

The decline of the Nile crocodile population in Loskop Dam, Olifants River, South Africa

Hannes Botha^{1, 2*}, Wouter van Hoven¹ and Louis J Guillette Jr^{3, 4}

¹ Centre for Wildlife Management, University of Pretoria, Pretoria, 0002, South Africa

² Mpumalanga Tourism and Parks Agency, Scientific Services, PO Box 1250, Groblersdal, 0470, South Africa

³ Department of Biology, University of Florida, Gainesville, Florida, USA

⁴ Department of Paraclinical Sciences, Faculty of Veterinary Science, University of Pretoria, Private Bag X04, Onderstepoort, 0110, South Africa

Abstract

The apparent decline in the number of Nile crocodiles present in the Loskop Dam prompted a study to determine the number, size and distribution of Nile crocodiles now present in the reservoir. The number of crocodiles in the Loskop Dam was surveyed using aerial counts and spotlight counts. Surveys revealed the presence of a very low total number of crocodiles and also a poor distribution of crocodiles in the different size classes over almost 30 years since 1981. Eight surveys carried out between 2001 and 2010 revealed that the distribution pattern of crocodiles in the Loskop Dam did not vary between winter and summer. These distribution patterns indicate that crocodiles occur most frequently in the eastern and western inlets and not in the main basin of the dam. Thirteen crocodiles were re-introduced into the dam during March 2007; however the August 2009 spotlight survey results indicated that none of these animals had survived.

Keywords: *Crocodylus niloticus*, numbers, size classes, density, distribution