

Book of Abstracts



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Biological invasion status and risk screening of the crayfish in an integral natural state reserve in northern Italy

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Risk screening of alien species already present or likely to arrive in a target area is a valuable procedure to identify the risks associated to their presence or entrance in a new environment. In this context, we inspected the wetland of the Bosco Siro Negri, a small residual floodplain forest of high conservation interest, performing surveys along one-year to verify the presence of invasive crayfish. For this purpose, we used funnel baited traps and artificial refuge traps (bricks), which provide habitat shelter for small specimens. All captured specimens were frozen, then analysed for sex and biometric variables and the body condition factor was calculated to determine the population health. The survey results indicated only the presence of *Procambarus clarkii*: in total, we collected 23 specimens, which were generally bigger and heavier in May 2022 and, for both sexes, the body condition factor indicated a decrease of the population health. Out of the 23 specimens, 7 were collected using funnel baited traps (5 males and 2 females) and 16 using bricks (9 males and 7 females): as expected, individuals collected using traps were larger-sized than those captured with bricks. Finally, we performed a risk screening analysis of the species already present, as well as of other possible “door knocker” crayfish listed in the EU list of Union Concern, by applying the AS-ISK tool. All the selected crayfish were ranked with high-level risk of invasiveness, and this information could be useful for the management of the natural state reserve.

Keywords: wetlands, invasive species, biometry, AS-ISK, invasiveness