



October 21, 2003

CONFIDENTIAL**AMERICAN ZOO AND
AQUARIUM ASSOCIATION**Accreditation
Commission8403 Colesville Road
Suite 710
Silver Spring, MD 20910-9314
Phone: 301-362-0777
Fax: 301-562-0888
www.aza.orgEric Stephens, Director
Miami Metrozoo
12400 SW 152nd Street
One Zoo Blvd.
Miami, FL 33177-1402

Dear Mr. Stephens:

During its meeting in Columbus, Ohio, on September 6-8, 2003, the AZA Accreditation Commission reviewed and voted to accept the Progress Report focusing on the elephant program at Miami Metrozoo.

We are requesting another Progress Report for our September 2004 meeting focusing on the status of the elephant program, staffing levels for that program (including the addition of a 5th individual), and the mammal curator position. Please submit your report, by email, to Denny Lewis for receipt no later than August 18, 2004.

As you move forward towards your next *regularly scheduled* inspection (which will take place in the months immediately prior to the expiration of your current accreditation in March 2005), we support your continued commitment to maintain, or exceed, accreditation standards.

If you have any questions don't hesitate to contact me, or Denny Lewis.

Sincerely,

A handwritten signature in black ink that reads "Mary Healy". The signature is written in a cursive, flowing style.

Mary Healy
Chair, Accreditation Commissioncc: Anne Baker, PhD, AZA President
Sydney Butler, Executive Director
Denny Lewis, Director, Accreditation Programs
Accreditation Commission



November 3, 2004

CONFIDENTIAL

AMERICAN ZOO AND
AQUARIUM ASSOCIATION

Accreditation
Commission

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Eric Stephens, Director
Miami Metrozoo
12400 SW 152nd Street
One Zoo Blvd.
Miami, FL 33177-1402

Dear Mr. Stephens:

During its meeting in New Orleans, Louisiana, on September 18-20, 2004, the AZA Accreditation Commission reviewed and voted to accept the Progress Report of Miami Metrozoo. No further reports are necessary at this time.

The next report due will be the response to the List of Concerns resulting from your upcoming accreditation inspection. We will email you instructions regarding that report in January. You will be notified by email approximately 3 months prior to the March 2005 meeting advising you of the exact date and time of your institution's hearing.

If you have any questions don't hesitate to contact me, or Denny Lewis.

Sincerely,

A handwritten signature in black ink that reads "Mary Healy". The signature is written in a cursive, slightly slanted style.

Mary Healy
Chair, Accreditation Commission [October 2002 – September 2004]

cc: William Foster, DVM, AZA President
Sydney Butler, Executive Director
Denny Lewis, Director, Accreditation Programs
Accreditation Commission



INSPECTION REPORT

MIAMI METROZOO

**Customer ID: 3099
Certificate: 58-C-0006**

**12400 SW 152ND ST.
MIAMI, FL 33177**

**Site: 001
MIAMI METROZOO & AMPITHEATE**

**Inspection
Type: ROUTINE INSPECTION
Date: AUG-25-2003**

No noncompliances identified during this inspection. This inspection included regulated animals and related facilities in the amphitheater area.

Animals inspected: 5 Gorillas, 13 Chimpanzees, 6 Elephants, 2 Clouded Leopards, 2 Siamang, 3 Gibbons, 1 Genet, 1 Sloth, 2 Cheetahs, 1 Ring-Tailed Lemur, 1 Black/White Lemur, 1 Pot Belly Pig, 1 Bush Baby, 1 Serval, 1 Skunk, 5 Porcupines.

Accompanied during inspection by: Terry Webb.

Prepared By: Mary Moore DVM
MARY MOORE, D V M , USDA, APHIS, Animal Care
Title: VETERINARY MEDICAL OFFICER , Inspector ID: 1044
Received By: Steve Connors
STEVE CONNERS
Title: GENERAL CURATOR

Date:
AUG-25-2003
Date:
AUG-25-2003

March 14, 2001

Michael Hutchins, Ph.D.
Director/William Conway Chair
Department of Conservation and Science
American Zoo and Aquarium Association
8403 Colesville Road, Suite 710
Silver Spring, MD 20910



Dear Mike:

I'm sorry these comments are not as timely as they could have been, but I hope they are helpful.

We care a great deal about the way elephants are housed and managed in captivity and these comments are based not only on the situation at Miami, but also on national concerns and issues. We are currently housing 1.1 Asians and 1.2 Africans in separate exhibit areas.

INDOOR HOLDING

The *outdoor barns* at Miami are smaller than the dimensions outlined in the draft guidelines. I emphasize the phrase, as we do not have any indoor holding at all. The elephants are outside on a year-round basis. These stalls do not create any problems due to size and in fact the size of the barns enable us to install wind breaks with limited difficulty in our short cool weather periods. In reviewing the draft guidelines, both our General Curator and Senior Elephant Keeper felt that the indoor minimums suggested could be reduced.

