PARASITISM IN ISLAND POPULATIONS OF THE AEGEAN WALL LIZARD (*PODARCIS ERHARDII*)

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The Aegean Wall lizard *Podarcis erhardii* is one of the most widely distributed species of Aegean reptiles. While there has been a substantial amount of research into the ecology and evolution of *P. erhardii*, there have been comparatively few studies on the parasite communities of the species. This study analyzes helminth parasite loads from 8 populations of *P. erhardii* occurring on islands of varying size in the Cyclades (Aegean Sea, Greece). By comparing burdens of infection among the different populations, this study aims to elucidate how host population and habitat factors shape levels of parasitism. Helminth diversity was very low with only four nematode taxa identified in the samples collected (*Spauligodon* sp., *Skrjabinodon* sp., *Parapharyngodon* sp., and *Skrjabinelazia* sp.). Rarer species (the digenean *Paradistomum mutabile* and the cestode *Oochoristica* sp.) that have been encountered in Wall lizard populations from the N. Sporades were absent from this survey. We found that worm burden was positively correlated with island area and that parasite prevalence was negatively correlated with island age. This suggests that numbers of parasites are determined not only by host population size but also that loss of parasite genetic diversity following long-term population bottlenecks likely impacts parasitic organisms. Given that these populations constitute a reliable model for the long-term effects of habitat fragmentation on species, the study raises concerns about the long-term prospects of survival for many specialized parasite populations in the face of widespread anthropogenic habitat fragmentation.