

**Report for Edmonton Valley Zoo**  
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Today I examined the 44-year old elephant known as “Skunik” or “Lucy “at the Edmonton Valley Zoo. Also present were Dr MJ Limoges and Dr Jim Oosterhuis, as well as elephant keeper and barn staff.

Lucy is an elder female Asian elephant with a long history of respiratory and dental disease. I last visited the zoo in 2016 to examine Lucy. This visit was to reassess her health.

**System review**

Eyes: An ophthalmologic examination was not done, but Skunik/Lucy is clearly visual and has no obvious ocular abnormalities.

Ears: Skunik’s pinnae are in excellent condition, and she appears to have good hearing, responding appropriately to spoken cues from her caretakers. She is trained for blood draw from both ears.

Mouth: Skunik/Lucy has no normal teeth in her mouth. All visible teeth are misshapen and rotated. She has lost the right lower molar since 2016. Both the right lower and right upper molar regions have areas in which feed can be trapped. The mouth is rinsed of debris twice a day by staff. Staff reports abnormal odors from her mouth and trunk intermittently. Today, no odors could be appreciated. No caries were visible.

CV/Respiratory: Skunik/Lucy’s respiratory abnormalities are unchanged since 2016. She breathes which is extremely abnormal for elephants. Both loud expiratory and inspiratory noises can be heard. With exertion the respiratory rate increases considerably. Staff reports coughing. This was not observed during this visit.

GI: Skunik/Lucy has had bouts of colic, and staff feels that they are increasing. She has also had bouts of inappetence. Nevertheless, Lucy has not lost weight, and in fact, is currently slightly overweight. Current weight is 8915 lb. Manure seen on this visit was normal, but staff reports some loose stool intermittently. No abdominal distention was visible. Lucy’s diet includes hay, beet pulp, elephant grain free supplement, some browse, green produce for treats, fresh grass and occasional popcorn. Hay is reported to be variable in content since regular forage analysis is performed.

Neuro/behavior: Mentation was entirely normal. Furthermore, the demeanor of this elephant was bright and curious. She was playful with her keepers and kept close proximity to the office area while people were in it. Staff reports that she lies down on both sides to sleep and is sleeping well. She enjoys training. She continues to receive ample enrichment ranging from painting, to sensory stimulation and has close, regular contact with keepers with whom she has an obvious and deep bond.

Skin: Lucy/Skunik’s skin is healthy and normal. She receives a full bath every other day, and a partial bath in between. She has a minor callous on her right hip, and a small, elbow lesion on the right, which is being appropriately tended to.

Musculoskeletal, gait and feet: Skunik/Lucy is sound and walks well after some initial stiffness. Initially, she doesn’t bend the right stifle, although can do so easily on the left. Like many older elephants, she has some conformational abnormalities; these are unchanged since 2016. Lucy’s front feet are soaked in either dilute apple cider vinegar or epsom salts daily. She is walked a total of 2 to 3 km daily around the zoo when weather permits. The nails are well trimmed. She has had some minor problems with the most lateral nail on the left front foot and an abscess on the bottom of the right front. Both are being appropriately managed. The pads were normal, with excellent thickness and good corrugations. A sole lesion on digit 5 of the left front is dry and closing. Impressively, when playing in her yard with keepers, she can move quite quickly. However, when descending a small hill, her hips could be seen to “drop” bilaterally.

Reproductive and urogenital tract: Staff reports frequent vaginal discharge, sometimes hemorrhagic and sometimes with “plugs” of mucosal tissue. These have been associated with abdominal pain. Staff also reports rubbing of the vulva on objects, probably due to pruritus and mild discomfort as well as tail flicking. The elephant is being trained for vaginal endoscopy. Urine was visually normal.

Medications: Lucy receives analgesics, antihistamines, and neutraceuticals.

### **Assessment**

Despite Lucy/Skanik’s chronic, severe, progressive respiratory and dental disease, this elephant is continuing to thrive, which in no small way is due to excellent veterinary and husbandry care. The vaginal discharge and colic are likely to be due to leiomyomas, which will be confirmed through ultrasound and vaginoscopy. Common in older, nulliparous, female Asian elephants, these benign tumors are progressive and not treatable. The elephant is given analgesics when she seems particularly uncomfortable. Lucy could stand to use some weight, which will improve her well-being. At 44 years of age, Lucy/Skanik is geriatric, since life expectancy in Asian elephants, both wild and in human care is between 37 and 40 years. The dental problems are unfixable and this elephant is an extremely poor candidate for general anesthesia.

### **Plan and Recommendations**

#### Medical recommendations

- Try to keep hay protein content between 8 and 12%
- Continue training vaginoscopy
- Continue to exercise the elephant
- Continue program of enrichment
- Consider training for rectal ultrasound

### **General recommendations**

Lucy should remain at the Edmonton Zoo. First, her respiratory condition is so severe that she might not survive the trip. Furthermore, in the past several years, many healthier elderly elephants have been transported to other facilities, including sanctuaries, only to die within one year of arrival.

Second, no elephant facility exists that has special expertise or experience with the types of issues that this elephant has or that could improve her care beyond what she receives now. Lucy/Skanik is the only elephant looked after by multiple people. She gets constant attention every day of the week. The elephant is deeply bonded to her caretakers and vice versa, and the zoo is clearly committed to this elephant and her well-being which they have demonstrated by building her an indoor arena, bringing in veterinary specialists to evaluate her, and allowing her to enjoy her old age. The zoo has also followed up on recommendations given by veterinary specialists. This has likely already extended Lucy/Skanik’s life by several years.

Moving Lucy/Skanik to another facility would not be in her best interests. Furthermore it would constitute a great unkindness. To force this elderly elephant to leave her home and the people to whom she is bonded for a trip which could potentially ruin her health further or even kill her is the antithesis of animal welfare. Sanctuaries have repeatedly shown themselves incapable of providing the one-on-one care this elephant requires and large number of deaths of elephants, most of whom were far healthier than Lucy, at sanctuaries shortly after arrival attest to that fact.

How long Lucy/Skanik will continue to do well is unknown. Her disease processes are multiple, untreatable, and very severe. Yet she is clearly well-adjusted, content, and even comfortable. Veterinary and caretakers respond to her problems as they occur, and monitor her comfort. Quality of life and long-term management are clearly priorities for the Edmonton zoo, and Lucy demonstrates this by thriving despite her health concerns.