

Univerzita Karlova
Abstract of the bachelor thesis
Dynamical Properties of Ecological Models
Adam Ráž, Praha 2011

In this thesis we study advantages and disadvantages of continuous modelling of population coexistence. We analyze in detail the Lotka-Volterra equations, which model the population dynamics of predator-prey interactions. We analyze the behavior in the absence of one species. We prove the existence of periodic solutions and analyze asymptotic properties of the model. We introduce an ecological stability of a model and in the terms of ecological stability we analyze the Lotka-Volterra model.