



600 NE Grand Ave.  
Portland, OR 97232-2736

## Council work session agenda

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Tuesday, February 26, 2019

1:00 PM

Oregon Zoo, Conservation Hall

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**1:00 Call to Order and Roll Call**

**1:10 Safety Briefing**

**Work Session Topics:**

1:15 Animal Welfare Committee [18-5175](#)

Attachments: [Animal Care and Welfare](#)  
[Oregon Zoo Animal Welfare Committee Charter](#)  
[Process for Reporting Animal Care and Welfare Concerns](#)  
[Animal Welfare Concern Form](#)  
[PowerPoint: Oregon Zoo's Animal Welfare Program](#)

2:00 Regional Investment Strategy Bi-monthly Update **18-5170**

Presenter(s): Andy Shaw, Metro

**2:30 Legislative Update**

**3:00 Chief Operating Officer Communication**

**3:05 Councilor Communication**

**3:15 Adjourn**

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### សេចក្តីជូនដំណឹងអំពីការមិនរើសអើងរបស់ Metro

ការគោរពសិទ្ធិពលរដ្ឋរបស់ ។ សំរាប់ព័ត៌មានអំពីកម្មវិធីសិទ្ធិពលរដ្ឋរបស់ Metro ឬស្នើសុំទទួលបានកម្មប្រព័ន្ធរើសអើងសូមចុះលេខស្នើសុំនៅទីកន្លែង [www.oregonmetro.gov/civilrights](http://www.oregonmetro.gov/civilrights)។ បើលោកអ្នកត្រូវការអ្នកបកប្រែភាសានៅពេលអង្គប្រជុំសាធារណៈ សូមទូរស័ព្ទលេខ 503-797-1700 (ម៉ោង 8 ព្រឹកដល់ម៉ោង 5 ល្ងាច ថ្ងៃធ្វើការ) ប្រាំពីរថ្ងៃ ថ្ងៃធ្វើការ មុនថ្ងៃប្រជុំស្នើសុំអាចឲ្យគេសម្រួលតាមសំណើរបស់លោកអ្នក ។

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**Animal Welfare Committee**  
*Work Session Topics*

Metro Council Work Session  
Tuesday, February 26, 2019  
Oregon Zoo, Conservation Hall

## ANIMAL CARE AND WELFARE

This document is intended to provide background information on the current state of animal welfare science and its application at the Oregon Zoo:

1. What is animal welfare, and how has our understanding of it changed?
2. How does the Oregon Zoo monitor the welfare of its animals?

### **What is animal welfare, and how has our understanding of it changed?**

Per the Association of Zoos and Aquariums (AZA), 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 good to poor:

*An animal typically experiences good welfare when healthy, comfortable, well-nourished, safe, able to develop and express species-typical relationships, behaviors, and cognitive abilities, and is not suffering from unpleasant states such as pain, fear, or distress. Because physical, mental, and emotional states may be dependent on one another and can vary from day to day, it is important to consider these states in combination with one another over time to provide an assessment of an animal's overall welfare status.*

The past few decades have seen a shift in societal views of animal welfare. Traditionally, zoo animal welfare assessments focused on appropriate husbandry practices and requirements associated with Accreditation (also regarded as welfare 'input' measures, or resource based assessments of welfare). In the past several years however, zoos have moved toward quantifying both 'input' measures (factors that contribute to an animal's welfare like housing, husbandry, early rearing experience, diet) as well as 'output' measures (behavioral, physical, and physiological objective and science based measures of an individual animal's well-being). For example, we use Quality of Life assessments that include appropriate management practices for a species, as well as consider the genetic makeup, life experiences, and temperament of individual animals.

### **How does the Oregon Zoo monitor the welfare of its animals?**

The Oregon Zoo takes a holistic view of animal welfare, which includes mental, emotional, and social health. Staff focuses on three categories of welfare outputs/assessments: behavioral, physiological, and physical.

*Behavior.* Self-maintenance, curiosity, play, and high behavioral diversity are usually considered as positive signs, while some stereotypic behaviors, excessive or self-directed aggression, and self-injury are generally considered negative indicators. However, behavioral welfare indicators are also species specific and need to be identified gradually over time for each species as well as each individual animal. Behaviors are measured and tracked using ethograms (catalogs of specific behaviors), check sheets, apps, iPads, cameras, and video recordings.

*Physiology.* Hormone levels, particularly those associated with stress and reproduction, can help indicate animal wellbeing. Glucocorticoids, or stress hormones, can be tracked over time to help determine an animal's responses to its surroundings and activities. While many of the animals at the zoo have been trained to give blood voluntarily, the endocrine laboratory is also equipped to test hormone levels in feces, urine, and saliva.

*Physical Appearance and Health.* Caretakers regularly monitor and track an animal's weight, body condition, and fur, feather, and skin condition for signs of disease or stress.

However, while an assessment from any of these categories can give a caretaker an indication of an animal's health, it may not provide an accurate picture of the well-being of the animal. For example, while elevated levels of glucocorticoids may indicate stress, this can also be associated with positive challenges such as animal introductions and mating. The stress response itself is an adaptive and normal biological function that helps individuals (animals and humans alike) deal with sudden changes in the environment; however when stress becomes distress (excessive negative stress) or chronic (long-term sustained stress and distress) health and wellbeing are negatively affected. Also, individuals even of the same species may deal with stress differently depending on their respective previous experiences and temperament. Therefore supplementing behavioral, physiological, and/or physical assessments with knowledge of the individual animal's personality and life history is important.

In addition to monitoring of these three aspects of animal health and wellbeing as needed, the Oregon Zoo has established an internal Animal Welfare Committee and Animal Welfare Concern Review Process. The committee is charged with promoting the optimal care and welfare of Oregon Zoo animals, providing a forum for questions and concerns, addressing animal welfare concerns, and serving in an advisory capacity to promote staff awareness about animal welfare issues.

