



# **Oregon Zoo's Animal Welfare Program**





## Animal Welfare Committee

*Promoting Excellence in Animal Care*

Formal inclusion and recognition of animal welfare as a central tenet of AZA's animal programs

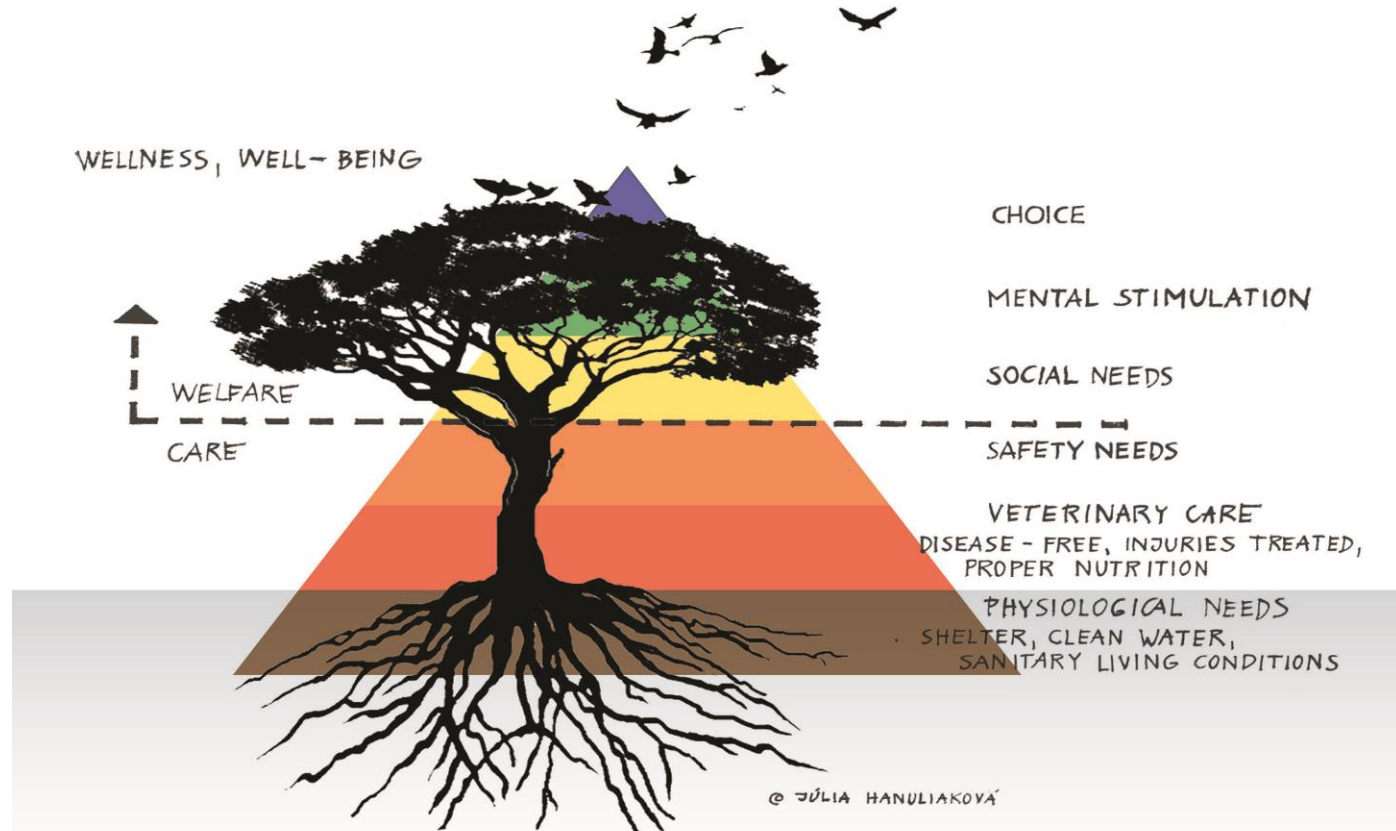
(AZA AWC established 2001)

# AZA Welfare Definition



*Animal Welfare* refers to an animal's collective physical, mental, and emotional states over a period of time and is measured on a continuum from poor to excellent.

# The WAZA Animal Welfare Strategy: Maslow's Hierarchy of Needs

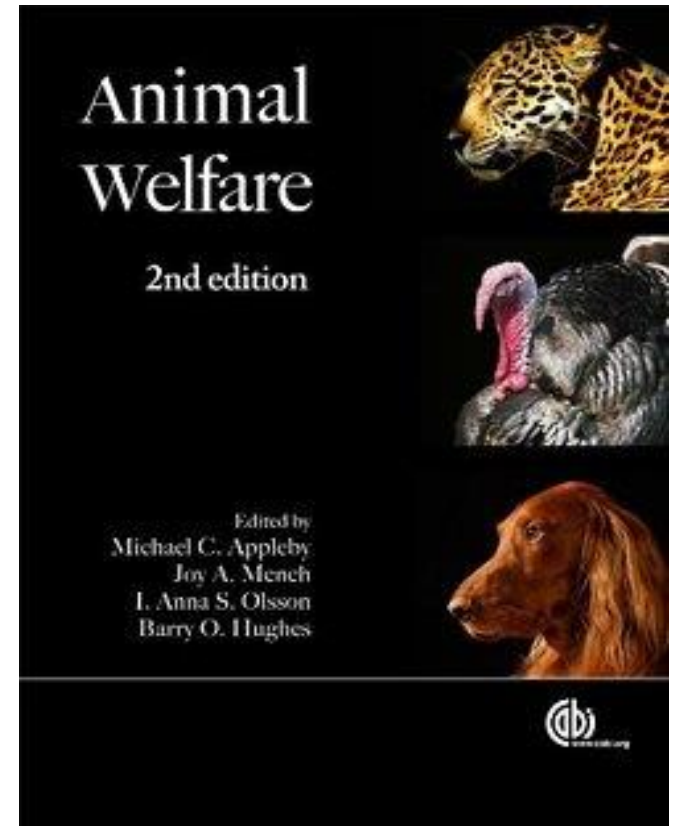


# Welfare Assessments

Two Main Types:

