

Bulletin No. 27
December 2, 1931.

By: Walter Fry, In Charge
Nature Guide Service,
Sequoia National Park.

Stencil No. 72

SEQUOIA NATURE GUIDE SERVICE

THE BLUE-FRONTED JAY
(Mountain Blue Jay)

The Blue-Fronted Jay (*Cyanocitta stelleri frontalis*) is an attractive and beneficial bird of Sequoia National Park. Somewhat larger than the robin, this jay is noted for its exquisite coloring, a beautiful blue and purple which blend to black on head and front of body. On the head is a conspicuous crest. The bird is bold, self-reliant and inquisitive; and it is the first of the feathered tribe to greet you with loud squawking notes and clever acrobatics when you make camp in Giant Forest.

The Blue-Fronted Jay is one of the Steller Jays, which represent a small group of closely related species inhabiting most of the mountainous regions of western north and middle America from Southern California to Alaska. The species we have is the western representative of the family. They inhabit the coast ranges at middle elevations in the heavier timber districts of California and Oregon; hence the common name "Mountain Blue Jay". They breed throughout their range, nesting in pine, fir and black oak trees at any height from the ground; and from April to July deposit three to six greenish-blue eggs spotted with various shades of brown. Size about $1\frac{1}{4}$ x 1 inch. Their nests are quite bulky, some 14 inches across, built of large twigs and sticks with a cup in the center about $4\frac{1}{2}$ inches across and three inches deep, lined with pine needles or grasses pasted together with mud. The birds seldom drift below their range unless forced by scarcity of food.

Blue-fronted Jays are omnivorous, eating any and all kinds of food the place or season affords. Being more arboreal in their habits than other jays, they collect most of their food from trees. Their principal diet during spring and summer is beetles and caterpillars, while in autumn and winter they feed mostly on fruits, berries, nuts and acorns. In fact, the jays will eat most any kind of bug, fruit, worm or nut.

I always had a fairly good opinion of the mountain blue jay as a destroyer of insects detrimental to forests, but not until 1918 did I acquire definite proof. In that year a serious attack was made by beetles on the pines in the Middle Fork of the Kaweah River and Marble Fork Basin of Sequoia National Park. The western pine beetles (*Dendroctonus brevicornis*) were killing the yellow pine, and the mountain pine beetles (*Dendroctonus monticolae*) were killing the sugar pine. So sudden and serious was the attack of these beetles as to threaten destruction of all the yellow and sugar pine of the park and its surrounding territory unless the infestation was quickly wiped out. The National Park Service and U. S. Forest Service jointly were quick to realize the threatened danger, and \$1,500 was made available for the purpose of combatting the pests. In an effort to destroy the infestation, it was decided that all affected trees would be cut and burned, thus destroying the larvae of the young beetles while in the wood. This plan proved effective, and as the consequence the forest was saved. The work was accomplished from April to June, inclusive.

Throughout the period of control work, it was noted that a vast number of the jays had congregated and many had nested within the infested area, but none of us for a time could contribute the cause, unless it was that some special food had attracted them thither. Finally, on June 29, it was learned beyond reasonable doubt that the jays had been attracted to the area from the presence of the many beetles for food. On that particular day the female of a pair of jays, that had five large fledglings tucked away in a nest in a fir thicket near the Old Commissary building, was killed by a sharp-shinned hawk, but the hawk was frightened away by the workers before it carried away the bird. We examined the dead bird, and you can imagine our surprise and amazement when we found that it had in its mouth and throat 8 of the western pine beetles and 14 of the mountain pine beetles; the very insects that the Government was expending \$1,500 to destroy. As we looked at the dead bird, we wondered; and as we wondered, we thought of their destiny and of the many hundreds or perhaps thousands of years these birds have been helping to save the forests we have with us today.

Many people rave over the beauty of the blue jay, but suspect him to be a bully, murderer and robber. In some localities they have gone so far as to advocate his extermination; all of which is uncalled for, unjustifiable and not borne out by the facts.

Knowing what I do about these blue dwellers of the mountain forests, after having lived over thirty-five years with them, I have no hesitancy in classing them as one of the highly beneficial birds of our mountain forests and to the wild life they contain. Much of the bird's diet consists in a great variety of insect life which is highly injurious to forest growths. Furthermore, the birds ever alert disposition and intelligence rank it as being the only bird that acts as a true sentinel of the forests of its surroundings, in giving out an immediate cry of warning to its own kind and to other feathered species upon the approach of predatory enemies, whether it be that of animal, bird of prey, or reptile.

