

L'acqua, la risorsa che ci connette

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New approaches for invasive alien crayfish control

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Eradication of Invasive Alien Species is a complex, costly and time-consuming task. In the case of the Louisiana crayfish *Procambarus clarkii*, eradication or at least control of the invading populations is mandatory. In Trentino, all the known populations of *P. clarkii* have been controlled with yearly campaigns conducted by trapping and removing the crayfish. In the case of the oldest introduction, Lagolo Lake, 5 years of campaigns have not proven effective in reducing the population abundance. In a second site, Costa Lake, the species has been spreading from its first introduction in 2023 to occupy the whole lake, and even invading an adjacent lake by walking on land, regardless of the two intensive campaigns conducted each summer. Therefore, from summer 2025, we have adopted a new approach, previously proposed for this and other species of alien crayfish and adopted in other LIFE projects: we removed the female pleopods to eliminate the support for the attachment of newly fertilised eggs. In this way, females release eggs that are lost into the environment due to the lack of physical support provided by the pleopods, but spermatophore release by the males still occurs, and more mating with sterilised females will lead to a decrease in the amount of spermatophore a male will produce/use for future matings. In this way, the number of juveniles should decrease, and the population should progressively age and undergo a density decline.