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Timothy C Reluga*, Department of Mathematics, Penn State University, University Park, PA 16802, and **Allison K. Shaw**. *Dynamical-systems insights into migration*. Preliminary report.

Long-distance migrations form some of the most astonishing phenomena in animal life on planet earth, and also some of the clearest examples of oscillations in populations. There are many different examples of long-distance migration for very different animals, including monarchs annual migration to Mexico, wildebeest migration in Africa, and salmon migrations up fresh-water rivers. It's clear that these species gain advantages in survival based on their migration patterns. But it's less clear how species without human capacities for reasoning, evolved to exhibit these long-distance migrations. In this talk, I'll present some recent and classical dynamical-systems results that explore how migratory behavior can emerge. (Received September 14, 2012)