BIRD BANDING AT FLORENCE LAKE, 7340 FEET ALTITUDE with one illustration By LILA M. LOFBERG

N O doubt some of my readers have motored, or taken the little mountain train, from Fresno to Big Creek and Huntington Lake, California. Perhaps some of you went as far as you could on the public road and were confronted with a gate, on the right of which a man emerged from a tent to make sure whether you were a Company employee with a reason and a pass allowing you to enter. If not, you enjoyed the scenery in the other direction.

Or maybe you have passed through that gate in the "courtesy car" and had the driver tell you many interesting things about Kayser Pass, the dog team (that carried, at one time, mail to this part of God's country), the Minarets, the tunnels, pipe lines, and other things, quoting costs as though a million dollars were a mere commonplace, so enormous is the work of gathering the water and turning its descent of the mountain into power for southern California. After your picnic lunch at Ward Lake, you continued traversing the ups and downs, ins and outs, to the end of the road. Then the car nosed up over a solid rock approach, and before you was a little gray house facing the lake.

Well, that is where the Florence Lake Bird Hotel and Banding Station is located. Unless you were too deeply engrossed in the dam, the lake, or the rugged scenery, you no doubt saw a flock of birds leave off their dining at the tables about twelve feet from the house and fly to the nearest trees until they were sure you were not going to molest them. The tiny pool between tables (see figure 83) is also for the birds' pleasure. From the nearby trees and the rustic fence surrounding the yard the birds have come step by step, one might say, until after three years most of them know that this is their haven, with not a cat or other enemy around.

It is in this place, with our one two-compartment Potter trap, that nearly all of the banding and observing described in the following pages has been done. The habits mentioned are not those that can readily be seen on a field trip, but rather those that one is not apt to observe unless situated permanently, as are we, with a chance to note repetitions of actions often enough to know they are not accidental. When health notes are not given we have observed none but apparently healthy individuals of that species. All dates are approximate. Records for the past three years show a variation of a few days, according to the weather. There are some mountain lovers, like ourselves, that stay the year around, and of these I shall tell first.

Clark Nutcracker (Nucifraga columbiana). These are daily visitors about nine months of the year. After the young are grown they leave for the higher altitudes about September first, returning the last of October or November, according to the severity of the winter.

Banding notes: Out of 44 banded, 23% have been in the trap two or three times and 12% have returned to the traps after being away for a season, all returns being adults. One to three young ones are brought to the tables the last of May and during June.

Health: Their general health is excellent. One that we banded had a scar extending from bill to eye on the left side of its head. It was black and arc-shaped and could have been covered with a quarter.

Habits: These clowning birds seldom dine peacefully. It is not a quarreling exactly, rather more of a bantering, as they vie with one another for places at the

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suet. During the summer they are eternally digging holes in the yard and hiding food. Fruit and lumps of brown sugar, for which they do not care, they flip disdainfully from the table. Many other things they do, seem to show a reasoning power. With a piece of suet that looks as though it could be separated from the whole, they will work on the narrowest place until it is severed and then fly away with it. Our Christmas tree is always stood up between the tables, and smaller bits of suet tied among its branches with strings. The Nutcrackers pull, twist and "chew" on the string until the suet falls to the ground; then they turn it until, finding the best way to grasp it in their bills, they carry it away.

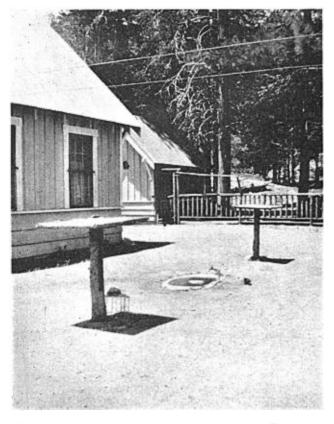


Fig. 83. FEEDING TABLES FOR BIRDS AT FLORENCE LAKE, 7340 FEET ALTITUDE ON THE SIERRA NEVADA.

Mountain Chickadee (*Penthestes gambeli*). Not once has a hike failed to disclose some of these garrulous mites along the trail. But they are at the Station from December 1 until May 1, about every twenty minutes between 8:30 a. m. and 4:00 p. m.

Banding notes: Out of 83 banded at this Station and Sub-Station B (a mile away), 49% have been in the trap two to five times; 7% have returned, and one of these has returned for the third time. Birds of either of these stations do not seem to visit the other station.

