

from the neighboring islands, as they agreed well with the descriptions given of them, and there were no available specimens to compare with.

As soon as I had finished the examination of the birds of each island collected by Mr. Ober, they were placed in a box by themselves, and not disturbed again except for an occasional comparison. The collection from Guadeloupe, containing specimens of the true *M. herminieri*, Lafr., was not received until more than a year after that from Dominica. These specimens I labelled *M. herminieri*, Lafr., as a matter of course, they being from the locality of the type. The difference between the birds from the two islands was not observed at that time, as no comparison was made.

This winter, having occasion to review the species of *Margarops*, I got the specimens from the different islands together for the first time, and at once saw that the species from Dominica was quite distinct from the Guadeloupe bird. It differs from *M. herminieri*, Lafr., in being less in length, of a more robust form, the bill stouter, and the tail shorter; the brown coloring throughout is much darker and of a ruddy cast, instead of olivaceous; the centres of the feathers on the throat and upper part of the breast are much more rufous, and have black spots at their ends; the abdomen is pure white, whereas in *M. herminieri* the lower part of the breast and the abdomen are covered with lanceolate-shaped markings, which are very striking, each feather being white, with a strongly defined brown border; only a very small space on the lower part of the abdomen is white; *M. herminieri* has the white ends of the under tail-coverts edged narrowly with pale brown; in the new species they are white without borders, and it has the tarsi and toes stronger and paler in color than those of *M. herminieri*.

FEBRUARY 1, 1880.

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**NOTES ON A COLLECTION OF FISHES FROM EAST FLORIDA, OBTAINED BY DR. J. A. HENSHALL.**

**By DAVID S. JORDAN, M. D.**

During the past winter (1878-'79) a collection of fishes was made for the writer by Dr. J. A. Henshall, of Cynthiana, Ky., in the streams and inlets of Eastern Florida. The number of species obtained was not large, but the specimens were preserved in excellent condition, and among them are several of interest. Two species (*Gerres plumieri* and *Umbrina broussoneti*) had not been previously recorded from the coast of the United States. Three others were, at the time of collection, new to science. One of these has been lately described, under the name of *Jordanella florida*, by Messrs. Goode and Bean. The others have been already noticed by me in these proceedings as *Zygonectes rubrifrons* and *Zygonectes henshalli*.

The marine species were obtained from Indian River and from the neighboring coast; the cyprinodonts, centrarchids, and other fresh or brackish water species chiefly from San Sebastian River and tributaries.

### DIODONTIDÆ.

1. *Chilomycterus geometricus* (Schneid.) Kaup.

### URANOSCOPIDÆ.

2. *Astroscopus y-græcum* (C. & V.) Gill.

A single fine specimen of this beautiful species. Dr. Henshall informs me that this specimen in life exhibited strong electrical powers, these powers apparently having their seat in the naked skin on the top of the head. So far as I know, such phenomena have not hitherto been ascribed to any fish of this family. I therefore put this statement on record, in hopes that subsequent observers of this rare fish may be able to verify it.

### ECHENEIDIDÆ.

3. *Echeneis naucrates* L.

A single specimen, with 22 laminæ in the disk.

### CARANGIDÆ.

4. *Selene argentea* Lac.

Numerous fine large specimens. Specimens lately described from the Pacific coast under the name of *Argyriosus pacificus*, Lockington, appear to belong to this species.

5. *Carangus chrysus* (Mitch.) Girard.
6. *Chloroscombrus chrysurus* (Linn.) Gill.
7. *Oligoplites occidentalis* (L.) Gill.

Several fine specimens of this highly interesting species. The character of five (instead of seven) dorsal spines, assumed to distinguish *Oligoplites* from *Scombroides* Lac. (*Chorinemus* C. & V.), is perhaps of insufficient value for generic distinction. Some of the species of *Scombroides* have, however, the dermal productions really scale-like, instead of the irregular linear imbedded ridges found in *Oligoplites*. This character may for the present, until all the species of the group are examined, be held to distinguish the latter genus.

### SCIÆNIDÆ.

8. *Umbrina broussoneti* Cuv. & Val.

Two fine specimens of this West Indian species were obtained by Dr. Henshall. These are the first yet recorded from the United States. The species is not included in Goode's Catalogue of Bermudan Fishes, nor

in any of Poey's lists of the fishes of Cuba. It is, therefore, an important addition to our fauna. This specimen agrees very fully with Günther's description of *Umbrina broussoneti*, and with Cuvier and Valenciennes's description of *Umbrina eoroides*. C. & V.'s description of *U. broussoneti* gives the number of rays in the dorsal fin as X. I, 25. My specimens have D. X. I, 28.

### GERRIDÆ.

9. *Gerres plumieri* Cuv. & Val.

A single fine specimen of this beautiful species. It has not been previously recorded from the coasts of the United States.

### SPARIDÆ.

10. *Lagodon rhomboides* (L.) Holbr.

### PRISTIPOMATIDÆ.

11. *Lutjanus caxis* (Schneider) Poey.

A single fine specimen.

### CENTRARCHIDÆ.

12. *Micropterus pallidus* (Raf.) Gill & Jordan.

