

# Pushing Our Limits - New and Innovative Okapi Training for Voluntary Medical Procedures







Using what was available to complete what we needed.

- Heart Scan
- Blood work

Limited time to devote to daily training.







## Voluntary Cardiac Scan



Adult female with pregnancy induced congestive heart failure.

Historically disliked keeper initiated interactions

Tracking heart condition without sedation regularly, allowing improvement to be discovered and daily medications reduced



# Blood Draw Training Session - El Jewar





## **Voluntary Blood Draw**

Successfully collected from all okapi on first attempt.

Behavior completed in 1-3 months

#### Used samples to:

- make dietary supplement changes
- Obtain accurate picture of overall health
- Monitor troponin levels for cardiac health





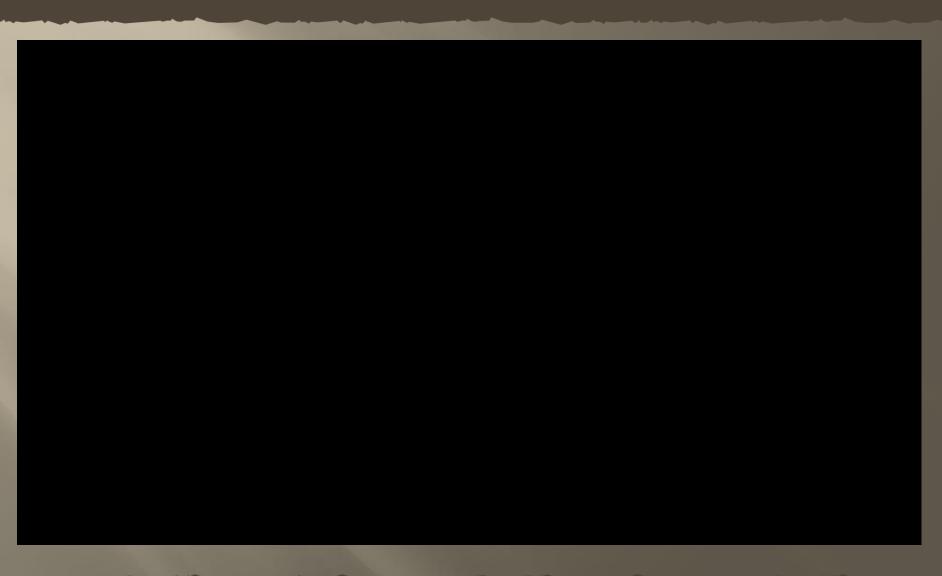
# Vitamin E Supplementation Benefit

Oct 2015



**Sept 2017** 







# Voluntary Plasma Collection



Used 18 gauge needle Draws took 8-9 min and required additional person

Denver Zoo Calf received plasma from our first collection







# Voluntary Pre-Shipment Procedure



# Over the course of two days:

- Blood draw
- TB test
- 2 hand injected vaccinations
- General health assessment with use of stethoscope



