

# Proceedings of the 49<sup>th</sup> Annual American Association of Zoo Keepers National Conference



AAZK OMAHA 2024

Together We Grow

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## Topical Workshops



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## Trials and triumphs of voluntary hoofstock training

Hoofstock training has been a hot topic in zoos over the past decade . Join the Omaha hoofstock crew as they go over the trials and triumphs of training giraffes, rhinos, and antelope . From voluntary blood, ultrasounds, and hoof trimming, We'll discuss the aspects that lead to success and failure. We'll take a look at safety, trimming techniques, antecedent arrangement and more. This two-hour lecture will include Q and A as well as case studies of different situations faced in our industry.

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# TRIALS AND TRIUMPHS OF VOLUNTARY HOOFSTOCK TRAINING

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# INTRODUCTIONS

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- Josh Shandera
- Josiah House



# OUTLINE

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- Brief operant condition overview
- Ultrasound training
- Blood Draw
- Hoof Trimming
- Wrap up

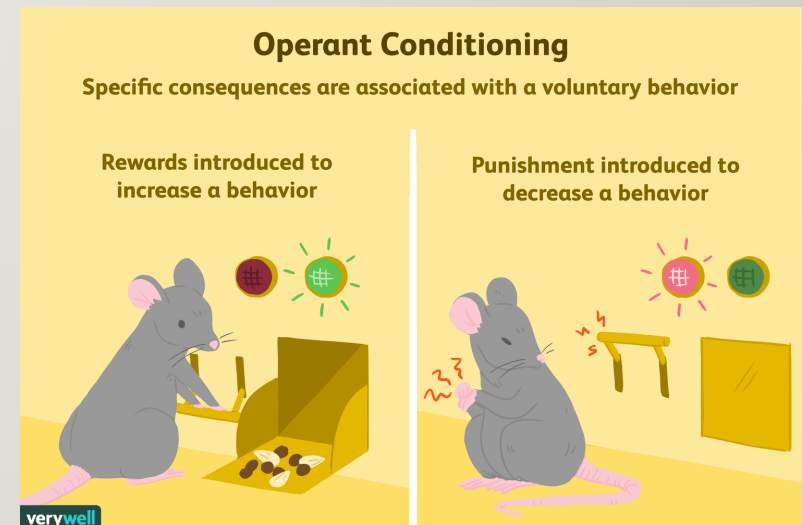


# OPERANT CONDITIONING OVERVIEW

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- Conditioning un paired stimuli to mean something
- Increasing the likelihood of a desired behavior by adding reinforcing
- Training is a conversation not a lecture

	Something "Bad" (aversive)	Something "Good" (rewarding)
Giving (positive)	Positive Punishment (behavior is weakened)	Positive Reinforcement (behavior is strengthened)
Taking Away (negative)	Negative Reinforcement (behavior is strengthened)	Negative Punishment (behavior is weakened)



# POSITIVE REINFORCEMENT

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- Increase the likelihood of the behavior by pairing it with a reinforcing stimuli
- Often times in hoofstock will be food
  - Grain, produce, lettuce, browse,
  - Always consult with your vets/ nutrition department
- A variety of reinforcers are ideal but with hoofstock sometimes you have to take what you can get.
  - Trained to take another reinforcer
- Presentation of reinforcement matters
- Predictability of your behavior





# POSITIVE ENVIRONMENT AND RELATIONSHIP

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- Lay the ground work where the animal is comfortable
- Shoots/GRD might be negative so build strong behaviors in a frequent area,
- Open space help animal view and learn your behavior and are able to predict and feel comfortable
- Herd animals may need to be separate but still in view of each-other
  - Hilly/marshall, takin, bongo



# KEEPER ANIMAL RELATIONSHIP (KAR)

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- Increase the predictability of your behaviors
- Does the animal trust you?
- Does the animal willingly approach you ?
- Investments in this relationship build trust for complex withdrawals