OUTDOOR HOUSING

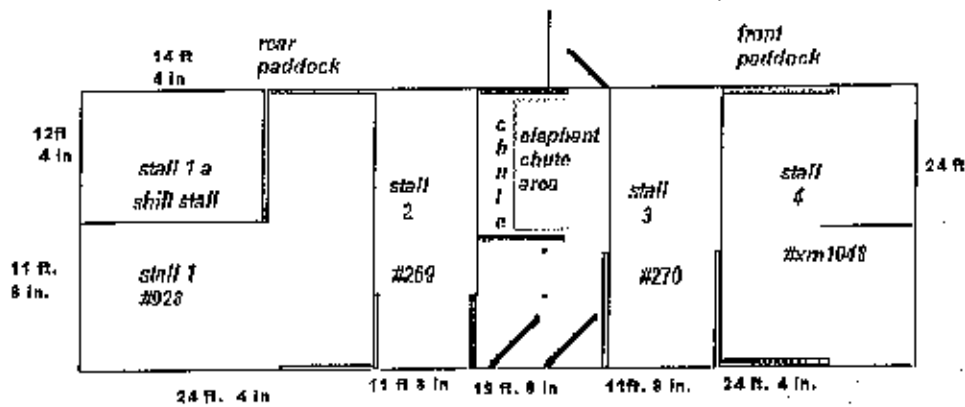
The sizes outlined in the draft guidelines are very small compared to the areas available in Miami, which are as follows:

Asian Bull -----10,000 square feet
Asian Cow ---- 15,000 square feet
African Bull---- 15,000 square feet
African Cow--- 28,000 square feet

This does not mean that a zoo with areas much smaller than this cannot effectively manage their animals. Perhaps the appropriate time to discuss a change in outdoor space is when a major renovation of existing elephant facilities or new exhibit construction is being planned and the ability to budget for more exhibit space is more available to the institution. Phasing out moated exhibits would be a consideration for us only as a part of a proposed Masterplanning initiative.

12400 S.W. 152 Street
Miami, Florida 33177

Telephone (305) 551-4400



*Miami Metro Zoo African Elephant Barn
normal nighttime housing set up with
the addition of #xm1048 (Flora)*

Barn length is 92 ft

Barn width is 24 ft. 3 in.

Stall 1 (bull stall) is 11 ft 8 in x 24ft 4 in with an additional area of 12 ft 4 in x 10 ft just outside shift stall (bull stall is L shaped)

Stall 1a (bull shift stall) is 14 ft 4in x 12 ft. 4.

Stall 2 is 11 ft 8 in x 24 ft

ERC area including ERC and area entering ERC is 19 ft 8 in. x 24 ft.

Stall 3 is 11ft 8 in x 24 ft

Stall 4 is 24 ft 4 in x 24 ft 4 in.

Doors

Crank doors are 10 ft wide by 12 ft tall from service area to barn and from barn to paddocks.

Crank doors between stalls and at bull shift door are 8 ft. wide by 12 ft tall

Push doors are 10 ft by 12 ft, although at the chute they only allow access as wide as chute is

Swing doors are 6 ft 4in by 6 ft 4in. and are used primarily for wheelbarrow access with the exception of the shift area in the Asian barn. Swing doors have removable horizontal bars above the doors to keep elephants from climbing over the doors

Barn

Barn is free standing from the roof and the top height of the top rail of the stalls is 13 ft. Ceiling height is 15 ft to the concrete roof



July 26, 2004

Denny Lewis, Accreditation Coordinator
American Zoo and Aquarium Association
8403 Colesville Road
Suite 710
Silver Spring, MD 20910-3314

Dear Denny:

At the Columbus Annual Conference in September 2003, the Accreditation Commission accepted the Progress Report from Miami Metrozoo on its Elephant Program and commended staff for the changes instituted following a site visit and report from Mr. Dennis Pate and Mr. Chuck Doyle, as well as a consultation with Mr. John Lehnhardt to insure that the program was on the right track and working effectively.

Also in September, the Commission indicated that they would like to receive a report in advance of the New Orleans meeting on how the Elephant Program has performed after one year of implementation. Following is that report:

- Staffing was thought to be a major concern of the Commission and a strong recommendation was given to add an Elephant Keeper position to the staff as well as the addition of a Curator of Mammals to insure proper management involvement with the program. Both of these positions have been added and filled.
- The training of staff was also a major concern of the Commission, and, as was presented in Columbus, a step-by-step process has been instituted for all existing and new staff working with elephants. This process is working very well and we currently (since the Columbus meeting) have three "new" staff at three different levels within the process, all make positive steps up the ladder. One individual has progressed to "Qualified Keeper", one is at "Level 3" and one is at "Level 2"

- There have been three Incident Reports filed since the Columbus conference. Two have been of the "animal on animal" variety, while one involved an act of aggression by "Flora" towards a new keeper. This consisted only of the elephant hitting the bars of the barn with her head when the new keeper gave her a command. She backed up immediately when commanded to do so by the Elephant Manager. "Flora" was sent by her owner to an elephant sanctuary in March, 2004. Copies of each are attached.
- Meetings continue on a regular basis with participation of not only all of the elephant staff, but also the Curator of Mammals, General Curator, Veterinary staff and Director.
- Reproductive assessments have been completed on all animals with the exception of our 1.0 asian as he was in musth at the time of Dr. Dennis Schmidt's visit. Dr. Schmidt will return to complete this one remaining assessment as his schedule allows when the 1.0 completes his musth.
- Foot x-rays on all animals have been completed with the exception of the same 1.0 asian, but he has had his rear feet completed. His front feet should be completed by the time of the Conference.

Thank you for the opportunity to present this report to the Commission.

Sincerely,

Eric J. Stephens
Director

A handwritten signature in black ink, appearing to read "Eric J. Stephens", written over a printed name and title. The signature is stylized and includes a long horizontal stroke extending to the right.

