

Proceedings of the 43rd Annual National Conference of the American Association of Zoo Keepers, Inc.



AAZK 2016

CREATING A HARMONY WITH WILDLIFE

M E M P H I S

September 19th – 23rd

Topical Workshops



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Maximizing Animal Conservation

Lauren Augustine and Kenton Kerns, Smithsonian National Zoological Park

Running a Successful Chapter

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Lee Hart, Ozarks AAZK Chapter
Jessica Real, Bay Area AAZK Chapter

Thursday, September 22nd

Zoo Keeper Fitness

Pattie Beaven, Earth Fit Consultant: Wellness and Healthy Lifestyle Coach

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Courtney Janney, Memphis Zoo

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Beth Roberts, Katrina Knott, Memphis Zoo

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AAZK Wants You

Rachael Rufino, Smithsonian's National Zoological Park

Professional Certificate Courses

***Materials available for course attendees on AAZK online**

Avian

Carnivore

Carnivore Professional Certificate Course Sponsored By:



Animal Welfare

Animal Welfare Professional Certificate Course Sponsored By:





FIRE HOSE WORKSHOP

Micala Teetzen

Lisa Daly

Tony Slamin

TONY SLAMIN AND LISA DALY



- Co-Founders of Hose2Habitat
- Work with Hose2Habitat is 100% volunteer
- Have worked with over 155 zoos and sanctuaries with enrichment
- Started by providing fire hose, but expanded to donate and work with many types of enrichment using many types of materials
- Email: Lisa@Hose2Habitat.org
- Phone: 240.388.1281

MICALA TEETZEN

- Zookeeper at Sedgwick County Zoo
- Leader of enrichment volunteer group
- Fire hose enthusiast for 15 years
- Self-taught; learned by trial and error

FIREHOSE IS MY FORTE!



GENERAL FIRE HOSE INFORMATION

- Fire hose must be tested annually. Hose that fails is often taken to landfills.
- Types of firehose: single jacket, double jacket, rubber single jacket
- Size of hose: lay flat vs inner diameter ; typical lengths 50' and 100'
- Advantages of using rubber vs canvas
- Hardware recommendations: firehose brackets, fender washers, bolt sizes
- Hiding hardware
- Not using hardware



SOME FIRE HOSE ATTRIBUTES

- Durable: stands up to heavy use and daily washing
- Flexible: wrap it, tie in knots, braid it
- Variety of widths, weights, and thicknesses
- Variety of materials and colors
- Ability to change its color: paint or dye it for even more colors
- Reinforce/stiffen with PVC or other sturdy material
- Stuff it with browse and other treats
- Cloth hose can retain scents for sensory enrichment



SOURCES OF FIREHOSE

Buy it new: \$60-\$200 for a 50' roll

Used fire hose sources:

- Local fire stations
- Airports
- Military bases
- Electric companies
- Hotels
- Craigslist
- **Hose2Habitat**

CUTTING FIREHOSE

Bandsaw—have to haul hose to maintenance shop and have cut lengths ready, impractical

Sawsall/jigsaw—dangerous, not enough hands to hold hose and tool, hard to make straight cuts

Utility knife—takes many cuts to get through tough material, dangerous

Serrated knife—cuts through it like butter. Portable, easy, safe. Step on one side and hold other side with your hand.

Tinsnips—cuts through a single layer of hose

Electric rotary shear (aka Firehose cutter)—super fast, easy, does need electrical outlet



MAKING HOLES IN FIRE HOSE

Knife

- Use only if it has a locking or non-folding blade



Awl

Cordless drill

- Use a drill bit a size or two larger than your bolts
- Wiggle it! Move drill up and down and side to side to open up hole



MAKING HOLES IN FIRE HOSE

Sandwich Boards

Use when making holes near the end of a piece of fire hose to prevent drill bit from getting bound up

2 pieces of scrap wood

Stand or kneel on top piece to keep it from spinning



PREVENTING FRAYING

- Burn ends of hose with a lighter or blowtorch
- Keeps animals from pulling or getting caught on loose threads
- Neater appearance
- Burn it outside
- Use caution to not burn yourself
- Firehose is not fire resistant!



COLORING FIREHOSE

- Spray paint
- Dyeing with natural dyes
- Dyeing with purchased dyes



PAINING FIREHOSE

- Spray paint is the easiest
- Roll it up and paint both edges first
- Unroll and paint both sides



NATURAL DYES

Spinach



Coffee and Tea



“FIXING” FIREHOSE FABRIC

- Before dyeing fabric must be “fixed” with a mordant or a fixative
- Helps fabric absorb dye
- Examples of fixatives:

Baking soda (1/2 cup: 1 gallon)

Vinegar (1:4)

Lemon juice

Alum

Salt (1:16, use if dyeing with berries)

- Soak in fixer solution for 1 hour and rinse with cold water.



CONCENTRATING PIGMENTS

- Simmer for 1 hour in a non-reactive pot (stainless steel or glass).
- Strain out plant material or remove tea bags.
- Put in your firehose on a low boil for 1 hour.





Let it soak overnight.

Bonus: Sensory enrichment.

Coffee and tea smells last for at least a month on the firehose!



Fixer: vinegar
Dye: coffee

Steril

Fixer: vinegar
Dye: spinach

Fixer: vinegar
Dye: tea

Fixer: baking soda
Dye: coffee

Fixer: baking soda
Dye: spinach

Fixer: baking soda
Dye: tea

PURCHASED DYES

Some firehose fabric is polyester or nylon filament

Use dyes made specifically for synthetic fabrics

ALL Rit dyes including Rit DyeMore are non-toxic

No fixative needed (salt is in dye)



PURCHASED DYES



+



=



PRACTICE



"SKINNING" FIRE HOSE

- Double-jacketed fire hose has 2 layers: an outer cloth layer and an inner layer with cloth fused to rubber.
- Skinning the hose separates the layers with these advantages:
 - Doubles the length of fire hose
 - Makes it easier to work with
 - Lighter finished product
 - Prevents rubber ingestion in species where that is a concern



LARGER LENGTHS OF FIRE HOSE

- Clamp only the outer layer to a **sturdy** structure.
- Use a second clamp to secure only the inner layer to the bed of a golf cart.
- Drive forward **slowly**, pulling the layers apart as you go.



DOES IT NEED TO BE STURDY? YEP.



CARDIO METHOD

Expose several inches of the inner layer of firehose.



Slowly roll a golf cart onto the fire hose until the tire is snugly on top of only the inner layer of fire hose.



CARDIO METHOD

Unroll the fire hose in a straight line behind the golf cart.

Pull the outer layer from the far end.



ENERGY EFFICIENT METHOD (AKA LAZY METHOD)

Follow the cardio method until there is at least a foot of outer hose pulled to the far end.

Tie that outer hose to a secure object on a second golf cart.

Drive forward slowly.



ANIMAL SAFETY



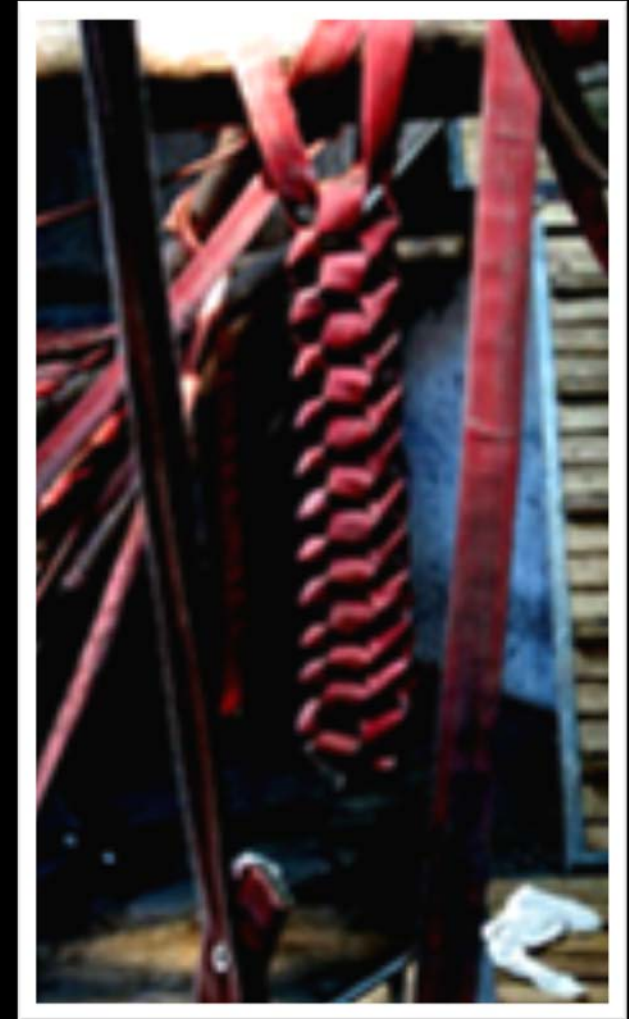
FIREHOSE ANIMALS



- Woven toy
- Stretches out over time
- Great for hiding diet items or hanging browse



BOONDOGGLE



WOVEN VINES



LADDERS/BRIDGES



HAMMOCKS



Papasan Hammock



Floating Hammock



Triangle hammock

FIREHOSE BEDS



FIREHOSE: THE ZOOKEEPER FIX-IT-ALL MATERIAL



Seals gaps in doors
preventing drafts



Cushioning doors from
rattling in the wind



Direct water away
from a downspout

STRIP DOORS



- Keeps heat/cool inside holding
- Keeps native birds, ducks, etc. out of holding area
- Can spray with fly spray
- Works with a variety of door types (guillotine, Dutch doors, sliders)
- Cut to size, works for all door sizes
- Metal weights added to bottoms if needed
- Remove middle flaps until you are sure animals are comfortable going through them

MORE USES FOR FIREHOSE



Use in place of rope



Sew ends and fill with
sand to make sandbags



Wrap logs
to increase
traction for
climbing
animals like
tree
kangaroos

VOLUNTEER GROUPS

- Use groups of volunteers to tackle large firehose projects
- Eagle Scout and Silver Scout projects
- Business/Corporate volunteering
- Community service days



HOOP HAMMOCK

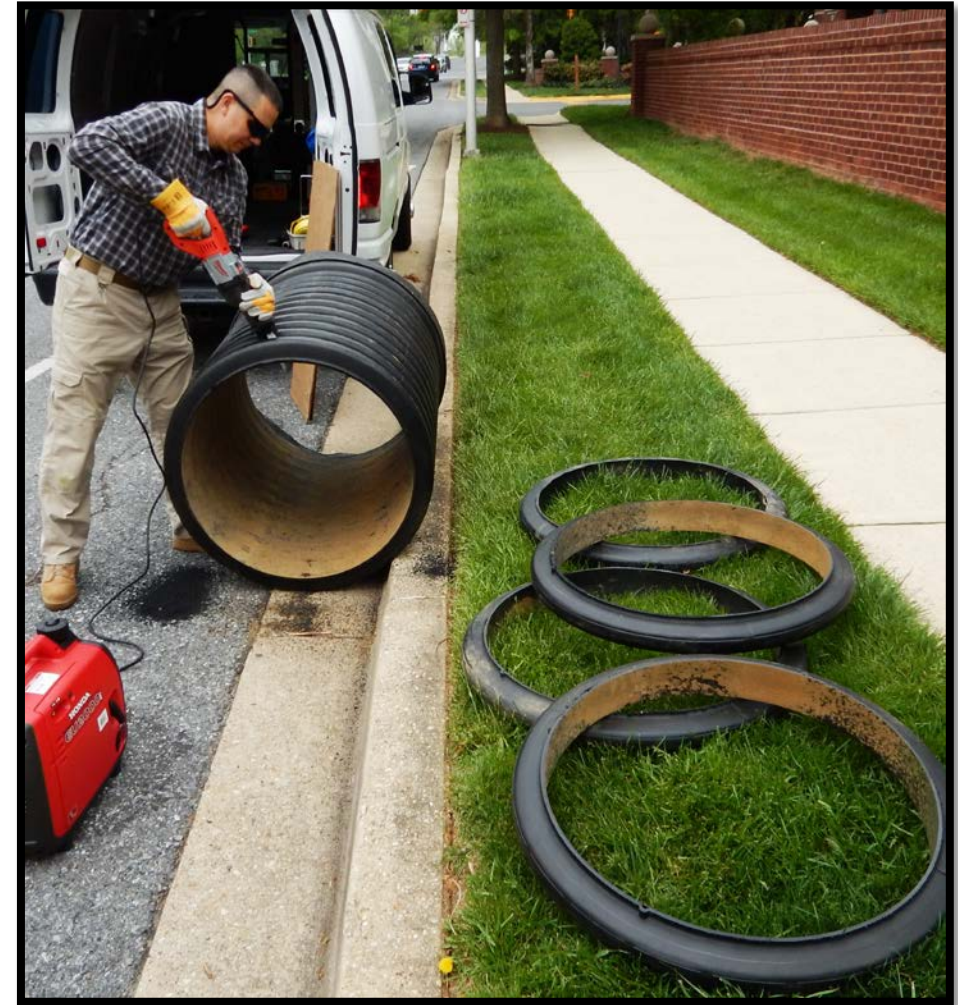


THE INSPIRATION



Otto Environmental
sells this
“Circular Swinging Hammock”
for **\$250**
plus shipping.

CORRUGATED DRAIN PIPE



Cut enough fire
hose strips to fill
the space

16 strips of 2.5"
hose cut to 4.5'
lengths



SANDWICH BOARDS



DRILL HOLES IN FIRE HOSE FOR BOLTS



SECURE FIRE HOSE WITH NUTS AND BOLTS



ATTACH SUPPORT HOSES



- At least 6' long.
- Must be the exact same length or it won't balance well.
- Attach at the 4 "corners" where the hoses change direction.

HOOP HAMMOCK HARDWARE



Swivel



Carabiner clips



Firehose brackets



HOOP HAMMOCK HANGING CONFIGURATIONS

- Very versatile for different species
- Alternate configurations greatly vary the movement or stability of hammock
- Allows adaptation to different spaces or propping
- Switch it up just for variety

SWIVEL SWING



2X2 SWING/THE ROCKER



VERTICAL



SPLAYED



SUSPENDED PLATFORM



WRAP AND TACK



SMALLER DIAMETER VARIATION





A SHEET CAN MAKE
THE
HOOP HAMMOCK
INTO A TENT





36" X 20' Dual-Wall Culvert Solid Belled End

Model Number: 36WT20NP | Menards® SKU: 6893976

	\$818.79
Everyday Low Price:	\$919.99
11% Mail-In Rebate:	\$101.20
Your Final Price:	\$818.79

You Save: \$101.20 After Mail-In Rebate

*The displayed final price is your price today after mail-in rebate and is subject to the terms and time frame of the rebate. Rebate is in the form of a merchandise credit check which may only be redeemed in store. [Learn More >](#)

Impractical for zoos to buy a 20' long \$900 pipe.

