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Robert R. Ferdinand* (rferdand@ecok.edu), PMB K-1, 1100 East 14th Street, Ada, OK 74820, and **Matthew M. Donica, James K. Gordon, Laura E. Johnson** and **Jessica L. Pitts**. *Modeling Interactions Among Fish, Fishermen and Fish-Eating Bird Populations*.

A coupled system of three nonlinear difference equations is presented. This system models the dynamics of interactions among fish, fishermen (men and women) and fish-eating bird populations in a water body such as a lake. Fixed points of this model are calculated and their stability is analyzed. Finally a numerical example is presented which graphically illustrates the theoretical results proved. Mathematica software is used to obtain the graphical results. This research involves four undergraduate mathematics majors and is sponsored by the 2009-2010 Center for Undergraduate Research in Mathematics (CURM) Grant. CURM is funded by the National Science Foundation (NSF) via DMS Grant # 0636648 and Brigham Young University (BYU). (Received August 19, 2010)