

Coupled demography of two sympatric lizard species

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Lizards are good ecological models, as they usually are conspicuous, abundant and relatively easy to catch. There are several demographic studies on lizards, most of them dealing with single species or populations. Single species demographic models predict population growth rate obviating the environmental conditions and their association with vital rates. However it is possible to analyze the relationship of vital rates with any condition acting upon them. We analyzed vital rates and its relation with a congeneric species abundance. We found *Sceloporus graciosus* does not show density dependence (from conspecifics, neither individuals from the second species *S. occidentalis*). *S. occidentalis* showed density dependence on survival from conspecific and heterospecifics. Density dependent models show a population structure and growth rate more similar to the observed under natural conditions.