1069-35-249 **Anthony W Leung**, Department of Math. Sci., University of Cincinnati, Cincinnati, OH 52246, **Xiaojie Hou*** (houx@uncw.edu), Department of Math. & Stat., UNCW, Wilmington, NC 28409, and **Wei Feng** (fengw@uncw.edu), Department of Math. & Stat., UNCW, Wilmington, NC 28409. *TRAVELING WAVE SOLUTIONS FOR LOTKA-VOLTERRA SYSTEM RE-VISITED.*

Abstract. Using a new method of monotone iteration of a pair of smooth lower- and upper-solutions, the traveling wave solutions of the classical Lotka-Volterra system are shown to exist for a family of wave speeds. Such constructed upper and lower solution pair enables us to derive the explicit value of the minimal (critical) wave speed as well as the asymptotic rates of the wave solutions at infinities. Furthermore, the traveling wave corresponding to each wave speed is unique modulo a translation of the origin. The stability of the traveling wave solutions with non-critical wave speed is also studied by spectral analysis of the linearized operator in exponentially weighted Banach spaces. (Received January 24, 2011)