

that often happens and luck was again with us to an unusual extent, for the nest contained nine beautiful eggs varying from fresh to about half incubated. The birds were somewhat more shy than those in the case of the first nest, never coming nearer than six feet but squeaking continually.

This nest closely resembles the first one, but is a trifle larger, measuring sixteen and a half inches in circumference by four inches in depth. The inner dimensions, however, are slightly smaller, measuring one and a half by one and a half inches. It was suspended from the lower side of the branch, most insecurely as usual, fifteen feet from the trunk of the tree and eighteen feet from the ground. The eggs are quite different in coloring from those of the first set, the ground being a perceptible reddish white strongly clouded about the larger ends with fine red-brown dots. Several have a fine line of the same color, as if made with a pen. They are very slightly larger than the first set, measuring .60 by .42 inches.

The only other occupied nest found was situated fifty feet up in a fir tree in the middle of a large grove. In size and construction it is similar to the two above mentioned, but the young had only recently vacated it. Curiously enough they had scarcely damaged it at all.

To try to arrive at any definite conclusions concerning the nesting habits of these birds would be hardly wise, owing to lack of sufficient data, but let us hope to hear from others on the subject. However, it seems extremely likely that my nests with eggs were unusually low ones, the fifty foot one being nearer the average as the birds are almost always high up in the trees. This seems the more probable since both my brother and I had found nests that had fallen to the ground that could not have come from lower than sixty feet, and possibly were built at a much greater height.

That they build a great many decoy nests is beyond a doubt. Indeed I have found two in one tree. I watched a bird working on one of these nests in the middle of July but could find no trace of an occupied nest in the vicinity. These extra nests are built of the same material as the occupied nests, but are not so neat in their construction nor are they so large.

The texture of the egg shell is the most delicate that I have ever seen, not even excepting eggs of the hummers, the drill sinking into the shell at the slightest touch. In spite of such a nerve-destroying process, however, I am happy to say that all seventeen of the eggs are prepared in perfect condition.

I feel positive that two broods are reared in a season, on account of the dates of my nests as well as owing to the fact that old birds with their troops of young may be seen at intervals between the middle of May and the first of July.

Tacoma, Washington.

