

had time to investigate a new canyon. The first tree I found containing a nest was a large live-oak. A stick thrown into the branches flushed a bird, but it was not a red-tail. Yes, another horned owl! The twenty-second of March was pretty late, but the temptation was too great; so up I went fifty-five feet into the very top of the live-oak to be greeted by a rather surprised look from a big bunch of white down. There was an egg also, but it was addled. This I took, for it was the only addled egg of this species I ever found.

One would think that I had all the horned owls in San Diego County corralled by this time. But San Diego County is a large one and but sparingly settled. The more you travel about the more you find. The twenty-ninth of March found me after red-bellied hawk's eggs in the historic San Luis Rey river bottom. I had taken a nice set of three and was about to start for home when a strange nest caught my eye some distance up the river. A stick thrown at the structure flushed a horned owl; but it was late in the day, as well as in season, so I left her without further molestation.

Numerous pairs of owls are not the only things we are thankful for in my locality, for the collector admires the size of the trees. Southern California does not boast of such giant sycamores as those of Illinois in Patrick Henry's time; for my highest record is but sixty-three feet, while fifty feet is a good average.

*Escondido, California.*

## BIRDS OBSERVED FROM MARYSVILLE TO GRASS VALLEY

BY LOUIS BOLANDER

LAST year I had the fortune to attend a surveying party in California from Marysville, Yuba County, to Grass Valley, Nevada County, some twenty-six miles. We also went from Lime Kiln, a place on the line between the last two named places, to Auburn, Placer County.

The first Sunday I crossed the bridge to the south, leading from Marysville into the bottomlands of the Yuba river. What was once orchards and fields is now a waste of bottomlands covered with brush, swamps and trees. This waste was caused by the sediment from hydraulic mines and dredgers up near Hammon City gradually filling the river bed. Marysville, described in older geographies as a city on bluffs at the junction of the Feather and Yuba Rivers, is now surrounded by levees. At this date (May 6, 1906) Marysville was three feet below the bed of the river and in danger of flooding. Even as one enters the bottomlands rows of fruit trees can be seen apparently growing out of the sand and here and there is a house top sticking up, mute evidence of the power of nature over man.

I no sooner entered this barren district than I saw a nest up in an alder tree about six feet from the ground. Upon climbing up I flushed the mother bird, a close sitter, and found one fresh egg of the western chipping sparrow (*Spizella socialis arizonæ*). The nest was made of light-colored straws loosely put together, lined with a few black horsehairs, and easily seen from the ground. All the time I kept near the nest the mother kept up a chirping, at the same time flying around in the bushes close to the ground. The male did not come near at all.

About a hundred yards further in the brush I came across a small patch of

sword grass. When I came to about the middle I flushed a small greenish yellow bird. Even tho I saw just where the bird flew from I had quite a time finding the nest. It was built in the sword grass among a few blackberry vines about one foot from the ground, and contained four fresh eggs. The nest was made entirely of dried sword grass lined with black horsehair, and was deep like a cup. The eggs were white marked on one end with lines and dots of black tending toward the forming of a ring. I sat down and waited. Finally I heard a small chirrup behind me, and turned quickly. This was a mistake on my part for no bird did I see. Another long wait and another chirrup, this time to my left. I staid perfectly still this time and finally caught sight of the female and her mate hopping around in the nearby bushes. They gradually came nearer and as soon as I saw the bright colored male with his black mask I knew what I had found. It was a nest of the Pacific yellow-throat (*Geothlypis trichas arizela*). The birds made quite a disturbance, the male chasing his mate toward the nest, but he would not come nearer than within ten feet of it even tho she came and sat on the nest. As soon as she got comfortably settled he left.

A little further on was another patch of sword grass. Here I flushed another female yellow-throat. The nest was built of the same material as the first and was in the sword grass about a foot from the ground. It contained four perfectly fresh eggs. The parents staid near all the time I was around; I could hear them, but rarely caught sight of them. I found another nest of this species near the other end of the patch in about a similar location containing four fresh eggs.

On the other side of the road near a fresh water pond I saw a pair of yellowthroats. As soon as they saw me they disappeared in the underbrush. By this time I knew where to look for the homes of these birds. Seeing a few clumps of sword grass about thirty feet from where the birds were at first I commenced to look. The first clump revealed nothing. But the first time I parted the second clump I looked directly down in a yellow-throat's nest containing five fresh eggs. The nest was about one foot from the ground and built of the same material as the others. The parents did not come around.