## Oregon Zoo Animal Welfare Committee Charter

**Committee Name: Animal Welfare Committee, AWC**

**Prepared By: Nadja Wielebnowski**

**Date: March 10, 2017, revised Oct. 24, 2018**

### **A Purpose of the Committee**

To support our vision of 'Creating a Better Future for Wildlife' and to help implement our strategic mandate of 'Making Animal Welfare a Guiding Principle'.

One of the highest priorities for the Oregon Zoo and its staff is to ensure the best possible welfare for the animals in our care as outlined in our welfare philosophy statement. While Animal Care staff and managers are directly responsible for the welfare and care of our animals, each Zoo staff member has a role to play in enhancing and ensuring optimal care and welfare for our animals. Any emerging animal welfare concerns should be addressed systematically and proactively through early detection and prevention of potential problems, regular feedback about animal care and welfare, evidence-based welfare assessments, and increase of staff awareness about animal welfare. To ensure this happens on an ongoing basis our institution has formed an internal Animal Welfare Committee (AWC).

#### **Primary Goals of the AWC:**

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

#### **Specific Action Items:**

- Systematically and proactively identify areas of opportunity for further improvement of care and identify action steps.
- Review and propose changes in Zoo policy in relation to animal welfare, e.g., hand rearing, program animals etc.
- Develop a communication plan with Marketing to distribute relevant animal welfare information to staff/volunteers on a regular basis.
- Develop a comprehensive welfare training for staff that includes face to face sessions and online resources and educates staff about evidence based management.
- Educate managers and supervisors about the process and their role in responding to animal welfare concerns.
- Manage the welfare concern process and communicate outcomes to staff.

**Committee structure:**

- The AWC committee will be led by a chair and a vice chair. The committee will have at least nine internal members (Zoo staff at managerial level) and two external members at any given time. The committee chair will be a permanent appointment, while the vice chair position may rotate among committee members every 12 months. Committee members will represent their own, as well as their divisions', perspectives and expertise to suggest recommended approaches to different welfare issues, concerns and initiatives.

**Description of Committee Roles:****Chair:**

- Directs and provides meeting agenda.
- Schedules and leads meetings.
- Together with the committee sets goals and identifies specific actions with assignments and deadlines to achieve set goals.
- Ensures committee activities are linked to strategic goals and ensures action items get moved ahead and completed on time.
- Keeps track of committee progress.
- Helps to initiate responses and assigns roles to address submitted welfare concerns and possible concern investigations. Reports on outcomes to deputy director, director and staff.
- Reports on committee work and initiatives to director, staff and other stakeholders.

**Vice chair:**

- Supports the committee chair activities and acts as "back up" if the chair is unavailable.
- Actively participates in committee meetings and committee work. Ensures that meeting minutes are taken and records kept of all activities in the AWC folder.

**Committee Members:**

- Provide feedback and complete assigned tasks in a timely fashion.
- Help to identify existing and potential welfare issues/topics, action steps and awareness efforts.
- Prepare for meetings ahead of time and actively engage in discussions
- Participate in fact finding, information gathering, planning, brainstorming, etc., between meetings, as needed and assigned.
- Provide content and guidance for written guidelines, policies and proposals.

- Agree to a common set of standards by which potential welfare concerns will be evaluated and prioritized. Members agree to abide by and support the decisions of the committee regarding which messages/initiatives are recommended.
- Solicit suggestions from staff for new potential welfare topics and initiatives for consideration. Refer suggestions to the committee for discussion.
- Consider the strategic implications, organizational impacts and outcomes of recommendations being discussed.
- Report on the committee's progress and recommendations as needed.

## B Committee Roster and Roles

### Membership

Name	Team Role	Department/Division
Dr. Nadja Wielebnowski Conservation & Research Manager	Chair	Conservation & Research
Kristin Spring Vet Hospital Manager	Vice Chair	Veterinary Care
Dr. Don Moore, Zoo Director	Ex officio	Director's Office
Sheri Horiszny, Deputy Director	Member	C3
Amy Cutting, Curator	Member	C3
Travis Koons, Curator	Member	C3
Becca VanBeek, Curator	Member	C3
Bob Lee, Curator	Member	C3
Tanya Paul, Curator	Member	C3
Carlos Sanchez, DVM	Member	Veterinary Care
Hova Najarian	Member	Marketing
Peggy Bodner	Member	Operations
Jennifer Payne	Member	Education
Jill Mellen, PhD	Member	External Scientist and Zoo Animal Welfare Expert
Nick Kockler, PhD	Member	External Ethicist, Regional Director, Providence Center for Health Care Ethics



## **C Committee Meetings**

### **Meeting Schedule**

The committee will meet regularly on a monthly schedule. Occasional “ad hoc” or special topic meetings will be scheduled as needed.

External members can join in person or by phone and are asked to attend at least 50% of all meetings annually (i.e., every other meeting). The committee chair will convene meetings and distribute agenda and meeting materials for members prior to each meeting. Committee members are responsible for reading materials prior to the meeting; members should raise questions for discussion based on their review, they may seek involvement of non-members at any point in the process. Committee members may suggest topics for the meeting agenda by sending them to the committee chair.

## Oregon Zoo

### Process for Reporting Animal Care and Welfare Concerns

**Purpose:**

To ensure that animal welfare is always of the highest priority, it is important that all staff members are able to bring forward any questions or concerns they may have regarding the welfare of the animals in our collection.

**Animal Welfare Concern Reporting Process:**

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 as described below.

To submit a written concern, an **Animal Welfare Concern Form** must be filled out and turned in to the Oregon Zoo's Animal Welfare Committee (AWC). Forms can be found on ZOOOGLE under the "Form Library" tab and can be submitted either via email, or printed and turned in to any member of the AWC committee, or dropped off in the AWC mailbox located in the LC administrative building.

Be aware that while these forms may be submitted anonymously this limits the AWC's ability to properly evaluate the concern and to communicate findings to concerned parties. Please note that Metro has a strict policy against retaliation; in no way will you be retaliated against for submitting a concern.