**Miami Metro Zoo
Elephant Management Program
(Elephant Incident Report)**

Date: September 27, 2003

Time: approx. 5:15 pm – 6:05 pm

Location: African barn

Type of incident: Animal – Animal and Animal - Keeper

Keepers Involved: Randy Tucker and Terry Webb

Elephants Involved: Peggy and Flora

Details of Incident:

While shifting Peggy, Flora and Mable from the front paddock, Peggy began making aggressive displays towards Flora after Peggy had been secured in stall #2. Mable shifted through the ERC without problem and onto the rear paddock. Flora was afraid to pass by Peggy and backed up and was able to squeeze between two posts in the ERC door and into the keeper area of The ERC. There were no keepers there at the time. The posts were thought to be narrow enough to prevent an adult elephant from squeezing through. While Flora was in the keeper area of the ERC she was able to back into the ERC and cause it to move away from her. This closed the ERC so that she could not be shifted through the ERC after she was out of the keeper area. After positioning Flora so the ERC door could be closed allowing an opening large enough for her to easily exit the ERC keeper service area, Flora was directed out of the ERC keeper area and housed in stall 3 overnight. She did receive one minor scrape that required no medical attention. The entire incident lasted 50 minutes.

Additional Comments:

- ◆ Zoological supervisor Carl Burch was called out to the African elephant barn to assist and advise as necessary.
- ◆ The ERC was reset the following morning and Flora stationed in the ERC with the door facing the rear paddock closed. She was not secured in the ERC by the rear door. She was nervous but stationed very well. Peggy was stationed facing the water drinker and made no attempts to harass Flora.

Design changes made to prevent this in the future:

- ◆ The emergency release lock handles on the ERC were modified so that the ERC could be locked in position at any time. Previously the emergency release lock could only be set when the ERC doors were shut or open but not during movement of the doors.

- ◆ A work order was placed to add an additional post in the door that Flora squeezed through. We have the materials to add the post on hand, so it will be a quick fix. (Work order completed Oct. 2, 2003)

Conclusion and actions taken to prevent this in the future:

- ◆ After discussions with the keeper and supervisor involved they felt that there should have been no problems shifting Flora as she had been mixed with Peggy for the previous 6 days without incident.
- ◆ The Elephant Manager believes, there were other alternatives in how they could have set up Peggy prior to the shifting of Flora. Flora is known to be afraid of Peggy. Attempting to have Flora pass by the elephant she was afraid of in very close quarters without providing some sort of comfort zone may have contributed to the problem. Peggy could have been stationed away from the ERC and not fed until after Flora and Mable were shifted. Peggy having food in her stall could have contributed to her reacting aggressively towards Flora. This in turn made Flora even more afraid to pass by Peggy.
- ◆ The Elephant Manager believes more training of the keepers and of the qualified backups in the elephant area, will help in the handling of unusual situations.
- ◆ The modifications to the ERC will prevent another episode of an elephant squeezing through the door.
- ◆ The welder modified the ERC on October 2nd, 2003. An additional post was installed in the door to prevent an elephant from squeezing through this door.

CC: Director
Curator
Elephant Manager
Elephant Keepers
Zoo Vet.
March 2003

**Miami Metro Zoo
Elephant Management Program
(Elephant Incident Report)**

Date: Dec. 1, 2003

Time: 4:45 pm

Location: African barn

Type of incident: (animal - keeper)

Keepers Involved: Eduardo Marrero/ George Smith and Tim Johnson were present

Details of Incident:

Senior Keeper George Smith was closing the paddock stall door and observing Eduardo close the stall door between stalls 3 and 4. Eduardo told Flora to back up as per the door closing procedure. Flora charged the bars and did two head thrusts hitting the bars with her head at tusk height. She stopped immediately when George Smith verbally corrected her and backed into place. She made no attempts to strike keeper Marrero.

Additional Comments:

Eduardo has only worked with Flora one time while she was on chains and only on occasion has he given her commands for shifting. While this was a minor display of aggression it is a warning that she will challenge new keepers. Flora was in the process of taking apples out of the drinker when Eduardo told her to back up, with her reaction she was making a statement that she did not want a new person telling her when to eat.

The elephant manager believes Eduardo can be trained to work Flora. After presenting a preliminary copy of this report and following discussion between the Curator and the Director it was concluded that this was not a behavior that was unexpected and we should continue the training of Eduardo with Flora.

CC: Director
Curator
Elephant Manager
Elephant Keepers
Zoo Vet.
March 2003

**Miami Metro Zoo
Elephant Management Program
(Elephant Incident Report)**

Date: June 7, 2004

Time: 1:15 pm approximately

Location: Front paddock African Elephant area

Type of incident: (animal – animal) Mable, Peggy and Machito

Keepers Involved: None during actual event, George Smith Sr., Tim Johnson and Gerald Hay after the event. Dave Jimencz (Zoological supervisor) was present when Mable was first discovered in the moat and he was available as needed. He was informed when situation had ended.

Details of Incident:

Sometime around 1:15 Mable while playing at the mud wallow on the front paddock with either Machito and Peggy or both, slipped into the moat. There were no signs she was forced into the moat. She was estimated to have been in the moat for about 45 minutes when she was discovered by the elephant dept. staff. She was trying to exit moat but due to the rain and the area she was trying to exit at she was not able to exit. Elephant dept. staff tried to coax her to an area of the moat she could exit easily but she did not want to leave area that other elephants were at. Staff shifted Machito and Peggy off of front paddock into the barn and onto the rear paddock. Before the elephants had shifted through the barn Mable walked down to the end of the moat near the barn and easily exited the moat. Mable was in the moat approximately 15 minutes after staff arrived. Staff secured Mable in the barn and bathed her and thoroughly examined her for any signs of injury. She had no signs of injury and was monitored for several days to see if any soreness was noticed. She never showed any indication of injury.

