

# Actinopterygii, Atheriniformes, Atherinopsidae, *Odontesthes bonariensis* Valenciennes, 1835: New records for the Plata Basin, Argentina

Esteban Avigliano<sup>1,2\*</sup> and Alejandra Vanina Volpedo<sup>1,2</sup>

1 Universidad de Buenos Aires, Facultad de Ciencias Veterinarias, Instituto de Investigaciones en Producción Animal (INPA-CONICET). Av. Chorroarín 280 (C1427CWO), Buenos Aires, Argentina.

2 Consejo Nacional de Investigaciones Científicas y Técnicas (CONICET), Argentina.

\* Corresponding author. E-mail: [estebanavigliano@conicet.gov.ar](mailto:estebanavigliano@conicet.gov.ar)

**ABSTRACT:** The present work reports the presence of the silverside *Odontesthes bonariensis* Valenciennes, 1835, in 11 water bodies and six new locations from the lower Plata Basin (Argentina).

The silverside *Odontesthes bonariensis* Valenciennes, 1835 (Figure 1) is distributed in freshwater and estuarine water bodies of Argentina (Ringuelet *et al.* 1967; Liotta 2005; Tombari and Volpedo 2008). The type locality is Montevideo, Uruguay and its original distribution is associated with lentic and lotic aquatic systems of the Argentinian provinces of Córdoba, La Pampa, Santa Fe, Santiago del Estero, Misiones, Entre Ríos, Tucumán, Corrientes, Salta, San Luis and Buenos Aires (Figure 2; Liotta 2005). The available information on the distribution of *O. bonariensis* was reviewed by Liotta (2005). This author reviewed the presence of silverside in 89 localities of different aquatic ecosystems (Figure 2).

The Plata Basin is formed by the Uruguay and Paraná

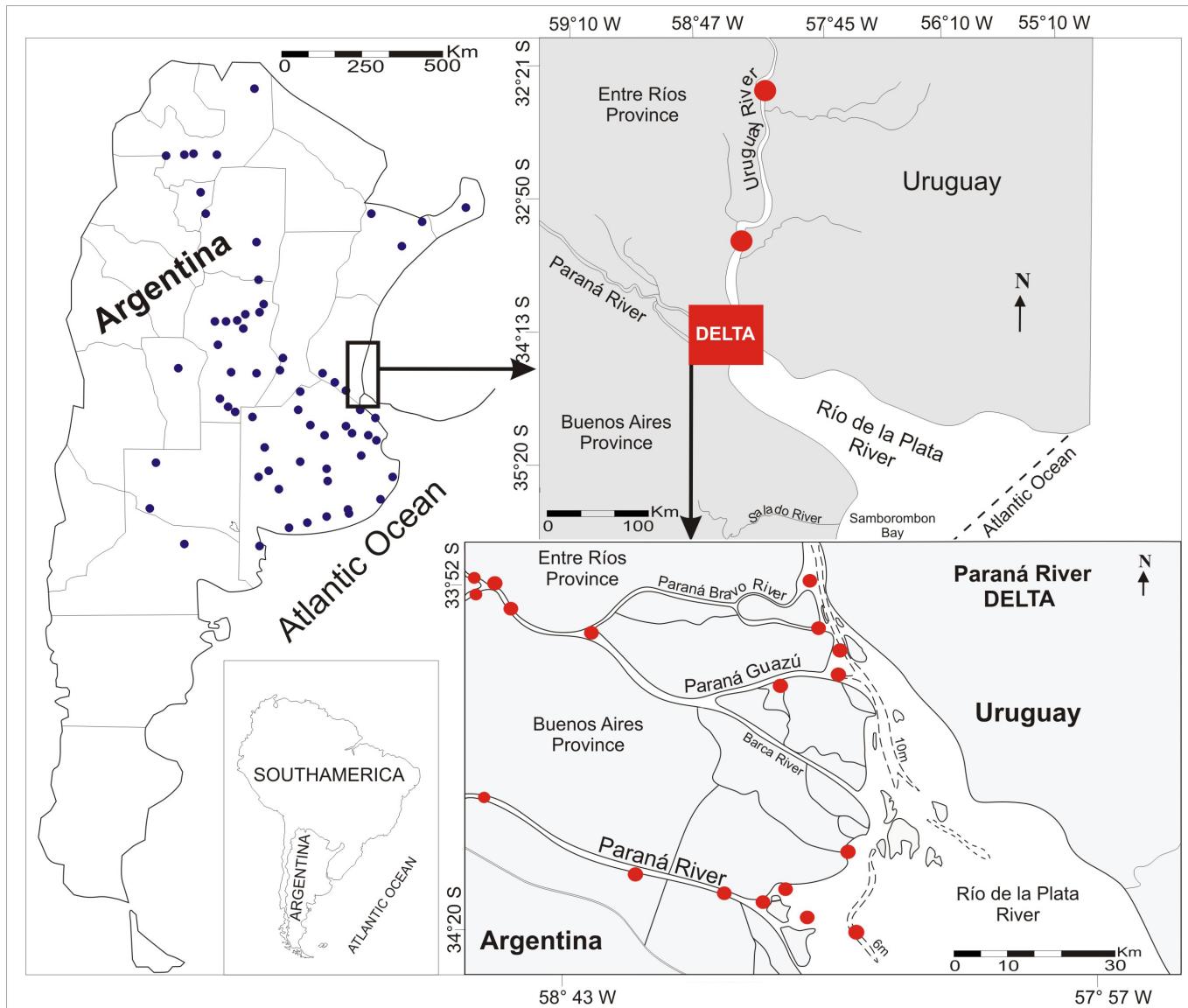
rivers and their tributaries, both of which discharge into the Río de la Plata. Here we studied the seasonal movements of silverside during 2008 to 2012, in the lower Plata Basin. In this context, the silverside was found in winter (June and July 2012) in different water bodies and new locations of the lower Plata Basin (Table 1 and Figure 2). Fish were captured with fishing nets and from local sport fishermen. The fish species were determined according to the taxonomic key proposed by García (1987) and Dyer (2006). The vouchers were deposited in the Universidad de Buenos Aires Fish Collection (COLV/Fish-UBA). New records include 11 water bodies and seven new localities. These records are in Entre Ríos and Buenos Aires provinces (Argentina) (Table 1 and Figure 2).



