

Determination of the type locality for *Hypostomus laplatae*, *Ramnogaster melanostoma*, *Gymnogeophagus australis*, and *Crenicichla scottii*, described from Argentina by Carl H. Eigenmann in 1907.

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Abstract

Eigenmann published a paper in 1907 on "a collection of fishes from Buenos Aires", in which he reported on 34 species, four then being new to science: *Plecostomus laplatae*, *Pomolobus melanostomus*, *Geophagus australe* and *Batrachops scottii*. The type locality of those species was stated as "Buenos Aires", and in the introduction of the paper he mentions that the specimens were obtained "near Buenos Aires" by W.B. Scott, so it was not clear if he referred to the city or the province and where was "near". So, the exact locality or drainage from where the type specimens of these species were collected remained unclear. Here, based on an historical analysis we present new evidence regarding the precision of the type locality of these species and identified the locality of Ensenada, in Buenos Aires province, as the most likely place where these specimens were obtained.

Resumen

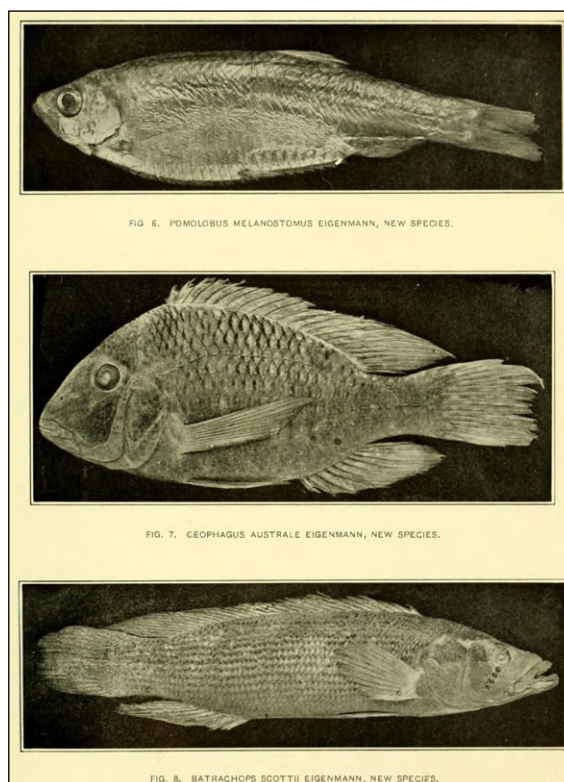
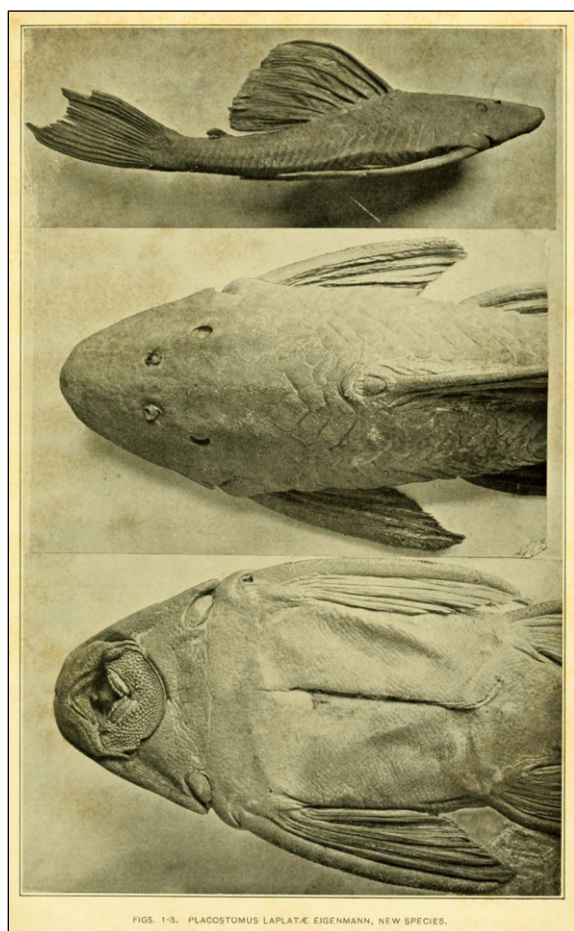
Determinación de la localidad tipo para *Hypostomus laplatae*, *Ramnogaster melanostoma*, *Gymnogeophagus australis* y *Crenicichla scottii*, descritas de Argentina por Carl H. Eigenmann en 1907.

