

**HOUSTON
ZOO**



**Institutional Ambassador
Animal Policy**

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Philosophy

The Houston Zoo recognizes the importance of live animals as ambassadors to provide our guests with stimulating and educational experiences and, further, that these experiences can positively impact attitudes towards wildlife and wild places. Ambassador animals must directly support the Zoo's mission to connect communities with animals, inspiring action to save wildlife, and must be presented in a manner that is safe and respectful of the animals.

The use of appropriate ambassador animals is one of the most effective ways to endear wildlife to our public, educate them about its importance, and inspire them to take part in conservation and preservation of our natural world. The Houston Zoo believes that the appropriate use of animals in programs and events both on- and off-site can be of great value if specific guidelines are established to ensure the safety and well-being of the animals, our guests, and the staff.

Ambassador animals are animals that participate in educational presentations or activities outside their home enclosures and/or are intended to have regular, physical contact with the public within their home enclosure. Presentations using zoo animals are designed to convey educational messages as well as to generate a respect for animals and conservation. Conservation educators have used live tractable animals in programs for many years, with the awareness and understanding that people gain an empathy and appreciation for other living things during these up-close encounters.

The Houston Zoo has two departments that are responsible for the majority of the ambassador animals at the zoo: Natural Encounters and the John P. McGovern Children's Zoo. The primary goal of the Natural Encounters department is to bring ambassador animals out to the zoo guests daily to help create a personal link to wildlife. The primary goal of the ambassador animal department within the John P. McGovern Children's Zoo (CZ) is to provide a collection of animals that meets the needs of Houston Zoo's Conservation education programs and presentations by CZ keeper staff. Houston Zoo places a high priority on the appropriate use of each ambassador animal and an appropriate setting for each program or encounter. All ambassador animals are presented in a way that demonstrates respect for the individual animals and for their counterparts in the wild. Each animal handler is trained to handle and present animals safely and in a manner, that best represents the species and its role in conservation education.

Appropriate settings

1. On-Site:
 - A. Formal
 - School group programs
 - Camp programs
 - Wild Winks (overnights)
 - Birthday parties
 - Tours
 - PR and Special events
 - B. Informal
 - Rolling encounters
 - Keeper Chats
 - Nature talks
 - Houston Texans Enrichment Zone
 - Contact Yard – Children’s Zoo
2. Off-Site (registration involved)
 - Zoo Mobiles:
 - School classrooms
 - Churches
 - Nursing homes/Senior centers
 - Camp grounds
 - Parks
 - Libraries
 - Hospitals
 - Civic Group Events
 - PR events (TV, community awareness)
 - Fundraising events

Compliance with AZA recommendations and Agency Regulations

All ambassador animals must be housed, transported, and used appropriately. The Houston Zoo is guided by AZA, federal, state, and county regulations, standards, and recommendations. Following is a list of these agencies:

- Association of Zoos and Aquariums—AZA Code of Professional Ethics, AZA ambassador Animal Policy, AZA Standards for Contact with the General Public, AZA Ambassador Animal Position Statement, TAG or SSP Ambassador Animal Policies.
- USDA—Animal Welfare Act.
- Centers for Disease Control and Prevention—Compendium of Measures to Prevent Disease Associated with Animals in Public Settings
- Education permits for off-ground events and injurious species.
- City of Houston Public Health Regulations

USDA Guidelines

- Handling of animals shall be done as expeditiously and carefully in a way so as not to cause unnecessary discomfort, behavioral stress, or physical harm to the animal.
- Care should also be exercised to avoid harm to the handler.
- Animals to which the public is afforded direct contact shall only be displayed for periods of time under conditions consistent with the animals' health and not leading to their discomfort.
- During public display, the animals must be handled so there is minimal risk of harm to the public with sufficient distance allowed between animal presentations and the viewing public to assure safety for both the public and the animal.
- Animals participating in program activities shall be allowed a rest period between events that is at least equivalent to the use time.
- When sunlight is likely to cause overheating or discomfort, sufficient shade will be provided to protect the live animals from the direct rays of the sun

Collection Planning

Suitable species and individuals are chosen for inclusion in the programs by a review of programmatic needs, availability of suitable housing, ability to provide excellent care and attention to physical and psychological needs. Each animal in the collection should be multifunctional (i.e., appropriate for use in more than one program), easily seen by an audience, and/or appropriate for the presentation of multiple messaging concepts that include Houston Zoo's mission and conservation philosophies. The selection of species and individuals for inclusion in the ambassador animal department is guided by the following objectives:

- The rationale for the selection of species and individual animals as ambassador animals must be clearly identified and justified through the Collection Planning, Species Approval, Animal Transaction Approval and Ambassador Animal Evaluation processes.
- The use of animals for programs and the setting in which such programs are conducted should be appropriate to the Zoo's mission and in accordance with Association of Zoos and Aquariums (AZA) and any other applicable regulatory guidelines.
- In every contact or presentation situation, the health and welfare of the animals, handlers and the public are primary concerns.
- Education and conservation messaging must be an integral component of all animal encounters and programs.
- Long-term management plans and program objectives must be in place for all program animals.
- Ambassador animals must be maintained and cared for by trained staff. Housing and husbandry conditions must meet standards set for the remainder of the animal collection, recognizing the special needs associated with managing ambassador animals.

Ambassador animals are part of the overall collection and are included in the overall HZI collection planning process. In addition to meeting the criteria on the Ambassador Animal Evaluation Tool (included as an appendix to this document), the temperament and suitability for program use of each individual animal must be considered. Acquisition and disposition of ambassador animals shall be in accordance with the HZI Acquisition and Disposition policies (included as appendices to this document).

The decision to acquire ambassador animals is carefully considered and involves multiple groups of people. Acquisitions must be consistent with the mission of the Houston Zoo and must meet collection planning criteria as developed by the senior animal management team

(Curators and Veterinarians). See the HZI Animal Acquisition Policy and the HZI Species Selection Criteria, attached to this document as appendices. Animal acquisitions at the Houston Zoo are approved by the Vice President of Animal Operations and Senior Veterinarian. All animal transactions, both acquisition and disposition, are documented through the office of the Registrar of the Houston Zoo. The species selection criteria will address whether the Zoo can provide for the captive care requirements of a species or specimen, whether the Zoo can provide the necessary support for a species or specimen, and whether that species or specimen adds value to the collection.

Conservation Education Messages

The Houston Zoo is committed to promoting conservation awareness, respect and appreciation for wildlife and the natural world. The use of program animals in presentations and guest interactions must be linked with the delivery of information around biodiversity, animal adaptations, and conservation. The Houston Zoo endorses the Conservation Messages developed by the Conservation Education Committee of the AZA. These messages form the basis for constructing conservation education messages utilized in ambassador animal presentations.

- Ecosystems are made of interdependent relationships between groups of living things (biodiversity) and their physical environment.
- Human beings are an integral part of all ecosystems and their activities affect these systems.
- Healthy ecosystems provide many essential services and benefits that sustain and improve human lives.
- The human experience requires a connection to nature. These experiences in wild places enrich our lives and inspire our choices for future generations.
- Nature is a place to renew the human spirit and refresh our emotional and mental health.
- Nature provides wondrous places to play and recreate, to explore, to be creative, to learn and enjoy both as individuals and with our friends and families.
- The variety of life on Earth, its biodiversity, is both essential and inspirational for human existence.

- Human beings are responsible for dramatic changes to ecosystems at a rate unprecedented in Earth’s history.
- The growth of the human population coupled with the increased consumption of resources by individuals will increasingly impact the planet’s finite resources.
- The primary human threats to the environment are global warming, habitat destruction, invasive species, and overuse of individual species.
- Due to the unprecedented changes, the human species is causing on the planet, we must often intervene to save wildlife.
- Through informed actions, we can positively impact ecosystems. These actions include:
 - Making appropriate lifestyle decisions.
 - Actively participating in public decisions.
 - Sharing our knowledge and feelings about wildlife and wild places.
 - Supporting conservation organizations, including AZA zoos and aquariums.
 - Being “informed” means considering multiple points of view.
- Responsible zoos and aquariums strive to conserve ecosystems and promote care and positive action for the natural world.
- Responsible zoos and aquariums provide animal and nature experiences that engender a sense of wonder and inspire visitors to conservation awareness and action.
- Responsible zoos and aquariums disseminate valuable information about animals and the ecosystems they inhabit.
- Responsible zoos and aquariums model caring by being leaders in animal care.

It is worth noting that allowing the public to come in direct physical contact with ambassador animals has the potential to send a mixed message about interacting with wild animals in nature and/or keeping wild animals as pets. Every opportunity should be taken to make it clear that the animals we use in our programs are wild animals and can, therefore, be unpredictable. It requires extensive training to understand the behavioral, health, and husbandry needs of wild animals. Zoo staff is fortunate to be able to use these animals as ambassadors for their wild counterparts to inspire guests to conservation awareness and action.

Human Health and Safety

- Transfer of zoonotic disease is minimized using hand washing stations, hand sanitizers and no touch policies.
- All animal handlers follow guidelines for proper attire as stated in the Tier 1 Animal Handler Guidelines of the taxon specific Animal Handling protocols

Evacuation Protocol for Animal Handlers

In the event of an evacuation, volunteers in possession of handling animals should respond as directed below.

- Plan A Evacuation (Amble to the nearest public exit) – return the animal to the Green Barn or the BEC handling animal room, whichever you're closest to, before evacuating the Zoo. Natural Encounters animals can be returned to their enclosure, before evacuating the Zoo.
- Plan B Evacuation (Boogie to the nearest exit) – put the animal in its crate, kennel, or carrier, and, if time permits, drop it off in the closest available building or secure location. However, if the situation is immediately dangerous (tiger escape or an active shooter), use common sense to preserve human life.
- Plan C Evacuation (Cover in the nearest secure building) – if time permits, take the animal with you to a shelter location

Animal Health and Welfare

- Housing and husbandry for ambassador animals meets or exceeds general AZA standards and the physical, social and psychological needs of the individual animal. For guidelines on rest periods, please see the taxon specific protocols.
- Wherever possible, all ambassador animals are provided a choice for participation. Contact yard animals have two retreat/rest areas. Handlers are trained to know signs of stress for all ambassador animals and may decide to withdraw an animal from a program if deemed necessary for that animal's health and welfare.
- All animal handlers are empowered to make the best decisions related to animal health and welfare. If safety or health is in danger of being compromised, handlers may remove the animal from the situation.
- All contact areas are supervised by trained staff and volunteers to ensure the health and welfare of the animals and guests.
- All ambassador animals are cared for at a level consistent with that of other animals in the collection.
- All ambassador animals are provided with proper care when no longer used as a program animal. Limits and restrictions of programs animals due to illness or age are determined by a veterinarian and the curator or supervisors of the animal's department. Animal health and welfare policies still apply to animals no longer used for programming.

- All animals are ensured the same level of contact and care during times of limited or reduced program use. Staff and volunteers are available to properly attend to the psychological and physical wellbeing of all program animals despite level of program use.
- Ambassador animals follow an enrichment protocol based on the HZI enrichment program philosophy and goals

Logistics: Managing the Program

Housing

Ambassador animals are housed in the Children's Zoo, Natural Encounters, Cheetah building, Giraffe Barn and Reptile building. Animals used in offsite education programs are housed in the ambassador animal building in the Children's Zoo and in the Natural Encounter's building. The Children's Zoo staff provides all animal care for the animals in the ambassador animal building. The Natural Encounter's staff provides all animal care for the ambassador animals housed in their building.

Requesting to use an ambassador animal

For volunteers:

Volunteers will request the use of CZ ambassador animals by sending an email to the Children's Zoo keepers and the supervisors. The email is sent to tjacobs@houstonzoo.org , mwitek@houstonzoo.org, apyle@houstonzoo.org , and ambassadoranimalrequests@houstonzoo.org. The email states the date, time and animal that they would like to handle.

For Education staff:

Animal requests for all scheduled education programs come in for the week and are emailed to Ambassador Animal keepers and supervisors.

For Children's Zoo staff:

Write in the animal that you would like to use on the reservation sheet that is on the computer in the Ambassador Animal Building. Check to make sure that the animal is not reserved for an education program or volunteer handling.

For Natural Encounters staff:

Check to make sure there is no special event that will need the animal while you are planning to have it out.

Documenting animal usage

In the mornings, the keepers in the Ambassador Animal section will transfer any animals used the previous day to the “animal usage tracking chart”. This documents the usage of the ambassador animals for a month at a time. At the end of each month this information is given to the Supervisor of Ambassador Animals to record in the master log.

The Natural Encounters department keeps a separate log of animals used. Each month animal usage is reviewed by a designated NE staff member.

Staff Training

Only trained CZ staff, NE staff, education staff and volunteers are authorized to handle ambassador animals. All animal handling protocols are in the taxon specific handling guidelines.

For CZ staff:

- Ambassador Animal section primaries are authorized to train other CZ staff members on all Tier 1 animals
- Any animal that is above a Tier 1 (advanced animal) has a trainer (s) assigned to each one. That trainer is authorized to check off any CZ staff on those animals.
- If it has been longer than 2 months since a CZ staff member has handled an advanced animal refresher training is required. The length and content of the refresher is up to the animal’s trainer.

For NE staff:

- Anyone who is trained to handle a tier 1 animal may train a new handler
- Animals that are above Tier 1 have designated primary handlers and/or training teams who are responsible for training new handlers on those animals.

For Education:

- Education staff that are authorized by the Community Programs Manager to train the Tier 1 animal handling training can train any other education staff
- Any animal that is above a Tier 1 (advanced animal) has a CZ staff trainer (s) assigned to each one. That trainer is authorized to check off any education staff on those animals. These trainings are set up through the Program Animal Supervisor, CZ staff and Education staff.

For volunteers:

- Authorized education and CZ staff trains all volunteers on Tier 1 animal handling. All volunteers are required to attend an animal handling refresher course every other year.
- Any animal that is above a Tier 1 (advanced animal) has a CZ staff trainer (s) assigned to each one. That trainer is authorized to check off selected volunteers on those animals. These trainings are set up through the Supervisor of Ambassador Animals and the Volunteer department.
- Volunteers need to fulfill the following requirements to handle advanced animals:
 - o Tier II animals must be handled at least once per month.
 - o Tier III animals must be handled at least twice per month.

If a handler is seen to have substandard performance or not following protocols the following actions will be taken.

For a CZ staff member:

- The handling issue will be addressed with a supervisor
- The supervisor will discuss with the staff member the issue and determine if retraining is needed.

For an NE staff member:

- The handling issue will be addressed with a supervisor or primary handler
- The supervisor will discuss the issue with the staff member and determine if retraining is needed.

For an Education staff member:

- The handling issue will be addressed with a CZ supervisor
- The CZ supervisor will alert the Community Programs Manager or the Interpretive Programs Manager to the issue and discuss the retraining steps

For a volunteer:

- The handling issue will be addressed with a CZ supervisor
- The CZ supervisor will alert the Volunteer Engagement Manager to the issue and discuss the retraining steps

Medical testing

All staff members that handle animals need to have a negative TB test result yearly. Any staff member that handles an animal with a high risk of rabies is required to have pre-exposure rabies vaccinations.

Training content

All CZ staff members are trained on presentation techniques, taxon specific protocols and conservation messaging by a CZ Supervisor or appointed CZ animal keeper.

All Education and Volunteer staff members are trained on presentation techniques, taxon specific protocols and conservation messaging by an appointed education or CZ staff member.

All NE staff members are trained on presentation techniques, taxon specific protocols and conservation messaging by an NE supervisor or specified NE animal keeper.

Reporting of injuries

All human (staff, volunteers and guests) injuries are reported to Zoo Rangers first then to a Supervisor. The Zoo Rangers and supervisor will fill out all appropriate forms.

All animal injuries need to be reported to a Supervisor of the appropriate Ambassador animal section.

During Zoo Hours:

For CZ Ambassador Animals:

Call the Ambassador Animal Building first

713-533-6857 or 6812

If no answer, contact CZ supervisors:

Tarah Jacobs—713-533-6647

Michelle Witek—713-533-6644

Angie Pyle – 713 -533-6645

Kevin Hodge—713-533-6642

After Zoo Hours

Contact CZ Supervisors

For NE Ambassador Animals:

Contact NE supervisors:

Amanda Daly - 713-533-6820

Kamryn Suttinger – 713-533-6821

Hannah Bailey – 713-533-6565

After Zoo Hours

Contact NE supervisors:

Amanda Daly – 832-814-2641

Kamryn Suttinger – 217-621-0495

Tarah Jacobs—352-598-1797

Hannah Bailey – 281-701-4073

Michelle Witek – 713-205-1508

Angie Pyle – 281-935-1810

Kevin Hodge (Curator)—409-739-0777

If no answer, contact HZI Vet Staff

Dr. Joe Flanagan—713-204-0545

Dr. Maryanne Tocidlowski—281-770-7619

Dr. Judilee Marrow- 217-714-3164

Dr. Christine Molter – 262-909-6895

Protocol to reduce disease transfer

All animal contact situations are supervised by a trained zoo staff member or volunteer. After any animal contact each guest should be offered hand sanitizer or the use of a hand washing facility in the immediate vicinity.

If an animal appears to be ill, it will be taken off any handling until the health-related issue is resolved by a veterinarian.

Review of institutional Policies

The policies outlined in this manual will be reviewed annually by the Supervisor of Ambassador Animals. Any changes or updates will be reviewed with the Curators of departments housing ambassador animals, Community Programs Manager, Interpretive Programs Manager and the Volunteer Engagement Manager.

TAG and SSP recommendations

The Houston Zoo follows all taxon specific recommendation from each TAG and SSP regarding using animals in ambassador animal programs. Some TAG recommendations are found in the appendices.

Animal Handling Protocols

Animal Handling Protocol - Tier 1

GENERAL

Preparation

- Remove any jewelry that an animal could get tangled in or caught on.
- Avoid wearing strong perfumes or colognes when handling the animals.
- Be prepared! Have a thorough understanding of your animals, and be ready to answer questions.
- Don't be afraid to ask another volunteer/staff member to be present during your program to help with the animals and with crowd control.
- Wash your hands or use sanitizer before and after handling whenever possible, especially if you have been handling other animals. If you are unable to, handle predator before prey.
- Always transport the animal in /coolers/view boxes to your presentation location.
- Never leave an animal unattended in a place that public can gain access to them.
- Carriers should not be stacked on top of one another or sat on.
- Do not feed the animals.

Temperature Protocols

TEMPERATURES FOR ANIMAL HANDLING AND SAFETY (updated July 2017)

>95° F	<u>No Handling</u>
91-95° F	15-minute <u>Maximum</u> (shaded areas are required)
86-90° F	45-minute <u>Maximum</u> (shaded areas are required)
65-85° F	No temperature restrictions (except as noted below*)

85° F	*Maximum for rabbits outside
80° F	*Maximum for chinchillas outside
70° F	* <u>Minimum</u> for Reptiles and Invertebrates
60° F	* <u>Minimum</u> for Amphibians
50° F	* <u>Minimum</u> for parrots
35-65° F	Additional range for native or cold hardy animals. Includes birds of prey.

*The temperatures listed above are set by the Director of Veterinary Services for outdoor animal handling. If the temperatures are outside of these ranges, animal handling will not be able to occur; no exceptions. Please be aware that any temperatures above 85° F may result in keepers needing to shorten the handling time an animal is available. Judgment and common sense apply. If weather conditions change or become threatening, it is the responsibility of the animal handler to assure safety for animals, staff, and guests.

Handling Protocols

- **Remember- Be S.H.A.R.P.**
 - **Support**
 - Offer proper support to the animal.
 - **Head Away**
 - Keep the animal's head away to prevent people from touching it.
 - **Awareness/Knowledge**
 - Be aware of what you are doing, what the animal is doing and what your "audience" is doing. Be knowledgeable about the animal you are handling.
 - **Restrain**
 - Restrain the animal gently yet adequately to prevent their escape.
 - **Plane**
 - Keep the animal on their natural plane.
- Remember that only trained staff and volunteers can handle animals.
- When presenting animals, position yourself so public cannot approach you from behind (e.g. in front of some type of barrier).
- Be aware of predator/prey relationships when placing carriers or handling animals next to one another.
- Instruct others to touch the animal with 2 fingers and on the back.
- Allow only those with dry hands to touch the animals.
- If an animal appears stressed at any time or if there are any other concerns put the animal away (if you are handling it) and contact Children's Zoo staff.

- When returning an animal to its carrier, always check to be sure there is not another animal that was inadvertently placed in the wrong carrier.
- Encourage those that have touched the animals to wash their hands. If you are not located near a sink, then have sanitizer available.
- If you are bitten by any animal, place it back in its carrier and report it to the appropriate department's supervisor immediately.

MAMMALS

Chinchillas

Removing from the enclosure (CZ staff only):

- Unlatch the enclosure
- Reach your hand in until it is directly above them. Then bring your hand down to restrain them from behind the head and grasp the BASE of the tail with your other hand.
- Bring them out of the enclosure
- Place them in the kennel completely before releasing your hands from their body.
- Turn the animal card around so the "Animal not in Enclosure" side is showing on the door



Handling (any approved handler):

- *Temperature restrictions: No outside handling above 80°F (Can be handled in an air- conditioned building if outside temp. is above 80°F though).*
- Do **NOT** hold them close to your body, as they are very prone to overheating.
- A glove on the hand closest to the head is required to be worn always with every chinchilla.
- **NEVER** put them on the ground, whether indoors or outdoors.
- To prevent them from trying to nip when removing them from the crate, move your hand along the top of the kennel until your hand is directly above them. Then bring your hand down to restrain them from behind the head and grasp the BASE of the tail with your other hand. Bring them out of the kennel.
- Next, slide the hand that was holding the head underneath the belly and rest

the back legs on the palm of your hand. Place your thumb and forefinger behind the front legs. NOTE: Some of the chinchillas will vocalize.

- Always keep a good grip on the base of the tail as they can be "jumpy".



Returning to the enclosure (CZ and trained education staff only):

- Open the kennel door.
- Place your hands in the kennel and move your hand along the top of the kennel until your hand is directly above them. Then bring your hand down to restrain them from behind the head and grasp the BASE of the tail with your other hand. Bring them out of the kennel.
- Place them in the enclosure completely before releasing your hands from their body.
- Latch the enclosure and turn the "Animal not in Enclosure" sign back around.

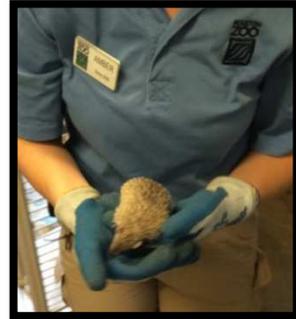


Hedgehogs & Tenrecs

Removing from the enclosure (CZ staff only):

- Put gloves on both hands.

- Unlatch the enclosure.
- Pick them up around the midsection with one hand on each side of the body
- Place them in the kennel and latch the door.
- Turn the animal card around so the “Animal not in Enclosure” side is showing on the door.



Handling (Any approved handler):

- *Temperature restrictions: No outside handling below 70°F.*
- Always wear gloves to handle.
- Do not turn them upside down or vertically to show how they roll into a ball.
- To remove them from the kennel, position them with their head facing away from you. Pick them up around the midsection with one hand on each side of the body. They may be active while being held. Rather than trying to confine their movement, move with them by adjusting the position of your hands accordingly, keeping the animal on a level plane. Prior to allowing public to touch, make sure you know where the head is and that it is facing away from guests.
- Foaming at the eyes and/or nose, sometimes accompanied by a snuffling noise, is often considered normal for them, but Children's Zoo staff should be notified if this occurs.





Returning to the enclosure (CZ and trained education staff only):

- Put gloves on both hands.
- Unlatch the kennel and pick them up around the midsection with one hand on each side of the body.
- Set down in the enclosure.
- Shut and latch the enclosure and turn the “Animal not in Enclosure” sign back around.



Small Rabbits

Removing from the enclosure (CZ staff only):

- Open the enclosure door, walk in the enclosure and latch the door behind you.
- Pick up the rabbit by placing one hand underneath their body with the front legs between your fingers. Use the same technique for the back legs with your other hand.
- Place them inside of the kennel while maintaining control of the back legs. Set them down on the floor of the kennel, shut and secure the kennel door.
- Turn the animal card around so the “Animal not in Enclosure” side is showing on the door.



Handling (any approved handler):

- For small rabbits, you will always manually remove them from the kennel. To remove them, position them with their head facing away from you. Place one hand underneath their body with the front legs between your fingers. Use the same technique for the back legs with your other hand.
- Never 'scruff' them by grasping the skin folds at the base of their necks.
- Always maintain control of their back legs. When they are stressed, they can kick their hind legs hard enough to break their backs.
- For Education/CZ staff: If you have the group sit in a circle you can let the rabbit hop around on the floor in the center of the circle. Assess your surroundings and the group before you put the animal in the circle. This is for indoor encounters only.
- When placing them back in the kennel, approach the kennel so the rabbit is not facing it. When ready to place them inside, maintain control of the back legs, then place the rabbit slowly and gently back into the kennel.
- **Signs of stress:** Lethargy and excessive movement. Vocalizing is common for some and does not necessarily indicate stress.



Returning to the enclosure (CZ and trained education staff only):

- Open the enclosure door
- To remove them from the kennel, position them with their head facing away from you. Place one hand underneath their body with the front legs between your fingers. Use the same technique for the back legs with your other hand.
- Place them on the floor of the enclosure then remove your hands from their legs.
- Shut and latch the enclosure and turn the "Animal not in Enclosure" sign back around



Large Rabbits

Removing from the enclosure (CZ staff only):

- Open the enclosure door, walk in the enclosure and latch the door behind you
- Place the harness over the rabbit's head, pull one leg through the harness, then clasp the harness around the rabbit's body
- Either pick up the rabbit or gently encourage them into the crate and secure the door
- Place the leash on top of the crate

Handling (any approved handler):

- Attach the lead to the harness and see if they will hop out of the kennel on their own. If not, you will need to manually remove them.
- Watch the large rabbits to make sure they do not nibble on someone's clothing or shoes.
- If it becomes necessary to pick them up, position one hand between the front legs lacing your fingers. Lift quickly and steadily bringing the rabbit upright and to your hip (same side as the hand used between animal's front legs.) While lifting, use your other hand to lift rabbit's midsection. Then position this arm across your body placing your forearm across the rabbit's knees, hand on the rabbit's rump. Only pick up the large rabbits if absolutely necessary.
- Keep them within 4 feet of their kennel. They should be controlled on the leash, and not be allowed to run wherever they would like.

- When returning the large rabbits to their carrier, place the carrier in front of them and see if they will hop into it on their own. You can gently encourage them by applying a small amount of pressure to their hindquarters.
- **Signs of stress:** Lethargy and excessive movement. Vocalizing is common for some and does not necessarily indicate stress.



Returning to the enclosure (CZ and trained education staff only):

- Open the enclosure door.
- To remove open the kennel door and guide them into the enclosure. Once the rabbit is in the enclosure remove the harness by unclipping it and slipping it off over the head.
- Shut and Latch the enclosure and turn the “Animal not in Enclosure” sign back around.

Three Banded Armadillo

Removing from enclosure (CZ staff only):

- Pick up the animal using two hands – one at the head end of the shell and one at the tail end of the shell.
- Place in the crate with newspaper on the bottom
- Secure the latch on the crate
- Turn the animal card around so the “Animal not in Enclosure” side is showing on the door



Handling (Any approved handler):

- When picking up, use two hands – one at the head end of the shell and one at the tail end of the shell. Do not put fingers where shell can snap closed on them!
- Make sure the armadillo is not upside down (Keep on her natural plane).
- The armadillo should only be touched on the back.
- If the armadillo is bucking constantly, put it down in the pool, setting it with its feet down first. Let it run around in the pool to give it a break. To pick the armadillo back up, use both hands and do not allow fingers to get pinched by shell.
- Guests are allowed to touch her while she is in the pool
- At times, the armadillo may be in estrous and should not be handled during that time. If you notice blood on the animal, please return her immediately to the Children's Zoo.
- **Signs of stress:** Some shaking is normal while the armadillo is being handled, but prolonged shaking and bucking are signs of stress. Put the armadillo down in the pool for a break or away in the kennel if these signs of stress persist.



Returning to the enclosure (CZ and trained education staff only):

- Open the crate door
- Pick up the animal using two hands – one at the head end of the shell and one at the tail end of the shell. Make sure to keep fingers in a position where they won't get pinched if she closes her shell.
- Place animal back in the enclosure.
- Shut and Latch the enclosure and turn the "Animal not in Enclosure" sign back around.

Domestic cat

Harnessing (CZ staff only):

- Pace the harness over the cat's head.
- Pull one leg through the harness.
- Then clasp the harness.
- Place in kennel with the leash on top.

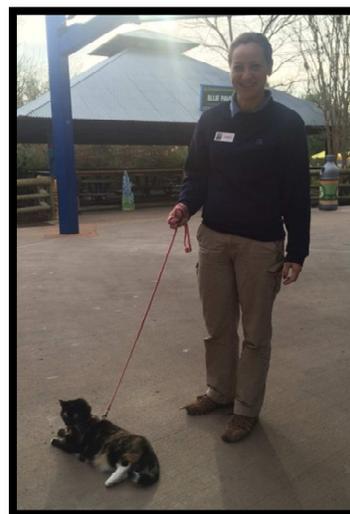


Handling (any approved handler):

- Leave the harness on at all times.
- While the animal is in the kennel, the leash can be attached to the outside of the kennel or on top of it.
- When taking the animal out of the kennel attach the leash to the harness right before bringing them out of the kennel.
- The kennel must stay within 4 feet of the handler and the animal.
- When picking up the animal, support the whole body.
- Do not let the cats eat grass.
- **Signs of stress:** Hissing or attempting to flee.

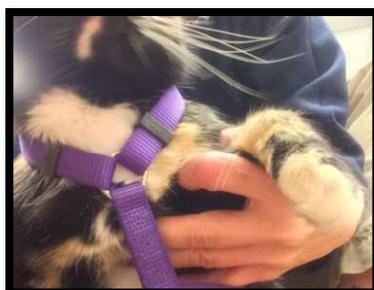
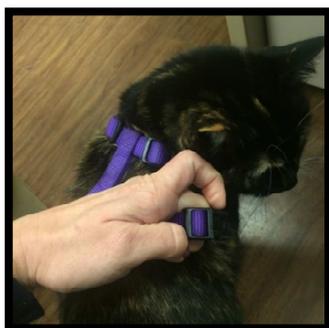
To present:

- Open the kennel door and reach in to attach the leash to the harness.
- Let the cat walk out of the crate.
- To pick up, support the whole body.
- For Education/CZ staff: If you have the group sit in a circle you can let the cat walk around on the floor in the center of the circle. Assess your surroundings and the group before you put the animal in the circle. This is for indoor encounters only.



Returning to their enclosure (CZ and trained education staff only):

- Open the crate door and let the cat walk out.
- Unclasp harness.
- Take the leg out of the harness.
- Pull harness off from over the head.
- Place the crate back in the enclosure and place the leash and harness on the side of the enclosure.



Naked mole-rat

Removing from enclosure: (NE staff only)

- Open the door to the nest chamber
- Carefully remove three to four individuals by picking them up around the middle of their body and place them in their designated critter carrier with a handful or two of substrate from the exhibit
- Be sure you have not selected the queen, since she does not go out for presentations.
- Place lid on critter carrier

To present: (NE staff only)

- If doing a presentation in the NE building, place the critter carrier on the black, rolling cart. For presentations in other areas of the zoo, it is advised to bring the folding table or similar presentation surface.
- Take the lid off the critter carrier
- To pick up, support the whole body and hold mole-rats over the open critter carrier. Hold mole-rats with a loose, but secure grip. See photo
- Remember, mole-rats have loose skin and can go backwards just as quickly and easily as forward.
- It is okay to let guests use one or two fingers to touch the naked mole-rats on their back. This activity is best if there is only a small crowd.



Returning to their enclosure (NE staff only):

- Open the critter carrier
- Carefully pick up mole-rats, one at a time, and place them in the NMR exhibit nest chamber
- Close nest chamber and secure the latch
- Substrate from the critter carrier can be added back to the exhibit or thrown away.

- No need to clean the critter carrier, unless it is soiled. Naked mole-rats are dependent on the colony scent. Because of this, if the carrier is soiled, it can either be wiped out with a paper towel or quickly rinsed and left to dry.

REPTILES

NO OUTSIDE HANDLING BELOW 70°F

Alligators

Removing from enclosure (CZ staff only):

- Take the lid off the tank.
- Pick up the alligator by restraining behind the head first, with your fingers resting against the bony plates. Then take a firm grasp around the base of the tail prior to lifting the animal out of the carrier. Never pick them up by grasping the midsection.
- Place in the designated alligator container or cooler, close and latch the lid on the top of the container.
- Attach the fact card to the side of the container.
- Place an “out” sign on the tank.



Handling (any approved handler):

- Always hold an alligator with one hand on the bony plates on each side of the head at the jaw line.
- Before opening the cooler lid completely, peek inside to determine the animal's position. DO NOT put your face close to the cooler as the gators can jump. When ready to pick them up, open the lid completely.

