found.

- 17 Corvus americanus.-A few seen at west side and 18 five miles east of the summit, feeding on the myriads of grasshoppers that were present.
- 18 Sturnella magna neglecta.-Common in the mountain meadows.
- 19 Icterus cucullatus nelsoni.-Common at western base and on the top of the mountains.
- 20 Scolecophagus cyanocephalus..-A few young of the year seen.
- 21 Carpodacus purpurcus californicus.-Scarce. Very shy and difficult to approach.
- 22 Carpodacus mexicanus frontalis.-A small flock and a few pairs seen near an orchard. Four fresh eggs taken on the 19th.
- 23 Chondestes grammacus strigatus.-Fairly common.
- 24 Spizella socialis arizonæ.-A few pairs seen.
- 25 Junco hyemalis thurberi.-Abundant. Nestlings and new nests observed on the 19th.
- 26 Pipilo maculatus megalonyx.-Common. Fresh eggs collected.

- 27 Zamelodia melanocephala.- Fairly common. Young were seen, just able to fly.
- 28 Cyanospiza amæna.-Common. Probably breeds.
- 29 *Piranga ludoviciana.*-Few seen. A male was taken in breeding plumage and with greatly enlarged testes.
- 30 Petrochelidon lunifrons.-A few pair.
- 31 *Tachycineta thalassina.* Common. Breeding in natural cavity of trees.
- 32 Phainopepla nitens.-Common at western base of mountains where they were eating alder berries. One nest in course of construction was found.
- 33 Vireo gilvus.-Common at summit.
- 34 Dendroica æstiva.-Fairly common.
- 35 Troglodytes aedon aztecus.-Very abundant, more than twenty nests containing young being observed.
- 36 Certhia familiaris occidentalis.-Rare.
- 37 Sitta carolinensis aculeata.-Common.
- 38 Parus inornatus.-A large flock noted on the mountain side.
- 39 Parus gambeli.-Common.
- 40 Sialia mexicana occidentalis.-Common. Set of four eggs taken on the 17th.

Observations on the American Raven in Southern California.

BY C. B. LINTON, WHITTIER, CAL.

URING my collecting experience I have found the American Raven (Corvus corax sinuatus) nesting in almost every range of foot-hills in Los Angeles and neighboring counties. Although it is being continually driven deeper into the wildest and most inaccessible portions of its former haunts by the encroachment of civilization, it is still abundant in certain localities. In the Puente hills of Los Angeles County I have taken numerous sets of eggs of the American Raven in the past four years. A tramp of a day or two through this range will reveal to the collector dozens of large, compact nests now unused excepting by an occasional Great Horned Owl or Western Redtail, whereas they were formerly occupied by ravens.

In February, 1895, I found my first pair of ravens putting the finishing touches to a huge nest built on a ledge of rock about fifty feet from the bottom of a ninety foot cliff. I was greatly discouraged at first as this nest seemed inaccessible, but on March 14 I persuaded a friend to climb to it, and he being experienced in the art, reached the nest without difficulty and secured a handsome set of five fresh eggs, which measured 2.09x1.37; 2.06x1.37; 2.04x1.35; 1.88x1.31 and 1.79x1.28. In color they bluish-green, heavily covered were with blotches of dark brown and quite similar to eggs of the American Crow. A set of four slightly incubated eggs was taken from this nest on March 28 and I procured another set of six eggs from a neighboring cliff on April 20, evidently from the same pair of birds. The eggs of this set vary greatly in size and coloration, one being very small and slightly marked.

I have noticed quite an oddity inthree sets of eggs taken from a pair of birds in 1897. Each egg has a "knob" on the larger end, making the series quite a curiosity, and I have noticed the same deformity in a set taken this season (1899) from a new nest near the

68

site of the old ones, the new nest being composed of the remnants of the several old ones, with some additions. The raven is very persistent and I have known one pair to lay four sets of eggs in one season and would probably have laid a fifth but unfortunately the nest was destroyed.

I have occasionally found them nesting in the steep banks of deep, narrow gulches, but usually they prefer a large gravel cliff in some secluded part of the hills, and in every instance the nests have been lined with sheep's wool gathered from the numerous bands of sheep feeding in the vicinity. I had intended to pay my respects to the ravens this year but have been otherwise engaged. However I procured a handsome set of Duck Hawk ^{1/3} from a deserted raven's nest on April 5, 1899, and feel that since I cannot help it, that I should allow my birds a short vacation.

400 400 400

FURTHER COMMUNICATIONS ON

BIRD PROTECTION.

"CIRCUMSTANCES ALTER CASES."

To My Fellow Collectors:—

"The science of ornithology demands the collecting of any reasonable number of birds to further its ends, and personally I have taken the lives of birds with as much zeal as any, when the skins were desired for actual use," I believe that I stand on the same ground as that defined by Mr. Barlow in our last BULLE-TIN. I am also in sympathy with the position . taken by Dr. Coues in his editorial in April Osprey. To put the matter in my own words, I believe in collecting all the scientific specimens, birds' skins and eggs included, that we may want to use. I believe in series and large series. If, of one species, we can use 100 mammals or 300 fish, we had better take them. If specimens are to be compared, if we can learn anything from them, or if we can pass them on to another who is in need of the material, I believe we are justified in collecting in any quantity to supply that demand. I do not believe in collecting for the milliner or taking birds in nesting timewhen the same plumages may be had before nesting. I have refrained from shooting many birds because I thought they

had nests and I have shot birds when I knew they had eggs or young. "Circumstances alter cases."

In the numerous letters which have appeared in the last six months concerning "bird slaughter" and "egg hogging", there seem to be about three grounds upon which the various authors condemn collecting. It is wrong to kill birds and take their eggs because (1) it is cruel; (2) it is of no use or scientific benefit or (3) it will exterminate the species. If it is cruel to kill wild birds and take their eggs then we had better stop killing and robbing the domestic birds. I do not agree with the Rev. Mr. Henninger that "the forcing a poor Flicker to lay 71 eggs in 73 days" is cruel. How many eggs is a poor barn-yard fowl forced to lay in a year? Is it not cruel to *force* her to hatch duck's eggs? It is not commonly so considered. The question of cruelty is one which we cannot consider in this connection as it is a matter of personal opinion and not subject to discussion any more than religious dogmas are.

The value of large series of eggs from a single species is largely a matter of personal opinion. For my part I think as much can be learned from 150 eggs of the Red-tailed Hawk as from an egg each of 150 species of birds. In this connection it is hardly worth while to call attention to the indignation of F. H. K. in his review of Eggs of Native Pennsylvania Birds, Osprey for November, 1898, where he condemns the collecting of more than? eggs of a species and of oological abnormalities altogether. The number of sets of a species which you will take must be regulated by yourself and decided without the help of the protectionist. Everyone learns by collecting a few eggs for himself. There is one class of collectors which should certainly be suppressed and they have been well dealt with, in writing, by Mr. Witmer Stone. See Auk XVI, p. 55. For the boys who gather eggs as they would pretty shells and the man who strives to possess the largest collection in town, we have no use. Neither can we consider such articles as the one asking "Hast thou named all the birds without a gun"? We don't do it that way on the Pacific Coastin The A. O. U. says it doesn't go!

In the possible extermination of birds we find the first point which the extreme bird protectionists have made. If we are seriously reducing the bird ranks it is time to call a halt and every sincere ornithologist will obey the command. Let us see what evidence we have