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16 September 09

ELEPHANT CONSULTATION REPORT

FOR

**VALLEY ZOO
EDMONTON, ALBERTA**

FOR

**FEMALE ASIAN ELEPHANT
"SKANIK"
(aka "LUCY")**

ON

10 SEPTEMBER 09

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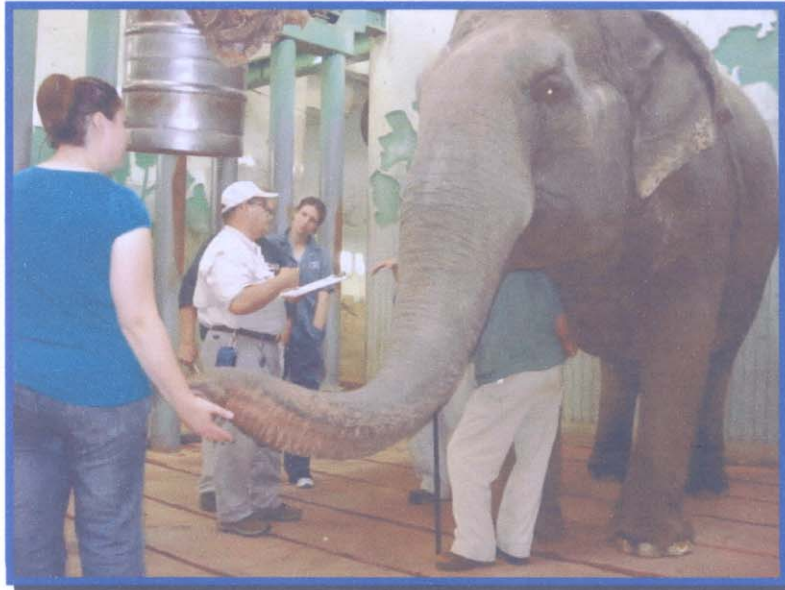
MEDICAL/HUSBANDRY RECORD OF INSPECTION

VALLEY ZOO
FEMALE ASIAN ELEPHANT
“SKANIK” aka “LUCY”



EDMONTON, ALBERTA
CANADA

Date of Inspection: 10 September 09
Species: Asian Elephant
Identification: Female, “Skanik” aka “Lucy”, age 34 years
Date of Report: 16 September 09



“Skanik”

Introduction:

I examined the above elephant at the Valley Zoo in Edmonton, Alberta, Canada on 10 September 09. Present for the examination was: Mr. Dean Treichel, Operations Supervisor for the Zoo, Dr. Milton Ness, Zoo Veterinarian and their Elephant Care Staff along with Dr Jack Ingram, Equine Specialist from Edmonton. This was my second examination of Skanik, a 34 year old female Asian Elephant. In July of 2002 the Zoo asked me to examine her and to evaluate the problems that she was having with her feet and to come up with an action plan for her.

This time I was asked to assess her overall health and to help them evaluate her respiratory problem and a retained, deformed molar tooth. (The tooth was shed before I arrived). This report is my written evaluation of her condition and my recommendations for dealing with her problems.

History:

Skanik has lived at the Valley Zoo in Edmonton, Alberta for 32 years. She came to the Zoo as a two year old orphan. She is a Valley Zoo Icon.

In 2007 when I saw her she had foot problems that were solved by adjusting her husbandry program, increasing her exercise schedule and reducing her weight.

This past year I have been in communication with Dr. Ness regarding a deformed upper molar that Skanik had retained. Dr. Ness traveled to El Paso, Texas in October of 2008 to participate in a Dental procedure that we were doing on an elephant at the El Paso Zoo and to discuss the possibilities of surgically removing Skanik's deformed molar. We also discussed her respiratory problem and the possibilities that the retained tooth was the cause of her nasal discharge and restricted breathing.

Since her respiratory difficulties and nasal discharge continued this year, the Zoo requested that I come to Edmonton to examine Skanik and participate in an endoscopic evaluation of her nasal passages.

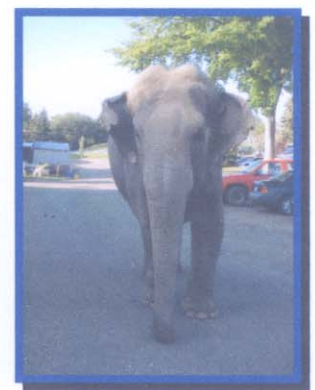
Overall Findings:

Skanik, as in 2002, is still a calm, gentle elephant that is managed in a “free contact” system. Unfortunately, she has a severe constriction of her nasal passages that affects her ability to breathe properly. If she walks too fast during her daily exercise, she has to open mouth breathe to restore her oxygen deficit. The retained, deformed molar was shed shortly before this examination. She has a pad defect on her right front foot and a bad nail on her left front foot. Also, recent radiographs of her front feet show some arthritis.

General and Oral Examinations:

Ones first impression of Skanik is that she looks pretty good. She has lost weight and is on a scheduled exercise program. She has relatively good movement while walking and is calm and gentle.