- Restrain behind the head first, with your fingers resting against the bony plates. Then take a firm grasp around the base of the tail prior to lifting the animal out of the carrier. Never pick them up by grasping the midsection.
- Ideally, it would be best to restrain the head AND base of the tail simultaneously and then lift out. NEVER grasp the tail first since the gator will be able to turn around and bite you! NEVER lift them out of the cooler by holding only the head or tail.
- Rotate the hand that is restraining the head to where it is underneath the head. Your fingers will still be placed on the bony plates. The tail can be tucked under your arm if it is a larger alligator.
- Do not turn them upside down to make them "go to sleep".
- Always hold the head away from the public, and do not let them touch any part of it.
- If they start moving their tail, tuck the tail under your arm to prevent them from hitting you or the public with it.
- When returning them to the cooler, rotate the hand that is underneath the head back to the top of the head, maintaining contact with the bony plates. Place the animal in the cooler so their feet are touching the bottom of the cooler. You can release the tail first and then the head or release both hands at the same time. As soon as you release the head, pull your hands out immediately and close the lid.
- **Signs of stress:** Panting, hissing, and excessive struggling. If any of these behaviors last more than 30 seconds, put the animal away, and be sure to report it to Children's Zoo staff when returning the animal.



Returning to the enclosure (CZ and trained education staff only):

- Open the lid to the container
- Pick up the alligator by restraining behind the head first, with your fingers resting against the bony plates. Then take a firm grasp around the base of the tail prior

to lifting the animal out of the carrier. Never pick them up by grasping the midsection.

- Place back into the tank and secure the lid on the tank.
- Take the “out” sign off of the tank that designated the animal was out of the enclosure.



Lizards

Removing from the enclosure (CZ and NE staff only):

- Unlock the enclosure and remove the locking mechanism
- Slide the door open
- To remove them, position them with their head facing away from you. Use one hand to restrain behind the front legs (from above). Use your other hand to grasp the base of the tail firmly. Then lift from the enclosure.
- Place into a cooler and shut the lid.
- Place the “out” sign on the enclosure.
- Place the info card for the animal on the side of the cooler. (NE does not use info cards)



Handling (any approved handler):

- Be aware of the chuckwalla's tendency to move his head and tail suddenly when he is first picked up.
- To remove them, position them with their head facing away from you. Use one hand to restrain behind the front legs (from above). Use your other hand to grasp the base of the tail firmly. Then lift from the cooler.
- Rotate your hands so they are underneath the body. This will allow more of the body to be available for touching. Make sure the head is not facing your elbow because if the animal gets irritated, it will be able to bite you. This is more a concern with skinks.
- **Signs of stress:** Lethargy, open mouth, excessive movement, and/or biting.



Returning to the enclosure (CZ, NE and trained education staff only):

- Open the cooler
- To remove them, position them with their head facing away from you. Use one hand to restrain behind the front legs (from above). Use your other hand to grasp the base of the tail firmly. Then lift from the cooler.
- Place the animal inside the enclosure and remove your hands.
- Slide the enclosure door shut and place the locking mechanism back on, turn to key to lock the enclosure.
- Take the "out" sign off the enclosure.

Snakes

Removing from enclosure (CZ and NE staff only):

- Unlock the enclosure and remove the locking mechanism.

- Slide the door/drawer open.
- Place snake in a pillowcase.
- Tie the top of the pillowcase in a knot to secure the pillowcase.
- Place the pillowcase inside a cooler marked for snakes.
- Place the “out” sign on the enclosure.
- Place the fact card for the snake on the zip tie loop, on the cooler handle with a dog clip. Fact cards and clips are found on the shelf in the reptile room. (NE does not use fact cards)



Handling (any approved handler):

- Snakes are transported in a knotted pillowcase in a cooler.
- If the snake is out of the pillowcase, or if it is stuck in a pillowcase knot when you open the cooler, close the lid and contact Children's Zoo staff.
- The snake can be removed from the pillowcase inside the cooler, or the pillowcase can be removed from the cooler and placed on a flat surface.
- Untie the knot and roll the top of the pillowcase back until you can locate the head. Do not put your hands inside the pillowcase without locating the snake's head first! Never put your head inside the pillowcase to locate the snake.
- When taking large snakes out of, or putting them back into, the pillowcase and cooler, it is best to have a helper.
- Gently restrain behind the head (about 4-6 inches behind the head based on the size/species of the snake). Use your free hand to support as much of the body as possible before lifting the snake out of the pillowcase.
- Always hold the head away from the public.
- Some snakes are quite active. Do not handle for the public unless the snake and you are comfortable.
- Keep snakes away from pockets and belt loops. If given the chance, they may crawl through belt loops. If this happens, try to get them to move forward until

completely through the loop (if they will fit). If not, it will be necessary to cut the loop. Never pull the snake backwards through the loop.

- Put them back into the pillowcase tail first, controlling the head and supporting the body as long as possible. Once completely inside, release the head. Gather the top of the pillowcase, twist it, and tie a secure knot (making sure, of course, that no part of the body becomes part of the knot!). Make sure that the knot is tied low enough so that the snake has some room to move, but can't stretch to its full length; and that the knot is not too tight where it can't be untied, or too loose where the snake could maneuver out of it.
- Snakes will have a cloudy or milky-white appearance to their eyes and their skin color may be lighter and/or have a bluish cast before shedding. When "in blue", snakes are not be handled at all.
- Be aware of predator/prey relationships when handling snakes. Do not handle prey animals and then snakes. Do not stand near someone holding another animal (King snakes also eat other snakes!).
- NEVER place snakes on the ground.
- **Signs of stress:** Open mouth, hissing, excessive movement, and/or turning body upside down and staying upside down. If any of these behaviors last more than 30 seconds, put the animal away and be sure to notify Children's Zoo staff when returning the animal.





Returning to the enclosure (CZ, NE and trained education staff only):

- The snake can be removed from the pillowcase inside the cooler, or the pillowcase can be removed from the cooler and placed on a flat surface.
- Untie the knot and roll the material back until you can locate the head. Do not put your hands inside the pillowcase without locating the snake's head first! Never put your head inside the pillowcase to locate the snake.
- Once you have the snake place it back into their enclosure. Place the pillowcase in the dirty laundry hamper in the kitchen. The cooler will need to be disinfected if the snake defecated in it. Otherwise it can be placed back on the shelf.
- Remove the "out" sign from the enclosure

Turtles & Tortoises

Removing from the enclosure (CZ and NE staff only):

- Unlock the enclosure and remove the locking mechanism (for the pancake tortoise), unlatch and the door and walk in the enclosure (box turtles and Texas tortoise)
- Slide the door open (pancake tortoise)
- Pick them up by placing your hands on each side of their shells near the middle
- Place into a cooler with newspaper and shut the lid. NE leopard tortoise may be transported in a medium vari-kennel.
- Place the “out” sign on the enclosure
- Place the info card for the animal on the side of the cooler



Handling (any approved handler):

- Pick them up by placing your hands on each side of their shells near the middle.
- Be aware that they sometimes urinate/defecate when moved. Therefore, it is best not to present the back end for the public to see/touch. (Helpful hint: Upon first picking them up, give them a chance to defecate before allowing the public to touch).
- Make sure the head is facing away from the public and the public is advised where to touch the shell.
- Prevent the public from touching near the tops of their legs as they could get their fingers pinched should the tortoise pull their legs in suddenly.
- Leather gloves are optional when handling the pancake tortoise (edges to carapace are sharp).
- **Signs of stress:** Open mouth, hissing, excessive movement, and/or turning body upside down and staying upside down. If any of these behaviors last more than 30 seconds, put the animal away and be sure to notify Children's Zoo staff when returning the animal.



Returning to the enclosure (CZ and trained education staff only):

- Open the cooler
- Pick them up by placing your hands on each side of their shells near the middle
- Place them back in the enclosure
- Secure the enclosure
- Take the "out" sign off the enclosure

BIRDS

General

- Be aware that the birds can fly short distances if they are exceptionally lightweight or it is a windy day. Watch their behavior and if the bird seems nervous put them back in their crate.

Dove and Chickens

Removing from the enclosure (CZ staff only):

- Unlatch/unlock the enclosure.
- When taking the doves out of their enclosures, you can step them up onto your finger/hand.
- Slowly move toward the crate and set the bird inside.
- Close and secure the door.
- Turn the animal card around so the “Animal not in Enclosure” side is showing on the door.



Handling (any approved handler):

- When taking the doves out of their carriers, you can step them up onto your finger/hand.

- When taking chickens out position them with their head facing away from you. Use both hands to hold the wings (near their shoulders) against their bodies. Be careful not to press your fingers too firmly against the breastbone. They do not have a diaphragm and too much pressure against the chest can restrict breathing.
- All birds can be perched on your hand or forearm. Hold your arm as if you were going to shake someone's hand with your elbow tucked in at your side. Keep your free hand close to the bird to stabilize it as necessary.
- They can also be perched on top of a kennel or table, with your hands nearby in case they try to jump down.
- Never gesticulate to get birds to flap or extend their wings.
- Be aware of predator/prey relationships while handling birds. Do not stand near a person holding a snake or carnivorous mammal while you are handling a bird.
- **Signs of stress:** Panting, drooling, and spreading wings in a drooped position. If any of these behaviors last more than 30 seconds, put the animal away and be sure to notify Children's Zoo staff when returning the animal.



- Returning to the enclosure (CZ and trained education staff only):
- Unlatch the crate.
- When taking the doves out of their kennels, you can step them up onto your finger/hand.
- Slowly move toward the enclosure and set the bird inside.
- Close and secure the enclosure.
- Turn the “Animal not in Enclosure” sign back around.

Opossum (Luna) Handling Guidelines

Time limits & Temperature restrictions:

>95° F **No Handling**

91-95° F 15-minute **Maximum** (shaded areas are required)

86-90° F 45-minute **Maximum** (shaded areas are required)- This includes transport time to and from the area that Luna will be handled at. She should only be out on the table for 15-20 minutes.

65-85° F 1 hour on Zoo Grounds- This includes transport time. The total amount of time that Luna is on the table should be no longer than 30 minutes. Total time out may be increased on Zoomobiles to allow for the additional transport time.

*The temperatures listed above are set by the Director of Veterinary Services for outdoor animal handling. If the temperatures are outside of these ranges, animal handling will not be able to occur; no exceptions. Please be aware that any temperatures above 85° F may result in keepers needing to shorten the handling time an animal is available. Judgment and common sense apply. If weather conditions change or become threatening, it is the responsibility of the animal handler to assure safety for animals, staff, and guests.

Packing & Transportation (CZ staff only):

- The opossum should be transported in a kennel.
- In addition to the kennel, the handler should have:
 - Target pole
 - Training pouch

- Appropriate diet in cup
- Tongs to deliver food
- Table if needed
- A keeper will place the kennel in Luna’s enclosure with the door open. They will use the “target” command and reward to get Luna up and moving. Then she can be “kenneled” by pointing into the kennel and saying “kennel”, and rewarding when all four feet are inside. The keeper may have to tuck her tail inside.

Equipment set up:

- The handler should set up the portable table and lock the legs into position. It is best to set the table up so that there is a barrier behind it (wall, bench, table), but not so close that Luna can climb off the table onto the barrier. It is easier and less stress inducing for Luna to present him in an area where guests cannot approach from all sides.
- She may be handled on the rolling cart at the Front Entry stage. Remove any debris or bird feces from the cart before putting her on it.
- She can go on the larger of the “tree perches” that has a bigger flat surface. Be aware that if she climbs all the way up the pole, she may be hesitant to come back down.

Unpacking the Opossum for handling (any approved handler):

- The handler should place the kennel containing the opossum onto the table.
- Once the kennel is on the table the handler may open the door and allow Luna to walk out. If Luna does not walk out on her own the keeper may target her out of the kennel.



The opossum walking out on their own

Situation specific protocols:

Luna is not reinforced by physical contact. Therefore, guests ARE NOT allowed to touch Luna and should stand approximately 2 to 2 ½ feet away from the table when he is out.

The handler presenting Luna may gently touch her tail if they have been approved to do so. Luna should be reinforced with food before and after the touching occurs.

Signs of stress:

- When Luna is relaxed, she will calmly walk around the table sniffing. Food should be given consistently. She may sit up and wash her face; this is not necessarily a sign of stress, but is likely because she does not have food to keep her interested.
- If Luna is scared she may back up quickly toward the edge of the table. The handler can gently place their hand behind her so she does not fall. If she does fall off the table the kennel should immediately be put in front of her face. She will go for the first small dark space she sees.
- When Luna is very upset, she tends towards aggression before the ‘playing dead’ response. If she shows any aggression, like hissing or biting, the kennel should slowly and immediately be put in front of her.



The opossum is resting in this photo; note the closed mouth

- One of the opossum’s primary defense mechanisms is their ability to ‘play dead.’ This is not a conscious decision for an opossum but rather an involuntary stress response. (This is a rare behavior for our opossums to exhibit because they are so used to being around people.) When an

opossum is ‘playing dead’ they will lie on their side with their mouth half open and their eyes rolled back in their heads. Saliva may foam from their mouth and they may exude a foul-smelling substance from their anal glands. If Luna exhibits this behavior, the handler

should slowly place the kennel directly in front of her nose. If Luna is completely unresponsive, the handler can gently lift her back end. If she still does not respond, the handler can scoot her into the kennel and immediately return her to the Ambassador Animal building. The handler should take note of whatever happened that they believe induced Luna's stress response and inform AAB keepers of the situation upon her return.

- Less severe signs of agitation involve open mouth breathing, drooling, mouth gaping, pacing on the table or trying to climb off the table. If Luna is exhibiting these behaviors, ask the audience to step back, remove any possible distractions that may be making her nervous (a guest holding food in view or a stroller placed too close) and see if this helps relax Luna. If Luna's anxiety level continues to escalate, the handler should kennel her and return her to the Ambassador Animal building. Luna will usually relax immediately if anything startles her, so the handler should try targeting and rewarding before ending the session.

Returning the opossum to the kennel after handling:

- Luna is generally very good about returning to her kennel on her own. When the handler is finished with the session they should lift the kennel up onto the table and open the door. Point in and say "kennel" generally Luna will walk right in. Reward Luna when all four feet are in. The handler may have to tuck Luna's tail into the kennel before securing the door as she doesn't always pull it all the way in behind her.



The opossum returning himself to his kennel

Returning the opossum to his enclosure (CZ staff only):

- When unpacking Luna, keepers may place her kennel into her enclosure and see if she walks out on her own. If she does not walk out on her own, keepers should target her out and reward.

- The keeper who unpacks Luna should also put the table, training pouch and cup, target pole and kennel back in the proper locations. (See 'disinfection guidelines' below for how to care for those items)

Disinfection guidelines:

Luna's kennel should be disinfected any time she urinates or defecates in it. If Luna does not urinate or defecate in the kennel, keepers may place it back on the shelf. Even if Luna does not defecate in the kennel, it should be fully disinfected no less than once a month. To disinfect the kennel, keepers should fully scrub both inside and outside using Comet and rinse it thoroughly with water, spray the kennel with Trifectant, let it sit for 10 min and then rinse thoroughly with water.

The target pole and food cup should be washed in the AAB kitchen. Make sure the training pouch is empty, and then it can be placed back in the box.

The table should not need to be disinfected following a handling session if Luna does not urinate or defecate on the table. The table surface can be disinfected using Trifectant and then rinsed thoroughly with water. The table surface should be disinfected no less than once a month

Invertebrate Handling guidelines

Guidelines for an activity where invertebrates are being handled outside of the Bug House or in the Swap Shop (on or off zoo grounds), these protocols ensure adherence to USDA regulations.

General:

- Check the list of invertebrates that have been cleared by the USDA to take out of the Bug House for educational activities, chats or media appearances. This list is located on the door of the freezer. Anything native to Texas is okay to use. The list that is generated is primarily for animals that are non-natives. If you are not sure, ask a primary Bug House keeper.
- The Chilean rose hair tarantula and the tailless whip scorpion that are housed in the Swap Shop are approved to use for activities, chats, or media experiences.
- If you are presenting in the lobby of the Bug house you don't need to transport animals in a critter keeper (unless it is a stick insect—see below). Make sure the critter keeper has a secure lid (if any of the plastic securing parts are broken, don't use that critter keeper). You will need to place the critter keeper in a cooler to transport the animals.
- Never leave an occupied invertebrate box unattended in a public setting.
- Before taking any invertebrate out you must be checked off by an approved CZ staff trainer.
- Make sure to sign out the animals that you are using. The sign out sheet for animals living in the Bug House is in the green binder on the cart. For invertebrates living in the Swap Shop the sign out sheet is in the Green Barn.

Beetles

Removing from the enclosure (CZ staff only):

- Unlock the enclosure and gently lift the beetle from the enclosure.
- Place the animal in a critter keeper and secure the lid.
- Place the critter carrier in the cooler with a blanket to help secure the container



Handling (Any approved handler):

- When handling a flighted beetle, use your thumb to gently restrain the wing movement. If you have a thumb over the back (no pressure is really needed) it is not able to part the carapace and spread the wings.
- You may want to wear gloves with the large beetles to prevent the tarsi from sticking into your hands.
- Guests can gently touch the carapace of the beetle on the side.



Returning to the enclosure (CZ staff only):

- After the critter carrier is out of the cooler, unlatch the lid and remove.
- Gently pick up the animal and place back in the enclosure.
- Latch and secure the enclosure.
- The Critter keeper is taken to the sink, cleaned, dried and stored on the appropriate shelf. Any soil used in the container goes in a trash bag and into the freezer.



Millipedes

Removing from the enclosure (CZ staff only):

- Unlock the enclosure and gently lift the millipede from the enclosure, fully supporting its body.
- Place a small piece of moist food (ex. Cucumber) in the critter carrier.
- Place the animal in a critter keeper and secure the lid.
- Place the critter carrier in the cooler with a blanket to help secure the container



Handling (Any approved handler):

- When handling millipedes, you may have it on a log or on your hands.
- Always make sure the millipede has its body supported fully so it does not break.
- People can gently touch the millipede on its back (just watch to make sure guests don't push on it).
- If the millipede begins to exude fluid, it may need a rest. The fluid that is exuded is a mild irritant to predators and may be a mild irritant to humans as well. It is okay to take two millipedes and switch them.



Returning to the enclosure:

- After the critter carrier is out of the cooler, unlatch the lid and remove.
- Gently pick up the animal and place back in the enclosure.
- Latch and secure the enclosure.



Stick insects

Removing from the enclosure (CZ staff only):

- Unlock the enclosure and gently lift the stick insect from the enclosure.
- Place the animal in a critter keeper and secure the lid.
- Place the critter carrier in the cooler with a blanket to help secure the container



Handling (Any approved handler):

- When handling a stick insect, use a female.
- Place sturdy branches for them to hang from in the critter keeper. When doing the actual handling, the container must remain directly under the insect at all times to catch any eggs that may be laid (most important with the Australians, but this should be followed with all stick insects).
- You may either keep the stick insect on the branch, or hold it on a fairly vertical hand (they are more comfortable in a vertical position).



Returning to the enclosure (CZ staff only):

- After the critter carrier is out of the cooler, unlatch the lid and remove.
- Gently pick up the animal and place back in the enclosure.
- Latch and secure the enclosure.

Madagascar hissing cockroach

Removing from the enclosure (CZ staff only):

- Unlock the enclosure and gently lift the roaches from the enclosure.
- Place the animal (s) in a critter keeper and secure the lid.
- Place the critter carrier in the cooler with a blanket to help secure the container



Handling (Any approved handler):

- When handling the Madagascar hissing cockroach, use a male (The males have the small bumps on their heads). The females give pseudo live birth, and then lay an empty egg case later.
- Guests may touch the cockroach. They are flightless, so there is no need to restrain them on their back.



Returning to the enclosure (CZ staff only):

- After the critter carrier is out of the cooler, unlatch the lid and remove.
- Gently pick up the animal (s) and place back in the enclosure.
- Latch and secure the enclosure.



Tarantulas

Removing from the enclosure (CZ staff only):

- Use gloves when handling or transferring a tarantula
- Unlock the enclosure and gently lift the tarantula from the enclosure.
- Place the animal (s) in a critter keeper and secure the lid.



Handling (Any approved handler):

- To limit the chance of a tarantula falling, handle over a counter, table or podium.
- Always pack a log for the tarantula in the critter keeper. You may have the tarantula on the log, or handle it if you wish (and have been trained).
- Use gloves when handling or transferring a tarantula.
- Use caution, and avoid getting your face close, in case the urticating hairs are thrown.
- Guests are NOT allowed to touch tarantulas



Returning to the enclosure (CZ staff only):

- Unlatch the critter carrier lid and remove it
- Gently pick up the animal (s) and place back in the enclosure
- Latch and secure the enclosure



Tailless Whip Scorpion

Removing from the enclosure (CZ staff only):

- Unlock the enclosure and gently encourage the animal on to your hand.
- Once he is on your hand place him in the critter carrier and gently encourage him off of your hand on to the piece of cork bark in the critter carrier and secure the lid.



Handling (Any approved handler):

- Unlatch the critter carrier and gently remove the animal by placing your hands in the carrier and gently encourage him on to the palm of your hand

- Once the animal is in the palm of your hand, place your right-hand perpendicular to your left. This creates a barrier preventing the animal from running up your arm.
- He can move quickly and may crawl to the underside of your hand. If he does, simply turn your hand over slowly and gently so that the side of your hand he is on is on top again.
- Guests are NOT allowed to touch the whip scorpion
- Once the handling session is over place the animal back into the critter carrier and secure the lid.



Returning to the enclosure (CZ staff only):

- Unlatch the lid and remove the animal by gently encouraging the animal on to your hand
- Gently place animal and place back in the enclosure and gently encourage him off of your hand.
- Latch and secure the enclosure.



Advanced handling for reptiles

Advanced snake handling

Tier 2 snakes are handled slightly different than the Tier 1 snakes due to their individual behavior differences.

The Tier 2 snakes are:

- 0.1 Rainbow Boa "Iris" (CZ)
- 0.1 Angolan Python "Seraphina" (CZ)
- 1.0 Madagascar Hognose snake "Julien" (CZ)
- 0.1 Rainbow Boa "Yara" (NE)
- 1.0 Black-headed Python "Djumma" (NE)

Removing from the enclosure (CZ and NE staff only):

- Unlock the enclosure and remove the locking mechanism
- Slide the door open
- CZ snakes are transported in pillowcases. NE snakes are transported in designated snake bags.
- Place snake in a tie the top of the pillowcase/bag in a knot to secure the pillowcase.
- Place the pillowcase/bag inside a cooler
- Place an "out" sign on the enclosure
- Place the fact card for the snake on the zip tie loop on the cooler handle with a dog clip. Fact cards and clips are found on the shelf in the reptile room. NE does not use fact cards.



Removing after transport (any approved handler):

- Snakes are transported in a knotted pillowcase/bag in a cooler.
- If the snake is out of the pillowcase/bag, or if it is stuck in the knot when you open the cooler, close the lid and contact Children's Zoo staff.
- The snake can be removed from the pillowcase/bag inside the cooler, or the pillowcase/bag can be removed from the cooler and placed on a flat surface.
- Untie the knot and roll the material back until you can locate the head. Do not put your hands inside the pillowcase without locating the snake's head first! Never put your head inside the pillowcase to locate the snake.



Handling (any approved handler):

Rainbow Boas are arboreal so they like to climb. Be aware that she will try to climb on anything that you are near. She will also climb through belt loops and key rings so be cautious where she is climbing. The Rainbow Boa at NE normally remains coiled during presentations, but may become active or shift position without warning.

The Angolan python likes to explore so she will try to explore her surrounding area. Be aware of any nearby obstacles that she can attempt to climb on. She will also climb through belt loops and key rings so be cautious where she is climbing. If she is stressed she will turn her face sideways and rub on either your arm or hand, her neck will puff out below her mouth and/or she will hiss. If these behaviors start she should be placed back in the pillowcase and returned to the Green Barn.

1.0 Madagascar Giant Hognose snake is a rear fanged mildly venomous snake. The mild venom is not dangerous to humans.

1.0 Black-headed python is strong and active. He may hiss or startle if suddenly picked up. Handlers should give him warning that he is about to be picked up by touching him with the snake-hook or their hand, before removing him from the enclosure. He likes to explore during presentations and in some circumstances, it is acceptable to put him on the ground. Djumma

may coil tightly around hands or arms. If he does this, end the presentation and try to put him in his bag. He will usually release his grip and go into his bag.

Let snakes find the position that they are comfortable while they are being held. Make sure their head is still away but they are comfortable. It is not necessary to strongly restrain the snake's movement. Doing so may result in the snake feeling threatened, becoming more active, or attempting to bite.

Signs of stress: open mouth, hissing, excessive movement and/or turning body upside down and staying upside down, if these behaviors last more than 30 seconds, put the animal away and be sure to notify CZ staff when returning the animal. NE staff should return the animal to its enclosure and make a TRACKS record

Returning to the enclosure (CZ, NE and trained education staff only):

- The snake can be removed from the pillowcase inside the cooler, or the pillowcase can be removed from the cooler and placed on a flat surface.
- Untie the knot and roll the material back until you can locate the head. Do not put your hands inside the pillowcase without locating the snake's head first! Never put your head inside the pillowcase to locate the snake.
- Once you have the snake place her back into her enclosure. Place the pillowcase in the dirty laundry hamper in the kitchen. The cooler will need to be disinfected if the snake defecated in it. Otherwise it can be placed back on the shelf.

Argentinian black & white tegu (Gorn) Handling Guidelines

Removing from enclosure (CZ staff only):

-The tegu should be transported in the large, lightweight, container with locking lid that is designated for her.

-To pack up Gorn, the keeper should bring the container over to the enclosure

- Lift Gorn by placing one hand underneath her front legs and grasping the base of her tail with the other hand, then move Gorn out of the enclosure and set her on the floor.



Gorn's transport container



Keeper removing Gorn from her enclosure



Placing Gorn into transport container

- Place an “Out” sign on her enclosure.

- There is also a small, laminated card and a wet erase marker attached to the container. This is for the handler to record when Gorn defecates or produces urates while out on handling. If Gorn produces normal feces the handler should write FN (feces normal) on the card, for urates they should write UN (urates normal) and for both they should write FUN (feces urates normal) on the card. If Gorn does not defecate or produce any urates during the handling session, the handler should write ‘none’ on the card.

Handling (any approved handler):

It is helpful for the handler to set up in front of a barrier (wall, planter, etc) so that guests cannot approach from all sides and surround the handler and the tegu.

Unpacking the tegu for handling:

- To lift Gorn up, take your left arm, palm up and flattened, and hold it out horizontally just behind and to the left of Gorn. Then use your right hand to grip just behind her front legs and slide her onto your left arm. Her tail should be in between your arm and your side, not on the outside of your arm. Your left hand should be underneath her front legs with the thumb and ring finger under her front two legs. Gorn’s entire torso and base of her tail will be supported on your arm but both of her rear legs should be hanging on either side of your arm. If Gorn can get purchase on your arm, she may try to push off with her rear feet. Place your right hand on her back to keep her steady.



Lifting up Gorn's tail to slide the arm underneath



Sliding Gorn back onto the arm



Handler with tail tucked between arm and side



Hand on top to keep Gorn steady

-Gorn is not comfortable being held for long periods of time so the handler should be prepared for Gorn to struggle in their arms. If she struggles, gently squeeze your arm to your side to prevent Gorn from swinging her tail, use your left hand to gently squeeze underneath her legs and neck and squeeze with your right hand on her back above her front feet.

-If Gorn is struggling a lot wrap your right arm around her for extra support instead of placing it on her back. To do this place your right arm beneath her chin so that her head rests above the crook of your elbow. Then wrap your arm gently around Gorn so that your hand rests on her

back.



Placement of arm with head in crook of elbow



Arm wrapped around Gorn for extra support

-She may be placed onto the ground for handling. To do this kneel and place the arm holding Gorn on the ground, using your free hand slide her off your arm and onto the ground.

Situation specific protocols:

-Gorn is more comfortable being touched when she is on the ground. Set up with a barricade behind you and ask guests to approach one at a time. Be sure to alert guests to the location of her tail and toes so they don't accidentally step on them. Guests can touch Gorn, with two fingers, only on her back behind her harness.

-Gorn may walk around during the handling session but cannot be further than 4 feet from the transport container. Guests can touch Gorn while she is walking; Guests are not allowed to walk in front of her. If she gets too far from the container or tries to climb onto something the handler doesn't want her to, the handler may turn her in the opposite direction.

-Flicking her tongue out to explore and smell things is a normal behavior for her. The handler may allow Gorn to smell different objects. Divert her from smelling guest's shoes or feet.

-If, at any time she seems uncomfortable she should immediately be picked up off of the ground put in her transport container (see signs of stress below).

Signs of stress:

-Tail whipping, flailing on the leash, hissing, opening her mouth and holding it open for longer than it takes to yawn

-If any of these behaviors occur, the handler should immediately stop any guest contact with her and ask guests to step back. Wait for Gorn to relax and close her mouth before trying to carry her back to her enclosure. If the stress behavior persists the handler should lift Gorn up in the safest manner possible and return her to her transport container and to the AAB. Any stress behaviors should be reported to the Ambassador Animal keepers

Returning to the transport container after handling:

-To lift Gorn up, take your left arm, palm up and flattened, and hold it out horizontally just behind and to the left of Gorn. Then use your right hand to grip just behind her front legs and slide her onto your left arm. Her tail should be in between your arm and your side, not on the outside of your arm. Your left hand should be underneath her front legs with the thumb and ring finger under her front two legs. Gorn's entire torso and base of her tail will be supported on your arm but both of her rear legs should be hanging on either side of your arm. If Gorn can get purchase on your arm, she may try to push off with her rear feet. Place your right hand on

her back, on top of the harness, to keep her steady. Gently place her back into her transport container and secure the lid and latch it shut.

Returning to the enclosure (CZ and trained education staff only):

-Lift her out of the kennel by using one hand to support her under her front legs and grasping the base of her tail with the other hand. Once she is out of the container unclip the harness and pull on the top loop, around her neck, to loosen it. Then slip the loosened loop off of Gorn's head and return her to her enclosure by lifting her in the same manner as described above. It is not necessary to wear gloves when returning her to her enclosure.

- Remove the "out" sign from the enclosure.

Disinfection guidelines:

The tegu's transport container should be disinfected any time the tegu defecates in it. If the tegu does not defecate in the container, keepers may place it back on the shelf as is. Even if the tegu does not defecate in the container, it should be fully disinfected no less than once a month. To disinfect the container keepers should fully scrub both inside and outside using a cleaner and rinse it thoroughly with water, spray it with Trifectant, let it sit for 10 min then rinse it thoroughly with water.

Malayan sail-fin lizard (Palei) Handling Guidelines

Removing from enclosure (NE staff only):

-Palei can be transported in arms, for short distances, but is otherwise transported in a cooler.

-Palei may be either in the NE outdoor rainforest exhibit, or in her enclosure in NE large holding. Pick up Palei by placing one hand underneath her front legs and grasping the base of her tail with the other hand. If using a cooler, Palei can then be placed directly in the cooler. If transporting her in arms, continue to support Palei's front legs, rotate her so she is resting on the forearm, with her tail tucked between your elbow and side.



-Since Palei is missing one of her front legs, she is very wiggly when initially picked up. Generally, as soon as her body is supported, she stops wiggling.

-If Palei is in her Holding enclosure, flip the sign to say she is Out. If Palei is in the outdoor rainforest, remove her picture from the Outdoor Rainforest image and place it in the Holding image.

Handling (NE staff only)

-If Palei was transported in a cooler, be cautious when opening the lid, since she may try to scramble out. Lift Palei up from underneath, as described above. During presentation, she may be held either with either of the two previously described methods.

Signs of stress:

-Tail whipping, flailing, hissing, opening her mouth and holding it open for longer than it takes to yawn. If any of these behaviors occur, step back from the audience and try switching your grip. If the behavior persists, return her to her transport container and to the enclosure she was retrieved from.

Returning to the enclosure (NE staff only)

-Palei can be walked back to her enclosure in arms, or returned to her cooler.

-Since Palei is missing a front leg, she should be returned to a perch and given an opportunity to balance herself, before letting go of her.

-Flip the sign to say Palei is in, or replace her image on the Outdoor Rainforest sign, depending on location.

Advanced Handling for Birds

Screech Owl Handling Protocol

General:

- Keep carrier level and out of the sun when transporting. Make sure elastic is behind the S ring on the side.
- Signs of stress: panting/open mouth breathing, repeatedly bating.
- Sometimes the birds anticipate going back into the box after being handled and may try to jump off the glove towards the perch in the box. Watch for this behavior and reset them before attempting to step them off again.

Removing from the enclosure (CZ staff only):

- Unlatch the door to the mew and enter the enclosure and pull the door shut behind you.
- Place the raptor glove on your left hand and bring a leash with you.
- Place your gloved hand under the bird and use your right hand to adjust the jesses so they are lying across the gloved hand.
- Gently lift the gloved hand to encourage the bird to step onto the glove. Once both feet are on your glove move your hand away from the perch and adjust the jesses so the leash can be attached.
- Thread each leash clip through the hole in the jesses and clasp them shut.
- While holding on to the leash, open the door and exit the mew.
- Back the bird into the box and let it step down on to the perch you may ***gently roll your hand forward to encourage bird to step off.***
- Slide the gloved hand off the jesses and shut the door to the box.
- Make sure elastic is behind the S ring on the side of the box.
- Take the leash and tie the end to the handle of the box.
- Take the glove off and place it on top of the box (under the handle).
- Place an “Animal not in Enclosure” sign on the door.