The next was a nest of a western chipping sparrow which was built in a tree about seven feet from the ground and very easily seen. It contained four incubated eggs. This made incubated eggs, pretty nearly ready to hatch, on the same date I found the fresh egg. I also found two old nests of this species and two old nests of the bush-tit in the close vicinity. I also found a bush-tit's nest near here containing one fresh egg. The parents were absent.

I saw a nest about twenty feet up in a tree. Even tho it looked like an old nest I decided to climb for it. It was a cottonwood tree and had many little branches to retard my movement. When about ten feet up I came across a pretty beetle which I tried to capture and take along. We played chase for a while until finally he squirted some liquid in my face which stung so I made quick descent to the ground. I decided not to climb in that tree again. I washed the liquid off and moved on. There were quite a few beetles in the bottomland both large and small. The most numerous kind was about an inch and a quarter long and had a very pretty green back.

In a clump of young cottonwoods I had another new experience. I came across a dead tree, and about six feet up I saw what I supposed was an old nest. It was of lichens, etc., and saddled upon a limb against the main trunk. I pulled it down, but was much ashamed of myself when the parents returned. It was a pair of gnatcatchers (*Poliptila cerulea obscura*) which were just building. I replaced

the nest, but the parent birds deserted it. Towards evening when I returned I went into this clump of cottonwoods again and by keeping quiet was surprised to see this pair of gnatcatchers again building. This time they had selected the very top of a young live cottonwood for their home, which grew about thirty feet from their former tree. They already had the foundation built. Both birds helped to build but the female bossed the job. She would always be there to inspect the work of the male, but would come there alone too, at times. Before leaving the nest to get more material she would hop all around the nest, chirrup twice and then fly. Never while I watched did she chirrup more than twice. I did not have a chance to return again to see this nest.

The last nest I found this day was one of the spurred towhee (*Pipilo maculatus megalonyx*). While walking under the trees beside the road I stepped on a dead limb lying on the ground. A bird flushed so close that it gave me a scare. On looking I found the nest, flush with the ground and lined with a few grasses. It contained four fresh eggs. The parent birds kept up a continual noise while I was there.

MAY 7, 1906.—On the way to work I saw a yellow-breasted chat (*Icteria virens longicauda*). He flew about thirty feet up into the air, then spread his wings and tail, fluffed all his feathers up and slowly came back to the brush. All the time he kept up his imitations. A mate was evidently close at hand.

At lunch time I found another set of yellow-throat's eggs. The nest was in sword grass about two feet from the ground and contained five fresh eggs. The female was flushed. Near at hand I heard the familiar chirrup from the gnatcatchers. I easily followed them to their nest in the top of a slender cottonwood. The nest was made of lichens and cob webs lined with some kind of down and plenty of feathers. It contained three fresh eggs. The birds flew within an arm's length when I was near the nest and kept up a constant cry. I also saw several lazuli buntings, some small-sized herons, and two males and one female of the mallard.

YUBA DAM TO SHEEP DIP, MAY 7 TO 12.—As we got nearer to Sheep Dip, our next camp, I saw quite a few magpies. I saw one flock of about twenty. There were tree swallows in the dead oaks. Also saw one canvasback duck.

On May 11, I found a nest of the yellow-throat. It was built over a swamp in sword grass and contained four heavily incubated eggs. The parent birds did not return even tho I flushed the female. I also found a nest of the "marsh blackbird" built in the tules above the swamp. It was made of tules and mud, and contained four incubated eggs. The parents were noisy.

On the way home I found a nest in a coffee pot in an old tin can heap. Two days before I had seen the parent bird enter with food for her young, but did not have time to investigate. When I looked this time the nest was empty; but underneath the layer of feathers, I found a rotten egg which the parent bird had evidently covered. By a later set I saw it must have been a nest of the Vigors wren.

On May 12, I found a deserted nest of the linnet containing four eggs. The rain two days before had evidently caused the desertion. I also saw a ground owl beside a hole which must have been its nest. I caught a young killdeer near Sheep Dip. In a locust tree near Sheep Dip I found a new nest of the western kingbird. The birds never returned to it after I looked at it. In a similar tree down the road a little further I found a nest of the California shrike. It was about ten feet above the ground and was made of straws, etc., lined with hair and wool. There were six heavily incubated eggs in it. The parent bird did not utter a cry

while I was near. Lark sparrows were plentiful. The farmer of that country believes that if a swallow builds in his barn it will not burn; and some will even take off the insurance. A black phœbe is called a "storm bird" in that region.

BETWEEN SHEEP DIP AND HAMMON CITY, MAY 13, '06.—In an old magpie's nest in the top of an oak I found a set of five sparrow hawk's eggs, heavily incubated. The parent did not fly off until I was within five feet of the nest. This was in an oak tree near a farm house.

