SOLVING THE MYSTERY OF THE MISSING LIZARD: INTERPLAY OF ECOLOGICAL CONDITIONS, ENVIRONMENTAL HISTORY AND HUMAN ACTIVITIES SHAPE THE DISTRIBUTION OF AN ISLAND SPECIES

Sydney WATKINS¹, Vanessa TAMEZ¹, Zachary GIZICKI¹, Panayotis PAFILIS² and Johannes FOUFOPoulos¹

¹ University of Michigan, USA, Email: jfoufop@umich.edu
² National and Kapodistrian University of Athens, Greece

* Corresponding author

The Aegean Wall lizard (Podarcis erhardii) has a wide distribution across the islands of the Aegean Sea. The seemingly unexplained absence of the species from Paros (Central Cyclades), as well as from most (but importantly not all) of the surrounding archipelago, has been noted for over a century and has remained one of the most tantalizing mysteries in Aegean herpetology. Over the last 10 years we visited Paros and all of the surrounding islands mapping out the distribution of the species and quantifying the local ecological conditions. Based on field observations, laboratory measurements and analysis of historical records and utilizing a tree regression approach we offer for the first time an explanation for the likely processes that produced the unusual distributional pattern of P. erhardii.