Handling (any approved handler):

- Untie the leash from the top of the box and hold it in your hand.
- Place the glove on your left hand.
- Remove the elastic from the side of the box and open the door.
- Make sure one hand is on the leash at all times and slide gloved hand up the leash onto the jesses. Gently encourage the bird to step on to the glove.
- Wrap the leash around your hand - Jesses in front under thumb, through to the back between middle and ring finger, then wrap leash around middle, ring and pinkie finger.
- Make sure you have the proper position of the bird on your glove- Think of the bird as the ice cream on top of an ice cream cone, keep it level at all times. If the bird is too far up on your arm in either direction, you can raise or lower your arm slowly and the birds will move to the highest point. If the bird is facing the wrong direction, you can use two fingers to gently push on the tail in the direction you want to move the bird (watch out for talons!). Be aware of the level of your arm while handling.
- If a bird bates (attempts to fly off the glove), give them some time to recover on their own. (Don't swing them back up like a cup and ball game). If they don't get back up, you can use your non-gloved hand to help them. Lift them back up onto the glove using your hand on their back (watch out for beak and talons!). Once a bird is back on the glove, check the jesses for twisting and unwrap the leash and readjust if necessary.
- Screech owls need space, have people stand 3-4 feet away. Make sure your back is against a wall or a fence so that people can't come up behind you.

To return to the transport box:

- When putting the bird back into box, make sure leash is completely unwrapped before moving bird into box.
- Back the bird onto a perch and gently encourage it to step off of your glove you may ***gently roll your hand forward to encourage bird to step off.***
- Slide the gloved hand off the jesses and shut the door to the box.
- Make sure elastic is behind the S ring on the side of the box.
- Take the leash and tie the end to the handle of the box.
- Take the glove off and place it on top of the box (under the handle).

Returning to the enclosure (CZ and trained education staff only):

- Untie the leash from the top of the box and hold it in your hand.
- Place the glove on your left hand.
- Remove the elastic from the side of the box and open the door.
- Make sure one hand is on the leash at all times and slide gloved hand up the leash onto the jesses. Gently encourage the bird to step on to the glove.
- Unlatch the door to the mew, step in and pull the door shut.
- Unlatch the leash clips and remove them from the jesses.
- Back the bird onto a perch and gently encourage it to step off your glove you may ***gently roll your hand forward to encourage bird to step off.***
- Exit the mew and latch the door.
- Remove the “Animal not in Enclosure” sign off of the door and hang in the appropriate spot.
- If there is feces or urates in the box or on the perch clean the box and dry it.
- Return the clean box to the shelf in the Green Barn, hang the leash on the hooks and place the glove in the appropriate box.



Senegal Parrot (Picasso) Handling Guidelines

*Only Children's Zoo Keepers Education Staff are permitted to handle Picasso in outdoor situations. Any volunteer or other staff that are handling Picasso must do so indoors only. In these instances, the temperature restrictions do not apply.

Removing Picasso from her enclosure (CZ staff only):

- The Senegal should be transported in a small, metal, parrot cage with newspaper lining the bottom. There is a cloth cover for the cage as well. The keeper packing up Picasso should also give the handler Picasso's clear 'step-up stick,' a small plastic baggie with 10 sunflower seeds in it and a parrot stand perch.
- When packing up Picasso keepers should have the crate nearby, with the door open, so that they do not have to walk very far while holding Picasso on her 'step up stick.' This decreases the chance of her flying off while being moved from her cage to the transport cage.
- Keepers should open the door to Picasso's enclosure and present the 'step up stick' to Picasso and say "step up". The stick should be held directly in front of Picasso, and should be at a level that is above Picasso's feet (so that she does in fact have to step UP) and slightly below her chest.
- Picasso should respond by stepping up onto the stick with both feet. Once Picasso's second foot comes onto the stick, the keeper should bridge Picasso with the word "good". The keeper should then, slowly, move Picasso's stick into her crate. The stick should be held slightly lower than the perch in the cage so that Picasso has to step up onto the perch. When Picasso is placed close to the perch the keeper should say "step off". Picasso should then step up onto the perch in the cage. Once Picasso's second foot comes off of the 'step up stick' and onto the perch the keeper should bridge and reward Picasso with a sunflower seed.
- Once Picasso is in the crate the door should be secured.

Equipment set up:

Picasso is presented on a parrot stand perch. It is helpful to have the perch placed so that there is a barrier behind it (wall, bench or table) or some stanchions placed around the perch, it is easier and less stress inducing for the parrot to present her in an area where guests cannot approach from all sides. When presenting Picasso in the Swap Shop, handlers will often set up stools around the perch as a barrier between Picasso and guests. Picasso does best when guests

are at least 3 feet away from her when she is in public. Before removing her from the enclosure make sure both cats that live in the Swap shop are secured in the office.

Unpacking the Senegal for handling (Any approved handler):

- Once all the equipment is set up for Picasso the handler should make sure that Picasso is standing on the perch before trying to remove her from the crate.
- Once she is standing on her perch the handler may then open the door to Picasso's crate, present the 'step up stick' to Picasso and say "step up". The stick should be held directly in front of Picasso, and should be at a level that is above Picasso's feet (so that she does in fact have to step UP) and slightly below her chest.
- Picasso should respond by stepping up onto the stick with both feet. Once her second foot comes onto the stick, the handler should bridge with the word "good". The handler should then, slowly, move Picasso's stick out of her travel cage and towards the parrot perch stand. The stick should be held slightly lower than the perch so that Picasso has to step up onto the perch. When Picasso is close to the perch, the handler should say "step off". Picasso should then step off the stick and onto the perch the handler should bridge (again with the word 'good') and reward Picasso with a sunflower seed.



Picasso demonstrating 'step up' out of the travel cage



Picasso demonstrating 'step off' onto her perch

Situation specific protocols:

The Senegal parrot has a sharp beak and may bite without provocation. Therefore, guests ARE NOT allowed to touch Picasso and should stand approximately 3 feet away from the perch when the parrot is out.

Never turn your back on Picasso

During the handling session Picasso, should ALWAYS be in view of the trainer. Sometimes, when a handler is answering a guest question, they may inadvertently turn their back on Picasso to talk to the guest; this is not acceptable. Handlers should position themselves so that Picasso is in front of them and slightly off to one side and should be within arms distance of Picasso during the session. This way the handler can both see Picasso and the audience at the same time and be in better control of the situation.

Can a handler pet Picasso?

The keeper presenting Picasso may occasionally pet or touch her during the session as an additional reinforcer for good behavior. Contact should be limited to once or twice during the session as the goal is not to make guests want to pet or own a pet parrot, the goal is to teach guests about parrots in the wild and encourage guests not to purchase a parrot on a whim. If a handler does use petting to reinforce Picasso for being quiet, they should only scratch her on the head with one finger and should do so knowing that she may nip or bite at the finger on occasion. If Picasso does nip at the finger the handler should never reward this behavior and should not pet her for the remainder of the session.

Can a handler talk to Picasso?

Speaking quietly to Picasso in a conversational voice is also acceptable during the session so long as the keeper does not use the bridge word 'good.' For example, you may talk to Picasso in a soft, soothing voice on occasion and tell her she is being wonderful or that everything is okay if she is being calm or even as a way to try and relax her when she is nervous. However, the handler should remember that their primary focus should be on teaching guests about Picasso, not having one on one time with her.

What should the handler do if Picasso is talking or whistling?

During the handling session Picasso, may occasionally make quiet noises, say words or whistle. These are acceptable behaviors, though trainers do not want handlers reinforcing these behaviors during the handling session. If Picasso is doing any of the behaviors listed above, the handler should just continue speaking to the public and explain that she can make different sounds or say some words but that these behaviors are 'on cue' from her trainers. Therefore, she should only be doing them when a trainer gives the specific signal and thus the handler does not want to reward her at the wrong time and accidentally change her signal/cue. In these instances, the handler should not give Picasso any sunflower seeds while she is talking or whistling and NEVER give her a seed directly following one of these behaviors, as this is

reinforcing and encourages her to do this more often. Instead, handlers should continue speaking to the public and wait for 30-60 seconds of silence before offering a sunflower seed; handlers do not HAVE TO offer her any rewards at all once she is done talking or whistling.

When should the handler give Picasso a sunflower seed?

The sunflower seeds given to the handler for the session are to be used to move Picasso to and from her travel cage to the perch and as reinforcers for good behavior. If Picasso is sitting quietly on her perch (at least 30 seconds of silence, longer periods of silence are better) the handler may give her a sunflower seed as a reward. The sunflower seeds may also be used by the handler to demonstrate how parrots use their feet to grip their food and open the seeds up. If the handler chooses to demonstrate this behavior, they should be sure that Picasso is not doing any sort of behavior (screaming or whistling or talking) for at least 30 seconds before offering the seed. The preferred action for Picasso when a seed is offered to her would be sitting quietly and looking around or possibly preening her feathers (a sign of relaxation).

Signs of stress:

Screaming:

When Picasso is nervous, or mildly stressed she will emit a piercing, two tone, scream. Generally, this is just a signal that she is a bit nervous of the proximity or size of the crowd. If Picasso makes this noise the handler should check to make sure the crowd is an appropriate distance away and may ask guests to quiet down for a moment. The handler may talk softly to Picasso in a reassuring voice but they should NEVER give her a sunflower seed when she makes this noise, as trainers do not want to encourage her to scream for seeds. It is okay, though not necessary, to reward Picasso with a sunflower seed when she is being calm and quiet on the perch. If she has recently been screaming, handlers should wait for at least 30 seconds of silence before offering her a reward.

If Picasso does not quiet down and continues to scream the handler should re-evaluate the situation. If there is a crowd that is too large and the handler does not feel that the situation will calm down, they should return Picasso to her cage and end the session. If Picasso becomes really agitated or is suddenly startled she may try to fly off the perch.

Flying off:

If Picasso flies off the perch and lands on the ground or a guest the handler should immediately go to where Picasso is and protect Picasso from any guests grabbing or stepping on her. If Picasso is on the ground the handler may attempt to step her up using the step-up stick if this can be done safely. If there is any IMMEDIATE danger to Picasso (she has landed ON a guest, another animal is being handled nearby or a guest is trying to grab her) the handler may make the decision to pick up Picasso with their hand to prevent anything from happening to her. When Picasso is manually restrained she may bite the handler but that is preferable to allowing any injury to come to guests or Picasso. In any instance that Picasso flies off the perch, she should be immediately returned to her carrier and taken back to the Ambassador Animal Building. The handler should inform the Ambassador Animal keeper of the incident upon their return.

Returning the Senegal Parrot to the kennel after handling:

- The handler should present the 'step up stick' to Picasso, while she is on her perch, and say "step up". The stick should be held directly in front of Picasso, and should be at a level that is above Picasso's feet (so that she does in fact have to step UP) and slightly below her chest.
- Picasso should respond by stepping up onto the stick with both feet. Once Picasso's second foot comes onto the stick, the handler should bridge Picasso with the word "good". The handler should then, slowly, move Picasso's stick into her crate. The stick should be held slightly lower than the perch in the cage so that Picasso has to step up onto the perch. When Picasso is placed close to the perch the handler should say "step off". Picasso should then step up onto the perch in the cage. Once Picasso's second foot comes off of the stick and onto the perch the keeper should bridge and reward Picasso with a sunflower seed.



Picasso demonstrating 'step up' from her perch



Picasso demonstrating 'step off' into her travel cage

- Once Picasso is in the crate the door should be secured.

Returning the Senegal to her enclosure (CZ and trained education staff only):

- The keeper returning Picasso to her enclosure should take the crate and place it near her enclosure.
- The keeper should then open the door to Picasso's crate, present the "step up stick" to Picasso and say, "step up". The stick should be held directly in front of Picasso, and should be at a level that is above Picasso's feet (so that she must step UP) and slightly below her chest.
- Picasso should respond by stepping up onto the stick with both feet. Once Picasso's second foot comes onto the stick, the keeper should bridge with the word "good". The keeper should then, slowly, move Picasso's stick out of her crate and into her enclosure. Once in the cage, the stick should be held slightly lower than the perch so that Picasso must step up onto the perch. When Picasso is placed close to the perch the keeper should say "step off". Picasso should then step up onto the perch in the enclosure. Once Picasso's second foot comes off the 'step up stick' and onto the perch the keeper should bridge and reward Picasso with a sunflower seed.
- Once Picasso is in the enclosure the keeper should close the door and put away the rest of Picasso's handling equipment. See 'Disinfection guidelines' below for instructions on cleaning up and putting away the rest of the equipment.

Disinfection guidelines (CZ Staff):

The soiled newspapers should be removed from Picasso's travel cage and disposed of following each handling session. The entire cage should be fully disinfected no less than once a month. To disinfect the cage keepers should fully scrub both inside and outside using a cleaner (ex. Comet) and rinse it thoroughly with water.

The step-up stick may be washed with dish soap if it is soiled and should be returned to the clear plastic bin below Picasso's cage for storage. The cage cover should be washed with regular zoo laundry and detergent once a month.

The parrot stand should be hosed off and cleaned with a cleanser (such as Comet or Joy) if Picasso defecates on the base of the perch. The perch is stored in the Ambassador Animal Building. Even if Picasso does not defecate on the stand, the entire stand should be cleaned no less than once a month.

Bald Eagle (Apollo) handling guidelines

(CZ staff only)

How to remove from his enclosure:

Before you go into his mew, ask him to go to his perch.

- Stand in front of him and to his right side.
- Present the glove and tap a couple times in the middle of the glove.
- Apollo will hop on the glove and then the jesses should be secured.
- Give him a reward with your right hand that should have a small glove on it.
- Bring the food to his face and open your hand.
- Before exiting the secondary of the mew, the leash and swivel need to be attached.
- Reward with food once everything is secure.

Putting Apollo in his crate:

- The crate should already be set up outside on a table next to Roxie's mew.
- The door of the crate should already be opened up.
- Once Apollo is on the glove, back him into the crate and have him step off onto the perch.
- When he is in all the way in, give him a reward and shut the door.
- His leash will stay on and the extra leash will be tied to the outside of the box.
- Use the key and lock the door shut before transporting anywhere.

Handling Apollo:

- Unlock his crate and untie leash from the side.
- Hold onto the leash with your right hand and open the crate.
- Using your right hand, grab the jesses and have him step up onto your glove.
- Once he is on your glove and secure, reward with food.
- When giving presentations to the public you will need stations to give space away from the public.
- No up-close pictures with guest.
- When talking with guest offer food to Apollo for reinforcement for being out with guest.
- When the presentation is over, follow the same steps as before when putting him back in his crate.

Returning to mew:

- Follow the same procedure and remove him from his crate.
- Bring Apollo into the secondary area of the mew and undue his leach and swivel.
- Reward with food.

- Open the primary mew door and back him onto his perch, reward with food.
- Leave the mew and do not turn your back on him.
- Close the door and latch it.

Kookaburra Handling Protocol

Removing from the enclosure (CZ staff only):

Stepping up

- When stepping Sydney up in the enclosure, hold up left hand, with palm facing you, six inches away at her foot level. Say “step up” and then move hand to her feet (if you don’t give her the cue, she may snap at your hand). Lift up left toes until she steps onto your hand and then continue lifting until she steps up with her right foot.
- When holding on hand, use thumb to lightly hold the toes on her left foot in place to avoid foot slippage.
- Slide her jesses through the holes in her anklets
- Drape the jesses over your pointer finger and hold them with your middle, ring and pinky fingers. Hold your thumb over her feet to avoid her foot from slipping.
- To put her back on the perch, turn her so she is facing towards the perch and say “perch”. Be sure to be close enough to the perch that she doesn’t fly to it.

Kenneling

- Face her towards the perch in the kennel and say “perch.” After she hops onto the perch, close the door and reward her through the side of the kennel with the long silver tweezer style tongs.
- When stepping up out of the kennel, use same protocol for stepping up in enclosure, but once she is on hand, keep her in the kennel and bring her jesses around to the front of your hand starting with the left foot. Once both jesses are secure in your bottom three fingers, bridge her and reward her immediately upon taking her out of the kennel. Make sure the jesses aren’t tangled/wrapped around her legs.
- Put a piece of newspaper through the door of the kennel to keep her occupied while in the kennel (she will bang around quite a bit if you don’t. A piece of browse can be used too).

Handling (Any approved handler):

Rewarding/feeding

- Hold food on a flat hand and present it to her. Make sure to get it close enough to her so that she doesn’t have to lean too far forward.

Calling

- She sometimes calls better while out when she is paying attention to you, so you can say her name to get her attention if she is distracted.
- Use a tongue trill until she is fully calling and then stop and let her finish her call.
- If she isn't responding to the trill and you need to have her call, you can also whistle or make a "wa wa wa wa" sound.
- Signs of stress: attempting to fly off hand repeatedly, attempting to bite at hands when food is not being offered, panting, excessive vocalization



***Sydney must be removed from the kennel inside some sort of secondary confinement. This can be a building or a zoomobile van, anything that is fully enclosed. You may then walk her to an outside encounter area. She does not do well with walking long distances.

Returning to the enclosure (CZ and trained education staff only):

- When stepping up out of the kennel, use same protocol for stepping up in enclosure, but once she is on hand, keep her in the kennel and bring her jesses around to the front of your hand starting with the left foot. Once both jesses are secure in your bottom three fingers, bridge her and reward her immediately upon taking her out of the kennel. Make sure the jesses aren't tangled/wrapped around her legs.
- Remove the jesses from the holes in her anklets
- To put her back on the perch, turn her so she is facing towards the perch and say "perch". Be sure to be close enough to the perch that she doesn't fly to it.

Harris's Hawk (Savannah) Handling Protocol

Removing from the enclosure (CZ staff only):

- To handle Savannah, you will need to know the falconer's knot and can do it one handed and without looking.
- Picking her up off the perch
 - Make sure the outside door is latched from the inside. Check to make sure that she hasn't become untied and she is still secured to the perch.
 - Enter the mew and close the door behind you.
 - Approach her with gloved hand in front of you. She should stay on the perch. If she flies towards you back away and wait for her to go back to her perch.
 - Squat down and grab the leash with your gloved hand. Slide the glove up the leash until you are holding the jesses and your hand is close to her foot.
 - Say "step up" and she should step on to the glove. Do not pull up on the jesses. If she does not immediately step onto the glove you may touch her toe with your finger or roll your glove slightly towards you to encourage her to step on to the glove.
 - Once she is on the glove, secure the jesses between your ring finger and your middle finger. Untie the leash and wrap it around your pinky and ring fingers.
- Putting Savannah in the box
 - Have the box waiting, unlatched, on top of the cupboard in the secondary hallway.
 - When exiting the mew, you should go through the door before Savannah does.
 - Unwind the leash from your fingers but keep the jesses secured between your ring and middle fingers and continue to hold the end of the leash with your right hand.
 - Use your right arm/elbow to hold the box door open and back Savannah into the box. If she is moving around or raising her wings you may put your right hand lightly on her back to guide her into the box.
 - Slide your gloved left hand down the leash as you close the door with your right hand. The leash should go out the top of the box and be tied to the handle.
 - Close the mew door and put the "out" tag on the door.
 -

Handling (any approved handler):

- Set the box on a stable surface. Make sure that guests are arranged so that no one can sneak up and startle Savannah as you take her out of the box.
- Untie the leash from the top of the box and hold it in your gloved left hand.
- Unlatch the box with your right hand and open the door, sliding your left hand up the leash until you have the jesses as the door opens. Hold the door open with your right arm/shoulder.

- Say “step up” and she will step on to the glove. She may step on to the glove as soon as your hand approaches her foot (and before you give the verbal) so be ready.
- Carefully remove her from the box, secure the jesses between your ring and middle fingers, and wrap the leash around your fingers.
- Guests should stay approximately 5 feet away from Savannah. Be aware of where the people can approach from as she does not like to have people walking up to you on all sides. Watch for children running up towards you. She does not like standing under low tents or overhanging branches.
- She typically starts to move around after about 20 minutes. She will do a hopping motion around on the glove and extend her wings but it does not usually progress into full bating (attempting to fly off the glove).
- Return her to her box by unwinding the leash from your fingers. Keep the jesses secured between your ring and middle fingers and continue to hold the end of the leash with your right hand.
- Use your right arm/elbow to hold the box door open and back Savannah into the box. If she is moving around or raising her wings you may put your right hand lightly on her back to guide her into the box.
- Slide your gloved left hand down the leash as you close the door with your right hand. The leash should go out the top of the box and be tied to the handle.

- Signs of stress: Bating repeatedly, excessive vocalizations

Returning Savannah to the enclosure (CZ staff only):

- Set the box on the top of the cabinet in the hallway of the mews. Make sure the outside door is latched from the inside.
- Untie the leash from the box and hold it in your gloved left hand.
- Unlatch the box with your right hand and open the door, sliding your left hand up the leash until you have the jesses as the door opens. Hold the door open with your right arm/shoulder.
- Say “step up” and she will step on to the glove. She may step on to the glove as soon as your hand approaches her foot (and before you give the verbal) so be ready.
- Carefully remove her from the box, secure the jesses between your ring and middle fingers, and wrap the leash around your fingers.
- Unlatch the mew door and open it. You should enter the mew first and then bring Savannah into the mew behind you.
- Squat down near the perch and unwrap the leash from around your fingers. Keep the jesses secured through your fingers.

- Tie the leash to the ring using a falconer's knot and a secondary half knot. ALWAYS tie the secondary knot. Pull the falconers knot so it is tight against the ring.
- Back Savannah up to the perch and say "perch". She should step off the glove on to the perch. If she does not, you can gently roll your hand back towards the perch to encourage her.
- Be prepared to move away from the perch as soon as you let go of the leash. Let go of the leash and move away quickly. Keep your gloved hand in front of you as she will occasionally grab the glove with her foot after you release her.
- Close the door and secure with the clip, return the out tag to its spot on the mesh.
- Wash out the box if she has defecated and return it to the correct spot in the green barn.
- Other notes
 - Handlers will not be using food with Savannah while she is on the glove.
 - Please do not touch Savannah (feet, keel, etc.) while she is on the glove unless specifically asked to do so by a trainer.

Great Horned owl (Roxie) Handling Protocol

General:

- Signs of stress: panting/open mouth breathing, repeatedly bating, not eating while out.
- Check with dingo trainers before taking her out and make sure they will not be walking the dingoes during her session.

Removing from the enclosure (Approved CZ staff only):

- Unlatch the door to the mew and enter the enclosure and pull the door shut behind you and latch the inside latch. Open secondary door and close behind you.
- Place the raptor glove on your left hand and bring a leash with you.
- Place your gloved hand under the bird and ask her to step up. She will bite at the glove for a few seconds but once she places her right foot on the glove you can begin raising your hand slightly until she places her other (left foot) onto the glove.
- Once both feet are on your glove, move your hand away from the perch and bring her into holding position.
- Adjust the jesses so the leash can be attached. Both jesses should come over her feet to the inside of her legs, then they should be placed between your middle and ring finger.
- Thread each leash clip through the hole in the jesses and clasp them shut.

- Wrap the leash around your bottom 2 fingers, somewhat tightly, until there is no leash left hanging.
- While holding on to the leash, open the doors and exit the mew.
- Place an “Animal not in Enclosure” sign on the door, if taking her out for extended period of time.
- Walk her to desired location.



Handling (Any approved handler):

- Make sure you have the proper position of the bird on your glove- keep it level at all times. If the bird is too far up on your arm in either direction, you can raise or lower your arm slowly and the bird will move to the highest point. If the bird is facing the wrong direction, you can move your arm slightly until it rights itself. Be aware of the level of your arm while handling.
- If a bird bates (attempts to fly off the glove), give them some time to recover on their own. Roxie should right herself relatively quickly.
- Roxie needs space, have people stand 10-15 feet away. Make sure your back is against a wall or a fence so that people can't come up behind you. Be aware of your surroundings.

Returning to the enclosure (Approved CZ staff only):

- Walk slowly back to the front of her mew.
- Trainer steps backwards into secondary and closes the door and latches it from the inside.
- Trainer then steps backwards into holding.
- Unlatch the leash clips and remove them from the jesses.

- Back her onto a perch and gently encourage her to step off of your glove you may ***gently roll your hand forward to encourage bird to step off.***
- Exit the mew and latch both doors.
- Remove the “Animal not in Enclosure” sign off of the door if necessary and hang in the appropriate spot.
- Return items to the Green Barn, hang the leash on the hooks and place the glove in the appropriate box.



Green-winged macaw (Clark) Handling Guidelines

*Only trained Natural Encounters Staff are permitted to handle Clark.

Removing Clark from her enclosure (NE staff only):

- Green-winged macaw should be transported in an extra-large vari-kennel with a wooden perch installed and newspaper on the bottom. A large sheet may be draped over the kennel to prevent guests from peeking in or protect from weather, but is not required. When packing up Clark, it is beneficial to bring a training pouch with a couple of peanuts or treats, Clark’s step-up stick and if desired, a parrot stand.
- Keepers should open the door to Clark’s enclosure and present the ‘step up stick’ to Clark and say “step up”. The stick should be held directly in front of Clark, and should be at a level that is above Clark’s feet (so that she does have to step UP) and slightly below her chest.
- Clark should respond by stepping up onto the stick with both feet. Once Clark’s second foot comes onto the stick, the keeper should bridge her with the word “good” and may give her a small treat. The keeper then should bring Clark’s stick into her crate. The stick should be held slightly lower than the perch in the cage so that Clark must step up onto the perch. When Clark is placed close to the perch the keeper should say “step off”. Clark should then step up onto the perch in the cage. Once Picasso’s second foot

comes off the 'step up stick' and onto the perch the keeper should bridge and reward Clark with a sunflower seed.

- Once Clark is in the crate the door should be secured.

Equipment set up:

Clark is presented either on a parrot stand perch or on her step-up stick. It is helpful to have the perch placed so that there is a barrier behind it (wall, bench or table) or some stanchions placed around the perch, it is easier and less stress inducing for the parrot to present her in an area where guests cannot approach from all sides. Similarly, take note of any areas that might be easy for Clark to climb on and be sure she can't access those areas. Guests should be at least 3 or 4 feet away from Clark, so they can't suddenly reach out to touch her.

Unpacking the Green-winged macaw for handling (NE staff only):

- Once all the equipment is set up for Clark the handler should make sure that Clark is standing on the perch before trying to remove her from the crate.
- Once she is standing on her perch the handler may then open the door to Picasso's crate, present the 'step up stick' to her and say "step up". The stick should be held directly in front of Clark, and should be at a level that is above Clark's feet (so that she does have to step UP) and slightly below her chest.
- Clark should respond by stepping up onto the stick with both feet. Once her second foot comes onto the stick, the handler should bridge with the word "good". The handler should then, slowly, move Clark's stick out of her travel cage and towards the parrot perch stand. The stick should be held slightly lower than the perch so that Clark must step up onto the perch. When Clark is close to the perch, the handler should say "step off". Clark should then step up onto the perch. Once Clark's second foot comes off the stick and onto the perch the handler should bridge (again with the word 'good') and reward her with a sunflower seed.

Situation specific protocols:

The Green-winged macaw has a sharp beak and may bite. Therefore, guests ARE NOT allowed to touch her and should stand approximately 3 feet away from the perch when the parrot is out.

Never turn your back on Clark

During the handling session Clark, should ALWAYS be in view of the trainer.

Can a handler pet Clark?

The keeper presenting Clark may occasionally pet or touch her during the session as additional reinforcement for good behavior. Contact should be limited to once or twice during the session as the goal is not to make guests want to pet or own a pet parrot, the goal is to teach guests about parrots in the wild and encourage guests not to purchase a parrot on a whim.

Can a handler talk to Clark?

Talking with Clark during presentations is acceptable and encourage. However, the handler should remember that their primary focus should be on teaching guests about Clark, not having one on one time with her.

During the handling session Clark, may occasionally make noises or say words. These are acceptable behaviors, though handlers should not reinforce these behaviors unless a cue was given first. If Clark is doing any of the behaviors listed above, the handler should just continue speaking to the public and explain that she can make different sounds or say some words but that these behaviors are 'on cue' from her trainers. Therefore, she should only be doing them when a trainer gives the specific signal and thus the handler does not want to reward her at the wrong time and accidentally change her signal/cue.

When should the handler give Clark reinforcement?

Reinforcement may be given to move Clark to and from her cage, the crate, and as reinforcement for good behavior. Large nuts may also be used to demonstrate how parrots use their feet to grip their food and strength of beak.

Signs of stress:

Screaming:

When Clark is nervous, or mildly stressed she will emit a piercing, two syllable, scream. Generally, this is just a signal that she is a bit nervous of the proximity or size of the crowd. If Clark makes this noise the handler should check to make sure there is nothing unusual going on nearby and that the crowd is an appropriate distance away and may ask guests to quiet down for a moment. The handler may talk to Clark in a reassuring voice but they should NEVER give her a reward when she screams. It is okay, though not necessary, to reward Clark with a when she is being calm and quiet on the perch. If she has recently been screaming, handlers should wait for at least 30 seconds of silence before offering her a reward.

If Clark does not quiet down and continues to scream the handler should re-evaluate the situation and consider ending the presentation.

Swaying:

When Clark is unhappy, she sometimes sways from side to side, not to be confused with her vertical “dancing” behavior. If Clark starts swaying, handlers should evaluate the presentation area, crowd proximity, etc....and try changing position or asking Clark for a different behavior.

Returning the Green-winged Macaw to the kennel after handling:

- If Clark is on a parrot stand, the handler should present the ‘step up stick’ to Picasso, while she is on her perch, and say “step up”. The stick should be held directly in front of Clark, and should be at a level that is above her feet (so that she does have to step UP) and slightly below her chest.
- Clark should respond by stepping up onto the stick with both feet. Once Clark’s second foot comes onto the stick, the handler should bridge Clark with the word “good” and may offer a reward. The handler should then, move Clark’s stick into her crate. The stick should be held slightly lower than the perch in the cage so that Clark must step up onto the perch. When she is placed close to the perch the handler should say “step off”. Clark should then step up onto the perch in the cage. Once Picasso’s second foot comes off the stick and onto the perch the keeper may bridge and reward.
- Once Clark is in the crate the door should be secured.

Returning the Green-winged Macaw to her enclosure (NE staff only):

- Clark may be stepped out of her crate from the back of the cart or other appropriate surface. The keeper should then open the door to the crate, present the “step up stick” and say, “step up”. The stick should be held directly in front of Clark, and should be at a level that is above her feet (so that she does have to step UP) and slightly below her chest.
- Clark should respond by stepping up onto the stick with both feet. Once her second foot comes onto the stick, the keeper should bridge with the word “good” and may offer a reward. The keeper should then, move Clark’s stick out of her crate and into her enclosure. Once in the cage, the stick should be held slightly lower than the perch so that Picasso must step up onto the perch. When Clark is placed close to the perch the keeper should say “step off”. She should then step up onto the perch in the enclosure.

Once her second foot comes off the 'step up stick' and onto the perch the keeper may bridge and reward.

- Once Clark is in the enclosure the keeper should close the door and put away the rest of the handling equipment. See 'Disinfection guidelines' below for instructions on cleaning up and putting away the rest of the equipment.

Disinfection guidelines (NE Staff):

The soiled newspapers should be removed from the travel cage and disposed of following each handling session. The entire cage should be fully disinfected no less than once a month. To disinfect the cage keepers should fully scrub both inside and outside using Trifectant and rinse it thoroughly with water.

The step-up stick may be washed with dish soap if it is soiled and should be returned to the parrot room for storage.

The parrot stand should be cleaned with Joy if Clark defecates on the base of the perch. The perch is stored in the NE parrot room. Even if Clark does not defecate on the stand, the entire stand should be cleaned once a month.

African Gray Parrot (Lucy) Handling Guidelines

*Only trained NE Staff are permitted to handle Lucy.

Removing Lucy from her enclosure (NE staff only):

- The African Gray parrot should be transported in her blue and tan vari-kennel, with newspaper lining the bottom. The vari-kennel is found on the shelf in the parrot room. A cloth cover is optional. When packing up Picasso keepers should have the crate nearby, with the door open.
- Keepers should open the door to Lucy's enclosure and ask her to step-up onto their hand
- Lucy should respond by stepping up onto the stick with both feet. Once Lucy's second foot comes onto the keeper's hand, the keeper should gently, cover the tops of Lucy's feet with their thumb. The idea is not to clamp Lucy's feet down, but to remind Lucy that she should not fly. The keeper may bridge and reward Lucy if desired. The keeper should then, move Lucy into her crate. The hand should be held level or slightly lower than the perch in the crate so that Lucy can easily step onto the perch. When Lucy is placed close to the perch the keeper should say "step off". Lucy should then step up

onto the perch in the cage. Once Lucy's second foot comes off and onto the perch the keeper may bridge and reward Lucy.

- Once Lucy is in the crate the door should be secured.

Equipment set up:

Lucy is presented on the hand. There is no required equipment. It is easier and less stress inducing for the parrot to present her in an area where guests cannot approach from all sides. Guests should be at least 3 feet away from her when she is in public.

Unpacking the African Gray parrot for handling (NE staff only):

- The keeper should open the door to Lucy's crate, present their hand to Lucy and say "step up". Keeper's hand should be held directly in front of Lucy, and should be at a level that is above slightly above her feet.
- Lucy should respond by stepping up onto the edge of the keeper's hand. Once her second foot comes onto the stick, the handler should cover the tops of Lucy's feet with their hand and may bridge and reward. The handler may then move bring Lucy to the presentation area.

Situation specific protocols:

The African Gray parrot has a sharp beak and may bite without provocation. Therefore, guests ARE NOT allowed to touch her and should stand approximately 3 feet away from the perch when the parrot is out.

