

## From the Archives

Harold C. Bryant was born in Pasadena, California, on January 30, 1886. He received an undergraduate degree (BS) from Pomona College, majoring in zoology/ornithology, and a MS and PhD in zoology from the University of California, Berkeley. From 1914 to 1930, he served with the California Fish and Game Commission, was a lecturer and field trip leader for UC Extension, and was a summer season ranger-naturalist at Yosemite National Park. This article was originally published in the California Fish and Game Journal in January of 1918.

## Deer Licks of the Trinity National Forest Game Refuge

BY HAROLD C. BRYANT

Heretofore, we have had to base our judgement as to the value of a game refuge largely upon the results obtained in The Transvaal in South Africa, and in other states. Convincing evidence of results to be expected from game refuges in California is now available, in that the first of the large state game refuges placed in a national forest has been in existence long enough to demonstrate possibilities.

Trinity Game Refuge was established by legislative enactment in 1911. Comprising 65,000 acres of brush and timberland, with abundant water and feed, and salt licks convenient, the region affords ideal conditions. A visit to this refuge at the present time will attest the worthwhileness of a sanctuary for deer and other game.

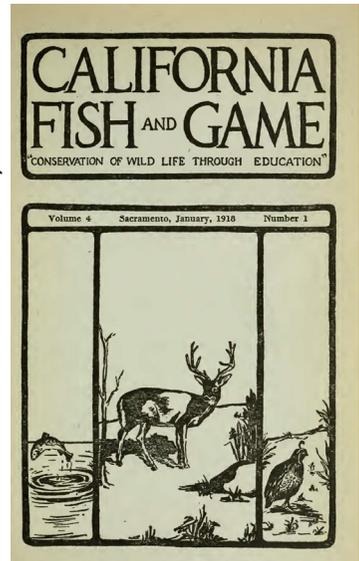
Although in Trinity County where violations of the fish and game laws are frequent, the residents respect the game refuge. The people of the county wanted the refuge in the first place, and although it set aside much of the best deer country, everyone concerned is willing to be inconvenienced and to hunt elsewhere.

Originally reporting the largest deer kill of any county, a noticeable decrease for several years brought a realization that something needed to be done to save the situation. The result was a demand for a game refuge. The interest taken by the United States Forest Service has had much to do with the attitude of the residents and the enforcement of the game laws.

Within the refuge are many famous deer licks, where in former years deer were killed by the thousands. Residents estimate that there were 10,000 deer killed at the licks near the north fork of Trinity River, up to the time of the creation of the refuge.

The writer visited the Trinity refuge during the latter part of May, 1917. Trips were made to the licks along the Trinity River near Helena, and also to the numerous licks along the Hayfork River, about ten miles from the town of Hayfork. At both of these places there was plenty of evidence that deer were very numerous and very tame.

On May 23, Deputy G. L. Laws and I went early to the large lick about two miles down Trinity River from the town of Helena. We seated ourselves about thirty-five yards away, but



in plain sight of the approach and the hillside in the background. After waiting for some time we were rewarded, not only by seeing ten deer within good range along the hillside, but also had the pleasure of having two does come to the lick and spend several minutes there. We attempted to photograph them, but the early morning light was not sufficient to make the pictures successful. It was only after we had stood up to take the third photograph that the deer became sufficiently frightened to leave the lick. Even then they did not run, but simply walked back up the hill. The sand next to the river showed that large numbers of deer had been at the lick during the night. All of the deer seen at close range were does; tracks also indicated a large percentage of does. When about to leave, four deer came over the hill and started toward the lick, but they "winded" us before they had gone half way down the hill, and turned back.

A trip, in company with Mr. Shock, to the numerous licks along Hayfork River, about ten miles from the town of Hayfork, gave even better results. One large lick inspected (Sulphur Spring) had been used during the night, and it was evident that a number of deer had been frightened away upon "winding" us. Even so early in the year trails were cut three and four inches deep. The tracks here indicated a large percentage of bucks.

Farther down the river, we seated ourselves on the bank of the river opposite what local residents have often termed the "Big Lick." We had been there less than five minutes when two deer appeared and spent some time at the lick. A screen of tree branches prevented photographs being taken. After these deer had left we moved our location, taking up a station directly across from the lick. We were in plain sight and but thirty-two yards away. During a wait of a little over two hours we were rewarded by seeing a dozen deer come to the lick. Several of the animals saw us, and at each click of the camera the head was raised and the ears pointed forward, and yet there was no sign of fright. The climax came when at 10:15 in the morning two bucks and two does came to the lick, and spent five or ten minutes there.

The antlers of the bucks at this time of the year were from four to six inches in length, the knob at the end just beginning to indicate a branching. Bucks were most in evidence at this lick, only three or four does being seen.

Probably nowhere in the state is it possible to find so many deer, or find them so tame, as in this Trinity refuge. Evidently the refuge forms a great game farm where the animals increase in numbers and then spread out to surrounding localities, furnishing food and sport for all those who wish.

Natural conditions are of the best. Artificial means may, however, improve the annual crop. Deer in this breeding area, although safe from attack by man, are still subject to attack by many predatory animals. Some work is being done by the United States Department of Agriculture to reduce the number of coyotes and mountain lions, but still more work along this line needs to be done. Refuges of this kind, even though they have proved their worth, should be more than refuges on paper. They need to be well guarded and at the same time made more effective by the destruction of predatory animals. Attention needs to be paid also to every means of making the deer more prolific.

It may be that salt bricks placed in certain parts of the refuge would aid in keeping the animals in good health. This area, at several different times, has been ravaged by a disease which killed off great numbers of deer. Investigations as to the cause and the cure of this disease would also be of value in increasing the effectiveness of the area. During certain years winter feeding might prove worth while.

The creation of the Trinity Game Refuge has assured a permanent supply of big game to Trinity County and is demonstrating to the whole state the benefits which accrue as a direct result of proper game protection.