1046-37-1748   **Shari Wiley*** (`shari_wiley@yahoo.com`), Howard University, Dept. of Mathematics, ASB-B, 213, Washington, DC, and **Abdul-Aziz Yakubu** (`ayakubu@howard.edu`) and **Michael Fogarty** (`mfogarty@mercury.wh.whoi.edu`). *Impact of Harvesting in a Discrete-Time Predator-Prey Model.*

An age-structured, discrete-time model is used to study the impact of fishing exploitations in a predator-prey system. This project was motivated by the work of Basson and Fogarty, who used an age-structured model with Ricker-type recruitment functions to account for interspecific interactions and exploitations. In this research, we generalize their model to study recruitment mechanisms that exhibit both compensatory (equilibrium) and overcompensatory (oscillatory) dynamics. We explore the implications of these different dynamics on the long-term survival of the exploited predator and prey species. (Received September 16, 2008)