1. Resource Based Measures  
(Inputs)

2. Animal Based Measures  
(Outputs)



# Resource Based Assessments (Inputs)

Enrichment + Enclosure Design + Nutrition + Research  
Programs + Veterinary Care + Husbandry Training +  
Population Management + Staff Training



**Maximize the Welfare Potential**



# Animal Based Assessments (Outputs)



## Behavior

Behavioral diversity, activity, species-appropriate behaviors, time budgets, etc.

## Physiology

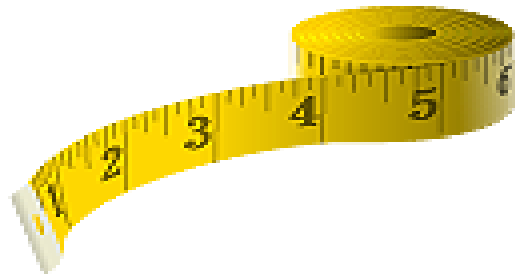
Hormone levels, stress response, reproduction, nutrition, etc.

## Physical Appearance & Health

Body condition, muscle tone, species-specific health parameters, etc.

# Animal Based Assessments (Outputs)

- At individual animal level
- Relative, not absolute
- No single measure



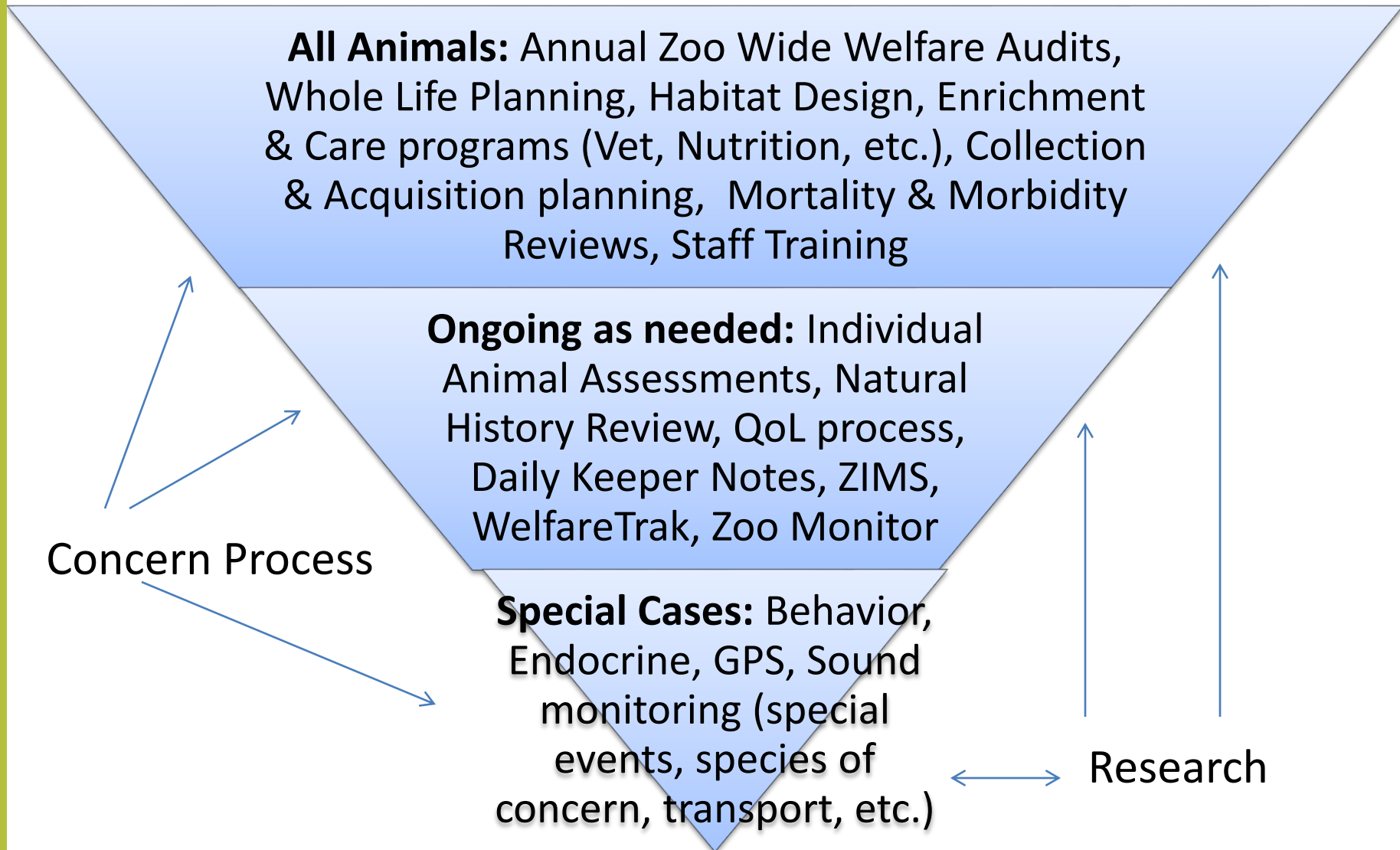


# Important Concepts

- Measures of positive welfare outcomes
- 24/7 time budgets
- Tradeoffs/opportunities/challenges/resilience
- Sensory and cognitive experiences
- Lifelong care and whole life planning
- Keeper-animal relationships (KAR)