Try asking for scrap pieces from:

- Dirt-moving companies
- Construction companies
- City water departments
- Agrisupply stores (outdated pipe)
- Plumbing supply stores (outdated pipe)

Hose2Habitat

ALTERNATIVE MATERIALS

- The key is a sturdy base for a hoop
- No tacos!!
- Mix and match different bases and hammock materials



PVC FRAME



- 10' of 2" PVC cut into 2'6" pieces
- 4 Long turn elbows
- Supplies \$15 (not including PVC cement)

PVC FRAME WITH BEDSHEET HAMMOCK

- Half of a queen size sheet
- Cut 8.5" from each corner and hem the edges
- Velcro on one (or all) edges for easy washing
- Use firehose or rope to hang from corners



PVC FRAME WITH BEDSHEET HAMMOCK



EXERCISE HULA HOOP



- j/fit Weighted Hula hoop
- "Non-segmented", "no assembly required"
- Remove foam covering to expose metal ring
- <http://www.amazon.com/fit-3lb-Weighted-Hula-Hoop/dp/B001P2O7HE>
- \$31 on Amazon

HULA HOOP WITH BURLAP HAMMOCK



BURLAP HAMMOCK

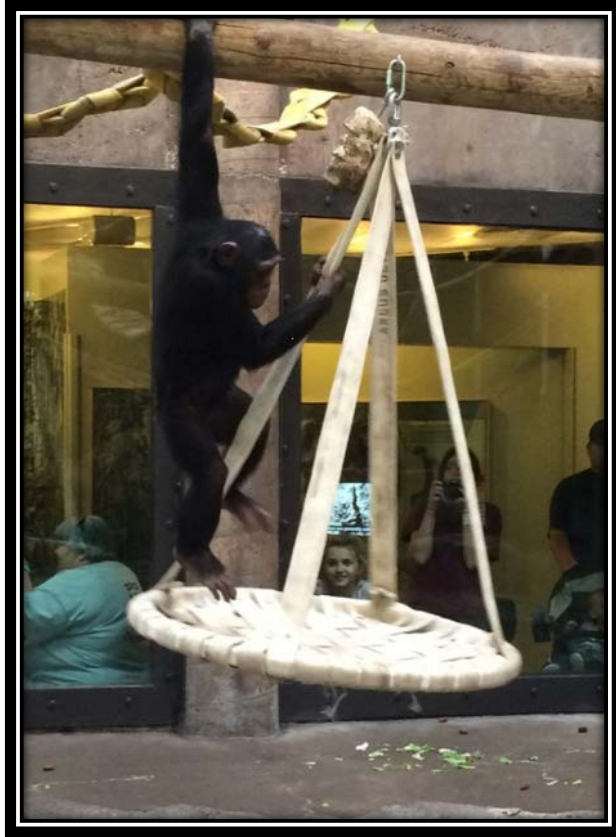


GAS PIPING





APES



MEDIUM-SIZED PRIMATES



SMALL PRIMATES



SMALL MAMMALS



Tayra



Meerkats

RED PANDA



GOATS



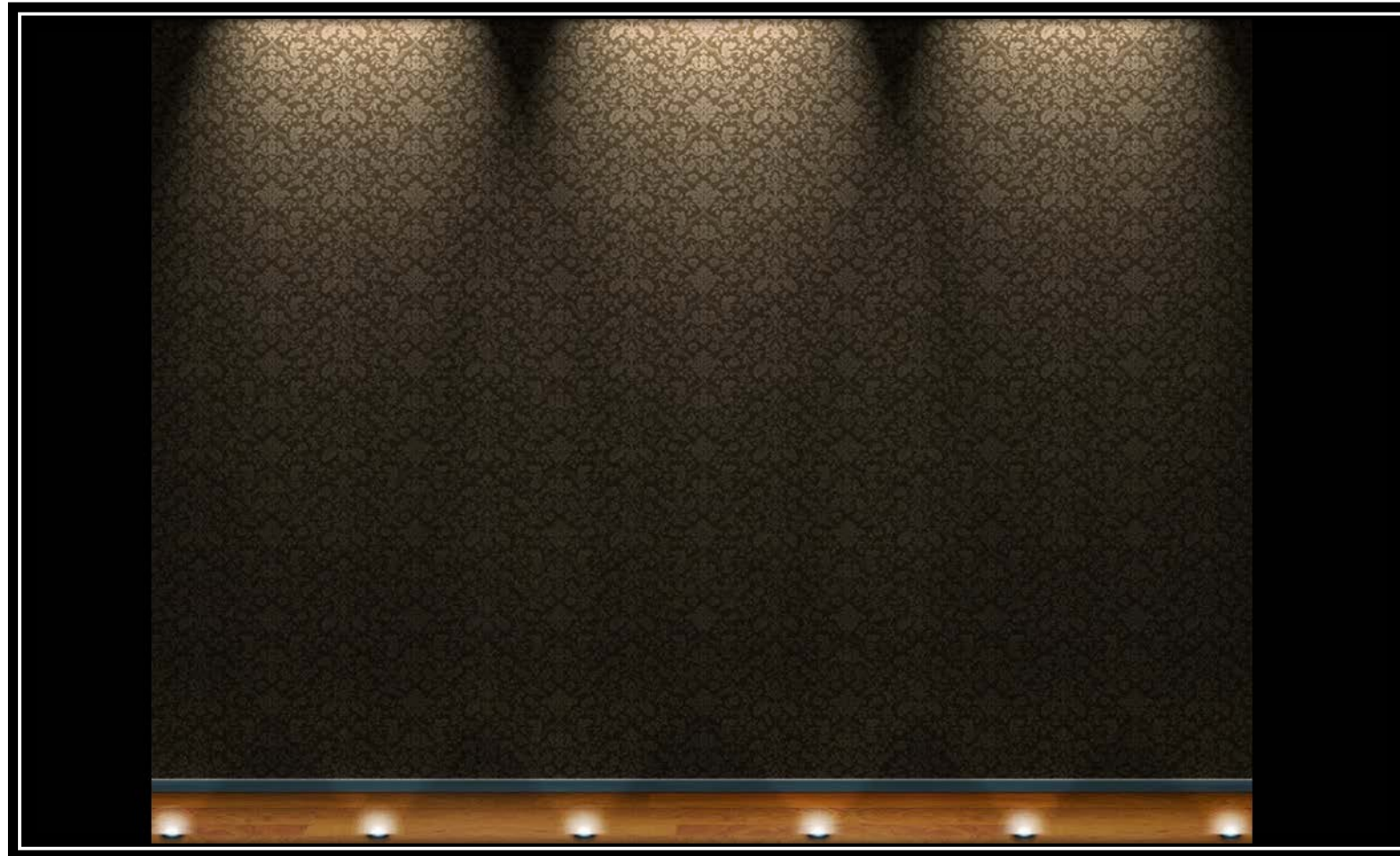
TREE KANGAROO



SMALL CATS



VIDEO OF HOOP HAMMOCK



THANK YOU!

- ❖ Hose2Habitat
- ❖ Sedgwick County Zoo
- ❖ GoldStarTool
- ❖ Custom Cut, Inc.
- ❖ Memphis Zoo
- ❖ AAZK



Maximizing Animal Conservation Efforts as an Animal Keeper

Lauren Augustine and Kenton Kerns

¹Smithsonian National Zoological Park, 3001 Connecticut Ave. NW Washington DC. 20008

Augustinel@si.edu

kernsk@si.edu

Animal keepers often feel they lack the ability to contribute to animal conservation on a larger scale. This stems from a belief that management does not support efforts outside of the typical animal keeper job description, or that larger conservation efforts are out of reach. This workshop will demonstrate how animal keepers can prevail in areas of conservation further than their job description and their collection, reaching past the animals for which they care to impacting entire species and habitats. Lauren Augustine and Kenton Kerns will draw from personal experiences, setbacks, and challenges faced both internally and externally. This workshop intends to motivate animal keepers to pursue extra-curricular options in *times of frustration* and limited funding. By welcoming these extra responsibilities, animal keepers can increase their impact, develop new skills, further professional development and continuing education, and, most importantly, create opportunities for the future.

Outline

1. Am I making a difference?
 - a. Role of a zookeeper
 - b. Impact of a zookeeper
 - c. Possibilities of a zookeeper...
2. Why volunteer outside your work time?
 - a. Open doors / network
 - b. Add to your resume
 - c. We have our responsibility to the animals for which we care
 - d. Achieve the feeling that you can make a difference
3. Challenges
 - a. "Conservation is part of another department."
 - b. "I don't feel I have the support I need to contribute to conservation within and outside the zoo."
 - c. "I can't afford to travel to save animals in the wild."
4. Solutions
 - a. Join a nonprofit or other conservation organization
 - i. AAZK
 1. BFR
 2. Trees for You and Me
 3. Chopsticks for Salamanders (FCSal)
 - ii. AZA – TAG or SSP volunteer positions
 1. Social media
 2. Fundraise
 - iii. Nonprofits, especially animal related
 1. SGLT case study
 2. Make contact, and ask what they need
 3. Fundraise
 4. Local conservation projects
 - b. Start your own nonprofit!
 - i. FCSal case study
 - ii. Time commitment
 - iii. Legality
5. Hone your skills
 - a. Network, network, network
 - i. Business cards
 - b. Public speaking/elevator pitch
6. What's your next step?
 - a. What makes you happy?
 - b. Make contact
 - c. Get involved

7. Resources

- a. Your coworkers
- b. Other zoo professionals (AAZK, AZA)
- c. Funding
 - i. AAZK Grants
 - ii. Taxa specific grants
- d. Local/National/International organizations

Maximizing Animal Conservation Efforts as an Animal Keeper



Lauren Augustine and Kenton Kerns

Smithsonian's National Zoological Park



Lauren Augustine

The Basics:

- Reptile keeper for 11 years

The Extras, outside of work:

- Founder and President of Foundation for the Conservation of Salamanders
- AAZK Conservation Committee member
- Studbook Keeper and SSP coordinator for three species of Asian box turtle
- Studbook Keeper for Cuban crocodiles
- NCAAZK Local Conservation chair
- Editor for GMU journal of graduate studies and Herp review
- Graduate student at GMU
- Memberships: VHS, AZA, AAZK, SSAR, TSA, CRF,



Kenton Kerns

The Basics:

- Small Mammal House Keeper for 7 years
- Small Mammal House Assistant Curator for 2 years

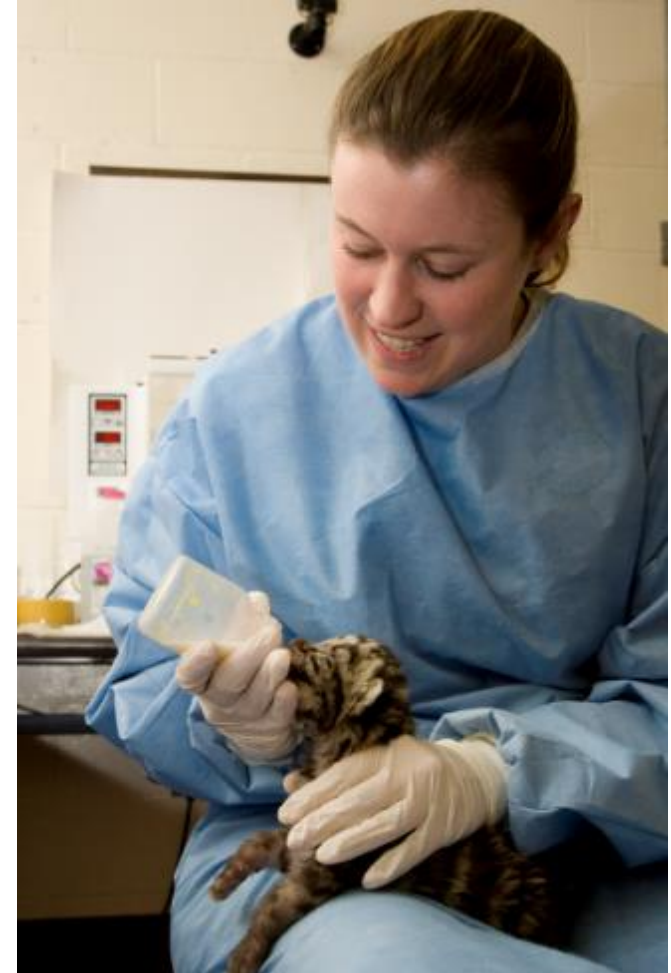
The Extras, outside of work:

- Board Member for Save the Golden Lion Tamarin
- Board Member for Foundation for the Conservation of Salamanders
- Studbook Keeper for golden-headed lion tamarins
- Member of AZA's Professional Development Committee
- Conference Chair of 2017 AAZK National Conference
- Past NCAAZK Chapter President





Zookeepers: Providing Excellent Care & Education



Current Professional Role and Impact

You know you provide...

- ...excellent animal care and husbandry.
- ...memorable educational and outreach opportunities.

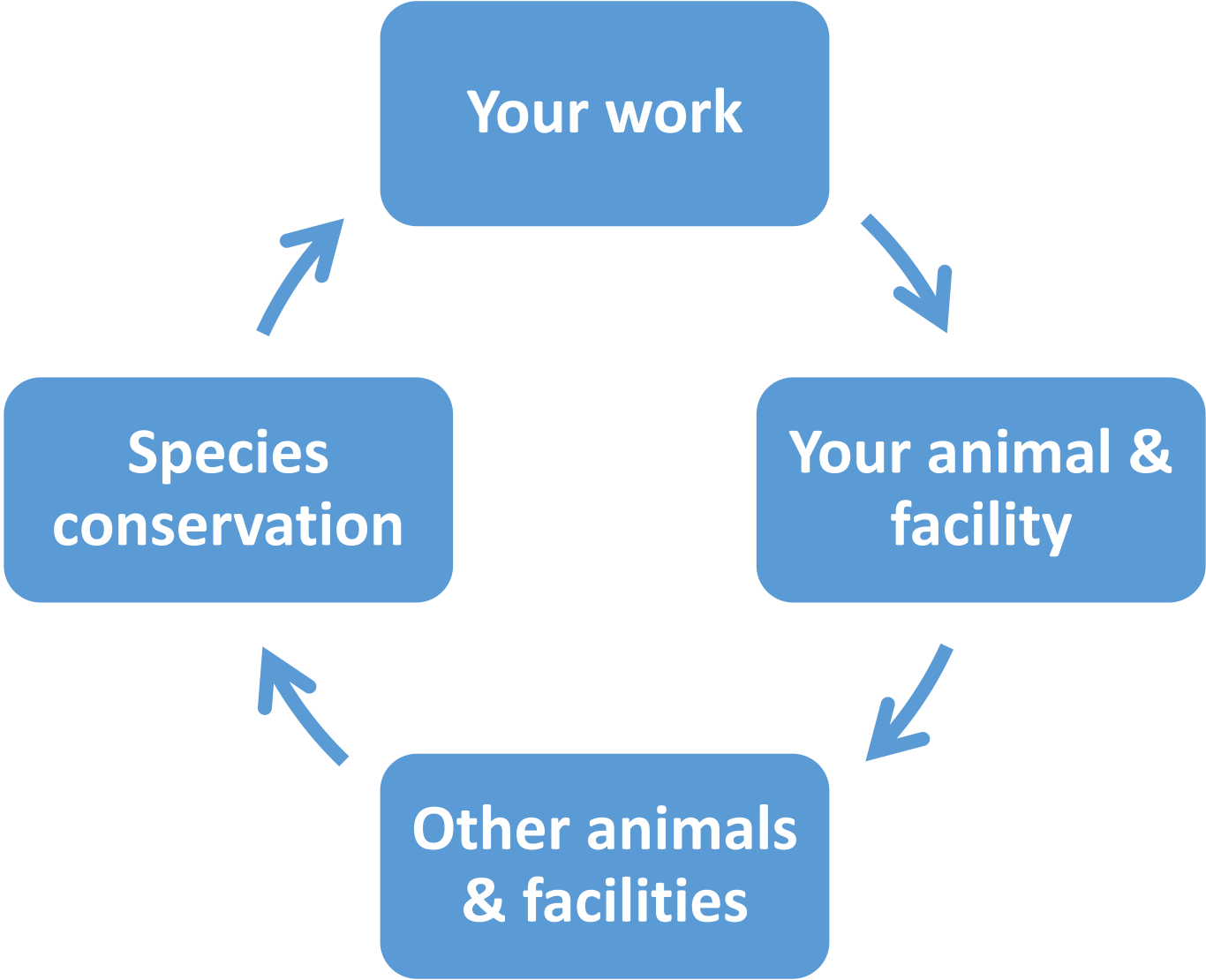
You know you have an impact on...

- ...zoo visitors you meet or that see your animals and exhibits.
- ...individual animals in your care.

But do you feel like you impact the conservation of species and habitats?

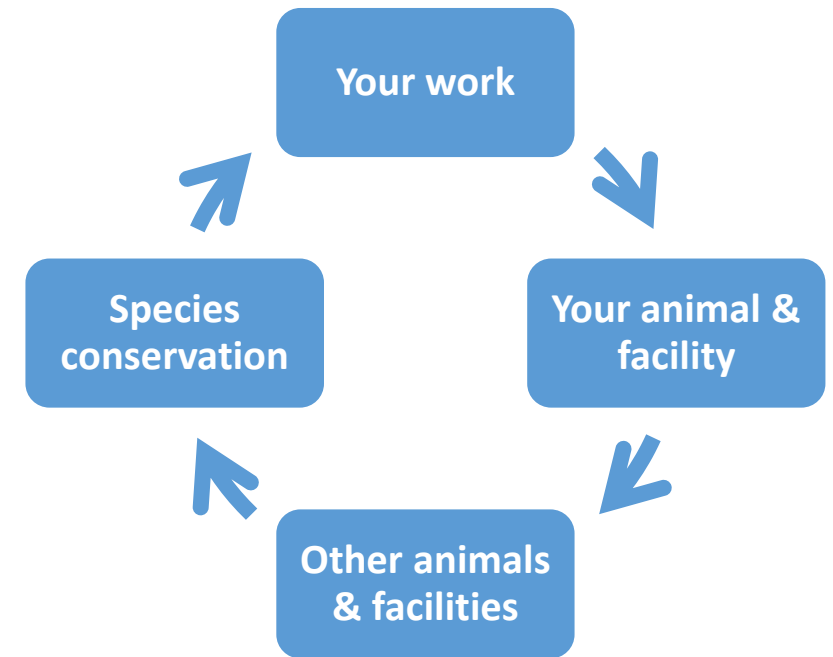


It's All Connected!



How Can You Achieve This?

- Communicate and network
- Write and publish
- Conduct research
- Join and volunteer with a conservation organization
- Mentor others
- Apply for grants
- Ask if others need help
- ... and on and on!

