GuZoo and Animal Farm Three Hills, Alberta.

19th and 20th July 2014

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has been prepared for, and on behalf of,

Zoocheck Canada

Executive Summary:

Following a request from Zoocheck Canada, I visited the GuZoo on Saturday 19th and Sunday 20th July 2014. I spent more than three hours on site on each occasion. My first and lingering impression is that the GuZoo is a shoddy, filthy place, unable to determine its primary role: whether it is a zoo, or an exotic animal-breeding farm. In my opinion it tends to the latter. I offer my professional observations and opinions below.

The standards of animal care and husbandry throughout the 'zoo' were unbelievably poor and often contrary to the ethics of modern zoo practice. The containment of many dangerous species was woefully inadequate with fencing of inadequate strength, poorly hung and maintained. There was a significant danger of escape from both the enclosures and the 'zoo'. There was also serious risk to many animals from collapsing fencing, as well as from farm implements and other items within the enclosures. The vast majority of the 'zoo' was in a shoddy state of disrepair.

The state of hygiene within the premises was appalling, posing significant risk to animals, staff and visitors in the 'zoo'. People had free and unmonitored access to many small animals and their enclosures. The lack of immediate and adequate washing facilities further increased the risks to both staff and public.

Feeding and watering of the animals was generally inappropriate, and was offered in an unhygienic and sometimes unsafe manner.

Domestic dogs (including visitors' dogs) were allowed almost everywhere. These may carry and spread disease into the 'zoo', and risk causing worry and stress to the animals. According to its owner, one visitor's dog that was allowed onto the premises was a danger to children!

The same six baby animals (puma/cougar, lynx, Artic fox and skunk cubs/kits, each 7-8 weeks old) were out for the public to handle for the entire time on each visit. This is too long for such young animals that also require proper rest. Although this activity was supervised, there was no encouragement of the public (including young children) to wash hand afterwards, nor was there easy access to wash facilities or hand sanitizers. This posed a serious hygiene risk. Furthermore, this apparently deliberate practice of hand-rearing cubs is recognized as interfering with an animal's development and behaviour, its ability to integrate with others of its kind, and its long-term prospects of contributing to meaningful conservation programmes. Routine hand rearing of baby in zoos is frowned on in all but emergency cases: it goes against all standards of modern zoo practice. However, it does make young animals more attractive to the general public and therefore bring in more visitors, and it does increase their value in the pet trade. According to one volunteer, the eight-week old puma/cougar cub had been sold to an individual in Nova Scotia, and all the others were "for sale" too. This 'zoo' appears to have the culture of a member of the exotic pet trade. With the number of young present within the 'zoo' there appears to be a significant danger of 'overbreeding' of many of its animals. Deliberate overbreeding is recognised as a significant welfare issue, and is an illegal practice in many jurisdictions.

Guzoo was found to have no useful education or conservation element. Indeed, its facilities, management, and actions can only project negative and damaging images of

wildlife and its conservation. As for the public awareness element of its remit to accept and look after "orphaned, injured or confiscated wildlife", it is less effective or 'real' than looking at documentaries or books.

All the above are urgent and pressing matters: the welfare of the vast majority of species within this collection is not being addressed. It would appear that there has been little improvement in the conditions at this zoo since its accreditation was removed and subsequently reinstated the Alberta Government ordered the zoo decommissioned and then subsequently reversed the decision. The urgent and outstanding matters highlighted in Zoocheck Canada's previous reports on Guzoo (2007 and 2011) remain. The only things that shine at this facility are the road signs on either side of Three Hills advertising it as a "Licensed Zoo" and "Animal Farm".

GuZoo is a dysfunctional zoo. It should not be accredited, open to the public, or permitted to operate as a zoo. It has a decommissioning plan, and it should be put into action.

In this document I have generally laid out my comments to the Court following the guidance of the Alberta Zoo Standards 2005. I hope this will give the Court a familiar structure to follow and to aid it in its deliberations. It also follows quite closely the layout of the Zoo Development Plan.

GOVERNMENT OF ALBERTA STANDARDS FOR ZOOS IN ALBERTA

Prepared by the Alberta Zoo Standards Committee of Alberta Sustainable Resource Development and Alberta Agriculture, Food and Rural Development September 30, 2005

I. Background, Purpose, Jurisdiction and Expectations

Purpose: "The general purpose is to ensure that facilities requiring an Alberta Zoo Permit meet acceptable standards that provide: a suitable environment for the animal collections and visitors; an environment that emphasizes education; where off-site display occurs, there is minimum risk to surrounding free-ranging wildlife, domestic animals and people, and in some cases provide an opportunity for scientific research and animal propagation to support wildlife conservation programs."

During my two visits to GuZoo I found the facility failed to meet the aims of the 'Standards' on each occasion:

- It was certainly not a suitable environment for many of the animals it housed. The structural facilities were often poorly constructed, in a chronic state of disrepair and dilapidated
- The containment of many of the larger and potentially dangerous wild animals wholly inadequate
- The enclosures were filthy, and the standards of husbandry derisory
- The drinking water provided to the animals was almost invariably contaminated and dirty. A potential source of infestation and infection
- Poor standards of nutrition with serious problems of obesity in the larger black bears, lionesses, Japanese macaque and porcupine
- The feeding systems and regimen often inappropriate, unhygienic and frequently dangerous to health, and on occasion also to the animals' physical wellbeing
- Uncontrolled and inappropriate feeding by visitors encouraged.
- Incompatible species within enclosures, or adjacent to one and other
- Poorly implemented environmental enrichment that was often in a state of disrepair. Much of it also hard and unforgiving. On occasions this was a significant danger to the animals it was designed to help
- Presence of domestic dogs and cats throughout the 'zoo', and in close contact with the 'zoo's' animals represents a significant health hazard. The dogs were not only those owned by the 'zoo' and its staff, but also brought in by members of the public. (One visitor who brought his dog into a confined petting area, while I was there, said we "should be careful" as his dog "did not like children")
- Insufficient separation of visitors from some of the dangerous animals
- Woefully inadequate encouragement of, and provision for, visitor hygiene. This was inadequate for the staff too

- Most enclosures had token educational signage though of variable standard, and some incomplete and unreadable. However, any educational merit that this may have provided was more than undone by the many and serious negative images given
- I did not observe any off-site activities, but on-site this 'zoo' failed to meet the basic requirements of minimal risk to local free-ranging wildlife, domestic animals, and the public
- There is no provision for scientific research, nor any contribution to conservation evident
- There is excessive animal propagation on site. It is more like a 'puppy farm' mill' than a responsible zoo. Responsible zoos have a breeding program in place to control the numbers of offspring
- Handling of exotic species is encouraged as part of the attraction, but with
 little control. Juveniles are sold on commercially but not necessarily to
 contribute to the captive management of the species concerned. There is no
 evidence of any support for wildlife conservation programs, and indeed the
 humanization of young is wholly contrary to the ethics and ethos of modern
 zoo and conservation efforts.

II. Standards Within the Mandate of Alberta Sustainable Resource Development - the Wildlife Act and Regulations

A. Animal Collection Management Standards

Marking/Identification: "All animals at the zoo facility must have an individual identifying tag, marking, microchip, tattoo or unique physical feature (e.g., ear tags, color pattern), except where this is not feasible (e.g., amphibians) in which case they can be identified by number of animals and exhibit location. Note: Permanent marking to occur as soon as reasonably possible after birth and must occur before one year of age".