Can a handler pet Lucy?

The keeper presenting Lucy may occasionally pet or scratch her during the session as an additional reinforcement for good behavior. Contact should be limited to once or twice during the session as the goal is not to make guests want to pet or own a pet parrot, the goal is to teach guests about parrots in the wild and encourage guests not to purchase a parrot on a whim. If a handler does use petting/scratching to reinforce Lucy for good behavior, they should only scratch her on the head with one finger. If Picasso does nip at the finger the handler should never reward this behavior and should not pet her for the remainder of the session.

Can a handler talk to Lucy?

Speaking to Lucy in a conversational voice is acceptable during the session. For example, you may talk to Picasso in a soft, soothing voice on occasion and tell her she is being wonderful or

that everything is okay if she is being calm or even to try and relax her when she is nervous. However, the handler should remember that their primary focus should be on teaching guests about Lucy, not having one on one time with her.

Lucy is typically, quiet during presentations. She may make kissing noises. Keepers may use any reinforcement to reward desired behaviors Lucy offers during the presentation.

Signs of stress:

Shaking:

Biting:

Excessive flapping or trying to fly off:

If Lucy flies off and lands on the ground or a guest the handler should immediately go to where Lucy is and protect her from any guests grabbing or stepping on her. If Lucy is on the ground the handler may attempt to step her up. If there is any IMMEDIATE danger to Picasso (she has landed ON a guest, another animal is being handled nearby or a guest is trying to grab her) the handler may make the decision to pick up Lucy with their hand to prevent anything from happening to her. If Lucy is manually restrained she may bite the handler but that is preferable to allowing any injury to come to guests or Lucy. In any instance that Lucy flies off the perch, she should be immediately returned to her carrier and taken back to the NE Parrot room. The keeper should make a note in Tracks about the incident.

Returning the African Gray Parrot to the crate after handling:

- The keeper should open the door to Lucy's crate and move their hand with Lucy on it into her crate. Lucy should be held slightly lower than the perch in the cage so that she can step up onto the perch. When Lucy is close to the perch, the handler should say "step off". Lucy should then step up onto the perch in the cage. Once her second foot comes onto the perch the keeper may bridge and reward.

Once Lucy is in the crate the door should be secured.

Returning the African Gray parrot to her enclosure (NE staff only):

- The keeper returning Lucy to her enclosure should take the crate and place it near her enclosure.

- The keeper should then open the door to Lucy's crate, present their hand to Lucy and say, "step up". The keeper's hand should be slightly above Lucy's feet and right in front she should respond by stepping up with both feet. Once Lucy's second foot comes onto the hand, the keeper may bridge and reward. The keeper should move Lucy out of her crate and into her enclosure. Once in the cage, the hand should be held slightly lower or even with the perch so that Lucy can step onto the perch. When Lucy is close to the perch, the keeper should say "step off". Lucy should step onto the perch in the enclosure. Once Lucy's second foot comes onto the perch the keeper may bridge and reward.
- Once Lucy is in the enclosure the keeper should close the door and put away the rest of the handling equipment. See 'Disinfection guidelines' below for instructions on cleaning up and putting away the rest of the equipment.

Disinfection guidelines (NE staff):

The soiled newspapers should be removed from Lucy's travel cage and disposed of following each handling session. The entire cage should be fully disinfected no less than once a month. To disinfect the cage keepers should fully scrub both inside and outside using Trifectant and rinse it thoroughly with water.

African Pygmy Falcon (Zuri) Handling Protocol

General:

- Keep carrier level and out of the sun when transporting.
- Signs of stress: panting/open mouth breathing, repeatedly bating.
- Handlers do not have to move slowly when handling Zuri, but should move cautiously and keep in mind that he is a tiny bird and sudden or rapid movements will knock him off balance.

Removing from the enclosure (NE staff only):

- Unlatch the door to the mew and enter the enclosure and pull the door shut behind you.
- Place the raptor glove on your left hand and bring a leash with you.
- Place your gloved hand directly in front of Zuri and slightly above his feet so that he can step up onto your hand.
- Gently lift the gloved hand Once both feet are on your glove move your hand away from the perch and adjust the jesses so the leash can be attached.
- Thread the leash clip through the hole in the jesses and clasp them shut.

- While holding on to the leash, open the door and exit the mew.
- Bring the bird into the crate and let it step down on to the perch. You should present the perch in a way that allows Zuri to step forward onto it. Slide the gloved hand off the jesses and shut the door to the box.
- Take the leash and tie the end to the front of the crate.
- Take the glove off and place it on top of the box

Handling (NE staff only):

- Place the glove on your left hand.
- Untie the leash from the top of the box and hold it in your hand and open the door.
- Make sure one hand is on the leash at all times and slide gloved hand up the leash onto the jesses. Gently encourage the bird to step on to the glove.
- Wrap the leash around your hand - Jesses in front under thumb, through to the back between ring and pinky finger, then wrap leash around middle, ring and pinkie finger.
- Make sure you have the proper position of the bird on your glove- Think of the bird as the ice cream on top of an ice cream cone, keep it level at all times. If the bird is too far up on your arm in either direction, you can raise or lower your arm slowly and the birds will move to the highest point. If the bird is facing the wrong direction, you can use two fingers to gently push on the tail in the direction you want to move the bird (watch out for talons!). Be aware of the level of your arm while handling.
- If a bird bates (attempts to fly off the glove), give him some time to recover on his own. Once a bird is back on the glove, check the jesses for twisting and unwrap the leash and readjust if necessary.
- Zuri need space, have people stand 3-4 feet away. Make sure your back is against a wall or a fence so that people can't come up behind you.

To return to the transport box:

- When putting the bird back into box, make sure leash is completely unwrapped before moving bird into box.
- Present Zuri to a perch and he should hop onto the perch
- Slide the gloved hand off the jesses and shut the door to the box.
- Take the leash and tie the end to the handle of the box.
- Take the glove off and place it on top of the box (under the handle).

Returning to the enclosure (NE staff only):

- Place the glove on your left hand.
- Untie the leash from the top of the box, hold it in your hand and open the door.
- Make sure one hand is on the leash at all times and slide gloved hand up the leash onto the jesses. Gently encourage the bird to step on to the glove.
- Unlatch the door to the mew, step in and pull the door shut.
- Unlatch the leash clip and remove them from the jesses.
- Present Zuri to a perch and he should hop off the glove and onto the perch. Exit the mew, latch the door and hang the leash on the hooks and place the glove in the appropriate box.
- If there is feces or urates in the box or on the perch clean the box and dry it.
- Return the clean box to the shelf in Large holding.

Great Horned owl (Ariel) Handling Protocol

General:

- Signs of stress: panting/open mouth breathing, repeatedly bating.
- Ariel had eye surgery to remove one of her lenses. Keepers should be careful not to bring her out in harsh lighting conditions and record any handling sessions in Tracks.
- Never move or wiggle your hand with the intent of getting Ariel to open or flap her wings.

Removing from the enclosure (NE staff only):

- Unlatch the door to the mew and enter the enclosure and pull the door shut behind you and latch the inside latch. Open secondary door and close behind you.
- Place the raptor glove on your left hand and bring a leash and jesses with you.
- Place your gloved hand under the bird and ask her to step up. Once she places her right foot on the glove, she should complete the step up on her own. If not, you can begin raising your hand slightly until she places her other (left foot) onto the glove.
- Once both feet are on your glove, move your hand away from the perch and bring her into holding position.
- Thread the jesses through the anklets so the leash can be attached. Both jesses should come over her feet to the inside of her legs, then they should be placed between your ring and pinky finger.
- Thread each leash clip through the hole in the jesses and clasp them shut.

- Hold the loose end of the leash in your right hand, or tie it to your belt loop, using the falconer's knot
- While holding on to the leash, open the doors and exit the mew.
- Walk her to desired location, or place in crate for transport.

Crating Ariel:

- If using the crate, bring it out and have it set up before retrieving Ariel from her enclosure.
- Ariel has an extra-large vari-kennel in NE Large Holding. Line the bottom with newspaper and place the kennel on the back of the cart, or another similar surface.
- Open the door to the crate and carefully back your gloved hand, with Ariel on it, up to the perch. As you are doing this, be careful not to hit Ariel's ear tufts or tail on either the perch or door to the crate.
- Ariel should be able to feel the perch lightly touch the back of her feet, which is her cue to step back onto it.
- When she has stepped back, slide the gloved hand down the jesses and away from the perch. Close the door to the crate and attach the leash to the door of the crate.

Uncrating:

- Put the glove on your left hand and untie the leash from the crate's door. Hold the loose end of the leash in your right hand.
- Open the door and reach in with your gloved hand, threading the leash and/or jesses between the gloved thumb and index finger. Present your gloved hand directly in front of Ariel and slightly above her feet so that she can easily step-up onto your hand.
- Carefully bring Ariel out of the crate, being careful not to hit Ariel's tail or ear tufts on the perch or doorway.
- When she is out, adjust the jesses so they go between the thumb and index finger, down the palm of your hand and back between the ring and pinky fingers. The loose end of the leash may be held in your right hand, or tied to your belt-loop with a falconer's knot.

Handling (NE staff only):

- Make sure you have the proper position of the bird on your glove- keep it level. If the bird is too far up on your arm in either direction, you can raise or lower your arm slowly and the bird will move to the highest point. If the bird is facing the wrong direction, you

can move your arm slightly until it rights itself. Be aware of the level of your arm while handling.

- If Ariel bates, give her some time to recover on her own. Ariel is flighted, so should just land on the glove after baiting.
- Ariel needs space, have people stand 6-10 feet away. Make sure your back is against a wall or a fence so that people can't come up behind you. Be aware of your surroundings.
- If the crowd size is small and/or well behaved, it is acceptable to approach the crowd so they can have a closer look at Ariel's feathers. If you choose to do this, rotate your hand so that Ariel's back is facing the crowd, instead of her front.

May I touch Ariel?

- Ariel will tolerate touching for brief periods of time. However, she most likely does not enjoy being touched. During a presentation, it is acceptable to touch Ariel for the following reasons
 1. Show ear tufts to the audience. This is done using the index finger of your right hand to gently lift, from behind the ear tuft. Do not hold the ear tuft upright for more than a second or two.
 2. Show location of ears/facial disk. Handler may use one index finger to gently separate the edge of Ariel's facial disk feathers from the smoother feathers on her head. Again, this should not be held for more than a second or two.
 3. Illustrated "frayed" edges of feathers for silent flight. Position your hand so Ariel's back is to the audience and use your right hand to point out the "frayed" edges of Ariel's tail.
 4. On rare occasions, it is permissible to let visually impaired guests touch Ariel on the back and tail. Continuous "petting" is not allowed.

Returning to the enclosure (NE staff only):

- Walk back to the front of her mew.
- Open the door and step into secondary. Your back should be to the door. Close the door and latch it from the inside.
- Trainer then steps backwards into holding.
- Unlatch the leash clips and remove the jesses.
- Back her onto a perch or extend your gloved arm to "release" Ariel to fly to a perch.
- Exit the mew and latch both doors.
- Return items to the Bird of Prey equipment area in Natural Encounters

Advanced Handling for Mammals

Patagonian Mara Handling Protocol

Preparation:

- Use full AM or PM diet for handling session. Separate rodent blocks, apple, and carrot (reward) into training pouch and put the rest of his diet (diet) into a small metal bowl. Use right hand blue glove for rewarding.

Removing from the enclosure (CZ staff only):

- Take the harness and leash off the hanger in the Green Barn.
- Unlatch the enclosure and enter with the harness.
- To put harness on, put harness on ground (noting the R and L orientation) between Wesley and the metal bowl with diet and have him walk over harness to eat. If his feet aren't correctly positioned in the harness, readjust feet by lifting both feet at his shoulders and setting him down into the harness correctly. Pull harness up quickly and fasten. Give him a second to eat his diet after the harness is fastened.} **** Until voluntary harnessing can be worked on, to harness, pick up Wesley and have second keeper put his harness on. Can ask him to kennel and reward him or put him in kennel and don't reward.**
- Exit the enclosure and place kennel in the doorway of his enclosure and ask him to kennel with a hand point. Hand him a reward and secure the door.
- Flip his cage card sign around so it has the "Animal not in enclosure" side out.
- Place his leash on the top of his kennel.

Handling (Any approved handler):

- Find a place where your back is to a wall or a protected area (the Swap Shop and corner near the Koi stream work well).
- Use your body to block the kennel door when getting Wesley out and reach in to clip the leash through the 2 D-rings on his harness.
- Once leash is clipped, step away from kennel and Wesley will walk out. {If he doesn't come out right away he can be targeted out of kennel. If he still refuses, asses surroundings for aversive things (loud music, etc.) and do not force him out if he is uncomfortable.}

- While out, Wesley is free to move around the handling space.
 - A carpet square (found on the shelves above his crate) can be brought to encourage his rolling behavior. When rolling, handle the leash like a jump rope, making sure he doesn't get tangled.
 - If you need to redirect him or move him around, a target can be used (handler's fist). Be sure to use a clear, upbeat voice when giving his target cue. The criteria of the target behavior needs to be met for him to get his reinforcement. He can be reinforced by the handler holding the reward in hand, or from the cup.
 - If you need him to sit still, place his diet bowl down.
- If Wesley gets startled, several things can happen:
 - Running in place at end of leash: Stop, have a good grasp on leash and let him calm down. Giving him some slack when he is starting to calm down can help. Sometimes he will snap out of it if you ask for a target.
 - Running in circles and flipping: Try to reel him in on the leash and get hands on him. If you hold him still on the ground, he will usually calm down. If he doesn't and is still uncontrollable, you can always pick him up and move him away from that spot. When picking him up, have one hand under chest between front legs and hold him on your hip with his rear legs not against your body. If something startles him and he has his legs against you he can push off of you and possibly injure you or himself. Try not to put him down if he is struggling.
- When done with the presentation, lead him over to the kennel (He will follow your hand) and stand on the opposite side of the door, making a tunnel with the door and your body. Ask him to kennel with a right-hand point into kennel (remove hand after point) and wait for him to either kennel, or turn away and refuse before giving him the kennel command again. Bridge when all four feet are in the kennel and hand him his reward when he is facing the front of the kennel. Try twice with the command and if he refuses, usher him into kennel by picking him up or scooting him in. He does not get a reward if he needs to be ushered into kennel. Once he is in the kennel, remove leash and close door.

Returning to the enclosure (CZ staff only):

- Make sure the door to the hallway is shut and latched.
- Place the kennel in the doorway of his enclosure and open the door.
- Place any leftover food on ground, unclip harness and let it fall to the ground.
- Latch and clip the enclosure door.
- Turn the "Animal not in enclosure" sign around.

Notes on Wesley: He can get distracted easily, so you can use his name to get his attention, but don't precede every cue with his name.

Skunk Handling Protocol

General

- All handlers must have current rabies vaccine
- The skunk is handled by CZ staff members only

Removing from the enclosure

- What you need to take the skunk out:
 - AM/PM diet and/or mealworms
 - Leather gloves
 - Target stick (optional)
 - Clicker
 - Station (piece of Astro Turf)
- Ask her to kennel, click, reward, and close the door.

Handling

- Open the door, and see if Lily will come out of the kennel voluntarily. If she chooses to stay inside, you can target her with a closed fist or with a target stick. When Lily comes out of the kennel have a high value reward for her and ask her to station.
- Repeat the station and target behavior on the stage.
- When done handling, ask her to kennel and secure the door.

Returning to the enclosure (CZ staff only):

- To return her to the enclosure ask her to kennel. Once she goes in the kennel secure the door.
- Set her crate in the enclosure and open the door. She should walk right out.
- Once she exits the crate remove it from the enclosure and secure the door.

Notes on Lily:

- She does not like loud music or hot temperatures.

North American Porcupine (Ernie) Handling Guidelines

Packing & Transportation:

-The porcupine should be transported in a kennel lined with newspaper.

-In addition to the kennel, the handler should have:

- a target stick
- a metal bowl
- a training pouch containing a cup filled with food rewards for the porcupine
- Ernie's presentation table
- the red pouch containing the cover for the table and the straps to secure Ernie's kennel during transport
- the green metal wagon (for volunteers to transport Ernie in the kennel and all of his equipment from place to place)

Packing (CZ staff only):

When packing up Ernie, keepers should take Ernie's kennel into his enclosure. Once he is down near the kennel, the keeper should open the door and make a pointing motion into the kennel with the right hand while saying "kennel". He should go right in and turn around. Once Ernie is fully inside the kennel and has turned around, he should be bridged with the word "good." The keeper should close the door and rewarded Ernie with a piece of greens, rodent block or biscuit.



'Kennel' cue



Ernie entering kennel on cue

- The keeper should then gently lift the kennel, keeping it level. Be careful, Ernie is heavy.
- If Ernie is going out with a volunteer in the Children's Zoo his kennel is placed on a rolling cart with the table and table cover on top of the kennel. Smaller items can be placed behind his kennel on the cart. Do not place food where he can reach it through the door or see it. Use the tie downs to secure everything to the rolling cart.



Proper orientation of Ernie's kennel on wagon



Proper packing of Ernie +supplies on wagon

Equipment set up (Any approved handler):

It is helpful to set up the table in an area where there is a barrier behind you (fence, building etc.) so that guests cannot approach from all sides.

- Set up Ernie’s table and then place the cover over it. Secure all Velcro closures.



- Place food in the container in the training pouch and attach to your belt.
- Make sure the target stick is handy.
- Once you are set up, you are ready to let Ernie out of his kennel on the table.

Unpacking the porcupine for handling (any approved handler):

- Pick up the kennel and place it on the table with enough room for Ernie to come out. You will need to hold onto the kennel with one hand while opening the door with the other.
- Place a treat in the bowl and set the bowl on top of his kennel (so that you can easily reach the bowl once he comes out)
- Open the door and say “Out”. Bridge once all 4 feet are out of the kennel and place the bowl with the treat on the table for him. While he is retrieving his reward, place the kennel under the table.



Handler ready to let Ernie out of kennel (note bowl on kennel) Handler presenting reward in bowl and simultaneously removing the kennel

*Ernie will not always pull his tail completely out of the kennel when he walks onto the table. Even if Ernie’s tail is still in the kennel the handler may pull the kennel away gently and place it under the table.

*If Ernie does not want to come out of the kennel the handler should close the door, wait a few moments and cue him again. If Ernie does not come out at this point the handler may attempt to target him out of the kennel using the target stick. If he cannot be encouraged to come out by targeting him, the situation is probably stressful to him in some manner. (Perhaps the area is too loud, there are too many people or he is just feeling unmotivated.) Never force Ernie to come out of the kennel if he seems nervous or uncomfortable.

-While the porcupine is out on the table the handler should remain at the table, follow the handling protocols and monitor for any signs of stress or discomfort (see below).

Situation specific protocols:

Understandably, guests ARE NOT allowed to touch the porcupine and should stand approximately 3 to 3 ½ feet away from the table when the porcupine is out. The handler presenting the porcupine should not pet or stroke him during the session either. (The handler can touch the porcupine ONLY when presenting his quills to the public).

CZ Staff only: In special situations, at the handler's discretion, guests may be allowed to take a photo with the porcupine. In this situation, the porcupine should be sitting calmly, not exhibiting any signs of stress, and should be eating a large piece of food like a browse biscuit or a rodent block. While he is eating, the guest may approach and kneel at the front of the table and have their photo taken with the porcupine behind them. Keepers should be ready to move the guest away if the porcupine drops his reward or becomes agitated.

Troubleshooting:

- If Ernie is not presenting the correct behavior for a cue, ask him to do something else (for example "target") then ask him for the first behavior again.
- If Ernie starts to pull on the table cover, redirect him with a target behavior, and then reward him.
- It's okay to put some food in his bowl and let him eat while you are talking. You do not have to keep him occupied every second.

Signs of stress:

-When Ernie is relaxed he will generally sit on table and focus his attention on the handler. It is normal for him to move around on the table during handling, as he is generally seeking direction from the handler so that he can gain a food reward. When Ernie is relaxed his guard, hairs will be lowered and he will appear 'soft.' If Ernie is taking food rewards and eating them, it is a good sign that he is comfortable with the situation.

-Ernie is very scent oriented and will sometimes spend a fair amount of time sniffing the cover on his table; he may occasionally lift his head and sniff around in the air as well. If the handler is not paying attention to Ernie, and he is out of food in his bowl, he will sometimes reach out and try to grab the handler with his front foot to get their attention. The handler should always be aware of what Ernie is doing and be sure not to stand close enough to be grabbed unexpectedly. Sometimes, a loud noise or other such distraction can temporarily “freeze” Ernie. If he hears a loud sound he will sometimes “jump” slightly and then remain perfectly still for 30 seconds to a minute, waiting to see if there is any threat nearby. When he is “frozen” Ernie will generally not pay any attention to the handler and will stare off into space. Once he has determined that the sound is not a threat, Ernie will generally turn his attention back to the handler and look at them directly.



Ernie sitting calmly eating a biscuit



Wild porcupine agitated with quills raised

-When Ernie is startled he may stand up his guard hairs and display the quills underneath them. He will generally turn his back to whatever is agitating him and present his tail, as the thickest quills are on his tail. He may occasionally stand on his hind legs and do a fast ‘shake’ when he is agitated. This generally only lasts for a moment and then he should relax his quills. As his stress level escalates he may try to climb off the table. If the porcupine is exhibiting any of the latter behaviors, ask the audience to step back, remove any possible distractions that may be making him want to climb off the table (a guest holding food in view, a stroller that is too close to the stand, a loud crowd that is too large for his comfort level) and see if this helps relax the porcupine. If the porcupine’s anxiety level continues to escalate, the handler should allow him to go back into his kennel and return him to the Ambassador Animal Building. The porcupine will usually relax after a few moments if anything startles him, so the handler should give him a moment to see if he calms down before making the choice to end the session.

Behaviors – CZ Staff

- **Target** – keeper uses a target stick or their fist, Ernie touches his nose to the target; use this behavior to move him around on the table
- **Show Quills** – using the target behavior, position Ernie where his back is facing your audience; reward him with a biscuit, a rodent block, or enough food to occupy his attention for a minute; very gently slide your hand down his back (just touching the guard hairs) then gently lift the guard hairs up to show the quills underneath; be careful of startling him, let him know you are there before you just reach in to pick up the guard hairs to show his quills



Handler letting Ernie know they are going to show quills

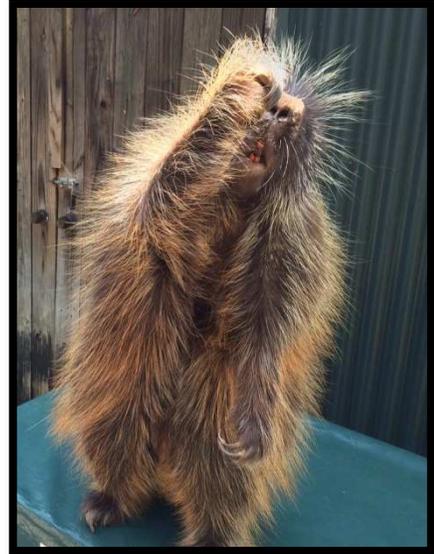


Handler lifting up Ernie's guard hairs to show quills underneath

- **Wave** – Using your fist, target Ernie to stand up on his rear legs; turn to face Ernie slightly and with your right hand raised up to just above your shoulder, say “wave” and open and close your hand repeatedly. Ernie should “wave” with his right front foot and continue waving as long as you are cuing him; do not have him wave for too long, look for three good waves with good extension before bridging.



Trainer giving "wave" cue to Ernie



Ernie waving (note extension of paw past nose)

- **Turn Right** – Using your right hand, point to the right while saying "turn". Ernie should make a complete circle, turning to the right.
- **Turn Left** – Using your right hand, point to left while saying "turn". Ernie should make a complete circle, turn to the left.



"Turn" right cue



"Turn" left cue

- **Shake** – Make a fist with your left hand and extend your pointer finger. Place hand in front of Ernie and say "shake". Ernie should place his right foot on your fingers. Gently lift up and down two times. Bridge and reward as long as he keeps his right foot in place.



'Shake' cue



Ernie performing the 'shake' behavior

Handling – Education Staff

Always use a bowl to place his reward in, never hand feed him. Do not touch Ernie unless you are showing his quills.

- **Target** – handler uses a target stick, Ernie touches his nose to the target; use this behavior to move him around on the table
- **Show Quills** – using the target behavior, position Ernie where his back is facing your audience; reward him with a biscuit, a rodent block, or enough food to occupy his attention for a minute; very gently slide your hand down his back (just touching the guard hairs) then gently lift the guard hairs up to show the quills underneath; be careful of startling him, let him know you are there before you just reach in to pick up the guard hairs to show his quills



Handler letting Ernie know they are going to show quills



Handler lifting up Ernie's guard hairs to show quills underneath

- **Wave** – Using your fist, target Ernie to stand up on his rear legs; turn to face Ernie slightly and with your right hand raised up to just above your shoulder, say 'wave' and open and close your hand repeatedly. Ernie should "wave" with his right front foot and continue waving as long as you are cuing him; do not have him wave for too long, look for three good waves with good extension before bridging.



Trainer giving 'wave' cue to Ernie



Ernie waving (note extension of paw past nose)

- **Turn Right** – Using your right hand, point to the right while saying 'turn.' Ernie should make a complete circle, turning to the right.
- **Turn Left** – Using your right hand, point to left while saying 'turn.' Ernie should make a complete circle, turn to the left.



'Turn' right cue



'Turn' left cue

Handling –Volunteers

Always use a bowl to place his reward in, never hand feed him. Do not touch Ernie unless you are showing his quills.

- **Target** – handler uses a target stick; Ernie touches his nose to the target; use this behavior to move him around on the table
- **Show Quills** – using the target behavior, position Ernie where his back is facing your audience; reward him with a biscuit, a rodent block, or enough food to occupy his attention for a minute; very gently slide your hand down his back (just touching the

guard hairs) then gently lift the guard hairs up to show the quills underneath; be careful of startling him, let him know you are there before you just reach in to pick up the guard hairs to show his quills



Handler letting Ernie know they are going to show quills



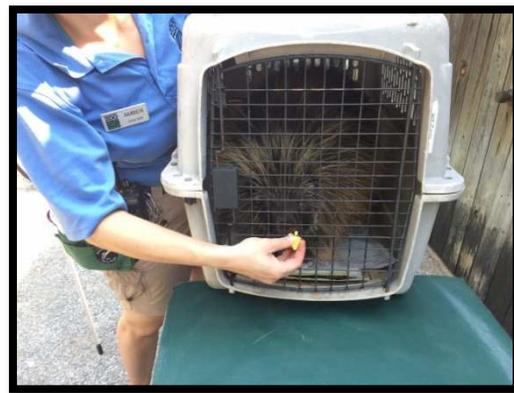
Handler lifting up Ernie's guard hairs to show quills underneath

Returning the porcupine to the kennel after handling:

-To pack up Ernie the handler should place Ernie's kennel on the table. The handler should keep hold of it with one hand, then open door with their free hand. The handler should say "kennel" after they open the door. Ernie should go in and turn around. Once Ernie enters the kennel and turns around, the handler should bridge him and close the door. Push a rodent block or biscuit through the door to reward him.



Ernie returning to kennel from the table



Handler pushing reward to Ernie through the bars of the kennel

Packing up to return

- Wipe off the cover and remove any uneaten food. If Ernie defecated or urinated while out, please wipe off with a wet paper towel and let a keeper know when returning to the barn. The cover may need to be disinfected or cleaned more thoroughly.

- If using the rolling cart, place everything back on the cart just as it was when transporting Ernie to the destination.

Returning the porcupine to his enclosure:



Ernie returning to his enclosure

-When unpacking the porcupine, keepers may place his kennel into his enclosure and see if he walks out on his own. If he does not walk out on his own keepers may leave the open kennel in the enclosure and wait until he exits on his own. Once the porcupine exits the kennel it should be removed from the enclosure.

-The keeper who unpacks the porcupine should also put the wagon (if used) table, table cover, target stick, training pouch, food cup and kennel back in the proper locations. (See the disinfection guidelines below for how to care for those items)

Disinfection guidelines:

The porcupine's kennel should be disinfected any time the porcupine urinates or defecates in it. If the porcupine does not urinate or defecate in the kennel, keepers may remove the newspaper and place it back on the shelf. Even if the porcupine does not urinate in the kennel, it should be fully disinfected no less than once a month. To disinfect the kennel keepers should fully scrub both inside and outside using a detergent such as Comet and rinse it thoroughly with water. Spray the surface with a disinfectant such as Trifectant, let it sit for 10 min and then rinse thoroughly with water.

The table should not need to be disinfected following a handling session as long as the porcupine does not urinate or defecate on the table. The table surface can be disinfected using

Trifectant and then rinsed thoroughly with water. The table surface should be disinfected no less than once a month.

The food cup and target stick should be washed with dish soap and hot water and placed in the kitchen to dry. The target pouch should be shaken out to ensure that there are no pieces of food or crumbs in it and returned to the appropriate container in the kitchen.

The table cover should be periodically, at least once a month, wiped down with a damp cloth to ensure that no food residue or crumbs remain on it. Once cleaned, it should be returned to the red pouch and placed back onto the proper shelf.

Prehensile-tailed Porcupine (Norman) Handling Guidelines

Packing (CZ staff only) & Transportation:

-The porcupine should be transported in a kennel lined with newspaper.

-In addition to the kennel, the handler should have a target stick, left handed leather glove and a training pouch containing a cup filled with food rewards for the porcupine. The large custom stand for the porcupine should be waiting at the final handling destination OR two people should be going to load/unload the stand from the cart or other transport vehicle.

-When packing up the porcupine, keepers may ask him to “kennel” from the ground or place the kennel up onto the branches of his enclosure and allow him to walk into the kennel from the branch.

-To “kennel” the porcupine from the ground: The keeper should open the door of the kennel and kneel down. If Norman is not on the ground the keeper may target him down from the branches of his enclosure. Once Norman is down on the ground, within sight of the kennel, the keeper should make a quick pointing motion into the kennel, with their right index finger, and say “kennel”. The keeper should remove their hand after making the pointing motion so that Norman does not have any obstructions or distractions while he is entering the kennel. After being given the cue Norman should walk into the kennel and turn around. When Norman begins to turn around he will pull his tail into the kennel. The keeper should bridge Norman once his tail is fully in the kennel close the kennel door. Norman should be given a reward for entering the kennel; the reward can be given through the bars of the closed door.



Kennel signal on the ground



Handler pushing food reward through bars of the kennel

-To kennel the porcupine from the branches of the enclosure: The keeper should lift up the kennel with their left hand and hold the door of the kennel open with their right hand. The keeper should place the lip of the kennel onto the branches and say the word “kennel”. Because they are holding the door open they will not be able to give the hand signal. The presence of the kennel, paired with the word “kennel” is generally enough of a cue to encourage Norman to enter the kennel. After being given the cue Norman should walk into the kennel and turn around. When Norman begins to turn around he will pull his tail into the kennel. The keeper should bridge Norman once his tail is fully in the kennel close the kennel door. Norman should be given a reward for entering the kennel; the reward can be given through the bars of the closed door.



Norman kenneling from branches



Handler pushing food reward through bars of the kennel

Equipment set up:

To assemble Norman's, stand the large, custom "tree" portion of the stand should be lifted up and slid onto the metal base of the stand. The custom portion is quite heavy and may require two keepers to carry. It is best to have the stand set up and waiting at the desired handling location in advance.

It is also helpful to have the stand set up so that there is a barrier behind it (wall, bench or a table) or some stanchions placed around the stand. This will make it easier for the handler and less stress inducing for the porcupine to present him in an area where guests cannot approach from all sides. Be sure that the stand is not so close that the porcupine can climb off the table onto the barrier. Norman can stretch surprisingly far when he holds on with his tail and extends his body, so be sure that the stand is clear of any objects for at least two feet on all sides.



Norman demonstrating his impressive stretching abilities

Unpacking the porcupine for handling (All approved handlers):

- The handler should place the kennel containing the porcupine onto the table.
- Once the kennel is on the table the handler may open the door and allow the porcupine to walk out. If the porcupine does not walk out on his own the keeper may use the target stick to target him out of the kennel.
- Norman will not always pull his tail out of the kennel when he walks onto the table. Once all four feet are on the table, the handler may pull the kennel away gently and place it on the ground. The kennel should be far enough away that Norman cannot reach it to climb down onto it.

-If Norman does not want to come out of the kennel the handler should close the door, wait a few minutes and try again. If Norman does not want to come out at this point and cannot be encouraged to come out by targeting him; then the situation is probably stressful to him in some manner. (Perhaps the area is too loud, there are too many people or he is just feeling unmotivated.) Never force Norman to come out of the kennel if he seems nervous or uncomfortable.



Norman walking out of his kennel onto the stand

-While the porcupine is out on the table the handler should never walk away from the animal, follow the handling protocols and monitor for any signs of stress or discomfort (see below).

-Norman tends to climb up onto the perch of his stand when he is out. The handler may target Norman around on the stand to get him to move to different areas and demonstrate how he grips with his prehensile tail.

Situation specific protocols:

Understandably, guests ARE NOT allowed to touch the porcupine and should stand approximately 2 ½ to 3 feet away from the table when the porcupine is out. The keeper presenting the porcupine should not pet or stroke him during the session either.

