



POSTERS

INTERACTIVE EFFECTS OF MARINE SUBSIDIES, HERBIVORY AND PREDATION ON ISLAND *Podarcis*

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On islands worldwide, lizards are frequently the most important vertebrates, both in terms of aggregate biomass and total population size. While some research has been done on the effects of predation on lizard population size, little is known on the effects of marine nutrient subsidies or herbivory on lizard population size. In this study we investigate the effects of seabird-delivered marine subsidies, herbivory by introduced goats, and predation by native snakes on the populations of the Aegean Wall lizard (*Podarcis erhardii*, Lacertidae, Reptilia) living on islands in the Aegean Sea (Greece). Our results indicate that *Podarcis* population densities are determined by a hierarchical interplay between predation on the one hand, and nutrient availability - mediated through goat browsing and seabird subsidies- on the other. Predation by snakes significantly depresses lizard densities on those islands that are big enough to support resident snake populations. On snake-free islands only, lizard numbers are positively associated with breeding seabird populations, presumably because of seabird subsidies. Also only on snake-free islands, lizard numbers are negatively associated with density of stocked goats. Experimental goat removal and addition experiments lead to the same results. Goats appear to impact lizard populations through the destruction of the vegetation and through the introduction of invasive generalist ticks that switch hosts from goats to parasitize lizards.