# Welfare Program Components



# Behavior Lab – Oregon Zoo



- Behavior Checksheets
- Data Collection Apps
- iPads/Tablets
- Camera/Videos
- GPS/Accelerometers
- VAST Volunteers

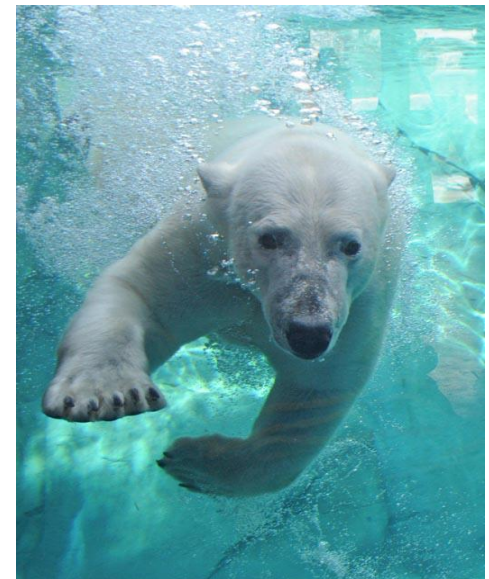


# Behavioral Indicators

*Generally Positive:*  
Self maintenance,  
curiosity, play, high  
behavioral diversity

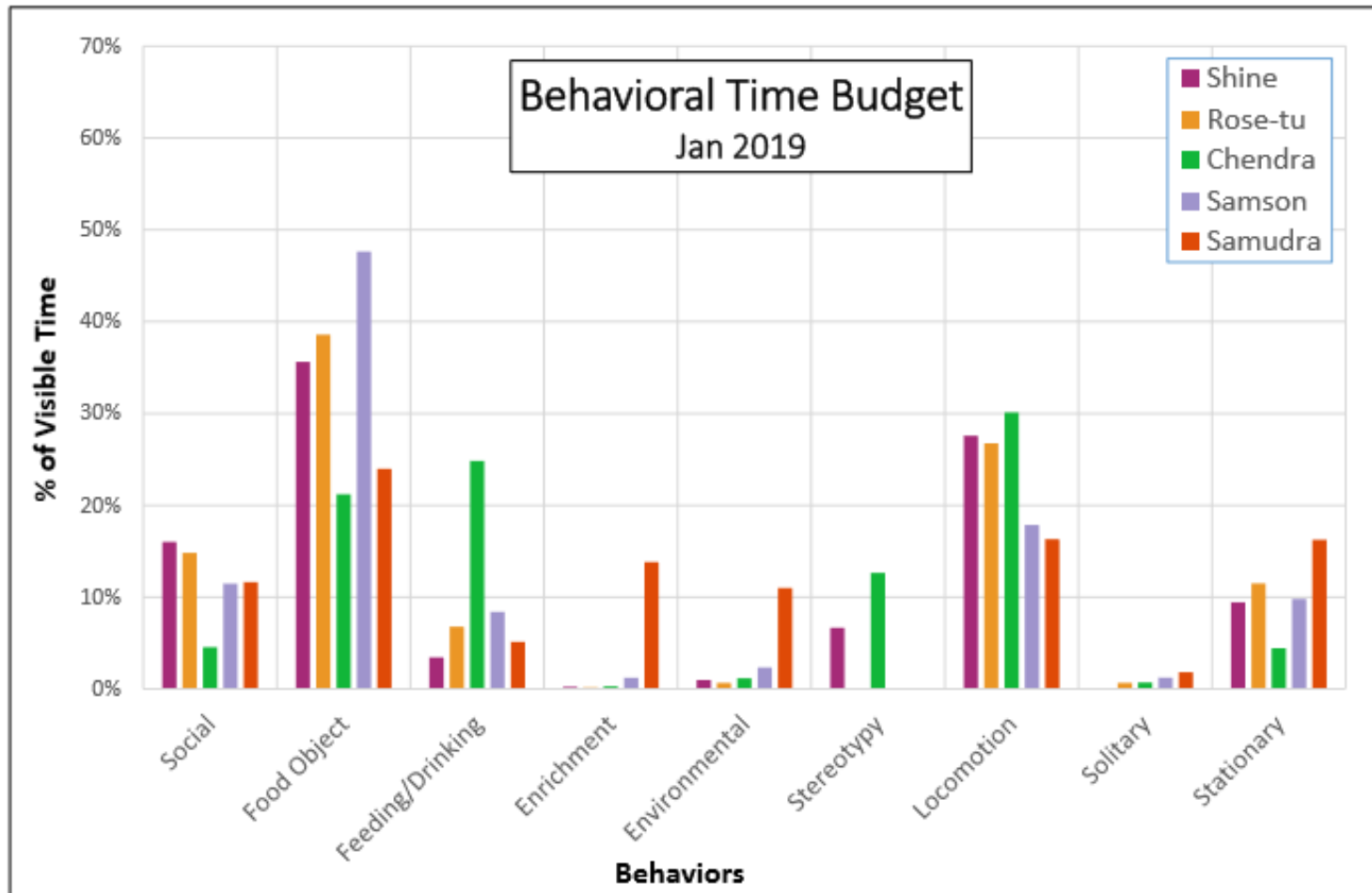


*Potentially Negative:*  
Some stereotypic behaviors,  
aggression, self-injury,  
hiding, low behavior diversity