Additional Comments:

As there were no signs that Mable was forced into the moat and there were no signs of aggression when Mable was put back on the paddock with Machito and Peggy it is assumed by the elephant dept. that this was a simple slip caused during harmless play with the wet conditions playing a significant part in her slipping. No change in the housing arrangements of the elephants or to the moats is warranted at this time.

CC: Director
Curator
Elephant Manager
Elephant Keepers
Zoo Vet.
March 2003

June 2, 2003

CONFIDENTIAL

Eric Stephens, Director
Miami Metrozoo
12400 SW 152nd Street
One Zoo Blvd.
Miami, FL 33177-1402

Dear Mr. Stephens:

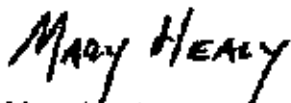
As you know, during its meeting in Columbia, South Carolina on March 26-28, 2003, the AZA Accreditation Commission reviewed the incident that took place at the Miami Metrozoo in December, 2002, in which an elephant keeper was seriously injured.

As reported to you at that meeting, the Commission has concerns about the lack of a Mammal Curator, and what appears to be an insufficient number of staff. We recommend that a consultant be hired to assist in the development of an elephant program, including keeper training. The new program should be in place before adding another trainee.

In connection to this, the Commission is requesting that an initial Progress Report be emailed to us by June 16, and that a second Progress Report be emailed by August 1, 2003. In addition, we are requesting that you be present to discuss the reports at our September meeting in Columbus, Ohio, and that Steve Conner accompany you to that hearing. Your reports should be emailed to Denny Lewis at dlewis@aza.org by the due dates indicated above.

If you have any questions, please don't hesitate to contact me at 916-264-5886, or Denny at 301-562-0777 x265.

Sincerely,



Mary Healy
Chair, Accreditation Commission

cc: Mark C. Reed, AZA President
Sydney Butler, Executive Director
Denny Lewis, Manager, Accreditation Programs
Accreditation Commission
Visiting Committee



July 14, 2003

AMERICAN ZOO AND
AQUARIUM ASSOCIATION

Accreditation
Commission

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Eric Stephens, Director
Miami Metrozoo
12400 SW 152nd Street
One Zoo Blvd.
Miami, FL 33177-1402

Dear Mr. Stephens:

The Accreditation Commission has received and reviewed the three-month Progress Report you submitted as requested. As you know, a second Progress Report is due on August 22, 2003. That report can be e-mailed if you wish.

The Commission was encouraged by what has been accomplished thus far, and considers the contract with John Lehnhardt, the Syracuse training program, and the improved communication and management oversight to be very positive developments.

If you have any questions, don't hesitate to contact me at 916-264-5886, or Denny Lewis at 301-562-0777 x265.

Sincerely,

Mary Healy
Chair, Accreditation Commission

cc: Mark C. Reed, AZA President
Sydney Butler, Executive Director
Denny Lewis, Manager, Accreditation Programs
Accreditation Commission



Denny Lewis, Accreditation Coordinator
AZA
8403 Colesville Road
Suite 710
Silver Spring, MD 20910

Dear Denny,

This is the secondary report asked for by the Accreditation Commission in preparation for the September meeting in Columbus.

Attached please find the report prepared by Mr. John Lehnhardt after his visit to Miami in July.

In this report Mr. Lehnhardt indicates that he would like to see just two additions to the protocols that we put in place for our elephant program following the receipt of the information from Mr. Chuck Doyle at Syracuse. These additions are 1) written routines to be followed based upon the variability of which African elephants spend the night on exhibit from one night to the next, and 2) written steps to more completely describe training procedures for new keepers.

The first item has already been accomplished and the second will be completed shortly. Both will be presented to the Commission at our meeting in September if so desired.

Mr. Lehnhardt points out also that while communication within the elephant area and with the animal management supervisors has improved, it will take a concerted effort to keep this communication flowing. It is our pledge to insure that this will continue to happen.

We have also successfully recruited a new elephant keeper for the area. This is in addition to the four staff already assigned to elephants and we will have the fifth person in the area either in the person of Mike Embury, if he is physically able to perform the work, or his replacement after another recruitment. He is scheduled to have a very

important doctor's visit later this month which will tell us a great deal about his capabilities as a zookeeper.

Best Regards,


Eric J. Stephens
Zoo Director

Handwritten note: All's right



Denny Lewis
AZA Accreditation Coordinator
8403 Colesville Road
Suite 710
Silver Spring, MD 20910

Dear Denny,

Following is an update of what has taken place since the meeting with the Accreditation Commission on March 28, 2003.

To recap what was told to me verbally, Mary Healy, Kris Vehrs and Dennis Pate met with me immediately after my appearance before the Commission to outline the concerns expressed and to relay to me what would be expected of me in the coming months. This included a visit by me personally to a zoo with a much more formal elephant program in place to view the program in a working environment. Syracuse and Disney's Animal Kingdom were suggested as two places that would be appropriate in the opinion of the Commission.

We were to contract with a paid consultant to review our program and report on what changes may be necessary particularly as it relates to training new staff members.

Keeper staff levels in the elephant area were thought to be inadequate and steps needed to be taken in short order to remedy that situation.