Whilst some birds, such as the swans, were ringed as expected, others were not (for example: a white or umbrella cockatoo which is considered Endangered by the IUCN and is listed in appendix II of the CITES list giving it international protection by restricting export and import of wild-caught birds.) Although it is possible that these were had a micro-chipped identification instead, it is a less common practice and leads one to suspect that the required identification of individuals is not adhered to in this 'zoo'. Or worse, as closed rings are attached within a few days of hatching that an animal may have been obtained from a less certain source. Given that at least one animal is a species controlled by CITES this seems a serious omission. (Exhibit - white or umbrella cockatoo at Guzoo)

Again ungulates are commonly ear-tagged for identification and it is good practice: <code>I aA</code> mongst the many ungulates on the premises I saw two miniature zebu (cattle) tagged on this facility. All animals in a zoo are required to be identified under the Standards. As I understand it, in Alberta cattle and sheep are also legally required to have a Canadian Cattle or Sheep Identification Program approved RFID ear tag before they can be moved off the farm of birth. Unfortunately there appear to be no legal requirements for tagging goats. Good husbandry practices would encourage breeding stock to be moved between facilities and so some tags would be expected. Once again, one has to question whether or not they are properly identified, and if the Guzoo management culture is correct in this regard. (Exhibit - sheep at Guzoo) (Exhibit - domestic cow at Guzoo)

Although the Zoo Development Plan (2006) appears to permit some animals to remain unidentified if they were on site prior to that date, I would expect to see more animals appropriately marked than I have, some 7½ years later.

Acquisition: "Animals must be obtained from a source in legal possession of the animals and the species must either be identified in the approved Zoo Development Plan or be accommodated through an amendment to this plan. All requirements that pertain to importing animals (federal and provincial) must be adhered to and arriving animals must be quarantined according to any applicable federal or provincial health care management protocol or other requirements."

First, it is important to note that it is unclear if the Zoo Development Plan that I reviewed is in fact "approved". There was no indication in the document which indicated it was approved by the Alberta Government. Julie Woodyer of Zoocheck Canada advises me that the plan was obtained through Freedom of Information legislation but that no documentation could be found to determine if the plan had ever

been approved

Whilst Zoocheck Canada are not party to the policies of this institution, or of the care given to ensure that these Standards are met. The apparent lack of appropriate marking of a CITES species, and others, naturally gives rise to concern. I would urge the Court to take a closer look at this.

Breeding: "Breeding of animals in the zoo facility may take place if it is approved as part of the Zoo Development Plan. If not approved, breeding must be prevented through drug therapy, appropriate management (i.e. opposite sexes kept in separate enclosures) or sterilization."

The breeding and commercial selling of zoo animals is permitted under Guzoo's Zoo Development Plan (2006), however the rationale give by Kneehill Animal Control and Rehabilitation Centre Ltd to justify their breeding policies in their application document are in my opinion often both suspect and misleading.

Guzoo's breeding and disposal policies are not those expected of a modern and ethically responsible zoo. It imparts the most negative images of our wildlife and conservation efforts. Hand-reared animals that have been separated form their dams and social groups lead socially depauperate lives with enormous and negative impacts on their development: making them unsuitable for conservation projects and generally impeding their integration into zoo breeding programs. The routine hand rearing of young animals is discouraged in AZA Standards. The humanisation of these animals often affects their ability to socialise with their kind, and the successful breeding and rearing of young. In this case the situation is made so much worse by the additional frequent handling by both staff and public. Except in an emergency, or to prevent disaster, hand rearing would be avoided if at all possible, and the handling of young by the public would be anathema to all responsible zoos. As an example of such problems, a long-term volunteer at Guzoo advised that their hand-reared male tiger would "kill every female he is put in with". He was separated from their female. This experience with hand-reared animals, as well as the repeated failure of such animals to successfully nurture young, is repeated again and again throughout the zoo and circus worlds.

At Guzoo the separation of young from parents and hand rearing appears routine. And breeding is encouraged regardless of need, with almost every enclosure that could have young doing so. This is NOT a sign of good zoo management, rather the behaviour of an irresponsible animal farm, deliberately breeding for the attraction young animals bring to a facility, and to produce a surplus for commercial gain. Whilst zoos need an income, these actions not consistent with those of a responsible zoo, and it runs a significant risk of overbreeding animals to the detriment of their health and welfare. Indeed the 'overbreeding' of animals in some jurisdictions is considered a cruelty, and prohibited in law.

Disposition of Live Animals: "Live animals must only be sold, transferred to, or otherwise disposed of to a person that has the legal authority to possess them."

During my visits it was not possible to learn much about the practices of this facility.

Comment [J1]: On page 20 of the standards there is an explanation of how zoo permits are give out. It says "

When a New Permit Applicant advises SRD that all fencing, enclosures, housing and other structures are completed, the facility will be inspected by the Alberta Zoo Advisory Committee. The Committee will either give their approval and recommend the Zoo Permit be issued or identify deficiencies to be rectified. "

In the case of Guzoo, we see that the committee identified deficiencies but there is no evidence that they gave it their "approval".

Furthermore, a confidential contact we have inside ARD informed me that neither SRD nor ARD is aware of the approval being given and yet SRD issued permit after pemit over the years.

I want to point out somewhere in our document that we are not aware of any "approved" plan to be in existence, in order to get to the issue in our legal action. Though I was advised that animals could only be sold to individuals and organisations with permits, I was alarmed at the readiness with which I was told they were for sale. I was also told that one young eight-week old cougar (Felis concolor) had recently been sold to a person in Nova Scotia. Tellingly, the GuZoo website also mentions how much easier they are to sell if hand reared, suggesting that this has become an important part of their program. (Exhibit Guzoo website)

The breeding of exotic animals for almost indiscriminate disposal is something that the Province should be actively discouraging on grounds of animal welfare and conservation! This commercialization also skews the management's view of the functions and responsibilities of a zoo, and gives highly negative and anthropomorphic images of wildlife to the public. This practice is unhelpful to responsible conservation efforts, and damages the zoo community as a whole.

Deaths: "Necropsies must be conducted on the advice of the attending veterinarian or for species as required by SRD and AAFRD. Carcasses must be disposed of in accordance with federal, provincial and municipal regulations".

I did not have the opportunity to observe what actions the 'zoo' takes in the event of a death, or of the practices used for animal disposal.

Annual Inventory: "Before March 31 in each year, the zoo operator must submit to the Regional Head of Wildlife Management a report setting out the total number of live animals (wildlife and controlled animals) processed on February 28 of that year, with their sex and kinds. If requested by Sustainable Resource Development, the zoo operator must submit additional record that are required to be kept by section 149 of the Wildlife Regulation (See section B, below)."

The 'zoo's' inventory records were not available to us, though Zoocheck Canada has asked The Department of Sustainable Resource Development (SRD) for access to them. Analyses of the records, including the Acquisitions, Dispositions, Births, Deaths, and the Animal Health Records, are of interest. They are a significant resource in the assessment of a zoo's management, and of its animal welfare performance. However, it must also be remembered that the rearing of young does not necessarily equate to good standards of animal husbandry or to improved welfare.

B. Record Keeping Standards: The purpose of these standards is to ensure that all wildlife and controlled animals in a zoo facility have permanent histories recorded that can be referenced if animals are sold, exported, involved in a breeding program, if there is a disease and/or parasite outbreak or if there is an escape from the zoo facility. Inventory and records are essential in tracing contact animals following the appearance of disease or the discovery of harmful parasites. The standards for record keeping that must be met are:

Sample Records - The operator must provide a description and a sample of the record keeping system they will use to record information and store records as a part of their licensing application/renewal Zoo Development Plan.

Acquisition – Acquisition records must include the kind, sex, origin and date of acquisition including the import number if applicable and the name and address of the person from whom the animal is acquired as well as its health status and nutritional background (i.e. what they eat).

