

154.—BROOK TROUT FROM MONADNOCK LAKE AND CRISTINE LAKE, NEW HAMPSHIRE.

By TABLETON H. BEAN.

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With reference to the trout recently received from Mr. Walter J. Greenwood, fish and game warden, Dublin, N. H., I have the following communication to make: These trout have also been made the subject of a letter to Mr. Richardson from Mr. J. H. Kimball, of Hillsborough, N. H.; they have been referred to, also, in the Boston Journal of March 22, under the title of "Dublin Trout;" and are also mentioned in Forest and Stream of March 27, 1884, page 170, second column, under the title "A Peculiar Fish."

After a careful examination of the individuals received from Mr. Greenwood I arrive at the conclusion that they are the common brook trout (*Salvelinus fontinalis*), differing in no respects, so far as I can see, from the usual type of the species excepting in their pale coloration and few vermilion spots—variations which I have frequently observed in trout from widely different localities. In order to aid in determining the species I record the following characters of the Monadnock Lake trout:

It is a *Salvelinus* without hyoid teeth. The gill-rakers are 15 or 16 in number; there are about 115 tubes in the lateral line, the number of rows of scales of course being much greater. The eye equals the snout in length and is contained $4\frac{1}{2}$ times in the length of the head. The maxilla reaches a little beyond the vertical from the posterior margin of the orbit and is nearly one-half as long as the head. The origin of the dorsal is nearly midway between the tip of the snout and the root of the upper caudal lobe. The length of the pectoral is one-sixth of the total without caudal. Dorsal, 10; anal, 10. Coloration, silvery gray on the upper parts, whitish below; pectorals, ventrals, and anal largely vermilion; vermilion spots on the sides, few in number.

WASHINGTON, D. C., April 5, 1884.

THE DUBLIN TROUT.

[From the Boston Journal of March 22, 1864.]

The peculiarities of Dublin trout have caused the speculations of anglers and others, during the last half century at least, and as the subject seems to be revived by the Dublin fish wardens, the following letter from Professor Agassiz, written about twenty-five years ago, will be interesting. After some male specimens were sent, as Professor Agassiz requested, he wrote that the examination of them only confirmed his previous opinion that the trout were specifically distinct,

adding that there must be others like them found elsewhere, as nature did not make a distinct species for one little locality; this last letter cannot now be found.

DEAR SIR: I duly received the two specimens of trout which you have forwarded to me. They reached Cambridge in a perfect state of preservation, and I was not a little surprised on examining them to find that they belonged to an undescribed species. I have carefully compared them to-day with all the trout occurring in the United States which I have thus far been able to secure, from Lake Superior to Labrador, and as far south as they reach, and I find them to differ specifically from all. As the specimens are all three females, I should be much obliged if you would secure some males for me. Should so-called lake herring, or whitefish, as they are also called, be found in your waters, which I suppose to be the case, I would be much obliged if you could secure some of these for me.

Allow me to close by returning my best thanks for the specimens you have sent me, which I have at once put up in my museum.—L. AGASSIZ.

CAMBRIDGE, MASS., *October 12.*

THE CRISTINE LAKE TROUT.

I have examined the trout recently received from Cristine Lake, New Hampshire, whence they were sent by Mr. S. M. Crawford, and find them to be *Salvelinus fontinalis* (Mitch.) Gill & Jor.

The proportions and other specific characters are the same as in the Monadnock Lake trout recently reported upon, but the coloration is different. The ground color of the sides and upper parts is a rich purple, the sides are profusely ornamented with crimson spots, and the pectorals, ventrals, and caudal, even now, are largely suffused with vermilion. Another peculiarity of these trout is their elegant shape.

WASHINGTON, D. C., *April 8, 1884.*

155.—SNAKES DESTRUCTIVE TO CARP.

By RUD. HESSEL.

[From letters to Prof. S. F. Baird.]

During the past few days a great many snakes have appeared at the ponds, many of which have been killed, as follows: August 4, 16; August 5, 32; August 6, 52; August 7, 32; August 8, 39; August 9, 14; August 10, 15; August 11, 21. This makes 221 snakes killed in one week.

In the smaller snakes I found from 9 to 15 young carp, and in the larger ones sometimes over 25, besides undigested skeletons of fish. They contained no frogs or tadpoles. We can, therefore, see that one