In special situations, at the handler's discretion, guests may be allowed to take a photo with the porcupine. In this situation, the porcupine should be calmly perched, not exhibiting any signs of stress, and should be eating a large piece of food like a browse biscuit or a rodent block. While he is eating, the guest may approach and kneel down at the front of the stand and have their photo taken with the porcupine behind them. Keepers should be ready to move the guest away if the porcupine drops his reward or becomes agitated.

Signs of stress:

-When the porcupine is relaxed he will generally sit on the perch portion of his stand and take food rewards. He will sometimes sit on the circular base portion of the stand or perch on the highest point of the stand. He generally sniffs around on the stand in the beginning of a handling session and should relax after a few moments. If the porcupine is taking food rewards and eating them, it is a good sign that he is comfortable with the situation. He may occasionally lift his head and sniff around in the air as well.



Norman calmly sitting on the perch

-When the porcupine is startled he may raise his quills and display the yellow fur underneath them. He may stand on his hind legs and do a fast “shake” when he is agitated. This generally only lasts for a moment and then he should relax his quills. As his stress level escalates he may try to climb off of the table or begin pacing on the table as well. He may also sway from side to side or make a huffing noise. If the porcupine is exhibiting any of the latter behaviors, ask the audience to step back, remove any possible distractions that may be making him want to climb off the table (a guest holding food in view, a stroller that is too close to the stand, a loud crowd that is too large for his comfort level) and see if this helps relax the porcupine. If the porcupine’s anxiety level continues to escalate, the handler should allow him to go back into his kennel and return him to the Ambassador Animal Building. The porcupine will usually relax after a few moments if anything startles him, so the handler should give him a moment to see if he calms down before making the choice to end the session.



Wild porcupine agitated with quills raised

Returning the porcupine to the kennel after handling:

-The porcupine is generally very good about returning to his kennel on his own. When the handler is finished with the session they should lift the kennel up onto the table and open the door. Generally, the porcupine will walk right in when presented with the kennel and given the “kennel” signal. (This is done in the same manner as shown in the ‘to kennel the porcupine from the branches of his enclosure’ section of this document.)



Norman returning to his kennel from the stand

-If the porcupine is exhibiting signs of stress he may try to climb on top of the kennel instead of going into the kennel or he may climb up to the highest perch and ignore the kennel.

-If the porcupine tries to climb onto the kennel when it is offered, the handler should remove the kennel from the porcupine's grasp, wait a moment and then offer it again. If the porcupine continues to try and climb onto the kennel he may have to be picked up and placed into the kennel.

-The handler should only lift the porcupine up and put him into the kennel manually if he will not enter on his own after multiple attempts. The left-handed glove should be on and the handler should offer their gloved hand, palm up and flat, to the porcupine. Using their right hand, the handler should make a 'come here' motion with their right hand and tell the porcupine to "step up". The porcupine should place his front two feet and his back right foot onto the glove. As the porcupine steps onto the glove with his rear foot the handler should reach up, grasp the end of the porcupine's tail with their right hand, and lift him up off of the perch. As soon as the fourth foot comes off of the perch the handler should bridge him and reward him by moving the hand holding the tail up towards the porcupine's face so that he can take the reward. Once the porcupine is in hand, the handler can move him towards the open kennel and allow him to walk off of their hand into the kennel. The handler should not release the tail until the porcupine has all four feet in the kennel.

Returning the porcupine to his enclosure (CZ and trained education staff):

-When unpacking the porcupine keepers may place his kennel into his enclosure and see if he walks out on his own. If he does not walk out on his own keepers may leave the open kennel in the enclosure and wait until he exits on his own. Once the porcupine exits the kennel it should be removed from the enclosure.

-The keeper who unpacks the porcupine should also put the stand, target stick, training pouch, food cup and kennel back in the proper locations. (See the disinfection guidelines below for how to care for those items)

Disinfection guidelines:

The porcupine's kennel should be disinfected any time the porcupine urinates or defecates in it. If the porcupine does not urinate or defecate in the kennel, keepers may remove the newspaper and place it back on the shelf. Even if the porcupine does not urinate in the kennel, it should be fully disinfected no less than once a month. To disinfect the kennel keepers should fully scrub both inside and outside using a cleaner (such as Comet or Joy) and rinse it thoroughly with water. Spray the surface with Trifectant, let it sit for 10 min and then rinse thoroughly with water.

The stand should not need to be disinfected following a handling session as long as the porcupine does not urinate or defecate on the stand. A damp towel should be used to wipe up any food crumbs that the porcupine leaves behind on the stand after every use. The stand surface can be disinfected using Trifectant and then rinsed thoroughly with water. The stand surface should be disinfected no less than once a month.

The food cup and target stick should be washed with dish soap and hot water and placed in the kitchen to dry. The target pouch should be shaken out to ensure that there are no pieces of food or crumbs in it and returned to the appropriate container in the kitchen.

Nubian Goat (Alvin) Handling Guidelines

Packing & Transportation (CZ staff only):

Alvin is not sent out with food, as the presence of food tends to encourage undesirable behaviors. The keeper who packs Alvin for handlers should gather up Alvin's collar, leash, a bottle of hand sanitizer, a towel and a broom/dustpan and walk down the back road to the Contact Area. The keeper can set down the broom/dustpan and towel outside the gate and should enter the Contact Area from the side gate that leads into the "training yard" portion of the contact area. The keeper should walk up to Alvin, or target him to themselves, and place the collar on his neck. Alvin will generally stand still while the keeper puts his collar on, but if he keeps trying to walk away the keeper may ask the Contact Area keeper to help hold Alvin still while they place his collar on.

When walking Alvin, the keeper should loop the handle of the leash around their left wrist and Alvin should walk on their right side. Generally, Alvin will follow beside the keeper but it may be necessary to target him to get him moving. The keeper should walk Alvin out of the Contact Area through the side gate in the training yard; he should NEVER be allowed to walk out of the Contact Area through the main guest Enter/Exit gates.

Once out of the yard the keeper should lock the gate behind them and walk through the large gate beside the Contact Area that leads to the public side. The handlers who will be working with Alvin will meet the keeper at this designated spot for the "hand off". One of the handlers will take Alvin and the other will take the broom/dustpan and towel.

Equipment set up:

There is no special equipment to set up when handling Alvin. One handler will be in charge of controlling Alvin on his leash and the other handler will be responsible for cleaning up after

Alvin and helping to direct guests who would like to touch Alvin. It is helpful for the handlers to set themselves up in an area with a barrier behind them (such as a wall or planter) so that guests cannot approach from all sides.

Situation specific protocols:

The handler controlling Alvin should loop the handle of the leash around their left wrist and have Alvin walking on their right side. The handler should not allow Alvin to pull them during the walk and he should not be allowed to eat any leaves or other debris from the ground. Alvin is not sent out with food, as the presence of food tends to encourage undesirable behaviors.

It is okay if Alvin nibbles on the leash a little bit but he should not be allowed to nibble on any of the handlers' clothing or guests' clothing. If Alvin nibbles at something, the handlers should discourage him with a firm "no" and redirect him by gently pushing his nose away from the object in question. If Alvin does not want to move forward, the handler may encourage him by walking a few steps backwards and calling his name or the backup handler may help encourage Alvin by lightly tickling the top of his tail as the "walker" pulls gently on the lead.

The handlers should walk Alvin to an area for handling and set themselves up with a barrier behind them. Alvin may be walked around the Farm area, and Desert/Prairie plaza. If Alvin is particularly excited about walking, he may be taken to the plaza in front of the Swap Shop or even into the Swap Shop if it is okay with the Swap Shop keeper that day. He should not be walked around the Coastal pools or onto any of the Forest area boardwalks. The handlers may not take Alvin out of the Children's Zoo or to the Butterfly Pavilion.

Wherever they decide to walk, the handlers should always keep an eye on the time and be sure to give themselves enough time to get Alvin back to their starting point at the agreed upon time to meet the keeper picking Alvin up.



Keeper demonstrating the back and front boundaries to the 'petting zone' on Alvin

When allowing guests to pet Alvin, the handler should have control of Alvin's head but should not be holding him too tightly. The handlers should try to position Alvin so that his side is presented to guests. The backup handler should be standing near Alvin's rear end and directing guests on how to properly pet him. The handlers should not allow guests to put their fingers, maps or any other objects near Alvin's face. Guests may pet Alvin with their whole hand but should pet only on his back and sides. The handlers may praise Alvin with soft, calm words when he is doing well and may scratch Alvin on the top of the head or neck as an added reward as no food is used as reinforcement during his handling sessions.



Handlers demonstrating proper positioning/control of Alvin for when guests are petting him

The backup handler is also responsible for sweeping up feces with the broom and dustpan and mopping up any puddles if Alvin decides to urinate while he is out.

Signs of stress:

If Alvin is stressed, he may make a bleating sound or try to run from the handlers. The handlers should assess the situation. If Alvin is open mouth breathing, panting heavily, or producing foamy saliva he may be tired and/or thirsty. If Alvin is continuously pulling on his leash and trying to walk back to the Contact Area, he is probably tired or agitated. In either of these instances the handler should end the session, walk Alvin back to the starting point, and call the Green Barn keepers to collect him.

Returning Alvin to his enclosure (CZ staff only):

The handlers with Alvin should set up a time with the Ambassador Animal keeper to let them know when their session will be done. At the agreed upon time, the keeper returning Alvin should meet the handlers at the large gate between the Contact Area and the back road. The handlers will hand off Alvin to the keeper and take the hand sanitizer, towel, broom and dustpan back to the Ambassador Animal building. The keeper should then walk Alvin through the gate, onto the back road and enter the Contact Area through the side gate that leads into the "training yard" portion of the Contact Area. The keeper may then walk Alvin into the main area, or into the far back area and remove Alvin's collar and leash. Once Alvin has been returned to the yard, the keeper should then go back to the Ambassador Animal building and put away Alvin's leash, collar, towel, broom and dustpan, being sure to follow the disinfection guidelines below if any of the items are soiled.

Disinfection guidelines:

If Alvin's towel is used to wipe up urine while he is out on handling, then it should be placed in with the regular laundry and washed with detergent. Alvin's leash and collar should be washed once a month with the regular laundry as well. Please place the leash and collar in a pillowcase to protect the washer and dryer from the buckle and leash clip. The dust pan should be cleaned with Comet no less than once a month.

Dingo handling guidelines

Removing from the enclosure (CZ staff only):

- Mawson and Tingoora will need to have their harness on before putting them into their crate. Go up to their enclosure and have both dingoes on the right side of their yard and close the shift gate. The keeper should go inside and secure the door behind you before opening the door in between the secondary and big yard. Open the door in between the two yards and ask Mawson or Tingoora to come up onto their platform in the secondary area to put on the harness. If you are taking both animals out Tingoora is shifted and harnessed first.
- When either Mawson or Tingoora are on their platform, attach the harness and leash. Reward them for coming up on the platform and reward them when you ask them to get off their platform. The leash should be around your left wrist and then your right hand should hold the middle of the leash. Once the middle door is closed and locked you can open the outer door and walk out with your dingo. Lock the outer door behind you and open the shift door for the dingo still in the enclosure.

Transporting (any approved handler/driver):

- The dingo crate should already be loaded up in the transportation van. Ask Mawson or Tingoora to come up into the van with you and close the door behind you. The dingo should go into the crate and take the leash off before you close the crate door.
- To take the dingo out of the van go inside the van and make sure all the doors are closed. Open the crate door and attach the leash to their harness before opening the van doors. Make sure again that the end of the leash is around your left wrist and you are holding the middle of the leash with your right hand. Open the van doors and have the dingo jump down to the ground.
- If you are transporting the dingo on a cart, the crate should already be loaded up on the back of the cart and hay should be added to the bottom of it. Ask Mawson or Tingoora to come up onto the cart and get in the crate, close the door to the crate and thread through the door.

Handling (any approved handler):

- To hold the leash of the dingo, place your left hand through the leash loop and hold on to the leash
- Take your right hand and hold on to the leash to give the dingo only a little of “give” on the leash. This helps you control the leash better.
- The dingo should stay on your right side
- Do not let guests touch the dingoes
- Signs of stress: Fleeing, growling, hair standing on end, ears back, curling lips to show teeth. If you see any of these signs put the animal back in its crate and return them to the Green Barn. Alert the CZ keeper that is there to receive the animal.



Returning to the enclosure (CZ and trained education staff only):

- Take the loop of the leash and wrap it around your wrist. Unlatch the crate door and allow the dingo to walk out of the crate. They will jump down off the back of the cart (or out of the van) on to the ground. Walk them back to the enclosure.
- To put the dingo back into its enclosure, close the shift door and make sure the second dingo is on the right side in the big yard. Unlock the outer door and go inside with the dingo and then shut the door behind you. Unlock the middle door and walk into the big yard with the dingo and ask Mawson or Tingoora to station. When the dingo is on his or her station, reward them with a treat and then take off his or her harness. Point to the ground and ask the dingo off and reward them for getting off their station with a treat.

- Leave the big yard and close the middle door behind you and make sure both dingoes are still in the big yard. Lock the middle door and exit out the secondary door. Lock the secondary door behind you and open the shift door for the dingoes to have access to both sections.

Disinfection:

- The dingo crate needs to be cleaned out after every use. If an animal defecates or urinates in the crate it must be disinfected. The crate should be disinfected no less than once a month.
- To disinfect the kennel keepers should fully scrub both inside and outside using a cleaner (such as Comet or Joy) and rinse it thoroughly with water. Spray the surface with Trifectant, let it sit for 10 min and then rinse thoroughly with water.

Juliana Pig (Winston) handling guidelines

Removing from the enclosure (CZ staff only):

To harness:

- Put the front loop of the harness over his head, and then put 3 pieces of food on the ground. While he is eating, pick up his left leg and put it through the opening then fasten the harness. Clip the leash to the loop on the harness.



Taking out of the contact area:

- Walk him out the front door in order to give him a chance to defecate in the area where he prefers. He can also be taken out the side gate, but then you will need to walk him up front to so he has a chance to defecate. If he is allowed to defecate before he leaves the contact area, he is less likely to defecate in his crate. Place the crate on the ground and ask him to kennel. You may need to bait him with food in his crate. Lift him in the crate onto the back of the cart.

Handling (any approved handler):

- Loop the leash around your wrist and hold onto the leash
- Open the door to the crate (if he was crated) and let him walk out
- He will freely walk where you guide him with the leash
- Reinforce him with food, by dropping it on the ground in front of him) after he has walked for a couple of minutes



Returning to the enclosure (CZ and trained education staff only):

- If he was crated, Lift the crate off the cart and put it on the ground. Hold onto the leash and open the door. He should walk out of the crate.
- Walk him back to the back of the contact area and unhook the harness. The harness should slide easily over his head.
- Take the harness and leash back to the Green Barn and hang it on the rack.
- The crate needs to be disinfected if he defecates in it. If he does not urinate or defecate in the kennel, place it back on the shelf. Even if he does not defecate or urinate in the kennel, it should be fully disinfected no less than once a month. To disinfect the kennel keepers should fully scrub both inside and outside using Comet and rinse it thoroughly with water. Spray the surface with Trifectant, let it sit for 10 min and then rinse thoroughly with water.

*If he can be walked to the location that would be better than crating him.

Natural Encounters Binturong Ambassador Program Overview

The HZI Natural Encounters Section manages the zoo's Binturong ambassador anima. The Curator and Supervisors oversee the training of staff and the husbandry and training of 0.1 Binturong. Personnel training focuses on safety and consistency to establish behaviors that support the husbandry, education and conservation goals of Natural Encounters and the Houston Zoo.

General:

- Though other Natural Encounters staff may interact with her, the binturong is only handled by members of the binturong training team.
- 0.1 Binturong worked free contact, but only with multiple trainers present.
- This animal requires relationship-building and advanced handling and training techniques.

Natural History of Binturong

- Range: South and Southeast Asia. It is uncommon in most of its range, which includes India, Nepal, Bangladesh, Bhutan, Myanmar, Thailand, Malaysia to Laos, Cambodia, Vietnam and parts of China. It is also found in Sumatra, Kalimantan, parts of Indonesia and parts of the Philippines.
- Habitat: Binturongs are an arboreal species that is confined to tall, established forests.
- Diet: Although classified as carnivores, but are omnivores and prefer fruit and vegetation. They are important seed dispersers for the strangler fig.
- Behavior: Binturongs are cathemeral, which means they are opportunistically awake or asleep throughout the daylight cycle.
- Binturongs are well adapted for arboreal living. They have a prehensile tail that is approximately 50% of their total body length. Their fur is dark and bushy to help them stay concealed. Their fur also allows rain to roll off their body. Binturongs usually descend to the forest floor to urinate, defecate and move from tree to tree.
- Binturong conservation status: CITES Appendix III, IUCN Vulnerable. Main threats include deforestation, wildlife trade and hunting, with the first being the most immediate threat. The population has declined 30% over the last 30 years and is expected to continue with this trend.
- Sources: Animaldiversity.org http://animaldiversity.org/accounts/Arctictis_binturong/

Individual Animal History

0.1 binturong Hannah was born in 2007 and hand-reared at the Natural Encounters Department of HZI.

Procedures:

1. Only qualified binturong trainers may handle or train the binturong.
2. To bring the binturong out of her enclosure for a presentation or training set there will always be a trainer, a back-up to the trainer and a third person for guest interaction and interpretation. The third person can be any staff member who is knowledgeable enough about binturongs to present, answer questions and give instructions to the crowd. The backup trainer must be a fully qualified member of the binturong team and is responsible for monitoring surroundings, assists the trainer and assists in an emergency.
3. The binturong must always wear a harness and leash and be under control by a qualified trainer.
4. The person who is actively training the binturong should focus on the animal and minimize interaction with guests.

Program Description and Guidelines

General

- Typically, binturong will be walked or transported by crate to the location. The binturong may climb on the back of the cart, sit or lie on the ground, or walk around within a designated secured area.
- There will be a primary trainer, back-up trainer, and interpretive keeper.
- Stanchions may be set up, but the appropriate distance can be designated in a variety of ways, such as a stage area, direction from interpretive keeper, or area defined by a lawn.
- Guests are not permitted to touch the binturong during presentations that are outside of the binturong enclosure.
- Photographs are allowed.
- The interpreter will address guests with information about binturong, including appropriate conservation information.
- No other program animals are allowed in the immediate area during binturong presentations.
- Programs are subject to changes or cancellation due to temperature restrictions and animal health issues as outlined in the HZI Program Animal Policy.

Locations

Binturong presentations will only occur in areas where the binturong feels comfortable and guests can be kept behind a safe barrier or at a safe distance. Natural Encounters staff must walk through any new location with event organizers prior to any event to confirm specific setup for the event (tables, music, food, etc.). If it is a new location for the binturong, a practice presentation will be scheduled so the binturong is familiar with the area as well.

Typical locations for binturong presentations include, the BEC, BEC lawn, and the area between Sea Lions and Natural Encounters buildings. Other locations may be considered on a case-by-case basis.

Request Procedures

- The VP of Animal Operations, the Curator, and area Supervisors must approve all requests for binturong programs.
- Requests are made through the Dashboard work request system.
- Event organizers must set up a time to walk the venue with a Natural Encounters supervisor at least one week in advance of the event and must notify the Natural Encounters Department of any changes to the venue or time of the event in a timely manner.

Procedures

The following procedures are followed whenever the binturong is outside of her enclosure:

- Binturong is always leashed or crated.
- Binturong back-up monitors radio and other communication, which should be kept to brief, essential conversations. Whenever possible, trainers should ask someone not involved in the presentation to cover radio calls.

Qualifications into the Binturong Training Team

Before being allowed to work with the binturong, new staff must be familiar with all HZI Natural Encounters policies and procedures that apply to the binturong. Regardless of previous experience, new binturong training team members should expect to spend a period in relationship-building with the binturong working directly with the binturong.

Once approved to proceed, full integration to the binturong training must follow the New Binturong Trainer Checklist.

Tier 3 - Though other NE staff may interact, animal is only handled by members of his or her training team. Worked free contact only with multiple trainers present. Requires relationship-building and advanced handling techniques.

We agree to pursue trainer training on Hannah the binturong.

Role	Printed name	Signature	Date
NE Supervisor			
Teacher Trainer			
Trainee			

ORIENTATION

I have read and understand the following items:

Title	Location	Trainee Initials
Protocol Holding – Special Handling Requirements for the binturong	Share → Natural Encounters → Staff Protocols and Guidelines → Section Protocols	
NE Ambassador Animal Information Chart - Binturong	Black binder in breakroom	
ABMA paper: A Binturong as a Program Animal? A Case Study	Share → Natural Encounters → Staff Papers and Presentations → Binturong Training Paper	
IUCN Red List of Threatened Species: <i>Arctictis binturong</i>	http://www.iucnredlist.org/details/41690/0	
Animal Diversity Web: <i>Arctictis binturong</i>	http://animaldiversity.org/accounts/Arctictis_binturong/	

Trainee observes 5 training sessions. Teacher trainer will interpret animal behavior, explain cues, and direct trainee to socialize with Hannah by feeding her, being sniffed, etc.

Date	Trainer initials	Trainee initials	Notes

CORE BEHAVIORS

Trainee gains competency on basic behaviors for binturong handling while trainer retains control of the leash. Trainer will note the date when full competency on each set of behaviors is reached and then begin the next set. Sessions will be cumulative with trainer continuing to note further practice or issues in the space provided.

Date	Comfort Confidenc	Station	Target	Sit	Here	Eyes	Sniff	Crate (on ground)	Touch	Unharness	Trainer Initials	Trainee Initials

	Notes:		

Trainee watches videos of early training sets with trainer interpreting dangerous behaviors now rarely seen, explaining precursors and coping strategies. Share → Natural Encounters → Photos → Animals → Training → Binturong → Videos for New Trainers

Date	Trainer initials	Trainee initials	Notes

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HARNESS AND LEASH/POSITIONAL BEHAVIORS

Trainee learns to harness the binturong and control the leash while completing training on positional behaviors. Trainer will note the date when full competency on each set of behaviors is reached and then begin the next set. During this time, trainer may control leash as needed but trainee will transition to holding the leash during sets. Sessions will be cumulative with trainer continuing to note further practice or issues in the space provided.

Date	Use of leash	Harness	Spin	Stand	Down	Back-up	Come	Go	Heel	Trainer Initials	Trainee Initials
	Notes:										
	Notes:										
	Notes:										
	Notes:										

I have read and understand the following items in preparation for presentations:

Title	Location	Trainee Initials

Houston Zoo Palm Oil Page	http://www.houstonzoo.org/palmoil/	
Palm Oil Initiative Meeting Notes	Share → Natural Encounters → Shows and Presentations for Guests → HZI Take-Action Initiatives	
Binturong Script – Long Version	Share → Natural Encounters → Shows and Presentations for Guests → Completed Presentations	

ADVANCED BEHAVIORS AND PROGRAMS

Trainee learns advanced behaviors and techniques for husbandry and guest interactions. Trainer will note the date when full competency on each set of behaviors is reached and then begin the next set. Trainee should be holding leash whenever training. Sessions will be cumulative with trainer continuing to note further practice or issues in the space provided.

Date	<i>Jump</i>	<i>Hang</i>	<i>Tail</i>	Weights	Awake vet exams	Injections	Unleash for crate	Train for paintings	Train for media	Trainer Initials	Trainee Initials
	Notes:										
	Notes:										
	Notes:										
	Notes:										

During mastery of above behaviors, trainee will learn various roles for public interactions. Trainer will note dates when full competency on each role is reached in the space below:

Date	Role	Notes	Trainer Initials	Trainee Initials

	BTS Tours - Spotter			
	BTS Tours - Speaker			
	BTS Tours - Trainer			
	Keeper Talks - Spotter			
	Keeper Talks - Speaker			
	Keeper Talks - Trainer			

We agree that the new trainer listed below is now a full training team member for this animal and is passed off to conduct training sets and to train new behaviors with supervisor approval.

Role	Printed name	Signature	Date
NE Supervisor			
Teacher Trainer			
New Trainer			

Natural Encounters Linnaeus' Two-toed Sloth Ambassador Program Overview

The HZI Natural Encounters Section manages the Natural Encounters two-toed ambassador animal. The Curator and Supervisors oversee the training of staff and the husbandry and training of 1.0 Linnaeus' two-toed sloth. Personnel training focuses on safety and consistency to establish behaviors that support the husbandry, education and conservation goals of Natural Encounters and the Houston Zoo.

General:

- Though other Natural Encounters staff may interact with him, the sloth is only handled by members of the sloth training team.
- 1.0 may be worked outside of his enclosure, but only with multiple trainers present.
- This animal requires relationship-building and advanced handling and training techniques.

Individual Animal History

1.0 Linnaeus' two-toed sloth, Curly was born in 1995 at the Santa Barbara Zoo and was acquired by the Natural Encounters Department in 2013 as an ambassador animal.

Procedures:

1. Only qualified sloth trainers may handle or train the sloth.
2. To bring the sloth out of his enclosure for a presentation or training set there will always be a trainer, a back-up to the trainer and a third person for guest interaction and interpretation. The third person can be any staff member who is knowledgeable enough about the sloth to present, answer questions and give instructions to the crowd. The backup trainer must be a fully qualified member of the sloth team and is responsible for monitoring surroundings, assists the trainer and assists in an emergency.
3. The person who is actively training the sloth should focus on the animal and minimize interaction with guests.

Program Description and Guidelines

General

- Typically, the sloth will be transported by crate to the location. The sloth may climb on his presentation prop or may stay inside of his crate.
- Stanchions may be set up, but the appropriate distance can be designated in a variety of ways, such as a stage area, direction from interpretive keeper, or area defined by a lawn.
- Guests are not permitted to touch the sloth without specific permission and guidance from the training team.
- Photographs are allowed.
- The interpreter will address guests with information about sloth, including appropriate conservation information.
- Other ambassador animals may be presented nearby, depending on species.

- Programs are subject to changes or cancellation due to temperature restrictions and animal health issues as outlined in the HZI Program Animal Policy.

Locations

Sloth presentations will only occur in areas where the sloth feels comfortable, where there is space to set up the presentation apparatus, and guests can be kept behind a safe barrier or at a safe distance. Natural Encounters staff must walk through any new location with event organizers prior to any event to confirm specific setup for the event (tables, music, food, etc.). If it is a new location, a practice presentation may be scheduled so the trainers and sloth are familiar with the area as well.

Typical locations for sloth presentations include, the BEC, BEC lawn, Masihara and Karamu. Other locations may be considered on a case-by-case basis.

Request Procedures

- Requests are made through the Dashboard work request system.
- Event organizers must set up a time to walk the venue with a Natural Encounters supervisor at least one week in advance of the event and must notify the Natural Encounters Department of any changes to the venue or time of the event in a timely manner.

Procedures

The following procedures are followed whenever the sloth is outside of his enclosure:

- Sloth is either on his presentation perch or crated.
- Sloth back-up monitors radio and other communication, which should be kept to brief, essential conversations. Whenever possible, trainers should ask someone not involved in the presentation to cover radio calls.

Qualifications into the Sloth Training Team

All potential, new members to the sloth training team must be approved by Natural Encounters supervisors.

Once approved to proceed with integration to the sloth training team, staff must follow the New Sloth Trainer Checklist.

Linnaeus’ Two-Toed Sloth New Trainer Checklist

Tier 3 - Though other NE staff may interact, animal is only handled by members of his or her training team. Worked free contact only with multiple trainers present. Requires relationship-building and advanced handling techniques.

We agree to pursue trainer training on Curly the sloth.

Role	Printed name	Signature	Date
NE Supervisor			
Teacher Trainer			
Trainee			

ORIENTATION

I have read and understand the following items:

Title	Location	Trainee Initials
NE Ambassador Animal Information Chart – Linnaeus’s two-toed sloth	Black binder in breakroom	
IUCN Red List of Threatened Species: <i>Choloepus didactylus</i>	http://www.iucnredlist.org/details/4777/0	
San Diego Zoo Fact Sheet: Two-toed sloth	http://library.sandiegozoo.org/factsheets/sloth/sloth.htm	

Trainee observes 3 training sessions. Teacher trainer will interpret animal behavior, explain cues, and direct trainee to socialize with Curly by feeding him, etc.

Date	Trainer initials	Trainee initials	Notes
			In cage
			On perch

			On perch
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Teacher trainer and trainee discuss any known health issues or behavioral tendencies in this animal that could endanger the animal, handler, or guest. This should cover possible signs of stress, aggressive behaviors, and startle reactions, including precursors and best practices for prevention or recovery.

Date	Trainer initials	Trainee initials	Notes

CORE BEHAVIORS AND PRESENTATIONS

Trainee gains competency on behaviors and techniques for sloth handling under direction of trainer. Trainer will note the date when full competency on each set of behaviors is reached and then begin the next set. Sessions will be cumulative with trainer continuing to note further practice or issues in the space provided.

Date	Comfort Confidenc	Target	Here	Touch	Crate from cage	Uncrate to perch	Crate from perch	Occupy on perch	Pose for photo op.	Nail care	Trainer Initials	Trainee Initials

	Notes:		
	Notes:		

	Notes:		
	Notes:		

I have read and understand the following items in preparation for presentations:

Title	Location	Trainee Initials
Houston Zoo Palm Oil Page	http://www.houstonzoo.org/palmoil/	
Palm Oil Initiative Meeting Notes	Share → Natural Encounters → Shows and Presentations for Guests → HZI Take-Action Initiatives	
Sloth Script	In process	

Trainee attends and observes at least one evening appearance with Curly trainer (not necessarily the teacher trainer).

Date	Trainer initials	Trainee initials	Notes

During mastery of above behaviors, trainee will learn various roles for public interactions.

Trainer will note dates when full competency on each role is reached in the space below:

Date	Role	Notes	Trainer Initials	Trainee Initials
	BTS Tours - Spotter			
	BTS Tours - Speaker			
	BTS Tours - Trainer			
	Keeper Talks - Spotter			
	Keeper Talks - Speaker			
	Keeper Talks - Trainer			

We agree that the new trainer listed below is now a full training team member for this animal and is passed off to conduct training sets and to train new behaviors with supervisor approval.

Role	Printed name	Signature	Date
NE Supervisor			
Teacher Trainer			
New Trainer			

Natural Encounters Red Panda Ambassador Program Overview

The HZI Natural Encounters Section manages the Natural Encounters red panda ambassador animals. The Curator and Supervisors oversee the training of staff and the husbandry and training of 1.1 Red Pandas. Personnel training focuses on safety and consistency to establish behaviors that support the husbandry, education and conservation goals of Natural Encounters and the Houston Zoo.

General:

- Though other Natural Encounters staff may interact with them, red pandas are only handled or trained by members of the red panda training team.
- 1.0 may be worked outside of his enclosure, inside the enclosure, or on exhibit. 0.1 may be worked inside the enclosure or on exhibit only.
- Free contact training requires the presence of two red panda trainers. To train 1.0 outside of his enclosure, two trainers and a supervisor must be present.
- These animals require relationship-building and advanced handling and training techniques.

Individual Animal History

1.0 Red Panda, Take' was born in 2009 and was acquired by the Natural Encounters Department in 2010.

0.1 Red Panda, Li Ming, was born in 2008 and acquired by the Natural Encounters Department in 2015

Take' and Li Ming are full siblings.

Procedures:

1. Only qualified red panda trainers may handle or train the red pandas.
2. To bring 1.0 red panda out of his enclosure for a presentation or training set there will always be a trainer, a back-up to the trainer and a supervisor present. The backup trainer must be a fully qualified member of the training team and is responsible for monitoring surroundings, assists the trainer, assists with interpretation and assists in an emergency. The supervisor is primarily there to assist in an emergency, but may also help interpret or instruct guests.
3. The person who is actively training the red panda should focus on the animal, but may also interact with the guests.
4. Red panda guest interactions are in the form of behind the scenes tours. The red pandas are never brought outside of the red panda building.

Program Description and Guidelines

General Tours

- Red Panda tours include at least one of the following scenarios; Take' on his harness and leash brought into the keeper area, guests brought onto the red panda exhibit, or guests feeding one or both red pandas, in red panda holding, through their enclosure mesh.
- Appropriate distance between guests and red pandas can be designated in a variety of ways, but is usually designated by instruction from the red panda trainers.
- With permission from the trainers, guests may be permitted to touch and/or feed the red pandas while free contact.
- Photographs are allowed.
- The trainers will address guests with information about red pandas, including appropriate conservation information.
- Programs are subject to changes or cancellation due to animal health issues as outlined in the HZI Program Animal Policy.
- No specific type of interaction is guaranteed, since this is determined by trainers interpretation of the animal's behavior on the day of the tour.

Locations

Red Panda presentations will only occur in Red Panda building keeper area, or Red Panda exhibit.

Request Procedures

- Requests are made through the Dashboard work request system.

Procedures

The following procedures are followed whenever 1.0 red panda is outside of his enclosure:

- Main door into red panda building must be dead-bolted. This is to prevent anyone from accidentally opening the door during the tour.
- Take' must always wear a harness and leash, which is put on inside of his holding enclosure.
- Trainers must provide some tall object for Take' to climb on, this is usually his training platform.
- Take' always has access to his holding enclosure.
- Red panda trainer brings Take' out of his enclosure and onto the training platform.
- Once on the platform, trainer may instruct guests in feeding, photo-op and/or touch behaviors.

The following procedures are followed whenever guests are brought onto the red panda exhibit:

- The primary trainer will enter the exhibit first, followed by the back-up trainer, followed by guests, supervisor enters the exhibit last and secures the door.
- Trainers or supervisor will instruct guests on where to stand on exhibit.
- Primary trainer will train the red panda onto the large boulder for guest interactions.
- Once on the boulder, trainer may instruct guests in feeding, phot-op and/or touch behaviors.

