1116-92-2147 **Kelly Ruth Buch*** (kbuch@siue.edu), 601 Aladar Dr, O'Fallon, IL 62269, **Abena Serwaa Bonsu Annor** (bridgeta4@att.net), 11966 Donlin Dr, Wellington, FL 33414, and **Daniel Rodriguez Pinzon** (da.rodriguez1253@uniandes.edu.co), , Colombia. *Female Centered Mate Selections as an Explanatory Mechanism for Dimorphic Solutions in a Rock-Paper-Scissors Game.* Preliminary report.

Side-blotched lizards, *Uta stansburiana*, exhibit trimorphic male throat-colors (orange, blue, or yellow). In terms of mating, the males participate in an apparent game of rock-paper-scissors determined by throat color (i.e., a cyclic dominance chain). Mathematical models of this behavior predict stable monomorphic and trimorphic populations. However, researchers have observed stable dimorphic populations of orange and blue males. Furthermore, it is postulated that the only large-scale, long-term, stable solutions exclude the yellow throat type. We propose a new mathematical model accounting for the female population available for mating that may exhibits such behavior. We discuss the conditions under which particular population configurations are stable and flow attractive. We use these results to motivate conservative methods that may mitigate biodiversity loss by preventing the decline of a particular monomorphic or dimorphic population. (Received September 21, 2015)