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**(Invasive) alien vertebrates**

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**Distribution, social perception and potential range expansion of invasive raccoons in Italy**

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Invasive alien species listed in the Annex of the EU Regulation 1143/2014 should be rapidly detected and, whenever possible, eradicated, given their strong impacts on native biodiversity, ecosystems, and health. However, assessing distribution, social perception towards these species and possible corridors for range expansion is decisive for successful management actions. Amongst invasive species of European concern, the Northern raccoon (*Procyon lotor*) has been present with a free-ranging population in central Italy since 2013, following the escape of some individuals from an enclosed area. Since then, the presence of these animals has persisted outside the protected area. The unmistakable characteristics of raccoon, such as its distinctive face mask and ring-tail pattern, make it highly recognizable and highly recorded on citizen-science platforms.

We used a citizen-science, photo-based approach to redefine the distribution of the Northern raccoon in Italy and we developed a standardised questionnaire to test for social perception towards this species. For a management proposal, habitat suitability and connectivity models were run to unveil the expansion history of this invasive species. We collected 61 raccoon occurrences, showing a remarkable range expansion of the species in central Italy, mostly southwards with respect to the introduction site. Moreover, we detected a high public appreciation on over 1000 questionnaires, which highlights the importance of a good communication campaign to enhance the success of removal programmes. To conclude, we showed a high environmental suitability for the raccoon in Europe, which is in line with its generalist behaviour in terms of habitat use. These results underscore the importance of implementing comprehensive removal programs and public outreach initiatives to mitigate the negative impacts of this invasive species.