Just Listen

Giving Animals a Voice to Improve Their Quality of Life

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The Tao of Pooh

“Lots of people talk to animals...Not very many listen though...that's the problem.”

Benjamin Hoff
Outline

• People are a critical part of the lives of animals in human care
• Let the animals ‘tell’ us how to improve their care
• Importance of the caregiver/animal relationship
• Strategies for working with nervous or skittish animals
• Techniques for problem solving
• Back to where we began
My Evolution of Thought

• Began in animal training, which influenced my thinking ever since (focus on trust/respect, building a positive relationship)

• $Q^2$ – *Our Quality of Care is Their Quality of Life* presentation at Twycross Zoo in 2013

• Keepers/trainers are an critical part of the animals’ lives, therefore we **must** be a positive force
My Evolution of Thought

• Animals first – always

• They are there all day, every day

• Ask yourself – what are the animals doing now? Did I give them behavioral opportunities to keep them stimulated? (animals do not go to sleep as soon as you leave!)
My Evolution of Thought

• We have a *moral obligation* to offer the animals in our care the absolute best lives we can provide
Human-Animal Relationship

Human-Animal Relationship

Where to Begin?

• Build a Positive Relationship
  - **Trust** - Before trying to train an animal, build a positive relationship with them so that the animal is comfortable with and trusts you.
  - **Motivation** – Change the animal’s motivation from “oh no, here they come” to “oh boy, here they come!” (Steve Martin)
  - **Patience** – Do not impose yourself on an animal before you’ve earned that trust.
Where to Begin?

- Find out what the animal likes (and dislikes)
  - Food preference tests
  - Likes/dislikes sheet
  - This can also help with effective enrichment and training
Food Preference

• Finding out the favorite foods of the animals in your care helps you find the most effective reinforcers

• Separate the items in the animal’s diet, and watch what items the animals choose to eat first. Do this for several feedings in case preferences change

• Once you find the animals’ preferred food items, take these out of the free-fed diet and use them for relationship building, training, and enrichment
Where to Begin?

• Build a Positive Relationship

  • ‘Human Pez Dispenser’ – Offer preferred items to the animals on a regular basis, so the animals associate you with favorite treats

  • Drop and Go – In the beginning just drop a favored food item in the enclosure and leave, don’t impose your presence until the animal begins to associate you with something positive

  • Proximity – Wait to introduce yourself in closer proximity until the animal appears to positively anticipate your visit

  • Tamarin example
Animal Sense

• "Listen" to the animals – vocalizations, body language, movement, etc.

• Let that behavior control your behavior
  – Habitat servicing
  – Move/freeze
  – Verbal warnings
  – GES, toucan, etc. examples
Working With High-Strung Animals

- Implementing exhibit changes and enrichment with nervous or skittish animals
Have You Ever Said…

“I can’t add that new item or give them enrichment, they’re nervous about everything!”
Implementing Change

• The information presented next discusses how to do enrichment with nervous or skittish animals; but the techniques also work with new habitat features and management changes.
Enrichment

• Some animals are neophobic – nervous about new things

• People sometimes believe the best thing to do for these animals is to keep everything the same, so that they are not stressed or nervous
Enrichment

- In reality, animals are much better off learning coping skills, the ability to deal with new things, since change is an inevitable part of life (giraffe example).

- In addition, once animals learn to accept new and different things, a whole new world of enrichment and activity can be used to make their life more interesting.
Enrichment

• Some people try the ‘enrichment overload’ approach, where they put enrichment everywhere

• Others try to get animals used to enrichment by putting it where they must go near it, such as by food bowls or in favorite areas of an enclosure
Enrichment

- These approaches may make animals nervous, and can sometimes make enrichment a negative thing.

- So, here are some ideas on how to introduce enrichment with nervous or skittish animals:
  - Habituation
  - Desensitization
Habituation

• The lessening or disappearance of a response with repeated presentations of the stimulus

• The process of gradually getting an animal used to a situation that it normally reacts to, (i.e. avoids or reacts adversely to) by prolonged or repeated exposure to that situation

• The key to habituation is that it is a PASSIVE process, where the animal is exposed to new things and acclimates to them on its own
Desensitization

• The act of pairing a negative, or aversive event, with positive reinforcement until the event loses its aversive quality

• Unlike habituation, desensitization is an ACTIVE process where positive reinforcement is paired with the item to build a more positive association
Desensitization

Two main methods

- Keeper encourages the animal to the item and reinforces the animal
- Favored food item can be placed near/on item and let the animal approach on its own
Double-Wattled Cassowary

- Keepers did not utilize enrichment because the animals appeared nervous about new things

- Enrichment study done by a research intern, so began habituating and desensitizing cassowaries to enrichment

- The first item took over a week for them to approach, but after the first few items, they began investigating new things within a very short time
Double-Wattled Cassowary
Listen to the Animal!

