

## First information on age and growth of



*Padogobius bonelli* is a goby native to Northern Italy, but several populations are established in Central Italy out of its native range. *P. bonelli* caused negative impact on native fish community but any study on growth in the introduced areas has ever been conducted. In this study age, growth and condition of a non-native population of *P. bonelli* from the River Aggia were investigated. Samples ( $n = 422$ ) were collected monthly from January to December 2012. Age estimation was based on scalimetry and five age classes (0+–4+) were observed. Sex ratio was strongly male-biased. Growth in previous years was determined by back-calculation from scale measurements and the occurrence of Lee's phenomenon was tested. Von Bertalanffy growth parameters were estimated (Males:  $L_{\infty} = 8.35$  cm,  $k = 0.40$ ,  $\Phi' = 1.44$ ; Females:  $L_{\infty} = 8.71$ ,  $k = 0.43$ ,  $\Phi' = 1.51$ ). No differences in growth between sexes were observed, despite sexual dimorphism based on the larger size of males is count as a typical trait of the species. This result could be affected by the reverse Lee's phenomenon that acts only on females, since in the population selectively survived females of larger size. Smaller females would be disadvantaged, especially during the breeding season, as highlighted by the low somatic condition observed in the period April–June.

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