

The following enumeration of the radial formulæ of eleven specimens of *Limanda ferruginea* should be placed on record:

Cat. No.	Locality.	Dorsal rays.	Anal rays.	Pectoral rays.		Ventral rays.	Caudal rays.
				Right.	Left.		
21020	Halifax, N. S. ....	85	65	12	.....	6	18
"	do. ....	81	59	11	10	6	18
"	do. ....	79	57	11	10	6	18
"	do. ....	85	63	11	10	6	18
21902	Gloucester, Mass. ....	83	63	10	10	6	18
21903	do. ....	87	66	12	11	6	.....
"	do. ....	89	60	13	12	6	.....
"	do. ....	82	61	11	11	6	.....
"	do. ....	83	61	11	11	6	.....
"	do. ....	73	58	11	10	6	.....
"	do. ....	76	59	11	10	6	.....

Certain individuals exhibit black spots instead of the ordinary markings of yellowish red; this may be sexual, but is more probably due to the color of the bottom on which they live. Adult individuals almost invariably exhibit markings of a lemon-yellow hue on the white under side of the body, contiguous to the tail.

The synonymy of the species stands as follows:

*Limanda ferruginea*, (Storer) Goode & Bean.

*Platessa ferruginea*. STORER, Report on the Ichthyology and Herpetology of Massachusetts, 1839, p. 41, pl. 2.—DEKAY, Zoology of New York, Fishes, 1842, p. 297, pl. xlviii, fig. 155.

*Pleuronectes ferrugineus*, GÜNTHER, Catalogue of the Fishes in the British Museum, iv, 1862, p. 447.

*Myxopsella ferruginea*, GILL, Catalogue Fishes of Eastern Coast N. A. 1861, p. 51; Proc. Acad. Nat. Sci. Phila. 1864, p. 217.

*Platessa rostrata*, H. R. STORER, Boston Journ. Nat. Hist. vi, 1850, p. 268, pl. viii, fig. 2.—GÜNTHER, op. cit. p. 447 (considers it to be allied to *Pleuronectes limanda*).

*Myxopsella rostrata*, GILL, Catalogue Fishes of Eastern Coast N. A. 1861, p. 51.

*Limanda rostrata*, GILL, Proc. Acad. Nat. Sci. Phila. 1864, p. 217.

*Limanda ferruginea* is closely related to *Limanda vulgaris*, Gottsche, from which it is distinguished by its shorter pectorals, smaller scales, lower dorsal and anal fins, and the greater average number of rays in those fins. It is certainly a strongly marked geographical subspecies, and must for the present be regarded as a distinct species.

DECEMBER, 1878.

ON THE IDENTITY OF *BROSMIUS AMERICANUS*, GILL, WITH *BROSMIUS BROSME*, (MÜLLER) WHITE.

By G. BROWN GOODE and TARLETON H. BEAN.

Dr. D. H. Storer, in his Report on the Ichthyology and Herpetology of Massachusetts, published in 1839, catalogued the common cusk of the New England coast under the name *Brosmius vulgaris*, considering

it to be identical with the European species of the same genus. In this he was followed by Dr. DeKay, in his *Fishes of New York*, published in 1842. In 1845, in his *Synopsis of the Fishes of North America*. Dr. Storer adopted for the American eusk the name *Brosmius flarescens*, which had been given in 1819 by Le Sueur to a supposed new species from Marblehead, Mass., characterized in his figures and descriptions by a prolonged lower jaw and a double barbel.\*

We believe that the specimen described by Le Sueur was a deformed individual of the common species, but this is a mere matter of opinion, and in any event the name cannot be used. In 1863, Professor Gill substituted the specific name *americanus* for the name *flarescens* adopted by Storer.

After a careful examination and comparison of two specimens from Europe (No. 17,366, Norway, Bergen Museum) with specimens from Massachusetts Bay, we are compelled to believe that the common eusk of New England is identical with that of Europe. In the proportions of their bodies they agree exactly, and the Norwegian specimens agree in every respect with Storer's description of *Brosmius flarescens* in his *History of the Fishes of Massachusetts*. The radial formulae of three specimens are given below:

No. 17366 A.	Bergen.	D. 91.	A. 75.
No. 21813.	Gloucester.	D. 97.	A. 75.
No. 17366 B.	Bergen.	D. 99.	A. 73.

DECEMBER, 1878.

**ON THE MORTALITY OF FISHES IN THE GULF OF MEXICO IN 1878.**

By **Lieut. J. P. JEFFERSON, U. S. A.**

KEY WEST, FLORIDA.

Prof. SPENCER F. BAIRD,

*Smithsonian Institution, Washington, D. C.:*

PROFESSOR: I have the honor to acknowledge the receipt of your valued favor of October 30th, which reached me after a delay, I being absent from Fort Jefferson. This absence, coupled with my wish to get all possible facts in regard to the destruction of fish in these and neighboring waters, will account for my apparent tardiness.

Since my communication in October another large body of the dark-colored water described therein made its way down the coast, across Florida Bay, striking Tortugas about the 20th of November, and extending up the reef as far as Key West, probably further. At Key West its approach could be seen distinctly; at first, belts of it, some narrow, others broad, came into the harbor, following the various channels leading to the northward, and only in these belts were the fish affected: in the course of twenty-four hours, however, all the water in the harbor was similarly colored, and the surface was covered with dead and dying fish.

\* Mémoires du Muséum, v, 1819, p. 158, pl. xvi.