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Christopher Brown and **Sheila K. Miller*** (sheila.miller@colorado.edu), 646 Swift Road, West Point, NY 10996. *Predator-prey role reversal as bifurcation in a structured model*. Preliminary report.

Role reversal in predator-prey systems has been observed in multiple ecosystems, usually as a result of external factors leading to a change in the environment. We study a structured model in which predator-prey role reversal is a result of a change in density rather than external factors. We then compare our model to a one-parameter structured model in which predator-prey role reversal occurs as a bifurcation. (Received September 22, 2010)