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**Sheldon P. Gordon\*** ([gordonsp@farmingdale.edu](mailto:gordonsp@farmingdale.edu)), Department of Applied Mathematics,  
Farmingdale State College, Farmingdale, NY 11735. *Modeling Logistic Growth and Extinction.*

Most of the introductory treatments of models for population dynamics in mathematics classes typically consider only population growth models such as exponential growth and logistic growth. However, biologists have observed that not only is there a maximum sustainable population level (as in the logistic model), but also a minimum sustainable population level and if the population falls below this, it will eventually become extinct. In this talk, the presenter will construct a pair of more general population models based on both difference equations and differential equations that encompass the possibility of both growth and extinction. (Received August 12, 2008)