

below it and above it; the base of the fin with dark interspinal spots, and the edge of the fin again blackish. Second dorsal blue-black dashed with orange toward the base; caudal blackish, rather darker at base; anal blue-black, with orange-yellow at the base; pectoral blackish, with orange cross shades; ventrals blue-black, with some edgings of orange.

The young example is similarly marked, but has less dusky shading, the fins being mostly pale.

These specimens were obtained in a hydraulic canal above Brookville, Indiana, by Mr. Amos W. Butler, April 25, 1885.

INDIANA UNIVERSITY, *April 29, 1885.*

**ON THE OCCURRENCE OF HADROPTERUS AURANTIACUS (COPE),
IN THE FRENCH BROAD RIVER, NORTH CAROLINA.**

By TARLETON H. BEAN,
Curator of the Department of Fishes.

The National Museum has just received from Dr. J. A. Watson, of Asheville, N. C., a fine specimen of the above species.

(Accession No. 15967; catalogue No. 37175.)

The length of the example is 103 millimeters; the length to end of lateral line is 88 millimeters. The form is elongate. The caudal peduncle is somewhat deep, its depth equaling about one-half the length of the head. The snout is somewhat abruptly curved, and the lower jaw is included. The back is not conspicuously elevated. The outline from the interorbital space to the origin of the dorsal forms almost a straight line. The head is slightly compressed anteriorly; its greatest length is contained about $4\frac{1}{3}$ times in the length to end of lateral line, and the greatest depth of the body about $5\frac{1}{3}$ times. The eye is one-fourth as long as the head, and equal in length to the snout. The width of the interorbital space is contained 5 times in the length of the head. The upper jaw is slightly longer than the eye. Strong teeth in the jaws. A few teeth on the head of the vomer. The maxillary reaches a little beyond the vertical through the anterior margin of the orbit. Cheeks and operculum with small scales in numerous rows. Preopercle entire. Gill membranes very narrowly united. Opercular spine feeble. Gular region naked. Scales of body very small, ctenoid. The belly is covered with ordinary scales. Scales at the nape very small and numerous. Lateral line complete, nearly straight, only slightly elevated over the anterior half of the pectoral, following a little above the median line of the body.

The dorsal fins are separated by a very narrow interspace. The longest dorsal spine is one-half the length of the head. The soft dorsal is higher than the spinous dorsal, its longest ray being nearly two-thirds as long as the head. The caudal seems to have been nearly truncate

or very slightly rounded. The longest ray of the anal is about equal to the length of the head without the snout, and exceeds the length of the longest dorsal ray. The anal spines are subequal in length, the second one being nearly one-half as long as the head. The pectoral is nearly as long as the head, slightly longer than the distance of its tip from the origin of the anal; its length is contained about $4\frac{3}{4}$ times in the total length to end of scales. The ventral equals the pectoral in length, and extends farther back. D. XV, 14; A. II, 11; Sc. 14-86 (tubes)—24.

A narrow, light area along base of spinous dorsal, above which the fin is dark. Snout and iris very dark and humeral region and the region through which the lateral line passes with a dark pseudo stripe somewhat intensified at both ends, and almost forming bands on the body. The greatest width of this dark stripe somewhat exceeds the length of the eye. Base and upper half of pectoral orange. Traces of orange on cheeks and nape. The whole of lower portion of body largely orange. Ventrals, and all but the basal portion of the anal, dark; the ventrals with a bluish tinge. A pearly blotch on the lower portion of the pectoral. Soft dorsal and caudal more or less suffused with orange.

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**ON THE IDENTITY OF *COTTUS MACULATUS*, FISCHER, WITH
COTTUS BUBALIS, EUPHRASEN.**

By TABLETON H. BEAN,

Curator of the Department of Fishes.

In a recent extract from the annals of the Scientific Association of Hamburg,* Dr. J. G. Fischer has described and figured a species of *Cottus* from Barbadoes. The anomaly of finding a species of this genus within the tropics induced me to examine the description very carefully, to ascertain, if possible, the source of Dr. Fischer's specimen. There is no reasonable doubt that the type of his new species is the common Father-lasher of Europe, and it is a source of wonder that the species should have been misinterpreted. After a study of our examples of *Cottus bubalis* from Bergen and Christiania, in Norway, and Leeds, England, I have no hesitation in stating that they agree perfectly with the description and figure of *Cottus maculatus*.

In some unknown way the locality of Dr. Fischer's specimen has been incorrectly given, and thus the describer of the supposed new species has been completely misled.

The differential characters claimed by Dr. Fischer for *Cottus maculatus* do not serve at all to separate his species from *C. bubalis*. The arrangement and number of the spines on the preoperculum are precisely the same in our examples of *Cottus bubalis* as represented in the figure

*Jahrbuch der wissenschaftlichen Anstalten zu Hamburg, ii, pp. 78, 79, taf. ii, fig. 8.