A Set of Abnormally Large Eggs of the Golden Eagle

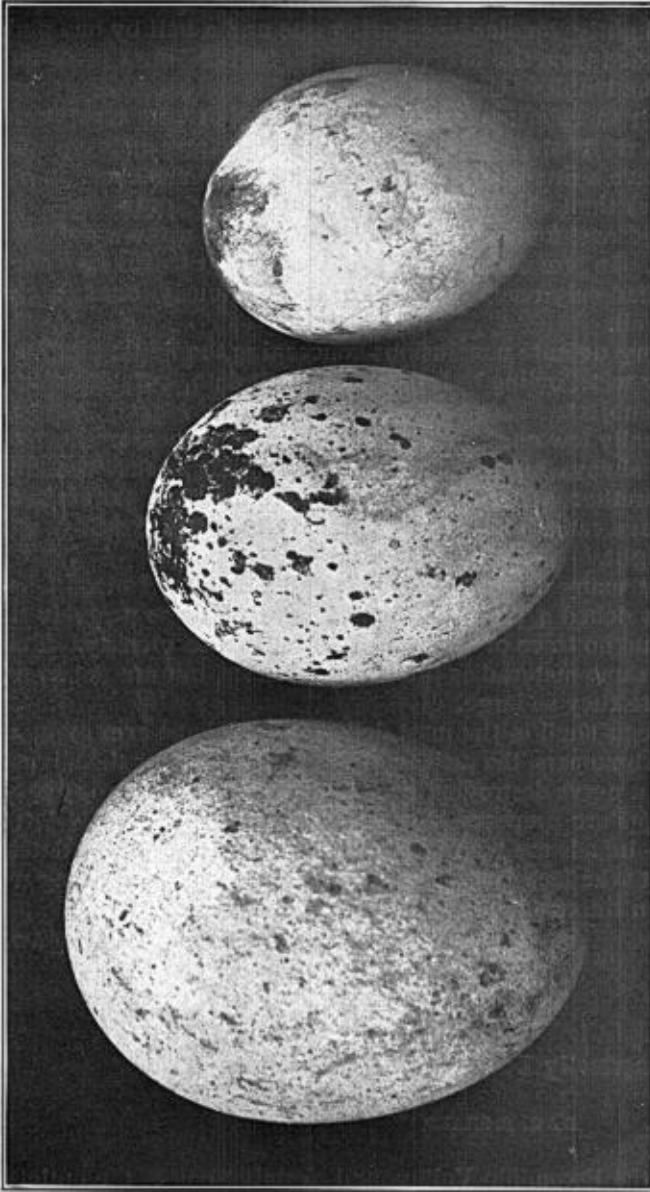
BY C. S. SHARP

A FEW miles west of the Escondido Valley, and forming one of the outlets to the coast, is a picturesque canyon, officially known, I believe, as Aliso Canyon; locally by every resident within a mile of it and among the unregenerate youth of this place as "Spook" Canyon, from the fact that the spiritualists of Escondido and vicinity hold an annual camp meeting in its groves. Through

it runs the county road and also, in winter, the flood waters of what we are pleased to call the Escondido River.

The canyon is of varying width, in places narrowing down to leave barely room for river and road, and then opens out into pretty bits of pasture with groves of live oak, a few small sycamore saplings, and scattered willows along the rocky river bed. In places the river bed itself is almost obscured by tall brush. The hills on either side are high and steep, and are covered with sage, wild lilac, and grease-wood, with occasional clumps of manzanita, very dense and high on the unexposed slopes. Huge rock piles are found here and there, and enormous boulders rise above the brush, becoming near the summit abrupt ledges of varying height.

On one of these ledges, which appears from the road, 200 feet below, to be two or three boulders piled on top of each other, in a corner formed by natural cleavage of the rock, is an old eagle's nest that was last occupied in 1897, when two young birds were taken from it. A few hundred yards below, an immense ledge, forming the whole face of the hill, rises above the brush and trees at about 150 feet above the river, extending upwards for perhaps an equal distance as smooth rock-faces, jutting boulders, and moss-covered terraces, with an extreme length of



UPPER EGG, WESTERN RED-TAILED HAWK; MIDDLE, AND LOWER,
GOLDEN EAGLE

about 200 yards. On the lower part of this, and about fifty feet from the bottom, are two nests. One of these nests is above and a little to the left of the other,

and so close that one can nearly reach the upper while standing in the lower nest.

The upper nest is on a projecting spur of rock, and was built in 1902 but never occupied; the lower is in a corner formed by natural cleavage, and it is an immense structure of sticks, grass, Spanish bayonet, and cornstalks—a very old nest, but until this year long unoccupied.

Ever since 1898 I have made three or four trips to these nests each spring at intervals of two or three weeks, but although birds were frequently seen, all my efforts were fruitless until March 12th of this year, when my patience and perseverance had their reward, and I had the very great pleasure of taking from the lower nest of the two a set of eggs which I believe to be the largest eagle's eggs on record. This was the first time eagles (*Aquila chrysaetos*) had nested in the canyon since 1897. It was evident that they were in the vicinity for at least one was near by on every trip that I made, but always high in air and generally to the southward.

My first trip to "Spook" Canyon this year was later than usual. No birds were seen in the vicinity, and the nests appeared as usual. I had carried a big coil of rope up the hill to the first and back again, and had commenced the ascent of the ledge to the others with reluctance, fully prepared for my usual disappointment, but this time the Fates were with me. When I was within a few feet of the lower nest, only separated from it by a projecting ledge of rock which hid it from view, there was a wild flutter of wings, and the biggest and blackest eagle that I ever saw sailed out from almost under my nose and glided away across the canyon. It is quite pleasing to have little surprises like that when one crawling up a slippery, moss-covered ledge, but that sort of surprise did not trouble me much. The eggs were a greater and more interesting one, and in another minute I was sitting in the nest chuckling to myself over my find, and wondering what the eagle would do if she returned. But she left me in peace, and it is perhaps fortunate for some of us that our Aquilan friends do not come back to us at times.

