

59. *Dendroica pensylvanica*. CHESTNUT-SIDED WARBLER.—Common, extending up to the highest summits of the Taconic Mts.

60. *Dendroica blackburniæ*. BLACKBURNIAN WARBLER.—But one specimen observed, a male in full song, in a grove of white pines in Sheffield, June 20.

61. *Dendroica virens*. BLACK-THROATED GREEN WARBLER.—Not rare in pine woods.

62. *Seiurus aurocapillus*. GOLDEN-CROWNED THRUSH.—Common wherever there are woods.

63. *Seiurus noveboracensis*. WATER-THRUSH.—One observed, June 17, on the edge of a small stream near the village of Sheffield. Although the place was often visited afterward, I failed to see or hear the bird again. I did not meet with this species later in northern Berkshire.

64. *Geothlypis trichas*. MARYLAND YELLOW-THROAT.—Common.

65. *Icteria virens*. YELLOW-BREADED CHAT.—One pair, Sheffield.

66. *Sylvania canadensis*. CANADIAN WARBLER.—Not uncommon on the Taconic Mts. of southwestern Berkshire and Litchfield Co., Conn.

67. *Setophaga ruticilla*. AMERICAN REDSTART.—Rare.

68. *Galeoscoptes carolinensis*. CATBIRD.—Common.

69. *Harporhynchus rufus*. BROWN THRASHER.—Not rare, although not nearly so common as in eastern Massachusetts.

70. *Troglodytes ædon*. HOUSE WREN.—Common.

71. *Parus atricapillus*. CHICKADEE.—Not many were seen.

72. *Turdus mustelinus*. WOOD THRUSH.—Common.

73. *Turdus fuscescens*. WILSON'S THRUSH.—Common. A few observed well up towards the summit of the Dome.

74. *Turdus aonalaschkæ pallasii*. EASTERN HERMIT THRUSH.—Common on the Taconic Mountains where it replaces to a great extent the Wood Thrush which is found only sparingly on the mountain sides. Also found to be abundant on Bear Mt., Salisbury, Conn.

75. *Merula migratoria*. AMERICAN ROBIN.—Abundant.

76. *Sialia sialis*. BLUEBIRD.—Common.

(To be continued.)

REMARKS UPON ABNORMAL COLORING OF PLUMAGE OBSERVED IN SEVERAL SPECIES OF BIRDS.

BY GEO. N. LAWRENCE.

As it might be of interest and call forth similar observations by others, I have concluded to put on record the instances that have

come under my notice of abnormal coloring in several species of birds. Mr. Ruthven Deane (Vol. I, No. 1, of the Bulletin of the Nuttall Orn. Club) has an interesting paper on albinism and melanism among North American Birds. The cases to which I am about to call attention would seem to proceed from quite a different cause from that producing albinism or melanism.

In 1862 (Ann. Lyc. of Nat. Hist., Vol. VII, p. 475) I described as new a Parrot from Panama, under the name of *Psittovius subcæruleus*; this specimen, in its general plumage, is of quite a uniform pale blue, and in color differs from any other American Parrot.

When Dr. Otto Finsch of the Bremen Museum was preparing his great work on the Parrots ('Die Papageien') published in 1865, he requested to see certain specimens of the family in my collection; with this I complied, sending the above-named specimen with others. At that time he considered *P. subcæruleus* to be a valid species and gave a figure of it in his book.

In 1871 (Ibis, p. 94) Mr. Salvin says of this specimen: "Dr. Finsch considers this bird to belong to a good species. For my own part, without having seen the original specimen, I cannot but think that the blue coloring of the plumage is accidental, and due to a deficiency in the yellow element of the normally green color of the feathers. Mr. McLeannan, who shot the specimen from which Mr. Lawrence took his description (the only one, I believe, that has ever been obtained) considered it only a variety of *B. tovi*, with individuals of which species he found it associating. I notice that in some specimens in our series of *B. tovi*, the feathers of the back are bluer than in others. *B. subcærulea* may only show an extreme development of this tendency."

Several years have elapsed since this specimen was described, and no similar ones have been obtained.

Mr. Salvin has offered two plausible theories to account for the peculiar plumage of this Parrot.

Since then, what I consider to be a very similar case, has come immediately under my notice, which induces me to think there is a cause for the last theory advanced by Mr. Salvin. A brood of Canary Birds was raised by a member of my family, in which there was a great disparity of colors. The male parent bird was of a very light yellow, with pure white wings and tail, the female was of a dark greenish color (of the variety known as

green Canaries). One of the brood was entirely white, the other three were all of the dark green color of the mother, without a particle of white in their plumage.

I recollect that the idea then occurred to me, that all the white element of color from the male was concentrated in one individual of the brood, which should have been disseminated to some extent among the others. I did not consider the white bird to be an albino, and as it was very beautiful we intended keeping it, supposing it to be a male, but soon after being fully fledged, it unfortunately escaped. The others we thought were probably females, and having no claims to beauty they were given away.

For the case of the Parrot to be parallel to that of the Canaries, all the others of the brood should have been without any blue color, but that they were so can only be a matter of conjecture.

