1124-39-99 **Hassan Sedaghat*** (hsedagha@vcu.edu), Department of Mathematics, Virginia Commonwealth University, Richmond, VA 23284-2014. *Extinction and the Allee Effect in an Age Structured Ricker Population Model.*

We determine conditions for the convergence of orbits to the origin (extinction) in the presence of the Allee effect and time-dependent vital rates. We show that when stages interact, extinction need not occur in the absence of positive fixed points, a situation that is impossible without inter-stage interactions. We also examine the shift in the Allee equilibrium caused by the occurrence of interactions between stages. This shift away from the origin leads to an expected enlargement of the extinction region when interactions occur between stages but surprisingly, we find that the enlargement is not the maximum possible allowed by the shift. (Received August 31, 2016)