The following procedures are followed whenever guests will be interacting with the red pandas with protected contact:

- A red panda trainer will instruct guests in feeding or other types of interaction through the mesh of the enclosure.
- A second trainer is recommended, but not required for this type of interaction.

Qualifications into the Red Panda Training Team

All potential, new members to the red panda training team must be approved by Natural Encounters supervisors.

Once approved to proceed with integration to the sloth training team, staff must follow the

New Red Panda Trainer Checklist.

Role	Printed name	Signature	Date
NE Supervisor			
Teacher Trainer			
Trainee			

New Red Panda Trainer Checklist

Tier 3 - Though other NE staff may interact; animal is only handled by members of his or her training team. Worked free contact only with multiple trainers present. Requires relationship-building and advanced handling techniques.

We agree to pursue trainer training on Take' and Li Ming.

ORIENTATION

I have read and understand the following items:

Title	Location	Trainee Initials
Protocol Bat Red Panda-Special Handling requirements for the red pandas	Share → Natural Encounters → Staff Protocols and Guidelines → Section Protocols	
NE Ambassador Animal Information Chart – red panda	Black binder in breakroom	
IUCN Red List of Threatened Species: <i>Ailurus fulgens</i>	http://www.iucnredlist.org/details/714/0	
Animal Diversity Web: <i>Ailurus fulgens</i>	http://animaldiversity.org/accounts/Ailurus_fulgens/	

Trainee observes 2 training sessions with both animals. Teacher trainer will interpret animal behavior, explain cues, and direct trainee to socialize with red pandas by feeding them, talking to them, etc.

Date	Trainer initials	Trainee initials	Notes

Teacher trainer and trainee discuss any known health issues or behavioral tendencies in these animals that could endanger the animal, handler, or guest. This should cover possible signs of stress, aggressive behaviors, and startle reactions, including precursors and best practices for prevention or recovery.

Date	Trainer initials	Trainee initials	

CORE BEHAVIORS: Li Ming

Date	Shift	Protecte d	Protecte d	Target	Station	here	Touch	Name	Scale	Crate	Awake vet	Trainer Initials	Trainee Initials

Trainee gains competency on basic behaviors for Li Ming while trainer retains control of the leash. Trainer will note the date when full competency on each set of behaviors is reached and then begin the next set. Sessions will be cumulative with trainer continuing to note further practice or issues.

in the space provided.

	Notes:		

CORE BEHAVIORS: Take'

Trainee gains competency on basic behaviors for Take' while trainer retains control of the leash. Trainer will note the date when full competency on each set of behaviors is reached and then begin the next set. Sessions will be cumulative with trainer continuing to note further

Date	Shift	Protecte d	Protecte d	Target	Station	here	Touch	Name	Scale	Crate	Awake vet	Trainer Initials	Trainee Initials

practice or issues.

in the space provided.

	Notes:		

Trainee watches a minimum of one keeper talk performed by primary trainer with these animals.

Date	Trainer initials	Trainee initials	Notes

I have read and understand the following items in preparation for presentations:

Title	Location	Trainee Initials
Houston Zoo webpage for paper recycling Take Action Initiative	http://www.houstonzoo.org/saving-wildlife/take-action/#paper-recycling/	
Paper recycling initiative meeting notes	Share → Natural Encounters → Shows and Presentations for Guests → HZI Take-Action Initiatives	
Red Panda Chat.doc	Share → Natural Encounters → Shows and Presentations for Guests → Completed Presentations	

Show Behaviors and Programs: Take'

Trainee learns to harness Take' and control the leash while completing training on show and program behaviors. Trainer will note the date when full competency on each set of behaviors is reached and then begin the next set. During this time, trainer may control leash as needed but

trainee will transition to holding the leash during sets. Sessions will be cumulative with trainer continuing to note further practice or issues in the space provided.

Date	Stand	Spin	Paw	Use of leash	Harness	Unharness	Walk into keeper	Work on platform	Feed and phot op.	Trainer Initials	Trainee Initials
	Notes:										
	Notes:										
	Notes:										
	Notes:										

During mastery of above behaviors, trainee will learn various roles for public interactions. Trainer will note dates when full competency on each role is reached in the space below:

Date	Role	Notes	Trainer Initials	Trainee Initials
	BTS Protected Contact Tours			
	BTS Tours w/Panda on Harness-Spotter			
	BTS Tours W/Panda on Harness-Speaker			
	BTS Tours w/Panda on Harness-Trainer			
	BTS Tours on Exhibit, no Harness-Spotter			

	BTS Tours on Exhibit, no Harness-Trainer			
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We agree that the new trainer listed below is now a full training team member for this animal and is passed off to conduct training sets and to train new behaviors with supervisor approval.

Role	Printed name	Signature	Date
NE Supervisor			
Teacher Trainer			
New Trainer			

Appendix

AZA Policy for Animal Contact with the General Public

Adopted by the AZA Board of Directors 1997, Incorporated into the Accreditation Guidelines in 1998
Submitted by the Animal Health Committee, R. Eric Miller, DVM, Dipl. ACZM, Chairman

Nearly every contact with other living organisms, whether it be with humans or other animals, carries some risk of disease transmission. Diseases that are spread from animals to humans are called zoonoses (adj. = zoonotic diseases). Responsible zoos should and do make reasonable attempts to limit the risk of the spread of disease from the animals in their care to their employees and to the general public (4,9). For the general public, the risk of contracting disease from most zoo animals is minimal to nonexistent due to their distance and isolation from the animals. However, contact areas for the general public can present increased risks that can be controlled with reasonable precautions. For this paper, contact areas refers to those areas in which there is direct physical contact between animals and people. These precautions are most effective when they are part of an overall preventive medicine program for the zoological park (5,8).

Risks of zoonotic disease can be markedly reduced by avoiding direct animal contact. However, this foregoes many valuable educational experiences and the establishment of a direct relationship between animals and the public. A reasonable alternative is adequate hand washing for those in direct contact with the animals. Hand washing is perhaps the single most effective personal hygiene procedure for reducing the risk of infection (4). Given that fact, all areas in which the public has direct contact with animals should have access to hand washing facilities that are in the immediate vicinity of the contact (or an equivalent; e.g., bacteriocidal hand-wipes).

As outlined by the AZA and the USDA's Animal Welfare Act, animal contact areas should always be supervised by a trained zoo representative. Obviously, animals that are ill, should not be used. Human food consumption should not occur in the immediate area of contact. Additionally, zoological institutions should be aware that the Centers for Disease Control (CDC) standards advise additional precautions may be necessary for humans that they classify as at increased risk of disease, including those that are immunocompromised. When a reportable disease is identified, all appropriate local, state, and federal regulatory officials should be contacted.

More detailed information on zoonotic diseases may be obtained from a variety of veterinary and medical textbooks and journals, (1,6) and from public health officials. Additionally, the AZA's Quarantine Protocol provides further testing recommendations (7). Also referenced at the end of this report is a review of some of the risks associated with animals and immunocompromised humans (3). Following is a list of disease considerations and control programs recommended for animals commonly used in contact programs. Depending on the disease and history of the animals, testing protocols may vary from an initial or incoming quarantine test, to yearly repetitions. This protocol should be at the discretion of the institutional veterinarian.

Reptiles and Amphibians

Most notable among the disease risks presented by reptiles is the transmission of *Salmonella* sp. Salmonellosis is a common and often nonpathogenic infection of reptiles (in one survey, according to species, the infection rate ranged from 3 to 55 percent) (2). Diagnosis may be difficult. A cloacal swab or other sample positive on culture for *Salmonella* sp. is diagnostic for infection. However, due to intermittent fecal shedding of these organisms, false negative cultures frequently occur. So, it is difficult, if not impossible to ascertain with certainty that an animal is *Salmonella* "negative." Therefore, all reptiles should be treated as salmonella carriers. Attempts to eliminate *Salmonella* carriers with antibiotic therapy have been unsuccessful and may be contraindicated as they can lead to chronic carrier states and increased resistance of these bacteria to antibiotics. Risks of transmission can be reduced in two ways: 1) avoid all direct contact with reptiles or surfaces with which they have come in contact, or, 2) allow only supervised contact followed by hand washing as previously described.

Reptiles can also transmit a variety of other organisms, mostly gastrointestinal in origin, and the same procedures described above should be effective in reducing the risks of transmission to those in contact. These other risks include other gram negative bacterial infections. Reptiles used in contact areas should be free of snake mites and pentastomids (e.g., *Armillifer* sp.).

Amphibians may present several of the same zoonotic risks as reptiles, so again, contact should be followed by hand washing.

Birds

Birds used in contact areas should be free of chlamydiosis and zoonotic parasites (e.g., giardia). Chlamydiosis testing is appropriate for members of the orders Psittaciformes, Galliformes, and Columbiformes. As in reptiles, salmonellosis can be present and difficult to diagnose and so, birds should be treated as suspects. In the general human population, avian tuberculosis is generally considered to have very low zoonotic potential, however, it can present significant risks for immunocompromised individuals. Care should be taken to avoid public contact with known infected flocks.

Mammals: General

All mammals are considered at risk for infection with rabies. Current rabies vaccines are licensed for use in only six domestic species: dogs, cats, ferrets, sheep, horses, and cows. For wild-caught individuals of most species, a prolonged (three-six month) quarantine is necessary to reduce the risk that they are infected with the virus. Even then, some species such as skunks, foxes, raccoons, and bats may still represent a greater risk. Any skin lesions compatible with dermatomycosis ("ringworm") should be carefully evaluated in order to prevent transmission to those in direct contact with them.

Mammals: Primates

Unless extensive testing has been performed for a variety of viral, parasitic, and bacterial diseases, all direct public contact with primates should be avoided. Public contact also places the primates at considerable risk of contracting diseases from humans.

Mammals: Small Ruminants/Neonatal Ruminants

All small ruminants; e.g., pygmy goats, sheep, dwarf cattle, llamas, etc., that are greater than six months of age and used in contact areas should be tested for tuberculosis, brucellosis, and leptospirosis. Obviously, any animals with lesions compatible with sarcoptic mange (mange mite = *Sarcoptes scabiei*) should be removed from contact. Any animals with lesions compatible with contagious ecthema ("orf" in man) should be tested and removed from contact until proven negative. Calves should be checked and found free of *Cryptosporidium* sp. And other infections with protozoa. Other diseases of a potential zoonotic nature include infection with *Coxiella burnetii* (Q-fever) in endemic areas. Additionally, recent reports indicate that infection with Johnes disease (*Mycobacterium paratuberculosis*) may present zoonotic concerns, primarily in goats.

Mammals: Swine

These animals should be checked for gastrointestinal infection with *Balantidium* sp. efforts made to control this infection. Additionally, consideration should be given to regular vaccination for the bacterial disease, *Erysipelothrix rhusiopathae* ("diamond skin disease").

Mammals: Small Carnivores

In general, due to the potential for bites, small carnivores should be used in contact areas only with extreme caution. Due to the risk of bites, small felids are generally not used in direct contact. If they are, care must be taken that such animals are negative for infection with *Toxoplasma gondii*. All carnivores should be tested for and be free of zoonotic species of roundworms such as *Baylascaris* sp. Small carnivores (e.g., raccoons and skunks) obtained from the wild may present a greater risk of rabies and their use should be avoided in contact areas.

Mammals: Rodents and Lagomorphs

When using rodents and lagomorphs in contact areas, consideration should be given to the risk of bites, past history, and exposure to hantavirus, salmonella, and tularemia.

Mammals: Chiroptera

At the present time, CDC regulations effectively prohibit the use of bats in direct contact areas.

Fish / Aquatic Tanks

Due to the potential for infection with atypical mycobacteria, *Vibrio* sp., *Erysipelothrix rhusiopathae*, and a variety of gram negative bacteria, contact with fish or touch tanks should also be followed by hand washing.

Summary

It is important to evaluate the risks of zoonotic diseases in a rational context. Contact animals can provide a valuable educational experience for visitors and participants in public programs to zoological parks and aquariums. Most zoonotic diseases of concern in public areas can be prevented with reasonable testing and quarantine programs and proper hand-washing techniques.

These are intended to be general guidelines and the risk of diseases can vary by area, so each zoological institution should develop its own zoonoses control program. Two excellent resources for reviewing testing and preventative procedures for many of these diseases are the American Association of Zoo Veterinarians' Infectious Disease Notebook, (1) and the American Veterinary Medical Association's Zoonoses Updates.(6) In summary, the most effective method for disease prevention is a complete and thorough veterinary program and common sense sanitary measures.

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AZA Ambassador Animal Policy

Originally approved by the AZA Board of Directors – 2003

Updated and approved by the Board – July 2008 & June 2011

Modified from "Program Animal" to "Ambassador Animal" to avoid confusion with "Animal Programs"; approved by the CEC; no change to meaning of these terms - January 2015

The Association of Zoos & Aquariums (AZA) recognizes many benefits for public education and, ultimately, for conservation in ambassador animal presentations. AZA's Conservation Education Committee's Ambassador Animal Position Statement summarizes the value of ambassador animal presentations (see pages 42-44).

For the purpose of this policy, an Ambassador Animal is defined as "an animal whose role includes handling and/or training by staff or volunteers for interaction with the public and in support of institutional education and conservation goals". Some animals are designated as Ambassador Animals on a full-time basis, while others are designated as such only occasionally. Ambassador Animal-related Accreditation Standards are applicable to all animals during the times that they are designated as Ambassador Animals.

There are three main categories of Ambassador Animal interactions:

1. On Grounds with the Ambassador Animal Inside the Exhibit/Enclosure:

- i. Public access outside the exhibit/enclosure. Public may interact with animals from outside the exhibit/enclosure (e.g., giraffe feeding, touch tanks).
- ii. Public access inside the exhibit/enclosure. Public may interact with animals from inside the exhibit/enclosure (e.g., lorikeet feedings, 'swim with' programs, camel/pony rides).

2. On Grounds with the Ambassador Animal Outside the Exhibit/Enclosure:

- i. Minimal handling and training techniques are used to present Ambassador Animals to the public. Public has minimal or no opportunity to directly interact with Ambassador Animals when they are outside the exhibit/enclosure (e.g., raptors on the glove, reptiles held "presentation style").
- ii. Moderate handling and training techniques are used to present Ambassador Animals to the public. Public may be in close proximity to, or have direct contact with, Ambassador Animals when they're outside the exhibit/enclosure (e.g., media, fund raising, photo, and/or touch opportunities).
- iii. Significant handling and training techniques are used to present Ambassador Animals to the public. Public may have direct contact with Ambassador Animals or simply observe the in-depth presentations when they're outside the exhibit/enclosure (e.g., wildlife education shows).

3. Off Grounds:

i. Handling and training techniques are used to present Ambassador Animals to the public outside of the zoo/aquarium grounds. Public may have minimal contact or be in close proximity to and have direct contact with Ambassador Animals (e.g., animals transported to schools, media, fund raising events).

These categories assist staff and accreditation inspectors in determining when animals are designated as Ambassador Animals and the periods during which the Ambassador Animal-related Accreditation Standards are applicable. In addition, these Ambassador Animal categories establish a framework for understanding increasing degrees of an animal's involvement in Ambassador Animal activities.

Ambassador animal presentations bring a host of responsibilities, including the safety and welfare of the animals involved, the safety of the animal handler and public, and accountability for the take-home, educational messages received by the audience. Therefore, AZA requires all accredited institutions that make ambassador animal presentations to develop an institutional program animal policy that clearly identifies and justifies those species and individuals approved as program animals and details their long-term management plan and educational program objectives.

AZA's accreditation standards require that education and conservation messages must be an integral component of all ambassador animal presentations. In addition, the accreditation standards require that the conditions and treatment of animals in education programs must meet standards set for the remainder of the animal collection, including species-appropriate shelter, exercise, appropriate environmental enrichment, access to veterinary care, nutrition, and other related standards. In addition, providing ambassador animals with options to choose among a variety of conditions within their environment is essential to ensuring effective care, welfare, and management. Some of these requirements can be met outside of the primary exhibit enclosure while the animal is involved in a program or is being transported. For example, free-flight birds may receive appropriate exercise during regular programs, reducing the need for additional exercise. However, the institution must ensure that in such cases, the animals participate in programs on a basis sufficient to meet these needs or provide for their needs in their home enclosures; upon return to the facility the animal should be returned to its species-appropriate housing as described above



HOUSTON ZOO, INC.
POLICIES AND PROCEDURES

HOUSTON ZOO ANIMAL ACQUISITION GUIDELINES

Live animal acquisitions come in the form of births, purchases, loans, donations, animals collected from the wild, and the acceptance of confiscated animals into the ownership or care of the Houston Zoo. These guidelines apply to collection animals and not to animals to be used as feed, which are only to be acquired from reputable animal feed suppliers. The Houston Zoo acquisition guidelines are adapted from the AZA Acquisition/Disposition Policy.

The Director of Veterinary Services will review and approve animal acquisition proposals from a veterinary perspective and is responsible for communicating any concerns to the Vice-President of Animal Operations. The final recommendation on any animal acquisition will rest with the Vice-President of Animal Operations and may be mediated by the Zoo Director in cases where agreement cannot be reached. All decisions will be made in the best interests of the welfare of the individual specimen(s) and the overall animal collection as well as the conservation of the species as a whole.

Most animal transactions, both acquisition and disposition, are initiated by the section Curator and are documented through the office of the Registrar of the Houston Zoo.

Guiding Principles

1. Live animals may be acquired through propagation of animals at or owned by the Houston Zoo, by purchase, loan, donation, animals collected from the wild, or acceptance of confiscated animals from one of the following sources: AZA member facilities, other qualified institutions, wildlife brokers, private individuals, governmental agencies, or other entities that abide by the same guidelines as the AZA Code of Professional Ethics, as stated in a signed contract.
2. Specimens proposed for acquisition must be relevant to and consistent with the purposes, programs, and activities of the Houston Zoo as outlined in the institutional collection plan, the long-term strategic plan, and the HZI mission statement.
3. Generally, preference for animal acquisitions will be from AZA member or related facilities, AZA Cooperative Conservation Programs, or state or federal wildlife programs. If specimens cannot

be acquired from these preferred entities, then other acquisition options may be explored, consistent with this policy.

4. Animals will only be acquired from reputable sources. In determining the reputation of a source, any convictions of federal, state, or international wildlife laws should be reviewed, as well as any previous dealing with other AZA institutions. These concerns may be overridden by animal welfare concerns in rescue or confiscation situations.
5. Regarding acquisitions from non-AZA members, the non-member's mission (stated or implied) must not be in conflict with the mission of the Houston Zoo or the AZA.
6. At the discretion of the senior animal management team, inspection of non-AZA member facilities and/or references may be required prior to animal acquisition.
7. Attempts to circumvent AZA conservation programs in the acquisition of SSP animals are detrimental to the AZA and its conservation programs. Such actions could be construed as a violation of the Association's Code of Professional Ethics. Acquisition of specimens managed through an SSP should be done in accordance with the efforts of the relevant SSP coordinators and the appropriate management groups.
8. SSP-managed species recommended for transfer by the SSP are typically acquired on a donation or loan basis.
9. Animal acquisitions may not create a commercial market that is detrimental to the long term survival of the species.
10. Acquisitions through propagation of specimens at or owned by the Houston Zoo will be guided by careful collection planning and animal management to ensure that animals produced are in compliance with the zoo's plans, or in accordance with cooperative species management programs.

Specimens may be acquisitioned into the HZI collection according to the following guidelines:

General Guidelines

- Acquisitions must meet the requirements of all applicable local, state, federal, and international regulations and laws.

- Animals are only to be acquired from sources that are known to operate legally and conduct their business in a manner that reflects and/or supports the spirit and intent of the AZA Code of Professional Ethics as well as the HZI and AZA Acquisition/Disposition Policies.
- Non-domestic animals shall not be acquired at animal auctions or from organizations or individuals that may use or sell animals at auctions. In transactions with AZA non-members, providers of animals must ensure in writing that the animal(s) were not procured at an animal auction.
- Animals shall not be purchased from organizations or individuals that allow the hunting of exotic animals. The provision of any compensation to such organizations must be viewed as endorsement or support for them.
- Live specimens may be collected from the wild with careful consideration to the long-term impacts on the wild population. Any capture of free-ranging animals should be done in accordance with all local, state, federal, and international wildlife laws and regulations and may not be detrimental to the long-term viability of a population or species.
- Acquisition of animals from research facilities may be considered on a case-by-case basis. Research at the facility providing the animal(s) should be consistent with the guidelines established under the Animal Welfare Act by the U.S. Department of Agriculture Animal and Plant Health Inspection Service (APHIS). The over-riding criterion for acquisition of these animals must be animal welfare.
- Animals may be acquired temporarily or long-term for reasons such as holding for governmental agencies, rescue and/or rehabilitation, or special exhibits. These animals should only be accepted if they will not jeopardize the health, care, or maintenance of the animals in the permanent collection or the animal(s) being acquired.
- Whenever possible, animals acquired by the Houston Zoo will be subject to pre-arrival medical screening to determine the health status of the individual specimen(s) as well as the level of health-related risk to the overall collection.

Collection of Live Specimens

- The Houston Zoo will not accept any animal that was acquired through illegal, unethical, or inhumane means, nor will HZI engage in any transaction with any vendor that acquires animals through such means. Vendors must provide a statement no less frequently than every three years that no animal in their possession was acquired through such means. A list of live animal vendors with whom the Houston Zoo engages in animal transactions will be maintained for five years in the Registrar's office.
- An aquatic animal vendor ethical treatment agreement must be on file in the Registrar's office for all commercial animal collectors that HZI does business with.

- Current and complete copies of all applicable local, state, federal, and/or international permits or special licenses must be on hand for all commercial animal collectors that HZI does business with.
- All animals collected from the wild by the Houston Zoo will be collected in strict compliance with collection permits issued by Texas Parks and Wildlife and/or any other applicable regulatory agency for the acquisition of live specimens.
- Use of chemical means (tranquilizers, lactic acid, cyanide, copper sulfate) or any other illegal method of collection will not be employed.
- Appropriate collection techniques may include trapping, seining, dip-netting, or trawling operations provided they are conducted in a humane, ethical, and professional manner.

Exotic Pets and the Pet Trade

The Houston Zoo promotes responsible pet ownership and sales. In addition to the requirements listed above, an animal may be acquired from private, established hobbyists and/or reputable pet industry groups under the following conditions:

- No animal should be acquired from private hobbyists or the pet industry if it would create an animal health or safety risk to the existing collection.
- Acquisitions from the pet trade should be examined on a case-by-case basis. Advice and support from the relevant AZA sub-groups, such as TAGs or SSPs, may be sought where appropriate.

Acquisitions from Staff Members

- Acquisitions of animals from staff members will be considered on a case-by-case basis.
- The staff member must legally be able to possess the specimen(s) they are providing to the zoo according to any applicable local, state, or federal regulations.
- Such transactions should not be for the express purpose of promoting a staff member's commercial venture, but must be mutually beneficial to both parties.
- A site inspection of the staff member's animal facilities may be required at the discretion of the senior animal management team.

HZI Responsibilities

- The Houston Zoo will maintain transaction forms to record animal acquisitions and dispositions.

- HZI, as a loan recipient, will provide responses to inquiries from the loaning institution on a timely basis. In the case of the death of a loaned-in specimen, the zoo will notify the owner institution within 48 hours of the event.

Source Responsibilities

- Institutions or individuals providing animals to the Houston Zoo will agree to abide by any contract(s) generated as part of the acquisition process.
- Institutions or individuals providing animals to the Houston Zoo will agree to provide appropriate animal care to the specimen(s) before arrival and during shipment, if so contracted.

No set of guidelines can cover every conceivable situation. On some occasions, there will be circumstances that require special consideration and/or emergency action.



HOUSTON ZOO, INC.

POLICIES AND PROCEDURES

HOUSTON ZOO ANIMAL DISPOSITION GUIDELINES

A live animal disposition is the sale, loan, donation, release, or euthanasia of any collection animal, wild or domestic, that is owned or under the care of the Houston Zoo. The HZI disposition guidelines are adapted from the AZA Acquisition/Disposition Policy.

The Director of Veterinary Services will review and approve animal disposition proposals from a veterinary perspective and is responsible for communicating any concerns to the Vice President of Animal Operations. The final recommendation on any animal disposition will rest with the Vice President of Animal Operations and may be mediated by the Zoo Director in cases where agreement cannot be reached. All decisions will be made in the best interests of the welfare of the individual specimen(s) and the overall animal collection as well as the conservation of the species as a whole.

Most animal transactions, both acquisition and disposition, are initiated by the section Curator and are documented through the office of the Registrar of the Houston Zoo.

Guiding Principles

Live animals may be disposed of by sale, loan, or donation to AZA member facilities, other qualified institutions, wildlife brokers, private individuals, governmental agencies, or other entities that abide by the same guidelines as the AZA Code of Professional Ethics, as stated in a signed contract.

1. Generally, preference for animal dispositions will be to AZA member facilities, AZA Cooperative Conservation Programs, state or federal wildlife programs. Difficult-to-place animals should be advertised in the AZA Animal Exchange for at least one month to ensure that a good faith effort was made to place the specimen(s) in an AZA facility. If specimens cannot be disposed of to these preferred entities, then other disposition options may be explored, consistent with this policy.
2. In dispositions to non-AZA members, the non-member's mission (stated or implied) must not be in conflict with the mission of the Houston Zoo or the AZA. Furthermore, the Houston Zoo must be confident that the recipient has the appropriate expertise, record-keeping abilities,

financial stability, and facilities to care for and maintain the animals. In some cases, a mandatory return clause may be incorporated into the animal disposition contract if the receiving institution/individual, for any reason, is unable to continue to care for and house the animal(s).

3. At the discretion of the senior animal management team (curatorial and veterinary teams), an inspection of non-AZA member facilities and/or references may be required prior to animal disposition. A Vendor Profile must be completed on all such facilities. Responsibility for the evaluation of the suitability of recipients of Houston Zoo specimens rests with the Area Curator and the Vice President of Animal Operations.
4. Attempts to circumvent AZA conservation programs in the disposition of SSP animals are detrimental to the AZA and its conservation programs. Such actions could be construed as a violation of the Association's Code of Professional Ethics. The disposition of specimens managed through SSP's should be arranged in accordance with the efforts of the relevant SSP coordinators and the appropriate management groups.
5. SSP-managed species recommended for transfer by the SSP are typically dispositioned on a donation or loan basis, unless commercial reimbursement is deemed appropriate by all parties involved in the transaction.

General Guidelines

Specimens may be dispositioned from the HZI collection according to the following guidelines:

- Dispositions must meet the requirements of all applicable local, state, federal, and international regulations and laws.
- Animals shall not be disposed of at animal auctions or to any organization or individual that may buy or sell specimens at exotic animal auctions. In transactions with AZA non-members, recipients must ensure in writing that the animal(s) will not be disposed of at an animal auction.
- Animals shall not be disposed of to organizations or individuals that allow the hunting of these animals or their offspring.
- Live specimens may be released within native ranges, subject to all relevant laws and regulations. Releases may be a part of a recovery program and any release must be compatible with the AZA Guidelines for Reintroduction of Animals Born or Held in Captivity, dated June 3, 1992.
- If specimens are euthanized due to quality of life issues, it must be done in accordance with the most recent report of the American Veterinary Medical Association Panel on Euthanasia, published periodically, and in compliance with the HZI Euthanasia Policy.

- Animals shall not be dispositioned to a facility for research purposes inconsistent with the guidelines established under the Animal Welfare Act by the U.S. Department of Agriculture. Animals will only be dispositioned into research facilities if the research is performed under the review and authorization of an Institutional Animal Care and Use Committee and if the research will benefit the species or taxonomic group directly involved in the study. In no circumstance can the proposed research be invasive, terminal, or otherwise to the detriment of either the individual animal(s) or the species.
- Animals will not be provided to animal brokers unless the contracted destination and proposed use of the animal(s) are known and approved prior to the disposition.

Exotic Pets and the Pet Trade

The Houston Zoo promotes responsible pet ownership and sales and does not encourage the keeping of exotic animals as pets. In addition to the requirements listed above, an animal is only to be disposed of from the Houston Zoo to private, established hobbyists and/or reputable pet industry groups under the following conditions:

- No animal should be disposed of to private individuals, members of the general public, or the pet industry if it would create a public health or safety risk, or have a negative impact on the conservation of that species.
- Dispositions to the exotic pet trade will be examined on a case-by-case basis. Advice and support from the relevant AZA sub-groups, such as TAGs or SSPs, may be sought where appropriate.

Dispositions to Staff Members

- Disposition of HZI specimens to staff members will be reviewed by the curatorial and veterinary teams and will be considered on a case-by-case basis.
- The staff member must legally be able to possess the specimen(s) according to any applicable local, state, or federal regulations.
- Such transactions should not be for the express purpose of promoting a staff member's commercial venture, but must be mutually beneficial to both parties.
- A site inspection of the proposed animal facilities may be required at the discretion of the senior animal management team.
- HZI should not give staff members preferential treatment or donate specimens to staff members that would otherwise be sold to reputable institutions or individuals.

- As with all loans, HZI retains the right to recall their animal(s) at any time with appropriate advance written notice.

Disposition of Dead Specimens

- Disposition of dead animals must meet the requirements of all applicable local, state, federal, and international regulations and laws.
- Animals that die at the Houston Zoo will have a complete necropsy to ascertain the cause of death. Information from complete post-mortem examinations assists with health care for the remainder of the collection, and is of the highest priority.
- Maximum utilization should be made of the remains, which could include use in educational programs or exhibits, as animal remains can be a valuable asset to the scientific community. Consideration should be given to scientific projects that provide data for species management and/or conservation.
- The zoo must first oblige agreements and respect legal ownership of the animal. Carcasses of animals that belong to other institutions, or which are managed by an SSP, TAG, or other cooperative conservation program will be first offered to those entities, or will be sent to the institution(s) as directed by the management authority.
- If there is no specific directive, it is the zoo's desire to provide specimens to institutions with the greatest potential utilization of the carcass. While public display is an important utilization, specimens may also provide important genetic, taxonomic, medical, teaching, or other information.
- Specimens may be covered by State, Federal, or international laws or treaties and will not be provided without appropriate assurance that all transfers are legal and appropriate.
- Records must be kept for all dispositions, including animal body parts, when possible.
- SSP and TAG necropsy protocols should be accommodated insofar as possible.

HZI Responsibilities

- The Houston Zoo will maintain transaction forms to record all animal acquisitions and dispositions.
 - These forms will require recipients to adhere to the AZA Code of Professional Ethics, as well as the HZI and AZA Acquisition/Disposition Policies.

- Transaction forms will require that recipients comply with all applicable laws and regulations of local, state, federal, and international authorities.
- Detailed disposition records of all specimens must be maintained in the office of the Registrar.
- HZI, as a loaning institution, will monitor at least annually the conditions of any loaned specimens and the ability of the recipient to provide proper care.

Recipient Responsibilities

- Recipients of animals from the Houston Zoo must agree, in writing via the Animal Transaction Confirmation process, to adhere to the AZA Code of Professional Ethics, as well as the HZI and AZA Acquisition/Disposition Policies.
- The recipient and transporter with intermediate responsibility for the animal(s) must agree to provide the animals with humane care and living conditions at all times. The recipient must be financially and otherwise able to provide such care and living conditions.
- Recipients of specimens from the Houston Zoo may not use our name to sell their animals or products without prior written consent.

No set of guidelines can cover every conceivable situation. On some occasions, there will be circumstances that require special consideration. The Zoo Director is the final authority on animal disposition decisions.



HOUSTON ZOO, INC.

POLICIES AND PROCEDURES

HOUSTON ZOO ENRICHMENT PROGRAM PHILOSOPHY AND GOALS

Definition

Behavioural enrichment is a dynamic process that enhances an animal's environment within the context of its behavioural and natural history. Social, cognitive, physical, and sensory enrichment techniques are introduced on a varied schedule in a variety of contexts to increase the animal's behavioural choices, elicit species-specific behaviours, and enhance animal welfare.

(AZA)

Mission

The Houston Zoo's Enrichment Program will provide our zoo staff the means to enhance the welfare of the animals, while providing quality guest experience, by encouraging natural behaviors.

Objectives

1) Strive to incorporate enrichment into the husbandry routine of the collection and familiarize all HZI staff with their role in the enrichment program.

- Responsible daily husbandry routines include enrichment.
- The enrichment program is a collaboration of all staff to ensure that it will remain self-sustaining.
- Animal care staff will be educated about the principles, theory, and practice of enrichment, including the internal processes for approval, assessment, and documentation on a departmental basis.

2) Engage our guests by interpreting exhibited animals.

- This provides an opportunity to educate guests about species-specific behaviors. Providing our animals with change, choice, and control increases the chance of eliciting these species-specific behaviors.
- This can inspire action on behalf of their wild counterparts.
- It will encourage thoughts on the proper care of pets at home.

3) Understand and address the physical and psychological needs of our animals.

- The program will focus on understanding and incorporating the natural and individual history of each animal, as well as its role in the collection.
- The program will be proactive and strive to identify and address issues, such as stress and boredom, before they occur.
- Utilizing the SPIDER framework to define species-specific behaviors, the program will develop appropriate behavior driven enrichment, implement it, and evaluate the results.

4) Provide environments, situations, and challenges that encourage natural, species-appropriate behaviors.