Eigenmann publicó un artículo en 1907 sobre "una colección de peces de Buenos Aires", donde reportó 34 especies, cuatro de las cuales eran nuevas para la ciencia: *Plecostomus laplatae*, *Pomolobus melanostomus*, *Geophagus australe* y *Batrachops scottii*. La localidad tipo de esas especies se declaró como "Buenos Aires", y en la introducción de ese trabajo menciona que los especímenes fueron obtenidos "cerca de Buenos Aires" por W.B. Scott, por lo que no estaba claro si se refería a la ciudad o la provincia y donde estaba "cerca". Por lo tanto, la localidad exacta y la cuenca de donde los ejemplares tipo de estas especies fueron colectadas permaneció poco clara. Aquí, con base en un análisis histórico, presentamos nueva evidencia con respecto a la precisión de la localidad tipo de estas especies e identificamos a la localidad de Ensenada, en la provincia de Buenos Aires, como el lugar más probable donde se obtuvieron esos especímenes.

Introduction

In 1907, Carl Henry Eigenmann published "On a collection of fishes from Buenos Aires" in the Proceedings of the Washington Academy of Sciences, reporting on a collection of fish obtained near Buenos Aires, Argentina, by Professor W.B. Scott. A total of 34 species were determined, being four of them new to science at that time: *Plecostomus laplatae*, *Pomolobus melanostomus*, *Geophagus australe*, and *Batrachops scottii* (figs. 1, 2).

The type locality of these four species was stated as "Buenos Aires" without providing details on the exact locality. He could have referred either to the city or the province of Buenos Aires, the latter a huge area of 307,500 km² with many different basins and water bodies. In the introduction to the original description Eigenmann (1907) indicated: "The present paper is a report on a collection of fishes obtained near Buenos Aires, Argentina, by Prof. W.B. Scott, of Princeton University. The collection adds several species to the La Plata fauna". This information was repeated in the detailed



figs. 1 (left), 2 (top)
 Photos of the four new species' holotypes described by Eigenmann (1907) from Ensenada:
Plecostomus laplatae (left), *Pomolobus melanostomus*,
Geophagus australe, and *Batrachops scotti* (right, top down)

description of each of the four described species. Interestingly, later in a review paper he mentioned "Habitat: La Plata" for these four species (Eigenmann 1910). Knowing precisely the type localities of species is essential for taxonomic studies. Similar species in different basins of adjacent areas could only be differentiable based on characters only observable in fresh or living material (e.g. coloration, behavior, molecular evidence), which cannot be obtained from the deposited type material (Bagley et al. 2015; Pinacho-Pinacho et al. 2018). Thus, knowing precisely the provenance of the type material of a species is essential for obtaining topotypes. In order to achieve this objective, we carried out a detailed bibliographic search to delimit the type locality of the four mentioned species described by Eigenmann.

Evidence for the type locality

1. In the introduction Eigenmann (1907) mentioned "The present paper is a report on a collection of fishes obtained near Buenos Aires". Conclusion: When mentioning "near" Buenos Aires it means a nearby locality and excludes the city of Buenos Aires.
2. On the first sheet of the paper, in the introduction, he informed that "The collection adds several species to the La Plata fauna" (Eigenmann 1907, p. 449). And then he stated: "...The Paraguay, whose sources are in contact with those of the Tapajos and Madeira, southern tributaries of Amazon, has provided an easy and open road for the Amazon fauna to Lower Parana and La Plata" (Eigenmann 1907, p. 449). Therefore, note that Eigenmann did not use the word "river" for any of the previous rivers that he mentions, which is constant in all this work. Therefore, it seems very likely that when he mentioned that this paper represented additions to La Plata fauna, he was specifically referring to the Río de La Plata and not to the basin, the city, nor the region, but to the river itself as a fluvial accident.
3. "The collection adds several species to the La Plata fauna" (Eigenmann 1907, p. 449). Taking into account the previous detail, it is clear that in this case it also referred specifically to the Río de La Plata and not "La Plata Basin".

4. The species obtained by Scott (table 1) resemble a composition of fish species as typically found in the Southern banks of the middle estuary of the Río de La Plata (Ringuelet et al. 1967, Almirón et al. 1992). *Crenicichla scottii* (fig. 3) and *Gymnogeophagus australis* (fig. 5) are usually not found in the open waters of this river, but are rather inhabiting the narrow bays, backwaters or mouths of streams, habitats found very frequently in the area of Ensenada, close to the reeds or aquatic vegetation. Both species were collected by the authors of this work in such an environment near the mouth of the Río Santiago into the Río de La Plata (34°49'59.1"S - 57°55'36.7"W) (figs 4, 6).
5. Eigenmann mentioned in the same way the locality of the new species, from what it is inferred that all they were obtained in the same locality. For example, in the paragraph of the description of *Gymnogeophagus australis* he stated "Type in Mus. Princeton Univ., a specimen 155mm. Long, from Buenos Aires; coll. Prof. W.B. Scott. Cotypes in Princeton and Indiana Universities (no. 11352, Mus. Ind. Univ.) 6 specimens 100 to 150 mm. long, from same locality". This style is repeated for the other new species: *Hypostomus laplatae*, *Ramnogaster melanostoma*, and *Crenicichla scottii*.
6. In a later work on the revision of the fish of South America, Eigenmann (1910) referred to the habitat of the four species described in the paper from 1907 as "Habitat: La Plata". In this same paper he used the names "Rio de La Plata", "La Plata Basin" and "La Plata" in a different way to refer to the distribution of the species that are mentioned or described there. For example: *Pimelodus argenteus* habitat: Rio de La Plata, Rio Parana, *Stegophilus intermedius* Eigenmann & Eigenmann habitat: Rio de La Plata; Amazonas, *Curimatus gilberti brevipinnis* Eigenmann & Eigenmann habitat: La Plata Basin, *Geophagus australis* Eigenmann 1907 habitat: La Plata, and *Bryconamericus* Eigenmann type: *Bryconamericus exodon* Eigenmann range: La Plata to Rio Grande do Sul and to western Peru and Costa Rica. Conclusion: "La Plata" as applied by Eigenmann is most probably the city of La Plata.