The eggs seemed pretty large to me while I was packing them, but it was not until they were placed beside others of my series that I realized how much beyond the average they were in size. I can find no published record of anything at all approximating them, and measurements that I have been able to obtain of large eggs in the collections of many well-known ornithologists fall far short of their dimensions. Abnormal eggs are not so common even among the smaller birds as to be uninteresting, and among the Raptors they are rare—seemingly less so, however, among the eagles (*Aquila*) for with them one egg much larger than the others in a set is rather frequently met with, but for both eggs to be of abnormal size is rare indeed.

Major Bendire and Mr. Davie give the average size of the egg of the golden eagle as about 2.93 by 2.30 inches. The largest set of which I have been able to obtain measurements out of about 300 sets in the collections of Messrs. C. W. Crandall, J. L. Childs, A. M. Ingersoll, A. W. Jonnson, J. B. Preston, A. E. Price, William Steinbeck, and H. R. Taylor, and in my own series, is a remarkable shaped set in the collection of Mr. A. W. Johnson, taken in Spain, and measuring 3.26 by 2.34, and 3.23 by 2.34 inches respectively. Mr. Johnson also informs me that he has a record of a Scotch taken egg, now in England, measuring 3.26 by 2.55 inches. These three eggs and one in a set of two in Mr. Price's collection measuring 3.23 by 2.44 inches, are the largest eggs I have so far heard of, and they are the only ones that exceed 3.20 inches in length.

Mr. Johnson, whose large series contains besides his California sets, many from Scotland, Spain, Lapland, Bulgaria and other countries, writes me that he finds an egg that measures 3.10 in length very large. Eggs above 3.15 are very except-

ional. I am quite able to agree with him, for in the large series that I have referred to I have found only twenty-two eggs that measured 3.10 or more in length, and of those, fifteen exceeded 3.15, four of these going beyond 3.20 inches. From these data the mammoth proportions of my eggs may perhaps be better appreciated. They measure 3.47 by 2.62, and 3.37 by 2.64 inches. Plain figures, while doubtless plain facts, are less readily digested than a more tangible object lesson, so I have included in a photograph for comparison, a large egg of a western red-tailed hawk, measuring 2.52 by 2.00, an average golden eagle's egg measuring 2.97 by 2.23, and the larger of my large set measuring 3.47 by 2.62. From the photograph and measurements, it will be seen that the large eagle's egg is as much larger than the average as that is larger than a red-tail's egg.

In coloration, as appears in the photograph, the larger egg is the more lightly marked. The markings appear more as ingrained shell markings of faint lavender and umber, giving the egg the appearance of having a very dirty white ground color. There are a few superficial spots and small splashes of a darker shade. The smaller egg is very handsome, the markings being of a much brighter tint, making the ground appear brighter and clearer by contrast. As shown in the photograph, the markings are heavier at the small end. At the large end the markings are all nearly confluent but very faint in shade, and have more the appearance of shell markings. The intermediate blotches and splashes are very bright. In both eggs the shell is very smooth, with few granulations. Incubation had just commenced and was equal in both eggs.

One naturally wonders why there should be so much difference between these eggs and others taken from the same nests and presumably the product of the same birds. A set of two taken from a "series of five" nests occupied by this pair of birds, are about average eggs, measuring 2.97 by 2.23 and 2.93 by 2.24 inches. The larger is the central egg in the photograph. The markings are strongly defined blotches and spots of a dark reddish brown and almost wholly at the larger end, no lavender shade appearing anywhere. The other egg is absolutely unmarked.

The "Spook" Canyon bird was unusually dark seeming almost black, and very large—in fact the largest and blackest eagle I ever saw, and in perfect plumage. I had a good view of her when she left the nest for I was not five feet from her. Then after I had left the nest and was on the ground below not more than fifty feet away she did what no eagle of my acquaintance ever did before, came back to the nest and settled down on it again with head up watching me and making a curious clucking, like the common call of the Cooper hawk, which she repeated a dozen times.

Escondido, California.

An Ornithological Comparison of the Pajaro Valley in California with Sioux County in Nebraska

BY J. S. HUNTER

DURING the summer of 1903 I was located in the Pajaro valley in Santa Cruz county, and it was with great interest that I compared ornithological conditions there with those in Sioux county in northwest Nebraska.

Sioux county is bordered on the north by South Dakota and on the west by