Disposition of Live Animals – Disposition records must include the kind, sex, destination and date of disposal of each live animal sold, transferred or otherwise disposed of, including the export permit number, if applicable, and the name address and permit number of the person to whom the animal is

sold, transferred or otherwise disposed as well as the health status and nutritional background. Births – As identified in the Zoo Development Plan where breeding is approved, the records for each animal must include the kind, sex, and date of birth of each animal born and permanent identification tag/marking. Note: Permanent identification tag/marking to occur as soon as reasonably possible after birth and must occur before one year of age.

Deaths – The kind of animal, date, enclosure location and circumstances of death for individual animals must be recorded in the permanent record for each animal that dies. Numbers and species dying must be recorded per exhibit for unmarked animals. For deaths where the attending veterinarian determines a potential communicable disease risk exists or for those species identified by SRD and AAFRD at the time of licensing, a description of all other animals sharing the same enclosure must also be included in the death record.

Animal Health records — The veterinarian must document their veterinary treatment activities as per the AVMA health record-keeping protocol. The zoo operator must keep a copy of these records on the premises.

Marking Records – Each animal at the zoo facility that has an identifying tag, marking, microchip, tattoo or unique physical feature must have this identifier noted in its permanent record.

Currency of records - Animal records must be kept current and data logged daily.

I have not had sight of Guzoo's records

C. Wildlife and Controlled Animal Transportation Standards: "The purpose of these standards is to ensure that animals transported to and from a licensed zoo facility in Alberta are healthy, pose minimal risk to free-ranging wildlife and are transported in a manner that is safe, prevents escape and does not cause undue stress on the animal".

I did not have the opportunity to observe the transport of animals to or from the zoo, nor did I have the opportunity to examine a transport crate or container at close quarters in the grounds of the 'zoo'. The one I did see did not meet modern standards. It was a primitive affair, not particularly safe to use, and would not minimize stress to the animal. The nearest I have seen in use would be animal transport crates in the early 1980s in western China! (Exhibit - animal transport crate). This crate was discovers in one of the 'zoo's' paddocks were its presence is an potential hazard to the hoof stock.

D. Wildlife and Controlled Animal Containment Standards: "The purpose of these standards is: to prevent direct contact between zoo animals and free-ranging wildlife, domestic animals, and visitors to the zoo facility; to prevent escape from the zoo facility; to prevent the transmission of disease and/or parasites, and; to prevent interbreeding (genetic contamination) between zoo animals and free-ranging wildlife. The standards for containment of wildlife and controlled animals that must be met are":

"A perimeter fence (equivalent to chain link fence) a minimum of 2.5 meters high around all the animal enclosures will be required, unless the species held in the zoo facility already have a fully contained perimeter (e.g., amphibians and reptiles in cages within a building) or have an alternate system as identified and approved in the Zoo Development Plan"

In considering fencing, along with other structures designed to hold and shelter animals in zoos, National, Provincial and State Standards refer to the minimum requirements for safely and humanely looking after the species held. As well as other

professionals, zoological institutions are closely involved in the development of these Standards, and help to ensure that they are the minimum acceptable. These are not optimal standards. Zoos, like other businesses do not wish to be encumbered with unnecessary costs. Over hundreds of years, we have learnt what we can 'get away with' with reasonable safety, and these are the standards that become incorporated into the zoo 'Standards' and 'Guidelines'.

The Guzoo perimeter fence is largely constructed of deer fencing, and although this is of the required height, it is not as strong, resilient, or impermeable as the required 'Standard' of chain link fence. Though not a specified requirement, a well-designed perimeter fence for a zoo should also have a return along its top edge so as to make it harder for species to climb over, either heading in or out. (see Exhibit - Guzoo and Calgary Zoo's perimeter fence.)

The perimeter fence at Guzoo would not stop its smaller animals such as fox and raccoon who would walk through it or climb over it, and neither would it stop the larger and more dangerous species such as the black bear, the larger cats, yak or American bison. Worryingly, this inadequate perimeter fence is also the main enclosure fence for the yak and bison. It abuts a public road running along the outside of the 'zoo', and there is also no stand-off barrier in that area. This is irresponsible, and goes against Guzoo's own April 15th Amendment to the Zoo Development Plan which states that "Perimeter fence not to be part of licensed animal enclosures". Deer fence would not stop an aggravated bison causing serious injury to casual passers-by, nor prevent its escape. These are large and potentially very dangerous animals: they require well designed, and strongly constructed enclosures. (Exhibit - Guzoo perimeter fence with bison paddock; Calgary Zoo bison paddock fence for comparison)

In its Zoo Development Plan, Guzoo claims its "Enclosures have insured containment of 15 years with no disease or parasitic contamination". In reality, the enclosures are often inappropriately constructed for the species they contained. With the mesh fencing poorly hung and tensioned and much of it poorly maintained, after 7½ years it is collapsing and has becoming a hazard to many of those it was meant to contain. Even with proper animal management practices no institution can sensibly claim that an enclosure will be free of disease and parasites for 15 years.

"Animals that can fly and/or climb must have a roof over their enclosure (i.e., be fully enclosed) or be subject to structures or other means to prevent escape".

Black bears climb, and there is neither an overhang nor a roof over much of their enclosure. The presence of electric fencing does not a secure barrier (please see further comments on electric fencing below).

The tigress's enclosure is covered, but with too fine a material to provide a secure barrier. Furthermore, this roof is not high enough to prevent easy access for the tigress. The situation is made worse by the presence of her den in the middle of the enclosure granting her easy access to the roof.

"Animals that can dig must have adequate flooring or material buried under the ground at the enclosure perimeter to prevent them from digging out of their enclosure or shelter".

It was not possible to gauge this without access to the enclosures. However, given the standards prevailing in the 'zoo' I would doubt that this requirement is properly adhered to. Please see below for the standards.

"Individual animal enclosures and the perimeter fencing must be locked when the zoo facility is closed and staff are not present. When the zoo facility is open to the pubic, the perimeter fence may be unlocked, however, individual animal enclosures must remain locked except when staff are present and working with or displaying the animals".

I was only present when the 'zoo' was open, and during those times the cages were locked.

"There must be a written plan in place outlining containment, recapture and emergency procedures in the event of an escape (i.e. either within or beyond the zoo facility)."

We have not had sight of this. But, the 'zoo' lacks adequate warning systems making it unlikely that they could respond to an emergency in some sections of the 'zoo' with sufficient speed. Their 'Zoo Animal Escape or Attack Protocol' Appendix A-1 of the Zoo Development plan looks too simplistic and is likely to result in confusion.

Escape protocols and procedures should be written out in all zoos, and practiced on a regular basis. These practice sessions should involve all responsible staff and be well documented and recorded. All equipment designated for such an emergency should be kept in good order and with a full service record, as required.

E. Off-site Display Standards:

This is permitted under the terms of the Zoo Development Plan. I had no opportunity to observe Guzoo exhibiting of animals off-site.

F. Species Conservation Standards: "If a zoo operator enters into any conservation programs with a wildlife management agency for any purpose including research or propagating endangered species, the following must be met:

There must be a written agreement between the zoo operator and that wildlife management agency that specifies what is expected of the zoo."

We have not had sight of any such agreement, but there was no evidence during my visits of any research or conservation programs being undertaken, or supported.

G. Conservation Education Standards: "The purpose of these standards is to promote positive attitudes about wildlife by providing information and knowledge to the public. The standards for education programs for wildlife and controlled animals in a zoo facility are:"

"The zoo must have an active educational program as outlined in the Zoo Development Plan and all exhibits must have signs that identify the species and provide information about status and range in the wild"

Sample photographs are attached. (Exhibit Signage at Guzoo 2014/08/19-20 and

Calgary zoo 2014/08/22)

Not all enclosures had legible signage, nor did it always give a full description of all species included within an exhibit.