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Habits: During the stormiest days we open a window leading from a porch and place food on the sill just inside. The birds invariably land on the porch railing saying "chickadee-dee" before entering, and chirp as they leave. Not one in a hundred times do they become excited and fly into the room, instead of out, when they have finished feeding.

Blue-fronted Steller Jay (Cyanocitta stelleri frontalis). Two or three stay around the Station all year. The majority seem to leave for the foothills September 15, and return March 15.

Banding notes: We have banded 42, 18% of which have repeated once only, and they were all young ones. None returned, according to trap records. Three of those banded in 1926 were reported to the Biological Survey: one shot at El Dorado, Eldorado County, one at Auberry, Fresno County, and one killed by a cat at Three Rivers, Tulare County. During June and July they bring from one to three young to the tables.

Health: As a rule healthy and alert, but one sick fellow sat on the table and fence all one day, never eating, but drinking every few minutes and sleeping the rest of the time. I tried to catch him, but he managed to slip from my fingers each time, just as I was ready to grasp him.

Another, much bedraggled, came to the tables from early spring until late summer. Most of the body feathers were gone and it was covered with dandrufflike flakes. It wore one of our bands and so far as I know was normal at the time of banding. It was as active as any of the others and never entered the trap while in this condition so we could not examine it closely.

Habits: Every one knows how the Jays hide food and our experiments with J. J. (a Jay that we raised from babyhood and that stayed with us as any domestic pet) proved to us that they remember where they hide it and return for it. Our records show them decidedly clever about the trap. If doors are fastened open, but the treadle in place as always, they go in and out, quite unconcernedly. But set the trap and they stand outside and reach over the treadle, not even springing the trap, and get the bait just the same. Only during nesting season do they seem to become careless and really get caught. Even then, "once but not twice" seems to be the motto of the adults, for never have they been caught the second time.

The Jays rearrange scraps of food many times so as to take the maximum amount with them—the smaller pieces next to their throat and the largest on the very end of the bill. J. J. once took, one at a time, 78 grains of hen scratch feed (including a few sunflower seeds which he always selected first) into his mouth. Then he proceeded to hide a few here, there and everywhere. We could never discover how he held them until ready to hide them away. He often ate from my hand in this way, though never taking as many seeds as mentioned above at any other time. If I picked out sunflower seeds and held them in my hand, he would take up one, crack the hull, drop it back to my hand, pick up the kernel and eat it, then flip the hulls out of my hand before doing the same thing with the next seed.

Sierra Junco (Junco oreganus thurberi). Not until March (unless snow is very deep on the meadows, then January or February) do the Juncos come to the Station. But they remain until their young are ready to go to the meadows— August 15.

Banding notes: Out of 44, 38% repeated and four, all adults, of those banded in 1926 returned in 1927. (They have not returned this year as yet.) They bring from one to four young during June and July.

Habits: They never eat from the tables when the ground is bare, but in winter

come readily to the chickadees' sill and the porch. They are much more likely to fly inside than the chickadees; then, of course, we have to catch them before they injure themselves. They are our earliest risers. Often, if it is very cold and stormy, they cling to the screens of the windows and chirp before we are dressed, seeming to remind us that hungry birds must eat.

Cabanis Hairy Woodpecker (Dryobates villosus hyloscopus). Only the males seem to winter at this altitude. One male has been with us three winters now— December 1 to May 1—while his mate arrives for a few days in April. They both leave around the first of May, the female returning once in a while for a hurried meal, but the male never until winter. This has been the rule until this winter (exceptionally open, so far) when the female arrived February 5 and came daily to the tables.

Banding notes: Both of these are banded. The male has repeated several times but the female has not. However, since they are the only ones we have banded, we know she has returned the three years just as he has, even though we have not had her in our hands. They have never brought their young to the Station.

Habits: Invariably they give a "yip" either enroute or as they "plunk" on the fence or table. Unless molested, they seldom leave the table until, with trip hammer precision, they have taken from 100 to 172 bits of suet. If other birds are on the tables they seem intent on examining every inch of the bark on the fence. In reality they are simply biding their turn at the table.

Slender-billed Nuthatch (Sitta carolinensis aculeata). These birds are at the Station December 1 to May 1, daily, and return during August with one or two young. Then they are not seen again on tables until winter.

Banding notes: Out of 6 banded, 33% have repeated one to three times, and one has returned.