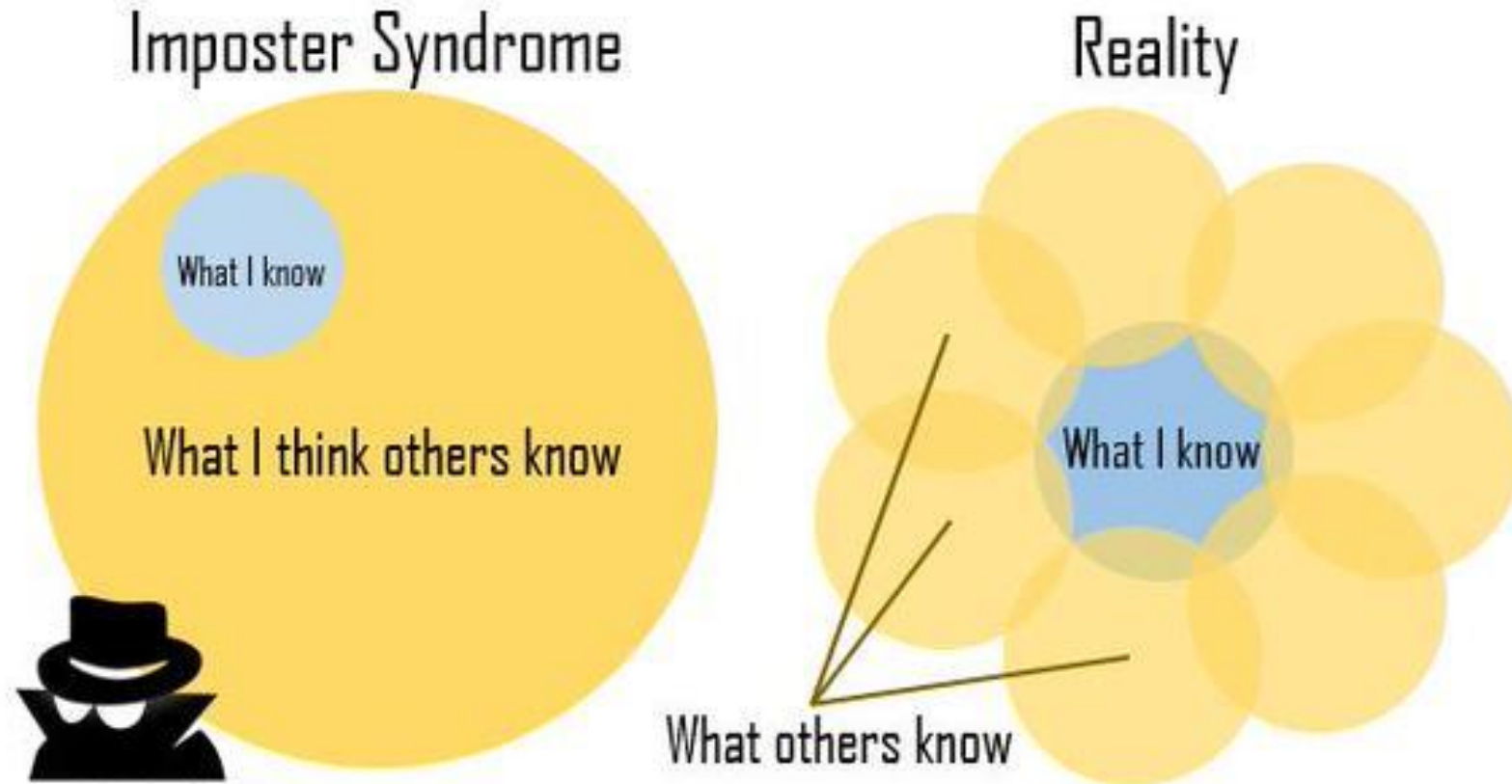


Challenges: What's Stopping You?

Challenge	Perceived	Actual
Time	X	X
Support	X	X
Knowledge	X	X
Other individuals	X	X
Discrimination	X	X
Fear/Intimidation	X	X
Lack of resources	X	X
Your Attitude	X	X



Challenges: Knowledge



Challenges: Your Attitude

The most essential factor is persistence - the determination never to allow your energy or enthusiasm to be dampened by the discouragement that must inevitably come.

James Whitcomb Riley



What Can You Do *NOW*?

Volunteer outside of your work

- Allows networking outside of your zoo
- Gain experience and bulk up your resume
 - Wildlife rehab = hand-rearing experience
 - Non-profit = fundraising
 - Vet clinic = experience with other species
- Feel like you are making a difference

Get involved with AZA programs

- Become an expert
- Network within the zoo community

IUCN Specialist groups

Present at a conference - don't just attend!

Find something simple

- PARIS - Program Animal Rating and Information System



Get Involved: Easy Ways

AAZK:

- BFR
- Trees for You and Me
- Chopsticks for Salamanders (FCSal)

AZA – TAG or SSP volunteer positions:

- Social media
- Fundraising

Nonprofits, especially animal related:

- Make contact, and ask what they need
- Fundraise
- Local conservation projects



Get Involved: Mentorship & Teamwork



Get Involved: Connect with a Nonprofit

CASE STUDY

Save the Golden Lion Tamarin

Story: Make contact with an established group and ask what they need

Can assist with:

- Fundraising
- Local projects
- Social media



Save the Golden Lion Tamarin's Mission

- **To protect the Golden Lion Tamarin**, a tiny endangered primate, and to protect and restore the globally outstanding biodiversity of its natural habitat, the Brazilian Atlantic Coastal Rainforest.
- **To cooperate with other organizations** with similar purposes.
- **To enlighten and educate society about preservation of the environment**, especially the Atlantic Forest and the Golden Lion Tamarin.
- **To support and promote the efforts of Associação Mico-Leão Dourado (AMLD)**, a Brazilian non-profit registered under the laws of the City and State of Rio de Janeiro, whose mission is the conservation of the biodiversity of the Brazilian Atlantic Coastal Forest focusing on the long-term protection of the Golden Lion Tamarin in its natural habitat.



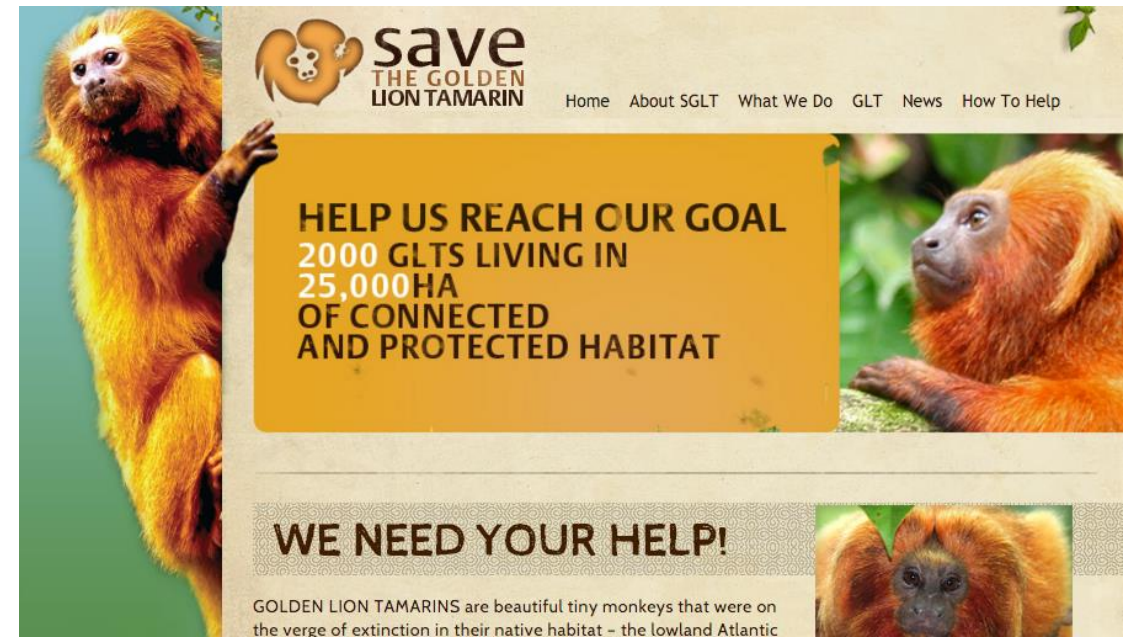
How did I get involved with this organization?

- Asked how I could help, made myself available, expressed an interest
 - All organizations are looking for competent people who can take on tasks in a detailed, organized, and timely manner.
- Identified areas when I could help
 - Social media/technology
 - Fundraising
 - Communication/editing
- Proved my interest and abilities and was invited on as a Board Member



How I Help

- Fundraising
 - ~\$10k a year through NZP's ZooFari
- Social Media and Website
 - Savetheliontamarin.org
 - Facebook.com/saveglts
 - twitter.com/SaveTheGLT
- Programming
 - Track-A-Tamarin – Annual fundraiser with \$10k goal for *in situ* tools, directed at groups like AAZK chapters



Challenges and Benefits

- Challenges:
 - Time management
 - Conflict of interest
 - Completely new environment
- Benefits:
 - Seen as the go-to GLT person at my institution
 - Supervisor understands, appreciates, and supports my involvement
 - Explain how your involvement is beneficial!
 - Professional development
 - New opportunities



Get Involved: Start Your Own Nonprofit!

CASE STUDY

The Foundation for the Conservation of Salamanders

Story: See a gap in funding and support for a species and move to fill it.

Challenges:

- Time commitment
- Legality
- Support



Reuse Chopsticks Save Salamanders



- Increase awareness about the deforestation for the production of disposable chopsticks
- Increase awareness about this project's flagship species, salamanders, and their diversity within the United States
- Raise money to support salamander conservation, education, and research by providing a "green" alternative



Why did I start this organization?

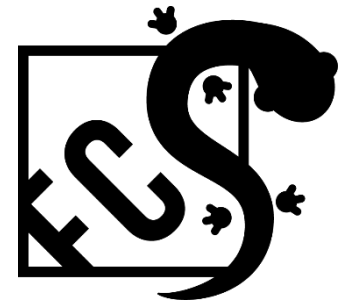
- Deforestation for the production of chopsticks
- Salamanders are under funded as a taxa
- Felt the need to contribute further to conservation
- Wanted to support animal keepers



Funding Distributed!

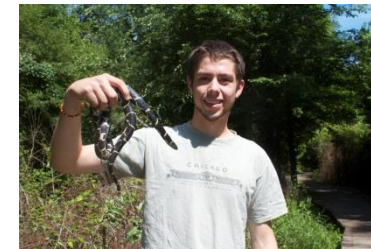
- **Grants awarded in 2013**

- \$1500 to Todd Pierson from Odum School of Ecology for his research “Monitoring of Appalachian Salamanders Using Environmental DNA”
- \$500 to Jamie Weyer from Omaha’s Henry Doorly Zoo & Aquarium for her participation in “Eastern Hellbender (*Cryptobranchus alleganiensis alleganiensis*) Ohio Conservation Plan”



- **Grants awarded in 2014**

- \$5500 to Brenna Forester from Duke University for her research “Evaluating the implications of local adaptation, habitat connectivity and gene flow for an endemic, high-elevation terrestrial salamander under global change”
- \$2000 to Sarah Plesuk from Henry Doorly Zoo and Aquarium for her proposal "Amphibian Habitat Enhancement and Monitoring in an Urban Area“



- **Grants awarded in 2015**

- \$5000 to Thomas McElroy, PhD from Kennesaw State University for his project “Conservation Genetics and Migration Monitoring of the Rare Pigeon Mountain Salamander (*Plethodon petraeus*) within a Highly Restricted Range”
- \$1000 to Thomas W. Franklin from Appalachian State University for his project “Using environmental DNA as a sampling method for occupancy modeling in *Cryptobranchus alleganiensis alleganiensis*”



Funding in 2016- International

- \$4,474 to Dr. Christopher Michaels from the Zoological Society of London and Jose Alfredo Hernandez Diaz from Africam Safari for “Assessment of the conservation status of the needs of the Taylor’s salamander”
- \$500 to Shu Chen from the Zoological Society of London for "Developing China’s first Chinese giant salamander conservation ecotrail in Fanjingshan National Nature Reserve“
- \$500 to Aram J. K. Calhoun and Kristine Hoffmann from the University of Maine "Vernal Pools for Me”



Mile Stones

- **Awarded over \$22,000 since 2013**
- **FCSal in 2014**
 - **Developed a board of directors**
- **First Salamander Saturday**
 - **Over 30 events**



Future

- Continue to offer grants
- Modify type of grants
- Become an internationally recognized organization
- Increase funding offered annually
- Expand partnerships - ASA, PARC, etc.



Challenges and Benefits

- Challenges
 - Time
 - Knowledge
 - Skill sets
 - Fundraising
 - Non-profit paper work
- Benefits
 - Connect to other professionals
 - Feel like I am making a difference
 - Improve myself- professionally and personally



Goals of Expanding Your Impact

- Hone your personal and professional skills
- Increase your knowledge... become invaluable and the go-to person!
- Network, network, network
 - Do you have business cards?
- Public speaking
 - Do you have a personal elevator pitch?



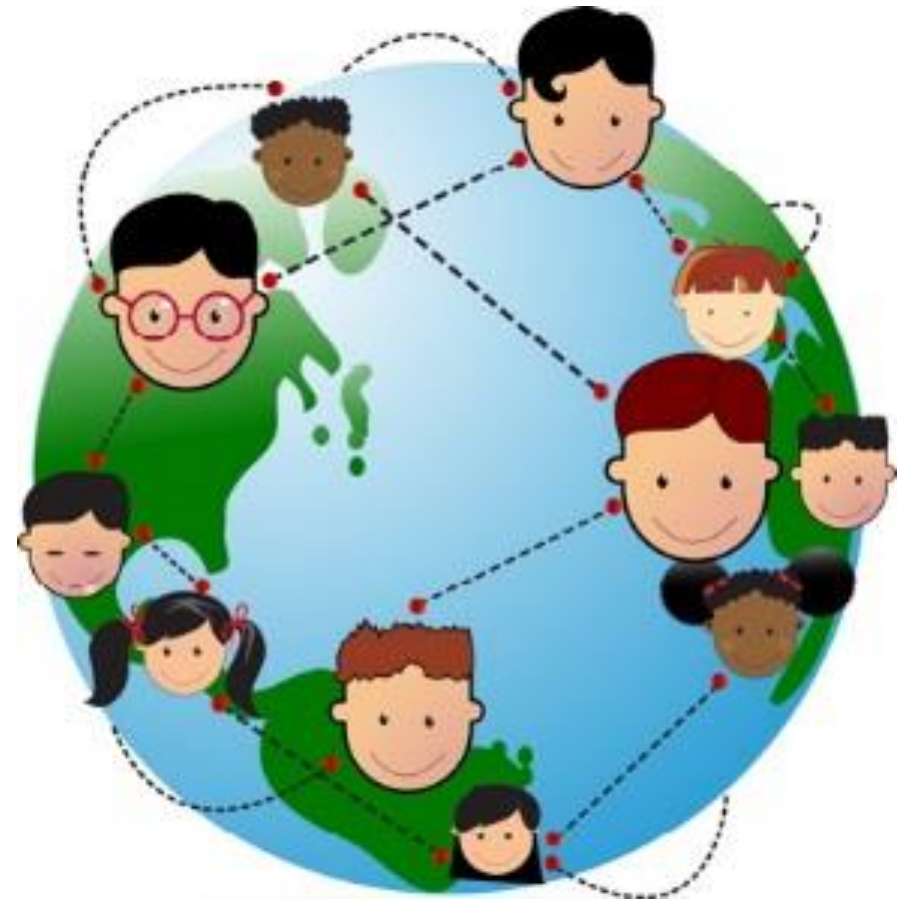
Resources

- Your coworkers
- Other zoo professionals (AAZK, AZA)
- IUCN Specialist Groups
- AAZK Conservation Committee
- Funding
 - AAZK Grants
 - Taxa specific grants
- Other organizations
 - International/National
 - Local



What's Your Next Step?

- Ask yourself, “What makes me happy?”
- Make contact, reach out, sell yourself!
- Get involved and expand your skill set
- Start small and locally and work your way up!



Tools for Running a Successful Chapter

Ali Striggow: President, Greater Houston Chapter AAZK

Lee Hart: President, Ozarks Chapter AAZK

Jessica Real: President, Bay Area AAZK

Rebecca Salinas: Vice President, Greater Houston Chapter AAZK

The Basics

- Bylaws
- Membership and Leadership
- Reviving a Flagging Chapter
 - Meetings
 - Finances
- Multi-Institution Chapters
- Chapter/Institution Relationships:
Small vs. Large Facilities

Bylaw Basics

- You can't have a chapter (let alone a successful one) without them!
- Find them and read them.
- Follow them.
- Email them out to everyone in your chapter or make them available in another way.
- Have both a digital and a hard copy ready and available for reference.
- If they are no longer meeting your needs, update them!

I think our bylaws need some work, what now?

- Any amendment must be presented to the chapter at least 30 days prior to voting on it.
- Think about all the things your chapter needs defined in order to run smoothly. For example:
 - Who can be a member of your chapter?
 - How many do you need for a quorum?
 - How will voting work?
 - If you offer professional development scholarships, what are the requirements?
 - How much can the treasurer (or other officers) spend without chapter authorization?
 - Social media guidelines
- Make sure members know that they can also propose amendments.

