The Effects of Provisional Rate on Offspring Growth in European Starlings

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Offspring rarely have a linear growth rate and many external factors may be to blame for this. They may be most sensitive to their rearing conditions when they grow most rapidly. Parenting and provisional habits are similarly inconsistent and may depend on various factors including the energetic state of the parent or the food availability in the surrounding environment. Though not previously linked before, the connection between parental provisioning efforts and growth and success rate of the offspring may be immense. This study focused on European Starlings (Sturnus vulgaris). The hypothesis tested was that rapid offspring growth may be connected and coincide with an increase in parental provisioning habits. Nest boxes were studied over a course of several weeks, and videos were filmed every other day to allow analysis of provisioning rates. Nestlings were weighed every other day to determine growth rate of the offspring. We will be studying the habits and rates of the parental provisioning as well as other factors such as sex of the bird and weather. These are known factors that affect provisioning habits in birds. We will be presenting results on whether parental provisional care affects the growth rate of the offspring. This will allow scientists to better understand the nonlinear affect that provisioning habits have on the offspring at different stages of development.