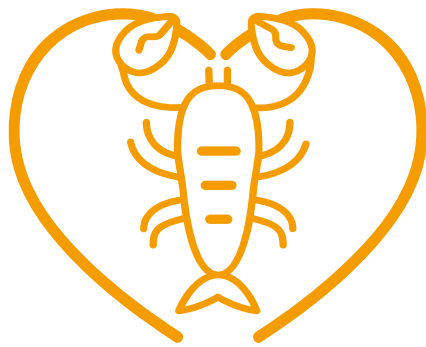


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Preventing the spread of *Faxonius limosus* in Trentino: management challenges, experimental protocols and new threats

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Two Alien Invasive crayfish species are present in Trentino (NE Italy): *Procambarus clarkii* and *Faxonius limosus*. Both species were accidentally introduced in the first decade of this century with fish restocking; their introduction caused the extinction of populations of the native *Austropotamobius pallipes*. *Procambarus clarkii* was so far recorded only in one small lake at 950 m asl, whereas *Faxonius limosus* has colonized a group of 5 lakes at 450 m asl, over an area of about 80km². The containment of *Faxonius limosus* is therefore difficult, given its presence in a high number of lakes, three of which are hydrologically connected. The first containment campaign to prevent its spread was conducted in summer 2023 in the downstream-most of the three connected lakes, Costa Lake, a small lake of about 1 hectare surface area. The efficiency of traps with different mesh size was tested in a 10-day campaign in mid-June, a more extensive one-week campaign was conducted in July. The use of small size (1 cm) mesh was the most efficient trapping system, as the small body size of the individuals probably allows them to escape from the standard, larger size (3x2 cm) mesh; crayfish were collected mainly in the canal which acts as the emissary of the lake, connecting it to the main river network. Unexpectedly and unluckily, individuals of *Procambarus clarkii* were collected in the NW part of the lake, suggesting a recent, point introduction, of unknown origin, which represent a further threat for the area.

Keywords: management of autochthonous species, invasive alien species, spiny-cheek crayfish, faunistic monitoring

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