Membership

- Define your membership base:
 - Are all AAZK national members at your facility automatically members of your local chapter?
 - Do you accept members outside of your home institution? What are the qualifications for outside members?
- Expand your membership:
 - Beginning of the year kick off/recruitment party
 - Ask to speak at all staff meetings
 - Recruit from non-keepers and volunteers
- Advantages of non-keeper staff as members
 - Expertise in areas such as marketing, finance, and development
 - Valuable resource for fundraising contacts
 - Often have the ear of the senior staff/executive team
 - Overall make getting stuff done way easier!

Leadership

- Core officers: President, vice president, treasurer, secretary, liaison
- Optional additional board positions: fundraising chair, conservation chair, social media chair, social chair, professional development chair
- Define who can fill each position:
 - Do they need to be full time staff or are part time staff and volunteers allowed to hold positions?
 - Do they need to have been at your facility for a certain amount of time?
- Set expectations for all officers and board members
 - Both general conduct expectations (meeting attendance, social media policy, etc) and specific goals and duties for each position.
 - These can be part of your by-laws or less formal and evolving.
 - Make it official: signed agreement by the president and all the officers.
 - Presidents aren't exempt! Make sure the expectations are clear for you as well and encourage your officers/board to hold you to them!
- Use your resources: non-keeper staff make great officers!

I just took over a “broken” chapter.....help!

- What do you do when you take over a chapter that hit a low the year before and didn't do much of anything?
- Find motivation from the conference and build a support team of other AAZK leaders
- Brain storm and develop new approaches
- Find a good team to support the changes
- Baby steps!

Meetings

- There are several different kinds of meetings that need to happen:
- ✓ Executive/officer/board:
 - Discuss current projects, updates, issues, and set the agenda for the business meeting
- ✓ Committee:
 - Discuss specific topics relating to the committees purpose
 - Bring ideas and items requiring a vote to the business meeting
- ✓ Business/General:
 - Should run fairly efficiently if previous two meetings have occurred.
 - Don't wear your members out! It helps to set a time limit if you don't have one already imposed on you (for example a lunch hour).
 - Keep it moving. If something isn't getting solved or people need time to think about something, motion to move the discussion or vote to the next meeting.
- ✓ Social: not essential but can help with team building and morale

Finances....ooh, scary!

- Organize your finances in a way that works for you and stick with it!
- Who has access to your accounts?
 - Two signature accounts: who's on the account
 - Deposits
 - Security
- Credit cards
 - Square and other mobile systems
 - Home institution system
 - How do you handle fees?
- Keep accurate records and back them up!
- Taxes
- Re-charter
- BFR

Multi-institution Chapters

- Find a balance
- Define your expectations as a chapter
 - Meeting times and places
 - Resources
 - Interests
- Individual institution expectations
- Communication requirements
- Revisit the bylaws when needed, especially if you add a new institution

Chapter/Institution Relationships

- Be of value (or make a case for your value) to your institution
 - Your success is their success
 - Professional development = more skilled and better educated keepers
 - Conservation
 - Not all of your conservation work has to be with institution partners but make sure you're supporting your institutions goals
 - Messaging – align your messaging with your home institutions messaging
 - Be a professional organization that your institution is proud of

Chapter/Institution Relationships

- Communicate
 - Designate a liaison between the chapter and the institution
 - Pick one person from your chapter who meets with the zoo designated liaison
 - Be organized when you go to talk to your zoo contact – they are busy and you’re taking up valuable time, make it count!
 - Write things down and follow up
 - Assume good intent and be patient
- Be proactive and take advantage of opportunities
- Expectations – make sure they are clearly defined
- Don’t compete with your institution for donors
 - Find out who you can contact
 - Check in with your institution liaison or development team before you start working on a new fundraising idea
 - Don’t assume that because it was ok to contact a donor before it is still ok, CHECK IN!

Chapter/Institution Relationships

- MOU's
 - Not every chapter needs one
 - Can help to address a lot of the issues we talked about in this section and make processes and procedures clearer
 - Can be very helpful if a major change in chapter leadership occurs – gives them something to refer to
 - Include wording to make sure you can change it if needed
 - Think about all the institution resources you currently utilize
 - When you think you have a solid MOU run it by Ed before signing it to make sure he doesn't see any red flags

The Goals

- Fundraising
- Conservation – Active vs. Passive
- Professional Development - Grants and Scholarships
 - In House Workshops
 - Mini Conferences

First things first.....set goals!

- Set goals at the beginning of every year
- Goals can be set by the officers/board or as a chapter at a general meeting
- Make sure your goals are reasonable and attainable
- Revisit your goals on a regular basis to keep on track and re-evaluate if things change
- Set new goals throughout the year as needed
- Acknowledge and celebrate when you reach your goals!

Fundraising

- Two types of fundraising: chapter funding and conservation
- Chapter funding:
 - Not as fun and can be harder to sell to the public
 - Coin funnels, face painting, bake sales, yard sales, calendars, tshirts
 - Option: percentage of every fundraiser (except BFR) goes to chapter general fund
 - If you use this option make sure you are honest about it and think about how you are wording things: “100% of donations go to conservation” vs “Proceeds go to conservation”

Fundraising

- Conservation:
 - Have fun!
 - Define your target audience for each event and plan accordingly
 - Try to include an educational component in conservation fundraising
 - Learn from other chapters - lots of great ideas out there!
 - Brewing for Rhinos, Roller Derby for Rhinos
 - Climbing for Clouded Leopards
 - Local Beer for Local Species
 - BYOB paint nights, animal artwork, t-shirts, fun runs, other ideas?



Conservation: Passive vs. Active

- Passive = Fundraising
- Active = Getting your hands dirty!
 - Can be harder to get your chapter involved with. Hard to schedule and time consuming.
 - Ask your institution for active conservation opportunities and support their scheduled conservation activities
 - Start small and local: Adopt a ditch/esplanade/ghighway/beach/etc, tree planting, native prairie restoration, help at a local arboretum, local wildlife monitoring, Great American Bird Count, other ideas?
 - Chapter can provide grants for members to do conservation work



Professional development: grants and scholarships

- Check in with your institution – most are very happy to have AAZK chapters fund workshop and conference attendance but some may have concerns
- Think about your finances:
 - How many scholarships/grants can you afford to give?
 - You may need to set a specific amount you have to give for every year.
 - Will your home institution match any of your scholarships?
- How do you choose who gets the money?
 - Point systems
 - Can members apply for more than one scholarship per year?
 - Quarterly deadlines for application or rolling application?
 - Chapter votes on applications
- What is required of members who receive chapter funding?
 - Submit a report, do a presentation or lunch and learn, do a mini-workshop, make conference materials available to chapter, etc.

Professional Development: in-house workshops/clinics and mini-conferences

- In house workshops/clinics
 - Utilize the expertise of your members and institution teammates
 - Think about hands on skills and informational workshops
 - Ideas: propping, social media etiquette, “How can you help your vet team?”, power tool basics, browse and toxic plants, enrichment, etc
- Mini-conferences
 - Hosting pre and post conference trips
 - Training workshop (San Antonio)
 - Hose2Habitat workshops

All The Rest

- Marketing: creating logos and image files
 - Websites and Social Media
 - Networking
 - Where does fun fit in?!?
 - What else???

A word about marketing...

Perform a self-assessment

- Who is your audience?
- What current resources or tools do you have?

Set Goals

Determine your uniqueness

- What makes you different?

Messaging

- Inspire your audience.

Tools

- Online (Social Media, etc.)
 - Graphics and their Importance!
- Offline

Budget & Resources

- Outline your budget
- Create a calendar

Results

- Progress?



Networking

- Make keeping up with other chapters a priority!
- If you have other chapters near you try to plan events together and support each other.
- If you have a liaison on your board task them with communicating with other chapters.
- Follow other chapters on social media.
- Learn from each other!

So where does the fun fit in??

- Work fun into your meetings!
 - Play a game
 - Section visits and training demonstrations
 - Social meetings: meet somewhere fun and keep business to a minimum
- Plan social events – not a fundraiser, not a meeting....just fun!
 - Hard to do when everyone is busy but make it a priority
 - Get together with neighboring chapters for fun time
 - Trivia nights, Zoo Brew (happy hour), Dave and Busters, Main Event, Top Golf
- Zoolympics – GHCAAZK event is after hours, on-site
 - One of our most popular events!
 - Beer and wine donated
 - Potluck
 - Crazy games



You could be up here next year!

Do you have some valuable insight to share?

Do you have expertise about an area we didn't cover this year?

Do you know someone who would be great at teaching this workshop?

The goal is to have new workshop instructors every year!

Email robin.sutker@aazk.org if you'd like to teach or suggest someone else to teach next year!

Questions about something we talked about today? Feel free to reach out to us at any time!

- Ali Striggow: astriggow@houstonzoo.org
- Lee Hart: lhart@springfieldmo.gov
- Jessica Real: jreal@oaklandzoo.org
- Rebecca Salinas: rsalinas@houstonzoo.org



Zookeeper Fitness:

Inspiring Conservation and
Positive Impacts with Healthy
Habits





Pattie Beaven

EarthFit Consultant:
Wellness and Healthy
Lifestyle Coach






How can I provide great care to the animals when I am not taking basic care of myself?”



Benefits of a Fitness Program

- ◇ Better Animal Welfare
 - ◇ Inspire conservation efforts
 - ◇ More energy
 - ◇ Better mood
 - ◇ Less sick time
 - ◇ Less injuries
 - ◇ Feel better
 - ◇ BE better
- 



Fitness Through Operant Conditioning





Zookeeper Principles

What we already know...



Basic Training Principles

Operant Conditioning

- ◇ Breaking the behavior into smaller steps, and progressively teaching each step.
- ◇ Antecedent, Behavior, Consequence

Focus on Positive Reinforcement

- ◇ Reward the behavior you want to continue
- ◇ Ignore behavior you wish to extinguish



Keeping Track

Behavior Plans

- ◇ Before training a behavior, a detail plan is designed
 - Who is primary trainer
 - Why behavior is being trained
 - Time goal for completion
 - Where and when training session will take place
 - What will be reinforcement

Training Log

- ◇ Throughout the training process, a log of sessions is maintained
 - Finding stumbling blocks or obstacles
 - Keeps track of progress
 - What is working and what isn't
 - Celebrate successes



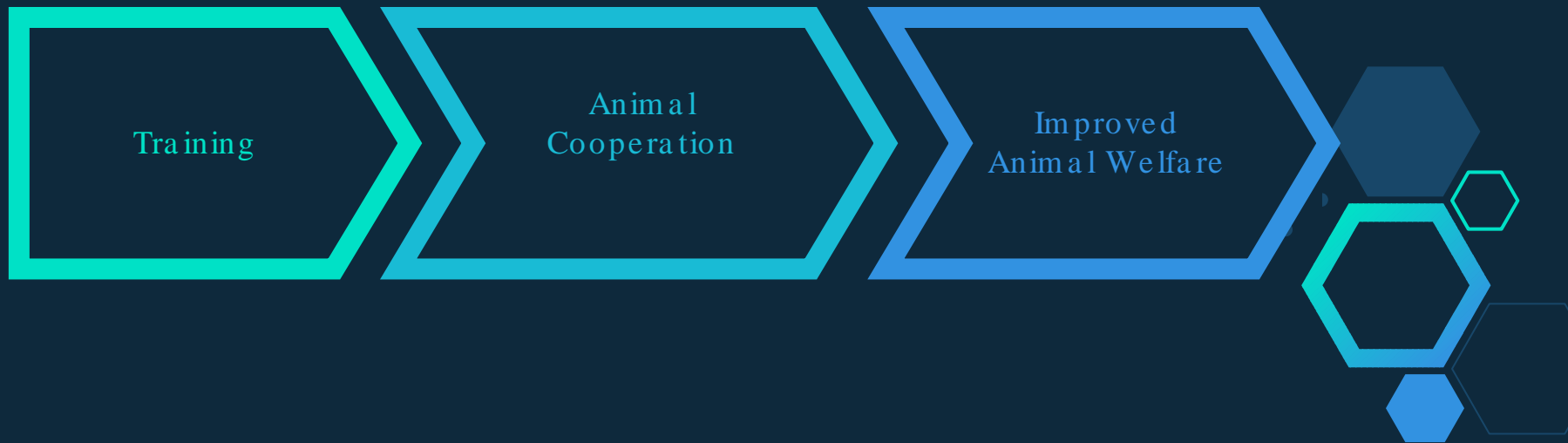


First Things First

Plan for success, and then make it so!



While our ultimate goal in Animal Training is Animal Welfare, we don't actually *train* the animal "better welfare". The behaviors we teach lead to better welfare.



Animal Training “Hive”

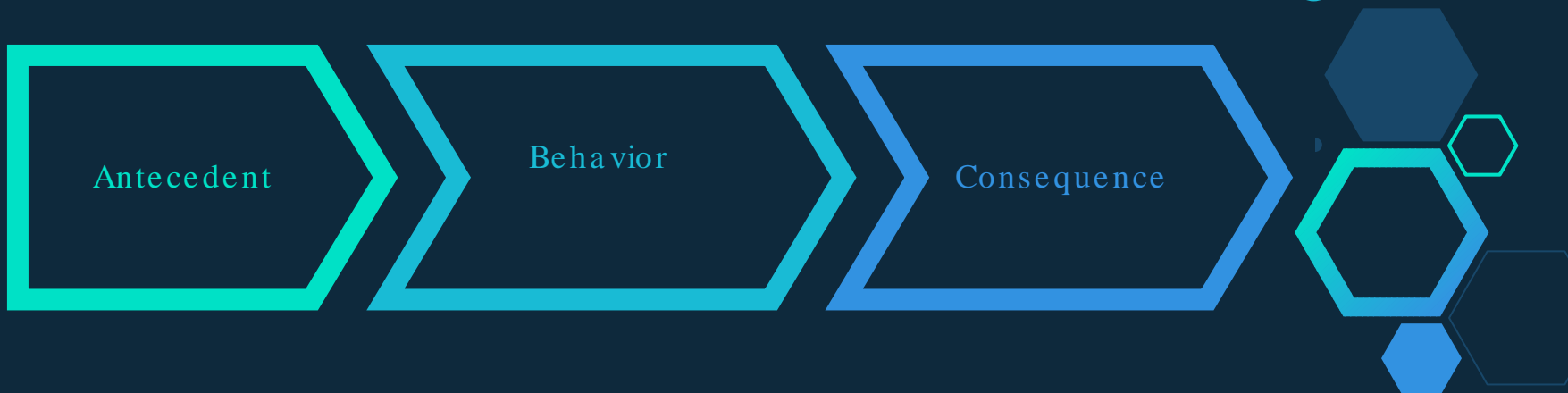


Healthy Habit Hive





For every behavior, there is an antecedent (cue or signal) and a consequence (reinforcement or punishment). This process is often called the ABCs of training.






What will your antecedent and consequence be for establishing your new healthy habits?

When my scheduled alarm goes off...

I will drink one cup of water

Whoo-hoo! I'm awesome!



Other considerations for developing and planning for healthy habits

- Time goal
- Relevance of habit toward your desired outcome
- Steps to take to progress toward developing healthy habit
- How will you know the behavior is completed?



A decorative graphic on the left side of the slide consists of several hexagons of varying sizes and colors (light blue, cyan, and dark blue) arranged in a cluster. A small network node with four connections is also visible near the top left.

Positive Reinforcement
is Not a Burger After
the Gym



How Negative Reinforcement affects motivation in fitness

Carrots and Sticks mentality

- If you meet your goal, nothing bad happens
- If goal not met, you lose something of value



How Negative Reinforcement affects motivation in fitness

- How much effort are you going to put into achieving this goal?
- How much effort will you put into **EXCEEDING** this goal?
- How motivated are you going to be to continue on?
 - Even if goal is met?
 - What about if goal is **NOT** met?



How Punishment affects motivation in fitness



Use of the word
"can't"
will result in a
10 burpee penalty



What lesson is being taught by using punishment?





How Positive Reinforcement affects motivation in fitness

- Small victories are celebrated
- Encouragement along the way
- When goal is met, HUGE celebration!
- If you don't meet your goal, nothing bad happens



How Positive Reinforcement affects motivation in fitness

- If you don't meet your goal, are you willing to try another attempt to achieve them?
- How motivated are you to achieve your goal? To EXCEED your goal?
- How motivated will you be to continue on after meeting your goal?

