oblique, both gently arched. Dorsal soft rays 31, anal 29. A line drawn from the origin of the soft dorsal to the origin of the anal would cut the lengthwise axis of the body a distance before the base of the caudal contained 2.4 times in the length to base of caudal. The stripes on the head are like those of the West Indian fish.

Although somewhat intermediate, the Ascension specimen is closer to West Indian examples than to the one from Trinidad. From the former it is very probably not taxonomically separable. This is in line with our idea of the probabilities in spite of the greater distance of Ascension from the West Indies than from Trinidad, based on the probable distribution of a sluggish swimming fish of this nature. The Northwesterly trade wind currents would make it difficult for a B. vetula to reach Trinidad from the West Indies, and as, on the other hand, Trinidad fish would not drift north of Cape San Roque, B. vetula from that island would be pretty effectually isolated from the North Atlantic current circuit, whereas those from Ascension would be on the outskirts of the same.

The high fin-count of the Ascension fish places it with descriptions of those from the Indian Ocean, which may leave the West Indian form as *Balistes vetula bellus* (Walbaum). We suspect that if the West Indian fish is separable from the Ascension, the Indian Ocean one will be found to be so also. As far as is determinable from a single specimen, *trinitatis*

is a valid race.

J. T. NICHOLS, R. C. MURPHY, New York, N. Y.

FISHES FROM PUNTARENAS, COSTA RICA.

A collection of fishes was obtained from the Costa Rica government many years ago by the Commercial Museums of Philadelphia. Recently, having

had the opportunity to study it through the kindness of Dr. W. P. Wilson, Director of the Museums, the list of species given below was ascertained:

Urotrygon mundus Gill, Sciaedichthys troscheli (Gill),

Gymnothorax punctarenae, sp. nov.: Head, 6½; depth, 11; snout, 51/4 in head; eye, 7; mouth cleft, $2\frac{1}{3}$; interorbital, 4-4/5. Eyelids joined to skin of Teeth all uniserial, large compressed, lower front five enlarged and firm, and six large front upper ones with three depressible inwards. Hind edge of each tooth on its basal half, finely serrated. fleshy. Front nostrils in short tubes, hind ones each as simple pore close over edge of each eye above. Body reticulated with brownish, leaving pale irregular blotches which become much larger and less defined on tail, until at tail end they form several large irregular vermiculations of brownish. Dorsal fin with basal half like color of back, border with dark brown broken marginal blotches. Anal largely dark brown, at least over greater marginal portion. Upper surface of head finely spotted or dotted with paler. Lower surface of head and belly pale, with faint and darker reticulations. Iris olive. Slight brownish blotch above gill-opening, though latter not surrounded by brown. Length 20-5/8 inches, from snout tip to vent 101/4 inches. Only one example. This species falls within the subgenus *Priodonophis* Kaup, on account of its serrate teeth. It differs, however, from the common Atlantic G. ocellatus in coloration.

Echidna nocturna (Cope), Fundulus dovii (Günther), Mugil hospes Jordan and Culver, Holocentrus suborbitalis Gill, Caranx hippos (L.) Apogon dovii Günther, Centropomus nigrescens Günther, C. robalito Jordan and Gilbert, Dermatolepsis punctatus Gill, Lutjanus jordani (Gill), L. argentiventris (Peters), Haemulon sexfasciatum Gill, Anisotremus pacifici (Günther), A. dovii (Günther), A. interruptus (Gill), Brachydeuterus leuciscus (Günther)

ther), Pomadasis branicki (Steindachner), Buccone praedatoria (Jordan and Gilbert), Bairdiella ensifera (Jordan and Gilbert), Xystaema cinereum (Walbaum), Gerres brevimanus Günther, Kyphosus analogus (Gill), Pomacentrus rectifraenum Gill, Nexilarius concolor (Gill), Abudefduf mauritii (L.), Chaetodipterus zonatus (Girard), Pomacanthus zonipectus (Gill), Holacanthus passer Valenciennes, Balistes naufragium Jordan and Starks, Spheroides annulatus (Jenyns), Tetrodon hispidus L. Eumycterias punctatissimus (Günther), Scorpaena histrio Jenyns, S. mystes Jordan and Starks, Philypnus lateralis Gill, Dormitor maculatus (Bloch), Mapo soporator (Valenciennes), Paralichthys woolmani Jordan and Williams.

Henry W. Fowler, Philadelphia, Pa.

A COLLECTION OF FOOD-FISHES FROM ARGENTINA.

The Academy of Natural Sciences of Philadelphia received during the past summer a collection of the larger and more important food-fishes from the Argentina government. Though no definite locality is assigned, the specimens were doubtless obtained at Buenos Aires:

Mustelus mustelus (L.), Luciopimelodus pati (Valenciennes), Pimelodus albicans (Valenciennes), Pseudoplaytystoma coruscans Agassiz, Doras granulosis Valenciennes, Loricaria anus Valenciennes, Prochilodus platensis Holmberg, Salminus brevidens (Cuvier), Menidia bonariensis Valenciennes, Mugil brasiliensis Agassiz, Sarda sarda (Bloch), Seriola rivoliana Valenciennes, Trachinotus glaucus (Bloch), Pomatomus saltatrix (L.), Perona signata (Jenyns), Polyprion oxygenius (Schneider), Acanthistius patagonicus (Jenyns), Sparus pagrus L. Cynoscion striatus (Cuvier), Sagenichthys ancylodon (Schneider), Micropogon opercularis (Quoy and Gaimard),



Fowler, Henry W. 1917. "Fishes from Puntarenas, Costa Rica." Copeia 39, 2-4.

View This Item Online: https://www.biodiversitylibrary.org/item/53398

Permalink: https://www.biodiversitylibrary.org/partpdf/85695

Holding Institution

Smithsonian Libraries and Archives

Sponsored by

Smithsonian

Copyright & Reuse

Copyright Status: Public domain. The BHL considers that this work is no longer under copyright protection.

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at https://www.biodiversitylibrary.org.