Pigmy Nuthatch (Sitta pygmaea). These birds are at the Station, January 15 to April 15.

Banding notes: Of the 13 banded, 61% repeated and one adult has returned for the third winter. They never bring their young to the Station. These saucy, "snub-billed" fellows always come to the tables in flocks. As many as nine have all been working on one piece of suet at the same time. The first winter we had one pair (one of which we banded and has returned as noted above). Last year we knew of seven and this year nine. One wonders if they are the offspring of our one pair, or if they brought their friends or just happened to gather after coming.

Red-breasted Nuthatch (Sitta canadensis). Two came to the Station (though in summer I have seen a few in the woods) for the first time December 13, 1927.

Banding notes: Both have been banded and one or both of them repeat every time the trap is set. They are the most fearless of our birds. This seems to be a nuthatch characteristic. They eat unconcernedly or stare unblinkingly, until we are within reaching distance of them.

Townsend Solitaire (Myadestes townsendi). They are in the hills all year and around the Station during the winter but they never come to the tables nor the yard. I managed to drop a hat over a young one not far away, hence One Only is wearing a band—no. 179999. Can anyone offer suggestions for bait or trapping conditions that may attract these elusive birds?

This ends our list of banded, year-around birds. The Sierra Creeper (Certhia familiaris zelotes) and White-headed Woodpecker (Xenopicus albolarvatus) seen

afield, in addition, seem to cover all species that stay up here all the time. This, a mild winter, is giving us a few surprises which will be noted later. Now for our summer guests.

Red-winged Blackbird (Agelaius phoeniceus). These are the first to arrive last of February (males only) and late March (females). They remain at the Station until the marshes open, May 15. A few males return during September, evidently migrating not later than October 1.

Banding notes: Of the 43 banded, 11% repeated, but so far none has returned. Only three were banded in 1926. They never bring young to the Station.

Habits: Nothing of particular note has been observed except the arrival of the males a month ahead of the females (in fact, according to our records, it is a month to the day). The females have always come with the Brewer Blackbirds. We always know, even before seeing them, when the females arrive, for the males immediately tune up for their "symphony concert" which they render daily, from morning until night, until they leave for the marshes. Rain, snow, sleet, wind, nothing stops them. They just give their feathers a shake and sing the louder.

Brewer Blackbird (*Euphagus cyanocephalus*). Great flocks of Brewers arrive the last of March and stay until nesting season. Then they scatter and come intermittently to the tables in small numbers. The last of June they return in hordes with their young and there is scarcely a moment of the day that the tables and yard are not quite black until they leave, not later than October 10. The only exception was a lone female on the table for a few moments, November 23, 1927.

Banding notes: The number banded (108) is greater than that for any other species. Only 3% ever repeated and only one of the forty-nine banded in 1926 returned in 1927. We never have seen an adult feeding more than one young at the Station, but no doubt this is due to the fact that the young are not wholly dependent when they are brought here.

Health: The Brewers seem to be the "War Veterans" of the bird world at this Station. What happens to their tails and one of their legs one wonders. These maimed ones seldom go into the traps, though we did get one "peg leg," a female with one leg gone from the mid-tarsus down and almost healed at the time. Another female had a deformed bill, much like a Crossbill's at the end. On the right, near the lore, it appeared normal. On the left, near the lore, the upper and lower mandible were wide apart. She seemed in as good condition as the rest, and not knowing how to help, we released her.

Habits: The most interesting thing we have seen them do is to dip a large, hard crust of bread in water, eating the softened portion, then sousing again until they ate the last crumb. Besides seeing dozens of them doing this, the tiny crumbs covered the bottom of the bath every time we cleaned it (at least once a day).

Western Robin (Turdus migratorius propinquus). They arrive March 1, leaving the Station after the young are grown—August 15—and, with few exceptions, usually migrate by October 15. This winter (1927-28) great flocks of them are everywhere, even in our yard, though they do not come to the tables. They try to "drown out" the Solitaires' songs with their own on our warm days.

Banding notes: 19 have been banded; 50% repeated; 3 of 10 banded in 1926 returned in 1927. They bring from one to four young during June and July.