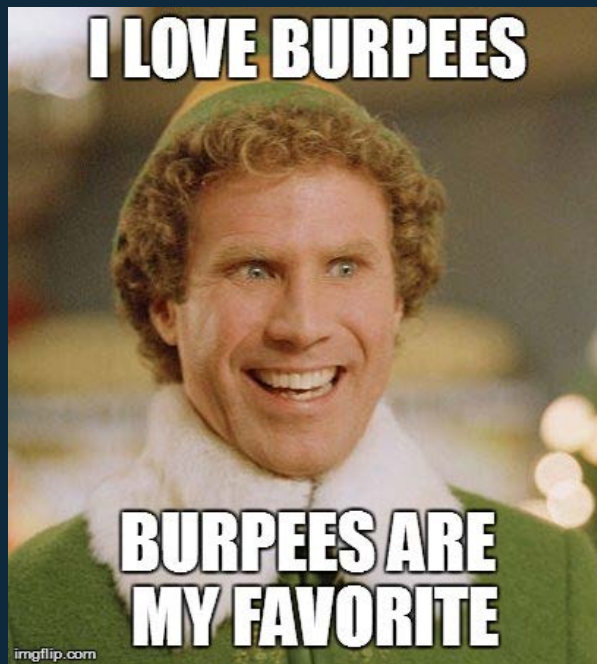


How Positive Reinforcement affects motivation in fitness

POSITIVE thoughts generate
POSITIVE feelings
and attract
POSITIVE life experiences



How Positive Reinforcement affects motivation in fitness





Reward Thyself!

Daily Celebrations: Creating Habits



ZOOKEEPERS KEEPING FIT

Keepers: The name for those who train
mean, eat clean, and live green!



THERE IS NO ONE GIANT STEP THAT
DOES IT; IT'S A LOT OF LITTLE STEPS




A decorative graphic in the top-left corner consisting of several overlapping hexagons in various shades of blue and cyan. The central hexagon is the largest and contains a white outline of a lit lightbulb, symbolizing an idea or inspiration.

Daily Celebrations: Creating Habits

“Little victories lead to bigger victories, that affect the battles that eventually win wars”





What do you find reinforcing and rewarding?

- Leisure activities
- Bucket list items
- Luxury items
- Relaxation activities
- Social activities
- Do- It- Yourself rewards





More Tips From the Pros



- Behavior Momentum
- Putting “Trust” in the Bank
- Jackpots
- LRS (Least Reinforcing Scenario)
- Setting Yourself Up for Success



A decorative graphic in the top-left corner consisting of several overlapping hexagons in various shades of blue and cyan. The central hexagon is the largest and contains a white line-art icon of a lit lightbulb.

Behavior Momentum

A good warm-up prepares your body physically for the training activity by stretching out muscles you will be using. Most warm-ups incorporate similar or scaled-down versions of the exercises you will be performing during your training.



A decorative graphic in the top-left corner consisting of several overlapping hexagons in various shades of blue and teal. The central hexagon is the largest and contains a white lightbulb icon, symbolizing an idea or insight.

Putting “Trust” in the Bank

Every time a trainer does something the animal likes, trust is “deposited” into the bank.

When it comes to fitness, though, we aren’t putting “trust” in the bank, we’re putting in motivation, so even when you don’t feel as motivated to do a workout, you can withdraw from your motivation bank and get out the door a bit easier






Putting “Trust” in the Bank

Pair your exercise with an activity you already enjoy

- Fitness classes at a gym
 - Yoga/Pilates/Tai Chi
- Hiking/Outdoor Recreation
 - Fitness video from library
- Groupon/Living Social for new gym

*Each trial is an opportunity to put more motivation in your bank,
and earning motivation interest*





Jackpots

*The exception to the
“Positive reinforcement is not a burger after the gym”
philosophy.*



LRS (Least Reinforcing Scenario)

Which “wolf” will you feed?





LRS (Least Reinforcing Scenario)

Ignoring the negative tapes in your head

To the voice in my head:
I am not listening to you anymore.
You are not nice to me.



Setting Yourself Up for Success

- Make sure you have water
- Make sure you have had a proper snack or some kind of fuel for your workout.
- If you have any equipment, make sure you have those ready before you start.





Enrichment





Reuse, Recycle, Reduce Your Waist



Equipment at your fingertips

Deflated basketballs or
soccer balls for
medicine balls





Equipment at your fingertips



Used exhibit and perching rope for intense cardio

Moscow Zoo



Equipment at your fingertips


- Boat bumpers for Sandbags/ Heavy lifts



- Benches/chairs

- Buckets for Kettlebells



A decorative graphic on the left side of the slide consists of several hexagons of various sizes and shades of blue and cyan. Some are solid, some are outlines, and they are arranged in a cluster. A small network icon with a central node and four connecting lines is also present near the top left.

Have Fun in your
Workout and it won't
feel like "Work"



Memory

BINGO

Fate of
the Die


Games
to Play

Deck of
Cards

Scavenger
Hunt

Animal
Cards





Change the routine with these variations of workouts-

- “Fight Gone Bad” Circuits
- Death By
- Tabata
- Ladder/Pyramid





Working out for Work

Exercises and workouts to empower you and keep you safe



Best Practices for Zookeepers

- Deadlifts
- Squats
- Pre-work stretching
- Farmer Carries
- “Woodchoppers”





Conservation Through Fitness





Experiencing Nature

Go outdoors and get fit! Connect with nature and the earth!
Appreciate your world, your life, and your health! Conserve what
you love!



Finding Your Place

*Leisure Activities for the Outdoors to expand appreciation
for nature and the environment*

- Yoga, Tai Chi, Meditation
- Wildlife Observation: Birding, Tide-pooling, Photography
- Visiting Nature Parks, Zoos/Aquariums
- Hiking, Walking



Getting Fit with a Purpose

- *Biking for Polar Bears*
- *Walking for Penguins*
- *Hiking for Wolves*





Workout with a Purpose

- *CrossFit for Conservation*
- *Zoo Zumba*
- ***BOWLING FOR RHINOS!!!***





Giving Back!

- ◇ Volunteer
 - ◇ Restore Nature
 - ◇ Support Natural Areas
 - ◇ Reach out
 - ◇ Educate
-
- ◇ BE THE CHANGE YOU WISH TO SEE IN THE WORLD





Eating Green

Don't just eat "clean", go one step further and eat **GREEN!**

Sustainability



- *Palm Oil*

Sustainability

**CERTIFIED
SUSTAINABLE
SEAFOOD**



- *Seafood*



Fitness and Visitors



Bridging Health and Wellness to Conservation

- *What if I told you that by increasing your cardiovascular health could help save polar bears?*
- *What if I told you that eating healthy could help save orangutans?*



Living by Example

“When you are being the best version of yourself, you inspire others to be the best version of themselves.”

- Steve Maraboli





Thanks!

Any questions?

You can find me at:

◇ pattie@earthconservant.com

◇ earthfitnow.com





Credits

Special thanks to all the people who helped make this possible:

- ◇ Presentation template by [SlidesCarnival](#)
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- 5-Moscow Zoo
- 6-Zoos Victoria “Don’t Palm Us Off” Campaign
- 7- Marine Stewardship Council



Reuse, Recycle, Reduce Your Waist: Make Your Own Medicine Ball

Medicine balls are a versatile piece of workout equipment that come in various weights, but is remarkably expensive. A small 15 lb. ball can cost upwards of \$40.

Being a zookeeper has made me resourceful, and creative. I found a way to turn a couple old punctured basketballs destined for the dump into exercise equipment at a fraction of the cost! The most I have ever spent on creating my own 20 lb. medicine ball was \$6! Save a bundle, reduce waste, and create fun enrichment to add to your workout!



What you will need:



- Soccer or basketball (if none available on hand, balls can be found at thrift stores for under \$4)
- Whole roll of Duct tape
- Sand
- Knife
- Funnel
- Scale

- Gorilla Glue (optional)

Instructions

1. If ball is flattened, mold it back to its round shape. Create a V-shaped slit in ball.



2. Slide funnel into slit. Using a cup or scoop, pour sand into funnel a little at a time. Use the knife to swirl sand and dislodge rocks if necessary.



3. After several scoopsful, weigh ball on scale. Ideal weight for most medicine balls is between 15–20 lbs. Weighing periodically (every 5 or 6 scoops) will give you a good idea how much more sand you will need to reach your target weight for your ball.



4. When ball is filled, remove the funnel and seal the slit with gorilla glue if you have some available. Tape the slit with an "X" out of duct tape.



5. Cover entire ball with duct tape. Create a midline across the covered slit with one long piece of tape. Take another long strip of tape and wrap around the ball criss-crossing the first strip of tape.



6. Using the tape lines as guides, cover each quarter of ball with tape. Once entire ball is covered, use any extra tape to wrap around covering seams and minute bare patches.



7. You're ready to workout! Medicine balls are great for squatting, ab exercises, increase intensity for cardio, and a great way to spice up regular exercises such as planks, sit-ups, push-ups, and lunges. For a complete list of exercise/workout ideas, visit www.earthfitnow.com under "Reuse, Recycle, Reduce Your Waist".

- I. Intro
 - A. Personal History and development of ZooFit/Zookeeper Fitness (5 min)
 - B. Benefits for Fitness (2 min)
- II. Fitness Through Operant Conditioning
 - A. Zookeeper Principles (5 min)
 - 1. Animal Training
 - 2. Keeping Track of Progress
 - B. First Things First (20 min)
 - 1. Training goals versus fitness goals
 - 2. Habit Hive and activity
 - 3. Establishing a cue/signal and reward
 - C. Positive Reinforcement is Not a Burger After the Gym (8 min)
 - 1. Negative Reinforcement in Fitness
 - 2. Punishment in Fitness
 - 3. Positive Reinforcement in Fitness
 - 4. Changing your mindset
 - D. Reward Thyself (10 min)
 - 1. Zookeeper Fitness Punch Cards
 - 2. Reward Sheet activity
 - E. More Tips From the Pros (5 min)
- III. Enrichment
 - A. Reuse, Recycle, Reduce Your Waist (20 min)
 - 1. Dowel Rod stretches video
 - 2. Medicine Ball Tutorial
 - 3. Other ideas
 - B. Have Fun in Your Workout and it Won't Feel Like Work (5 min)
 - C. Working out for your Career (10 min)
 - 1. Deadlift demo
 - 2. Proper Squat demo
- IV. Conservation Through Fitness
 - A. Experience Nature (5 min)
 - B. Eating Green (5 min)
 - C. Conservation, Fitness, and Visitors (10 min)
 - 1. Fitness with a Purpose
 - 2. Living by Example-Practice what we preach

OPENING

1. Despite the fact that 50% of working population is comprised of women, and that more than 50% of women have managerial positions, they still hold only 15.7% of C-level positions at Fortune 500 companies.
2. 2014 unpublished survey of 156 AZA zoo & aquarium directors yielded the following results about current AZA leadership population
 - a. 72% male; 28% female

Brief overview of personal leadership path & style

EVALUATING SURVEY RESULTS

TOP TEN LESSONS LEARNED

1. When you find yourself becoming irreversibly jaded, find a way to re-engage or find a new challenge
2. Stop focusing on being perfect in every facet of your life/job
3. Don't dwell on things you can't fix – find a solution or get over it
4. Stay positive – focus on things going right & things you CAN change
5. Modesty can get you overlooked
6. Choose your battles
7. If there's something you want – ask for it, apply for it
8. Don't assume simply working hard will get you noticed by those who are in charge – those people have other things on their mind
9. Don't leave until you leave
10. Understand your role in moving the organization forward

QUESTIONS TO ASK

1. What part of your job do you like the most?
2. What part of your job do you like the least?
3. What are the most important issues facing women in the industry today?
4. What do you consider the most important leadership qualities in a manager?
5. Should managers be experts in their field?

1. Are you male or female?

- Male
- Female

2. Please select the option that best describes you:

- I have a child (or children).
- I don't have children, but want to have them one day.
- I have no interest in having children.
- I'm undecided about having children.

3. What is your role?

- Zoo keeper (do not manage full-time employees)
- Manager (manages full-time employees)
- Other (please specify)

4. What is the biggest challenge for you in your day-to-day job?

- Challenges with the public
- Challenges with your coworkers/team
- Challenges with your animals
- Other (please specify)

5. My top three professional strengths are:

- 1.
- 2.
- 3.

6. My three areas for professional growth and development are:

1.

2.

3.

7. Which of the following do you agree with (select one):

- True leaders are born.
- Leadership can be taught and learned.

8. How old are you?

- <24
- 24-28
- 29-32
- 33-36
- 37-40
- 41+

9. How long have you been in this field?

- 1-3 years
- 3-5 years
- 5-7 years
- 7-10 years
- 10-15 years
- 15+ years

10. How many institutions have you worked at (as a paid employee)?

- 1
- 2
- 3
- 4
- 5
- 6+

11. I believe my organization recognizes and rewards leadership.

- Strongly agree
- Agree
- Somewhat agree
- Somewhat disagree
- Disagree
- Strongly disagree

12. I maintain a healthy balance between personal life and professional life.

- Strongly agree
- Agree
- Somewhat agree
- Somewhat disagree
- Disagree
- Strongly disagree

13. Managers/leaders should be experts in the field.

- Strongly agree
- Agree
- Somewhat agree
- Somewhat disagree
- Disagree
- Strongly disagree

14. Select whichever option applies to your career path:

- I have never applied for a leadership role and don't plan to.
- I haven't applied for a leadership role yet, but will one day.
- I have applied for promotions/leadership roles, but have yet to receive one.
- I had to apply for a leadership role more than once before receiving one.
- I have received every leadership role I have applied for.
- Other (please specify)

15. Select whichever option applies to your career path:

- I have applied for leadership opportunities only at my current institution.
- I have applied for leadership opportunities that would require my moving if I received them.
- I have applied for leadership opportunities at my current institution as well as others.
- None of the above.

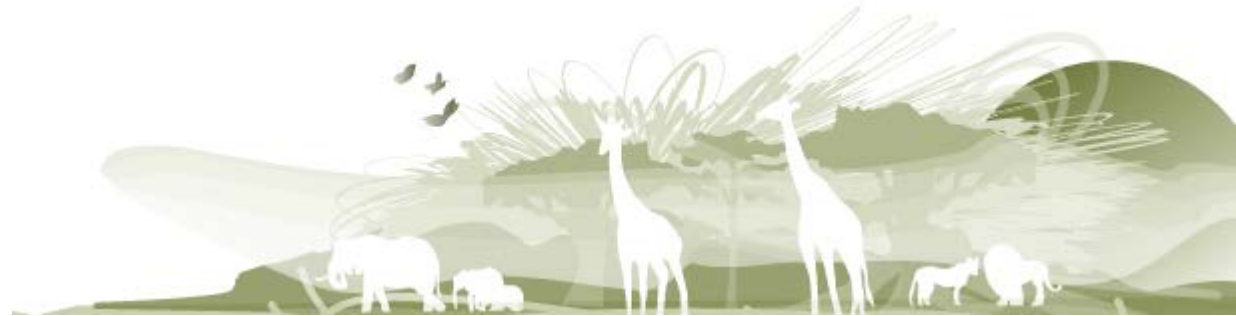
16. The following professional development opportunities are available to me:

	Available	Have Pursued	Would like to Pursue
Academic degree/certificate programs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Professional workshops, seminars	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Conferences	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Association memberships	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Corporate training programs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Leadership development	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mentor and/or Coach	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Personal/Professional Networking	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

17. The best way to get recognized as a leader in this field is to:

Crisis Management for Zoo and Aquariums

**AAZK Conference
Memphis, TN
September 19-23, 2016**



Ed Hansen

(He's Kind of a "Bid Deal")

- Began zoo career in 1979 at Reid Park Zoo.
- Served on the AAZK Board of Directors from 1987-1994 and as President from 1992-1993
- Promoted to Animal Care Supervisor - Reid Park Zoo in 1990
- Graduate of AZA Professional Management Schools 1992
- Hired as the Executive Director of AAZK in 1994
- Retired from Reid Park Zoo in 2003
- Became a Risk Management Specialist for the City of Tucson in 2003
- Managed a safety program for over 6000 employees
- Holds a Professional Certificate in Occupational Health and Safety from San Diego State University 2007
- Holds a Professional Certificate in Public Sector Leadership from University of Arizona/Eller Executive Foundation 2012
- Retired from the City of Tucson in 2013 to become the CEO/CFO of AAZK
- Holds 12 OSHA Certifications – 4 FEMA Certifications – 3 Department of Homeland Security Certifications

Kelly Murphy

(Just call me “Murphy”)

- Began zoo career in 2002 at Santa Barbara Zoo until 2007
- Hired at the North Carolina Zoo in 2007
- Promoted to Senior Keeper – North Carolina Zoo in 2013
- Current Vice President of North Carolina Zoo AAZK Chapter
- Current Co-Director of 5k race for local AAZK Chapter
- Current Chair of National AAZK Safety Committee
- Current member of the AZA Safety Committee
- Over 10 years experience as a volunteer Fire Fighter
- 7 FEMA Certifications – 1 Department of Homeland Security Certification

Applied Crisis Management Learning Objectives

- Development of Natural Disaster and Response (Continuity of Operation Plan – COOP)
- Development of Animal Escape & Person in Dangerous Animal Exhibit Drills w/progressive complexity; Recapture, Immobilization and Dispatch Plans
- Implications of injury/event response and treatment to Staff Training
- Statistics of Active Shooter; Facility Response
- Defining response to Public Emergencies



Continuity of Operations (COOP)

Continuity of Operations (COOP) is the initiative that ensures that Federal Government departments and agencies are able to continue operation of their essential functions under a broad range of circumstances including all-hazard emergencies as well as natural, man-made, and technological threats and national security emergencies.