In its Zoo Development Plan (Appendix 2) Guzoo claims that its education is based on show and tell. There was no evidence of any useful education taking place and being guided by members of staff or volunteers. One volunteer did walk a while with me, but with the exception of how far he had seen the tigress jump to attack someone no item on the list of staff dialogue was provided. When I was in contact with the young cubs and kits on both days, and with two different groups of attendants I heard on no useful educational information being imparted, beyond "they are sleepy now", "you can pick them up" and "don't let the dogs in".

"Educational programs may also include species not present at the zoo facility (e.g., SRD has information covering species at risk). See Appendix C for further information."

"C. Appendix 3. Conservation Education Information

Educational messages may be delivered by signage, pamphlets, audiovisual presentations, live encounters and live interpretation and must be based upon current scientific knowledge. The following list provides a guide to the types of information that should be presented to the public in an educational program that addresses an individual species:

- Geographic distribution
- Current numbers and status (i.e., trend)
- Biology (e.g., breeding season dates, gestation length, birth dates, litter sizes, social groupings, home range size, life expectancy, predators, diseases, parasites, food preferences, water needs)
- Adaptations to their environment (e.g., foot type, leg length and shape, body size, teeth/beak type, fur/feather functions, digestive system, behaviour in response to weather/predators/food/water)
- Habitat distribution and status (i.e., trend)
- Relationship with human activities on the landscape
- Interactions with human individuals (i.e., coexistence with humans)
- Biodiversity and sustainable use
- The zoo should have access to a reference library and electronic databases as sources of biological information for educational programs."

(See Exhibits above).

Whatever education is offered by the signage supplied it is rapidly deconstructed by the negative images of wildlife, animal conservation and animal welfare on show throughout the facility.

Examples appended (Exhibit - Guzoo 2014/10/19-20)

H. Public and Staff Safety Standards: "The purpose of these standards is to ensure that a zoo facility is operated in a safe manner. All applicable federal, provincial and municipal safety legislation must be followed. In addition, the following minimal standards for public safety must be met:"

In my opinion, Guzoo is not operated in a safe manner. There are inadequate containment, safety barriers, signage and safety systems: and the management of the facility was found lacking in all areas observed.

In the Zoo Development Plan it states that "Antibacterial gel dispenser entry and exit of petting zoo (on site October 15, 2005)" – in spite of looking I could not find one on either visit. It should be noted however that anti bacterial gels are not as effective as a properly equipped wash station.

"There must be warning signs to advise visitors of dangerous animals or dangerous fixtures."

Though signage is sometimes present it is frequently inadequate and incomplete. There was no warning signage of the electric fence in the black bear enclosure, nor warning that the camels may 'spit'. Although stand-off barriers were present they were not always adequate (eg. the public could reach the camels - an animal with a serious bite) and there were too few signs to say "Do not cross the barrier". (Exhibit - camel petting is possible across the barrier at Guzoo, and it may be encouraged. I suspect the girl in the "I Love Guzoo" sweatshirt may be affiliated to the 'zoo').

"Zoo facilities maintaining venomous animals must have a written protocol for anyone handling venomous animals and must have appropriate antivenom available on site or very close by at a local medical facility."

Green iguana lizards do have venom-secreting glands on both jaws, but it poses no significant threat to humans and is used to subdue small prey. Other than the green iguanas, I saw no evidence of venomous animals being housed at the 'zoo'

"Zoo facilities with dangerous animals must have practical safety procedures in place to deal with an attack by these animals."

Fortunately there was no need for any safety procedure to be put into action during my visits, but I have had NO confidence in the Guzoo's ability to respond to such emergencies. What there was of staff present were all concentrated in and around the buildings for much of my visits, and at no time were any evident around the black bears, wolves, yak, bison or elk. And, for the most part, neither were they around the big cats (cougar, lion or tiger). There was no remote alarm system that could be activated by the public in case of an emergency. If, for instance, the bears has escaped or someone had climbed over a safety barrier (as I have experience of people doing in zoos) there would have been no way for the management to be made aware of the situation in a timely manner: let alone respond appropriately.

"Effective guardrails or barriers must be constructed to prevent contact between the visiting public and any animals posing a safety hazard."

For the most part there were good safety barriers but there were instances such as with the camels (Exhibit:) where the public were not adequately separated from dangerous animals. Zoos also have a duty to police such barriers and ensure they are respected. Unfortunately, the public does not always behave as expected and zoos, be they big or small, experience problems in this regard. The absence of identifiable staff in much of the zoo does little to encourage the public to behave.

It should also be remembered that such barriers are also required to protect animals from the public. There was inadequate protection in this regard. Indeed, the public

was encouraged/allowed to enter some of the domestic animal enclosures unsupervised: a practice that should always be discouraged in zoos, as it is in the Zoo's Development Plan. (Exhibit)

"Animals must be safely confined. Enclosures with potentially dangerous animals must have double door entry systems or a separate, secure shift area where the animals can be secured during routine maintenance, cleaning or veterinary care."

This was not always readily available. For example, the lionesses and tigers would be difficult to move about, and neither the gates nor fencing are sufficient to prevent a determined animals attack or escape. To try and effect a double door entry system for the male tiger for instance would be difficult: it would mean moving him in to the female tiger's enclosure and "He was liable to attack her" (see above) and so she would first have to have been moved into a race, that again was not secure, Alternatively, he would have had to be moved in with the two lionesses and similar problem would ensue. (Exhibit:)

"Direct contact (i.e., touching) between the public and animals is allowed only when this activity is approved in the Zoo Development Plan. Such contact must occur in a contained area and all applicable Alberta Health regulations must be followed."

This practice happens many times within the Guzoo. The encounters were almost invariably unsupervised, and there was totally inadequate instruction on, or provision for hygiene. There is the potential to contract significant pathogens in the petting areas of zoos. These vary from psittacosis (from birds) to hemolytic *E. coli* and salmonellosis from hoof stock, etc. Public health departments have put out advisories across the western world with regards to the risks from handling animals and from 'petting zoos'.

In August 2014 there was an outbreak of hemolytic E. coli in Alberta. "Alberta Health Services says 122 people across the province have been diagnosed with potentially dangerous E. coli infection over the past month. The health agency says the type of bacterium found in these cases is E. coli O157:H7, which can cause severe illness including cramping, bloody diarrhea, and kidney failure. Officials say since 15 Jul 2014, there have been 59 confirmed cases in Calgary, 48 cases in Edmonton, 7 cases in the South, 6 cases in the North, and 2 cases in the Central zone [all in Alberta Province]. Alberta Health Services says it hasn't found the source of the _E. coli_, which is usually found in the intestines of humans and animals, or whether the cases are linked" (http://www.huffingtonpost.ca/2014/08/19/alberta-e-coli outbreak_n_5693199.html. Whilst I am not suggesting that this outbreak is in any way connected to GuZoo: petting zoos are known to be a potential source of the infection. As such strict observation of acceptable hygiene requirements is essential

"Animals in areas where direct contact with visitors is possible must pose no danger to the public, be comfortable with human contact and be under direct supervision by zoo staff."

There was NO supervision by zoo staff (direct or otherwise) in such areas: except in the case of the young animal handling facility where the cougar and lynx cubs, and the artic fox and skunk kits were available for handling and sale.

