## Preliminary Assessment of the Living Conditions of Two Male Mountain Lions (*Felis concolor*) and Two Female Black Bear (*Ursus americanus*) During a Visit to the Spring River Park & Zoo in Roswell, New Mexico on February 25-26, 2017

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**Introduction-** A request was made by the PETA Foundation to provide an initial assessment of two exhibits, one housing two male mountain lions and a second exhibit with two female black bear at the Spring River Park & Zoo in Roswell, New Mexico on February 25-26, 2017. This report of findings is based upon over thirty years of clinical experience and veterinary board specialty certification in zoological medicine, site inspections conducted for the American Association of Zoo and Aquariums (AZA), and expertise in evaluating the standard of care and living conditions of non-domestic animals. The findings and assessment from this visit were compiled in cooperation with Dr. Christine Capaldo, a veterinarian with the PETA Foundation focusing upon captive wildlife.

**Procedure**- Observations of two side by side exhibits were conducted at the Mountain Habitat on the Capitan Trail area of the Spring River Park & Zoo (Fig. 1). One exhibit housed two male mountain lions and the adjacent exhibit two female black bear. The exhibits were physically assessed from the visual perspective of a public visitor. Observations were made over a two day period directly in front of the exhibits to include photographs and videos revealing exhibit characteristics and the animals contained therein.

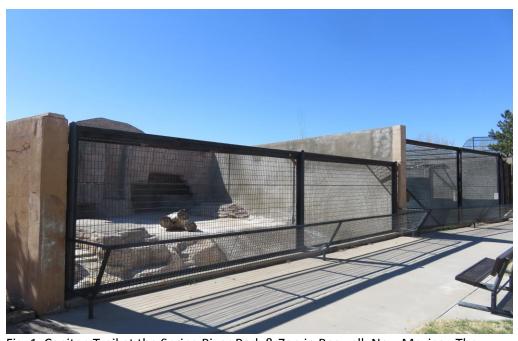


Fig. 1 Capitan Trail at the Spring River Park & Zoo in Roswell, New Mexico. The middle enclosure housed two female black bear and the far enclosure two male mountain lions. There was no indication of animals being housed in the near enclosure.

**Observations-** The black bear were not on display (Fig. 2) on February 25<sup>th</sup> and on exhibit only for observation a few minutes on the morning of February 26th. The mountain lions were on display in their enclosure on the morning and early afternoon of February 25<sup>th</sup> and off exhibit (Fig. 3) for all but a few minutes on the morning of February 26<sup>th</sup>.



Fig. 2 Black bear exhibit at the Spring River Park & Zoo in Roswell, New Mexico.



Fig. 3 Mountain lion exhibit at the Spring River Park & Zoo in Roswell, New Mexico.

Assessment of Findings- Both enclosures could be described as "old style" zoo exhibit construction design from the 1930's - 1940's and earlier sometimes referred to as "grotto style" consisting of concrete floor and wall surfaces likely sprayed with gunite or shotcrete mortar material to include faux rock work. Water flowed down concrete lined spillways in each enclosure to a water filled moat at the base or front of each enclosure. The enclosures were barren of any natural substrate. Both exhibits contained concrete appearing perches or shelf ledges, and what appeared to be a single retreat or shallow hiding space in the rear of each enclosure. At the back of each grotto there appeared a partially viewable sliding or guillotine door to admit the bears and lions into their respective den or bedroom space. Zoo visitors could view the bears (Fig. 4) and lions (Fig. 5) by looking down thru wire mesh unless the animals were at the extreme rear of their enclosure near eye level with zoo visitors.



Fig. 4 Black bears on exhibit at the extreme rear of their enclosure.



Fig. 5 Mountain lions on exhibit near the front of their enclosure with signage indicating their names to be Bret and Bart Maverick.

The female black bears were identified by signage in the front of their enclosure as Ursula and Sierra. Both bears (Fig. 6) demonstrated patchy and regional hair loss or alopecia over the back, front and rear legs of one bear (right) and over the front and rear legs, and lower back of the second bear (left).



Fig. 6 Black bears Ursula and Sierra demonstrated regional hair loss or alopecia.

One lion, illustrated below (Fig. 7) periodically paced back and forth at the rear of the enclosure while the other paced the front along the moat edge. Both lions appeared overweight and lacked overall body muscle definition. Their hair coats were plush and appeared in good condition.



Fig. 7 The lion illustrated above would periodically pace back and forth at the rear of the enclosure. No muscle definition is visible due to obesity.

The second lion (Fig. 8) illustrated below demonstrated a healthy hair coat and his lower canine dentition appeared clean and free of tartar.



Fig. 8 Both lions revealed normal hair coat condition, poor muscle definition, and were overweight.

The lion in figure 8 on the morning of February 25<sup>th</sup> was observed chewing on green grassy appearing material (Fig. 9). Later in the day this lion had regurgitated the grassy material (Fig. 10).



Fig. 9 The lion in figure 8 was noted in the morning of February 25<sup>th</sup> to be chewing on green grassy vegetation.



Fig. 10 The lion noted chewing upon grassy vegetation regurgitated foamy grassy matter observed to the left of the lion that same afternoon.

The lion in figure 10 revealed a pendulous abdomen associated with excessive abdominal and subcutaneous fat depot was noted having a discolored area in the posterior portion of his abdomen. The subcutaneous fatty abdominal depot appeared to develop a focal darkened area from contact with the concrete flooring (Fig. 11.). While relatively benign this signifies an unhealthy level of obesity.



Fig. 11 Note the darkened posterior abdominal area partially denuded of hair from contact with the concrete enclosure surface.

**Conclusions-** Critical findings over two days of observations of lions Bret and Bart Maverick revealed periodic stereotypic pacing.\* This abnormal behavioral pattern is indicative of stress and compromised behavior due to boredom from inhabiting a severely restricted space with unnatural species inappropriate substrate. Findings of obesity and good muscle definition in both lions indicate lack of exercise in a severely restricted space. The current enclosure is devoid of stimulus in an outdated exhibit inconsistent with modern zoo enclosure design and incompatible for a carnivore species such as mountain lions.

A brief discussion with a zoo keeper revealed the lions to be rescued siblings now seven years of age. According to the same keeper the bears often selected not to come out on exhibit. Likewise both bears inhabit obsolete and outdated enclosures which restrict species typical behaviors. Neither enclosure allowed for adequate freedom of movement and normal behavioral patterns. Neither species in particular bears Ursula and Sierra were able to dig or forage in natural substrate. The unnatural exhibit surfaces in the bear enclosure is a likely contributing factor to their abnormal hair loss.

\*Video recordings of the mountain lions documented periodic pacing back and forth illustrating stereotypic behavior in the back and front of the enclosure indicating compromised behavior.