

1116-VC-347      **J. N. Ndam\*** ([ndamj@unijos.edu.ng](mailto:ndamj@unijos.edu.ng)), Dept of Mathematics, University of Jos, PMB 2084, Jos, Nigeria, and **S. Dung**. *A Mathematical Model for the Propagation of an Animal Species on a Plain.*

A mathematical model for the dynamics of an animal species propagating on a plain is constructed. Travelling wave solutions are then sought for two cases, the case with constant diffusion coefficient and that with density-dependent diffusion coefficient. The results show the existence of travelling wave solutions in both cases. The minimum wave speeds as well as the basins of attraction were determined. (Received August 26, 2015)