order	family	species of Eigenmann 1907	species today	remarks
Clupeiformes	Clupeidae	<i>Pomolobus? melanostomus</i>	<i>Ramnogaster melanostoma</i>	sp.nov. from Ensenada
	Engraulidae	<i>Stolephorus olidus</i>	<i>Lycengraulis grossidens</i>	junior synonym
	Pristigasteridae	<i>Ilisha flavipinnis</i>	<i>Pellona flavipinnis</i>	
Characiformes	Erythrinidae	<i>Hoplias malabaricus</i>	<i>Hoplias argentinensis</i>	probably
	Serrasalminidae	<i>Serrasalmo marginatus</i>	<i>Serrasalmo marginatus</i>	
	Anostomidae	<i>Leporinus obtusidens</i>	<i>Megaleporinus obtusidens</i>	
	Curimatidae	<i>Curimatus gilberti</i>	<i>Cyphocharax voga</i>	fide Vari (1992)
		<i>Curimatus platanus</i>	<i>Cyphocharax platanus</i>	
	Prochilodontidae	<i>Prochilodus lineatus</i>	=	
	Acestrorhynchidae	<i>Acestrorhynchus ferox</i>	<i>Acestrorhynchus pantaneiro</i>	fide Menezes (1992)
	Bryconidae	<i>Salminus maxillosus</i>	<i>Salminus brasiliensis</i>	junior synonym
	Characidae	<i>Acestrorhynchus brachycephalus</i>	<i>Oligosarcus jenynsii</i>	fide Braga (1994)
		<i>Acestrorhynchus hepsetus</i>	<i>Oligosarcus oligolepis</i>	most probably
Siluriformes	Loricariidae	<i>Astyanax rutilus</i>	<i>Psalidodon rutilus</i>	
		<i>Loricaria anus</i>	<i>Loricariichthys anus</i>	
		<i>Loricaria vetula</i>	<i>Paraloricaria vetula</i>	
		<i>Plecostomus commersoni</i>	<i>Hypostomus commersoni</i>	
		<i>Plecostomus laplatae</i>	<i>Hypostomus laplatae</i>	sp.nov. from Ensenada
		<i>Pterodoras granulosus</i>	=	
	Doradidae	<i>Rhamdia quelen</i>	<i>Rhamdia</i> sp.	most probably
	Pimelodidae	<i>Iheringichthys labrosus</i>	=	
		<i>Luciopimelodus pati</i>	=	
		<i>Pimelodus valenciennis</i>	<i>Parapimelodus valenciennis</i>	
		<i>Pimelodus albicans</i>	=	
		<i>Pimelodus clarias macrospila</i>	<i>Pimelodus maculatus</i>	most probably
			<i>Pseudoplatystoma coruscans</i>	
Pleuronectiformes	Achiridae	<i>Achirus lineatus</i>	<i>Catathyridium jenynsii</i>	most probably
Cichliformes	Cichlidae	<i>Batrachops scottii</i>	<i>Crenicichla scottii</i>	sp.nov. from Ensenada
		<i>Geophagus australe</i>	<i>Gymnogeophagus australis</i>	sp.nov. from Ensenada
		<i>Heros autochton</i>	<i>Australoheros facetus</i>	
Atheriniformes	Atherinopsidae	<i>Atherinichthys argentinensis</i>	<i>Odontesthes argentinensis</i>	
		<i>Atherinichthys bonariensis</i>	<i>Odontesthes bonariensis</i>	
Mugiliformes	Mugilidae	<i>Mugil platanus</i>	<i>Mugil liza</i>	junior synonym
Perciformes	Sciaenidae	<i>Pachyurus bonariensis</i>	=	

table 1. List of the species from Ensenada treated by Eigenmann (1907).



fig. 3. *Crenicichla scotti* collected at the mouth of a nameless stream at Ensenada (fig. 4).



fig. 4. Nameless stream at Ensenada at its mouth into the La Plata river.



fig. 5. *Gymnogeophagus australis* collected close to Isla Santiago at Ensenada.



fig. 6. Mouth of Santiago stream into the La Plata river close to Isla Santiago at Ensenada.