***Note: Animal emergencies should be reported immediately to Security and any available LC staff member.***

Animal welfare issues may include (but are not limited to):

- Health concerns
- Exhibit or facility issues
- Social Housing concerns
- Behavior abnormalities
- Nutrition or diet concerns

Staff reporting submitting an animal welfare concern form to AWC will receive written feedback from the Committee. Anonymous submissions will also be evaluated, though decisions and feedback will only be sent to the animal care staff overseeing the animal of concern.

The Oregon Zoo is committed to excellent animal care and welfare. We will work to address animal welfare concerns brought to our attention in a timely fashion.



## 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: \_\_\_\_\_

Type of Concern:      Individual Animal                      Multiple Animals

Number of Species:      Single Species                      Multiple Species

Please list species:

Has the concern already been brought to the attention of a supervisor/manager?      Yes                      No

If yes, who was the concern reported to and what was the outcome (optional)?

If no, why?

**D. Descriptive Information:**

What is the situation/condition resulting in an animal welfare concern?

Please describe any evidence you have to support your concern (e.g. behavior, injury, disease, etc.)?

Please describe any suggestions/solutions you have to improve the welfare of the animal(s) and why you believe they would be effective (cite supporting information if possible).

Describe the outcomes of any previous attempts that have been made to resolve this concern.

RESET

Submit

For more information about this process, please go to Zoogoo under the Policies tab and click "Reporting Animal Welfare Concerns". Thank you!



