

## FROM FIELD AND STUDY

**Some Diving Notes on Cormorants.**—On June 12, 1910, while collecting along a stretch of rocky coast line in a twenty foot skiff, with Joe Francisco, my boatman, I took some interesting notes on the diving of the Brandt Cormorant (*Phalacrocorax penicillatus*), and Baird Cormorant (*Phalacrocorax pelagicus resplendens*).

We were one and one-half miles southwest from Trinidad, Humboldt County, California, and about one-half mile off shore. Mr. Francisco had set a net the night before, near a blind rock and in twenty fathoms of water. We were taking in the net when a Brandt Cormorant came to the surface in its meshes, then a second one and a third. Although the Baird Cormorants were common everywhere on the ocean, there were none in the net. On closely questioning the fisherman, he informed me Brandt Cormorants were caught almost daily in from five to thirty fathoms of water, while using the deep water nets, but were never taken in over forty fathoms of water; while the Baird Cormorant, (I had taught him the difference between the two species), were often taken in as much as eighty fathoms of water.

I saw several Baird Cormorants rise to the surface of the water with pieces of kelp in their bills, in places where Joe informed me the water was over eighty fathoms deep. Brandt Cormorants were not seen far off shore, though they were common amongst the rocks near shore. Is it a superiority in diving, or a desire to obtain a certain kind of food that prompts the Baird Cormorants to go down deeper than Brandt Cormorants, while on their feeding grounds?—C. I. CLAY.

**The Black Duck in California.**—The Museum of Vertebrate Zoology of the University of California is the recipient of a specimen of the Black Duck (*Anas rubripes*). It is evidently a female, though the sex was not recorded from dissection, and is excellently mounted. It was transmitted to the Museum by Mr. Vernon Shepherd, a taxidermist of San Francisco, who received the bird from a hunter by the name of Spooner, who shot it at Willows, Glenn County, California, February 1, 1911. The specimen is No. 17198 of the Museum's department of birds.—J. Grinnell.

**Golden Eagle and Dog.**—The following eagle story was told to me by Mr. A. J. Nevraumont, of the California Seed Co., San Francisco, California, and both Mr. Nevraumont and his brother-in-law, who was with him at the time, are willing to take their oaths that it is true in every detail. And I might say parenthetically that they trust me implicitly to get the details straight. And I hope I do.

On Christmas day, 1909, Mr. Nevraumont and his brother-in-law took a walk in the redwood grove near San Rafael, Marin County, California, and had with them a small white dog. As they were strolling along, enjoying the balmy softness of a California Christmas among the beautiful evergreen redwood trees they were startled by the sound of rushing wings, and saw that an eagle was swooping down from some point of vantage upon the white dog. As the bird descended it touched a dead branch which broke off and came down on top of it just as it struck at the little dog. The branch was so heavy and the blow from it was so great that the eagle was partially stunned, and Mr. Nevraumont managed to jump on the bird and save his dog from harm. He killed the eagle with a club, and showed it to several people. If he had known at the time that my brother and I were interested in birds he would have presented it to us, he says, but being ignorant of our especial hobby he naturally did not do so. From his description it must have been a Golden Eagle. I have seen this species on rare occasions in this county, but never in the vicinity of San Rafael.—JOSEPH MAILLIARD.

**A Method of Tree Climbing.**—Collecting a set of four Pileated Woodpecker's eggs from a stump five feet in diameter at the base; nest forty-five feet from the ground.

First a rod of one-fourth inch iron, thirteen feet long is bent as shown at *a b c*, Fig. 1, with loops at *a*, *b*, and *c*, and laid on the ground around the tree.

Second, a five-eighths inch rope twenty-five feet long, shown by *d e*, Fig. 1, wound spirally around the iron rod as shown, and with a loop at *l*, about six feet from end *d*, also laid on the ground.

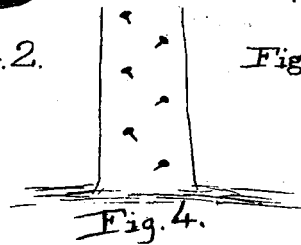
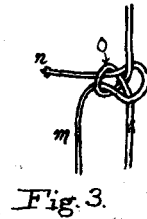
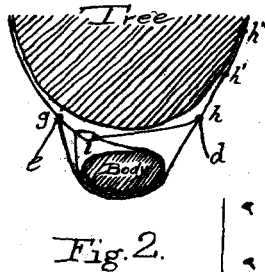
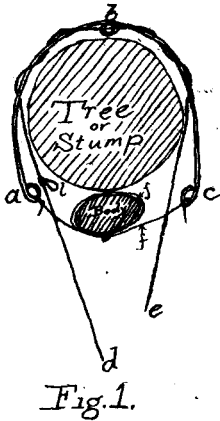
Third, six feet of clothes line tied around the waist (*f* Fig. 1.) and to the loops *a* and *c* of the iron rod.