# Ongoing Behavior Monitoring

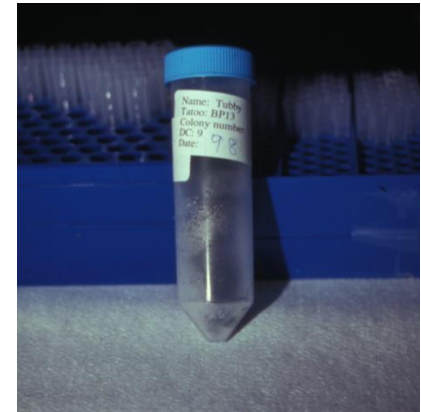
## JAN 2019 Elephant Behavior Audit Report



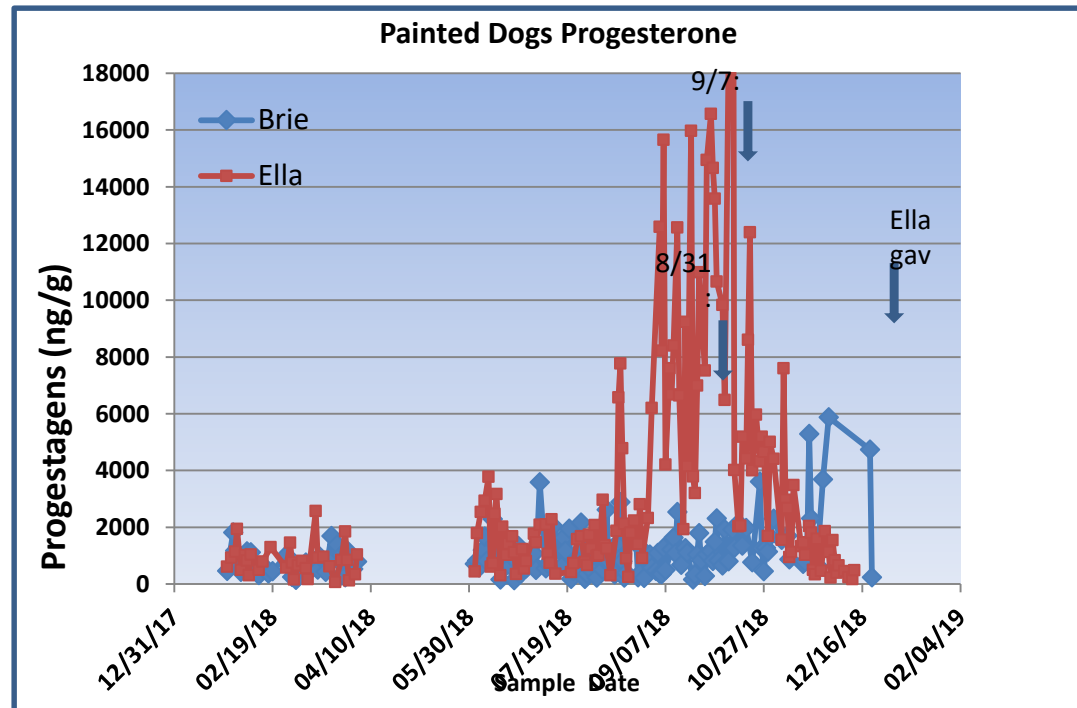
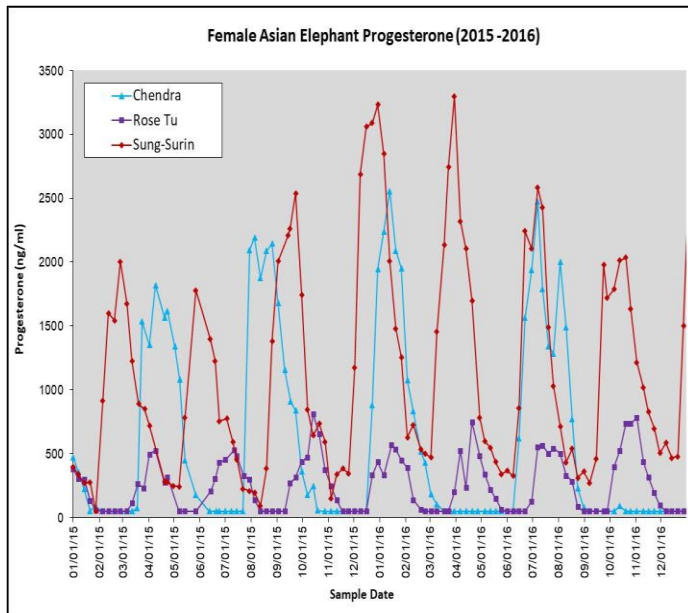


