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Some Birds of Sequoia National Park

THE CALIFORNIA GREAT BLUE HERON

The California Great Blue Heron (*Ardea herodias hyperonca*) is one of the most striking and picturesque species of Sequoia Park birds. When this great tall, blue bird stands on some dead tree or snag along the river bank, and the color of its body blends with the azure sky above and the blue running waters beneath, it is a picture to be long remembered. The birds' great bulk, graceful poise and beautiful coloring immediately attract attention.

In the early days of park history, these birds were abundant along the streams in the lower elevations of the park and were seen at all seasons of the year; but of recent years they have been on the wane, so that now individual species are rare and seldom seen. This diminution I attribute to the fact that in the early days the birds were not protected by law outside the park, and that they are quite bold they fell easy victims to firearms. Although the birds were never shot for food, they were ruthlessly slaughtered merely for pastime or trophy.

Although the Great Blue Heron ranges over the larger portion of North America, except the extreme north, it is resident principally south of the middle portion of the United States and migratory from there northward. So rapidly were the birds being depleted that a few years ago both the Federal and State governments came to the rescue by enacting protective laws. The Great Blue Heron, their nests and eggs, are now protected by Federal law.

Description of the California Great Blue Heron

The California Great Blue Heron is the largest of our North American Herons. The birds often attain a height of over three feet, and a wing spread of four feet. Their general form is slender; neck, legs and beak very long; tail short and drooping. The color of the plumage is both unique and beautiful, being interspersed with blue, white, black and brown. Their general color is dark blue; neck brownish; head marked with white and black; under part of body striped with black and white. The birds are slow in flight, (seldom exceeding twenty-five miles per hour), but when deprived of the use of their wings they can run very rapidly. In running, they might be matched with the domesticated turkey. In some localities these birds are called Blue Cranes, while in others they are called Storks: both these names are erroneous, for the Great Blue Heron belongs to a different family from either the cranes or storks.

Feeding Habits of the California Great Blue Heron

The California Great Blue Heron is not a bird of the forest or of the open plains. It is essentially a bird of the rivers, lakes, and marshes where it feeds along the water's edge and catches tadpoles, frogs, small fishes, crustaceans, and a great variety of aquatic insects. The birds are well adapted for wading in deep water; and so accurate is their aim and gage of distance with their long spear-like beak, that they seldom miss their prey, although sometimes

a foot or more under water. It is not to be understood that the Great Blue Herons capture all of their food in and along the waters, for many times they go far afield in search of rodents, such as rats and mice. In capturing their prey they never dart down from the air or in running pursuit, but simply stalk along gently or stand and watch for an opportunity. I have seen the birds stand for hours at a time in one spot along the water's edge, or at some gopher's hole, patiently awaiting a final capture. Some people claim that the bird's diet consists mainly of fish. In this locality I find that such is not the case, for in the stomachs of the three birds that I have examined here I found no fish whatsoever, but only frogs, rodents, insects and crustaceans. This leads me to the belief that fish furnish but a small portion of their diet.

The birds are poor swimmers when they get into water beyond their wading depth. During the month of June, 1910, I saw one in such a predicament in the Kaweah River within Sequoia National Park. When first I saw the bird, it was standing out in the middle of the river on a large protruding boulder which was just on the upper edge of a heavy rapid and totally surrounded by running water some five feet in depth. The bird was busily engaged feeding on some kind of insects. Suddenly it made a frantic effort to catch something passing and lost its footing, disappearing head over heels into the water, and was carried down some two hundred feet over the rapid and into a swirling pool below. When I rushed down to the pool in an effort to learn the bird's fate, I found it floating around and around with head high up in the air and its tail and wings spread out flat upon the water. The bird made no attempt whatsoever in an effort to swim ashore, but flapped one wing as a kind of rudder and floated to land, where he walked drippingly away, apparently none the worse from the accident.

