

orado up to the present time, and brings me to the point which I wish most to emphasize.

A glance at the map will show that by far the greater part of ornithological work in Colorado has been restricted to the central portion of the state: a strip running from the northern to the southern boundary and comprising less than a third of our total area. This leaves the boundaries of our state practically untouched on all four sides, with the exception of the work done by Smith and Ferril, and that done by Warren in the southeast corner; and the surprising discoveries made by these gentlemen, is proof sufficient that it is in these remote parts of the state that our work from now on should be done and that from these places will come the most important additions to our information regarding Colorado ornithology.

No better illustration of this fact could be found than that mentioned by Cooke where he states that in the collection of Frank Bond at Cheyenne, Wyoming, are six species of birds, taken by him at Cheyenne, less than ten miles from the Colorado line that have not yet been recorded from this state.

The eastern base of the foothills and much of the mountainous central portion of the state, were quite thoroly worked years ago; yet I think that most of us must plead guilty of doing over and over the work that has been so well done by those who were here before us. I do not mean to imply that our time is wasted in studying sections that have been thoroly studied, for there is always a great deal to be learned no matter how carefully the ground has been gone over before; but I do maintain that our efforts would be conducive of a greater number of, and more important, discoveries if we turned our attention to those sections whose ornithology has been neglected.

Does this condition of affairs not furnish food for reflection and would it not be a wise move for the active ornithologists of the state to get together and formulate a definite line of work whereby the little studied portions of the state will receive the attention we are now bestowing upon that portion of the state whose ornithology is long past the elementary stage of development?

Denver, Colorado.

FROM FIELD AND STUDY

Microscopic Subspecies: a Reply.—Mr. C. B. Linton (CONDOR, X, 181) raises again the question of the indentification of closely related subspecies taken from a boundary zone—neutral territory where the two intergrade. He also opens a question for answer that is practically the old question so often raised by the beginner in ornithology—"how are we going to name a bird correctly?" To this there is but one answer, I think, and I will endeavor to illustrate.

To begin with, Mr. Linton's caption "Microscopic" is hardly applicable as it stands; he does not state that the subspecific differences recognized between the *types* of the races mentioned are microscopic, but that the differences evident in the particular specimens he had in hand were microscopic; hence he is not warranted in applying the adjective to the race or its types, but should confine it to the specimens he refers to. That a recognizable difference exists between the types he has the authority of the A. O. U. Committee for. Take for instance the colors blue and green; they are certainly distinct when typical, but when we get to the greenish-blues and bluish-greens, there comes a point when no one can say positively what the color is. The same is true of subspecies; the types may be very different, but there comes a point when a specimen must be called intermediate—where one form grades into the other and it is impossible to state definitely to which race the specimen shall be referred.

It is also known that individuals of one race may be taken in the type locality of a closely related race. These individuals wander away from home. An Englishman may go to New York, yet he is still an Englishman!

This brings us to the answer to Mr. Linton's question: It is not always possible to definitely

name an intermediate between two races even tho the types may be very different; the best that can be done is to label the specimen an intermediate, and note to which race it appears most closely related; and it is not unusual to find stragglers of one race on the breeding grounds of a closely related race in winter, as he found *Vireo huttoni oberholseri* and *Vireo huttoni* together in February and March; this is a common occurrence in the genus *Junco* (cf. Kaeding, CONDOR, I, 79).—H. B. KAEDING, *Los Angeles, Calif.*

Some Interesting Colorado Records.—The following records of species but little known to Colorado were made by Mr. J. W. Frey, of Salida, Chaffee County, Colorado, who collected quite faithfully there in the spring of 1908. Salida is situated in a wide valley on the Arkansas River, west of the Grand Canyon of the Arkansas, and with the Continental Divide to the west, and the Sangre de Christo Range to the south. The altitude is a little over 7,000 feet.

Nycticorax violaceus. Yellow-crowned Night Heron. "Killed on Big Arkansas River one mile north of Salida out of a bunch of five, the only one I got and altho I hunted them never saw or heard of the other four. This one was brought to me by a boy whose father killed it that morning. I bought it from him and went hunting for the rest as soon as I could get ready." (Copy of Frey's memoranda.) The label on the specimen, which was a female, gives the date as May 1, 1908. This is the second record for Colorado, and the only one of which we have the exact data. W. W. Cooke, in his "Birds of Colorado," says, "The only recorded specimen is the one in Mrs. Maxwell's collection, and that is known to have been taken in Colorado, but where cannot now be learned": not as satisfactory a record as it might be, which makes the present all the more welcome. The specimen is now in the collection of Colorado College, at Colorado Springs, and was examined by Mr. C. E. Aiken and Mr. W. L. Sclater, as well as by myself.

Dolichonyx oryzivorus. Bobolink. Frey saw ten birds at Salida, May 14, 1908, and secured four, all males. This is a new locality for this species in this state. The bird seems to be very peculiarly and locally distributed in Colorado.

Zonotrichia coronata. Golden-crowned Sparrow. Frey took one April 19, 1908, at Salida, which makes the second record for Colorado. I have the skin in my possession at the present time.—EDWARD R. WARREN, *Colorado Springs, Colorado.*

Correction of Errors.—Two errors in the List of the Birds of Mesa County, which appeared in the July CONDOR, have been called to my attention and I wish to correct them.

Speaking of the Canyon Wren, I credited the only absolute specimen to Mr. Horace G. Smith of the State Historical Society. This record was furnished me by Mr. Smith, but the specimen itself was taken by Mr. Will C. Ferril, of the same society, to whom the credit of the record should be given.

The technical name of the Broad-tailed Hummingbird should read *Selasphorus platycercus* instead of *Trochilus platycercus*.—ROBERT B. ROCKWELL, *Denver, Colorado.*

Tapeworm Epidemic among Washington Seabirds.—Pacific Beach is situated on the northwest coast of Washington, about midway between Cape Elizabeth and Gray's Harbor, and here I located for a short vacation beginning August 20, 1907.

In conversation that evening with the landlord of the small hotel our talk soon drifted to birds, and he asked me to explain the occurrence of numerous birds he had found washed up on the beach during the past week. They were all either dead or dying, but what puzzled him was that they were apparently uninjured in any way.

Next morning I set out at once to verify the above statements, and found matters to be even more interesting than I had expected. In a walk of about three miles along the shore I found some thirty dead or dying birds of the following species: Slender-billed Shearwater (*Puffinus tenuirostris*), White-winged Scoter (*Oidemia deglandi*), Surf Scoter (*Oidemia perspicillata*), Cassin Auklet (*Ptychoramphus aleuticus*), and California Murre (*Uria troile californica*). The shearwaters were by far the most extensive sufferers, next the White-winged Scoters, and so on down to the California Murre of which species I found only one. This was probably owing to the relative numbers of the different birds, the Murre for instance probably being a straggler from the bird rocks on the north or south. It was evident that the epidemic had only recently commenced as the birds found were all comparatively fresh and the ocean was rather plentifully dotted with sick birds, some of them so close in as to be rolled over and over in the breakers.

An external examination showed the plumage to be in perfect condition with no signs of wounds, but the extreme emaciation of the birds showed the cause to be more deeply seated. After making a skin of one of the shearwaters, an examination of the body at once showed the trouble: the intestines from end to end were packed solid with tapeworms. These worms were about three inches long, rather slender, and marked with alternate rings of white and brownish-black. There were many hundreds of the disgusting parasites in every bird, making death from