

# Observations of *Protochondrostoma genei* within freshwater ecosystems of Friuli Venezia Giulia

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First observation of *Protochondrostoma genei* (Bonaparte, 1839) in the Friuli Venezia Giulia Region (formerly indicated as *Chondrostoma genei*) was reported by Tellini (1895), for the Natisone River (Isonzo Basin, locality of Orsaria) and the Vipacco River (Isonzo Basin, locality of Sagrado). Specimens collected in these sites are probably kept by the Cabinet of Natural History, at the Royal School of Gorizia.

Subsequent observations regarded the Isonzo River and the Dottori Ditch (both sampling sites were located in the municipality of Sagrado) and were provided respectively by Gridelli (1936) and Flego (1972). Specimens of *P. genei* collected in these watercourses by Gridelli in 1933 and 1935 are kept at the Natural History Museum of Trieste. The same Author indicated the presence of the species in the Meduna River (Livenza Basin, municipality of Pordenone) and in the Stella River (Stella Basin, municipality of Pocenia).

D'Este (1978) observed *P. Genei* in the Corno Stream (Stella River Basin) near the locality called Rodeano; moreover, the Author reported captures of *P. genei* in the Tagliamento River near the Madrisio bridge.

After samplings carried out in 1990 for the definition of the Fish Map of Friuli Venezia Giulia, Stoch et al. (1992) indicated the presence of *P. genei* exclusively for two sites: in the Meschio River (Livenza Basin, locality Borgo Schiavoi, municipality of Sacile) and in the Arzino Stream (Tagliamento Basin, locality San Francesco, municipality of Vito d'Asio).

Battistella et al. (1999) carried out investigations regarding morphology and genetics of the genus *Chondrostoma*, analyzing samples collected in Meduna River (Livenza Basin) and Reça Stream (Isonzo Basin). The species was also collected in the Meduna River (Cordenons) and in the Corno Stream (Isonzo Basin, S. Giovanni al Natisone) during the year 2003, as reported by Pizzul et al. (2006).

More recently, several scientific researches highlighted that *P. genei* distribution area in the Friuli Venezia Giulia territory was severely restricted and the species was absent in most of the sites where its presence was formerly reported. Among these sites we cite:

- Meschio River: samplings performed during 2002 and during 2016 by Pizzul et al. (2002) (Life Science Department, University of Trieste) in the context of the Regional Water Protection Plan for ARPA FVG;
- Arzino Stream: samplings performed by Pizzul (Life Science Department, University of Trieste) in 2009, 2012 and 2016 in the context of the Regional Water Protection Plan for ARPA FVG;
- Natisone River: samplings operations performed by Pizzul (Life Science Department, University of Trieste) in the localities of Manzano (2009), Pulfero (2010 and 2016), S. Piero al Natisone (2011), Taipana (2015), Cividale del Friuli (2016) and S. Giovanni al Natisone (2017) during the activities related to the Regional Water Protection Plan for ARPA FVG;
- Vipacco River: samplings operations performed by Pizzul (Life Science Department, University of Trieste) in the locality of Savogna d'Isonzo (Gorizia) during the activities related to the Regional Water Protection Plan for ARPA FVG;
- Stella River Basin: 28 sampling sites investigated in the period 2007-2008 (Mancini, 2008)

*P. genei* was reported by Pizzul for ARPA FVG (always in the context of the Regional Water Protection Plan) in the following watercourses:

- Rio Lin (Livenza Basin), 2017
- Judrio Stream (Isonzo Basin) 2017, localities of Vencò and Brazzano
- Reca Stream (Isonzo Basin) 2016, locality Vencò
- Brentella Creek (Livenza Basin) 2017, locality Murlis, municipality of Zoppola
- Taglio River (Ausa-Corno Basin), 2017 municipality of Cervignano del Friuli

The species was also observed by Moro (personal communication) during 2014 in the Chiarò di Cialla Stream, a tributary of the Corno Stream (Isonzo Basin) (Figure 1).

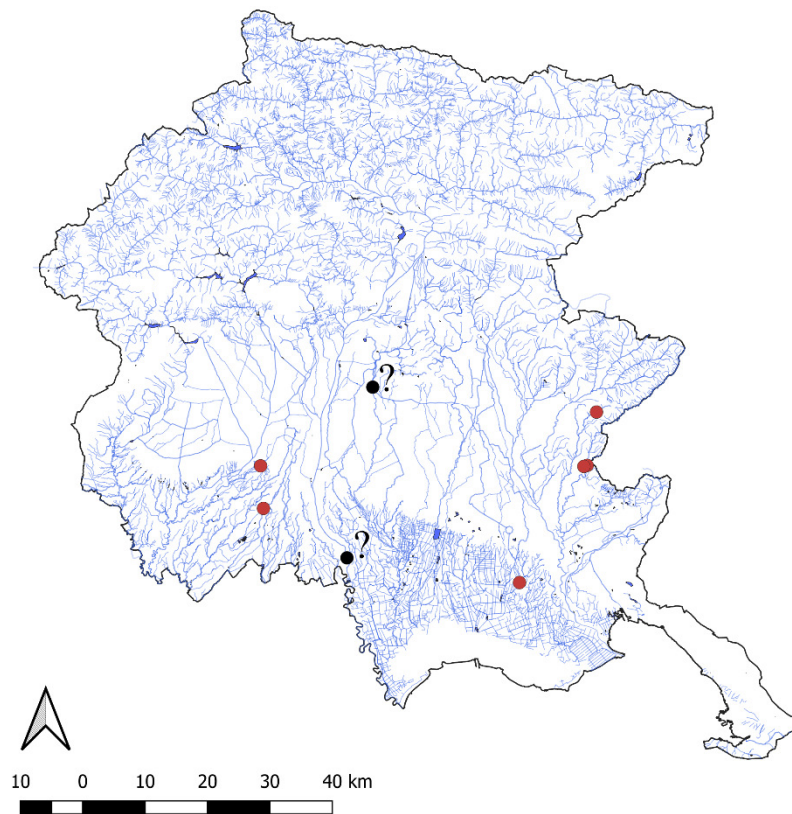


Figure 1. Distribution of *Protochondrostoma genei* in the Friuli Venezia Giulia Region freshwater system, based on most recent observations

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