7. The collector of these species, William Berryman Scott (fig. 7) was a renowned US-American vertebrate paleontologist, professor of geology and paleontology at Princeton University. Scott arrived on 4.Jul.1901 at the port of La Plata, Ensenada, province of Buenos Aires. During his four months of stay in Argentina he was based in the city of La Plata, living in the Museo de La Plata, and left the country again from Ensenada towards the end of October of that same year (Scott, 1939). Conclusion: Eigenmann (1910) might have used the term "Habitat: La Plata" in that work, knowing that Scott was established in La Plata city: "After a day in Montevideo, we came up the river by night and landed on the morning of July 14 at Ensenada, the port of La Plata.... Shortly after arriving in Buenos Aires, I went down to the extraordinary city of La Plata" (Scott 1939, p. 249). And "All my La Plata friends came to see me off, when my steamer sailed of Ensenada" (Scott, 1939 p. 254). (see Appendix 1).
8. According to Simpson (1948), field work was not Scott's strong point. His trip to Buenos Aires was punctually a visit to the museums and he did not undertake collecting in Argentina (Scott, 1939).

Koerber and Casciotta (2012) revised the description of *Crenicichla scottii* and assumed that Eigenmann referred to the banks of the Río de La Plata based on the fact that the title of the article indicates Buenos Aires. López (1992) for *Hypostomus laplatae* (Eigenmann, 1907) assumed Buenos Aires to be the type locality, and then stated that 'the distribution analysis shows the probable endemism of *H. laplatae* restricted to its type locality (Río de la Plata)'. So far, there seems to be certain consensus regarding the Río de la Plata as the probable type locality of those species, but the exact location has not yet been determined.

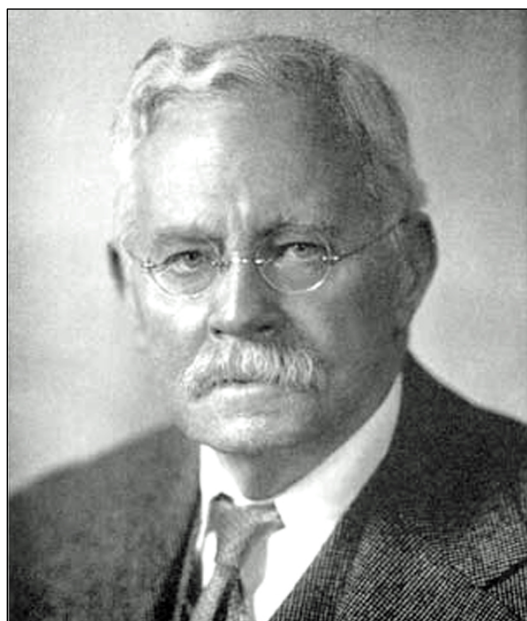


fig. 7
William Berryman Scott (photo from Simpson 1948)

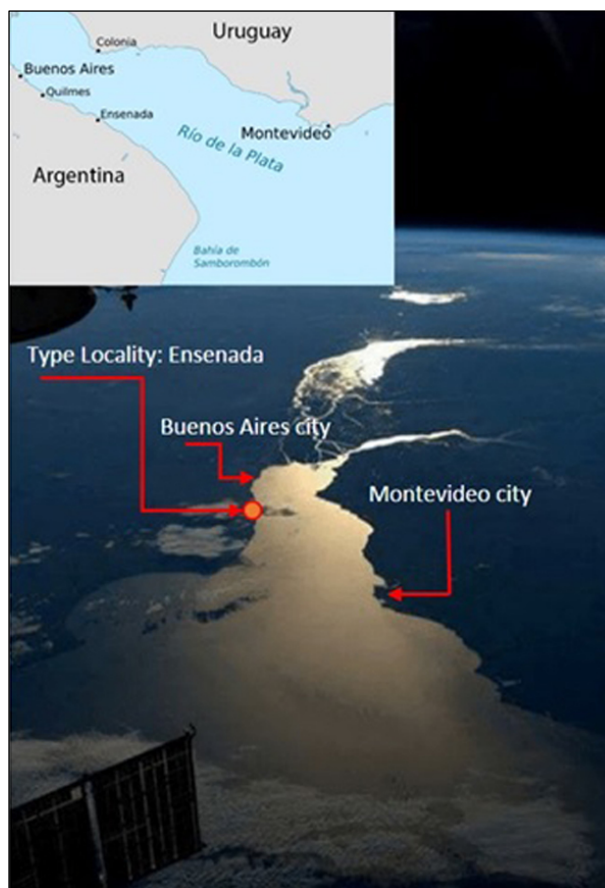


fig. 8
Space view of the Río de la Plata indicating Ensenada, Buenos Aires, and Montevideo.
Photo taken from the ISS by astronaut Karen Nyberg.