# ANTECEDENT ARRANGEMENT

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- Set the animal up for success
  - Is the animal motivated?
  - Do they know they're about to train?
  - Do they have the space to be successful?
- What does strong antecedent arrangement look like?
- Can you communicate more clearly
- Set yourself up for success
  - You need reinforced for training as well to increase the frequency of the behavior





## TRAINING QUESTIONS AND DISCUSSION

# ULTRASOUND OVERVIEW

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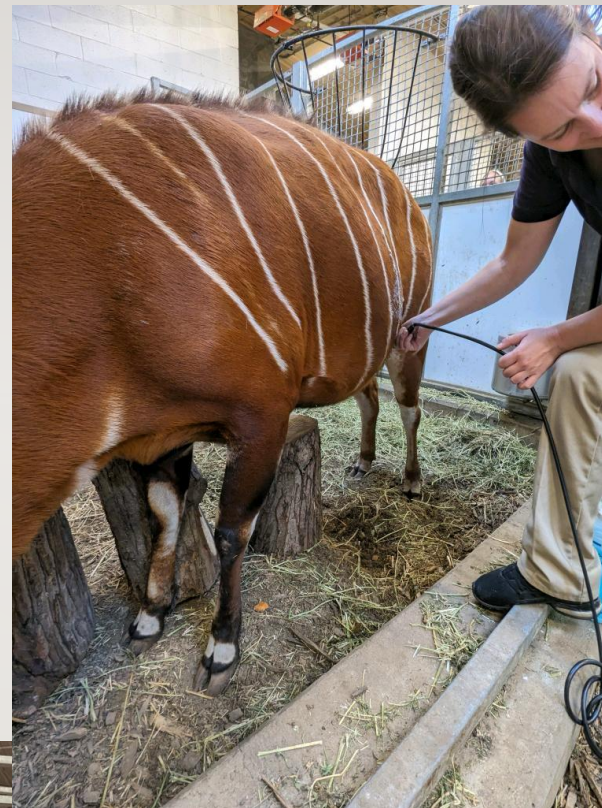
- Setup
- Animal Safety
- Human safety
- Voluntary participation
- Rectal vs transabdominal
- Set your vets up for success



# SET UP

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- GRD - giraffe
- Scale with bumper – whites
- Scale with barrel - indians
- Open door with logs- bongo
- Show the versatility of success and the necessity of using what you've got



# ANIMAL SAFETY

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- Animal comfort
  - Locked on scale
  - Around barriers and new staff
- Proper equipment
  - Lube, bumper, education
- Newt story?



# STAFF SAFETY

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- Ability to reinforce- through mesh, bollards, firehose
- Arm placement – butt bars in the way, pinch points in GRD
  - Vets will have to be watching the screen and wont be able to keep direct eye contact on animal
- Open communication through trainers, vets, animal
- Established boundaries of what behaviors your looking for
- Mashile bumper story





# VOLUNTARY PARTICIPATION

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- What behaviors look like
- Open communication between keeper vet and animal
  - Allowing animal to express discomfort
  - When does an animal become to uncomfortable
    - Need breaks
    - Better conditioning
- Using environmental cues
- Continuous reinforcement
- Building up time, movements and arm size



# RECTAL VS TRANSABDOMINAL

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- Which is less invasive
- Which is more successful
- Pros and cons
- Clean up the rectum after to not get dried out
- Hard to make good contact through fur
- Distinct markers/organs to find
- Size of hole



# SET YOUR TEAM UP FOR SUCCESS

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- Animal easily and comfortably enters position
- Low movement from the animal
- Quiet environment
- Conditioned to the experience
- Clear expectations from all three parties
- Empty animals 😊
- Positioning other animals appropriately



# MASHILE ULTRASOUND VIDEO

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# ULTRASOUND QUESTIONS AND DISCUSSION

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# VOLUNTARY BLOOD DRAW

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- Set up
- Safety
- Open communication
- Training is a conversation
- Building up
- Injections
- Plasma/ duration



