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Jason Callahan* (jasonc@stedwards.edu), St. Edward's University, 3001 South Congress Ave, Austin, TX 78704. *Analysis of a Coupled, n-Patch Population Model with Ceiling Density Dependence.*

We consider a system of difference equations with ceiling density dependence to model the dynamics of a coupled population on an arbitrary, finite number of distinct patches where migration between all patches is possible. In this model, each patch possesses a separate carrying capacity, and the dynamics of the coupled population is governed by a linear model until the population of a patch reaches its capacity after which it remains at this maximum value. Further, we analyze the global attractors of this model and apply these results to an Arabian oryx metapopulation model with some patches protected and others unprotected from poaching. (Received September 12, 2016)