Facility Planning/Response

Disaster Threat = COOP

- Weather
 - Hurricane
 - Tornado
 - Flood
 - Blizzard
- Earthquake
- Fire/Wildfire
- Energy Failure
- Civil Disturbance
- Biological/Chemical/Hazmat



Natural Disaster Response

- ❑ In a major natural disaster, a Facility should plan on having zero external assistance for approximately 24-48 hours
- ❑ Emergency Services will concentrate on Rescue and Recovery operations in the community



Disaster Alert

- Weather
 - Hurricane
 - Tornado
 - Flood
 - Blizzard
- Wild Fire
- Earthquake
- Energy Failure
- Civil Disturbance
- Biological/Chemical

Activate - COOP
Communication



Continuity of Operation Progression

Alert

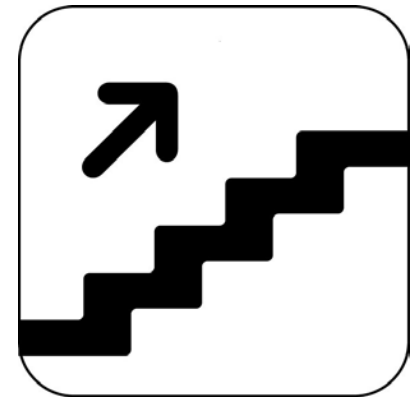
Response

Recovery

Incremental Operations

Maintenance

Normal Operations



COOP Contact - Management

- Administrative Staff (POC)
 - Director
 - Management
 - Curatorial
 - Security
 - Finance
 - Human Resources
 - PIO/Social Media



COOP Contact – Internal (POC)

- Animal Care
- Veterinarian(s)
- Life Support
- Maintenance
- Horticulture
- Security



COOP Contact – External (POC)

- Police

 - Local Precinct – Desk Sergeant

- Fire

 - Nearest Station – House
Commander

- Local Governing Authorities

- Utility Service Agencies



COOP Communications

Pre-disaster

- Text
- Cell Phone
- Landline
- Two-way Radios

Post-disaster

- Radio Shack



COOP Partnership Agreements

Executed to companies outside the community to ensure energy and supplies are available in an emergency

- Water
- Generators/Pumps/Lighting
- Fuels (Gas/Diesel/Mixed-fuels)
- Animal Dry Foods/Produce/Live Food
- Hardware/Fencing/Glass
- Construction Equipment/Operators
- Debris and Animal Waste Removal



COOP Partnership Agreements

- Executed to Sister Zoo(s) or Agencies outside the community to ensure specialty foods, capture equipment, animal medications, crates, and staff assistance are available in an emergency

- Animal Relocation
- Animal Recapture
- Veterinary treatment
- Replacement Staff
- Temporary Construction
- Operation of Construction Equipment
- Cleanup



Crisis Management Planning

Creation of **Emergency Response Teams** (E-Team/A-Team)

- **Written Response Plan and Training** – A (Animal) Team
 - Recapture, Immobilization, Dispatch
- **Written Response Plan and Training** – E (Emergency) Team
 - Injuries, Public Behavior and HazMat Response
 - Incorporation of Local Authorities into ERT Response
 - Active Shooter Response
 - Employee Training (Action/Injury/Evacuation)
- Emergency Planning for Natural Disasters
 - **Written Continuity of Operations Plan** (COOP)



Determine Emergency Response

A/Team

- Animal Escape
- Person in Dangerous Animal Exhibit
- Animal Aggression/Injury

E/Team

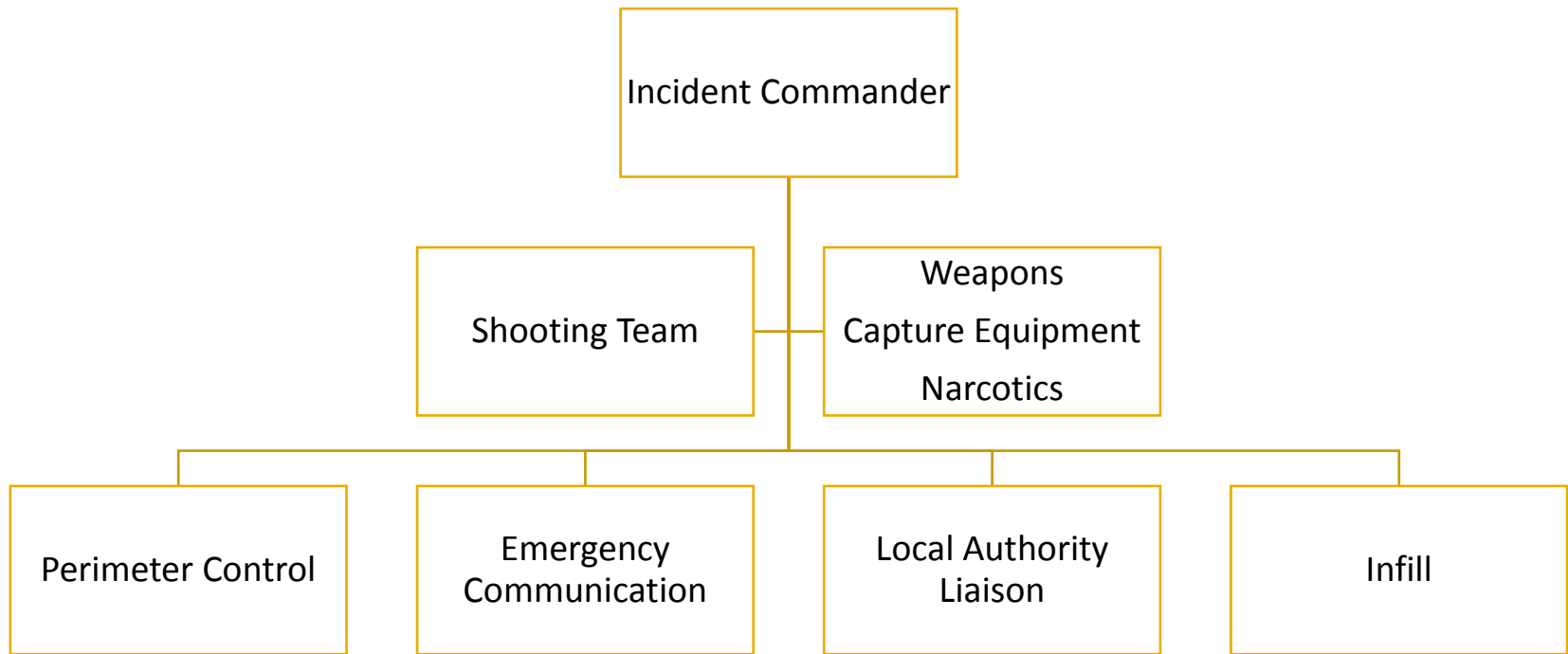
- Keeper Injury
- Public Injury

Local Authority

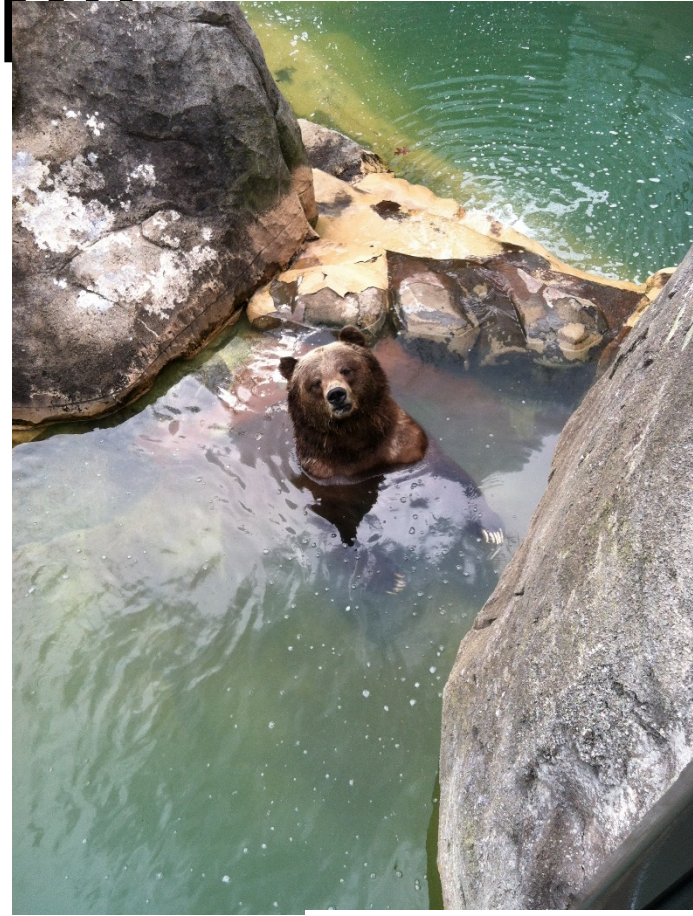
- Public Behavior
- Active Shooter
- Act of Terrorism
- Emergency Evacuation



Emergency Response A/Team



Animal Escape & Person in Dangerous Animal Exhibit



A/Team Emergency Response Planning

- Develop Procedures
 - Identify **species** or **conditions** that will cause an animal to be “**dangerous**”
- Dangerous** dictates:
 - Level of Response
 - Recall vs Recapture vs Dispatch
 - Local Authority Response



A/Team Emergency Response Planning

- Communication
 - Codes or Colors
 - Radio Protocol
- Public Safety
 - Evacuate or Shelter
 - Closing Facility
- Angle of Approach
 - Quiet, Controlled, Coordinated
 - Forming Perimeter
- Action Plan
 - Recall
 - Recovery
 - Distraction / Rescue
 - Dispatch



Emergency Response Training

- Monthly** Drills
 - Plan Review
 - Recovery Options
 - Post Drill Follow Up
- Shooting Team
 - Weapon Selection
 - Ammunition Selection
 - Quarterly** Field Qualification
- Keeper Roles
 - Training
 - Animal Knowledge
- Facility Roles
 - Media Relations Training



A/Team Emergency Response

- Incident Command
 - Radio Communication Control

- Animal Action Plan
 - Recovery/Recall
 - Field of Fire
 - Authority to Proceed



E/Team Planning and Response Injury Treatment

- Emergency** 911 Notification
 - E/Team Notification
- Triage
 - Staff First Aid Training
 - Staff BBP Training and Equipment
 - Good Samaritan Act



E/Team Planning/Response Emergencies

Public/Staff Injury

- Emergency Response

- Staff Training

Negative Public/Animal Interaction

Active Shooter

Fire/Hazmat

- Emergency Response

- Staff Training



E/Team Planning and Response Fire and Hazardous Materials

Emergency Notification

- Staff Notification

- Radio Protocol

- Animal Recall (Training)

- Evacuation

- Shelter-in-Place

- Employee Training (**HazCom**)



E/Team Planning and Response Public Animal Interaction

Emergency Notification

- Staff Notification

- Radio Protocol

Animal Recall (Training)

- Rescue Equipment

- Injury and Rescue



Active Shooter



Active Shooter FBI Study

The FBI identified 160 active shooter incidents between 2000 and 2013.

- ❑ An average of 11.4 incidents occurred annually with an increasing trend from 2000 to 2013.
- ❑ An average of 6.4 occurred in the first 7 years studied and an average of 16.4 occurred in the last 7 years.



Active Shooter FBI Study

Casualties:

- ❑ 486 people were killed in the 160 incidents and 557 were wounded.
- ❑ In at least 15 incidents, family members were targeted resulting in 20 killed and 1 wounded
- ❑ In 16 incidents, current, former or estranged wives as well as current or former girlfriends were targeted resulting in 12 killed, 3 wounded and 1 unharmed. In addition 42 others were killed and 28 wounded.



Active Shooter FBI Study

Locations:

- ❑ Commerce – 73 (46%)
 - ❑ Businesses open to Pedestrian traffic- 44 (27.5%)
 - ❑ Businesses closed to pedestrian traffic - 23 (14.3%)
 - ❑ Malls – 6 (3.8%)
- ❑ Education – 39 (24%)
- ❑ Government – 16 (10%)



Active Shooter FBI Recent Information

According to the FBI, 2014 and 2015 each saw 20 active shooter incidents. That's more than any two-year average in the past 16 years, and nearly six times as many as the period between 2000 and 2001, the starting point for the FBI's review.

In all, not including any of the shooters, 92 people were killed and another 139 wounded in active shooter incidents last year and the year before, according to the FBI.



A/Team Emergency Response Planning

Communication

- Codes or Colors

- Radio Protocol

Public Safety

- Evacuate within safe limits

- Closing Facility



E/Team Planning and Response

Active Shooter

Emergency Notification

- Staff Notification

- Radio Protocol

Lockdown Procedures

- Evacuation

- Shelter-in-Place

Run, Hide, Fight



Post-emergency ERT Action

- 12-24 Hours Post Incident
 - Assemble Critical Staff
 - Not to Determine Responsibility**
 - Proactive Incident Review
 - Deficiencies
 - Corrective Action
 - Counseling
 - Re-training



Media Planning and Response

Public Information Officer (PIO)

- Assignment
 - Secondary Assignment

- Formal Training

- Call Center

- Social Media

- Press Release



ERT Planning and Response Media (PIO)

- Speaking with “one voice”
- Know your “message”
- Filling in the huge hole of Social Media and the Web
- Updating multiple agencies, more Social Media
- Different audiences require different channels
- Recognize the frailty of the human body and spirit!**



QUESTIONS?



Topical Workshop: Developing Research Partnerships

AAZK Outline Draft 7/15/16

Objectives:

- Provide examples of research collaborations between keepers and researchers
- Re-introduce the scientific method and guide participants through development of research projects
- Provide ways for participants to learn new skills and improve research efforts

Total Time: 2 hours (8 – 10 AM: Friday, September 23)

- 8:00 AM **Introduce Speakers and Participants**
Why we are excited to be here.
Why are you here? What research have you been involved in?
- 8:10 AM **Presentation: Research in AZA Zoos** – Background/ AZA Resources (5 min)
- 8:15 AM **Generating Ideas Exercise (10 min):**
- How to set up RSS Feeds for Google Scholar
 - Other sites (Science, Nature, WWF, etc)
- 8:25 AM **Presentation: Examples of Keeper-Research Collaboration (15 min)**
- Animal Management and Monitoring – Applied
 - Example: Collaborations in Giant panda Reproduction and Nutrition
 - Hypothesis Driven Research in Zoo and Field
 - Example: Collaborations in Giant Panda Chemical Communication
- 8:40 AM **Presentation/Discussion: Considerations of Research Design (15 min):**
- The Scientific Method
 - Types of research projects (non-invasive, invasive; what needs an IACUC?)
 - Sampling schemes, types of data, categorizing your data
 - Conclusions: what can be drawn from controlled vs. observational research design
- 8:55 AM **Group-Work Activity (30 min):**
- Participants will be split into groups to work through the steps of designing a research project. At the end, participants will present their information to the group for further discussion. Potential projects to include:
 - **Example proposal#1:** Experimental: Determine best environment to rear tadpoles and metamorphs of unfamiliar species.
 - **Example Proposal#2:** Observational: stress and social interactions in brown bears
 - **Example proposal#3:** Husbandry Survey: Stereotypic behavior and reproductive outcome of select species

9:25 AM **Discussion: Generating Ideas and Projects** (10 min):

- Participants will brainstorm sources of information to help generate ideas for research. Sources will be written down on white board or projected word document. Sources that we may help guide them to:
 - Keeper records and observations
 - Literature search (Books on wild and captive animals, field guides, SSP recommendations and Studbook materials, Journal articles)
 - Peer communication, Conferences
 - Local university (professor research bios, seminars open to public)
 - Local, national, and global conservation organizations

9:35 AM **Data Analysis Exercise: Quantifying your observations** (15 min):

- Participants will be given a data set, and we will walk through the steps of organizing the data, graphing, and basic statistics

9:50 AM **Research Excitement** (5 min):

- Communicating Science to the Public and Closing Remarks

Handouts:

Research Project Handout

RSS Feed instructions

Low cost conferences

NATIONAL AVIARY

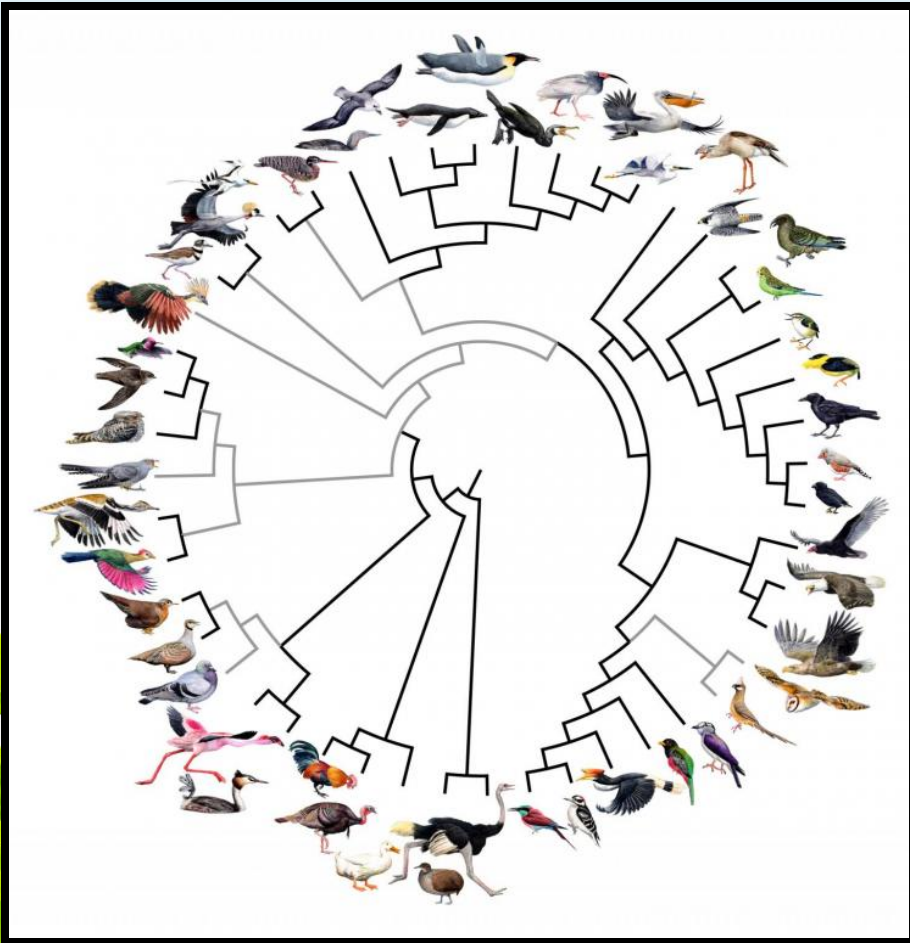
Thinking outside of the birdcage: Using non-typical items to improve avian welfare



Sarah Shannon Gray
Supervisor of Hospital Wards

NATIONAL AVIARY

Diversity of species and requirements



- As keepers, it is our duty to provide the highest quality of care for our animals and address all of their needs.
- It can be challenging to accommodate all the varying needs of each species in a captive environment.

