Chapter 8

Night Lights and Reptiles: Observed and Potential Effects

Gad Perry and Robert N. Fisher

Reptiles are amazing creatures. They are found in most types of habitats, sometimes in great numbers; the greatest density of any terrestrial vertebrate was measured in Sphaerodactylus macrolepis, a tiny West Indian gecko (Rodda et al. 2001). They range in size from the tiniest known vertebrates (another Sphaerodactylus; Hedges and Thomas 2001) to large "maneaters" more than seven meters long and weighing over one ton (Pooley et al. 1989). Despite this, relatively little is known about most species. Summarizing our knowledge of the better-studied West Indian taxa, Schwartz and Henderson (1991:2) stated, "It is surprising how little is known about the natural history of about 95% of the herpetofauna." Perry and Garland (2002) likewise complained that even basic ecological data, such as home range size, were unavailable for a majority of reptile species. Gibbons et al. (2000) pointed out that reptile species are disappearing at a rate that is at least comparable to that raising great alarm in amphibians, yet little attention is being paid to this decline. It is perhaps not surprising, therefore, that information on the effects of night lighting on reptiles, with the notable exception of the sea turtles (see Chapter 7,

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