# 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)

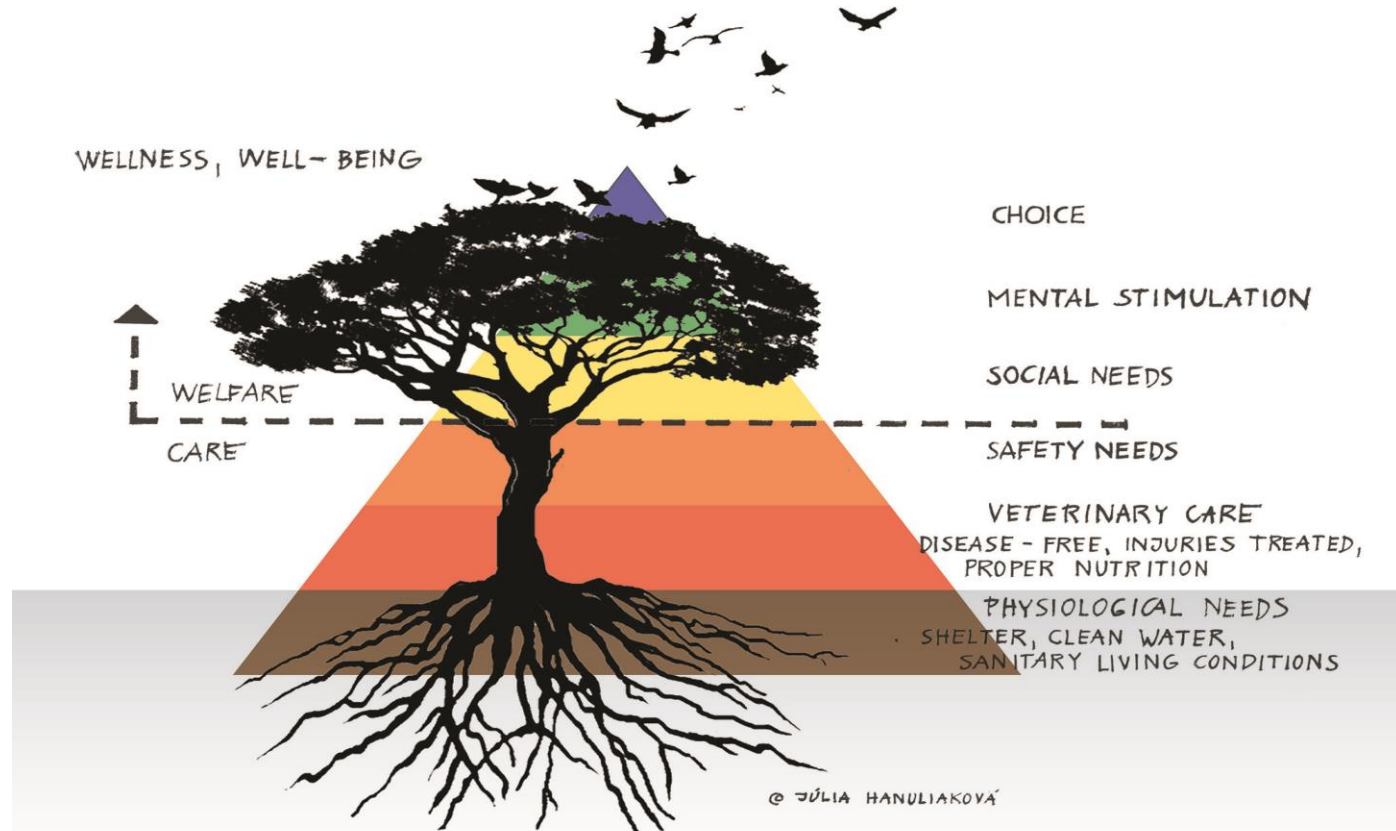
# AZA Welfare Definition



*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

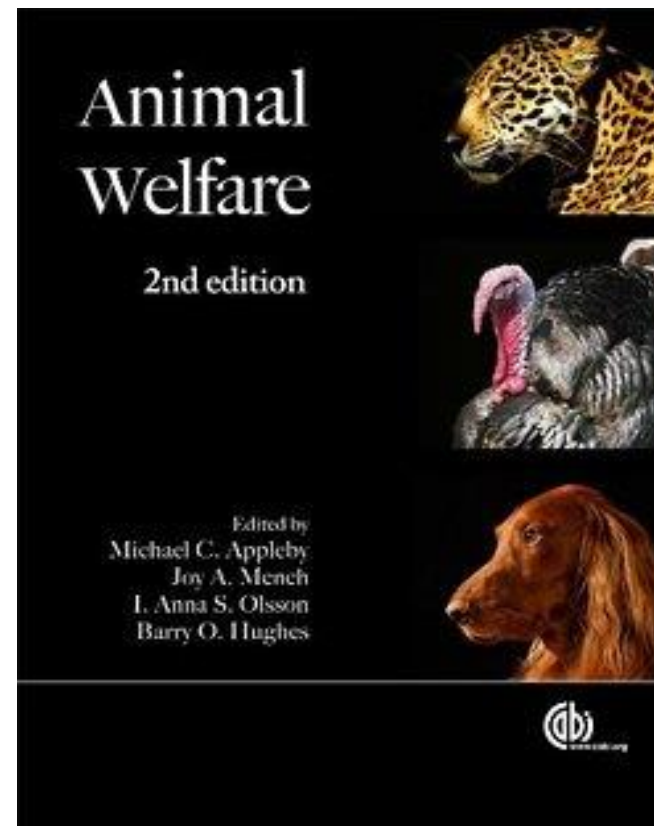


# Welfare Assessments

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

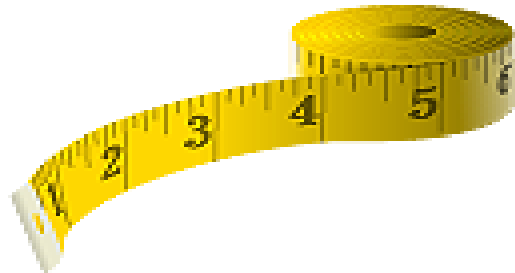
Hormone levels, stress response, reproduction, nutrition, etc.

## 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

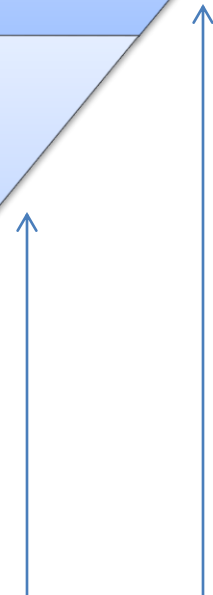
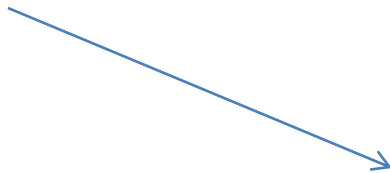
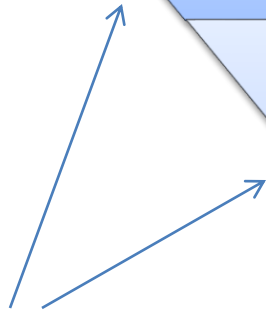
**All Animals:** Annual Zoo Wide Welfare Audits, Whole Life Planning, Habitat Design, Enrichment & Care programs (Vet, Nutrition, etc.), Collection & Acquisition planning, Mortality & Morbidity Reviews, Staff Training

**Ongoing as needed:** Individual Animal Assessments, Natural History Review, QoL process, Daily Keeper Notes, ZIMS, WelfareTrak, Zoo Monitor