NATIONAL AVIARY

Variety of needs to address

- Space
- Habitat Replication
- Breeding Requirements
- Security & Comfort levels
- Medical Conditions
- Nutrition
- Enrichment & Training
- Behavioral Issues
- Temperature, Humidity & Lighting

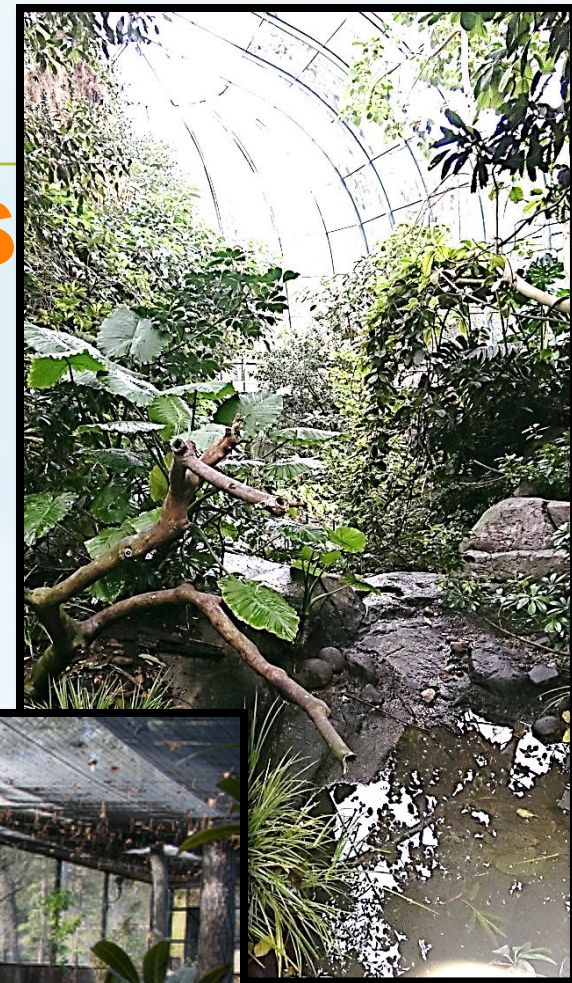


Limitations

- Space
- Budget
- Natural vs Non-natural
- Function
- Materials
- Breeding Rec's or Restrictions
- On Exhibit vs Off Exhibit
- Medical concerns
- Location/Climate
- Safety

NATIONAL AVIARY

Ideal Exhibits



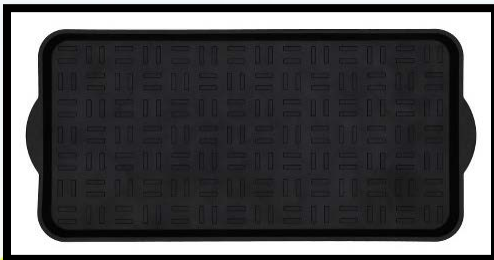
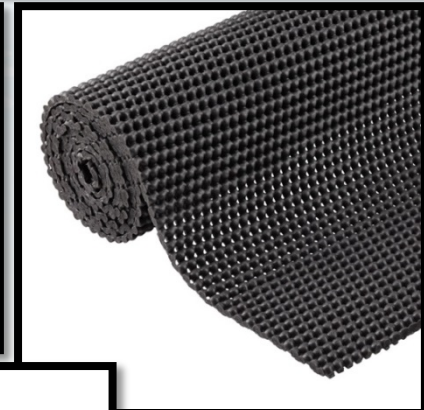
NATIONAL AVIARY

Reality



NATIONAL AVIARY

Time to think outside of the box (or bird cage!)



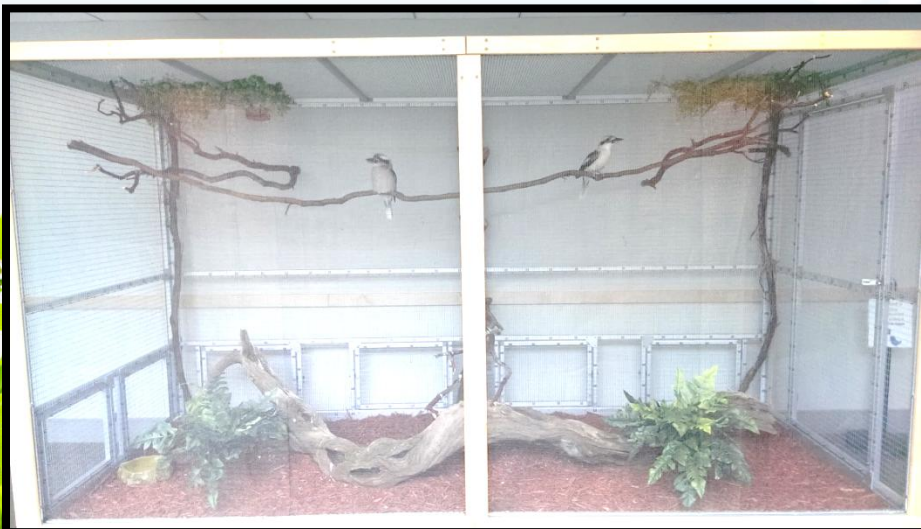
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Replicate Natural Environment



NATIONAL AVIARY

Artificial Plants



NATIONAL AVIARY

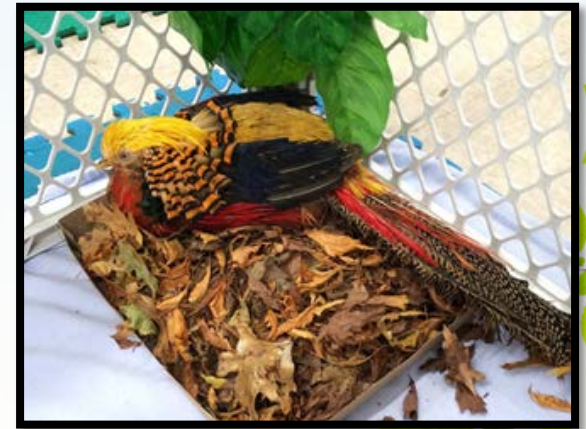
Substrates Natural



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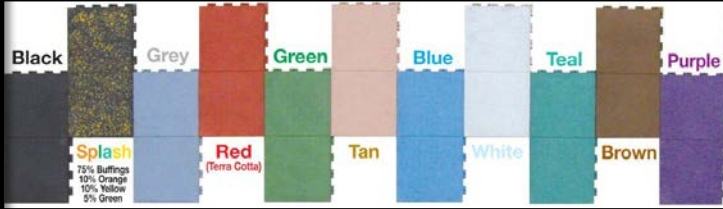
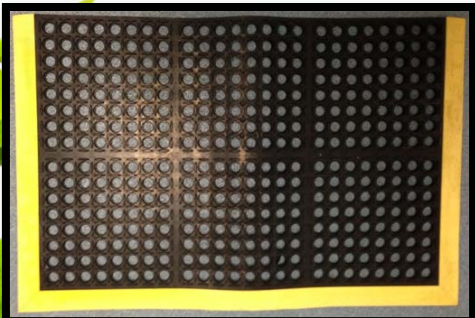
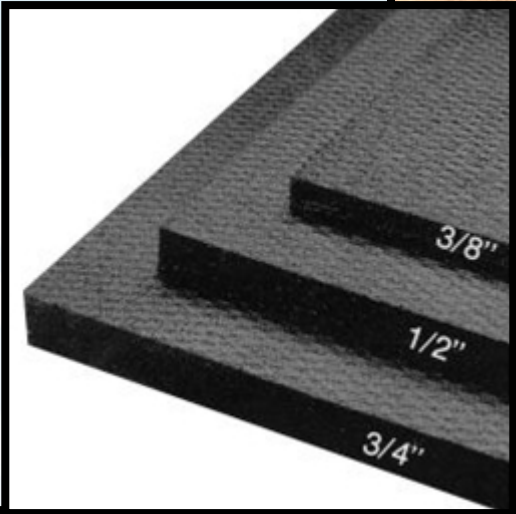
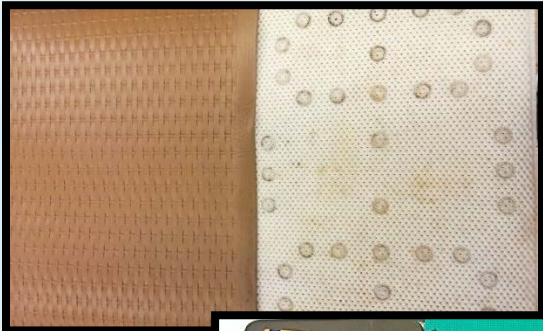
Substrates

Natural



NATIONAL AVIARY

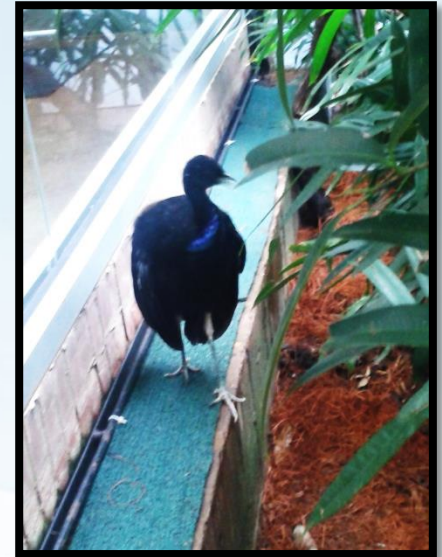
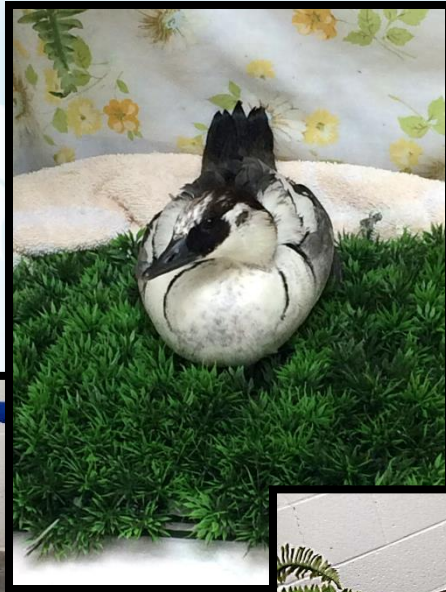
Comfort Floor Covering



NATIONAL AVIARY

Various substrates

Non-natural



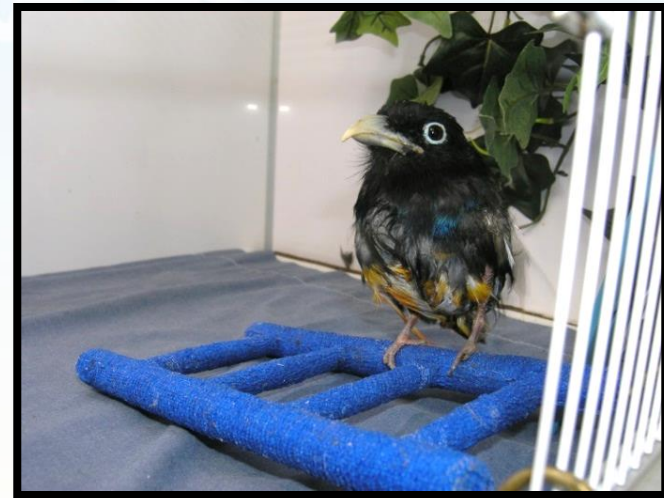
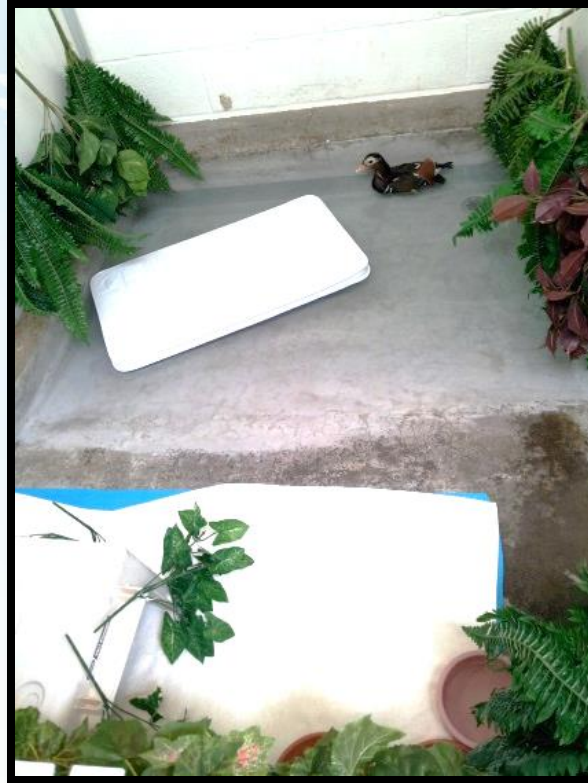
NATIONAL AVIARY

Comfort Padding & Beds



NATIONAL AVIARY

Disabilities



NATIONAL AVIARY

Disabilities



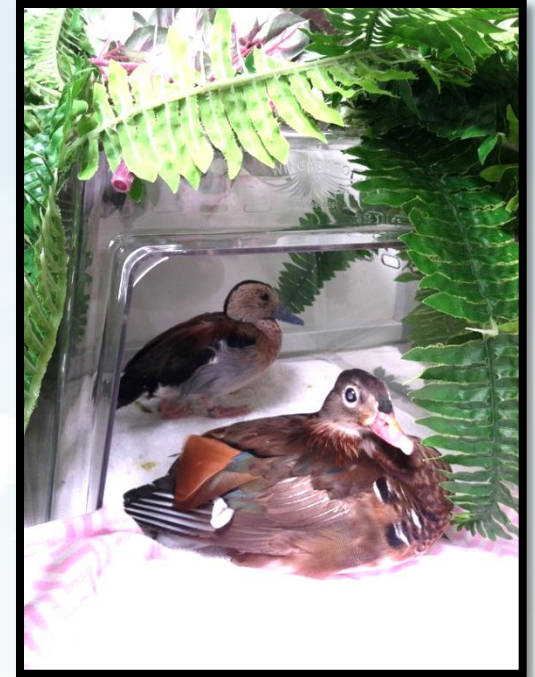
NATIONAL AVIARY

Foot Conditions



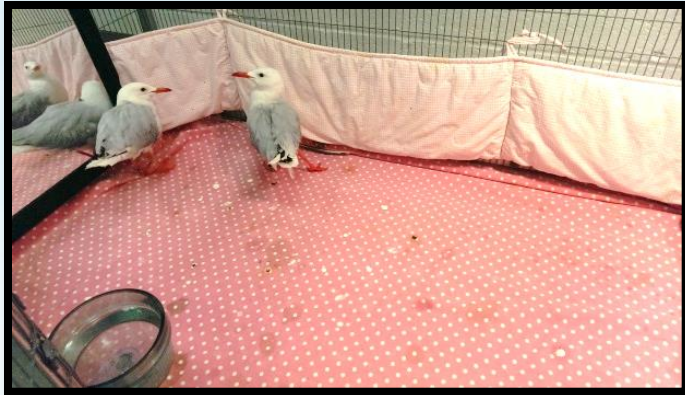
NATIONAL AVIARY

Security & Injury Prevention



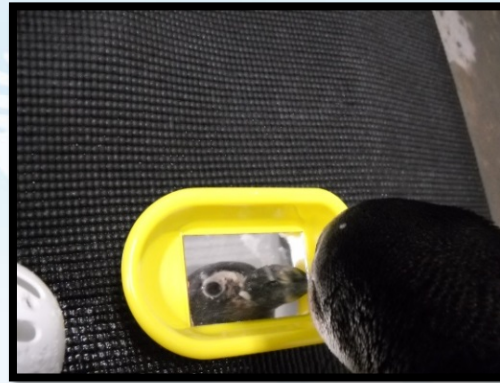
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Security & Injury Prevention