# Endocrine Lab – Oregon Zoo

## Hormone Monitoring: Feces, Urine, Serum

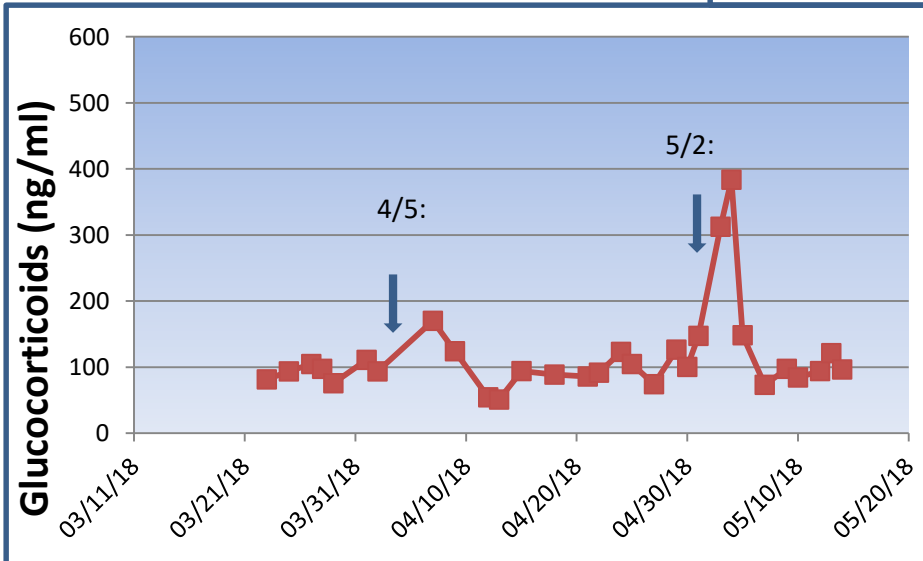
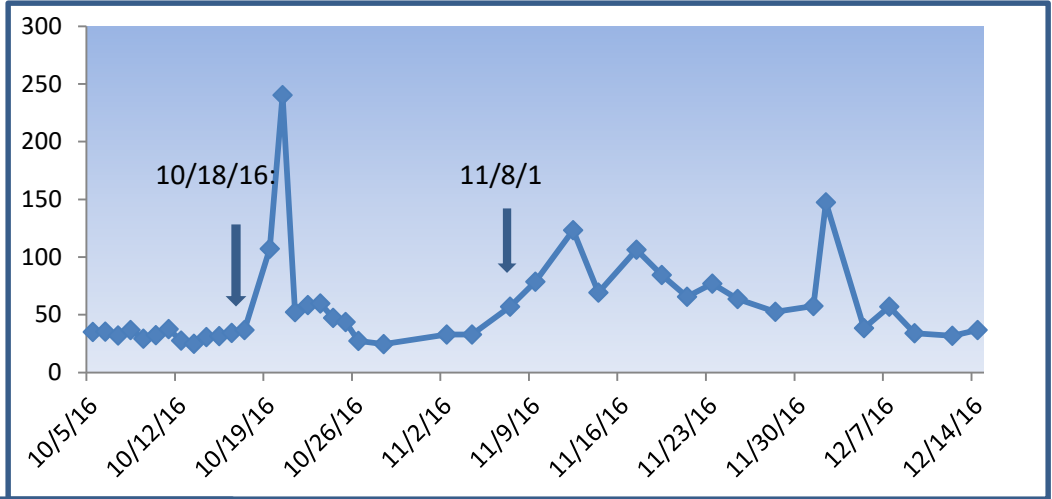