So strong are the social ties of this Blue-fronted Jay that all separated birds quickly congregate to the spot of the garrulous informer upon his danger warning, and all join in the vocal demonstration. Through long experience, other birds of the forest look to the Mountain Blue Jay as their watchman, and whenever he gives a warning sound of danger they quickly rush to cover. Deer also heed their warning, and are quickly on the alert for approaching danger.

The worst harm which the Blue-fronted Jay has ever been accused of doing is, that he robs nests of other birds of their eggs and young, which he consumes as food. This may be true in certain instances, but I believe such occurrences are very rare, for never yet have I seen one of these Blue Jays actually rob the nests of any other birds of their eggs or young. On many occasions I have seen these jays and other birds nest and hatch their young in proximity to each other without the jay harming other birds. One of these instances I noted in June, 1904, when two pair of the blue jays, a pair of robins, a pair of orioles, a mother grouse, and a mother mountain quail, all nested and hatched their young within a radius of 300 feet of the Colony Mill Ranger Station in Sequoia National Park, elevation 5,525 feet. The result of the hatch was as follows: Blue Jays, 9; robins, 4; orioles, 3; grouse, 8; and quail 12. The jays were the first to build their nest. I simply mention this for the reason that the other birds were aware of the jays' presence in the vicinity at the time they started to build their nests; and it would seem from this that they had no fear of the jays, and possibly were glad to have them for their watchmen. The old birds soon became quite tame, and we fed them about the cabin door. The grouse and quail showed a preference

for wheat and rice as a diet, neither of which would the other birds eat. The jays would eat most any other foodstuff we gave them, but seemed to enjoy most the scraps of meat and potato peelings, while the robins and orioles relished more the bread crumbs.

As the young birds hatched, their parents brought them to the cabin for food just as soon as they were able to travel. The first to arrive was the quail with her brood, and also her mate; next was the grouse with her brood, but no mate ever showed up. Some three weeks later came the jays with their young, to be followed later on by the robins and orioles. Not until the third week after their arrival did the young quail and grouse take the grain we threw out for them.

A crew of road workers was stationed at the cabin, where they remained throughout the season, and the birds won the friendship of all. The men cleared off a feeding ground where the flock was fed regularly every morning and evening until the premises were vacated in the fall. The feeding was conducted about one hour after sunrise, and one hour before sunset. The birds soon learned to come by call, for which purpose a police whistle was used. It was always considered a great treat by the men to watch the birds during the feeding hours, as the older birds were always matching their superiority as to which was boss of the flock. In this the grouse stood at the head of the list, being followed next by quail, jay, robin, then orioles. Quite often the young of the same species would fight amongst themselves, just like domestic fowls. The jays always bossed the robins and orioles while on the ground, but when in flight the robins and orioles whipped them.

The young birds grew rapidly and were all mature by the first of September, after which we were unable to keep count of them for the reason that so many other birds of like species had come in and joined them; as by the first of October the flock had been augmented to about one hundred birds. I feel certain that had it not been for the vigilance of the jays, there would have been loss sustained to the young of the grouse and quail, and possible some of the other birds of the flock during the season, due to birds of prey such as the Cooper and Sharp-shinned hawks, of which there were many. A large black oak tree that stood near the cabin from the top of which a good view of the general surroundings could be obtained, was the jays' lookout, and seldom was there a time between sunrise and sunset of any day but what found some jay stationed there.

What if the blue jays do, on rare occasions, plunder or destroy a nest of other birds? As compensation for this he spends six months of every year of his life devouring insects that are detrimental to forest growths; and his entire life as watchman for other things of the wild.

Due to their boisterous conduct, many people class the blue jay a bully, but this conduct is not due to his fighting qualities; it is because the bird feels good and has a good opinion of himself, as practically every bird of the forest when it comes to a showdown whips the blue jay.

Knowing what I do about the mountain blue jay, I admire them and love them. True, they are ruffians, but, jolly fellows, they go about the business affairs of life with such swagger and shout, such extreme gusto in the immediate affairs of the moment as no other bird of the forest. Never do they droop around, bowed down with melancholy. They set a good example of enjoying life. They tend to raise depressed spirits. The forests would be gloomy without them. So let's give the mountain blue jay a chance.