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**Gail Wolkowicz\*** ([wolkowic@math.mcmaster.ca](mailto:wolkowic@math.mcmaster.ca)), Department of Math. & Stats., McMaster, Ontario L8S 4K1, Canada, and **Chiu-Ju Lin** and **Lin Wang**, [lwang2@unb.ca](mailto:lwang2@unb.ca). *An alternative formulation for a delayed logistic equation.*

An alternative single species logistic distributed delay differential equation with decay-consistent delay in growth is derived. We prove that the model does not permit sustained oscillations and that when the delay is sufficiently long the population dies out. Such dynamics are more biologically realistic compared to the dynamics predicted by the classical delayed logistic model. We establish a threshold for survival and extinction: in the former case, it is confirmed using Lyapunov functionals that the population approaches the delay modified carrying capacity; in the later case the extinction is proved using the fluctuation lemma. We further use adaptive dynamics to conclude that the evolutionary trend is to make the mean delay in growth as short as possible. This confirms Hutchinson's conjecture and fits biological evidence. (Received September 04, 2019)