Although allowed for in the Zoo Development Plan, I consider all carnivore aged six

months dangerous, and especially so to young children. Cougars, bears, lions and tigers of this age are all powerful animals, and able to cause significant injury with their claws and teeth. Members of the public should not handle them.

I. Staff Experience and Training Standards: "The purpose of these standards is to ensure that the keepers at the zoo, whether the owner, the operator or the staff (including volunteers), have the necessary experience and training to ensure the zoo facility is operated according to the standards in this document and good zoo practice. The standards for staff experience or training that must be met are:

There must be a list in the Zoo Development Plan of all staff who will be involved in operations and animal care at the zoo facility, with a list of their qualifications, training and experience, including any certifications they have (e.g., first aid, cardio-pulmonary resuscitation, hazardous chemical handling, zoo related training and other relevant training).

The Zoo Development Plan must also outline a plan for ongoing training needs, training of volunteers and provision of staff with emergency training such as first aid.

The zoo operator shall ensure staff have knowledge and experience in animal care for the species assigned to them commensurate with their responsibilities."

The standards of zoo management observed at the Guzoo were appalling, firmly indicating to me that the staff had inadequate knowledge, training and experience.

I have no confidence in the expertise and ability of the staff at Guzoo. The Zoo Development Plan claims that "experience is the best teacher", this is definitely not the case in zoos. Guided experience is an important part of learning about zoo animal management, but more formal education with experts is required to gain adequate knowledge to provide for proper management of a zoo and its animal husbandry. This comment in the Zoo Development Pan may help explain why the management of Guzoo is so poor, indeed unsafe. Formal education from, and experience of working in a major zoological institution is needed here.

There was no obvious 'First Aid Room', or other such facility on site, in spite of a member of staff supposedly being trained in that field.

III. Standards Related to the Animal Protection Act: "The standards under the regulatory authority of the Animal Protection Act involve animal care in the zoo. The purpose of these standards is to ensure the needs of all the animals in the zoo facility are being met with regard to food, water, shelter, space and health care. All animals held on the zoo premises, including wildlife and controlled animals, as defined under the Wildlife Act, as well as all other animals, will be considered as zoo animal under the Animal Protection Act. As such, all standards relating to the Animal Protection Act will apply. Domestic livestock that have been allowed to co-mingle with wildlife or controlled animals, if they are no longer wanted, must be slaughtered or be humanely euthanized. They must not be allowed to enter an auction market nor may they be transferred live to a farm or ranch."

Animal Protection Act "Animal care duties - Section 2.1 A person who owns or is in charge of an animal

(a) Must ensure that the animal has adequate food and water,

Animal diets appeared often unbalanced, fed in an unhygienic fashion, sometimes

contaminated and of inadequate quality. For example: AZA's 'Zoo Standards for Keeping Large Felids in Captivity' state, "Large felids should be separated into individual enclosures for feeding in order to prevent fighting as well as to allow accurate measurement of food consumption", and that "Food items from non-domestic stock should be frozen prior to freezing to kill any pathogens that might be present".

Two wild boar carcasses that were being used as feed: a fresher one for the lionesses, and a putrefying one for the cougars. The lionesses had a carcass left on the dirty flooring for more than 24 hours in the heat of an Alberta summer. The carcass left for the cougars had been outside for considerably longer: it could be easily smelt from more than 20 meters away and the skin and remains were left decomposing on the soil. This practice, along with many other feeding practices within the 'zoo', is unhygienic and against all standards of modern zoo husbandry. It puts the animals at considerable risk of infection, infestation and poisoning through the putrefaction and contamination of the meat, as well as malnutrition through the decomposition and leaching of nutrients. (Exhibit - wild boar carcass in the cougar enclosure at Guzoo 2014/08/20) Neither the cougars nor lionesses were separated at feeding time. The uncontrolled feeding of the lionesses has resulted in clinically obese animals. Contrary to the claims of Guzoo's Animal Care Protocol and its Zoo Development Plan, this practice is not in the best interests of the big cats nor does it provide much stimulation in their day-to-day lives.

My experience on each of my visits was that the conditions of the Animal Welfare Protocol (Zoo Development Plan, Appendix A-4) were not being met. The mix if foods offered to each species did not appear to be as diverse as the Protocol suggests. And the daily cleaning requirement for feed and water dishes was widely ignored. However, the Protocol itself is inadequate in its provision, it fails to provide properly balanced diets, and suggests inappropriate cleaning regimens, for many species.

AZA Standards state that all feed should be offered on clean cement/cage floors, metal feeders attached to cage walls, or in aluminum or stainless steel pans etc., and that it should be protected from contamination with excrement, etc. These are not the conditions for feeding observed in many of the enclosures at Guzoo. Unfortunately I was unable to see where food items were stored or prepared, but this should all be done in a hygienic fashion, that is vermin free, and under conditions that maintain nutrient value. Supplements should be provided as needed, and again stored in a manner that will ensure their efficacy. All food items should be prepared on nonabsorbent and washable surfaces. Uneaten food should be removed daily.

AZA Standards also state "Clean, potable drinking water should be available at all times. Watering devices may consist of exhibit/enclosure built-in containers for the larger species or sturdy portable containers for smaller species", and "Regardless of size, portable water containers should be cleaned and disinfected daily". The drinking water offered to animals at Guzoo almost invariably not fresh or potable, but dirty and contaminated. There is no suggestion of daily cleaning of water containers. (Exhibit:)

(b) Must provide the animal with adequate care when the animal is wounded or ill,

I did not observe the treatment of sick or injured animals.

I have no knowledge of the veterinary prophylactic program in the zoo (frequency of health checks, vaccination and worming protocols, provision for geriatric care, etc. The Veterinary Services Protocol (Zoo Development Plan 2006, Appendix A-5) provides for semi-annual zoo veterinarian inspections during which they will observe the physical examination of the animals. I do not feel confident that this is being given rigorous attention, and fail to understand how the other conditions in which the animals find themselves, and impact on their health and welfare, have been allowed to drift so badly.

- (c) Must provide the animal with reasonable protection from injurious heat or cold, and
- (d) Must provide the animal with adequate shelter, ventilation and space."

(Please see comments on shelter below)

I cannot comment on the disposal of animals from this facility. I have no experience or knowledge of it.

A. Protocol Development Requirements for Animal Care: "If a zoo is not an accredited zoo, then the zoo operator must submit the following Animal Care Protocol, including exhibit descriptions, at the time of application or renewal of the permit. These will be forwarded to the Alberta Zoo Advisory Committee appointed under the Wildlife Act. (Note: Once accepted, Animal Care Protocols would be expected to remain in place for a relatively long period of time or until the exhibit was changed)".

"Animal Care Protocol: The zoo operator must provide an animal care protocol for each species or species group for each separate exhibit. For multi-species groupings at the exhibit level, the protocols may apply to more than one species and this must be noted. This husbandry protocol will describe in detail the provision of adequate food, water, the health care program, adequate shelter if required by the species, and the provision of any shelter, building or structure within the enclosure. In addition, a description of a cleaning and waste removal program that clearly defines when and what will be cleaned must be provided. The zoo operator must provide a description with scale drawings of each separate exhibit including enclosures, shelters, housing and other structures as appropriate – exhibits may be for one individual, several individuals of the same species or multi-species groupings with many individuals. The species (one or more) and number of individuals of each species planned for the exhibit must be noted along with the description.

The following standards for animal care must be met and used in development of the Animal Care Protocols and accompanying exhibit descriptions. The standards are grouped under four headings: B. Animal Exhibit Standards; C. Animal Health Care Standards; D. Animal Behavioural Husbandry Standards and E. General Animal Care Standards. As noted above, the following are not required for accredited zoos."