# Reproductive Management

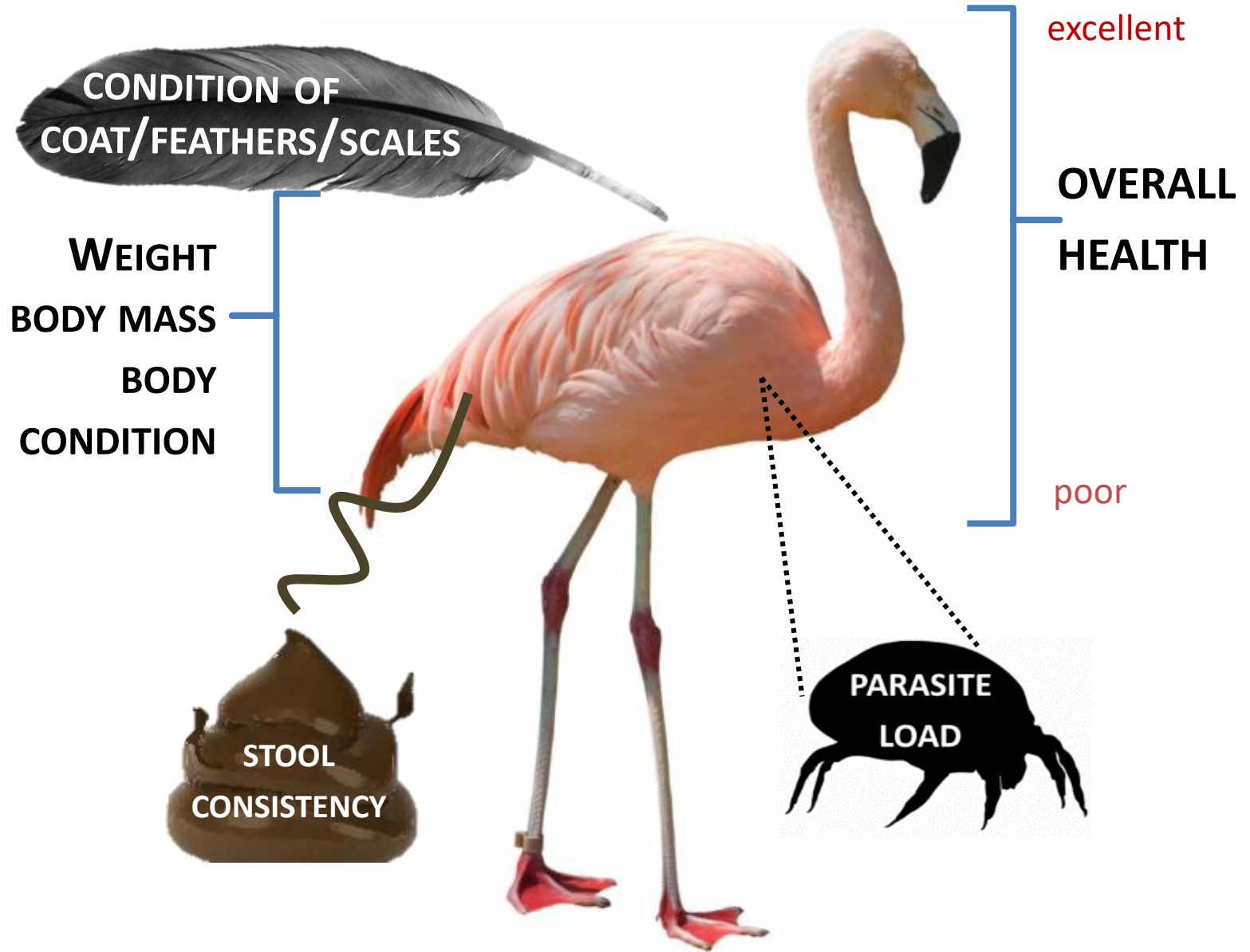




# Monitoring Transport, Vet Exams and Husbandry Changes

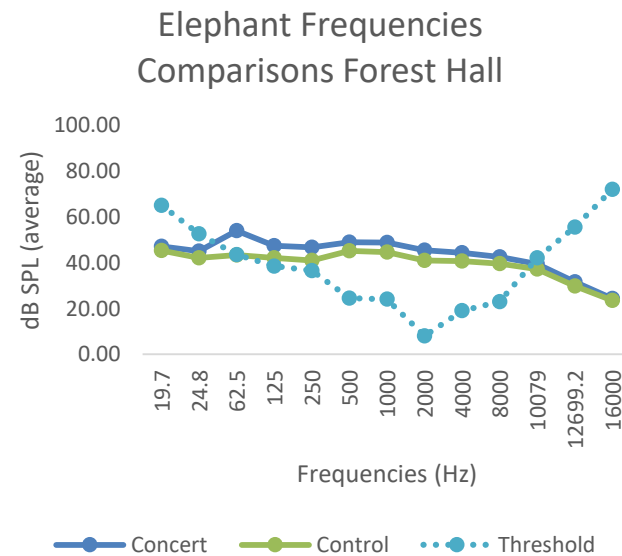
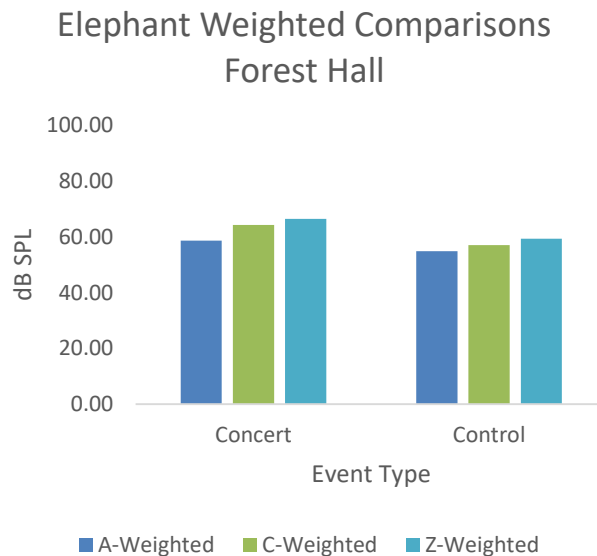


# Physical Indicators



# Monitoring New Construction, Concerts, and More...

- Monitoring behavior, hormones, and sound levels during concerts, construction, daily events
- Assessing sensory environments



# Annual Welfare Audit Process

- Across all animal areas of the Zoo
- Based on welfare science and 5 Domain Model
- Identification of special opportunities/key species/individuals for further investigation
- Area teams complete questionnaires
- Curators will bring identified priorities to AWC and next steps will be determined together



# Evolving and Emerging Tools

- More Advanced Behavior Tracking Apps
- New physiological and physical measures (I-Button)
- Automated data collection & camera systems
- More advanced GPS/Accelerometers, RFID



***“The Level of Our Success is Limited  
Only By Our Imagination... ” (Aesop)***

# Oregon Zoo AWC Committee

Chair: Nadja Wielebnowski

Vice Chair: Kristin Spring

Internal Members: Peggy Bodner, Amy Cutting, Travis Koons, Bob Lee, Hova Najarian, Tanya Paul, Jennifer Payne, Sheri Horiszny, Don Moore, Carlos Sanchez, Becca VanBeek

External Members: Dr. Jill Mellen, Dr. Nick Kockler





# AWC Goals

1. Promote optimal care and welfare for our animals throughout their lives using a science based approach
2. Provide a forum for animal welfare questions and concerns
3. Raise awareness among staff about what constitutes good animal welfare and recommend specific actions as needed



# Raising a Welfare Concern

- Step 1: Notify your immediate supervisor of the animal welfare concern. Ensure that the individual understands that you have a serious concern. (i.e., not just a question in passing).
- Step 2: If you receive a response from your supervisor and continue to have concerns, notify a veterinarian, curator or other manager that you have a welfare concern.
- Step 3: If you believe the concern has not been understood and addressed, submit an Animal Welfare Concern form online or in the AWC mail box (LC bldg).



## Animal Welfare Concern Form

Thank you for taking the time to submit a concern to the Oregon Zoo's Animal Welfare Committee (AWC). The Oregon Zoo has a firm commitment to ensure that animal welfare is our highest priority. The purpose of the AWC is to support our vision of "Creating a Better Future for Wildlife" and to support our strategic mandate of "Making Animal Welfare a Guiding Principle for our institution".

Please note that Metro/Oregon Zoo has a strict policy regarding retaliation; **in no way will you be retaliated against for submitting a concern.**

We ask that you fill out the entire form, leaving only optional information blank if desired, to ensure we have enough information to initiate the Animal Welfare Concern Process. Once completed, the form can be submitted and it is sent to AWC team email or it can be printed and dropped off in the AWC mailbox at the LC Administration building. Concerns may be submitted anonymously (print option only), although this limits the AWC's ability to communicate findings to concerned parties.

**Instructions:** Section A is optional, though strongly encouraged. All other sections must be filled out in its entirety.

### A. Optional Information:

Name:

Phone:

Department: ,

Email:

Date

### B. Urgency Criteria:

Is there evidence an existing condition is causing animal(s) pain, suffering, or chronic disease without appropriate medical care?

