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## **Nonlinear Juvenile Predation Population Dynamics**

A general nonlinear age-structure predator-prey model is analyzed for the dynamics of two interacting populations that includes self-limitation on the prey and juvenile predation. Our aim is to identify mechanisms of newborn survival that allow us to explain viable interactions between the two populations in circumstances when their absence would otherwise result in unstable behavior with unbounded oscillations. To achieve our goal we apply some standard methods in the analysis of dynamical systems such as Painlevé and bifurcation analysis.