The lack of a Curator of Mammals was also cited as a concern since a lack of management involvement in the elephant program was evident to the Commission.

Ms. Vehrs indicated to me at this time that the normal procedure would be for the outline they had just presented to me would be followed by a formal letter "in a couple of weeks" and that a report to the Commission would be due in a three month period of time as well as another appearance by myself and Steve Connors before the Commission at the September meeting.

12400 S.W. 152 Street
Miami, Florida 33177

It was disturbing to me (I relayed this to Ms. Vehrs, Ms. Healy, and Mr. Pate while still in Columbia) that the Commission felt that I had not taken this issue seriously. I want to allay any thought of that as quickly and effectively as possible. The injury and other events are extremely serious and if I did not express myself in a manner reflecting this, it was certainly not my intent at all. All of us have taken this quite seriously and have made significant progress in improving all aspects of our elephant procedures and programs.

As you can see by the date of the letter from Ms. Healy, I did not receive this letter until the 4th of June. However, because we have taken this very seriously, we have not waited to get things in motion and have taken these steps since the meeting in Columbia:

- I called the zoo to direct that an overage (non-budgeted) position for Elephant Zookeeper be requested immediately. That was done the same day. (Copy attached) An advertisement for this position has appeared on the AZA website with dozens of responses but very few have been qualified applicants. Interviews have taken place with the most qualified, and as of this writing we are awaiting a decision from the best qualified person on their relocation from New Jersey to Miami.
- A Curator of Mammals position has been added to the budget for next fiscal year which begins October 1, 2003. A lead keeper designation has been granted to an existing elephant keeper to insure 7-day a week supervisory coverage.
- We received an extremely informative package of information from Chuck Doyle at the Rosamond Gifford Zoo and we have incorporated many of their programs into our protocols for both keeper training and more routine reporting structures such as Incident Reports. Our training protocol was essentially re-written, we receive (Steve Conners, Terry Webb and myself) written weekly reports from the Elephant Manager, daily visits by the General Curator and the Zoological Supervisor are taking place and we are having much more frequent Elephant Management meetings with written minutes. (copies attached)
- I visited Disney's Animal Kingdom on April 23rd and met with Gary Miller and his keeper staff for their daily routine beginning at 5:00 a.m. They use a combination of free and protected contact and this varies even with the staff as more accomplished members are given more responsibility within the free contact regimen. (Certain staff members work free contact with some of the females but not all) The visit was very soon after an unsuccessful birth and medical treatments were still being performed on this particular cow. A semen collection for the Kansas City Zoo was also performed on "Jack" in my presence and unsupervised conversations with keeper staff was freely allowed. I must say that, as I expected, the Disney staff was wonderfully open and discussed all that was asked of them about their routines. Mr. Miller even stopped what he was doing at one point as he noticed that I had noticed something he had done that may have

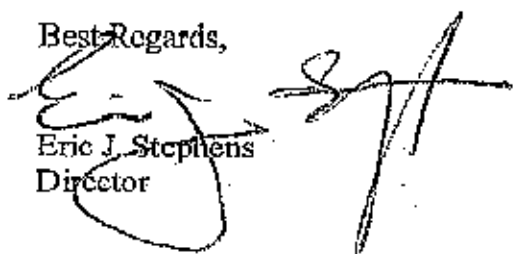
been thought to be out of the norm as it relates to the two man rule to discuss this with me. Discussions also took place with Mr. Miller about assisting us with semen collection training for our staff for our male African "Machito" or possibly swapping "Jack" and "Machito" in an effort to improve our chances of getting "Machito" represented. He is a proven breeder, but his only offspring died at Cleveland after living only a few days.

- An agreement with Mr. John Lehnhardt has been reached for him to visit Miami as a paid consultant to review our program. In fact, Mr. Lehnhardt was scheduled to be in Miami for this purpose from May 21-23, 2003 until he had to cancel at the last moment (the day he was scheduled to arrive) due to another cow going into labor at Animal Kingdom. I have expressed my desire to have his visit rescheduled in such a way to allow him to review and make comment and still allow us enough time to react to whatever he may have to say before the September conference. I feel that since we have been asked to submit another report by August 1st, we should be able to report favorably on the results of his visit.
- On another note, the 0.1 Asian we house is a retired circus performer that has been offered to us for sale. We are investigating the details of this offer. The owner of the 0.1 African involved in the keeper injury has been told that she should be off grounds by July 1st. I believe that this will be difficult for him to arrange but that is the date I have given them.

To summarize, I believe we have taken a number of positive steps since the Commission meeting to improve elephant management at Miami Metrozoo. I look forward to our next update in August and to a positive meeting in September.

Best Regards,

Eric J. Stephens
Director



24 December 2002

Dr. Mary Moore
USDA, APHIS, Animal Care
920 Main Campus Dr.
Suite 200
Raleigh, NC 27606

Dear Dr. Moore,

Since your last visit the Miami Metrozoo staff has conducted a detailed evaluation of exhibits and holding areas for its mammal collection, with respect shelter available to these animals. Our findings are summarized below.

All of the large carnivores (bears, large cats) are provided with trees on their exhibits, which provide adequate shade and some protection from rain. Rockwork, which is used to hide the nighthouses from public view, also serves as a windbreak and additional rain/sun protection for these animals. The nighthouses available for all of these species have concrete walls and roofs providing excellent protection in all weather conditions. There is sufficient space in each nighthouse to house animals individually.