**Special Cases:** Behavior, Endocrine, GPS, Sound monitoring (special events, species of concern, transport, etc.)

Concern Process

Research



# Behavior Lab – Oregon Zoo



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



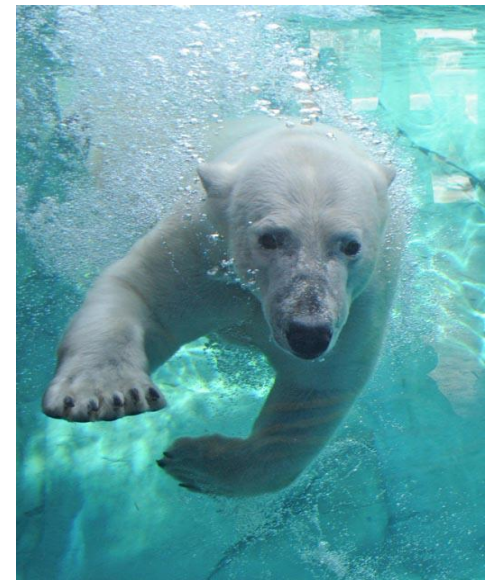


# Behavioral Indicators

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

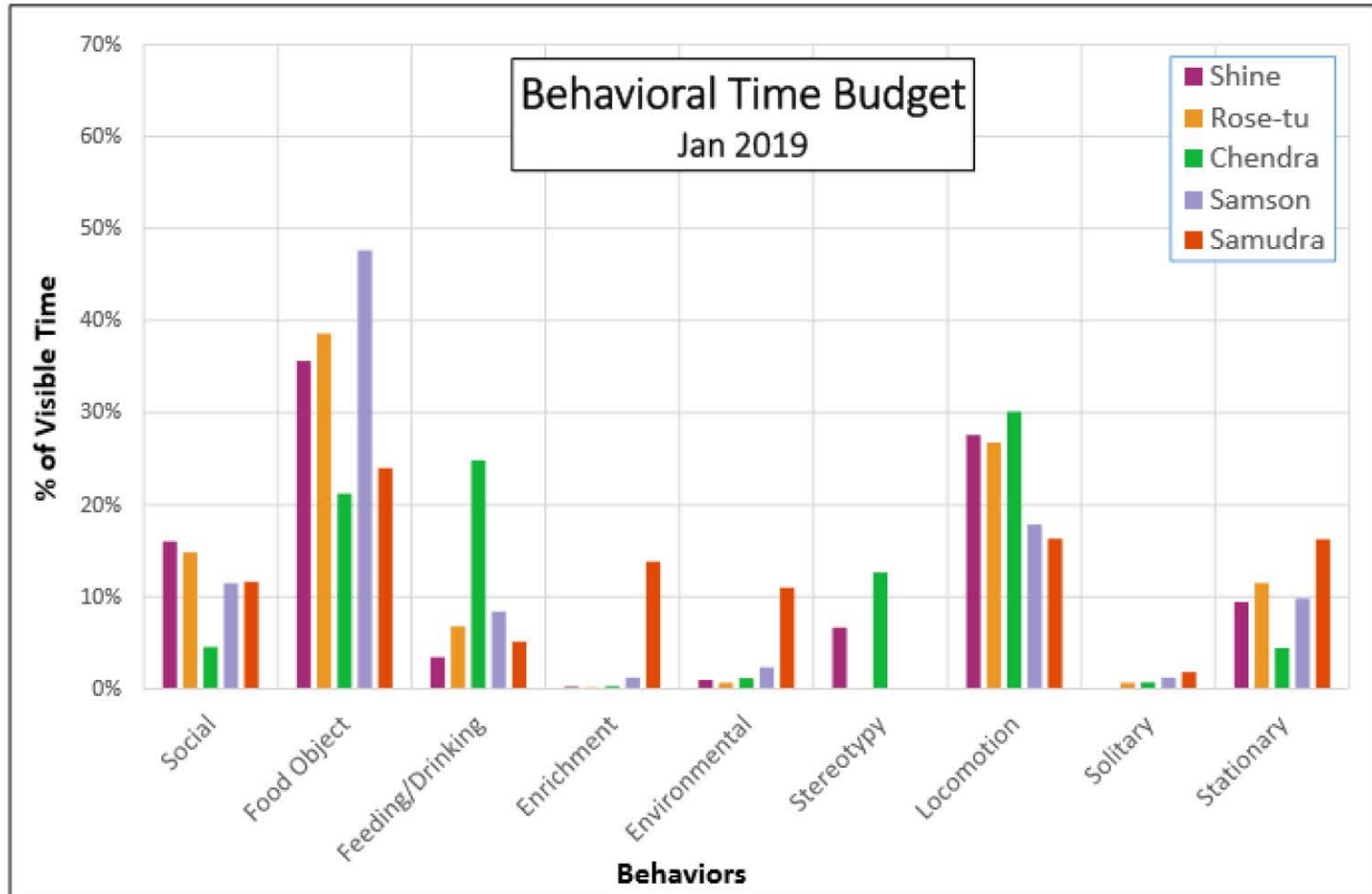


*Potentially Negative:*  
Some stereotypic behaviors,  
aggression, self-injury,  
hiding, low behavior diversity



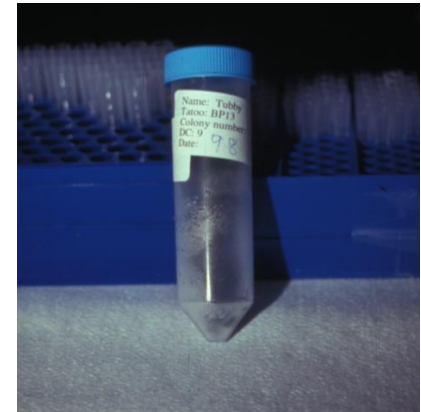
# Ongoing Behavior Monitoring

## JAN 2019 Elephant Behavior Audit Report



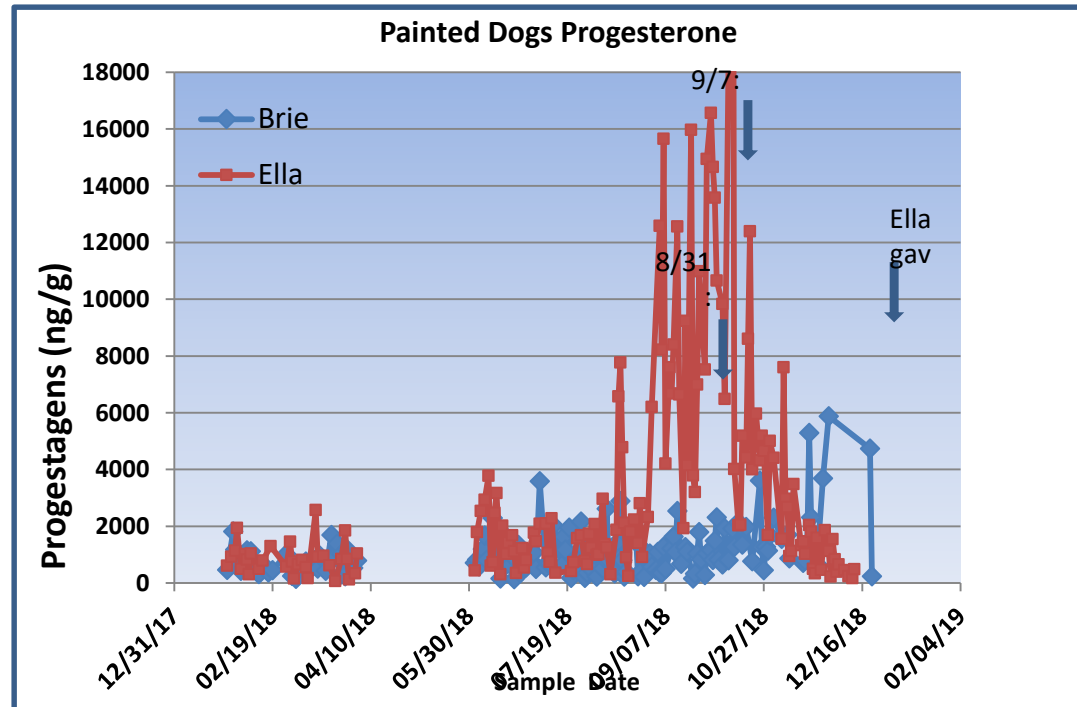
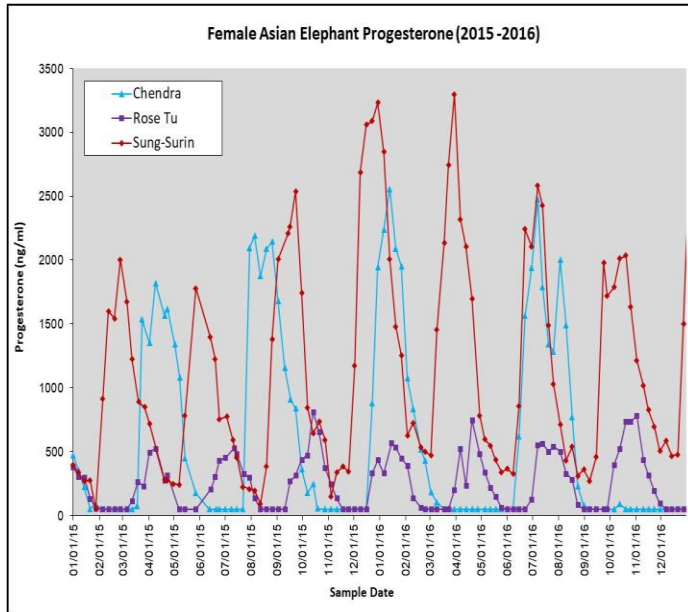
# Endocrine Lab – Oregon Zoo

