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Warren Hall, Biometrics Department, Cornell University, Ithaca, NY 14850. Nonlinear Discrete-Time Pair Formation Models. Preliminary report.

Most discrete mating models use the gene as the unit of selection. This simplification made it possible to develop the Haldane, Fisher, Wright theory of population genetics. Many evolutionary biologists still believe that one of the most important unit of selection is the individual. In this talk, I will present a framework for developing mating models for individuals. A few examples and extensions will be highlighted. (Received September 27, 2000)