



The global diversity and distribution of lizard clutch sizes

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Abstract

Aim: Clutch size is a key life-history trait. In lizards, it ranges over two orders of magnitude. The global drivers of spatial and phylogenetic variation in clutch have been extensively studied in birds, but such tests in other organisms are lacking. To test the generality of latitudinal gradients in clutch size, and their putative drivers, we present the first global-scale analysis of clutch sizes across lizard taxa.

Location: Global.

Time period: Recent.

Major taxa studied: Lizards (Reptilia, Squamata, Sauria).

Methods: We analysed clutch-size data for over 3,900 lizard species, using phylogenetic generalized least-square regression to study the relationships between clutch sizes and environmental (temperature, precipitation, seasonality, primary productivity, insularity) and ecological factors (body mass, insularity, activity times, and microhabitat use).

Results: Larger clutches are laid at higher latitudes and in more productive and seasonal environments. Insular taxa lay smaller clutches on average. Temperature