Discussion

After carefully analyzing the works of Eigenmann (1907, 1910), the species obtained and the history of the places visited by the collector (Scott 1903, 1939), we conclude that Ensenada ($34^{\circ}49'59.1''\text{S}$ - $57^{\circ}55'36.7''\text{W}$), on the bank of the La Plata river, province of Buenos Aires, is the most likely place where Scott obtained those specimens in 1901 (fig. 8).

Our analysis provided the explanation why Eigenmann applied three different forms when referring to this locality. Ensenada complies with: "near Buenos Aires" for being close to the city of Buenos Aires; "from Buenos Aires" for being in the Province of Buenos Aires, and "Habitat: La Plata" because it is where the port of La Plata is located, about 15 km from the center of the city of La Plata, and where Scott arrived, was based, and from where he departed.

Today Ensenada, meaning bay or inlet, is a part of the megalopolis of Buenos Aires at the South-Western shoreline of the Río de la Plata.

This area typically contains species from the middle estuary of the Río de La Plata in combination with several species from the lower Paraná freshwater ecoregion, especially in the area of the Santiago river delta that combines numerous characteristic environments of the Plata riverbank, including a subtropical influence caused by the warm water brought down from the North by the Paraná and Uruguay rivers and by the pathways these rivers offer for fish. This location is highly influenced by the Atlantic tides which are impacting the Río de la Plata estuary (Ereño, 2002).

Eigenmann (1907) mentioned that this new collection added several species to the fauna of La Plata. Prior to this publication, the contributions on the knowledge of the fish from the Río de La Plata were those of Eigenmann & Eigenmann (1891), Perugia (1891), Berg (1895, 1897, 1899, 1901), and Lahille (1895). The latter two provided very detailed information on their collection sites.

Lahille (1895) published a list of fish from 'around La Plata' commenting that they were incorporated in the collection under his care during 1894. Among these, he mentioned *Plecostomus plecostomus*, from Isla Santiago, and *Geophagus brasiliensis* from Puerto Viejo, which are most likely the species described later by Eigenmann as *Plecostomus laplatae* and *Geophagus australe*. Unfortunately, this material is lost, and thus, we were not able to revise it (see Appendix 2).

We conclude that Scott did not carry out field work during his stay, confirmed by himself when mentioned that all his specimens, including birds, fossils, and books, were acquired by purchase or exchange (Scott 1939, p. 253). Thus, it is very probable that also his fish have been purchased by Scott from local fishermen at the coast of Ensenada, being only about 9 km from the Museo de La Plata, where he was staying.

This way of obtaining specimens by buying from local fishermen, as well as in the market, exchange or donation was frequent for the researchers of the time. For example, Lahille visited fisher towns and places in the province of Buenos Aires, buying specimens from local fishermen (García 2009). Also Berg began a study based on specimens provided by the local fishermen (García 2014).

The hypothesis of having acquired the specimens in the city or port of Buenos Aires is discarded by the first evidence "The present paper is a report on a collection of fishes obtained near Buenos Aires". Also, Scott's visit to the museums of Buenos Aires have been short and filled with social encounters that it can be assumed that he travelled with little luggage and thus, there it would not have made sense to eventually load and transfer fish specimen which he could obtain more comfortably in the vicinity of his base in La Plata.

For these and the above presented reasons the possibility of having sampled in other streams or rivers in the province of Buenos Aires or even in the city of Buenos Aires is declined and we hereby determine the town of Ensenada (34°49'59.1"S - 57°55'36.7"W) at the shore of the La Plata river, province of Buenos Aires, as the locality where Scott obtained those species from local fishermen in 1901 and thus, as the type locality of the four species described by Eigenmann (1907) as new to science.

Acknowledgements

Thanks are due to Felipe Alonso, Jorge Casciotta, Marcos Mirande, and Stefan Koerber for valuable input and the critical review of this work, to Susana García, researcher, specialist in the History of Sciences, Historical Archive of the Museo de La Plata, to Hugo López and Diego Nadalin for facilitating contacts, and to Pablo Burchardt and Facundo Bozza for allowing us to use their photos shown in figures 3-6.

