

## OBSERVATIONS AND CAPTURE OF AN INTRODUCED GREEN IGUANA, *IGUANA IGUANA* (LINNAEUS, 1758), IN TROPICAL QUEENSLAND, AUSTRALIA

Elizabeth A. Roznik

School of Marine and Tropical Biology, James Cook University, Townsville, Qld 4811.

Email: betsy.roznik@gmail.com.

### INTRODUCTION

Introduced species can have numerous ecological and economic impacts in their non-native ranges (Perrings *et al.*, 2000; David, 2009; Pimentel, 2011). Green Iguanas (*Iguana iguana* [Linnaeus, 1758]) are native to Central and South America, but they have been introduced successfully to at least 14 distinct localities worldwide (Krysko *et al.*, 2007; Kraus, 2009). Although the impacts of Green Iguanas in their introduced ranges have not been studied extensively, iguanas may compete with native species, disperse seeds of invasive plants, damage landscape vegetation, cause erosion of drainage canals and other structures through burrowing, pose airstrike hazards at airports, and act as great nuisances to land managers and property owners (Engeman *et al.*, 2005; Krysko *et al.*, 2007; Sementelli *et al.*, 2008; Engeman *et al.*, 2011).

In Australia, it is illegal to import Green Iguanas or keep them or other non-native reptiles as pets, but evidence suggests that iguanas are held illegally in Australia. Green Iguanas were detected frequently by border and post-border Australian biosecurity agencies between 1999 and 2010 (Henderson & Bomford, 2011; Henderson *et al.*, 2011). A total of 23 Green Iguanas were detected in 13 incidents during this time period; of these, there were 17 individuals (in 10 incidents) confiscated from private keeping, 5 individuals (in 2 incidents) confiscated at the border, and 1 individual detected as a stowaway entering Australia (Henderson & Bomford, 2011). Despite this, there are currently no known introduced populations of Green Iguanas in Australia (Kraus, 2009). However, this species is considered to pose an extreme

risk of establishment because of large areas of suitable climate in northern and coastal regions of Australia (Henderson & Bomford 2011; Henderson *et al.*, 2011). Here, I report my observations of a Green Iguana that I found in the wild in tropical Queensland; this represents the first known record of a sighting of a Green Iguana in the wild in Australia (Henderson & Bomford, 2011; W. Henderson, Invasive Animals Cooperative Research Centre, personal communication).

### OBSERVATIONS AND CAPTURE

On 16 April 2011, I went kayaking on the Ross River in Townsville, Queensland, Australia. Around 1530 hrs I paddled up Jensen Creek, a small stream flowing through the Townsville Palmetum Botanic Gardens, and saw a large green lizard with spines down its back, which I suspected was a Green Iguana. The lizard was partly submerged in the water along the stream bank, and was located approximately 75 m from the confluence with the Ross River. I took a photograph of the lizard and attempted to approach it, but it swam away and could not be relocated. From my photograph, Peter Harlow (Taronga Zoo) and Lin Schwarzkopf (James Cook University) confirmed that the lizard was a Green Iguana, and Eric Vanderduys (CSIRO) later confirmed this identification upon capture.

In coordination with Biosecurity Queensland, CSIRO, and James Cook University, a team of volunteers and I conducted day and night surveys in the Palmetum Botanic Gardens for the iguana. At approximately 0800 hrs on 21 April 2011, the iguana was observed climbing up a tree overhanging Jensen Creek; it was approximately 20 m above the stream, and 20 m from the location where I observed

**Figure 1. The female Green Iguana (*Iguana iguana*) discussed in this article.**



it initially. The iguana was captured around 1500 hrs by a person elevated in a basket by a crane; a noose on the end of a 2 m-long pole was slipped over the iguana's head to capture it. A veterinarian contracted by Biosecurity Queensland (who requested to remain anonymous) determined that the iguana was an adult female (Figure 1; body mass 1.2 kg, snout-vent length 300 mm, tail length 565 mm) and was not gravid at the time of capture. The lizard was found to be in good condition (condition score 3/5), and had been eating mainly figs, as these was the main contents of its digestive tract. In accordance with the Australian Environment Protection and Biodiversity Conservation Act, the lizard was euthanased soon after capture, and the specimen was destroyed.

Upon capture, the iguana was very docile, and it had scars from abrasions on its nose, as often found in captive reptiles that rub their

noses against their enclosures, suggesting that the iguana was a released or escaped pet. No other Green Iguanas were observed during our surveys; therefore, it is likely that the captured iguana was not part of a larger breeding population.

#### ACKNOWLEDGMENTS

I thank Robert Cobon (Biosecurity Queensland), Eric Vanderduys (CSIRO), and volunteers from James Cook University, especially Richard Duffy, Angus McNab, and David Pike, for help with the iguana surveys and capture. Arborcare SEQ provided the crane and operating team; these costs were covered by the Townsville City Council. David Pike provided comments on the manuscript. I was supported by a James Cook University Postgraduate Research Scholarship during manuscript preparation.

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