



Epigenetical context in the life-history traits of round goby *Neogobius melanostomus* from Slovak stretch of the Danube

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Over the last decade, four alien gobies have invaded the middle Danube catchment. One of the effective tools for understanding the problems associated with invasions is a thorough epigenetical analysis of various biological traits (morphological, ecological, ontogenetical, life-history) of the target species. Round goby *Neogobius melanostomus* (Pallas 1811), is a non-indigenous, demersal fish species that has recently widely extended its area of distribution. Our previous study of its external morphology revealed that the overall development was rather fuzzy, and no remarkable change in external shape during its entire ontogeny were observed. Such a direct development represents a strongly precocial (i.e. specialised) life-history. In contrast, short generation time and earlier maturation of non-native populations suggests a shift back towards a more altricial (i.e. less specialised, more generalised) life-history. In this study, life-history traits of round goby from Slovak stretch of the Danube are examined to test our hypothesis that such a combination of altricial-precocial trajectories as appears to be typical for invasive round gobies, may be one of the key factors for successful colonisation of new environments. This study was funded by the Slovak Scientific Grant Agency, project no. 1/2341/05, and by Faculty of Natural Sciences grant no. 8/2004.