Yes ☐

No ☐

Is there evidence an existing condition is preventing animal(s) from direct access to nutritious food, fresh water or appropriate medical care?

Yes ☐

No ☐

Has a course of action been approved that, based on previous research or experience, will result in either of the previous criteria or present an imminent escape hazard for animal(s)?

Yes ☐

No ☐

Is the concern related to an approved animal care protocol?

Yes ☐

No ☐

Unknown ☐

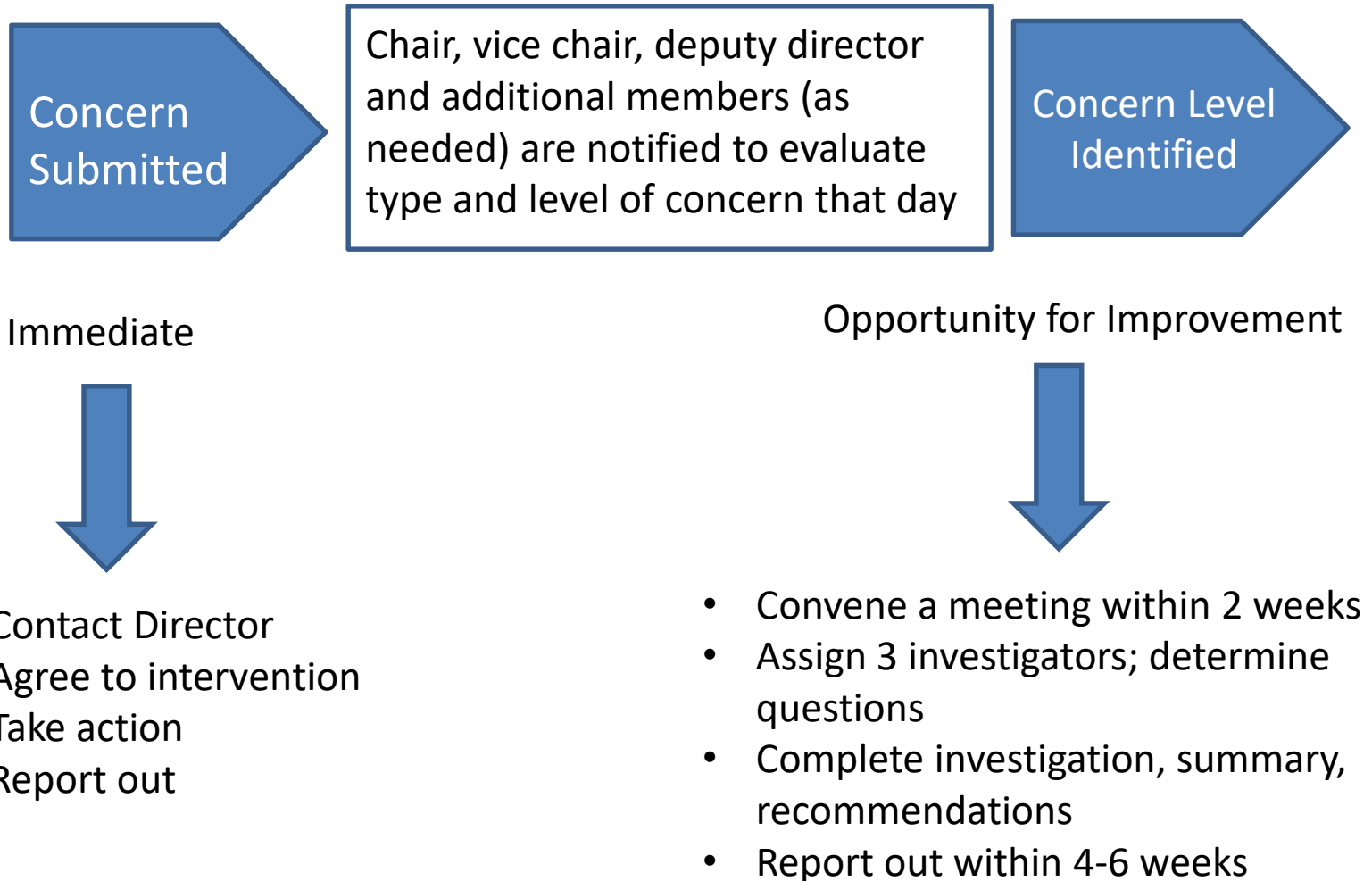
If you marked yes to any of the above, your concern may be categorized as urgent at the onset of the review process. Please submit your concern by sending the form via email to your direct supervisor and/or any member of the AWC. You may also submit a hard copy of this form anonymously in the mailbox marked "Animal Welfare Committee" at the LC Administration building.