Another instance of the blue color being predominant, is that of a specimen of *Vireolanus* which was sent me from the Smithsonian Institution some years ago, as possibly a new species. I found it to be an abnormally colored example of *V. pulchellus*. The usual plumage of this species is as follows: above of a rather light clear green; the head and hind neck light blue; the under plumage of a pale yellowish green; the throat and inner margins of the quills pale yellow. The specimen under examination is of a uniform light blue color above, and of a pale whitish blue below; the throat and inner margins of the quills whitish. This seems similar to the two cases above mentioned.

For quite a long time I have had in my possession an example of *Procnias tersa*, which is entirely of a clear light yellow—much resembling a Canary Bird in color,—and having a few very pale dusky bars on the sides. These bars, although nearly obsolete, enabled me to determine the species, as they are a strongly marked character, in the normal plumage of both sexes. In the regular plumage of the female of this species, the only yellow color is on the abdomen and under tail coverts, the rest of the plumage being green. The male is verdigris-blue, with a white abdominal stripe, and no yellow whatever in its plumage. I can only attribute this abnormal coloring to a similar cause to that which produced it in the other cases.

I procured in Fulton Market, a specimen of *Tympanuchus americanus*, male, which was of an unusual color. The rufous coloring which exist in the neck tufts, and in some individuals

in the upper plumage, of all normally colored birds, pervades nearly the entire plumage of this specimen. All the usually light markings are tinged with bright light rufous; the entire under plumage is deep rufous; the dark bars and the under tail coverts are of the usual color; the neck tufts are deep rufous tipped with black, none of the feathers being light buff as some of them are in normally colored birds; the throat is tinged with rufous. It was in good condition, weighing $2\frac{1}{4}$ pounds. The rufous coloring of this specimen may be due to the same cause as in the preceding cases, but perhaps it is open to doubt.

The inference seems a fair one, that sometimes from some unknown cause, a certain color which is normal in a species, or in one of the parents, is concentrated in one individual of a brood, to the exclusion of it from the others.

The great change of plumage—which was a gradual one—in the bird about to be described, is due to a very different cause. Several years ago, a green Parrot was received at the Central Park Menagerie, to which Mr. Conklin called my attention, as it was marked with a few conspicuous scarlet and yellow feathers. As it was in one of their large wire enclosures, I could not examine it closely, and for some time was unable to determine the species. I found it to be an example of *Chrysotis vittata*, the body of which in its normal plumage is entirely green, except that it has a narrow band of scarlet on the front. I watched it with much interest, as I found that most of the feathers were gradually changing color. It was two or three years before it died, when Mr. Conklin sent it to me. By that time the scarlet and yellow coloring had increased so much as to occupy the entire plumage of the body, except the head and neck, and these are marked with scattering feathers of scarlet. If it had lived a little longer all its plumage would probably have been scarlet and yellow, except the wing and tail feathers. The scarlet coloring much exceeds that of the yellow; the specimen is of brilliant plumage.

Dr. A. B. Meyer has an article (Sitzungb. Kön. Preuss. Akad. Wissensch. Berlin, 1882, No. 24) on this change of plumage, which he terms “xanthochromism in Parrots.” In referring to this paper the editors of the *Ibis* (1883, p. 116) say: “Hence xanthochromism in Parrots seems, to a certain extent, to supplant the albinism of other birds.”

My opinion is, that the change is caused by the birds being in confinement.

In the Maximillian collection, now owned by the American Museum of Natural History, there is an example of a Parrot—also normally green—in which most of the feathers have changed to yellow; it is labelled "*Chrysotis amazonica* var. *domestica*." I think from the name, it is evident that Prince Maximillian considered the yellow coloring of this Parrot to be due to domestication.



NOTES ON THE BIRDS OF WHITE TOP MOUNTAIN, VIRGINIA.

BY WILLIAM C. RIVES, JR., M. D.

THE WHITE TOP and Balsam Mountains in southwestern Virginia, are the loftiest in the State, and none of equal elevation lie between them and New England. They may be regarded as forming the limit to the northward of the 'Land of the Sky,' for although wholly in Virginia, they are within a short distance of the North Carolina line and are directly adjacent to its mountain region. The altitude of White Top was given by Professor Guyot as 5530 feet, but according to the more recent observations of the U. S. Geological Survey its height is 5673 feet, and that of the Balsam (also called Mt. Rogers) 5719 feet.

The former mountain may be easily reached by means of a road which runs from Seven Mile Ford on the Norfolk and Western Railway, over its eastern shoulder into Ashe County, North Carolina. With the intention of visiting it, our party left Glade Spring, a station on the railway at the height of 2088 feet, on July 25, 1888, and arrived the same evening at Miller's, a few hundred feet below the highest point. Among the birds noticed on the journey, I caught a glimpse, while crossing the Iron Mountain about 4000 feet high, of one which appeared to be a Chestnut-sided Warbler (*Dendroica pensylvanica*). About the lower part of White Top grow many magnificent trees, oaks, sugar maples, poplars (*Liriodendron tulipifera*) of remark-