way back to camp another nest was found by Taylor in a clump of branches of an oak tree about eight feet from the ground above the stream. The nest was almost finished and as we stood beneath it the bird flew into the tree directly in front of us with more building material, but seeing us she quickly disappeared, and evidently started a home elsewhere, for the nest was never completed nor was the bird seen again. The last nest was found May 30th, placed in the shoots of an alder on the bank of the river, and like our previous experience the bird saw us and the nest was abandoned. By this time the first nest found contained three eggs, the bird having laid each day from the date of discovery and three days later, on the 3rd of June, we made a final trip to take the set, which was complete with the three eggs. During the three visits to this nest the bird was not seen until the last moment. As we were wrapping her nest and eggs she darted into the bush above us and seeing the nest gone, flew to a nearby fence and was shot, to complete identification.

All nests found were placed from two to eight feet from the ground, their favorite nesting site being in patches of huckleberry and in all cases situated close to the stream. This nest was placed in a bush of huckleberry on the edge of the stream three feet from the creek bed. It was composed of chips of dead wood, small branches of huckleberry, dead leaves and twigs, and held together with mosses and rootlets. The lining consisted of fine redwood bark, fibers, fine rootlets and the remains of dead leaves. The eggs are a shade lighter than the robin's and of one color.

On the 28th of May, while on our way to the coast after nests of the Nuttall Sparrow another interesting bird was met with. After a hurried visit to a few mammal traps we made our way up a steep cattle-worn trail to the ridge above camp overlooking the ocean. At the top in the center of a little glade a small group of laurels, madrones, tan-oaks and firs, principally the latter, stood with the quiet of a hot morning atmosphere. And out of this quiet came at intervals the rolling note of a Louisiana Tanager which was a gentle hint for us to cross over and investigate the interior. Just as we broke thru the first low branches at the edge, a dead limb cracked under our feet and a much frightened and surprised Pileated Woodpecker dropped backward from a dead stump and went cackling off thru the timber, much the same as a guinea-hen warbles when with outstretched neck she endeavors to scale the barn yard fence. Floundering over logs and thru brush, Taylor was hot on his trail; for skins of these big fellows are worth a hard day's work, and besides when brought to view in after days usually bring up a pleasant memory. While I

waited his return the subdued notes of a Western Golden-crowned Kinglet caused me to look to the top branches of a fir close by. I looked till my neck ached, but as usual this green mite of a bird that nature so skilfully blends with the tint of the forest was everywhere but the place I looked for him. However, as I was about to give up the search he flew down into a tan-oak. Following close after him I soon found him clinging to the underside of a branch, and blazed away and silently left the tree without a feather disturbed. Again following to a limb he was about to pull on him with the other barrel, when I noticed another bird join him and I stood close to the trunk to watch them.

If it had not been for my bad judgment, a defective shell, or probably more providence than anything, there would have been no cause to write these notes. Flying down to within five feet of my head the mate began tugging at some moss which grew in clusters on the trunk, and immediately a mental picture of a partly constructed nest flashed across my mind. It was hard to suppress an inclination to turn my head in search of it, which action would certainly have spoiled any chance of its discovery. But I obeyed the instinct to freeze, and stood afraid even to wink until the bird fluttered over my head with a few timid peeps sixty feet up in a tall fir and disappeared into a cluster of small branches on the underside and close to the end of a large overhanging limb.

About this time Taylor appeared on the scene with a fine male Pileated and we exchanged congratulations. For about a half hour we stayed in this spot watching the Kinglets make trip after trip to their nest which was absolutely invisible from any point of view. But it was there, that was sure; and for the fact that the birds had not the slightest regard for our presence, it seemed a certainty that a little patience on our part would mean the nest and eggs of *Regulus satrapa olivaceus*. Much satisfied with the prospects in view we resumed our way to the coast and by noon were in the midst of tangles of blackberry thickets with Sparrows piping all about us; but with all this encouragement not a nest was found, until we again made the trip on the second of June when we took three rich sets.