References

- Almirón, A.E., S.E. Gómez & N.I. Toressani (1992): Peces de agua dulce de la provincia de Buenos Aires, Argentina. Situación ambiental de la Provincia de Buenos Aires. Recursos y rasgos Naturales en la Evaluación Ambiental 2 (12):1-29
- Bagley, J.C., F. Alda, M.F. Breitman, E. Bermingham, E.P. van den Berghe J.B. & Johnson (2015): Assessing species boundaries using multilocus species delimitation in a morphologically conserved group of neotropical freshwater fishes, the *Poecilia sphenops* species complex (Poeciliidae). PLoS One 10 (4): e0121139
- Berg, C. (1895): Enumeración sistemática y sinonímica de los peces de las costas argentinas y uruguayas. Anales del Museo Nacional de Buenos Aires 4: 1-120
- Berg, C. (1897): Contribución al conocimiento de los peces sudamericanos, especialmente de los de la República Argentina. Anales del Museo Nacional de Buenos Aires 5: 263-302
- Berg, C. (1899): Comunicaciones ictiológicas. II. Comunicaciones del Museo Nacional de Buenos Aires 1 (4): 93-97
- Berg, C. (1901): Comunicaciones ictiológicas. IV. Comunicaciones del Museo Nacional de Buenos Aires 1 (9): 293-311
- Braga, L. (1994): Los Characidae de Argentina de las subfamilias Cynopotaminae y Acestrorhynchinae. Fauna de Agua Dulce de la República Argentina 40 (6): 1-45
- Eigenmann, C.H. (1907): On a collection of fishes from Buenos Aires. Proceedings of the Washington Academy of Sciences 8: 449-458
- Eigenmann, C.H. (1910): Catalogue of the fresh-water fishes of tropical and south temperate America. Reports of the Princeton University expeditions to Patagonia 1896-1899. Zoology 3 (4):375-511
- Ereño, C. E. (2002). Climatología en la Cuenca. 51-75 *In*: Borthagaray, J.M. (ed.): El Río de la Plata como Territorio. Ediciones Infinito, FADU y FURBAN, Buenos Aires
- Fernicola, J.C. (2011): Implicancias del conflicto Ameghino-Moreno sobre la colección de mamíferos fósiles realizada por Carlos Ameghino en su primera exploración al río Santa Cruz, Argentina. Revista del Museo Argentino de Ciencias Naturales 13: 41-57
- García, S. (2009): El estudio de los recursos pesqueros en la Argentina de fines del siglo XIX. Revista Brasileira de História da Ciência 2 (2): 206-221