# SET UP

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- Training area, lofts, scale,
  - Chose an area that the animal is comfortable and secure/has history in
  - Build on the existing relationship
- Set yourself and vet staff up for success
  - Have needles/bags/alcohol/tables part of the trained experience
  - Have reinforcers ready
  - Position other animals properly



# SAFETY

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- Vet/tech input on training plan
- Ability to clean the leg/neck/ear
- Animal comfort in training area
  - Ability to leave / calm down
- Needles not being left in
- Staff in a position that they wont get kicked /bit/ hit





# OPEN COMMUNICATION BETWEEN STAFF

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- Going over session goals
  - Changes session to session
- Proper order of operations
  - Touch/stick/ bridge
- Second keepers comfort level
  - Animal placement
  - Tension in the leg
  - Animals demeanor



# TRAINING IS A CONVERSATION

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- Listen to the animal
- What behavior tells you to slow do or move forward
- Think about the success of the next session as much as the success of the current session
- Is the animal trained or distracted
  - Does it matter?
- Does the animal understand what's going to happen
  - Small discomfort= big reward



# BUILDING UP

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- Touching
  - Adding a second
  - Touch all over
- Pen cap poke
- Blunt
  - Pre-established communication
- Small gage
- Large gage



# INJECTION

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- Have the animal poke themselves
  - Order of operations matters
  - Build solid behavior



# PLASMA AND DURATION

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- Adjusting needle
- Building up needle size, volume of blood,
- Changing up reinforcer
  - Monitoring what and how much they get
- Proactive collection
- Jaws success story
- Necessity of plasma



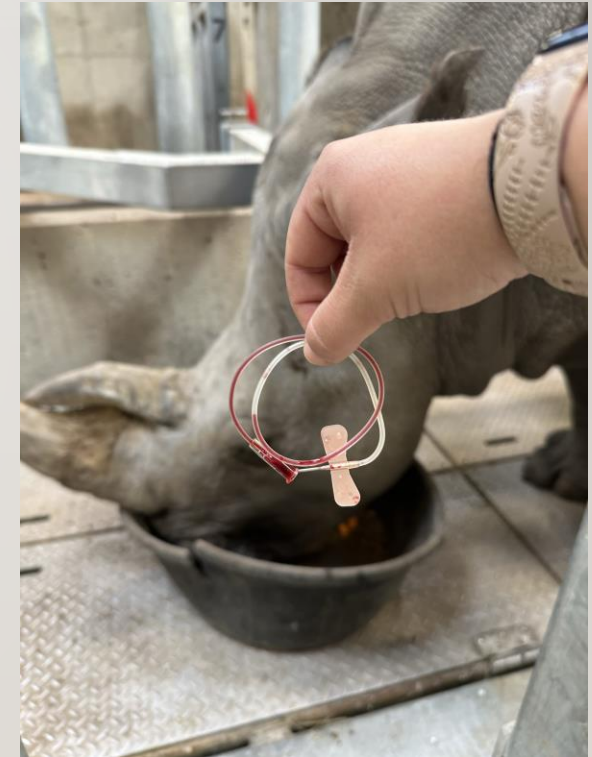
# MARY TRAINING VIDEOS

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# BLOOD DRAW QUESTIONS AND DISCUSSION

