

### Proud Parents -Promoting Breeding in a Pair of African Grey Crowned Cranes Zoo Internship-Biology 4250 Jessica Harmison-USU Biology Department Troy Cooper-Willow Park Zoo Kim Sullivan-USU Biology Department

## Problem

A pair of 17 year old African Grey Crown Cranes had never hatched offspring. The pair had

Changes Made

Outcome

Four eggs were laid the third week in July.

#### not laid eggs since 2011.

Goal

Understand what is required to promote healthy crane breeding, and ultimately have successful

reproduction and viable offspring.

# Research

Information was collected from zoo staff about the cranes history and their daily life. Research was conducted to learn about the Grey Crown Cranes life and reproduction in the wild

- Enclosure was covered with black tarp for greater privacy
- Grey Crown Cranes reproduce in African wetlands during the rainy seasons and to replicate that a water feature was repaired so that the cranes had man-made pond and a stream.
- The cranes were given meal worms and crickets as enrichment.
- A nest was built out of hay with a wall in front to provide privacy from zoo staff conducting daily maintenance.
- A fake egg was placed in nest to stimulate cranes to incubate the egg





Figure 3. Weighing a crown crane egg

#### The first egg hatched on August, 13 2013



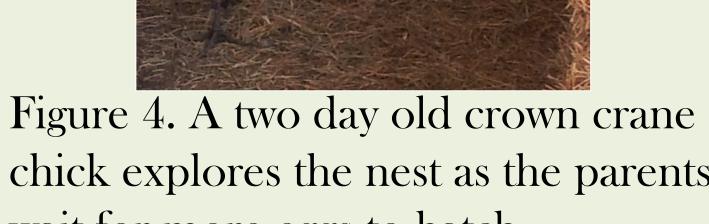
- Crown cranes reproduce during the raining seasons
- Crown cranes live in large groups until it is time to mate. Crown cranes then break from the group into their lifelong pairs.
- Contacted other zoos to learn what has worked in the past to promote breeding
  - Suggestions included enrichment and privacy
- Observed cranes over one month and following each change to their exhibit.



Figure 1. A temporary wall and nest were built in the enclosure



Figure 2. A pond water feature in the enclosure



chick explores the nest as the parents wait for more eggs to hatch

### The second egg hatched on August 17,



Figure 5. Two crown crane chicks explore their enclosure

# **Recommendations for the Years to Come**

- Greater enrichment for the cranes
- Sprinklers could be placed in the ceiling to create a moist natural breeding environment
  - Cover the enclosure in July
  - Build a nest and privacy wall

Acknowledgments ; I would like to thank the staff at the Willow Park Zoo for making this project possible. I would also like to thank Lisa Murphy for all her helpful suggestions and support.