5) Safety and risk will be carefully considered when providing enrichment.



HOUSTON ZOO, INC.

POLICIES AND PROCEDURES

ANIMAL TRAINING PROGRAM PHILOSOPHY AND GOALS

Definition

“Training can be defined as a type of learning; learning is broadly defined as a change in behavior resulting from practice or experience; when that practice or experience is dictated by humans, the process is called training (Mellen & Ellis, 1996).”

“Training is teaching (Ramirez, 1999).”

Mission

The Houston Zoo’s Training Program provides our staff with the means to enhance the welfare and care of collection animals, create quality guest experiences, and to contribute to conservation.

Objectives

- Incorporate training into the husbandry routine of every area and familiarize staff at all levels with their roles in the program.
- Understand the natural history and role in the collection of each animal in order to set suitable goals and select appropriate training methods.
- Proactively use training to improve husbandry, veterinary procedures, and captive management.
- Use training to enhance our guests’ experience by providing opportunities to experience animals that are true ambassadors for their wild counterparts.

Incorporate training into the husbandry routine of every area and familiarize staff at all levels with their roles in the program.

- Training is not an “extra,” it is as much a part of the routine as feeding and cleaning.
- The program must be self-sustaining; it cannot rely on one individual.
- ALL animal care staff will be educated about training principles, theory and practice, including the internal processes for approval, assessment and documentation.
- All animal care staff is expected to be able to articulate and apply animal training techniques to achieve training goals as outlined by their area.
- The ultimate goal of each training plan is that a completed behavior is trained to the level that multiple staff members can have the animal demonstrate the behavior to the required criteria.

Understand each animal's role in the collection in order to set suitable goals and select appropriate training methods.

- Safety and risk (animal, staff and guest) is always the first consideration in any training initiative.
- The program focuses on understanding and incorporating the animal's natural and individual history, role in the collection, and the trainer's relationship with that animal into the training process.
- The focus of the training program is operant conditioning and positive reinforcement. Negative reinforcement and punishment, applied correctly, may also be appropriate in some situations.
- All training plans must be reviewed and approved by the appropriate Supervisors.

Proactively use training to improve husbandry, veterinary procedures, and captive management.

- The program will be proactive and strive to identify and address issues before they occur.
- Training goals will be set for each area, species and individual, as appropriate, based on the husbandry, veterinary, and guest experience priorities for the collection.
- Training is one of the many animal management tools that will be used to facilitate good animal care. The choice of when to use training versus other management techniques will be made on a case by case basis cooperatively by the animal care and veterinary staff.

Enhance our guests' experience by providing opportunities to experience animals that are true ambassadors for their wild counterparts.

- Training can be used to demonstrate natural behaviors and emphasize the high quality of care animals at the zoo receive.
- Training can be used to provide programs for our guests, offering opportunities for close, personal interactions, which can have long lasting impacts on their view of the natural world.
- Interpreting training sessions provides an opportunity to educate guests about responsible pet ownership.

Daily Ambassador Animal removal guidelines

A removal is considered the time that an animal is taken from its home enclosure and then returned to its home enclosure. Animals should rest in their home enclosure for 30 min between removals whenever possible.

Animals that can be removed up to two times a day:

Mammals

Armadillo, Opossum, Patagonian Mara, North American Porcupine, Crested Porcupine, Goats

Birds

Birds of Prey, Parrots, kookaburra, Road Runner

Herps and invertebrates

Tarantula, whip scorpion

Animals that can be removed up to three times a day:

Mammals

Chinchillas, Hedgehog, Tenrecs, Rabbits, cats

Birds

Dove, Chickens

Herps and invertebrates

Turtles/tortoises, Lizards Alligators, Crocodiles, Snakes

Houston Zoo, Inc.

Volunteer Animal Handler Training (CZ)

Volunteers must successfully complete animal handling training and evaluation provided by qualified staff designated by the Curator of the Children's Zoo before using animals in a public contact situation. A record of each handler's list of useable animals will be kept by the handler and by the Education Department.

The Animal Handling Training System

- Tier 1
 - All the Tier 1 animals have been divided into 4 groups so there will be 4 training sessions offered. One for each group. You must complete the training session corresponding to the group of animals before you can handle animals from that group.
 - Birds and more: Chickens, dove, tenrec and View Box animals
 - Mammals: Chinchilla, large rabbit, small rabbit, armadillo, and cat
 - Reptiles: Lizard, Turtle/tortoise, alligator, Ball Python and another snake
 - Tier 1 training will include:
 - The proper method of removing an animal from its transport container, the correct use of restraints (halters, jesses, harnesses, etc.), and other procedures necessary to insure the well-being and safety of the animal,
 - The correct way to present the animal to the public,
 - Other finer nuances of animal handling, such as behaviors of the animals or how best to approach hesitant visitors.
 - Natural history information that you will be expected to learn
 - Supervised handling of all the types of animals in that session
 - Trainees must demonstrate that they can convey accurate information, interact positively with visitors, and restrain the animal in a safe and gentle manner.
 - Tier 1 animal training will be conducted at regular intervals throughout the year.
 - After completing the requirements set forth by the Conservation Education Department, all volunteers are eligible to participate in Tier 1 training.
 - In order for all animal handlers to remain current, volunteers must have a minimum number of animal contacts each year. Volunteers are required to have 8 different animal contact sessions each year. It does not matter how many animals are used

for contact during a session. Each session counts as one of the required contacts (even if they repeat animals they have already handled).

- If more than six months elapse, the staff person will need to retake the appropriate training session in order to become an active animal handler again.
- All summer seasonal instructors using camp animals will go through the camp animal training regardless of whether they have been trained previous summers. This will provide training for them to use the Camp animals through the summer season. Likewise certain staff may be trained on specific animals for a specific use.

○ Tier 2

- Application process
 - Vacancies will be announced
 - If all requirements are met, submit an application for the desired animal. Spots will be limited.
 - Requirements:
 - Be a Tier 1 handler in good standing.
 - Must have completed 30 hours of hands-on animal contact with the public.
 - Must have been a volunteer for at least 1 year.
 - Once an applicant is considered you must:
 - Pass a natural history exam on that species/group
 - Commit to complete the necessary training required until handler and animal are confident (will consist of approximately 3-4 sessions behind the scenes and 2 sessions interacting with the public with the animal) in a reasonable amount of time (~3-4 months)
 - Commit to handling the animal at least once per month.
 - Understand that failure to follow the above commitments may cause the handler to be removed from the program.
- All Tier 2 handlers will still be eligible to handle all Tier 1 animals but will need to complete the yearly Tier 1 refresher course.

○ Tier 3

- Application process
 - Vacancies will be announced
 - If all requirements are met, submit an application for the desired animal. Spots will be limited.
 - Requirements:
 - Be a Tier 2 handler in good standing.
 - Must have completed 60 hours of hands-on animal contact with the public (60 hours can include any combination of Tier 1 and Tier 2 hours).
 - Volunteers must have been handling animals for at least 2 years.
 - Once an applicant is considered they must:
 - Pass a natural history exam on that species

- Commit to complete the necessary training required until handler and animal are confident (will consist of a minimum of 6 sessions behind the scenes and 2 sessions interacting with the public with the animal) in a reasonable amount of time (~5-6 months)
- Commit to handling the animal at least 2 sessions per month.
- Understand that failure to follow the above commitments may cause the handler to be removed from the program.
- All Tier 3 handlers will still be eligible to handle all Tier 1 animals but will need to complete the yearly Tier 1 refresher course.
- All Tier 3 handlers will still be eligible to handle all Tier 2 animals for which they have been approved to handle.

TIERIFICATION OF CHILDREN'S ZOO AMBASSADOR ANIMALS

TIER 1

Chicken

Most snakes

Bearded dragon

Rabbit

Box turtle

Texas tortoise

Dove

Chinchilla

Armadillo

Alligators

TIER 2

Screech owls

Goats

Julianna pig

Tegu

Rainbow boa

Angolan Python

Senegal Parrot

Tarantula (out of a view box)

Tailless whip scorpion (out of the view box)

TIER 3

North American Porcupine

Patagonian Mara

FAQs

Volunteer Advanced Animal Handling

How often will I need to come in for the initial training sessions?

We will try to schedule you for a training session once per week. This will be dependent on your availability and the trainer's schedule. It is important that you are able to come in on a regular basis several times per month in the beginning in order to have consistency in the training process.

How long do the training sessions last?

At least 30 minutes each session.

How many training sessions will I need?

This will vary according to the animal you are training with and on how your training sessions progress. Most training is completed after three to five sessions, but can go longer.

Do I need to wear my volunteer uniform for training sessions?

Yes.

Where do I go for my training sessions?

Please come to the Ambassador Animal building in the Children's Zoo, unless you are requested to meet elsewhere.

Who do I contact if I need to change my training session after it is scheduled?

You can either email or call us. If you email us, please email ALL of us if case someone is on vacation. If you call us, please keep calling until you reach someone.

Ambassador Animal Keepers – 713-533-6812 – ambassadoranimalrequests@houstonzoo.org

Tarah Jacobs, Supervisor, Ambassador Animals – 713-533-6647 – tjacobs@houstonzoo.org

Michelle Witek, Supervisor, Children's Zoo – 713-533-6644 – mwitek@houstonzoo.org

How many times do I need to handle my animal to meet my commitment?

Tier II animals must be handled at least once per month.

Tier III animals must be handled at least twice per month.

How do I reserve my animal for a handling session AFTER I am trained?

The best way is to send an email to ALL of us at the above email addresses. Sending the email to all of the addresses assures that someone will respond even if the others are unavailable or on vacation.

Please let us know which animal, what day, and what time you would like it. Please give us at least 24 hours' notice when you wish to reserve your animal for a handling session. Please do not try to reserve your animal over a week in advance. We are not able to accommodate requests that far in advance at this time.

You should receive an email confirmation from the Ambassador Animal keepers. If you do not, please follow-up to make sure your animal has been reserved, so you do not make a trip in to find your animal is not available. It is not necessary to email the Conservation Education Department.

If you need to cancel or change anything about your reservation, please let us know as soon as possible. Please email ALL of us or call.

ZooMobile Programs SOP

Program Overview

The goal is to Increase the reach of ZooMobiles to connect communities that can't otherwise visit the Zoo and inspire behavior changes through take action initiatives

Live ambassador animal interactions and program topics based on take action initiatives and conservation partner's fieldwork.

Audience

Schools, day cares, scout groups, senior living facilities, hospitals, summer day camps and community centers in Houston and surrounding areas

Extended Audiences: Teachers, care takers, and families

Schedule

January – December

Monday – Saturday (occasionally Sundays)

Times by request

ZooMobile program Restrictions

1. Animals can be picked up no earlier than 7:30 AM.
2. Programs must end no later than 8 PM.
3. Festivals
 - a. Minimum of 2 hours
 - b. Maximum of 4 hours
4. Assemblies
 - a. 30 or 45 minute option
 - b. 1-50 or 51-100 participant options
 - c. No minimum number of programs
5. Zoo Tales
 - a. No minimum
 - b. 20-30 minute program
 - c. Maximum of 6 programs
6. Critter Chats
 - a. 20 minute program
 - b. Minimum of 2 programs, Maximum of 6 programs
 - c. Can be combined with other presentation styles for a maximum of 4 hours of programming

Registration Information

Guests are required to submit a registration form to the Conservation Education department inbox a minimum of 3 weeks prior to the requested program date. Date approval is based on staff and vehicle availability.

- 1) Administrative Assistant will forward forms to ZooMobile Coordinator to check availability.
- 2) After availability is confirmed
 - a) If date is unavailable, send email to organization and ask for alternate program dates
 - b) If date is available, send an email to Admin assistant with program dates.

Once booked, a confirmation form is sent to guests and ZooMobile Coordinator. ZooMobile is then added to education calendar (copy coordinator that is conducting program). Payment is due 3 weeks in advance.

Animal Welfare, Cancellation and Program modification information

The following information is what the guest receives upon booking a ZooMobile program

Animal welfare: Our main concern is the welfare of our animals. We ask your support in several ways:

1. Zoo animals MUST NOT be within 200 feet of non-zoo animals or food of any kind.
2. Teachers must remain in the classroom to supervise their students during the presentation.
3. A parking space close to the presentation site and a table will be needed.
4. There must be an area around the animals where the public is NOT PERMITTED.
5. Outdoor programs will be presented only if weather conditions permit. Appropriate shade and shelter must be available. **Animals will not be available for outdoor programs where temperatures are 90° F or higher.**
6. A program can and will be stopped or cancelled if the animal's welfare is jeopardized in any way such as persistent disruptive behavior and noise whether the animals are in or out of their crates. In this instance, the ZooMobile will not be refunded.

Cancellations: Patrons who provide written notice of cancellation to group.reservations@houstonzoo.org on or before 3 weeks (21 days) prior to the program date will receive a full refund. No refund will be issued after this date. Program and date changes must be made at least 3 weeks (21 days) prior to the program date and are subject to availability and a \$25 rescheduling fee. The Houston Zoo reserves the right to cancel any program due to inclement weather or other unforeseen circumstances, in which case a full refund will be provided. Cancellations are official upon receipt of confirmation from the Houston Zoo.

Program Modifications: Our programs are created to be engaging, fun-filled and highly interactive. Should there be a need to modify the program due to time limitations, age of participants, space available, or any situation in which the program cannot be performed as intended, an additional fee of \$100 will be added to the balance.

Group Size: For Zoo Tales and Critter Chats, maximum capacity is 35 participants, including teachers, aides and chaperones. If the classes have a combined 1-35 extra participants, you will be charged for one additional program. If the classes have a combined 36-70 extra participants, you will be charged for two additional programs, etc. For Wildlife Warriors, any extra participants over the maximum capacity for that program will also incur an additional program charge. Festival programs do not have a maximum number. If you have any questions, please contact us at 713.533.6739.

Curriculum

P:\Education\ZooMobiles

Logistical Information

The following tasks should be completed on a daily basis.

- 1) Print confirmation form for ZMs (these are received as calendar requests via email).
- 2) Update the tracking spreadsheet with current program information.
P:\Education\ZooMobiles\Budgets or [ZooMobile Budget and tracking sheet](#)
- 3) Map location of ZM using Google Maps and attach to confirmation form.
- 4) Write animal pick up and return times on the top corner of the confirmation form.
 - a) Use Google maps to estimate ambassador animal pick-up/return times
*Pick-up time = program start time – 15 min – drive time – 15 mins (add more time for traffic if needed)
Ex: program start time of 9:00 → be there by 8:45 to set up → 30mins of drive time so leave the Zoo at 8:15 → allow 15mins to load animals so list pick up at 8:00am.
*Drop-off time = program end time + 15mins + drive time.
Ex: program end time of 11:00 → pack up and leave by 11:15 → 30mins of drive time so get to Zoo and drop off animals at 11:45
 - b) Write the pick-up and return times in the top right corner of confirmation form
 - c) List the volunteer meet & return times just below animal times. They meet us 30 minutes before pick-up times and return (free to go) 30 minutes after drop-off.
Ex. For the program above they would meet at 7:30 & return at 12:15
- 5) Enter volunteer requests in Volunteer Impact for the next month's programs. Updates may need to be made mid-month if additional programs are booked.
*programs are entered if they occur within the next two months after the current month
- 6) Make a note on the confirmation form of volunteer(s) requested.
- 7) Check previously entered ZM jobs in Volunteer Impact. If a volunteer has signed up, note the volunteer's name on the confirmation form.
- 8) Complete CZ animal requests. All changes should be made before requests are sent to the CZ on Friday.
- 9) Enter all information into the animal request for the corresponding date. Requests are made for Tuesday – Monday. Requests are sent out on Friday afternoon for the following week.
- 10) Add ZooMobile to [Coordinator schedule](#)
- 11) Put completed confirmation forms in ZooMobile binder. They are organized by date.

The following tasks should be completed on a weekly basis.

- 1) Admin assistant will make confirmation calls beginning on Monday for the following week's programs.
*Confirmation call sheets are attached to ZooMobile forms after they have been contacted

- 2) Admin assistant will send payment reminders if necessary
- 3) Admin assistant will take payments as necessary
- 4) Admin assistant send ZooMobile survey to program participants from the previous week

After the ZooMobile program

- 1) Update the tracking spreadsheet with attendance numbers.
- 2) Set program to inactive on Volunteer Impact.
- 3) Run a report on Doubleknot to get emails
- 4) Add emails to My Emma
- 5) Create an email that includes a link to the online survey and send to participants weekly
- 6) Record any stories of impact or any notes from the program into report spreadsheet

Teaching Information

1. Retrieve confirmation form from ZooMobile binder.
2. Retrieve appropriate curriculum binder.
3. Select materials for program per curriculum. Rolling carts and bins for transport are located in the Rhino Room.
4. Collect a ZooMobile cell phone, keys, and a gas card from the ZooMobile cabinet.
5. Load ZooMobile vehicle.
6. Pick up ambassador animals from Children's Zoo and load into vehicle.
7. Drive to program location.
8. Unload animals and materials. Rolling carts, flatbed carts, and bungees should be used to secure and transport all animals, biofacts, and the tablecloth from the vehicle to the designated program area. Do not leave animals unattended at any time, unless they are in a secure location that only Zoo staff can access. If they need to be moved due to weather, utilize a volunteer to assist if possible. The ZooMobile vehicle can be used to create a temperature appropriate environment where applicable.
9. Set up table display and position animals appropriately (under table, etc.)
10. Conduct program per curriculum. For festival programs, engage visitors by asking and answering questions, discussing conservation items, etc. Ambassador animals should be utilized one at a time, rotating the animals so there is an animal available to see/touch at all times and the animals receive the appropriate rest time during the program time (weather and animals permitting).
11. Once program is concluded, get an accurate count of the number of participants (estimates for festivals) and record on the confirmation form. If a program modification was made, get a representative from the organization to confirm the number of participants for the presentation.
12. Pack up all materials and load materials and animals into ZooMobile vehicle.

13. Return to the Zoo. If there is less than a ½ tank of gas, fill up the vehicle on the way back to the Zoo.
14. Return ambassador animals to Children’s Zoo. If you will not make the return time listed on the confirmation form (due to traffic or other unforeseen complications), call the Children’s Zoo to give them your estimated time of arrival. If the return time is after the Zoo closes, Education staff is responsible for putting the animals away.
15. Park ZooMobile vehicle in the gravel lot area.
16. Put away all materials including cell phone, keys, and gas card. Record the fuel level on the sheet inside the ZooMobile cabinet.
17. Put confirmation form in the basket on the ZooMobile Coordinator’s desk.

Ambassador Animal Guidelines for ZooMobile Programs

- 1) Staff must complete ZooMobile program training prior to doing programs alone.
- 2) Staff members will always have a cellular phone when traveling with an animal to ZooMobile programs. Staff may choose to use their personal device. However, Zoo cell phones are provided.
- 3) If necessary, Children’s Zoo staff will provide items for water and food for animals while off-site.
- 4) Emergency contact information is located in each ZooMobile vehicle.
- 5) Each ZooMobile vehicles contains a supply crate with the following:
 - Paper towels
 - Newspaper
 - Full water container
 - Hand sanitizer
 - Dust pan and whisk broom
 - Extra pillowcase
 - Trash bags

- 6) Appropriate air conditioning or heating must be provided while traveling with ambassador animals. Report any AC/heating issues immediately to ZooMobile Coordinator or Community Programs Manager.
- 7) ZooMobile vehicles should never be parked for prolonged periods in hot or cold conditions with animals inside.
- 8) ZooMobile vehicle must always remained locked when not attended.
- 9) Animals (in or out of kennels/carriers) must always be attended when out of the vehicle in an unsecure area or where accessible to the public.
- 10) Animals will be transported in secure kennels/carriers with appropriate bedding.
- 11) Load Kennels/carriers into vehicle and secured them in such a way that they cannot shift or slide while traveling to destination.
 - a) Animals in kennels should not be able to see or touch each other through doors or window openings.
- 12) Children Zoo staff will clean and disinfect kennels/carriers after programs.
- 13) Use flatbed carts to transport animals from vehicle to program site.
 - a) Use bungee cords or straps to secure kennels/carriers on the carts.
- 14) During ZooMobile programs, each handler (staff or volunteer) should only have one animal out at a time.
- 15) During ZooMobile program, staff should monitor animals for signs of stress or compromised health at all times.
 - a) If ZooMobile is outdoors, staff should monitor temperature and make sure handling is within temperature guidelines.
- 16) Any animal exhibit signs of stress or compromised health should be returned their traveling kennel/carrier immediately.
- 17) Closely monitor animal. If necessary, use emergency contact information located in each ZooMobile vehicle to determine next steps.
- 18) All other existing animal handling protocols must be followed during ZooMobile programs.

EMERGENCY NUMBERS FOR CZ ANIMAL ISSUES

****If an animal appears stressed at any time, or if there are any other concerns, put the animal away and contact Children's Zoo staff.****

During Zoo Hours:

Call Ambassador Animal Building first

713-533-6812 or 6813

If no answer, contact CZ supervisors:

Tarah Jacobs — 713-533-6647

Michelle Witek — 713-533-6644

Kevin Hodge — 713-533-6642

Other Handy Numbers

Gate One Before/After Hours

713-533-1011

Gate One During Operational Hours

713-533-6639

Base

713-533-6501 (9:00am-close)

Rangers

713-202-9745 (6:45am-close)

After Zoo Hours

Contact CZ supervisors

Tarah Jacobs — 352-598-1797

Michelle Witek — 713-205-1508

Kevin Hodge — 409-739-0777

If no answer, contact HZI Vet Staff

Dr. Joe Flanagan — 713-204-0545

Dr. Maryanne Tociolowski — 281-770-7619

Dr. Christine Molter — 262-909-6895

Dr. Judilee Morrow — 217-714-3164

Ambassador Animal Evaluation Tool

Below is a list of common criteria that multiple institutions evaluate a species or individual animal against to determine if a species or animal will be a good fit for animal programs usage. Each individual institution should select the criteria that are most important for consideration and place the criteria in the decision tree in order of that determined importance.

Species/Individual under consideration:

Philosophical and Regulatory Evaluation

Before proceeding through the rest of the tool, the first point of consideration is whether or not this species is consistent with both institutional philosophy of program animal use and AZA recommendations.

For example, AZA's position on primates is that they not be utilized for programs so that would automatically stop evaluation of a species that falls into this category. Another example is institutional comfort with the use of exotic cats for program. Also consider any Government Regulations and Laws pertaining to the use of a species.

Does this species meet institutional, and/or AZA recommendations?	Yes: Proceed w/tool	No: Stop, do not use
--	------------------------------------	-------------------------------------

Determine your Institutional Priorities: 1 being the highest priority

Rate each of these categories in order of what is most important for your institution. This may require discussion to develop consensus about what is most important. These priorities will be used in the decision tree portion of the tool after the scoring portion below is complete.

- _____ Institutional Collection Plan
- _____ Conservation and Education Messaging
- _____ Animal Health and Welfare
- _____ Taxon Specific Protocols: Behavioral Husbandry, Logistics and Staff Training
- _____ Human Health and Safety

Criteria Scoring

Institutional Collection Plan	Scoring Guide (-4 to 10 points)		Score
Is this species/appropriate individual available? <i>Consider things like population levels, if hand reared animals are required for success, if there is a SSP which might influence ability to acquire, etc.</i>	Easily acquired	2 pt	
	Some effort to acquire or find correct individual	1 pt	
	Not easily acquired or lots of effort to find correct individual	0 pt	
Is there display value for this species? (if applicable, the animal will be good for exhibit and programs)	Yes or N/A	2	
	No	0	

Can the animal be transferred easily if it does not work as a program animal?	Yes, there is a developed back up plan	2 pts	
	It may be able to be transferred but not sure	0 pts	
	It will be hard to find a placement for the animal	-2 pts	
Is there research potential?	Yes or N/A	2 pts	
	No	0 pts	
Is there a significant cost to acquire, train staff to use or special equipment that must be purchased?	Costs are included in budget	2 pts	
	Moderate costs or could potentially be covered	0 pt	
	High costs or funding would not be available to provide for required purchases	-2 pts	
Total Score for Institutional Collection Planning (out of 10 points)			

Conservation and Education Messaging	Scoring Guide (0 to 8 points)	Score	
Has a strong conservation message.	Strong conservation message and/or related to Zoo projects	2 pts	
	Conservation message unrelated to Zoo Projects	1 pt	
	No conservation message	0 pt	
Has other desirable educational messages. <i>For example, it is from a particular part of the world or does it have special adaptations. Also evaluate if these messages fit into existing programs if applicable.</i>	Has many applicable educational messages and/or connections to a variety of existing or planned programs	2 pts	
	Has some desirable educational messages and some connections to programs	1 pt	
	Has limited messages and connection to programs	0 pt	
Can be used in a variety of program situations. <i>Consider things like small or large programs, on and offsite, formal training demos, etc.</i>	Can be used in most settings, high level of versatility	2 pts	
	Can be used in some settings, moderate versatility	1 pt	
	Can only be used in limited settings	0 pt	
Guest experience value. <i>Consider things like the potential for close encounters, if it is a popular species with visitors, if it a touch opportunity.</i>	High value for guest experience	2 pts	
	Moderate value for guest experience	1 pt	
	Low value for guest experience	0 pt	
Total Score for Conservation Education Messaging (out of 8 points)			

Animal Health and Welfare	Scoring Guide (-4 to 10 points)		Score
Space available for animal through entire life.	Ample space for entire life	2 pts	
	Space allocation meets minimum requirements or ample when young, meets minimum requirements when full size	1 pt	
	Not enough space or enough space when young only	-2 pts	
Appropriate housing available	Housing available without need for purchase or modification or there are budget exists for these expenses	2 pts	
	Housing available but requires modification	1 pt	
	Housing must be purchased or built	0 pt	
Can meet environmental requirements (temperature, humidity, ventilation, filtration)	Simple environmental requirements/already available in current housing or budget exists to modify	2 pts	
	Some modification needed to meet requirements	1 pt	
	Major modification needed to meet requirements	0 pt	
Can fulfill behavioral/enrichment requirements <i>Score as appropriate for your situation, for example hard to provide enrichment but plenty of resources to provide is a 2</i>	Easy to meet enrichment needs and/or plenty of resources to provide it	2 pts	
	More involved enrichment needs and/or some resources available	1 pt	
	High level of enrichment needs and/or limited resources to provide it	0 pt	
Are there additional welfare concerns, beyond housing and enrichment, associated with utilizing this species for program? <i>Consider things like appropriate social groupings, animal's ability to choose to participate in programs.</i>	No	2 pts	
	Yes	-2 pts	
Total Score for Animal Health and Welfare (out of 10 points)			

Taxon Specific Protocols: Behavioral Husbandry, Logistics and Staff Training	Scoring Guide (-2 to 14 points)		Score
What investment in time is required to train/socialize? <i>Consider what level of conditioning will</i>	Time is not a limiting factor and had been budgeted for all needed training	2 pts.	
	Time is somewhat limited but budgeted for all needed training	1 pt.	

<i>be required – from simple desense socializing to perch/crate training all the way to show behaviors.</i>	Significant ongoing time that exceeds current resources is required for successful program use	0 pt.	
Staff training skill set assessment – do staff that will be working with this animal/species possess the required skills in training? <i>Consider the skill level of all handlers working with this species both with initial training and ongoing usage.</i>	Staff exceed training skills requirement	2 pts.	
	Staff meet training skills requirement	1 pt.	
	Staff do not meet training skills required	0 pt.	
Species is tractable or widely considered easily handled once desensitized	Yes, confident that this species will be able to be handled and remains so through its life	2 pts.	
	Maybe, some institutions use this species as a program animal, but no direct experience with or may not remain tractable through life	1 pt.	
	Not likely or unknown if species is tractable throughout life	0 pt.	
What range of behaviors can this species/individual demonstrate? <i>Consider how many and how complex of behaviors can be expected and how impactful these behaviors may appear to audience.</i>	Multiple behaviors or behaviors that are highly educational or inspirational	2 pts.	
	Simple behaviors or limited number of behaviors	1 pt.	
	Very little possibility for trained behaviors	0 pt.	
Transportation to program.	Straightforward to transport using normal carriers and vehicles	2 pt	
	May require specialized/modified carrier that is more difficult to transport	1 pt	
	Requires large, specialized transport carriers and/or difficult to move without more than one person	0 pt	
Expected frequency of usage.	Potential for multiple uses per day (usually domestic animals or highly socialized exotics)	2 pt	
	Potential for multiple uses per week	1 pt	
	Limited use or preparation for use required (diet management limitations)	0 pt	
How many potential handlers will be able to use this species?	Most handlers will be able to use this species	2 pts	
	Some handlers will be able to use this species (reached mid-level handling)	1 pt	
	Few handlers will be able to use this species (reached advanced level handling)	0 pt	
	Only paid staff will be able to handle this animal in volunteer driven program	-2	
Total Score for Taxon Specific Protocols (out of 14 points)			

Human Health and Safety	Scoring Guide (0 to 4 points)		Score
Potential risk of injury.	Low risk, animal is not likely or is unable to inflict serious injury	2 pts	
	Medium risk, animal is more likely or may be able to inflict serious injury in unusual situations	1 pt	
	High risk, animal is likely to or has the capacity for serious injury in many situations	0 pt	
Disease transmission issues.	Low risk for zoonotic disease transmission and/or rabies vaccination is NOT required for handlers	2 pts	
	Some risk for zoonotic disease transmission and/or rabies vaccination is required for handlers	1 pt	
	High risk of zoonotic disease transmission	0 pt	
Total Score for Staff/Handling/Program Suitability (out of 4 points)			

Decision Tree

	Write in your Criteria in Priority Order from beginning of tool	Total Points for that Criterion
Level 1 Criterion (highest priority)	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; padding: 5px; width: 40%;">Score above 50%</div> <div style="border: 1px solid black; padding: 5px; width: 40%;">Score below 50%</div> </div> <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 10px;"> <div style="width: 40%; text-align: center;">↓</div> <div style="width: 40%; text-align: center;">↓</div> </div> <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 10px;"> <div style="width: 40%;"></div> <div style="border: 1px solid black; padding: 5px; width: 40%; text-align: center;">RECONSIDER</div> </div>	___ out of ___
Level 2 Criterion	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; padding: 5px; width: 40%;">Score above 50%</div> <div style="border: 1px solid black; padding: 5px; width: 40%;">Score below 50%</div> </div> <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 10px;"> <div style="width: 40%; text-align: center;">↓</div> <div style="width: 40%; text-align: center;">↓</div> </div> <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 10px;"> <div style="width: 40%;"></div> <div style="border: 1px solid black; padding: 5px; width: 40%; text-align: center;">RECONSIDER</div> </div>	___ out of ___
Level 3 Criterion	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; padding: 5px; width: 40%;">Score above 50%</div> <div style="border: 1px solid black; padding: 5px; width: 40%;">Score below 50%</div> </div> <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 10px;"> <div style="width: 40%; text-align: center;">↓</div> <div style="width: 40%; text-align: center;">↓</div> </div> <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 10px;"> <div style="width: 40%;"></div> <div style="border: 1px solid black; padding: 5px; width: 40%; text-align: center;">RECONSIDER</div> </div>	___ out of ___
Level 4 Criterion	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; padding: 5px; width: 40%;">Score above 50%</div> <div style="border: 1px solid black; padding: 5px; width: 40%;">Score below 50%</div> </div> <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 10px;"> <div style="width: 40%; text-align: center;">↓</div> <div style="width: 40%; text-align: center;">↓</div> </div> <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 10px;"> <div style="width: 40%;"></div> <div style="border: 1px solid black; padding: 5px; width: 40%; text-align: center;">RECONSIDER</div> </div>	___ out of ___
Level 5 Criterion	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; padding: 5px; width: 40%;">Score above 50%</div> <div style="border: 1px solid black; padding: 5px; width: 40%;">Score below 50%</div> </div> <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 10px;"> <div style="width: 40%; text-align: center;">↓</div> <div style="width: 40%; text-align: center;">↓</div> </div> <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 10px;"> <div style="border: 1px solid black; padding: 5px; width: 40%; text-align: center;">Good species for acquisition</div> <div style="width: 40%;"></div> </div> <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 10px;"> <div style="width: 40%;"></div> <div style="border: 1px solid black; padding: 5px; width: 40%; text-align: center;">RECONSIDER</div> </div>	___ out of ___

CHILDREN'S ZOO CONTACT AREA (CA) SOP

All Children's Zoo keeper staff responsible for the following:

All keepers participate in cleaning of the CA daily

The Farm keeper is responsible for the AM feeding of all CA animals

The CA keeper is responsible for refilling the hay racks at noon

The CA Closer is responsible for feeding all PM diets, bedding down CA animals if temperatures require bedding, and locking up the CA for the night.

The 'late' Closing keeper is responsible for assisting with bedding down (if other keeper needs help), administering any PM medications for CA animals, and covering break shifts for CA keepers and assisting them in closing duties if needed.