Dr. Léon Vaillant (Mission Scientifique au Mexique: ined.) divides this species provisionally into two, adopting the name "*Micropterus salmoides*" for the ordinary form, and that of *Micropterus nuceensis* (Baird & Girard) for the southwestern form (Texas and Mexico). According to him the two are externally identical, but *M. nuceensis* is distinguished by the presence of a small patch of teeth on the tongue, the tongue being entirely smooth in the ordinary form.

I have examined a number of specimens in regard to this point.

I find lingual teeth in the following specimens:

(1.) Two specimens, one large one small, from the Falls of the Ohio.

(2.) One small specimen from a tributary of White River at Bloomington, Ind.

(3.) One specimen (in the museum at Paris) from Texas.

I find them absent in the following:

(1.) Several specimens in Henshall's collection from Indian River.

(2.) Specimen from Neuse River.

(3.) Specimens from White River at Indianapolis.

(4.) Specimens from Lake Erie.

The presence of these teeth evidently does not depend on age, and apparently not on sex. It may be a specific feature, but I am inclined at present to think it only a feature of individual variation. I have not seen such teeth in the small-mouthed black bass.

13. *Chænobryttus viridis* (C. & V.) Jor.

14. *Lepomis pallidus* (Mitch.) Gill & Jor.

The recent rejection of the name "*pallidus*" for this species by my friend Professor Goode (Proc. U. S. Nat. Mus. 1879, 139) is due to his having overlooked the fact that Mitchell has a *Labrus pallidus* as well as a *Bodianus pallidus* in his Memoir on the Fishes of New York. The latter, as Professor Goode observes, is *Bairdiella argyroleuca*; the former is *Lepomis pallidus*.

15. *Lepomis punctatus* (Cuv. & Val.) Jor.

(*Lepomis apiatus* Cope.)

Several fine specimens.

16. *Enneacanthus obesus* (Baird) Gill.

(*Bryttus fasciatus* Holbrook = *Bryttus obesus* Baird?).

"*Enneacanthus milnerianus* Cope" is included in Goode's list (Proc. U. S. Nat. Mus., II, 1879, 114) of the fishes of Florida. This species appears in my list of valid species of Centrarchidæ in Bulletin X of the National Museum. It is a nominal species, and came into the lists in this way: While my paper in Bulletin X was passing through the press, Professor Cope kindly sent me the proof-sheets of a paper on the fishes of the Saint John's, which has since appeared in the Proc. Am. Philos. Soc. In this paper a new species with the above name was described. This species, however, Professor Cope saw fit to suppress in the publication of the paper, he having identified it with *Enneacanthus fasciatus*.

## MUGILIDÆ.

17. *Mugil brasiliensis* Agassiz. White Mullet.

Our other common species of *Mugil*, the striped mullet, *Mugil plumieri* and *Mugil lineatus* of authors, is doubtless the species for which the name of *Mugil albula* L. should be retained.

## SCOMBERESOCIDÆ.

18. *Hemirhamphus unifasciatus* Ranz.

## CYPRINODONTIDÆ.

19. *Jordanella floridae* Goode & Bean.

Many specimens of this interesting species were obtained by Dr. Henshall. The females differ from the males chiefly in the lower vertical fins.

20. *Zygonectes rubrifrons* Jordan.

Numerous specimens.

21. *Zygonectes henshalli* Jordan.

Still more abundant. This species and the preceding are very closely related, and are both nearly intermediate between *Zygonectes* and *Fundulus*. The current genera related to *Fundulus* are separated by characters of very dubious value.

22. *Fundulus* sp.

A small specimen with pale cross-bars; not suitable for identification.

23. *Gambusia patruelis* B. & G.

Two specimens, agreeing with the descriptions of *Gambusia holbrooki* of Girard and Günther, and with Girard's figure of *Gambusia patruelis*. The two species are probably identical. The black bars on the caudal and the oblique suborbital blotch are characteristic color-marks.

CATOSTOMIDÆ.

24. *Erimyzon goodii* Jordan.

Many specimens.

SILURIDÆ.

25. *Amiurus erebennus* Jordan.

Many small specimens.

ANGUILLIDÆ.

26. *Anguilla rostrata* (Le Sueur) DeK.

A comparison of these Florida specimens with a series of eels from Venice renders it evident that our American eel is not identical with *Anguilla vulgaris* of Europe, as I with others have supposed.

In our species the beginning of the dorsal is notably more posterior than in the European one. In Venetian specimens the distance from the snout to the base of the dorsal is contained  $3\frac{2}{5}$  times in the total length of the fish. In Florida specimens the same distance is contained barely 3 times in the total length.

The same difference is expressed differently but correctly by Dr. Günther (Cat. Fish Brit. Mus., VIII, 24). He ascribes to *A. vulgaris* the character of—

“The length of the head is nearly equal to the distance between the commencements of the dorsal and anal fins.”

And to *A. bostoniensis* (*rostrata*)—

“The length of the head is conspicuously more than the distance between the commencements of the dorsal and anal fins.”

The band of vomerine teeth also appears to extend farther back in *A. vulgaris* than in *A. rostrata*.