## Hormone Monitoring: Feces, Urine, Serum

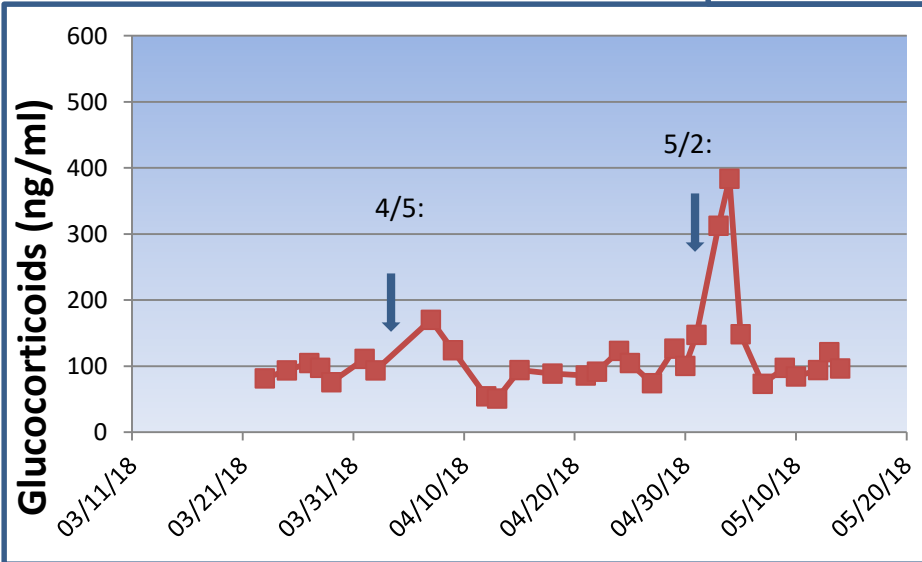
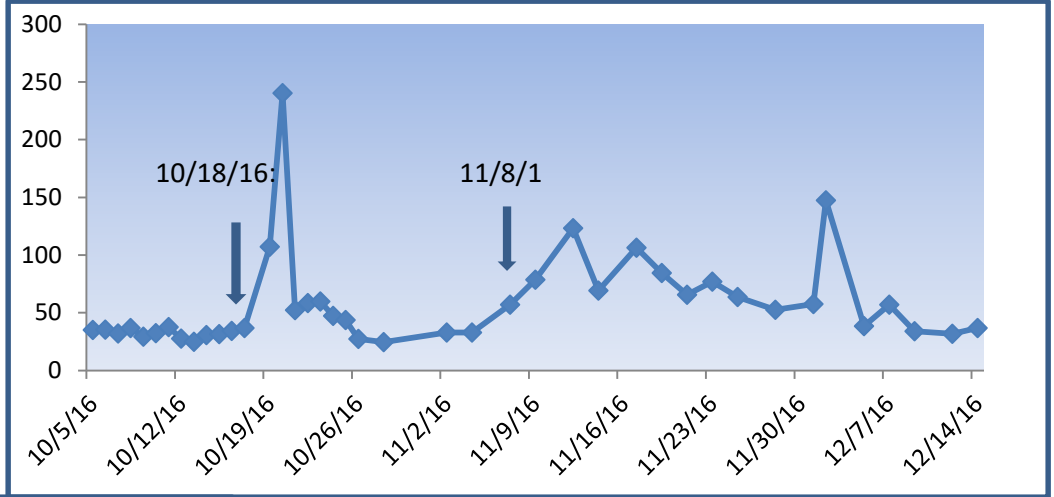




