

Gard, Thomas C.

Persistence in stochastic food web models. (English) Zbl 0533.92028

Bull. Math. Biol. 46, 357-370 (1984).

Author's summary: A sufficient condition is given for stochastic boundedness persistence of a top predator in generalized Lotka-Volterra- type stochastic food web models in arbitrary bounded regions of state space. The main result indicates that persistence in the corresponding deterministic system is preserved in the stochastic system if the intensities of random fluctuations are not too large.

Reviewer: W.J.Padgett

MSC:

92D40 Ecology

60J70 Applications of Brownian motions and diffusion theory (population genetics, absorption problems, etc.)

Cited in **109** Documents

Keywords:

stochastic boundedness persistence of top predator; generalized Lotka- Volterra-type stochastic food web models

Full Text: [DOI](#)

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