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# VOLUNTARY TRIMMING

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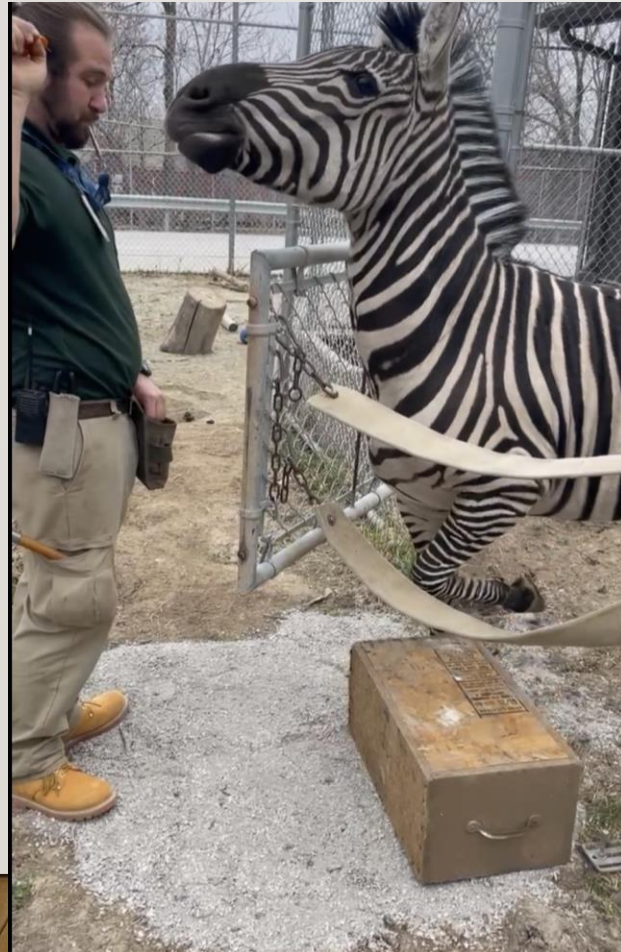
- Setting yourself up for success
- Training areas
- safety
- Strong antecedent arrangement
- Foundation behaviors
- Small wins build big success
- Predictable behavior
- Understanding the tissue
- Advocating for medical intervention
- Involuntary trimming





# SETTING YOUR SELF UP FOR SUCCESS

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# TRAINING AREA

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- Firehose
- GRD
- Scale



# SAFETY

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- Animals comfort in area
- Educated on what to trim
  - How to use tools and maintain comfort
- Knowing previous pathology
- Second keeper safety
  - Body placement to lower risk
- Knowing the animal
  - Comfort level with touch/where to touch
- Solid predictable behaviors



# STRONG ANTECEDENT ARRANGEMENT

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- Box placement
  - Stationary box with mashile
  - Box with skies for mary
  - Softer/ taller box for betty
- Doorways and thresholds
  - What barrier to use, fire hose that flexes
- Scales to align and provide keeper access
  - Do they cut off visual information to the animal
- Substrate challenges
  - Mulch with mary up on wood plate
  - Pavers used for minnie
  - Soft pad for jawara



# FOUNDATION BEHAVIORS

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- Come here and back
  - Planting foot placement
- Touching
- Target "station"



# SMALL WINS BUILDS BIG SUCCESS

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- Foot placement
- Luring them up on the box
- duration
- Touching
- Trimming



# PREDICTABLE BEHAVIOR

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- Repetition repetition repetition
- Does the animal understand whats going to happen
  - Consistency matters
- Are they conditioned to some or all different stimulation
  - Degrees of manipulation
- Listening to the animals behavior
  - Taking breaks, reducing force when tense
- Trimming should be naturally reinforcing



# UNDERSTANDING THE TISSUE

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- Chalky vs waxy
- Longer hoof wall
- Twisting hoof wall
- Gain further education
- Collaboration is key for industry growth





# ADVOCATING FOR MEDICAL INTERVENTION

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- Knowing what soft tissue is being distorted
- Flares and twist are too far gone
- Have vets informed and allow input on training plan
- “Whos really preventing the knockdown”



# INVOLUNTARY TRIMMING

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- Knockdowns
- Standing sedations
- Waying the risks





# MASHILE CURLING VIDEOS

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## MASHILE CURLING VIDEOS PART 2

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# TRIMMING QUESTIONS AND DISCUSSION



# CREATING A CULTURE TO SUPPORT GROWTH

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- Encouragement comes from any level
- Reinforce each other in every task-training, cleaning, projects
  - Start with a positive
  - The way you ask matters
  - What is your intent
- Failure is part of growth
- Keep an open mind



# WHAT TO DO WITH YOUR INFORMATION

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- Gain more education
- Skill development takes time and practice
- Share information and excitement



# THANK YOU FOR YOUR TIME

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- QUESTIONS

