

# BOOK OF ABSTRACTS

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## GENERAL SESSION

### P58 IDENTIFYING NEW POTENTIAL AREAS FOR THE ESTABLISHMENT OF THE INVASIVE RACCOON (*Procyon lotor*) IN EUROPE

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The concern about biological invasions is growing worldwide because implies a serious threat to biodiversity conservation, the high economic costs of management measures and, in many cases, involves a health risk for humans, since some species are host of pathogens that are transmitted to humans. The raccoon (*Procyon lotor*), a medium-size carnivore native from North America, is a good example of invasive species. Its high ecological plasticity has allowed it to adapt successfully to different ecosystems in Europe and Asia, where the species has been introduced due to: releases for hunting, fur farms escapes and more recently the pet trade. The successful raccoon's expansion in Europe poses a threat to biodiversity conservation. In this study we review and update the distribution of this species in Europe, with the aim of identifying new potential areas for the establishment of the raccoon in Europe. According to this updating of presences and a set of predictors variables (environmental and human activity), we applied the Favourability Function to detect favourable areas for the species. Anthropogenic variables have a significant relevance explaining the current occurrence of this invasive species. The favourability model detected central Europe and the United Kingdom as the areas with the best conditions for the species, being related to territories with a high percentage of urban area. This may indicate that the invasion pattern could still be reflecting the places of releases. In this sense, the favourable areas for the presence of the raccoon highlight unoccupied zones with high potential to be established in the near future. Our results provide useful information to increase the monitoring effort and develop prevention plans to optimize effective control measures.