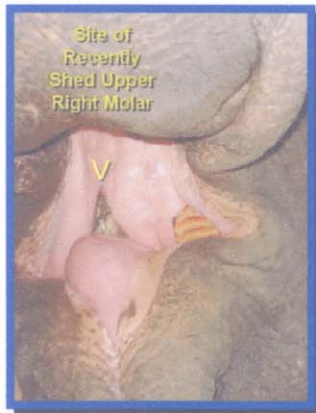
On closer inspection, however, it is noted that she has a white nasal discharge and when she walks too fast she has to periodically open mouth breathe during the walk and will even stop and take every breath through her mouth in order to get enough air into her lungs. Elephants are obligatory nasal breathers, so to see an elephant breathe through her mouth is quite shocking.



Skanik on a Walk and the Nasal Exudate Produced

As noted in 2002, she has some conformational defects that include both front legs being bow legged and pigeon toed and the rear feet being somewhat pigeon toed. Also, she has some stiffness in her left elbow. Her weight is now at 4,230 kg (9,300 lbs), which, as requested, is down from my previous visit. A weight reduction program should continue, however.

The recently shed, deformed right upper molar was examined and the site in her mouth was visualized and found to be filled with a normal blood clot. I expect this to heal without complications. The left upper molar appears to be normal. The lower molars could not be visualized.



Skanik's Deformed Recently Shed Upper Right Molar

Examining her body revealed no problems other than a healed pressure sore on her right hip and a small wear spot on the right side of her face.

Exam of Feet:

Examination of Skanik's feet reveals that she has had attentive care, as evidenced by her clean nails and the nice, well cared for cuticles. The staff should be commended for their efforts. However, due to the previously mentioned conditions, she has developed a pad defect at the pad/nail junction of the #2 nail on her right front foot. Instructions were given to the keepers on how to handle this defect.



Skanik's Defect Below Her Right Front #2 Nail

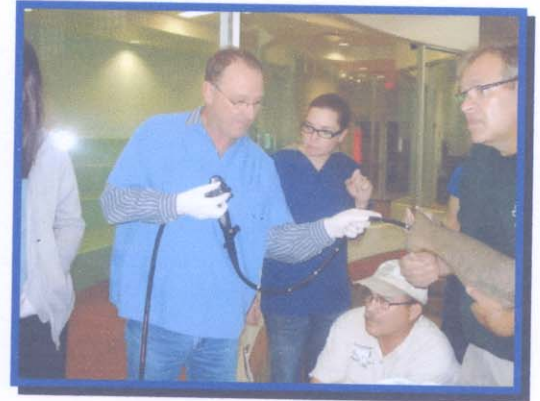
The #4 nail on her left front foot is undermined, so most of the nail wall has been removed and the keepers were instructed on how to deal with this problem, also. Her rear feet are in good shape, with no defects found.



Trimming of Skanik's Left Front #4 Nail

Exam of Upper Respiratory System:

For the evaluation of Skanik's respiratory problem, Dr. Ness gave her a sedative that allowed for her to remain standing for examination. Dr. Jack Ingram, an Edmonton Equine Specialist, utilized a 3 meter (~10 foot) flexible endoscope to examine each nostril. Skanik was steadied by her handlers and her trunk was extended through the PC wall for the exam. She showed no signs of irritation when the scope was inserted into her trunk. Each nostril appeared the same, with a whitish coloration to the mucus membranes at the eight to nine foot level. Also seen were some small red circular blotches.



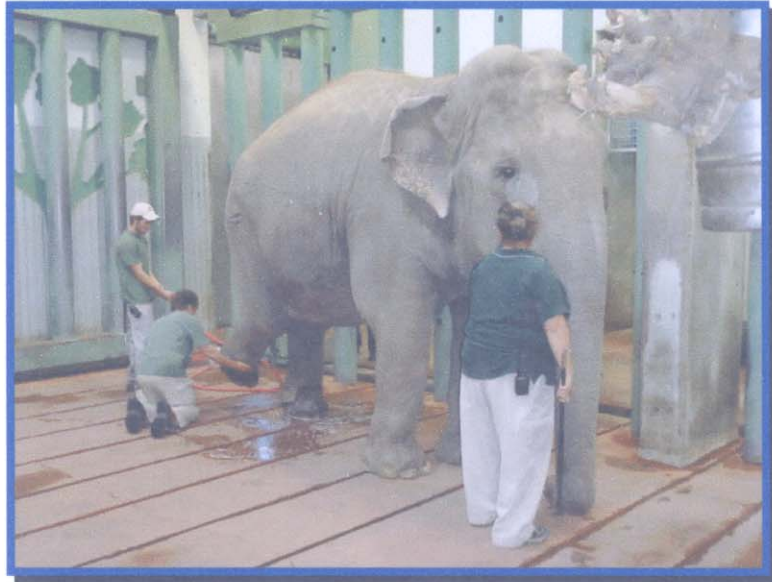
Dr. Ingram's Endoscopic Examination of Skanik's Nasal Passages

At the extent of the scope, the nasal passages narrowed to slits and there was a considerable amount of white exudate—the same material that she discharges from the end of her trunk. With each respiration, it was noted that the air was forced through the area, bubbling through the exudate. This area was thought to be just above the soft palate. No obvious reasons could be seen that would account for the constriction. No polyps or tumors were seen. Also, both sides appeared the same, so the association with the deformed, recently shed, right upper molar could not be directly correlated to her problem.