- García, S. (2010): Enseñanza científica y cultura académica. La Universidad de La Plata y las Ciencias Naturales (1900-1930). Editorial Prohistoria, Rosario. 150 p.
- García, S. (2014): La pesca comercial y el estudio de la fauna marina en la Argentina, 1890-1930. *História, Ciências, Saúde - Manguinhos* 20 (2): 653-67
- Guenther, A. (1880): A contribution to the knowledge of the fish-fauna of the Rio de la Plata. *Annals and Magazine of Natural History (Series 5)* 6 (31): 7-13
- Hatcher, J.B. (1903): Narrative of the expeditions, geography of Southern Patagonia. *In: Scott, W.B. (ed.): Reports of the Princeton University Expeditions to Patagonia, 1896-1899. 1: 1-313*
- Holmberg, E.L. (1893): Nombres vulgares de peces Argentinos con sus equivalencias científicas. *Revista del Jardín Zoológico de Buenos Ayres* 1 (3): 85-96
- Holmberg, E.L. (1891): Sobre algunos peces nuevos o poco conocidos de la República Argentina. I. *Revista Argentina de Historia Natural* 1 (3): 180-193.
- Hubbs, C.L. (1964): History of Ichthyology in the United States after 1850. *Copeia* 1 (1): 42-60
- Koerber, S. & J. Casciotta (2012): On the erroneous records of *Crenicichla lacustris* (Castelnau, 1855) from freshwaters of Argentina. *Ichthyological Contributions of PecesCriollos* 25: 1-4
- Lahille, F. (1895): Faunas locales argentinas. I. Lista de los pescados recogidos en los alrededores de La Plata (prov. de Bs. As.), durante el año 1894 y conservados en las colecciones del Museo de La Plata. *Revista del Museo de La Plata* 6: 265-274
- Lanteri, A.A. & A. Martínez (2012): Carlos Bruch: pionero de los estudios entomológicos en la Argentina. *Revista de la Sociedad Entomológica Argentina* 71 (3-4): 179-185
- Lopes, M.M. (2001): Viajando pelo campo e pelas coleções: aspectos de uma controvérsia paleontológica. *História, Ciências, Saúde - Manguinhos* 8 (supplement): 881-897.
- López, H.L. (1992): Peces loricáridos de la cuenca del Plata, Argentina. II. El género *Hypostomus* Lacépède, 1803 (Pisces, Siluriformes). *Publicaciones de la CARU, Série técnico-científica* 1: 63-79
- Menezes, N.A. (1992): Redefinição taxonômica das espécies de *Acestrotrhynchus* do grupo *lacustris* com a descrição de uma espécie (Osteichthyes, Characiformes, Characidae). *Comunicações do Museu de Ciências da PUCRS, Série Zoologia* 5: 39-54
- Miquelarena, A.M. & D.O. Nadalin (2014): Catálogo de ejemplares tipo de la colección ictológica del Museo de la Plata. *ProBiota - Serie Técnica y Didáctica* 23: 1-31
- Perugia, A. (1891): Appunti sopra alcuni pesci sud-americani conservati nel Museo Civico di Storia Naturale di Genova. *Annali del Museo Civico di Storia Naturale di Genova (Serie 2)* 10: 605-657
- Pinacho-Pinacho, C.D., M. García-Varela, A.L. Sereno-Urbe & G.P.P. de León (2018): A hyper-diverse genus of acanthocephalans revealed by tree-based and non-tree-based species delimitation methods: Ten cryptic species of *Neoechinorhynchus* in Middle American freshwater fishes. *Molecular phylogenetics and evolution* 127: 30-45.
- Regan, C.T. (1908): Description of a new loricariid fish of the genus *Plecostomus* from Argentina. *Annals and Magazine of Natural History (Series 8)* 2 (10): 358
- Reig, O.A. (1961): La paleontología de vertebrados en la Argentina: retrospectiva y prospectiva. *Holmbergia* 6 (17): 67-127
- Ringuélet, R.A., R.H. Arámburu & A. Alonso de Arámburu (1967): Los Peces Argentinos de Agua Dulce. CIC, La Plata, Buenos Aires. 602 p.
- Scott, W.B. (1903): Editor's preface. *In: Scott, W.B. (ed.): Reports of the Princeton University Expeditions to Patagonia, 1896-1899. 1: 1-313*
- Scott, W.B. (1939): Some memories of a paleontologist. Princeton University Press, New Jersey. 336 p.
- Simpson, G.G. (1948): Biographical memoir of William Berryman Scott, 1858-1947. *Biographical Memoirs of the National Academy of Sciences* 25 (7): 175-203
- Steindachner, F. (1866): Ichthyologische Notizen III. Ueber einige neue Fischarten aus Suedamerika. *Sitzungsberichte der Mathematisch-Naturwissenschaftlichen Classe der Kaiserlichen Akademie der Wissenschaften* 53 (1): 208-214
- Steindachner, F. (1875): Die Suesswasserfische des suedoestlichen Brasilien. *Sitzungsberichte der Kaiserlichen Akademie der Wissenschaften. Mathematisch-Naturwissenschaftliche Classe* 70 (1): 499-538
- Steindachner, F. (1881): Beitrage zur Kenntniss der Flussfische Suedamerika's. III. *Denkschriften der Kaiserlichen Akademie der Wissenschaften, Mathematisch-Naturwissenschaftliche Classe* 44: 1-18
- Vari, R.P. (1992): Systematics of the neotropical Characiform genus *Cyphocharax* Fowler (Pisces, Ostariophysi). *Smithsonian Contributions to Zoology* 529: 1-137

recommended form for reference:

Calviño, P.A. & M. Waldbillig (2020):
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Ichthyological Contributions of PecesCriollos 70: 1-7

available as pdf-file at www.pecescrilloos.de since 15.May.2020 (corrected version)

Despite several controls by authors and editors a first version of this note has unfortunately been published on 14.May.2020 with an incomplete list of references.

Appendix 1 - W.B. Scott in Argentina

Scott left on 20.Jun.1901 from Southampton, England, on a Royal Mail Liner steamship and after stopovers in La Coruña, Vigo, Lisbon, Pernambuco, Bahia, Rio de Janeiro and Montevideo, he arrived on 14.Jul.1901 to Ensenada, the port of La Plata, province of Buenos Aires (Scott, 1939 p. 249).

He stayed in Argentina for about four months, from 14.Jul.1901 until the end of October, when he departed to New York, where he arrived on 29.Nov.1901.

The purpose of the trip was exclusively to visit the Museo de La Plata (MLP), the Museo de Buenos Aires (MACN) and the private collection of Florentino Ameghino, for to study and photographing of type specimens of fossil mammals from Patagonia, to be used in the investigation of collections of John Bell Hatcher, who between 1896 and 1899 had participated in expeditions to Patagonia. During his visit, Scott developed an excellent relationship with both, Ameghino and Moreno, who were completely estranged from each other.

Francisco P. Moreno, director of the Museo de La Plata (MLP), made available to his visitor all the necessary resources. Scott lived in the Museo de La Plata throughout his stay in Argentina and enjoyed the most cordial attention and hospitality (Scott in Hatcher 1903). The Museo de La Plata contained a large house for the director and his family, and a part of it was assigned for Scott's stay, with his own room, bathroom and study (Scott, 1939. p 250).