**FIGURE 1.** *Odontesthes bonariensis* collected in San Fernando (Buenos Aires province, Argentina). Scale: 10 mm.

**TABLE 1.** New localities and aquatic ecosystems (\*) for *Odontesthes bonariensis*.

LOCALITY	PROVINCE	WATERBODY	VOUCHER	COORDINATES
1-Concepción del Uruguay	Entre Ríos	Uruguay River	COLV/Fish-01	58°17'9.44" W, 32°29'57.43" S
2-Gualeguaychú	Entre Ríos	Uruguay River	COLV/Fish-02	58°21'48.83" W, 33° 5'36.57" S
3-Islas del Ibicuy	Entre Ríos	La Paloma Stream*	COLV/Fish-03	58°28'44.80" W, 33°53'51.39" S
4-Islas del Ibicuy	Entre Ríos	Paraná Bravo*	COLV/Fish-04	58°29'2.99" W, 33°54'53.43" S
5-Islas del Ibicuy	Entre Ríos	Sauce River*	COLV/Fish-05	58°28'58.70" W, 33°56'13.53" S
6-Islas del Ibicuy	Entre Ríos	Ceibo River*	COLV/Fish-06	58°28'46.98" W, 33°57'29.60" S
7-Islas del Ibicuy	Entre Ríos	Paraná Guazú River	COLV/Fish-07	58°29'36.89" W, 34° 0'27.24" S
8-San Fernando	Buenos Aires	Guazucito Stream*	COLV/Fish-08	58°23'12.50" W, 34° 1'53.61" S
9-San Fernando	Buenos Aires	La Barca River*	COLV/Fish-09	58°24'6.13" W, 34° 8'32.88" S
10-San Fernando	Buenos Aires	Paraná Miní River*	COLV/Fish-10	58°28'40.79" W, 34°11'57.41" S
11-San Fernando	Buenos Aires	Bajos del Temor*	COLV/Fish-11	58°28'10.81" W, 34°16'34.15" S
12-San Fernando	Buenos Aires	El Sueco Channel*	COLV/Fish-12	58°29'55.06" W, 34°17'43.65" S
13-Escobar	Buenos Aires	Paraná River	COLV/Fish-13	58°36'10.46" W, 34°16'30.73" S
14-Islas del Ibicuy	Entre Ríos	Brazo Largo Stream*	COLV/Fish-14	58°53'0.49" W, 33°52'7.50" S
15-Zarate	Buenos Aires	Talavera and Paraná Guazú Confluence*	COLV/Fish-15	58°54'46.63" W, 33°53'29.03" S



**FIGURE 2.** Geographical distribution of *Odontesthes bonariensis* in Argentina (Blue point: specific reported locations, Liotta 2005; yellow point: this report).

**ACKNOWLEDGMENTS:** Authors are indebted to the Consejo Nacional de Investigaciones Científicas y Técnicas (CONICET), ANPCyT (PIP 2010-1372) and the Universidad de Buenos Aires (FVET-UBA, UBACYT CC05, UBACYT 20620110100007) for financial support.

#### LITERATURE CITED

- Dyer, B.S. 2006. Systematic revision of the South American silversides (Teleostei, Atheriniformes). *Biozell* 30(1): 69-88.  
 García, M.L. 1987. *Contribución al conocimiento sistemático y biológico de los Atherinidae del Mar Argentino*. Ph.D. thesis. La Plata: Facultad de Ciencias Exactas y Naturales y Museo, Universidad Nacional de La Plata.  
 Liotta, J. 2005. *Distribución geográfica de los peces de aguas continentales de la República Argentina*. La Plata: Probiota, FCNyM, UNLP. 654 p.

Ringuelet, R.A., R. Arámburu and A.A. de Arámburu. 1967. *Los peces argentinos de agua dulce*. La Plata: Comisión de Investigación Científica. 602 p.

Tombari, A. and A.V. Volpedo. 2008. Modificaciones en la distribución original de especies por impacto antrópico: el caso de *Odontesthes bonariensis* (Pisces: Atherinopsidae), p. 155-165 In A. V. Volpedo and L. Fernández Reyes (ed.). *Efecto de los cambios globales sobre los humedales de Iberoamérica*. Buenos Aires: Programa Iberoamericano de Ciencia y Tecnología para el Desarrollo.

RECEIVED: March 2012

ACCEPTED: February 2013

PUBLISHED ONLINE: June 2013

EDITORIAL RESPONSIBILITY: Rubens Pazza