One Robin came to the Station and tried to eat and drink with its mouth wide open and apparently immovable. Since it wore one of our bands we know it was all right at the time of banding. It did not re-enter the trap and soon disappeared. Sept., 1928

Habits: Since having J. J. we have been interested in the relative intelligence of the different species. An orphaned baby Robin, in the three days we had it before it escaped, had learned only not to fear me, while J. J. on his second day greeted me and his food saucer with the same enthusiasm he would have shown toward his real mother. The Robin showed no curiosity as to his surroundings, while J. J. was trying out everything on his third day. Yes, we still feel there are few of our birds whose I. Q. rates as high as that of the Jays.

White-crowned Sparrow (Zonotrichia leucophrys leucophrys). These arrive April 20 and migrate September 1.

Banding notes: Of the 6 banded, 4 have repeated. The only one banded in 1926 returned in 1927. They have never brought young to the Station. These trim birds never linger at the Station, so we could not observe them as we should have liked. The one banded in 1926 was evidently exploring, for the surroundings are not the ones they usually choose. Too, we never saw it before or after that once during that season, but on April 25, 1927, it, with six others, returned and they were here throughout the season. The nearest willow-bordered stream is at least a quarter of a mile away.

Western Tanager (*Piranga ludoviciana*). They arrive May 15 and leave August 15.

Banding notes: Of the 9 banded, 44% repeated and three of the four banded in 1926 returned in 1927. They never have brought more than one young to the table. The first Tanager we ever banded I caught in a thicket a little distance from the Station. To our knowledge we saw it no more. The other three of 1926—male, female and their young—were caught on the tables, and all three returned May 18, 1927. During the season they were retrapped and the mate of the young one (which turned out to be a male) was banded also. Then each pair brought its one youngster to the trap, so now three generations of the same family are wearing our bands. We hope May will bring the entire clan back to us after their winter's sojourn in Central America.

Russet-backed Thrush (Hylocichla ustulata). They arrive April 20 and migrate October 30.

Banding notes: Of the 10 banded, 30% have repeated and only one of the eight banded in 1926 returned in 1927. They bring from one to three young to the tables, or rather the yard, for they have never been to our knowledge on the tables.

Health: The Thrushes, too, seem to lose a leg easily. In the five years we have been watching them we have seen many little unfortunate cripples, but never have been able to get them into the trap. One banded last year had a growth just above the bill on the left side. It was about the size and shape of a large black-headed pin-head and in appearance reminded me of the growths on horses' legs.

Killdeer (Oxyechus vociferus). Along the river, small streams, marshes and the lake there are many Killdeers from March 20 to September 30. But this year I saw one in a marsh on February 1. They never come near the Station and the only one wearing one of our bands is a young one over which I dropped my hat.

Last spring I watched a young Miss trying to decide between two suitors. It seemed to be a sort of an elimination contest, by the "Follow the Leader" method. A wrong turn or misstep on the part of the males caused much stamping and screeching by the female, and humble obeisance by the "men folk." A very interesting little play lasting for over two hours.

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Western Mockingbird (Mimus polyglottos leucopterus). While trying to tempt Solitaires with mountain ash berries (I have seen them eating these afield) I was thoroughly surprised to see a Mockingbird busily eating them. Placing the trap over the berries the Mockingbird soon obliged me and was awarded a band. I then took the trap away and he came down, finished the berries, sang a rollicking song from the fence and went his way, the one and only Mockingbird I have seen above the foothills.

There have been other interesting migrants at the Station, though we were unable to band them. During the middle of July, both 1926 and 1927, a couple of Black-headed Grosbeaks (Zamelodia melanocephala) have eaten from the tables for several days. A pair of Bullock Orioles (Icterus bullockii) ate canned figs lustily from April 21 to 25, 1927. A flock of about fifty Bohemian Waxwings (Bombycilla garrula) sat in the top of a tree, gossiped, and grabbed bugs out of the air above the tables for over an hour but did not sample our "bill of fare."

Then a couple of mornings ago (February 13) a Saw-whet Owl (*Cryptoglaux acadica*) sat almost on our back door step. We had never before seen such a tiny owl and not only wanted to give him a band but would like to have kept him in the woodshed for a "mouser." He turned his head and winked those yellow eyes at us as we, on either side of him, approached. We almost caught him twice. He must have enjoyed the game, for he returned about a dozen times. At last we decided to let him rest for a few moments before trying to catch him again, but when we returned he was gone.

These, then, are the main facts we have gleaned in our banding at Florence Lake Station from March 25, 1926, to the present date, February 15, 1928.

Florence Lake, Big Creek, California, February 18, 1928.