Guzoo is an "accredited zoo" and as such is not required to provide the above.

In my opinion the level of animal husbandry and zoo management present in this zoo is so low, that its accreditation should immediately be removed. It fails to meet reasonable standards in almost all areas required in this "Animal Care Protocol".

Comment [J2]: This is not a CAZA accredited zoo which is what they are referring to, so he should have done it. Whether he did or not is anyone's guess!

B. Animal Exhibit Standards:

"Definitions: The term "exhibit" in this document includes all the enclosures, shelters, buildings and any other structures that constitute the 'home in the zoo' for a particular species or multi-species assemblage. It does not refer to 'public exhibit' as the term is used in some zoo literature. The term "enclosure" in this document refers any area of the exhibit (e.g. the fenced area, the cage, or a room in a building or some combination of these), which contain the animals in the zoo facility and prevent the animals from escaping."

"Purpose of Standards: The purpose of these standards is to ensure the exhibits meet the needs of the animals that will occupy them and facilitate future operation of the zoo facility. Section 1 deals with general standards while Section 2 deals with specific dimensional and material standards. The standards for exhibits are:"

1. General Exhibit Standards: "All animals must be maintained in numbers sufficient to meet their social and behavioural needs (unless a single specimen is biologically correct for that animal). Exhibit enclosures must be of sufficient size to provide for the physical well being of the animal. All animal exhibits must be of a size and complexity sufficient to provide for the animal's physical and social needs and species typical behaviours and movements. Exhibit enclosures must include provisions (e.g., permanent and/or non-permanent features and structures) that encourage species typical movements and behaviours."

The owl enclosure/flight was much too small, poorly designed and maintained. It is furnished in such a way as to prevent adequate exercise and free flight.

AZA's 'Zoo Standards for Keeping Large Felids in Captivity' state, "Among the large felids, lions, tigers and cheetahs, are largely terrestrial (Caro, 1994; Schaller, 1972) and do best when maintained outdoors, at least during warmer weather, in large spacious enclosures that are planted with grass, bushes and trees for shade, surfaces to mark, places to hide and other aspects in their enclosure that will change their pathways. Elevated resting areas such as boulders will also be well utilized"; it also states that "Regardless of the number of individuals living in the enclosure, each felid should have its own resting/nest box or enclosure for sleeping or enclosure servicing"; and that "All enclosures should have varied topography to add interest to the animals' life. Hills, trees, shrubs, branches, rocks and stumps are good pieces of 'furniture' for terrestrial species and can be used for shade as well as for territorial marking. Large wooden objects should also be available for scratching. If possible, these objects should be moveable in order to change pathways daily, weekly or at least periodically, in order to alter pathways as well as elicit behaviorial interest".

At Guzoo the lion and tiger enclosures were flat and depauperate with only a small box to enter for shelter or seclusion (not one for each lioness for example), and the lionesses had a boomer ball but it was left abandoned in a corner. There was nowhere for the male tiger to bathe in hot weather, nor for the lionesses. The water basin in the enclosure of the tigress was unsafe and would be slippery as dirty, (it would be worse still in cold and freezing weather). Other than the provision of carcasses there was no useful environmental enrichment and no suggestion of any variation to their mundane existence. Given that the carcasses were left down until eaten, any advantage for enrichment derived from this method of feeding was soon lost when compared to the more usual practice of providing jointed meats. These are wholly inappropriate environments for these animals and do not nearly meet their behavioural requirements. (Exhibits)

"Enclosures for digging or burrowing animals must comply with the provisions set out in the Wildlife and Controlled Animal Containment Standards in Section II Subsection D of these Standards."

It was not possible to examine the floors of the enclosures in detail.

Many species in this collection are potentially diggers including the big cats, bears, wild canids, and porcupine. Unless the enclosure has a suitably wired, concrete or solid rock base the fence needs to be buried into the substrate. The depth of burial will depend on the species and nature of the substrate, but is commonly at least one meter below ground or as a horizontal sheet around the perimeter of the enclosure.

The use of electric fencing (as in the bear enclosure) is not a substitute for a properly and securely constructed fence.

"Enclosures must be of sufficient size and design to allow individual animals the opportunity to avoid or withdraw from contact with other animals in the enclosure or remove themselves from the view of visitors, using topography (e.g., large earth mounds, large rocks), fixed features (e.g., fences, walls, screening, shelter boxes), moveable fixtures (e.g., brush piles, root balls) or other design methods."

AZA's 'Lion (Panthera leo) Care Manual (2012)' states, "According to the 2010 AZA Lion SSP Space Survey, the majority of exhibits are over 929 m² (10,000 sq ft), which should be considered the minimum size for new exhibits. Exhibits for institutions that plan to breed and/or hold more than three animals should be larger, and ideally have the ability to divide that outdoor space into two exhibits to manage future social issues. Alternatively, an outdoor off-exhibit holding yard also provides space for managing multiple groups of animals". And for indoor enclosures: "In regions with colder climates and/or those institutions that have indoor exhibits, where animals may spend most of the time during inclement weather, indoor space should provide natural light and fresh air via operable windows or skylights. Again, the size of the enclosure will vary with group size and demographics but 185.8 sq m (2000 sq ft) should be the minimum for a group of 1.2 lions, with more space for larger groups". (Similar standards are set for tigers). In addition to these indoor enclosures big cats would be expected to have an indoor holding pen for each animal and a much larger outdoor enclosure for use throughout much of the day. The lions and tigers at Guzoo have no outdoor spaces and are confined, year round to enclosures of not more than 48x32 feet (1536 sq ft / 142.7 sq m). Guzoo falls well short of AZA's space requirements, even for just the long-term (though not permanent) indoor enclosures mentioned above.

Isolation of parturient females and young. Two to four weeks prior to parturition, female wild cat should be moved to a separate cubbing den that is quiet and secure from disturbances, other animals and unfamiliar staff, and noise. She should remain there, assuming the young are mother raised, for 2-3 months before introducing the female and young back into the exhibit or to other cats, if appropriate for the species/specimen. There was no apparent provision of this for the lions and tigers: although they are not breeding at present I believe they have done, and there is a hope they will do so in the future.

It was not possible to examine the facilities for the other felids but the layout of the

enclosures suggests that there may be problems here too. It is recommended that males should be separated from periparturient females in these species too.

As expressed above, there were also serious problems with the lack of environmental enrichment in the lion and tiger enclosures.

"Animals must be protected from injurious heat and cold associated with ambient outdoor conditions or any other weather conditions that are detrimental to their health. Only animals that can acclimate and tolerate ambient outdoor conditions can be kept in outdoor enclosures, and they should have access to sheltered areas to protect them from sun, wind, precipitation and temperature extremes. Some species can be outdoors during some seasons but need access to indoor facilities during colder weather"

In almost every case the provision of shelter was inadequate, poorly constructed and maintained, and frequently inappropriate. Simple corrugated iron cloches provide little protection from the summer's heat or winter's cold, and they were way too small to accommodate many of the animals they were supposed to shelter. For example, the donkeys (who have little ability to adjust to severe cold), and elk that were otherwise in dreadfully exposed paddocks. The goats, tahr, dromedaries, pigs, and many other species in the zoo are susceptible to the severe damp and cold of winter. Many animals at Guzoo are provided with inadequate shelter that is poorly designed and maintained. Often they are simple wooden or metal structures, and un-insulated. They are poorly baffled from the elements. Many provide inadequate shelter from wind, rain and snow, and many will flood in winter with their soil floors becoming a quagmire (see Zoocheck Canada's 2011 report). This is of serious concern, and a significant threat to animal welfare (Exhibit)

I was unable to examine many of the shelters as they were 'off show', for example those provided for the primates, bears, canids, and others where housing was away from public view. But I fear that if what one can see is as bad as it is, things may not be much better for other animals under Guzoo's care. Many animals in this collection are susceptible to heat, cold and damp, and particularly a combination of the latter two.

