Globally attracting fixed points in higher order discrete population models

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Abstract We address the global stability properties of the positive equilibrium in a general delayed discrete population model. Our results are used to investigate in detail a well-known model for baleen whale populations.

Keywords Clark model · Delayed population model · Age-structured model · Global stability · Global attractor · Permanence

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1 Introduction

The dynamics of single-species population models with nonoverlapping generations has been one of the strong motivations for the impressive development of the theory of discrete dynamical systems. Since the celebrated papers by May ([25,26], among others), a lot of papers and monographs have been written on

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