Breeding Habits of the California Great Blue Heron

The California Great Blue Heron is found breeding over practically its whole range. The birds sometimes breed in colonies. In June, 1896, I found sixteen occupied nests in one large dead valley oak tree on Cross Creek in Kings County, Calif. Within the park they have never been found nesting in more than two's. The nests are usually placed well up in a tree, and are constructed of a crude platform of dead sticks, in the corner of which are placed scant linings of dead grasses and leaves. I never have yet seen any of the male birds taking part in building the nests. From 3 to 5 eggs of a greenish blue color, size about $1\frac{1}{2}$ X $2\frac{1}{2}$ inches, are laid; and about 28 days are required for incubation. I have never seen the male birds help in the incubation of the eggs, but have often seen them help feed the young. The mating and nesting period in Sequoia are the months of April and May; the young birds remain in the nests until they are about half grown, when they clamber out on the tree branches, returning to the nests at night. When two-thirds grown, the young fly to the ground and remain there; but the mother continues to help feed them and hover them at night until about October, when she leaves them to shift for themselves. The same nests are often occupied by the birds from year to year, but a certain amount of annual repair work is always done.

For a long time I thought that the California Great Blue Herons were monogamous in their habits, and that individual birds of the opposite sex paired off during the breeding season; but of recent years I have changed my opinion, for I know of one instance that such was not the case. On April 16, 1909, while I was camped at the Mt. Whitney road camp on the Middle Fork of the Kaw-

eah River in Sequoia National Park, three of the birds came up the river and established themselves in a clump of dead alder and cottonwood trees near camp. The trio consisted of two females and one male bird, the latter being somewhat lame in his right foot.

On the second day the females started building separate nests about ten feet apart in a large dead cottonwood tree on the river bank. After ten days the nests were finished, and three and four eggs laid in each, respectively. Each nest hatched three young birds, which were reared to maturity in the park. A few days after the young had hatched, the male bird "Brigham", (for that is what the boys called him) began to help feed the young, devoting his time and attention about equally between the two hungry broods. Although the nests were vacated by the young at intervals of three days apart, and the broods remained separate for a period of almost two months, Brigham, like a dutiful father, was always on the job with first one family or the other in helping to care for the young. About the last of July, the two broods united into one happy family, a condition that continued until late in the fall. But on the 10th day of the following November, the birds all seemed to be suddenly overcome with a sense of migratory impulse, for they all left the park in one flock. Never before or since have I seen a more beautiful flock of the California Great Blue Heron than were these nine birds as they passed from my sight in flight down the river out of the park with proud "Brigham", the husband and father leading the way. I felt gratified and pleased that the Sequoia National Park was responsible for the direct product of six beautiful birds that would continue to help perpetuate their species.

Will the California Great Blue Heron continue to
thrive under existing conditions?

Now that the California Great Blue Heron is protected under existing laws, will the species continue to thrive and hold its own? Let us hope that law will prove sufficient to save the species, and that the California Great Blue Heron, the largest and most beautiful of our North American herons, will continue to grace our California rivers and swamps. But laws alone will not save any species of bird. The giant heron offers an easy mark for the thoughtless Sunday tripper with his shotgun or 22 rifle. Doubtless many have been shot and thrown aside when the hunter either tired of looking at the curiosity or learned that he had broken the law. In addition to protective laws there are needed breeding grounds where food and shelter may be found. In this part of California only the national park affords such shelter, and as the birds range outside the park or migrate lower in winter it is feared that this picturesque and noticeable species may become extinct within a few years.

What may be done to save the California Great Blue Heron? The establishment of additional state and federal bird refuges would be of assistance. Then too, notices prominently posted by Audobon Societies, near the haunts of the heron, would save many a specimen that otherwise would fall to a load of shot or a 22 bullet. The notice would be better if it carried a colored picture of the bird, so that the careless hunter might realize its beauty as well as the law which protects the heron.

As Ruskin said: "God has lent us the earth for our life. It belongs as much to those who come after us as to us." Who are we to utterly destroy the beautiful creatures with which God peopled the earth?

We should save the California Great Blue Heron from going along the fatal way winged by the passenger pigeon, the Kentucky parakeet, and many another species of American bird.