Seth F. Oppenheimer* (seth@math.msstate.edu), Department of Mathematics and Statistics, P.O. Drawer MA, MSU, MS 39762. A diffusion model for the release of sterile mosquitoes. Preliminary report.

We will develop a model for the release of sterile mosquitoes into a normal population over a two dimensional region. The result will be a system of partial differential equations and ordinary differential equations. This work is in the very preliminary stages, but we hope to have at least some numerical simulations to show and, if we can, some analysis. (Received August 28, 2008)