Population Dynamics Model with Age Structure

Authors:

- Rodrigo Moreno, Austral University (RMoreno@austral.edu.ar)
- Constanza Sanchez de la Vega, Buenos Aires's U. (csfvega@dm.uba.ar)

Abstract: When studying the behavior of a population, understanding what factors inherent to the population influence the decisions of the individuals that make it up, its age structure is of particular importance. Typical phenomena such as the Allee effect, interspecific competition (between individuals of different species) and intraspecific competition (between individuals of the same species but of different ages or qualities), logistic effect (the latter addressed in the model presented), must be considered at the moment. to model said dynamics.

The studied model, conditions for the existence of equilibria and description of said equilibria are presented. In addition, a brief historical review of the main publications on this topic is made, and connections with other branches of science are presented.

References:

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