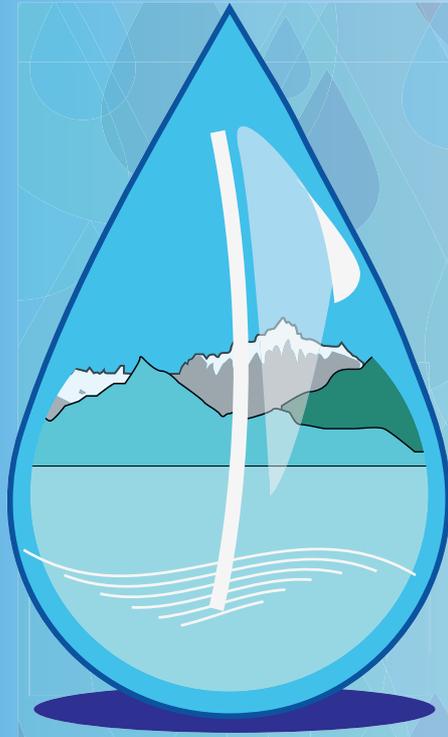


ABSTRACT BOOK



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RS13 - Oral

A MACROECOLOGICAL APPROACH TO ASSESS ALIEN SPECIES INVASION DRIVERS IN ITALIAN FRESHWATERS

P. Colangelo¹, A. Boggero¹, D. Fontaneto¹, L. Bartolozzi², A. Basset³, I. Bertani⁴, A. Campanaro⁵, A. Cattaneo⁶, F. Cianferoni², G. Corriero⁷, G.

¹*National Research Council, Institute of Ecosystem Study*

²*Entomological Department, Natural History Museum of the University of Florence, Zoological Section 'La Specola'*

³*Department of Science and Biological and Environmental Technology, University of Salento*

⁴*Department of Life Sciences, University of Parma*

⁵*National Forestry Service, National Center for Biodiversity Study and Conservation*

⁶*Département de Sciences Biologiques, Université de Montréal*

⁷*Department of Biology, University of Bari 'Aldo Moro'*

⁸*Dipartimento di Scienze dell'Ambiente e del Territorio e di Scienze della Terra, University of Milano Bicocca*

⁹*Department of Cellular and Environmental Biology, University of Perugia*

Within the LifeWatch European e-Science infrastructure for biodiversity and ecosystem research a showcase on alien species was launched and coordinated by LifeWatch-Italy. Here we present the results relative to the role of propagule pressure, and abiotic and biotic variables as determinants of alien species occurrence among different taxonomic groups across several natural freshwater habitats in Italy. We determined that abiotic variables were good predictors of alien species occurrence: in fact,

together with propagule pressure, expressed as the proximity to major inhabited areas, and differences in the receiving community, expressed as the native species richness, they play a crucial role in determining the number of alien species. Furthermore, we found evidence of an influence of body size in determining the invasion success. This is the first study providing broad-scale support for the correlates of the occurrence of alien species across a wide range of taxa. Considering that many previous studies did not formally consider propagule pressure, our results may explain the apparent idiosyncrasy in results from species-specific studies. Moreover, by using the predictions of our model, we addressed the probability of the occurrence of alien species in freshwater habitats across the whole country, to be used for conservation planning.