- Whichever method you use, remember two main things:
  - Start where the animal is relaxed and comfortable
  - Let the animal’s behavior set the pace
Listen to the Animal!

• If the animal is apprehensive about approaching the object closely, start far enough away so that the animal is not nervous.

• Don’t place objects where an animal can’t easily avoid them, for example, don’t put them in/next to the food bowl or in the shifting pathway of the animal.

• Animals will generally respond more positively to enrichment if they are given the chance to make the choice whether or not to approach it at their own pace.

• Once the animal comes to a certain distance without hesitation or nervousness, then gradually move the object closer.
It’s Worth the Effort

• Once animals start becoming comfortable with new things, progress moves at a faster pace

• It may take them days or weeks to use a new exhibit feature or interact with their first enrichment item, but then each one after that will generally proceed more and more quickly

• Spend the time helping the animals learn to accept change, and you will open up a whole new world for them – it’s worth the time, it’s worth the effort!
Problem Solving

- There are lots of tools available, here are some options that might be useful as part of your animal care ‘toolbox’
‘Clipboard’ Approach – Simple and Effective

Patterns and contexts

- Many problem behaviors occur in specific situations, even though the patterns may not be obvious.
- Using a simple data collection sheet, you can more easily determine whether the behavior is occurring at specific times or in specific contexts.
- If patterns are found, this is a valuable tool towards finding ways to solve the problem.
‘Clipboard’ Approach

- This is an example of a form used for a macaque
Patterns of Behavior

• Look at the information to see if there is a pattern to the behavior. Does it occur:
  – at certain times of day?
  – before/after feedings?
  – when there are a lot of visitors?
  – when the animal is alone, or with specific other animals?
  – when certain keepers are present?
Patterns of Behavior

If a pattern is found, this gives you a tool in trying to reduce or eliminate the problem. For example:

• Bird overpreens feathers when lots of visitors are present
  - Offer more hiding areas and perching options farther from the public

• Monkey displays when a certain keeper is present
  - That keeper works to build a more positive relationship with the animal, and to make sure to not react when the unwanted behavior occurs

• Otter does a repetitive pattern swim at a similar time each day
  - Offer enrichment activities before this behavior normally occurs to give the animal another behavioral option

• Gorilla engages in R&R after feedings
  - Modifying types, proportions, and amounts of foods (i.e. fruit, biscuit) in each feeding may reduce this behavior
Accidental Reinforcement

• Many unwanted behaviors occur because they have been reinforced – by keepers, volunteers, visitors, or other animals.

• It’s critical that staff and volunteers are all taught to ignore unwanted behaviors and to not bring attention to them (as long as it is safe to do this).

• Attention will often make an animal stop doing an unwanted behavior at that time, but this is also likely to reinforce the behavior and cause it to occur again in the future.
Problem Solving Model

- From Ken Ramirez’s book *Animal Training – Successful Animal Management Through Positive Reinforcement*

- More detailed and time-consuming process, but very useful for working through long-standing or serious behavioral problems
Problem Solving Model

Identify the problem

- Break behavior into parts (behavior is complex)
- Usually only certain parts need fixing
- Document the first occurrence
- Look for patterns
- Meet to discuss as soon as possible
- Outline the symptoms
- Examine the records
- Review “causes” checklist
- Evaluate the motivation
- Accept responsibility
Problem Solving Model

Determine the cause

1. Environment
   - Weather
   - Facility changes (construction, landscaping, painting, etc.)
   - Prop changes (different uniforms, training pouches, equipment, etc.)
   - Public activity

2. Social
   - Dominance/submissiveness
   - Aggression
   - Competition
   - Sexual activity
Problem Solving Model

Determine the cause

3. Psychological
   - Boredom
   - Neurotic or aberrant behavior (often become self-reinforcing/classically conditioned)
   - Superstitious behavior

4. Physical
   - Always check for health or medical concerns
   - Biggest health problems may not be easily observable (arthritis, vision or hearing problems, etc.)
   - Physical capabilities
Problem Solving Model

Determine the cause

5. Keeper/Trainer
   - Skill level
   - Basics (cues, bridging, reinforcers, consistency)
   - Emotion/mood

6. Training Sessions
   - Planning (session goals/plans are critical)
   - Number of sessions
   - Frequency of sessions
   - Pacing of sessions
Problem Solving Model