**If an animal is in a life-threatening situation, please immediately contact your supervisor or a veterinarian.**

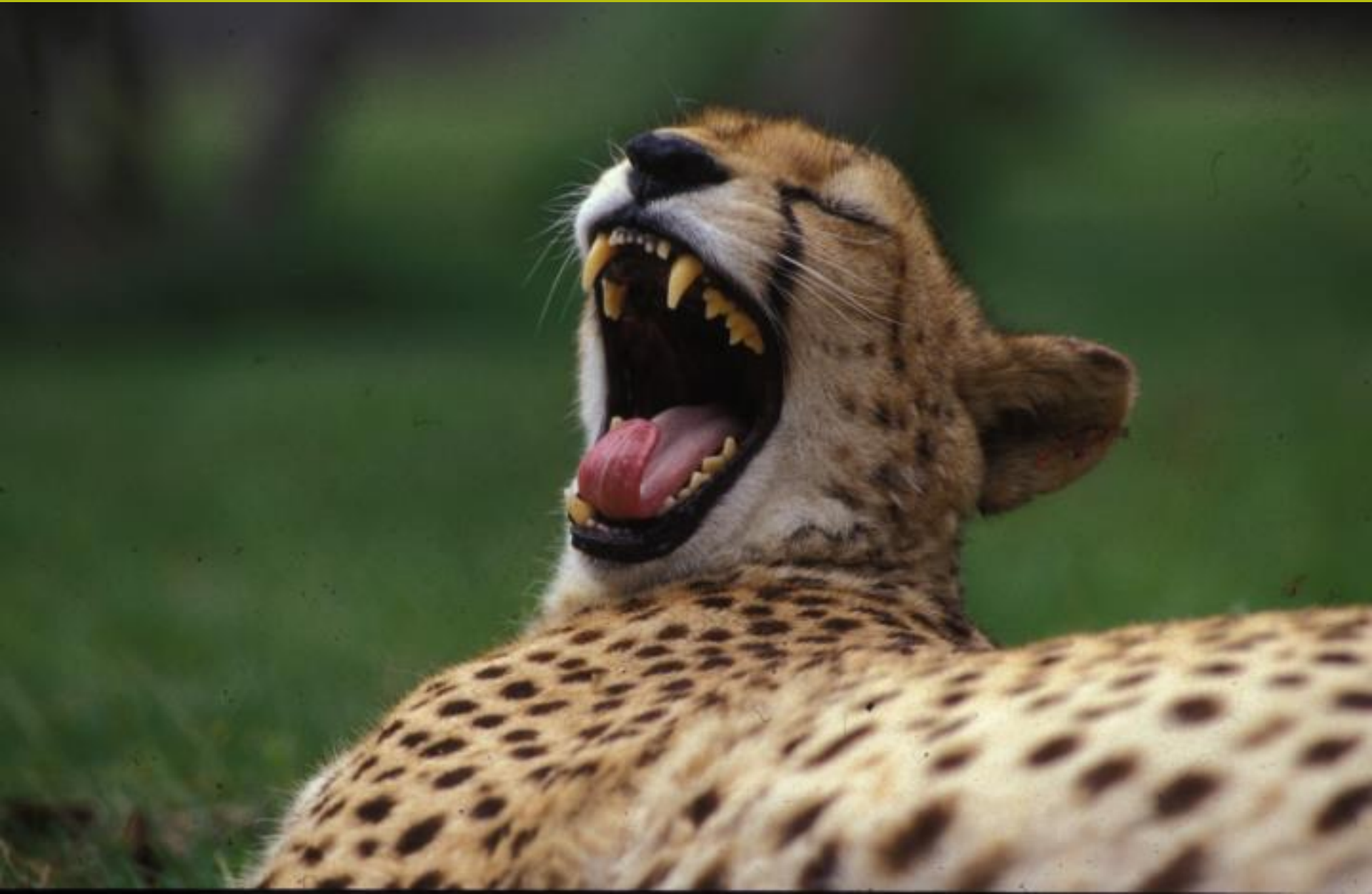
### C. General Information:

Exhibit Location:

# Welfare Concern Process



**THANKS!**



# Elephant Lands Transition Study

Sept. 2012 – Dec. 2016

PhD student Sharon Glaeser & volunteers

Behavior: 8,208 video clips

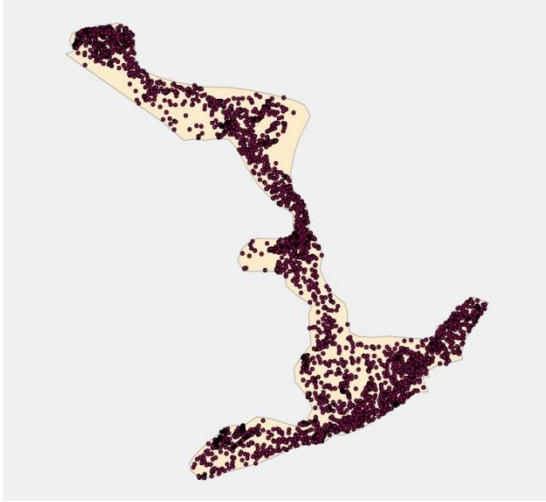
Physiology: >1,655 fecal and serum samples

Movement & Activity: GPS >178 sessions

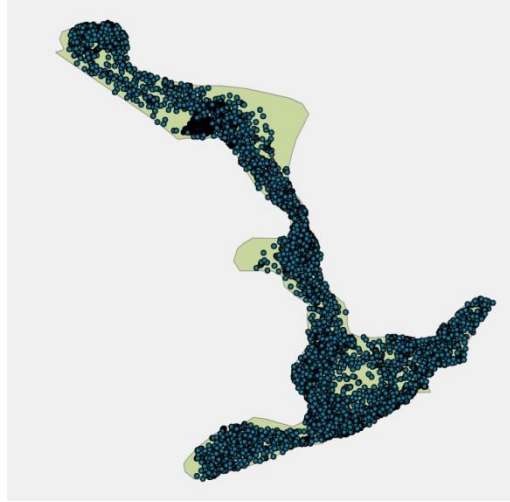




# Habitat Utilization



Samudra: Using the entire habitat



Sung-Surin: Usage in winter (November)  
similar to summer (August)



- Elephants are using the entire habitat and it's resources.
- They have indoor/outdoor access, and even on cold days individuals spend 4 to 20 hours outdoors.
- Greater walking distances.
- Movement in Elephant Lands is more self-directed – more choice and control for the elephants.

# Behavior Outcomes

- Increase in resource use (diversity in food delivery, habitat features, enrichment)
- Increase in exploratory behavior and behavioral diversity
- Greater variability in social interactions
- Increase in choice & control