All of the primates have exhibits and nighthouses which are nearly identical to those of the large carnivores- trees and rockwork on exhibit, and secure concrete nighthouses. The only exceptions are the gibbon and siamang displays which have less extensive rockwork. In addition it is our policy to provide these animals with access to their nighthouses during inclement weather (see attached). Although rarely used, the gibbon and siamang nighthouses would benefit from improvements in the existing artificial lighting. The lemur nighthouse is also rarely used except for the two black lemurs that spend most of the day inside (access is available to all the lemurs 24/7). All eight lemurs do use this shelter during the coldest weather and the three species segregate into separate sections. We plan to add additional platforms to provide more resting space in this area.

Our numerous antelope, camelid and equid exhibits all have trees for shade and shelter that are more than sufficient for the number of specimens in each herd. Rockwork serves as a windbreak on the majority of these exhibits also. Most of these animals are held in holding pens overnight, each of which has at least one open-sided shelter which provides sun and rain protection. There are a few exceptions to this. Our lone scimitar-horned oryx is maintained on exhibit at all times. Tree cover on this exhibit is extensive (five sizable trees). A shelter in its holding pen is available should weather become severe. This animal is currently surplus to the collection. Our lone male impala is housed on exhibit continuously. Again extensive tree cover is available (6 sizable trees). This animal is a recent acquisition that has proven incompatible with the females currently kept in the holding pen. He will be shipped out within 30 days. 2.1 Grants zebras are maintained on exhibit continuously where they have access to trees and two open sided shelters. A

recently acquired female Grant's zebra is currently being held in a holding pen without a shelter. This is a temporary arrangement while she is being introduced to the herd. She has been the target of aggression from the adult male. If she is not accepted into the herd in two weeks she will be moved to a location providing shelter. Both the okapi and female giraffe have enclosed barns rather than shelters available as night quarters. It should be noted that we have found the open sided shelters to be totally acceptable for management of our extensive ungulate collection. It could be argued that in a combination of high wind and rain the animals would become wet. This is a possibility, however we feel that the open design is preferable to an enclosed one to allow for freedom of movement of the animals and social interaction of the herd. Enclosing these shelters would restrict movement with the possibility of one animal becoming trapped and injured by another. This arrangement also makes animal observations easier and safer for the staff.

Rhinoceroses, and warthogs have trees for shade and shelter on exhibit (warthogs also have a thatch shelter), and open concrete-roofed barns for night quarters. Tapirs have trees available on exhibit. Baird's tapirs have open, metal-roofed shelters in holding pens. Malayan tapirs have large tarp-roofed shelters. One rhino is held in an off-exhibit pen with a metal-roofed shelter and some tree cover. One tapir is held in an off-exhibit pen with a metal-roofed shelter and some tree cover. Additional trees have been obtained to add to these off-exhibit pens and will be planted in the next two weeks.

African elephants have large trees for shade on the exhibits. Asian elephants have large trees protected by large, concrete, artificial trees to provide shade. We conducted extensive observations on the front Asian display to determine the adequacy of the shade available in this area, since this yard seemed shade deficient. Observations were made 8 am, 12 pm and 4 pm from 1 April through 30 September on the amount and location of shade available, and (beginning 1 May) whether or not the animal was utilizing it. The results showed that of observations made when shade was considered "poor" the animal was utilizing it 21% of the time, not utilizing it 21% and either roaming (55%) or in the pool the remainder. This information indicates that during the warmest months of the year, the elephant(s) were not heat stressed. Nevertheless we intend to provide additional shade to this exhibit. A large ficus tree has been located and root pruned for this purpose. We will be unable to transport this tree as soon as we had hoped, however there is a smaller tree on site that can be used to shade this exhibit within the next three weeks. The larger tree will be planted at a later date. Both elephant species have open concrete-roofed barns available in the evenings. In cold weather large tarps are installed as windbreaks and the elephants are locked inside.

Small mammals include otters, clouded leopards, crested porcupines and bat eared foxes. The leopards are protected by a large ficus tree as well as rockwork in their exhibit. Their holding cages are chainlink with a solid metal roof and each has a den box. The otter exhibit is shaded by rockwork and trees, with off-exhibit holding of concrete-roofed rooms with mesh on two sides, containing den boxes. Foxes are sheltered by moat walls and a tree while on exhibit. Off display they utilize a plastic den box. The porcupines have trees on exhibit for shade. A large, hollow fiberglass log has been removed from

this display for repair. Off exhibit holding contains two culvert pipes that provide good, burrow-like shelter.

Red kangaroos have large trees on exhibit and a metal-roofed shelter open on three sides. The wallabies have a tree and a thatch-roofed shelter on exhibit. Night quarters are covered concrete rooms enclosed on two sides with wire mesh.

This is a summary of our mammal shelter availability with areas we feel need improvement. These improvements are relatively minor for several reasons. Our animal collection is focused on species which range in warm or tropical habitats. Thus they are already adapted to the climate in south Florida. We also embrace a philosophy that some exposure to the elements is conducive to animal health. However, our animals live comfortably. I believe our longevity records, breeding successes and general lack of environment related health problems bears this out.

Sincerely,

Steve Connors
General Curator
Miami Metrozoo

c: Eric Stephens



INSPECTION REPORT

Entry walls of clouded leopard night enclosure.

Lion night den #4.

Door in Indian rhino night enclosure.

**3.127 (a) REPEAT NCI
FACILITIES, OUTDOOR.**

(a) Shelter from sunlight. When sunlight is likely to cause overheating or discomfort of the animals, sufficient shade by natural or artificial means shall be provided to allow all animals kept outdoors to protect themselves from direct sunlight.