Determine the cause

7. Regression
   - Regression is a normal part of learning

8. Desensitization (animals becoming comfortable with items or changes in the environment)
   - Remember this is an ongoing process
   - Desensitize animals well, so that when unexpected changes occur animals can more easily accept/handle them
Balance of motivators

- Try to determine the balance of reinforcement
- For increased behavior – what is reinforcing it?
- For decreased behavior – what is reducing it?
- Be aware our perceptions may be different from the animals
- Realize that we may not have identified all possible motivators
## Problem Solving Model

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<th>Factors that MAY decrease the <strong>desired</strong> behavior</th>
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Understanding motivation

- Animals seek to control their environment
- Selfishness “what’s in it for me?”
- Consequences are rarely neutral
- Past consequences create motivation for behavior
- Motivators (positive and negative) are always present in the environment (not always from us)
- Animals will select stimuli that are important to them, not the trainer
- An animals’ ability to control the balance of reinforcers impacts whether or not an animal learns
- Dependent upon the animal’s internal state
Problem Solving Model

Implement a plan
- Determining the cause is not always possible
- Knowing the cause may not present an immediate solution
- Use of behavior analysis
- Consistency with all keepers/trainers is critical

Monitor and readjust
- Once a plan is implemented, closely monitor the animal’s behavior and progress
- If the problem does not improve, review the problem-solving model, and readjust the plan as needed
Example – Gorilla Shifting

Identify the problem (be specific)

• During shifting attempts, some of the gorillas regularly run back and forth through, and/or block shift doors

• K2 and K3 are more likely to play, running doors, etc. during attempts

• H1 will sometimes sit at and/or block the door

• Shifting behavior is possibly better when fewer people are present
Example – Gorilla Shifting

Determine the possible causes

Environment

• Roof project occurring over the past few months

• Researcher has begun working with the gorillas over the past couple of months
Example – Gorilla Shifting

Social

• H1 used to be submissive to K1 in the past but now acts more dominant since reintroduction

• K1 now appears to be low ranking within the group, in the past has been one of the dominant members, possibly causing frustration, lack of control?
Example – Gorilla Shifting

Psychological

- Holding 3 is a knockdown area, may have a negative association
- Holding 3 is the only one not on view to the public
Example – Gorilla Shifting

Physical
• K1 has arthritis

Trainer
• Lots of keepers work gorillas, consistency could be an issue
• There is no specific training/shifting plan developed for this behavior
• Keepers have varying levels of experience with animals and/or training
Example – Gorilla Shifting

Session Use
• Behavior only worked once a day for p.m. feeding

Regression
• Remember this is a normal part of the training process and occurs regularly

Desensitization
• Goal is to desensitize animals thoroughly that they easily handle unexpected changes
Example – Gorilla Shifting

Consider the balance of motivators

Factors that may reinforce/increase playing with doors

- Door cannot close, stops separation
- May get more attention due to longer sessions
- May spur play sessions with the young male gorillas, so may have a positive association
Example – Gorilla Shifting

Consider the balance of motivators

Factors that may reduce/decrease stationing for separations

• Being separated from other gorillas
• Going to a less favored enclosure
• May get less attention from keepers overall if shift more quickly
• No tiered reinforcement for shifting quickly vs. slowly
• If the young males don’t separate, keepers wait them out, sometimes resulting in a long playtime
Example – Gorilla Shifting

Implement a plan

• Use station markers to clearly let the animals know where to go

• Implement a tiered reinforcement system with higher value/amount of reward for quicker shifting

• Reduce number of people in the environment during shifting attempts

• Ignore undesired behavior, take a break if animals don’t shift within a specified amount of time
Example – Gorilla Shifting

Constant monitoring

- Shifting records show K1 successfully shifted over 80% of the time
- Keepers focused on not bringing attention to incorrect behavior, especially the behavior, and have seen improvement in overall shifting success, and a reduction in ‘door games’
- Have reduced volunteers coming back during shifting attempts, to better control the environment and potential attention-related reinforcement
- The roof work project and related disruptions are done
Main Messages

• **Listen to the animals!** Let their behavior be your guide

• Techniques like habituation and desensitization can help get animals accustomed to change and open up a world of new experiences

• There are many problem-solving tools available to help work through challenges
Final Thoughts

• Back where we began…

*We have a moral obligation to offer the animals in our care the absolute best lives we can provide*

Animals first – always
Thanks!

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