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**Ying Zhou\***, zhou.494@mbi.osu.edu, and **William Fagan**. *Expanding and contracting habitats: comparison of dispersal strategies*. Preliminary report.

In this talk, I will present an integrodifference equation model for the spatiotemporal dynamics of a population living in habitats with time-dependent sizes. I will show the conditions required for the resulting integral operator to be completely continuous. Bifurcation results will follow. It can be shown in some examples and under some conditions that the dominant eigenvalue of the integral operator will monotonically decrease with larger temporal changes in the habitat sizes. In the mean time, the dominant eigenvalue may not be monotonic with respect to mean dispersal distances. (Received January 19, 2015)