MANNING THE CONTACT AREA (CA)

1. The Contact Area is open from 10:00am- 5:00pm daily. It is closed periodically due to inclement weather. Keepers should refer to posted guidelines for periods when the CA may be closed to guests due to inclement weather. Always confirm with a supervisor before closing the area.
2. There are 4 part-time keepers designated to work the CA. There is 1 CA keeper scheduled to man the yard during the week and 2 are scheduled on the weekends and/or on anticipated busy days. Children's Zoo full time keepers assist with covering lunch time and break time for the CA keepers.
3. There are 2 chained off rest areas in the main yard/guest area of the contact area. These allow for the animals to rest away from guests if desired throughout the day. There are also 2 alternate yards, the back yard and the side/training yard, that the animals can be placed into which gives the options to completely separate them from the guest area.
4. Keepers are to enforce the rules of the contact area, watch the animals, interact with guests in the yard, and should act and appear professionally, wearing a collared shirt, and be standing and alert when guests are around.
5. Volunteers
 - a. When a volunteer comes down to work in the Contact Area, greet them and talk with them to assess their knowledge and comfort level with the area and review the basic rules. Not all volunteers are comfortable being left alone, all first-time volunteers should not be left on their own.
 - b. If you do leave a volunteer watching the area, review how to use the radio with them. **The keeper(s) scheduled for that shift are still responsible for the area and should be the one to respond if volunteer calls for assistance.**

- c. If a volunteer is covering more than one keeper shift, each keeper should check in on them at the start of their shift to make sure they are doing well and to see if they need anything.



Contact Area Rules and Hand Cleaning Station- Hand sanitizer graphic also notes location of restrooms located directly behind the contact area if guests would like to use water and soap.



Front Main Contact Area- Rest area for animals under large shelter-half is chained off during guest hours for them to eat and rest away from guests.



Second rest area in front main contact area which is chained off during guest hours for them to eat and rest away from guests.



Back Yard Area- Non-Guest Access- Used throughout the day for animals that need rest or need to be separated from guests.



View of the back area from far side of the yard.



Side Yard Area- located to the right of the front main contact area- used for primarily training and can also be used as rest area to separate out from other animals and/or guests.

Giraffe Feeding

One of the most important roles that zoos can play and arguably the most compelling justification for their existence is that of educating the public and inspiring them to conservation awareness and action. Program animal presentations can be a powerful tool in creating personal connections between guests and animals. AZA's Conservation Education Committee has defined a program animal as "an animal whose role includes handling and/or training by staff or volunteers for interaction with the public and in support of institutional education and conservation goals" (AZA, 2011a). Some animals are designated as Program Animals on a full-time basis, while others are designated as such only occasionally.



Giraffes participate as on-grounds program animals in a number of AZA institutions that conduct public feeding or behind-the-scenes tours, typically paid experiences. In these cases, giraffes remain in their home enclosure and guests interact with the animals from outside the exhibit. Giraffes have the freedom to choose whether or not to participate in the experience. Institutions limit the amount of time that the public feeding experience is offered, usually no more than 2-4 hours per day, sometimes only on week-ends or peak attendance days. A variety of feed items are used (greens, produce, browse biscuits, crackers). The decision about what and how much the public is allowed to feed should be made with the input of a nutritionist or veterinarian such that the nutrition of the giraffes is not adversely affected.

The welfare and safety of the animals involved in educational programming is of paramount importance. The AZA Accreditation Standards require that the conditions and treatment of animals in educational programs must meet standards set for the remainder of the animal collection, including species-appropriate shelter, exercise, appropriate environmental enrichment, access to veterinary care, nutrition, and other related standards (AZA Accreditation Standards 1.5.2, 10.3.3). The giraffes serve as program animals only part-time and do not leave their home enclosures. Their housing and standards for care are unchanged as a result of program participation.

The ability to meet the physical and psychological needs of the giraffes is not compromised as a result of their use in public feeding or behind-the-scenes experiences. Their participation is strictly voluntary and does not impact their abilities to express species-appropriate behaviors or their opportunities for exercise, enrichment, or social contact. The quality of their veterinary care and husbandry, including behavioral training, is not impacted.

Giraffes used as program animals are subject to all program animal-related guidelines and regulations, including those of the home institution, USDA, AZA, and any other applicable regulatory agency. Like other program animals, giraffes must be given a rest period at least equal to their period of use. The public giraffe feeding experience is subject to the same weather guidelines that determine whether or not the animals can be out in their exhibits. See Chapter 1, Ambient Environment for recommendations about appropriate ambient conditions for giraffes. Giraffes are not transported outside of their home exhibits for educational programming and are therefore not exposed to infectious agents to which they might be naïve.

Staff, docents, or volunteers must always be present to monitor both giraffe and guest behavior. These personnel should be trained in program animal-specific protocols, the natural and individual histories and behavior of the animals, and public interaction procedures and must also be well versed in recognizing signs of stress or discomfort in the giraffes. They must have the skills to ensure that guests interact appropriately with the guests and to intercede in instances of unauthorized contact with the giraffes. They must be able to enforce all rules associated with managing the experiences, such as not allowing tactile contact with the giraffes and not allowing eating or drinking around the animals. In the event of any animal issue or guest injury, there must be clear procedures in place for handling and reporting incidents. Zoonotic risks should be mitigated by providing hand washing stations or hand sanitizer



Houston Zoo, Inc.
Cheetah Ambassador Program
Policies and Procedures

Rev. 7/30/2017



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Houston Zoo Mission Statement

Houston Zoo connects communities with animals, inspiring action to save wildlife.

In everything we do, we strive to:

- Be a Zoo for all.
- Provide exemplary animal care, assuring outstanding animal welfare.
- Provide engaging animal experiences.
- Deliver a smart, fun, inspiring guest experience.
- Be the leading environmental education resource in Texas.
- Inspire broad community support and collaborations.
- Change behaviors to help protect wildlife.
- Create a workplace culture that embodies respect, empowerment, teamwork, and personal development.
- Employ best business practices and sound financial management.
- Ensure safety for guests, staff and the animals in our care.
- Operate sustainably; set an example for others.

Carnivore Section Mission Statement

The Houston Zoo Carnivore Section provides the highest possible quality of life to every animal in our care. We recruit and retain a professional staff that will be experts in carnivore natural history, husbandry, and conservation. Through the creative use of graphics, exhibits and keeper presentations, we inspire our guests to act both locally and globally for conservation.

Goals

- Make guest, staff, and animal safety our first consideration and top priority every day.
- Strive to be at the “cutting edge” of progressive animal management, with a focus on providing our animals species-appropriate exhibits, choices and control over their environments, and managing their behavior through positive, non-invasive methods whenever possible.
- Exceed AZA and USDA guidelines for animal care and welfare.
- Become leaders in AZA population management programs through our expertise in carnivore husbandry, including breeding, training, and enrichment.
- Participate in carnivore research and conservation programs, both in the field and in captivity.
- Provide clear and consistent conservation messages to our guests, including discouraging private ownership of non-domestic carnivores and informing them of the threats that carnivores face in the wild.

Houston Zoo Cheetah Ambassador Program Overview

The Houston Zoo Cheetah Ambassador Program will provide a safe, unique guest experience that inspires action on behalf of both wild and domestic animals.

The HZI Carnivore Section manages the Houston Zoo Cheetah Ambassador Program. The Curators and Supervisors oversee the training of staff and the husbandry and training of the animals, which include 2.0 cheetahs. Personnel training focuses on safety and consistency when working with these animals in order to establish behaviors that support the husbandry, education, and conservation goals of this program.

Objectives

- Ensure guest, staff and animal safety when working with the cheetahs.
- Provide the highest level of care for the animals and ensure consistent application of training techniques.
- Ensure that all HZI staff have a complete understanding of the expectations and goals of

- the program and can convey those goals to Zoo guests.
- Deliver informative and responsible messages about animal care and conservation during guest programs.

Conservation Education Messages

The Houston Zoo currently supports the Ruaha Carnivore project which was started in 2009 by Amy Dickman. The project aims to help develop effective conservation strategies in Tanzania's remote Ruaha landscape. They do this by gathering baseline data on carnivore numbers and ecology, in order help develop appropriate conservation strategies and by working closely with local communities to effectively reduce human-carnivore conflict. The Ruaha National Park is the largest park in Tanzania and the second largest in the whole of Africa.

Natural History of Cheetahs

- Range: Sub-Saharan Africa, most abundant in eastern and southern Africa. Small populations exist in Iran and parts of Pakistan.
- Habitat: primarily grassland and savannah but also use scrub and open woodlands.
- Diet: rabbits to antelope, but mostly gazelles, which they often lose to lions, leopards, or hyenas. Cheetahs are not obligate drinkers and are able to get sufficient moisture from prey. They capture prey by tripping with a paw and strangling by biting.
- Behavior: diurnal. Males and females come together only to breed. Males may form coalitions.
- Cheetahs are adapted for speed; leaner, longer bodies compared to other cats, semi-retractable claws, long tails for balance, large eyes, enlarged nostrils, sinuses and lungs, flexible spines. They can reach a speed of 40 mph in three strides and top speeds of 70 mph.
- Cheetah conservation status: USFWS Endangered, CITES Appendix I, IUCN Vulnerable. There are 6-7,500 cheetahs in the wild. Primary threats are human encroachment, including a declining prey base and conflict with livestock.
- Sources: Cheetah Conservation Fund (www.cheetah.org), Cheetah SSP (www.cheetahssp.org), and <http://ruahacarnivoreproject.com/>

Individual Animal Histories

- Cheetahs Kito and Kiburi were born in September 2007 in Florida. Rejected by their mother, they were brought to HZI to be hand-reared by staff.

Cheetah Program Procedures

Overview

Safety and animal welfare are the top program priorities. The Cheetah Ambassador program has been designed to be consistent with the HZI Program Animal Policy. The Supervisor, Curator, and VP of Animal Operations must approve any changes to the procedures contained in this document.

Procedures

When cheetahs are removed from their enclosure and walked on leashes, the following rules apply. The only exception is when cheetahs are running.

1. Only qualified cheetah walkers, who are also trained as second leash walkers, may handle cheetahs. Qualification procedures are outlined in the Cheetah Ambassador Program Policies and Procedures.
2. The cheetah must always be under the full control of the primary cheetah walker.
3. The primary cheetah walker and second leash walker will not be expected to converse with or respond to guest questions so that they can remain fully focused on the cat. Primary cheetah walkers and second leash walkers may be required to rearrange schedules or work mandatory overtime as needed in order to safely meet the needs of the program.
4. A cheetah back-up will always accompany the cheetah, primary cheetah walker, and second leash walker. Back-up qualification procedures are outlined in the Cheetah Ambassador Program Policies and Procedures. The back-up is an essential member of the team. He or she monitors the surroundings, provides information to the primary cheetah walker trainer and second leash walker, and assists in any emergency situation. The cheetah back-up always carries a cane to be used only in emergency situations.

5. The primary cheetah walker will have the ultimate decision making authority in any situation. The primary cheetah walker knows the cat's behavior. If he or she feels that a situation is potentially unsafe due to guest behavior, cat behavior, or the environment, he or she will immediately notify the second leash walker, and backup and take the cat to a secure location. If necessary, guests will be asked to leave the area and the program may conclude.
6. The interpreter will be the only person present that will be interacting with guests.

Program Description and Guidelines

General

- All USDA and APHIS regulations are followed
- Typically, the cheetah(s) will be walked or transported by crate to the location. The cheetah(s) may jump up on a table, sit or lie on the ground, or walk around within a designated secured area.
- There will be a primary cheetah walker, second leash walker, and back up for each cheetah.
- Sufficient distance and/or barriers between the animals and the public will be in place at all times to assure the safety of the public and the animals. Trained handlers, leashes, and stages are not substitutes for sufficient distance and/or barriers.
- Guests are not permitted to touch the cheetahs.
- Photographs of cheetahs are allowed. Flash is acceptable.
- The cheetah interpreter will address guests with information about the cheetahs and the overall program (see conservation education messages contained in this document).
- A program may consist of just one cheetah or two cheetahs. This is decided well before an event takes place by the supervisor and curator.
- No other program animals are allowed in the immediate area during cheetah presentations.
- Programs are subject to changes or cancellation due to temperature restrictions and animal health issues as outlined in the HZI Program Animal Policy.
- Paid walks:
 - Will take place before the zoo is open
 - An education liaison will always accompany the guests
 - Guests must be at least 12 years old
 - One adult per child is required for all guests under 17
 - Tour not to exceed 4 guests
 - All general program guidelines above apply
- Cheetah run at Houston Sports Park:

- Cheetahs will only be run at the Sports Park when no other events are scheduled by the facility
- Cheetahs will be off leash during the run but will be under leash control immediately before and after each run takes place
- Amount of times that cats run will be based on temperature and animal behavior
- If 1 cheetah is running 5 trained cheetah members must be present.
 - If a VIP guest is present, 6 cheetah members are needed
- If 2 cheetahs are running 8 trained cheetah staff members must be present.
 - If a VIP guest is present, 9 cheetah members are needed
- VIP guest will remain behind a sufficient distance or barrier at all times and will always be accompanied by a trained carnivore staff member.

Locations

Cheetah presentations will only occur in areas where the cats feel comfortable, there are adequate exit options for the cat, and guests can be kept behind a safe barrier or at a safe distance. Carnivore staff must walk through the location with event organizers prior to any event to confirm specific setup for the event (tables, music, food, etc.).

Typical locations for cheetah presentations include, the BEC, Karamu Outpost, and the Masihari Special Events Tent. Other locations may be considered on a case-by-case basis. Cheetah paid walks may go through the entire zoo with exception of sensitive animal areas and in some behind-the-scene areas.

Request Procedures

- The VP of Animal Operations, the Curator, and area Supervisors must approve all requests for cheetah programs.
- Requests are made through the Dashboard work request system.
- Event organizers must set up a time to walk the venue with a cheetah trainer at least 48 hours in advance of the event and must notify the Carnivore Section of any changes to the venue or time of the event in a timely manner.

Procedures

The following procedures are followed whenever the cheetahs are outside of their enclosure:

- Cheetahs are leashed or crated at all times.
- A cheetah back-up must always accompany primary cheetah walkers when cheetahs are leashed.
- Primary cheetah walkers and secondary cheetah walkers do not carry cell phones, pepper spray, or radios when walking a cheetah.
- Cheetah back ups monitor radio and phone communication, which should be kept to brief, essential conversations. Whenever possible, trainers should ask someone not involved in the presentation to cover radio calls.

Qualifications into the Cheetah Program

General

Before being allowed to work with the cheetahs, new staff must be familiar with all HZI and Carnivore Section policies and procedures. Trainers must fully understand the goals and objectives of the Cheetah Ambassador Program; this is critical to the care of the animals as well as ensuring conservation education messages are effectively delivered to guests.

Regardless of previous experience, new staff members should expect that their initial contact with the cheetahs would be limited. All staff will complete the appropriate training before working with these animals. New staff will be integrated into the Cheetah Ambassador Program under the guidance of the Area Supervisors, who will provide training and feedback.

Integration into the cheetah program will begin with the position of cheetah back up, followed by training as second leash walker and then to primary cheetah walker and presentations. Each of these roles is outlined in detail in the full Cheetah Ambassador Policies and Procedures document. Staff members may be moved up or down in level depending on the demonstration

of skills and judgment, as evaluated by Supervisors and the Curator. Supervisors will consider advancement of a staff member from one level to the next based upon oral, written, and practical evaluations.

Once a new staff member is familiar with HZI and Carnivore Section procedures, work towards becoming a Level 1 cheetah back up may begin with the approval of the Supervisors. Level 1 qualification consists of becoming familiar with the cheetah area exhibits and procedures as well as observing training sessions, walks and presentations. Level 1 cheetah back ups will be familiar with the following aspects of the program:

- I. Husbandry routine for cheetah area (see Carnivore Protocols for more details)
 - A. Cleaning
 1. Schedule for frequency of cleaning and disinfecting
 2. Protocol for the safe use of chemicals
 3. Storage and use of cleaning tools and equipment
 - B. Feeding and watering
 1. Diet preparation procedures
 2. Safe diet delivery and use of meat sticks
 3. Appropriate presentation
 4. Safe food storage procedures
 5. Diet change and ordering procedures
 - C. Enrichment
 1. Creation and use of schedules
 2. List of approved items
 3. Procedures for submitting new ideas
 - D. Shifting procedures
 1. Operation of shift doors and locks
 2. Use of off-exhibit yards
 3. Procedures for working in with animals
 4. Procedures for separating animals
 5. Weather guidelines for providing building access
 - E. Medications and treatments
 1. Preparation and delivery procedures
 2. Maintaining med sheets
 3. Procedures for refills and new med sheets
 - F. Record Keeping
 1. Daily reports
 2. Training and enrichment
 3. Medications

II. Facilities

- A. Exhibits
 - 1. Location and operation of gates
 - 2. Exhibit maintenance
 - B. Barns
 - 1. Operation of shift doors
 - 2. Secondary containment gate procedures
 - 3. Location and operation of lights
 - C. Supplies
 - 1. Storage location
 - 2. Ordering procedures to restock
 - D. Emergency equipment locations
 - 1. First aid kit
 - 2. Fire extinguisher
 - 3. Escape supplies
 - E. Presentation locations
 - 1. Location of exits
 - 2. Potential hazards
 - 3. Guest guidelines
- III. Animal Training
- A. HZI training program overview
 - B. Reads about and understands animal behavior
 - C. Understands concepts and techniques
 - 1. Positive and negative reinforcement and punishment
 - 2. Shaping methods
 - 3. Conditioning and use of bridges
 - 4. Relevant props
 - D. Record keeping for training sessions
- IV. Presentations
- A. HZI Program Animal Policy
 - B. Guest messages
 - C. Procedures
 - 1. Guest contact
 - 2. Locations
 - 3. Walking through Zoo
 - 4. Transport
 - 5. Emergencies
 - D. Cheetah back-up role
 - 1. Understands primary responsibilities
 - a. Lead through doorways and corners
 - b. Monitor guests
 - c. Spot potential distractions and hazards
 - d. Monitor cheetah behavior

- e. Communication with trainer
- 2. Positioning
 - a. Ahead through doors
 - b. Ahead around corners
 - c. In between cheetah and guests
 - d. Unusual situations
- 3. Emergencies
 - a. Understands appropriate use of cane
 - b. Can assist with securing cheetah
- 4. Able to perform all above duties and interpret for guests

Level 1 Cheetah Back-up

The back-up is an essential part of the team for all guest programs and whenever the cheetahs are out. The cheetahs never be on leash, including entering guest areas, without a back-up and this will depend on guest volume. The back-up performs the following duties:

- Monitors the surroundings for potential distractions and hazards and communicates this information to the primary cheetah walker.
- Monitors the behavior of the animals and communicates pertinent observations to the trainer.
- Monitors radio and other communications and provides pertinent information to the trainer.
- Monitors and directs guests.
- Answers questions and provides program interpretation and conservation education messages for guests and staff, if interpreter is not available.
- Assists trainer in emergency situations.

Level 1 Cheetah Back Up Evaluation

Name:		Date:
Y	N	Skill
<input type="checkbox"/>	<input type="checkbox"/>	Demonstrates knowledge of the cheetah husbandry routine
<input type="checkbox"/>	<input type="checkbox"/>	Demonstrates knowledge and familiarity with the cheetah barn and exhibit

<input type="checkbox"/>	<input type="checkbox"/>	Demonstrates knowledge of the natural and individual history of cheetahs
<input type="checkbox"/>	<input type="checkbox"/>	Demonstrates knowledge of the concepts, terms, and techniques of animal training
<input type="checkbox"/>	<input type="checkbox"/>	Demonstrates knowledge of HZI and carnivore training procedures
<input type="checkbox"/>	<input type="checkbox"/>	Understands and demonstrates the duties of the cheetah back-up role
<input type="checkbox"/>	<input type="checkbox"/>	Demonstrates knowledge of the HZI Program Animal Policy
<input type="checkbox"/>	<input type="checkbox"/>	Presents accurate and appropriate guest messages about cheetahs
<input type="checkbox"/>	<input type="checkbox"/>	Follows established protocols
<input type="checkbox"/>	<input type="checkbox"/>	Consistently works safely around all animals
<input type="checkbox"/>	<input type="checkbox"/>	Performs all other aspects of the job satisfactorily

Level 2 Second Leash Walker

This is an advanced program level and comes with increased responsibility. The second leash walker handles the second longer leash used on the cheetahs for public presentations and any time the cheetahs are out. The primary role of the second leash walker is to follow the direction of the primary cheetah walker. They are considered a secondary safety measure and should not verbally or physically reinforce the cheetah.

Level 2 Second Leash Walker Evaluation

Name:		Date:
Y	N	Skill
<input type="checkbox"/>	<input type="checkbox"/>	Demonstrates strong animal training skills
<input type="checkbox"/>	<input type="checkbox"/>	Follows direction from the cheetah trainer at all times
<input type="checkbox"/>	<input type="checkbox"/>	Solicits and provides feedback on training
<input type="checkbox"/>	<input type="checkbox"/>	Follows established protocols
<input type="checkbox"/>	<input type="checkbox"/>	Consistently works safely around all animals
<input type="checkbox"/>	<input type="checkbox"/>	Demonstrates the ability to make sound decisions without direct supervision
<input type="checkbox"/>	<input type="checkbox"/>	Demonstrates ability to manage time and meet obligations
<input type="checkbox"/>	<input type="checkbox"/>	Demonstrates dependability

<input type="checkbox"/>	<input type="checkbox"/>	Understands and commits to the time and scheduling requirements of the program
<input type="checkbox"/>	<input type="checkbox"/>	Demonstrates the ability to work well with co-workers and with other departments
<input type="checkbox"/>	<input type="checkbox"/>	Excels in all aspects of Level 1 cheetah back up role
<input type="checkbox"/>	<input type="checkbox"/>	Performs all other aspects of job satisfactorily

Level 3 Primary Cheetah Walker

This is the most advanced program level. Cheetah trainers are the only staff allowed to work with the cheetahs on the leash and outside the primary enclosure. The cheetah trainer performs the following duties:

- Maintains established behaviors.
- Documents training sessions.
- Communicates status of behaviors to staff.
- Works with the cheetahs on leash.
- Assists in the development of protocols and procedures.
- Directs all aspects of cheetah presentations.
- Communicates plans and potential issues with other trainers.

Interested keepers that excel in the Level 2 second leash role may be selected by Supervisors and the Curator to advance to Level 3 primary cheetah walker. Under APHIS guidelines, a primary leash walker will have at least 2 years' experience involving the care of cheetahs. Level 3 responsibilities consist of maintaining previously trained behaviors with the cheetahs, and working with the cheetahs safely around guests. Level 3 primary cheetah walker will be able to perform all the duties of Level 2 and:

- I. Understand all aspects of the cheetah training program
 - A. Cues
 1. Verbal
 2. Hand signals
 3. Other
 - B. Criteria
 - C. Discipline
 1. Expectations

- 2. Methods
- 3. Interpreting
- D. Status of all behaviors
 - 1. Maintenance
 - 2. In training
- E. Ability to read and anticipate behavior
- F. Solicits and provides feedback
- II. Judgment
 - A. Always puts safety first
 - B. Acts in a calm and professional manner
 - C. Makes good decisions in all situations
 - D. Solicits and provides feedback
 - E. Appropriately recognizes limitations of skills
 - F. Demonstrates good problem solving skills
- III. Job Performance
 - A. Dependability
 - 1. Good attendance and punctuality record
 - 2. Available for mandatory overtime
 - 3. Willing to be flexible with his or her schedule as needed
 - B. Relationships
 - 1. Works well with co-workers
 - 2. Works well with other departments

Level 3 Primary Cheetah Walker Evaluation

Name:		Date:
Y	N	Skill
<input type="checkbox"/>	<input type="checkbox"/>	Demonstrates strong animal training skills
<input type="checkbox"/>	<input type="checkbox"/>	Demonstrates ability to read and anticipate cheetah behavior
<input type="checkbox"/>	<input type="checkbox"/>	Solicits and provides feedback on training
<input type="checkbox"/>	<input type="checkbox"/>	Follows established protocols
<input type="checkbox"/>	<input type="checkbox"/>	Consistently works safely around all animals
<input type="checkbox"/>	<input type="checkbox"/>	Demonstrates the ability to make sound decisions without direct supervision
<input type="checkbox"/>	<input type="checkbox"/>	Demonstrates ability to manage time and meet obligations
<input type="checkbox"/>	<input type="checkbox"/>	Demonstrates dependability
<input type="checkbox"/>	<input type="checkbox"/>	Understands and commits to the time and scheduling requirements of the program
<input type="checkbox"/>	<input type="checkbox"/>	Demonstrates the ability to work well with co-workers and with other

		departments
<input type="checkbox"/>	<input type="checkbox"/>	Excels in all aspects of Level 2 second leash role
<input type="checkbox"/>	<input type="checkbox"/>	Performs all other aspects of job satisfactorily

Animal Use Tracking sheets

Animal sign out sheet

PLEASE PRINT LEGIBLY

Date	Animal Name and Species	Time Packed	Person Picking Up Animals	Time Picked Up	Destination	Person Returning Animals	Time Returned

Ambassador Animal Usage chart

Handling Herps/Inverts

Tortoises	Snakes	LIZARDS
Ihop	Favre	Charles
Robbie	George	Falcor
Billy (NE)	Half Pint	Gorn
TURTLES		
G-48 (Swap Shop)	Iris	Jake
Mork (Swap Shop)	Joshua	Kagoro
Mindy	Jolt	Quasi (NE)
Lunchbox	Orville	Amphibians
Cutter	Pistol Pete	
		Invertebrates
Crocodylians	Rizo	Blondie (Swap shop)
Cupcake		

	Seraphina	Millipedes (Bug house)
Cookie		
	Volley	
Animal		
	Colonel Mustard	
Dr. Teeth		
	Wilma	
Zoot		
	Julien	
	Yara (NE)	
	Djumma (NE)	
	Mama Kubwa(NE)	
	Kamili(NE)	

Handling Birds

Birds	BOP's
Lonesome	Savannah Off Grounds: On grounds:
Sydney	
	Roxie Off Grounds: On grounds:
Meep	
PARROTS	Apollo Off Grounds: On grounds:
Picasso	
Denver	Catori Off Grounds: On grounds:

Rainbo	
	Sage Off Grounds:
Clark (NE)	On Grounds:
Lucy (NE)	Ariel (NE) On Grounds:
CHICKENS	Zuri (NE) On Grounds
Batman	
	Parsley Off Grounds:
Zakira	On grounds:

Handling Mammals

Advanced Mammals	CHINCHILLAS	Insectivores
Domino	Summer	Ninerec
Ernie	Ande	Violet
Norman	Rio	Jonah
Lily	RABBITS	Princess Toadstool
	Fiona	
Wendell		Milly
	Francine	
Rocco		CATS
	Bramble	Bagheera
Wesley		
	Thistle	Penny
Ben		
Fiesta		
Jingle		
Belle		
Alvin		
Winston		
Lilly (wombat)		
Peanut		
Mawson		
Tingoora		
Elsa		

Hannah (NE)
Curly (NE)
Take' (NE)
Li Ming (NE)

TAG recommendations

Recommendations for Reptiles and Amphibians Used in Outreach Programs (From the Lizard TAG RCP)

(Updated by Diane Barber, October, 2012)

Introduction

This information is intended as a resource that includes a list of common species of lizards used in institutional outreach programs. With over 4,700 described species of lizards, it is obvious that there are numerous species that could be safely used in outreach programs. It is not the intent of the LAG to produce an all-inclusive or restrictive list of species. Rather, it is hoped that during the species selection process for outreach programs, educators, collection managers, and other zoo staff work together, using this document, the LAG RCP and Institutional Collection Plans as tools. It is well understood that space in zoos is limited and it is important that outreach animals are included in institutional collection plans and incorporated into conservation programs when feasible. However, this does not mean that all outreach animals need to be part of a conservation program. There are many parallel species that can be used in place of rare or “fragile”

animals to convey conservation and educational messages.

There are numerous components to consider when choosing appropriate species for use in outreach programs. Some popular species used for exhibit can be categorized as “difficult” from documented experience or by reputation, rendering them unsuitable for outreach. However, it is important to remember that individual animals often have individual personalities and can sometimes be evaluated on a case-by case basis. These considerations, as well as staff expertise, husbandry requirements, medical and nutritional requirements, length and types of programs, environmental needs, restraint and transportation methods, temperament, safety issues, and educational messaging should all factor into sound collection planning for outreach program animals.

Husbandry Considerations

It is imperative that adequate housing is provided for all animals. Housing and quarantine requirements for each species should be addressed and approved by qualified staff before animals are acquired. Because of their relatively small size, ease of availability, and seemingly routine housing components, reptiles and amphibians are oftentimes acquired before enough is learned about their husbandry requirements. Although some lizards, such as leopard geckos, can live long and seemingly well-adjusted lives housed in small, simple enclosures, this is not the case for every lizard. Many species require elaborate environments just to survive. Components such as space utilization, ultraviolet light requirements, thermoregulation needs, nutritional and medical requirements, stress factors, social structures, adequate record keeping, etc., all factor into maintaining healthy captive lizards. There is no simple recipe or cookie-cutter approach to choosing the right species for outreach. It is imperative that each animal is researched and experienced personnel are consulted before acquisition in order to evaluate whether or not the animal can be adequately housed. The LAG RCP, husbandry accounts and steering committee members can be used as resources outside of institutions if necessary, but by all means utilize Herpetological Staff if they are present.

Snakes in Outreach (From the Snake TAG RCP)

(written by Clyde Peeling, Reptiland)

Few taxa generate more excitement in live animal programs than snakes. Part of their appeal is that snakes are so widely hated, feared, and misunderstood; but snakes also evoke simple curiosity. They hold people's attention, offering interpreters the chance to communicate something meaningful. In the hands of a skilled presenter most audiences—even adults shaped by years of negative propaganda—may be transformed to appreciate, or at least tolerate, these animals. Many snakes make ideal outreach animals. Choosing species that tolerate repeated handling, properly transporting them, and ensuring safety of the presenter and audience are subjects that should be considered.

Choosing Species

This document should be used as a guide; not an all-inclusive list. Experience may prove that some individuals of a species reputed to be intractable are well-suited for handling, while individuals of other species said to be reliably gentle may be completely untrustworthy. Select specimens that have proven gentle and tolerant of handling and those that are hardy enough for transport. Many snakes from the families colubridae and boidae make excellent program animals, but species from other families may also do well.

Some examples of species used successfully include:

New World rat snakes (*Pantherophis sp.*)

king snakes/milk snakes (*Lampropeltis sp.*)

Pine snakes / bull snakes (*Pituophis sp.*)
Eastern indigo (*Drymarchon couperi*)
Boa constrictor (*Boa constrictor*)
Ball python (*Python regius*)
Burmese python (*Python bivittatus*) *now listed as Injurious Wildlife*
Yellow anaconda (*Eunectes notaeus*) *now listed as Injurious Wildlife*

Check wildlife regulations to ensure that each species may be used in the location of your venue.

Venomous species or large snakes are regulated in some states and municipalities; native species may be protected by local wildlife laws; and some species of large boids are now listed as Injurious Wildlife, requiring double containment and interstate transport permits.

Handling

After removing a harmless snake from its transport container, it is generally best to let the snake hold you as opposed to you restraining the snake. Provide adequate support to give it a sense of security. Depending on the size of the snake, get your hands, arms, or torso under the animal to eliminate any risk of it falling. Very large, heavy bodied constrictors are difficult program animals—it looks ungraceful to heft a massive snake from a container and improper handling may injure the snake. Boids in the neighborhood of 6 to 9 feet and up to 25-30 pounds are most

comfortable both for the presenter and snake. The opportunity to touch tractable specimens provides a memorable experience for audiences. Public contact with snakes comes with some degree of risk, but this is manageable with reasonable precautions. Touch animals should be clean, dry, and healthy to limit the possibility of zoonotic disease transmission, and audiences should be encouraged to wash or sanitize hands after touching. It is generally best to discourage people from touching the snake's head, and to conduct touching in a controlled environment (e.g. a line of people touching one at a time). Be sure to check local regulations, because public touching is prohibited by some states and municipalities.

Program snakes are typically rotated on a regular schedule to prevent excessive handling or disturbance during preshed, shedding, or feeding cycles. Program animals that display signs of stress or illness should be eliminated from the lineup until cleared by curatorial or veterinary staff.

Husbandry

When possible program animals should be treated as a separate population and kept isolated from the non-program living collection. Where complete isolation is impossible, they should be provided with dedicated caging and keepers must exercise caution to limit contact between the two populations.

Transport

Many snakes travel well with little apparent stress. Transport containers should be stout, secure, cleanable, and provide adequate ventilation. Commercial plastic restaurant bins have been used successfully for decades and are available in various sizes. Insulated picnic coolers and Styrofoam boxes provide greater protection from temperature extremes. Boxes should be bedded with an absorbent material (e.g. newspaper or non-toxic wood shavings) to absorb uric acid or feces. Cedar and other aromatic wood shavings should be avoided.

Disposable heat packs add a margin of safety on extended trips in cold weather, but it is best to keep transport containers in a temperature-controlled environment. Inexpensive digital thermometers that have an outdoor probe may be used to monitor one or more containers from the front of a transport vehicle. Overheating is a greater threat than under heating and containers should never be exposed to direct sunlight or left in an enclosed vehicle unattended. The size of the container should in most cases keep the snake tightly confined to preclude sliding about during travel. Bags have been used extensively for shipping snakes inside containers but will prove awkward for a presenter doing outreach programs.

Venomous Snakes in Outreach

Viperid and Elapid snakes make dramatic program animals when used by handlers with extensive venomous training. Obviously, this requires a controlled environment and appropriate distance from an audience. While controversial among some herpetologists, venomductectomy surgery adds an additional layer of safety for some venomous snake species. Venomoid snakes should always be handled using the same protocols as unaltered snakes, as if they were fully capable of envenomation.