Sufficient shade is not available for the protection and comfort of the Asian elephants in the day paddock.

The facility conducted a shade survey from April 2002 through September 30, 2002 to assess elephant use of existing shade during the hottest part of the year. No evidence of heat stress was noted during this survey. However, the facility has proposed to add more natural protection to this paddock. Partial completion of this project is expected within three weeks.

Previously identified noncompliances which have been corrected:

3.75 (a) Housing Facilities, General.

Appropriate secondary containment measures have been provided to the squirrel monkey and colobus night enclosures.

3.75 (c) Housing Facilities, General.

The large metal door in the gorilla service area has been adequately repaired and is no longer excessively rusted.

3.75 (b) Outdoor Housing Facilities.

The facility has provided a written protocol which allows all nonhuman primates access to night shelters during inclement weather.

3.125 (a) Facilities, General.

The quarantine building previously housing duikers is being reconstructed. No animals are currently housed in this area. Sharp edges, protruding nails and wires have been repaired in animal night areas. Wood resting surfaces in the clouded leopard and cheetah enclosures have been replaced.

3.127 (a) Facilities, Outdoor.

The bat eared fox have been provided with additional natural shelter.

3.127 (b) Facilities, Outdoor.

Prepared By: Mary Moore DVM
MARY MOORE, D. V. M., USDA, APHIS, Animal Care

Title: Veterinary Medical Officer, Inspector ID: 1044

Received By: Steve Connors
STEVE CONNORS

Title: GENERAL CURATOR

Date:
DEC-20-2002

Date:
DEC-26-2002

January 5, 2003

Dr. Mary Moore
USDA, APHIS
920 Main Campus Drive
Raleigh, NC 27606

Dear Dr. Moore,

I'd just like to write a note to follow up on your recent inspection of Miami Metrozoo. In reference to the lack of senior staff members "signing off" on a new keeper's skills in the elephant department, it needs to be clarified that senior staff members delegated that authority to the Senior Keeper, George Smith. We were given regular verbal reports on the progress of the new keeper, Mike Embury, and were satisfied that his training was adequate and appropriate. Mr. Smith has more elephant experience than anyone else on our staff, so he would be the logical person to rely on to train new employees. Since we were receiving regular verbal updates this was felt to be satisfactory. In the future a more formal written protocol will be followed.

The other items mentioned in your report are being addressed as priorities by our maintenance department.

Sincerely,
Steve Conners
General Curator

c: Eric Stephens, file



INSPECTION REPORT

MIAMI METROZOO

Customer ID: 3099

Certificate: 58-C-0008

Site: 001

MIAMI METROZOO & AMPITHEATE

**12400 SW 152ND ST.
MIAMI, FL 33177**

**Inspection
Type: ROUTINE INSPECTION
Date: DEC-17-2002**

2.131

DIRECT

HANDLING OF ANIMALS.

(3) During public exhibition, dangerous animals such as lions, tigers, wolves, bears, or elephants must be under the direct control and supervision of a knowledgeable and experienced animal handler.

On December 15, 2002, an employee was critically injured during a formal public exhibition program involving elephants. This employee was hired ten weeks before the incident, had no free contact experience with elephants prior to hire and was solely responsible for the control and supervision of the elephant which caused injury.

Historical aggressive tendencies exhibited by this elephant was provided to zoo employees by a previous handler and is documented in the behavioral profile. The elephant also displayed aggressive behavior toward another keeper in October of this year, however, the incident was not accurately described to management by the keepers.

Specific formal documentation of the extent and scope of the injured employee's training was unavailable for review during this inspection. The written references provided were vague and lacked detail. The written elephant management program utilized by the facility states that new elephant staff members will be officially considered qualified when the senior keeper, elephant staff, zoological supervisor and general curator have discussed and determined that the new keeper has shown the knowledge and ability to perform all elephant related tasks in a safe and proper manner. This discussion and determination did not take place before the new employee assumed sole handling responsibility during public exhibition for an elephant with previous documented difficulties.

To ensure safety of the animals, public and staff, all training protocols for employees handling dangerous animals and elephant management programs should be reviewed. Formal documentation of training provided to employees should be detailed and comprehensive. Accurate, timely communication of any adverse animal behavior is critical to appropriate handling decisions and subsequent safety issues.

Correct by: Immediately.

Prepared By: Mary Moore DVM
MARY MOORE, D. V. M. , USDA, APHIS, Animal Care
Title: VETERINARY MEDICAL OFFICER , Inspector ID: 1044
Received By: Steve Connors
STEVE CONNERS
Title: GENERAL CURATOR

Date:
DEC-20-2002

Date:
DEC-26-2002



INSPECTION REPORT

Correct by: August 27, 2002.

**3.125 (a)
FACILITIES, GENERAL.**

(a) Structural strength. The facility must be constructed of such material and of such strength as appropriate for the animals involved. The indoor and outdoor housing facilities shall be structurally sound and shall be maintained in good repair to protect the animals from injury and to contain the animals.

*The duiker shelter ceiling in the quarantine area has rotting, broken and fragmented wooden beams. This effects structural integrity and could potentially break away and injure an animal.

*Several animal night enclosures have splintered plywood with sharp edges and/or some nails or wires protruding. These areas include the yellow back duiker, gemsbok, kangaroo, bat eared fox, tapir, Impala, and black duiker. These sharp edges could cause injury to the animals. These items should be repaired or replaced.

