

Alan Hastings, University of California, Davis, CA USA

Simple approaches to dealing with resource pulses: consequences for persistence and dynamics

Resource pulses have been found to play an important part in ecological dynamics. However, most current simple models in ecology do not include large temporal variation in resources. There are detailed models in ecology, such as those based on the dynamic energy budget (DEB) approach that have proved useful, but these are too complex to use in data poor situations and also do not provide general insights. In contrast I will develop simple models that incorporate the key ingredients of temporally varying resources and simple descriptions of age structure in consumers to show the importance of explicit inclusion of these two key ingredients in understanding persistence.