The next oak contained a nest of the yellow-billed magpie (*Pica nuttalli*) about forty feet from the ground. This contained five fresh eggs. It was made of oak twigs lined with mud and hair, and having a dome of oak twigs. The parent birds were very noisy. There were three other nests in nearby oaks all containing young. Each nest had an addled egg in it.

Bullock orioles (*Icterus bullocki*) were plentiful in the oaks. They built in the overhanging limbs, making their nests of hair, lined with wool, the heights ranging from six to twenty-five feet from the ground. Three nests I looked at had one fresh egg each, one nest had five incubated eggs and another five fresh eggs. The parent birds would stay above me in the oaks and chatter and growl as long as I was near. I saw one nest that had oats interwoven in the hair making the most beautiful nest of its kind I ever saw. I also saw a female oriole hanging beside an unfinished nest. Upon examination I found a single horsehair had become tangled around her neck and she had died beside her unfinished home.

The next nest was one of the Swainson hawk in an old magpie's nest in an oak. It contained two fresh eggs. The parent bird flew off when I came under the tree and sailed away slowly without a cry. There were many nests of the kingbird, but it was too early for their eggs. Mourning doves were numerous also, but no eggs were found. The English sparrow had invaded even this country. They built in the oaks near the farmhouses. I also found an unfinished nest of the Arkansas goldfinch in a poplar beside the river.

SHEEP DIP, MAY 13 TO 24.—Found a nest of the meadow lark in a field, containing five fresh eggs. The bird was a close sitter. I also found a set of dove's eggs in a field laid on the bare ground. May 16, I found a ground owl's nest. I dug out the nest and found eight eggs and one young. Two of the eggs were fresh. When I reached in and pulled out the sitting bird by the leg she did not attempt to bite. When I let her go outside of the hole, instead of flying away, as I naturally supposed she would, she dodged back to her nest in the ground. The remains of a lark and a rat were in the nest. The entrance was lined with cow dung.

May 17, I dug out another owl's nest. It contained eight eggs, one of which was fresh, two or three rotten and the others in different stages of incubation. May 20, I found another set of the Swainson hawk in an old magpie's nest in an oak. It contained three incubated eggs. The parents made no outcry. The linnets' nests I observed all had incubated eggs. In another magpie's nest I found three fresh eggs of the sparrow hawk. The parent bird raised a big outcry. All the magpie's nests I saw had young. I also found another nest of the gnatcatcher. It was built in a live-oak about twelve feet from the ground. It was built of lichens, feathers, etc., and saddled upon a lone branch. The next nest was one of the California jay. It was built of twigs lined with hair, and looked flimsy. The parent bird slipped off and did not utter a sound all the time I was near. A little further on I found a nest of a flicker. It was in a pine stub about thirty feet from the ground. The hole followed a quarter turn in the tree and was about a foot deep. It contained six glossy, white eggs showing the yolk thru the shell.

By a stream I saw a small hole in a stub of a tree about six feet above the water. It contained the nest of a Vigors wren. There were seven fresh eggs on a lining of grass and many feathers. The bird was absent but soon returned. She uttered no cry while I was near. The woodpeckers' nests I saw were built in solid oak trees and could not be looked into. May 19, I found a fresh set of five linnet's eggs that had no spots on them. It was in a nest in an oak about twelve feet from the ground. There was also a set of 'doves' eggs in a nest in an oak about twelve feet from the ground. On the 24th I found another set of dove's on some drift wood by the creek.

AROUND SPENCERVILLE, MAY 27 TO JUNE 3.—I found a nest of the western lark sparrow containing four incubated eggs. The nest was built on the ground in the pine needles under a dead pine limb. The birds were quiet. Also a nest of the brown towhee containing four incubated eggs which had been deserted on account of rain. Another deserted nest of the same species contained one fresh egg.

The next day I found another nest of the western lark sparrow. It was built in the top of a scrub oak about six feet from the ground, and contained two incubated and one fresh egg. The two incubated eggs were probably caused by the bird covering the eggs during the few days' rain we had, the fresh egg being laid after. I also found another nest of the California jay. It was built in an oak about six feet from the ground and contained four fresh eggs. The parent bird, altho startled, did not utter a sound. This is about the only time this noisy bird will hold its tongue! The next day I found two nests of the valley partridge. One nest contained twelve, the other seventeen fresh eggs. Both were built on the ground under young oaks growing on the line that was brushed out the previous year. There were many deserted nests of birds, containing eggs and dead young. This was the first instance the farmers could remember of having such rains at this time of the year.

