

1077-35-321

Jon Jacobsen* (jacobsen@math.hmc.edu), **Yu Jin**, **Mark Lewis** and **Hannah McKenzie**. *R_0 analysis of a spatiotemporal model for a stream population*. Preliminary report.

We consider a framework for studying population persistence in spatiotemporal models based on an infinite dimensional analogue of the basic reproductive number R_0 used in structured population models. We consider applications in the context of population persistence in streams. (Received August 21, 2011)