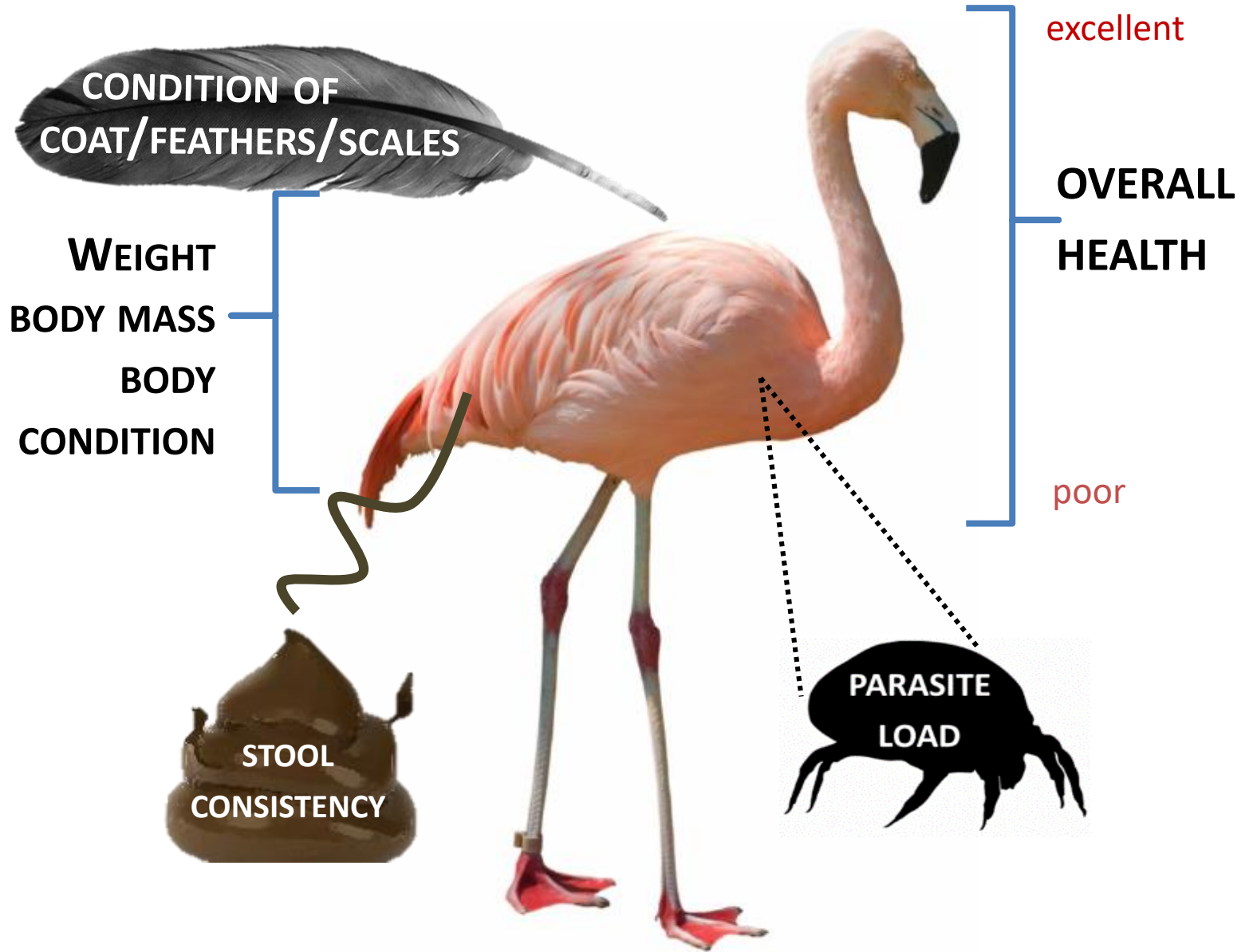
# Reproductive Management



# Monitoring Transport, Vet Exams and Husbandry Changes

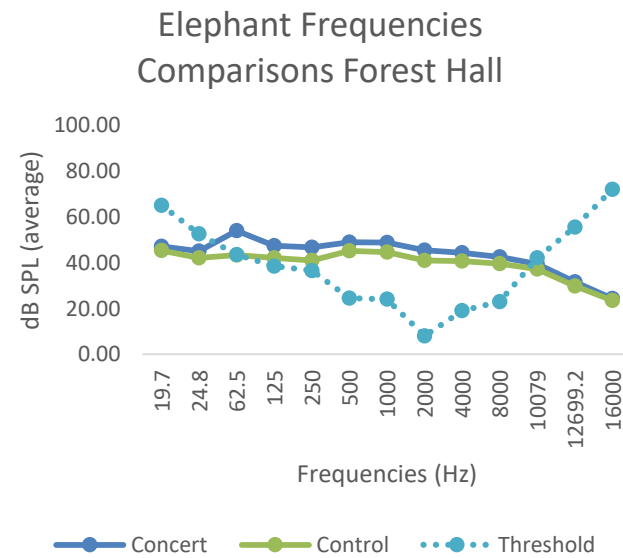
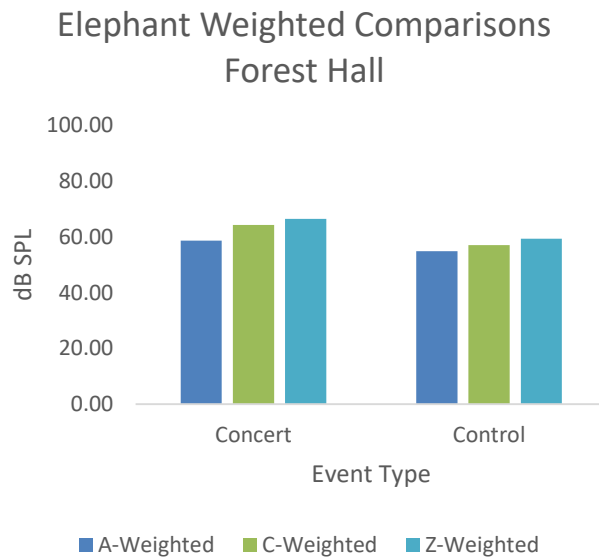


# Physical Indicators



# 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

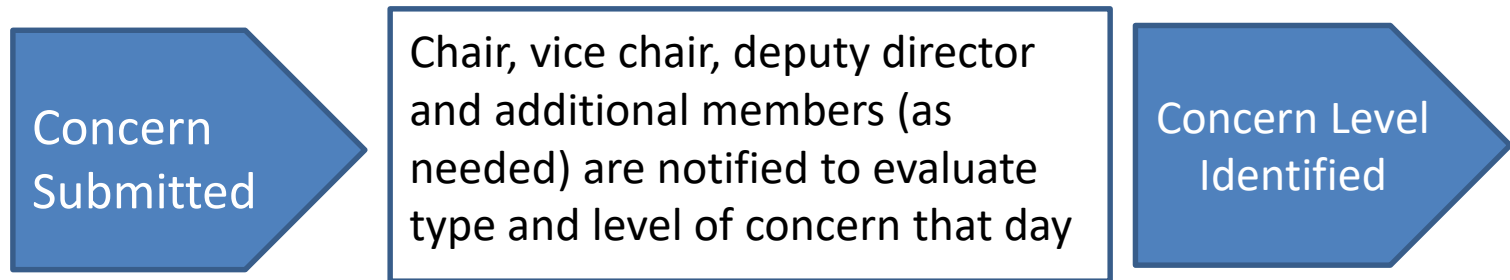
If you marked yes to any of the above, your concern may be categorized as urgent at the onset of the review process. Please submit your concern by sending the form via email to your direct supervisor and/or any member of the AWC. You may also submit a hard copy of this form anonymously in the mailbox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



