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Danielle Burton* (dburton3@utk.edu) and **Shandelle M Henson**. *A note on the onset of synchrony in avian ovulation cycles.*

Spontaneous oscillator synchrony occurs when populations of interacting oscillators begin cycling together in the absence of environmental forcing. Synchrony has been documented in many physical and biological systems, including estrous/menstrual cycles in rats and humans. In previous work we showed that Glaucous-winged Gulls (*Larus glaucescens*) can lay eggs synchronously on an every-other-day schedule, and that synchrony increases with colony density. Here we pose a discrete-time model of avian ovulation to study the dynamics of synchronization. We prove the existence and uniqueness of an equilibrium solution which bifurcates to increasingly synchronous cycles as colony density increases. (Received August 28, 2014)