*The wood resting surfaces in the day enclosures for the clouded leopard and cheetah have splintered surfaces with sharp points which could cause injury to the animals. These surfaces should be repaired or replaced.

Some work orders have already been submitted for the repair of these items.

Correct by March 27, 2002.

**3.127 (a)
3.127 (b)
3.127 (c)
FACILITIES, OUTDOOR.**

a) Shelter from sunlight. When sunlight is likely to cause overheating or discomfort of the animals, sufficient shade by natural or artificial means shall be provided to allow all animals kept outdoors to protect themselves from direct sunlight.

*The large outdoor paddock for the Asian elephants lacks sufficient shade to provide protection from the sun, particularly during the summer months. Asian elephants are prone to sunburn and are normally found in the forest in their natural environment. Additional shade either by natural or artificial means must be provided to this paddock area if it continues to be used for these elephants.

*An adequate amount of shade is not provided to the bat eared fox. The fox spend their time outdoors in the dry moat which currently has no shade provisions except shadows which are provided by the edges of the moat and dependent on the position of the sun.

Correct by May 27, 2002.

Prepared By: Mary Moore DVM
MARY MOORE, D. V. M. , USDA, APHIS, Animal Care

Title: VETERINARY MEDICAL OFFICER , Inspector ID: 1044

Date:
FEB-27-2002

Received By: Steve Connors
STEVE CONNORS

Title: GENERAL CURATOR

Date:
FEB-27-2002



INSPECTION REPORT

b) Shelter from inclement weather, Natural or artificial shelter appropriate to the local climatic conditions for the species concerned shall be provided for all animals kept outdoors to afford them protection and to prevent discomfort to such animals.

Many day and night enclosures lack appropriate shelter from inclement weather including rain and wind. These shelters are necessary to ensure appropriate protection and comfort. Please evaluate all animal areas for shelter from inclement weather and submit a written plan to address the sheltering needs of these animals.

Correct by: August 27, 2002.

c) Drainage. A suitable method shall be provided to rapidly eliminate excess water. The method of drainage shall comply with applicable Federal, State, and local laws and regulations relating to pollution control or the protection of the environment.

*An inadequate drainage system is causing a large puddle of water to accumulate near the Black Rhino night enclosure.

*Poor fitting piping due to mineral accumulation is causing a pool of water to accumulate near the Indian Rhino night enclosure. Water continuously runs from this pipe.

*A large amount of excess water is accumulating outside the gorilla night enclosure. A constant flow of water is generated by poor fitting pipes due to mineral build up and also from a main valve for the paddock pool.

Excess water accumulation can inflame vermin, insect, odor and disease hazards.

Correct by: March 27, 2002.

Note: Please develop a regular maintenance program for elephant foot care.

Current animal inventory: 5 Tapir, 3 Black Rhino, 3 Yellow Back Dulkers, 2 Okapi, 2 Genet, 6 Bongo, 4 Dama Gazelle, 3 Addax, 3 Black Duiker, 3 Kangaroo, 5 Squirrel Monkey, 4 Arabian Oryx, 4 Gemsbok, 2 Pygmy Hippos, 3 Lowland Nyala, 4 Waterbuck, 4 Giant Eland, 4 Reticulated Giraffe, 5 Impala, 3 Grants Zebra, 6 Grants Gazelle, 6 Thompsons Gazelles, 11 Kudu, 6 Guanaco, 4 Colobus, 14 Chimps, 4 Gorillas, 5 Gerenuk, 3 African Crested Porcupine, 3 Bat Eared Fox, 4 African Elephants, 2 Asian Elephants, 3 Bengal Tigers, 3 Persian Onager, 3 Lions, 4 Cape Hunting Dogs, 2 Black Bear, 2 Simbar Horned Oryx, 4 Sable Antelope, 3 Grevoys, 2 Gaur, 1 Sloth, 3 Dromedary Camel, 2 Bactrian Camel, 3 Clouded Leopard, 9 Asian Otters, 4 Muntjak, 2 Indian Rhino, 4 Banteng, 2 Emperor Tamarins, 2 Koalas, 5 Wallabies, 5 Wart Hogs, 3 Tree kangaroos, 3 Sun Bears, 2 Anoa, 3 Orangutan, 5 White Handed Gibbons, 2 Siamang, 2 Red Ruffed Lemurs, 2 Black Lemurs, 3 Ring Tailed Lemurs

Current animal inventory amphitheater: 1 Cheetah, 1 Serval, 1 Ring Tailed Lemur, 1 Pot Belly-Pig, 1 Black/White Ruffed lemur, 1 Skunk, 1 Caracal Cat

Prepared By: Mary Moore DVM
MARY MOORE, D. V. M., USDA, APHIS, Animal Care

Title: VETERINARY MEDICAL OFFICER, Inspector ID: 1044

Received By: Steve Connors
STEVE CONNERS

Title: GENERAL CURATOR

Date:
FEB-27-2002

Date:
FEB-27-2002



INSPECTION REPORT

Correct by: August 27, 2002.

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Correct by March 27, 2002.

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3.127 (b)

3.127 (c)

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Correct by May 27, 2002.

Prepared By: Mary Moore DVM
MARY MOORE, D. V. M. , USDA, APHIS, Animal Care

Date:
FEB-27-2002

Title: VETERINARY MEDICAL OFFICER , Inspector ID: 1044

Received By: Steve Conners
STEVE CONNERS

Date:
FEB-27-2002

Title: GENERAL CURATOR