NATIONAL AVIARY

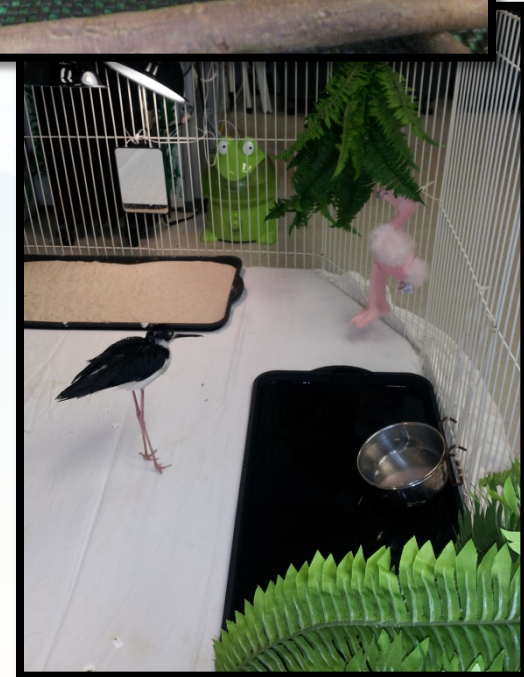
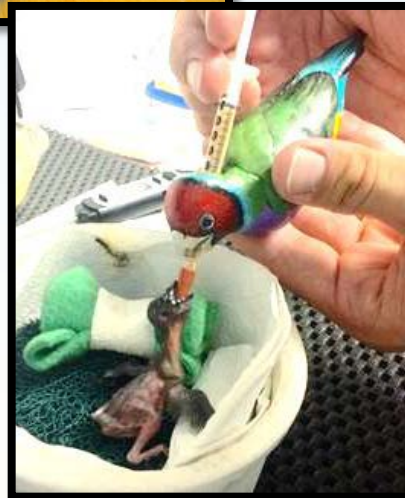
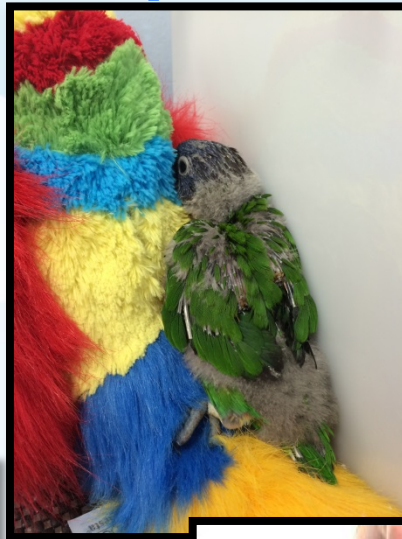
Companionship Mirrors, Cage Mates & Neighbors



NATIONAL AVIARY

Companionship

Replicas



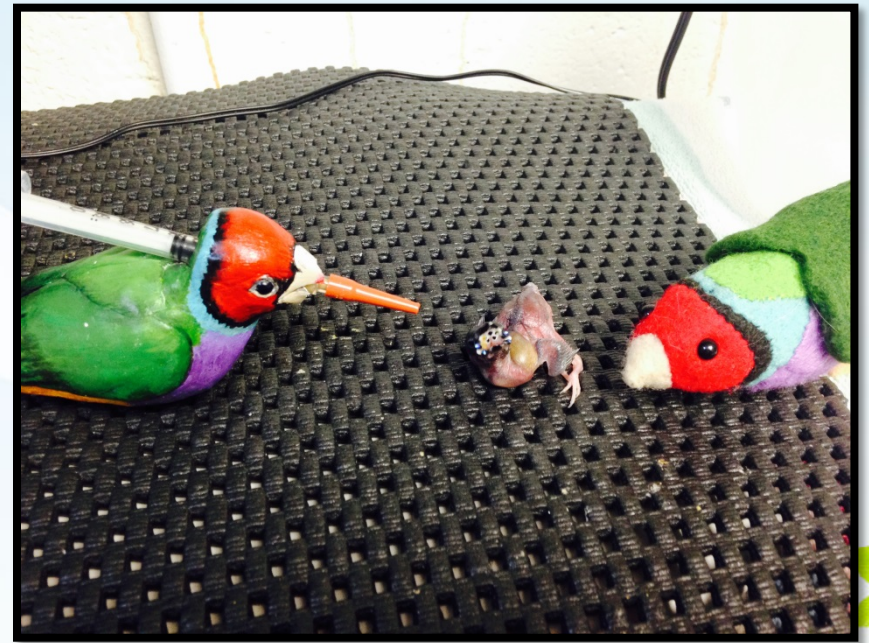
NATIONAL AVIARY

Chick Rearing



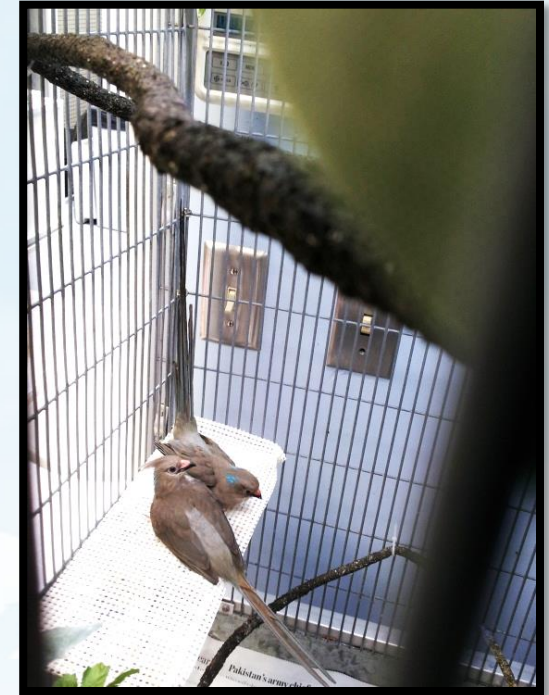
NATIONAL AVIARY

Chick Rearing



NATIONAL AVIARY

Posture



NATIONAL AVIARY

Temperature, Humidity & Lighting



NATIONAL AVIARY

Let the brainstorming begin!

Think of items you can use to improve your animals' quality of life.



It could change one birds life or thousands!

ALL EXPERIENCE LEVELS
WELCOME:
AAZK WANTS YOU TO
PARTICIPATE AT THE
NATIONAL LEVEL!

RACHAEL RUFINO
SMITHSONIAN'S NATIONAL ZOO
AAZK BOARD OF DIRECTORS



AMERICAN ASSOCIATION OF ZOOKEEPERS

- **Mission:** Advance excellence in the profession, communicate effectively to benefit animal care, support conservation and promote preservation
- **Vision:** Lead in the zoo and aquarium industry fostering professional development, networking, animal welfare and conservation
- **Purpose:** Foster professional attitude in keepers/aquarists, encourage them to be active in the field, support zoo keeper education, and make the public aware of our concern for all conservation and preservation projects

COMMITTEES AND PROGRAMS

Committees

- Professional Development
- International Outreach
- Conservation
- Grants
- Awards
- Ethics
- Communication
- Safety
- Behavioral Husbandry

Programs

- Bowling for Rhinos
- Trees for You and Me
- National Zoo Keeper Week
- Bylaws Program

WHY

- **Influence direction of AAZK**
- **Elevate the profession (yourself and others)**
- **Experience for your resume**
 - This experience is applicable to all fields
- **Networking**
- **Be a voice for AAZK membership (leaders in the organization represent YOU!)**

WHO SHOULD GET INVOLVED?

- **Volunteers, interns, apprentices, staff of all levels**
- **People who want to:**
 - IMPACT**
 - INSPIRE**
 - LEAD**
 - CREATE**
 - LIFT OTHERS**

HOW TO GET INVOLVED

- **Network**
- **Follow-up**
- **Follow AAZK social media and Eblasts for openings**
- **Apply with a cover letter, resume and (sometimes) interview**

WHERE DOES THIS HAPPEN

- **Chapter Level: volunteer, become an officer, attend meetings and events**
- **Committee Level: member, co-chair**
- **Program Level: manager**
- **Board of Directors**

WHEN

- **Chapter Level**
 - Officer positions open at the start of the new year
 - Volunteer to help with events at any time
 - Attend meetings and events year-round
- **National Level**
 - Committee openings year-round
 - Co-chairs get voted in by the BOD
- **Board of Directors**
 - Nationwide vote amongst members, get sworn in during annual conference

WHAT TO EXPECT

- **Collaboration**
- **Communication with team members, Board Oversight and more**
 - Conflict management
- **Conference calls monthly (for some)**
- **Creating timelines, sticking to deadlines**
- **Establishing goals for committee/program**
- **Problem solving: miscommunication, projects, etc**

WHAT TO EXPECT

- **Be pushed for new ideas (ideal if you already push yourself)**
- **Work hard for membership because it's about giving back**
- **Work may come in waves based on time of year**
- **Possibly create workshops, presentations, posters and documents for Association's resources**

NO LIMIT

You can join as many committees and programs as you want!

LIMIT

Unless you're a Board member, then you can't

WHAT YOU SHOULD DO NOW

- **Take advantage of every opportunity**
 - No opportunities? No complaining!
Create your own- find a need and fill it
- **Figure out your skill set**
 - Sell your skills to the committee/program hiring
 - Build your weaknesses

WHAT YOU SHOULD DO NOW

- **Communicate with everyone everywhere and do it RESPECTFULLY**
 - Every interaction is an interview
 - Be memorable in positive ways
 - What do you want people to say about you when you're not there?
 - Small field- you never know who is connected to who (can help or hurt you)

COMMITTEE AND PROGRAM ORGANIZATION

- **Professional Development**
 - Professional Development Committee
- **Education**
 - International Outreach Committee
- **Conservation**
 - Conservation Committee
 - Bowling for Rhinos
 - Trees for You and Me

COMMITTEE AND PROGRAM ORGANIZATION

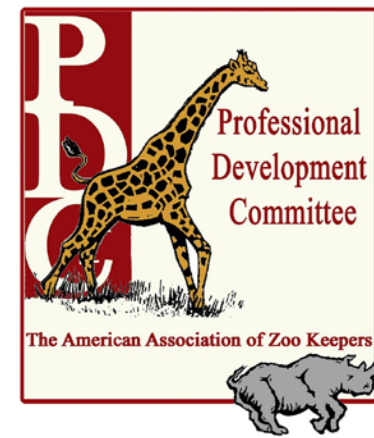
- **Recognition**
 - Grants Committee
 - Awards Committee
 - Ethics Committee
 - National Zoo Keeper Week
- **Communication**
 - Communication Committee

COMMITTEE AND PROGRAM ORGANIZATION

- **Regulation**

- Safety Committee (NEW!)
- Behavioral Husbandry Committee
- Bylaws Program

PROFESSIONAL DEVELOPMENT COMMITTEE



Serves as a resource for AAZK members to explore continuing education opportunities through online training courses (AAZK Online) and annual conferences

INTERNATIONAL OUTREACH COMMITTEE

Provide assistance to international colleagues, promotes the goals and objectives of AAZK internationally, increases global awareness of AAZK and enhances communication among zoo professionals around the world

CONSERVATION COMMITTEE



Connect AAZK members with opportunities to engage in habitat conservation and in situ wildlife initiatives, and provide educational resources about environmentally responsible practices

BOWLING FOR RHINOS



AAZK's annual flagship fundraiser for zoo professionals to raise funds and awareness for rhino and habitat conservation- supports the Lewa Wildlife Conservancy and Actions for Cheetahs in Kenya

Total funds raised to date: \$6,000,069.45

TREES FOR YOU AND ME



A tree-planting conservation program created through a partnership between AAZK and Polar Bears International (PBI) to combat climate change and aid communities in greening efforts

Funds raised for TFYM are used in an annual granting program for areas effected by deforestation

GRANTS COMMITTEE



Encourage and support research conducted by members in zoos and aquariums to help them achieve professional growth and benefit the zoological community

AWARDS COMMITTEE



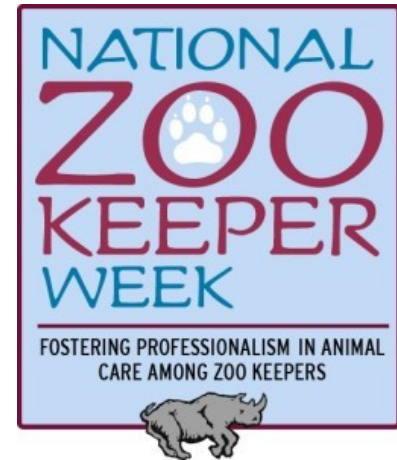
Recognize excellence in the field of animal care by developing awards' criteria, nominating procedure, qualifications or nominees and selection procedure

ETHICS COMMITTEE

Investigate formal and written complaints of violation of the Code of Professional Ethics, Bylaws or Resolutions as are brought to its attention

Appointments to the committee occur every two years by the Board of Directors

NATIONAL ZOOKEEPER WEEK



Recognize and promote dedicated zoo and aquarium professionals year round, culminating in an annual celebration during the third week in July

COMMUNICATION COMMITTEE



Facilitate communication through social media, membership Eblasts, promotional literature and supports internal communication between the public, members, chapters, committees and the Board of Directors

SAFETY COMMITTEE (NEW)



Provide resources and opportunities for safety and health training through electronic resources and annual conference workshops and certification courses

BEHAVIORAL HUSBANDRY



Provide access to resources regarding: training, enrichment and animal welfare, the committee encourages, and educates and shares knowledge in zoos and aquariums

BYLAWS PROGRAM

Program Manager annually reviews the Bylaws (rules and regulations by an organization to manage actions of its members) of the Association and recommends changes to the Board of Directors

BOARD OF DIRECTORS CONTACTS

CEO/CFO Ed.Hansen@AAZK.org

President Penny.Jolly@AAZK.org

**VP, BOD Member (oversight for PDC, Ethics,
Conference Manager)** Bethany.Bingham@AAZK.org

BOD Member (oversight for CC, BFR, TFYM)
MaryAnn.Cisneros@AAZK.org

**BOD Member (oversight for Safety, BHC, Bylaws,
Grants)** Bill.Steele@AAZK.org

BOD Member (oversight for Comm2 and NZKW)
Rachael.Rufino@AAZK.org

COMMITTEE CO-CHAIR AND PROGRAM MANAGER CONTACTS

Professional Development

Melaina.Wallace@AAZK.org Ellen.Gallagher@AAZK.org

International Outreach

Yvette.Kemp@AAZK.org Adriana.Diaz@AAZK.org

Conservation

Christy.Poelker@AAZK.org Janee.Zakoren@AAZK.org

Bowling for Rhinos

Patty.Pearthree@AAZK.org Jim.Haigwood@AAZK.org

COMMITTEE CO-CHAIR AND PROGRAM MANAGER CONTACTS

Trees for You and Me

Christy.Mazrimas-Ott@AAZK.org Anthony.Neilsen@AAZK.org

Grants Jessica.Munson@AAZK.org

Awards

Janet.Mccoy@AAZK.org Denny.Charlton@AAZK.org

Ethics

Bethany.Bingham@AAZK.org

COMMITTEE CO-CHAIR AND PROGRAM MANAGER CONTACTS

National Zoo Keeper Week Robin.Sutker@AAZK.org

Communication Zach.Page@AAZK.org

Safety Kelly.Murphy@AAZK.org

Behavioral Husbandry

Amanda.Ista@AAZK.org Megan.Wright@AAZK.org

Bylaws Jackie.Wolfinger@AAZK.org



Rachael.Rufino@aazk.org
Smithsonian's National Zoo
AAZK Board of Directors