Survival, dispersal and reproduction of headstarted Mona Island iguanas, *Cyclura cornuta stejnegeri*

Miguel A. García^{1,2,5}, Néstor Pérez-Buitrago^{2,3}, Alberto O. Álvarez¹, Peter J. Tolson⁴

¹ Division of Wildlife, Department of Natural and Environmental Resources, P.O. Box 366147, San Juan, Puerto Rico, 00936

² Center for Applied Tropical Ecology and Conservation (CATEC), University of Puerto Rico-Río Piedras, Puerto Rico, 00931

³ Department of Biology, University of Puerto Rico-Río Piedras, Puerto Rico, 00931 ⁴ Department of Conservation and Research, The Toledo Zoo, Toledo, Ohio 43609, USA

⁵ Corresponding author; e-mail: magarcia@drna.gobierno.pr

Abstract. The endemic Mona Island Iguana, Cyclura cornuta stejnegeri, is considered endangered, and exhibits relatively low population numbers and reduced recruitment of juveniles to adults. A headstarting program was initiated in 1999 to increase the effective population number. Two groups of headstarted iguanas were released in April and August 2002, after reaching a target size. Most of the released iguanas have since been observed to be active and in good health. Two females bred in 2004, the first certain record of reproduction by headstarted Cyclura iguanas in the wild. Eight radiotracked individuals had large dispersal ranges, with mean Minimum Convex Polygon (MCP) of 10.7 ha (range 2.6-22.2 ha) and mean distances covered of 288 m (range 471-6396 m). We discuss the future development of the headstarting program for Mona Island iguanas.

Key words: Cyclura; dispersal; headstarting; iguana; Mona Island; radiotracking.

Introduction

The Mona Island iguana (Cyclura cornuta stejnegeri) is classified as endangered by the IUCN (2006) and as threatened on the U.S. Endangered Species List, due to a relatively low population density and a low recruitment of juveniles into the adult population (Díaz, 1984; DNER, 2004; Moreno, 1995; Wiewandt, 1977; Wiewandt and García, 2000). The main threats to this iguana are habitat modification and predation by exotic mammals (Wiewandt, 1977; Wiewandt and García, 2000). The major habitat changes have been at nesting sites, where the native vegetation has been replaced by plantations of Australian pine, Casuarina equisetifolia (Wiewandt,