All shelters must to be spacious enough for the animals they are supposed to protect. In Alberta's climate they also need to have raised solid (usually concrete) floors to allow proper cleaning, and prevent flooding and potential foot problems. All floors walls and ceilings must be properly insulated to offer protection from the freezing winters and summer heat. They must also allow for protection from wind and blizzard irrespective of the direction it is coming from (for example both dromedary shelters are fully open in the same direction removing the possibility of escaping inclement weather when the wind is blowing in that direction, the same applies for many of the other shelters.)

It should be noted that AZA's 'Lion (*Panthera leo*) Care Manual (2012)' states, "If lions are acclimatized, and provided shelter from the wind, they can tolerate temperatures as low as -1.1 °C (30 °F) without difficulty, although they should be provided access to an indoor enclosure or supplemental heat if temperatures fall below 10 °C (50 °F)". Given their exposure in their meshed enclosures, there is no indication that this is properly provided for.

"If a species is not native to the area or able to acclimate, that species must have enclosures where the temperature, humidity, ventilation and lighting levels can be regulated to simulate their natural environment"

I saw little evidence of this except in the "vermin section" where the green iguanas were kept in small cages (too small for their size) (Exhibit), and the turtles/terrapins had inadequate haul-out areas in their shoddy and poorly illuminated or enriched terrarium.

Maintenance of the structures across the zoo is poor: fences broken, doors hanging off their doorposts, and a blocked drainpipe from a roof may initiate flooding in inclement weather (Exhibit). Such issues compromise the maintenance of environments around the 'zoo'.

"All equipment, fixtures and vegetation must be installed in such a way that they do not present a hazard to the animals and must be maintained in good working condition"

Lack of maintenance, combined with poor design, is a very real and serious problem in this facility. There is a lack of knowledge and understanding, and possibly resources. Whilst you will get away with defects and deficiencies much of the time, when things go wrong they can go seriously wrong! There are many significant and potentially serious hazards for the animals almost everywhere in this 'zoo'. Unfortunately, these will often endanger the staff and visitors too as any enclosure is only as secure as its weakest element.

- Sliding doors in the carnivore enclosures are very poorly designed and maintained. They give little confidence that they would work properly in an emergency, or provide adequate containment (Exhibit)
- Cage furniture rarely appears to be properly secured, and much of the enrichment is hard, unforgiving, ramshackled, potentially slippery and difficult to use. In many places it could cause injury. In several instances it will make required hygiene and pest control difficult, if not impossible, to achieve (Exhibit)
- Ropes used as part of the environmental enrichment have been allowed to fray at the ends providing an entrapment and strangulation hazard (Exhibit)
- Fences are poorly constructed and hung. In many cases they are falling down in enclosures providing entrapment, strangulation and impaling hazards. (Exhibit)
 In the case of the dilapidated wooden fencing splinters and exposed nails have the potential of causing serious injury (Exhibit)
- Inappropriate feeders are being used: such as the hay feeder in the white-tailed deer enclosure that is designed for cattle and suitable for some other simple horned species, but risks trapping the complex antlers of deer and causing injury (Exhibit)
- The design and construction of the tigress's water basin was unsafe as gaps were left between it and the enclosure mesh in which legs could be trapped, and metal poles were left sticking up above the surface on which an animal could become inured: the risk increasing markedly if the animal is agitated, interacts aggressively with another, or struggles on a slippery footing (water and icing in winter for example) (Exhibit)
- The presence of antiquated farm equipment, old travel crates, roles of fencing wire and general rubbish in many paddocks is a serious and potential hazard, and gives a very poor educational message to visitors (Exhibits)
- Whilst providing cover, uncontrolled vegetation can limit the usable area of an

- enclosure for many species, and makes monitoring the animal much more difficult. It also compromised electric fencing wherever they make contact
- Diamond mesh, as used in the Japanese macaque exhibit is known to cause entrapment and damage to limbs and digits of primates (Exhibit)

"Fencing must be of a design and strength suitable for the particular species and must be attached to posts firmly fixed into the ground in a manner that prevents animals from detaching the material or dislodging the posts."

Almost without exception the larger and more dangerous animals in this facility are not securely contained. I will use the big cat enclosures as my main example because they are well known as being amongst the most dangerous animals in the 'zoo'. You would think that they would therefore be amongst the enclosures over which the most care is taken. Many of the problems seen in in this area recur throughout the collection'

- The pipework frame of the tigress's enclosure should provide a sound foundation for the meshwork, unfortunately it is unsafe. It is made of piping but this has been very poorly put together. They have been cut straight across and not contoured to fit against each other. They have then been welded together where they meet, this is essentially spot welding s the contours of the pipe dose not match the contour its is abutted against, and so the structure is not as strong as a fully welded joint. The open end then lets moisture enter and corrosion can start within the pipe weakening it further. Worse still the welding is not expertly done: it is heavy handed which will often weaken the pipe wall and hence weaken the joint further. This structure is not strong enough to safely contain a large tiger even if the mesh was of sufficient strength and quality. This very poor quality metal work is repeated throughout the 'zoo'. The outside of the pipes, have also now starting to corrode as they have not been properly treated (Exhibit)
- The gates too are of insufficient strength in some enclosures, and have too big a gap between gate and frame which may allow an animal to get a limb of horn through posing a danger to handlers and allowing extra grip and leverage on the door. There is often inadequate support of the doorframe, and no finger protection for the latches. In the case of the big cats the gates could be broken-through in a determined assault.
- When wire is used for lions tigers and cougars it should be of at least 4mm diameter as required by AZA, but most national standards require at least 5mm weld mesh, (steel 'woven mesh' can be a bit finer as it has a different strength and integrity, hence the different requirements, but it is not used at Guzoo). And the standard should apply to all areas that may be reached by the animals, including roves (very thin mesh is used for the roof of the tigress enclosure). The wire mesh used at Guzoo is of insufficient strength for the species it is required to contain, and in the tiger enclosure for example, the wire mesh has already been broken through. (Exhibit)
- Unless built on a well-constructed three-inch thick concrete floor, the fencing should extend underground to a depth of at least 0.5-1.0 meter, the actual requirement however depends on the resistance of the substrate. (It was not possible to ascertain whether Guzoo's enclosures had been adequately constructed in this respect).
- Furthermore, the mesh should be properly secured to the pipework of the enclosure, but at Guzoo it is attached to the frame by loops of galvanized wire of

insufficient strength (wire and ties). An enclosure is only as secure as its weakest element. The ties should also be made of at least the same diameter wire as that from which a fence is made. The ties should be tightly twisted together and at suitable intervals through the mesh and structure, securely tying one to another. The ones at Guzoo are of very variable quality: many are not twisted off securely and others have their ends sticking dangerously onto the enclosure where they may cause injury to an animal. (Exhibit).

- The black bear enclosure is also woefully unsafe. Black bears require fencing of at least similar strength and construction to lion, and electric fencing cannot be relied upon to provide a secure primary defense against escape. Deer fence is used around much of their enclosure and is totally inadequate. It was not possible to tell if the fence had been sufficiently buried underground or not, but if it has, that section of it should be at least 11 gauge. This enclosure is of insufficient height and requires an overhang of some 45°, and a meter in width.