The rope end *d* is carried around the body and fastened to the loop *l* with any suitable knot and again at *h* as shown in Fig. 2. The end *e* is also passed around the body and fastened at *g*, the knots at *g* and *h* being made as shown in Fig. 3. As the tree becomes smaller, while being ascended, the loop *o*, (Fig. 3) has to be shifted from *h* to *h'* and *h''* etc., (Fig. 2) the slack rope being taken up at *g* (Fig. 2) by pushing the part *m* through the loop *o* and pulling the end *n*

out; so that when I slipped and fell back, which occasionally happened, as it was raining hard and blowing a gale, it jerked up tight on *o* but could not get *n* out. The two ends of the iron rod were bent around behind the bark as the rod became too long.

About two hours of experimenting were necessary to figure out this combination, the reverse of everything being very simple while coming down, which took about five minutes.

Twenty-five spikes eight inches long, and a small hand axe were also taken along (in a satchel with an egg box) and driven into the stump in a zig-zag as shown in Fig. 4, each spike being about two feet higher than the last; twenty-four spikes were needed and I could not have got the eggs with twenty-three only, so that it was "cutting it rather fine", but the estimated height was forty feet; it is advisable to take more than five extra spikes, especially as they cost only a cent apiece. The iron rod of course is used to lift the rope up ahead while ascending, branches being cut or knocked off with the hand axe, which was looped to the wrist most of the time to prevent dropping it. On the south side (where the nest was) the stump was so rotten that the spikes when driven four inches into the wood, pushed right out when my weight was put on them, so climbers were useless; on the north side they just would hold my weight and that was all, but two pulled out on the way down. The whole combination is absolutely safe and I could repeat it now in twenty minutes. It is hardly more difficult than going up and down stairs. The stump, a cottonwood, was about fifty-five feet high and surrounded by ash trees of the same height, in a large swamp of about 100 acres one-fourth mile from the Illinois river and four miles south of Kerby. The swamp is heavily timbered with large cottonwoods and smaller deciduous trees of other kinds, and these waving violently in the wind finally produced a sensation that was probably like sea-sickness, but deep-breathing stopped it very quickly. Also, when about ten feet below the nest the old birds appeared for the first time that day (the nest was



located the day before by seeing one bird fly to it when the other came out and flew away) and set up all kinds of "cat-calls" that very quickly dispelled any remaining dizziness.

The nest was about fifteen inches deep, the floor of it being boat-shaped, about ten inches long and five inches wide, and chipped out of the soft sap wood, so that its length was parallel with the side of the tree. The day before I staid near it for about an hour trying to devise some way to reach it and during this time the birds changed places once and occasionally hammered inside the nest, but did not throw anything out. The ground below was covered with fresh chips but the entrance was old and dark colored. One bird, probably the male, made most of the noise, while the other seemed very much subdued and depressed, and the same was noticed around a nest that I found in 1901. In each case the noisy bird was first heard, apparently about half a mile away and approaching very swiftly with its loud, clear calls; then lighting on a tree near by and keeping up a soft, conversational "clu-clu-clu, clu-clu-clu", for several minutes till the other bird came out and flew silently away, when number one flew to the nest and looked in (while clinging to the outside just below the entrance) and then back out again and all around for six or eight times before going in. The soft notes are like "chuck" with the hard "ck" taken off and I have heard the same complete combination several times, apparently in about one place in another large swamp, but cannot find any nest, yet feel sure that a nest must be there as all of the conditions are just right for it.

The four eggs were about one-fourth incubated. It was rather difficult to reach half way around the tree and cut out the hollow, and it is very probable that if my father had not in the past given me endless instruction in all kinds of knots, the nest would never have been reached.

Some oologists talk about hiring climbers, but I not only cannot get anyone to climb a tree, but find it necessary to go alone, as anyone who goes along in case of accident, throws so much "cold water" that it completely extinguishes my desire to climb. It might be well, if any large limb were to be encountered, to take a sharp hand saw.—CHARLES W. BOWLES.