



## Weak Allee effects population growth models in a random environment

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Based on a deterministic model of population growth with weak Allee effects, we propose a general stochastic model that incorporates environmental random fluctuations in the growth process. We study the model properties, existence and uniqueness of solution, the stationary behavior and mean and variance of the time to extinction of the population. We then consider as an example the particular case of a stochastic model with Allee effects based on the classic logistic model.

**Keywords:** Allee effects; population growth; random environments; extinction times.