Meantime the Kinglets were not seen making trips to their home with building material as they had done on the day of finding the nest; in fact only once did I hear them in the vicinity and then neither of them were seen. Evidently they must have been adding the last finishing touches when I first saw them. Much to our regret we had a limited amount of time to stay on the South Fork; business compelled us to break camp on the 8th of June. So the day before, we were obliged to pay our last visit to the "Kinglet tree". A full set was hardly expected, two or three eggs would answer a good purpose, and the anticipation from this thought hurried us across the open glade to the tall fir.

Bird life was unusually quiet, probably due to a thick fog that floated up the gulches from the ocean below and reaching the ridge would spread its misty blanket over the timber where it hung until the warm rays of the noon sun melted it into space. On one occasion it became so *damp* owing to a fog of this sort which managed to get down into the canyon one night, that waking up half drenched we decided it would be more comfortable around a camp fire than to attempt sleep in miniature lakes of fog. And sitting by a smouldering fire we smoked and were smoked, till the first sign of morning gave us a chance to start another day.

But back to the tall fir and the Kinglets: After exchanging ideas as to which was the best way of getting to the nest we decided to both climb to the limb in which it was placed and take a chance at crawling down the limb beneath. Taking a coil of stout cord I fastened one end as near the nest as I could reach and tossing

the other to Taylor told him to take in slack while I pulled inward, until the nest began to tilt and we dared not draw it closer. Being compelled to hold on with one hand I was at some disadvantage but finally managed to reach the branch covering the nest, and carefully breaking it away saw for the first time how it really looked. A green bunch of delicate mosses clinging gracefully to the inner side of a small cluster of branches where in its cavity of silky fibers and downy feathers, lay like pearls five faintly spotted eggs almost as frail as bubbles, which I covered with a soft piece of cotton that made it safe to pull the limb towards me another foot, giving me an opportunity to use both hands. When the big limb flew back into place and I held the treasure intact, a mingled feeling of nervous joy and relief went out in a big sigh, and I looked back to the time when I tried to kill one of those Kinglets and understood why kind providence spoiled my aim.

The nest is a compact ball of mosses and lichens with a round deep cavity $1\frac{3}{4}$ inches deep by $1\frac{1}{4}$ in diameter; the lining consists of a few cow hairs, fine bark fibers and feathers woven in such a manner about the edge that there appears to be hardly any cavity at all. The eggs are white with a ring of faint brown spots on the large ends and here and there scattered over the surface.

San Anselmo, Cal.

NOTES FROM SANTA CRUZ ISLAND

By C. B. LINTON

AT 11:30 p. m., November 19, 1907, my father (H. Linton), Mr. George Willett, and myself left San Pedro harbor in a dilapidated fishing smack and in company with a crawfisherman, one "Cold-foot" Jorgensen. We arrived off the south end of Santa Cruz Island at 10:30 the following day during a stiff nor'wester. For various reasons we were unable to make camp until the 22nd. It may not be amiss to state here that twice during the blow we were nearly wrecked: once while at anchor in Potatoe Harbor, a broken anchor allowing the boat to drift within the breaker line and nearly onto the rocks. In this instance the timely arrival of Willett and H. Linton in a small boat, saved the day, and incidentally the fishing smack. At another time (the engine having broken down) we were blown nearly onto the rocks of Ana Capa Island; but with father at the wheel and Willett and I on the "sheet" we managed to hold her off. I mention the foregoing, and the many sleepless nights spent on the rocky shores, "running" the surf several times each day (with attendant duckings), etc., merely as a warning to those who seem inclined to believe a field naturalist's life "strewn with roses". (It's generally strewn with cacti!) For instance, here is a fair sample day: November 20, a. m. rowed seven miles up coast; coming back were obliged to put ashore in rocky cove, thru heavy breakers, to keep from swamping during high wind; secured 12 specimens here; reached camp at 1:30 p. m.; made up specimens, 6 p. m.; broke camp, packed 100 green specimens, loaded tent and camp outfit in skiff, rowed four miles along dangerous coast after dark; 8:30 p. m. ran breakers and made camp on beach; 3:30 a. m. broke camp, ran breakers, rowed fourteen miles to Northwest Harbor, ran breakers, made camp, went after specimens; 5 p. m. to 10 p. m. made skins. "It's a strenuous life".

Santa Cruz Island is very mountainous, with wide valleys intervening. There