During the procedure, the relaxation from the sedative did not allow for Skanik to open-mouth breathe, so she forced her breaths through the constricted nostrils causing loud noises, not heard before. When the sedative wore off, she returned to her normal breathing patterns where sounds are heard at each inspiration and expiration.

Facilities:

The outside yards consist of two yards; a small one on the Service side of the barn and a large yard on the Viewing side of the barn. Both yards have a dirt surface, pole structures, and shade. The inside stalls that are also used for winter holding and public viewing, have concrete floors. The floor of one of the inside stalls is covered in sand, where Skanik goes when she wants to lie down to sleep.



Inside Facilities

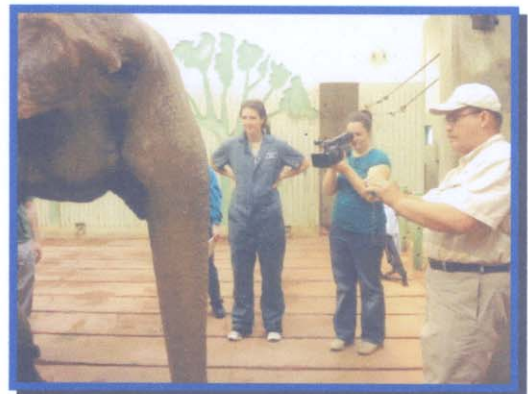
Treatments:

Skanik is currently on oral phenylbutazone due to the arthritis in her lower legs and feet. A treatment plan is being developed to attempt to relieve her respiratory problem.

I administered no medications during my inspection.

Staff Instructions:

I reinforced the importance of movement, exercise and weight reduction in getting Skanik through her respiratory problem. Feeding the prescribed diet is imperative, i.e. no food items that aren't on the approved diet list. The Assessment section and the Proposed Plan section will detail my suggestions.



Assessments:

- Skanik's good nature and the ability of the handlers to work closely with her will be the key to her ability to overcome her current problems.
- Her respiratory problem is a serious condition that will have the highest of priorities.
- Skanik is still overweight. The goal should be for her to lose 450 kg (~1,000 lbs) over the next 12 months.
- The fact that Skanik has nicely manicured cuticles indicates to me that the staff is working hard at keeping her feet in good condition.
- The nail defect of her #4 toe on her left front foot needs aggressive trimming in order to prevent the nail from overgrowing and trapping the dead tissue under new nail. This foot should be soaked twice a day, as directed, to facilitate the trimming and healing process.
- The pad defect on her right front foot needs aggressive care, as well. This defect will need special trimming in order to get the defect to "drift" forward through the bottom of the #2 nail. This foot will benefit from daily soaking, also.
- The small size of the indoor facilities restricts the ability to maintain a good exercise program during the winter months.
- The concrete floor of the indoor facilities increases the abnormal pressures on Skanik's feet in the winter months.

Proposed Plan:

- **Respiratory Problem:**
 - Treat this as a medical problem, for now.
 - Put her on a course of antibiotics and anti-inflammatories.
 - Submit another trunk culture for aerobic and anaerobic bacteria as well as culture for fungi.
 - Modify the treatment protocol based on the culture results.
 - Repeat the endoscopic exam in four to six weeks.
 - If the problem persists without improvement, biopsy the deep nasal mucous membranes. And repeat the course of therapy.
- **Weight Reduction:**
 - Continue the current plan for gradual weight reduction with a goal of getting her to loose 450kg within the next twelve months.
 - Continue her exercise program, with care not to over-stress her so she has to open mouth breathe.
- **Foot Care:**
 - The Elephant Staff should continue their good foot care practices.
 - Special attention should be made to the above mentioned problem areas.
 - Her front feet should be soaked twice a day for 30 minutes each time in water that is as warm as she can stand without scalding her (put your hand in it---if it's too hot for you, it's too hot for her). One of the soakings should be with Epsom salts and the other with a disinfectant.
 - Proper foot care pedestals need to be purchased or built to facilitate proper trimming and the comfort of Skanik during the foot care sessions.
- **Exercise:**
 - Continue Skanik's exercise program despite her respiratory problem.
 - Be attentive to her need to catch her breath and if she has trouble doing so, discontinue the exercise session.
- **Facilities Modifications:**
 - The indoor facilities need to be enlarged to facilitate exercise in the winter.
 - An alternative would be to install an elephant treadmill.
 - Secure rubber mats for the inside facilities in preparation for the winter.
 - Develop a plan for modification or replacement of the indoor facilities to meet the industry standards.
 - Enlarge the indoor sand covered areas.
- **Husbandry Modifications:**
 - Train Skanik to a "flat-topped" pedestal to facilitate examination and trimming of the nails and a "yolk" stand for pad care.
 - Train Skanik to open her mouth for examination and photographs of her upper molars (the lowers are nearly impossible to see). Some folks use a leaf blower to get their elephants to open their mouths.

End of Report



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