



Zoo Research & Development:

Working together to ensure optimal animal health and welfare at Cleveland Metroparks Zoo now and in the future

Zoo Research & Development

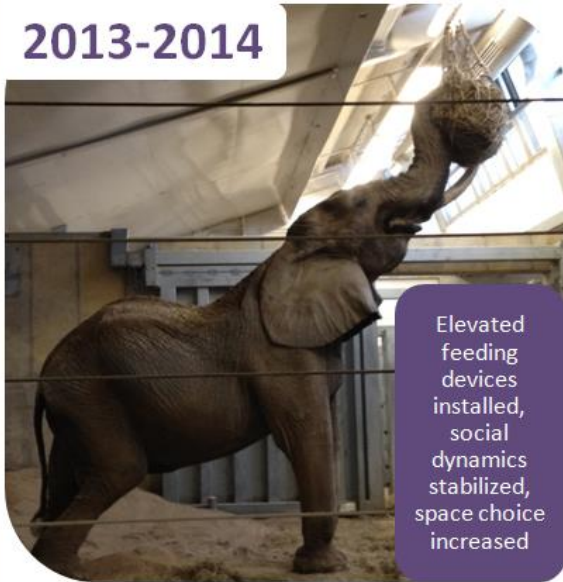
- What do we mean by R&D?
 - Research
 - Answering questions we might have about animal husbandry, health, & welfare and population sustainability
 - Hypothesis-driven research
 - Science-based management
 - Development
 - Creating innovative strategies for answering research questions and implementing findings
 - Teamwork

Zoo Research & Development

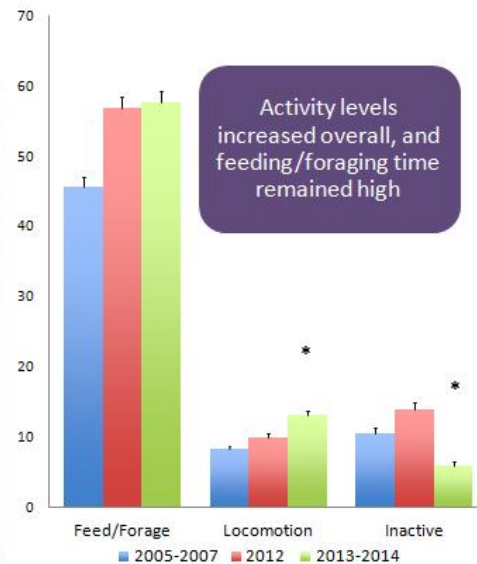
- Why is this important?
 - The right thing to do
 - We need more information to ensure excellence in animal care
 - Immediate science-based results to inform animal management decisions
 - Setting new and higher standards for our industry
 - Science is a foundational pillar for the future of zoos
 - *Cleveland Metroparks Zoo's knowledgeable and highly skilled staff are on the cutting edge of zoo science and science-based management...*

Elephants

2013-2014

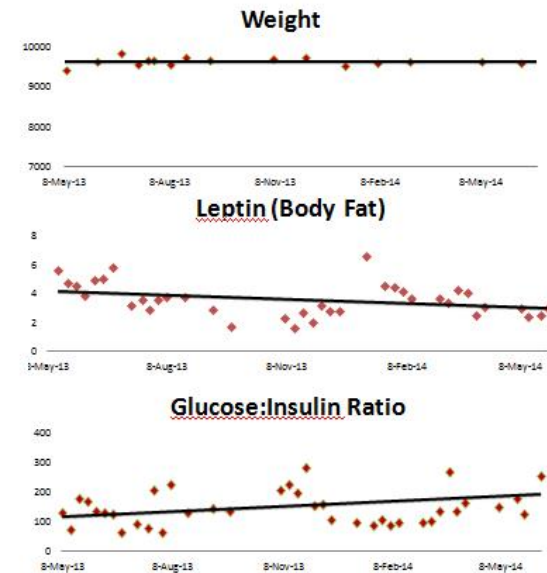


Elevated feeding devices installed, social dynamics stabilized, space choice increased



Activity levels increased overall, and feeding/foraging time remained high

Weight gain leveled off, body fat began to decrease, and insulin sensitivity increased = improvements in health



Elephants

[Parlor #4] Cam 14
2011/5/25 4:18:59.760



Giant Anteater



Pairing Up for the Zoo's First Anteater Birth

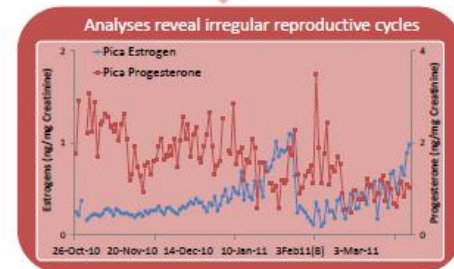
Zoological Programs Team

Integrating Animal Care, Veterinary Programs, and Conservation & Science to advance animal welfare and scientific knowledge

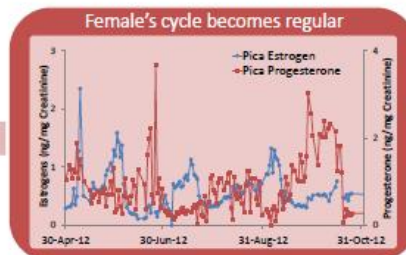


Opportunity for Collaboration:
Giant anteaters were not reproducing. Animal Care Staff observe aggression between the pair.

Animal Care seeks assistance from the Zoo's Endocrinology Lab.
Does female, "Pica," have a normal reproductive cycle?



Using hormone monitoring, male and female are paired only when she enters estrus



Animal Care Staff separate the male and female



Armadillos

- AZA Animal Welfare Committee
- AZA Conservation Education Committee
- AZA Research & Technology Committee

***Q:** Do animals used for education programs experience better or worse health and welfare than exhibit animals?*

Armadillos

- Cleveland Metroparks Zoo conducted the first pilot study to answer this question in one species, armadillos, at 17 zoos across North America



Cheetahs



- 14 zoos participating
- 73 cheetahs



Gorillas

The Cutting Edge



Gorillas

- Managing gorilla heart health with science and husbandry
- Click here for video:



Gorillas

- Using novel techniques to study social cohesion in bachelor gorilla groups
- Click here for video:



Zoo Research & Development

- Smart business now & for the future
 - Happy and healthy animals
 - Connect visitors to our mission
 - Ensure successful reproduction needed for sustainable populations
 - Increase visitor stay time, return visits by guests, and revenue opportunities



Thank you

- Questions?