Immediate



- Contact Director
- Agree to intervention
- Take action
- Report out

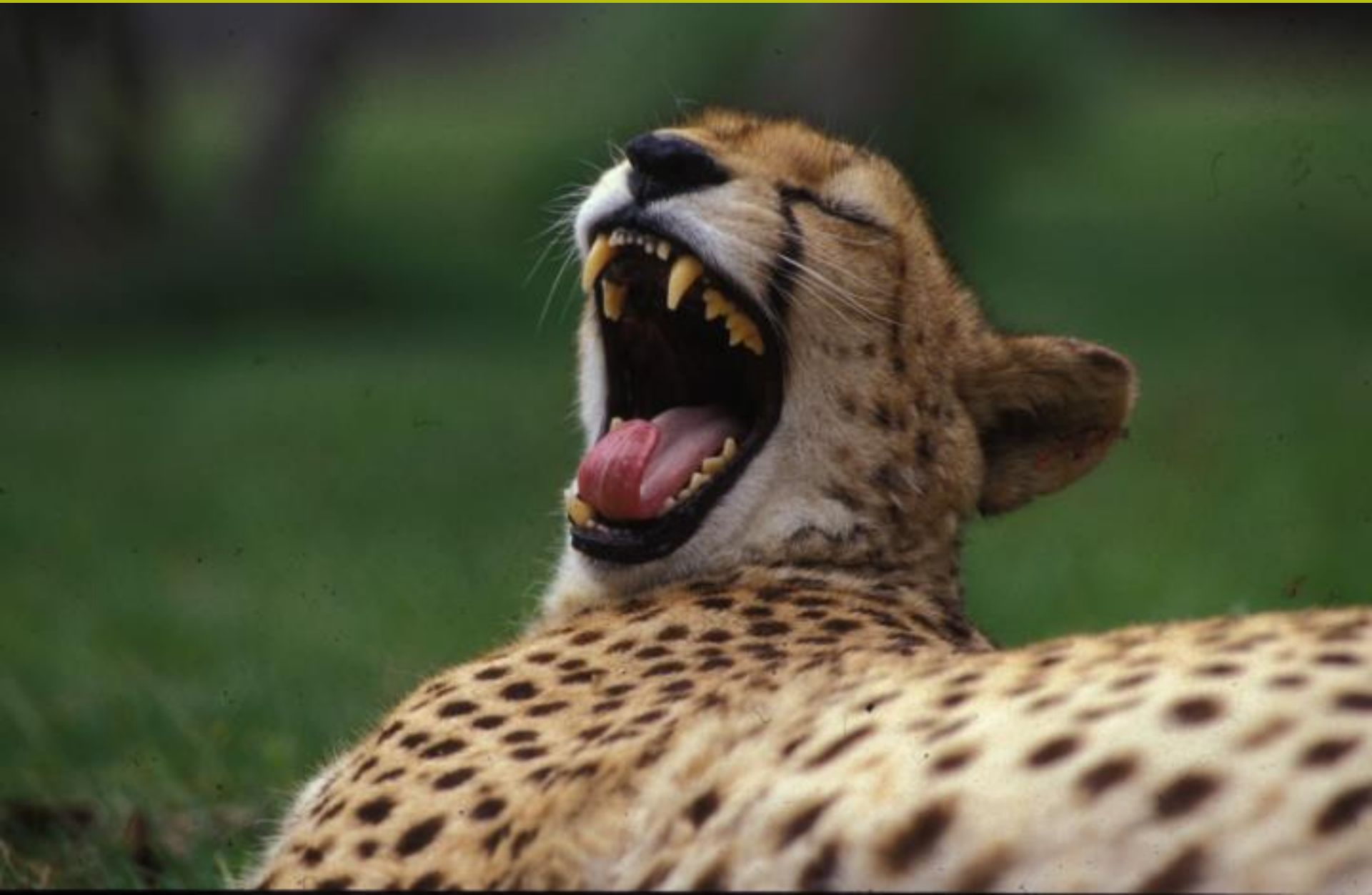
Opportunity for Improvement



- Convene a meeting within 2 weeks
- Assign 3 investigators; determine questions
- Complete investigation, summary, recommendations
- Report out within 4-6 weeks



**THANKS!**



# Elephant Lands Transition Study

Sept. 2012 – Dec. 2016

PhD student Sharon Glaeser & volunteers

Behavior: 8,208 video clips

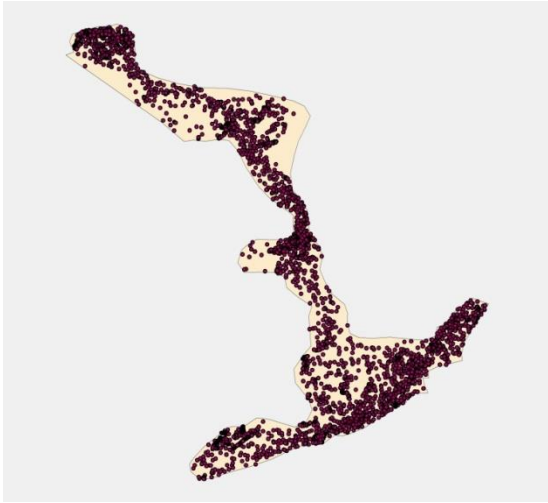
Physiology: >1,655 fecal and serum samples

Movement & Activity: GPS >178 sessions

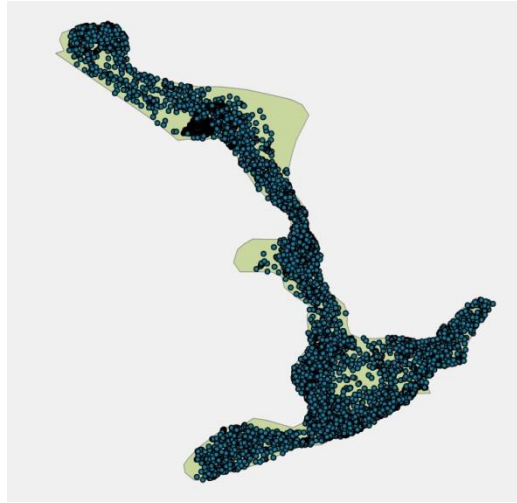




# Habitat Utilization



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



**Regional Investment Strategy Bi-monthly Update**  
*Work Session Topics*

Metro Council Work Session  
Tuesday, February 26, 2019  
Oregon Zoo, Conservation Hall