LIME KILN, JUNE 8 TO 10.—The new birds I saw here are as follows: I found two nests of the western robin, one containing two, the other three fresh eggs. Both nests were built in oaks near the ground and exposed. The materials used were straw, mud, string and rags. I found four nests of the spotted sandpiper (*Actitis macularia*). On an island in the middle of a creek I found a nest with one fresh egg. The egg was placed in a depression on the ground among a little grass. On the other side of the island was a mother with four young. She kept up a continual cry. The young matched the color of the ground. On the bank of the creek I found a nest of this species containing four fresh eggs. It was located on the ground under a tree. The depression was lined with a few grasses. The eggs all pointed toward the center. Another nest was built on the shore among the rocks and contained no lining. It contained four fresh eggs.

A nest of the lazuli bunting, containing four incubated eggs was built in a live oak bush about three feet from the ground. The materials were plant fibers lined with hair. Near the same place I found three nests of the black-headed grosbeak. One nest in an oak contained two fresh eggs, the other two were built in the same alder tree and contained one and three eggs respectively. All the nests were made of purplish-colored rootlets. In an adjoining alder, which I climbed to look into one of the grosbeaks' nests, I came across a yellow warbler's nest containing four slightly incubated eggs. It was built against the main trunk and was made of alder fibers, willow down and hair. The bird was absent. I also saw a nest containing five young flickers. They were so large they completely filled the excavation, and could fly when I took them out.

LIME KILN, JUNE 10 TO JULY 1.—I found a nest of the willow woodpecker in a rotten alder stub by a creek. The chips showed me that it was a late nest. It contained four fresh glossy white eggs. The parent bird was very noisy but did not come near. The next nests found were two of the western wood pewee. One contained four fresh eggs. The nest was saddled upon a limb of an alder about six feet from the ground. The other was built in a crotch of an alder about twenty feet from the ground and contained two eggs. The next nests were two of the valley partridge. One contained fifteen eggs and the other twenty-one eggs. I thought I had found a large set but another member of the party reported the finding of a set of twenty-two a couple of days later. This was the largest set reported. All nests were on the ground under bushes. Another peculiar nest I found was one built about ten feet down in an old mine shaft. It was some sort of a swallow's nest, built of red clay, and at this date contained three young. The parent birds would not come near, and were not seen closely enough to identify. It was quite dark and damp where the nest was.

Around Dry Creek, near Auburn, nighthawks were numerous. About dusk they would fly about high up in the air with their peculiar flight and cry. They would take three or four slow flaps of the wings, then three or four very fast flaps and rise in the air, always uttering their peculiar cry when rising. Once in a while they would dive straight down with a sound like an enormous bow-string being struck. It was likely to scare one if it came unexpectedly, and if one was not accustomed to it.

*San Francisco, California.*

## FROM FIELD AND STUDY

**Feeding Habits of the Lewis Woodpecker.**—Late on the afternoon of December 8, 1906, while riding between Witch Creek and Santa Ysabel, I noticed ten Lewis woodpeckers (*Melanerpes lewisi*) flying about over a creek catching insects in the manner of swallows, with flight that was graceful, resembling that of the latter. I never before noticed them feeding in this way, their usual habit being to perch on top of dead trees, darting from a limb to catch passing insects. They have been unusually common here this fall.—H. W. MARSDEN, *Witch Creek, California.*

**Notes From Placer County, California.**—Band-tailed pigeons (*Columba fasciata*) occurred here in considerable numbers this fall, appearing to be most numerous along Bear River, where ideal feeding grounds abound. The first noted were a few scattering birds on September 21, 1906. On October 17, a flock of about three hundred were seen feeding on acorns and "coffee" berries; and scores of birds were continually passing overhead, following the course of the river. Large numbers have been killed by hunters.

This country is very much alive and the common turkey vulture is seeking new climes! During the first week of October I noticed five flocks of from twenty-five to sixty buzzards (*Cathartes aura*) slowly making their way westward. They appeared to be young birds, but I have never been able to discover breeding grounds in this vicinity.

A few robins (*Merula migratoria propinqua*) have remained in this locality thruout the summer. They breed here in small numbers, but usually leave soon after the young are able to fly.

Quail (*Lophortyx californicus vallicola*) are plentiful, even tho the late rains destroyed large numbers of eggs. I collected a set last spring under rather peculiar circumstances. We had cut and cocked our meadow grass, when the late rains came and interfered with hauling. Some of the hay was ruined and it was a month before it was removed from the field. These haycocks