Scott was very well received by the staff and was very grateful to the people of La Plata, especially Rafael Cattani (museum secretary), Santiago Roth (paleontologist), Rodolfo Hauthal (geologist), Carlos Bruch (entomologist, at the time in charge of the zoology section), and Roberto Lehmann Nitsche (ethnologist and director of the anthropology department) who accompanied him to Ameghino's house to introduce him there personally. In Buenos Aires he was grateful to Carlos Berg (director of the museum) and Agustín Péndola, secretary of the museum (Scott, 1939).

Ameghino granted free access to review and photograph his entire personal collection and, before Scott leaving the Museo de La Plata, had taken precautions to receive a set of copies. A part of this photo collection was used as the basis for Ameghino's work 'The Fossil Mammals of the Argentine Republic' from 1889 (Fericola, 2011).

According to Simpson (1948), fieldwork was not Scott's strong point, and on his trip to Buenos Aires, he punctually visited the Museums and did not conduct sampling.

"As the day of my departure for home drew nigh, I had another burst of intense activity in winding up my various lines of work and packaging the spoils of birds, fossils and books, which I had acquired by purchase and exchange. When these were boxed, they formed a large wagon load." (Scott, 1939, pág. 253). By mentioning the 'purchase' and 'exchange' of specimens, it is very likely that the fishes were not collected by himself.

Scott didn't even see the need to go to the field, as Ameghino said. His most precious collections were the more than five hundred photos he took of Ameghino's collections (Lopes, 2001).

"Of my photographic prints, I made up two large albums, one for Ameghino, containing all the pictures I had made of his fossils, and the other, for myself, in which I mounted all the photographs I had taken in La Plata and Buenos Aires" (Scott, 1939, pág. 253).

Concurrently with the investigations carried out by Roth and Ameghino, Hatcher's expedition organized by Princeton University to the province of Santa Cruz managed to extract abundant material that was transported entirely to the United States. Both Scott and Sinclair carried out excellent monographs with the review of this material, integrating Ameghino's discoveries in the general picture of mammal phylogeny (Reig, 1961).

Appendix 2 - The Lahille collection

An interesting fact is that Lahille (1895) published a list of fish from “around La Plata”. Among these, he mentioned *Plecostomus plecostomus* from Isla Santiago, and *Geophagus brasiliensis* from Puerto Viejo, which are most probably the same species described later by Eigenmann: *Plecostomus laplatae* and *Geophagus australe*.

“Bajo la designación de ‘alrededores de La Plata’ comprendo las pequeñas lagunas y las zanjas situadas dentro del perímetro del ejido de la Ciudad: arroyo del Gato, dique N° 1, y los dos canales, Este y Oeste. (Este último se encuentra completamente separado del dique y del canal Este.) Bajo el nombre de Puerto de La Plata, incluyo el Dock Central y el Canal de entrada. Al antiguo puerto de la Ensenada corresponde el Arroyo de Doña Flora. Y, en cuanto a los límites de Punta Lara y de la Isla Santiago, diré solo que son bastante claros para que sea necesario determinarlos aquí.

Al final de la lista de los peces recogidos en los alrededores de La Plata, ó incorporados á la sección a mi cargo durante el año 1894, agregaré las de otras especies que no he podido encontrar aún en esta localidad o en la parte correspondiente del río” (Lahille, 1895).

Lahille was head of the zoology section of the La Plata museum, between 1893 and 1899 and at the time of Scott's visit, head already left the museum. Lahille resigned from the MLP in 1899 to join the Nation's Ministry of Agriculture as Chief of the Hunting and Fishing Division. From Lahille's quitting in 1899 to MacDonagh's appointment as head of the ichthyology section of the Department of Zoology in 1929, the section was not staffed by ichthyologists for 30 years.

In 1901 Carlos Bruch was appointed head of the zoology section, a position he held until his retirement in 1920 and then honorably for another decade (García, 2010). His specialty was entomology and photography (Lanteri & Martínez, 2012). According to Susana García (pers. com.) when the Museum joined the new Universidad Nacional de La Plata, the academic authorities projected tasks as usual in the museums in other parts of the world, such as guided tours through the exhibition and the elaboration of collection catalogs (García, 2010, p. 169). Only in 1908 the zoology section began to keep a book of incoming and cost of specimens.

Miquelarena and Nadalin (2014) have not been able to locate Lahille's material in the MLP collection or documentation related to its entrance. The first entry records for this collection date from 1910. The collection and the record that he initially collected for the Ministry of Agriculture and Fisheries are also considered lost. Susana García (pers.com.) could not reconstruct what was stored in the ministry's collections. During a huge fire all files and materials in Lahille's office were lost in 1915. On the other hand, we do not know if Lahille ever transferred his MLP collection to the ministry's building and if it was eventually lost in that fire.