Notes on electric fencing in zoos: I find it impossible to recommend electric fencing for the containment of any animal, especially those that may be dangerous. At best they are no more than a deterrent used to help stop an animal testing a barrier. As a veterinary surgeon with involvement in zoo and wildlife consultancy work, I commonly come across animals that have escaped their electric fences.

For the following reasons, electric fences are best restricted to controlling animals that are not dangerous, and only ever used as a deterrent for those where some risk is involved. Whilst they have the advantage of being easy and to create cheap to erect as temporary boundaries, electric fences have the following disadvantages:

- They are of low visibility to an animal
- Animals that are shocked may not understand why
- Animals that are shocked and spooked may take flight toward the opposite or adjacent side of the enclosure. This is made worse if the enclosure is small
- Animals may become entangled in it
- Animals can learn to avoid it and/or insulate themselves from it. They can often sense if it is active or not
- Animals that escape are discouraged from returning
- As a barrier it is very vulnerable to failure, and to current leakage rendering it useless (such as when shorted out by contact with vegetation, etc.)
- They can be easily bundled through at speed by larger species
- They have less effect on animals with thick and dense dry coats
- Electric fences are merely a deterrent and should never be considered 'fool-proof'.

"Perimeter fencing – must comply with the provisions set out in the Wildlife and Controlled Animal Containment Standards in Section II Subsection D of these Standards."

"Dangerous animals that can climb or jump must be kept in completely fenced or walled enclosures with roofs, or in enclosures with fences or walls of a type and construction which prevents animals from jumping over or climbing up and over the top of the fences or walls, or in enclosures surrounded by suitable dry moats or wet moats of adequate depth having sufficiently high outer-edge walls or

fences above the water surfaces. These moats must be surrounded by fences, walls, hedges or other shrubbery sufficient to prevent visitors approaching too close to the edges of the moats."

The wolf enclosure requires an 8-foot fence with an additional inward facing overhang constructed of either a 45-degree mesh slope or electric wire fencing. An overhang is required on a fence of this height, but none is present at Guzoo. (Exhibit)

"Venomous animals must be kept either in solid roofed and walled enclosures with suitable means of ventilation or in enclosures where the walls are of adequate height and design to prevent them from escaping and these enclosures must be kept within a secondary barrier, secured within the facility."

Not applicable: see comments above.

"Gates must be as strong and effective at containing the animals as the rest of the enclosure barriers, should normally open inward unless there is a safety hazard for the keepers, and must not be hazardous to visitors."

The gates are often of inferior strength and design: see comments above. (Exhibit)

"All gates and enclosures that access animal exhibits must be kept locked at all times except when staff are carrying out animal husbandry activities or displaying the animals."

This was done

"Effective guardrails or barriers must be constructed to prevent contact between the visiting public and any animals posing a safety hazard."

See comments above: this was not always adequate, as in the case of the dromedaries, and these barriers in Guzoo were generally unsupervised. (Exhibit)

"A zoo facility must have holding facilities for the quarantine of newly arrived animals and isolation facilities for the treatment of sick/injured animals."

I did not see the 'quarantine facilities', But understand from the Zoo Development Plan that they are off-site. I was unable to gauge their quality or suitability for the range of species that they may be expected to house.

"To ensure successful parturition and newborn rearing for some species a zoo facility must provide separate accommodation for expectant mothers and newborns, until it is suitable to reintroduce them to the herd in the species regular enclosure."

Although not breeding at the moment I believe that the zoo would like to breed its lions and tigers (this was supported during my conversation with one of the volunteers). Both these species require separate accommodation for expectant mothers and newborns, but in neither case was this provided for. In the case of the two big cats mentioned it would have been almost impossible to adequately cater for this requirement without considerable adaption of enclosures, and expense.

Separation is also required for the other cats and the bears, but to assess the facilities would have required a look behind the scenes, Although I have not seen them, I doubt

if these animals are adequately provided for although Guzoo is having success with breeding its current pairings of several cats.

"Since water is a significant element in the life cycle of many diseases and parasites, enclosures must be landscaped in a fashion that prevents accumulation of standing water within the enclosures."

It rained quite heavily for an hour or so during my second visit, and it was apparent from this that water accumulates and stands in several parts of the 'zoo's' animal areas. The Standards require suitable drainage, which patently is not provided for. This is to the detriment to the animals' comfort, and puts their health at risk. (Exhibit:)

See Zoocheck's previous report on GuZoo (2011). This is an urgent problem to which Guzoo has not responded. There has been little improvement to the shelters or drainage provided at the 'zoo' in the three years.

2. Specific Exhibit Standards: "The American Zoo and Aquarium Association (AZA) Minimum Husbandry Guidelines for Mammals identifies minimum standards (at the species or species group level) for lighting, temperature, humidity, food and water, social groupings, exhibit size and sanitation and veterinary care. The Alberta Zoo Advisory Committee will use the AZA Minimum Husbandry Guidelines for Mammals to evaluate applications for an Alberta Zoo Permit. Therefore, applicants for an Alberta Zoo Permit are advised to use these guidelines as a reference during the development of their Animal Care Protocols and exhibit descriptions for mammals."

Guzoo fails to meet the AZA requirements on almost all cases: of providing suitable diets, prepared and presented under hygienic conditions; ready access to clean and potable water; and sanitation. Guzoo also fails to meet Alberta's Zoo Standards on sanitation. All enclosures are required to be cleaned daily and the larger paddocks spot cleaned at least once a week – this patently does not happen at Guzoo. There are even piles of what looks like waste and fecal material in some of the paddocks (ostrich and Himalayan tahr for example as well as huge manure piles clearly visible in the farm yard). The paddocks of many animals are littered with feces and it is often contaminating their feed sites. (Exhibit)

On occasion, Guzoo fails to meet exhibit size requirements (e.g. the big cats).

Although not yet written into 'AZA Standards' the lighting provided to caged birds and turtles/terrapins in the petting areas was totally inadequate (Exhibit)

"The AZA is currently drafting Minimum Husbandry Guidelines for Birds, Amphibians and Reptiles. When they are available, the Alberta Zoo Advisory Committee will use them to evaluate applications for an Alberta Zoo Permit. In the interim, it will be the responsibility of the applicant to access other sources for minimum husbandry guidelines for birds, amphibians and reptiles (e.g., CAZA and AZA accredited institutions)."

- **C.** Animal Health Care Standards: "The purpose of these standards is to ensure the provision of ongoing health care for the animals in the zoo facility, public safety and the protection of the health of endemic species and domestic animals outside the zoo facility. The standards for achieving this are:
- There must be a written agreement demonstrating evidence of a veterinary-client relationship

- between a licensed Alberta veterinarian (known as the zoo veterinarian) and the zoo operator

 A health management plan is to be developed by the zoo veterinarian in conjunction with the zoo
- operator. A minimum of one annual inspection is suggested but the zoo veterinarian in consultation with the owner may schedule more frequent inspections.
- A protocol for euthanasia should be agreed between the veterinarian and the zoo operator
- The zoo veterinarian must also provide (either through their clinic and/or alternates) for 24 hour, seven days per week coverage for emergency care to treat sick or injured animals, and suggest quarantine and/or other procedures to contain disease outbreaks as necessary
- If the zoo operator is not aware of potential problems and risks of disease and/or parasite outbreaks within the zoo facility (e.g., have not had training in this area), the veterinarian should provide enough basic training to the zoo operator and staff so they can recognize the onset of disease and parasite problems within the zoo
- The zoo operator must consult with the zoo veterinarian to ensure that animal diets are of a quality and quantity suitable for each animal's nutritional and psychological needs
- The zoo veterinarian must record veterinary activities as per the AVMA health record keeping protocol
- When infectious diseases are diagnosed, the zoo veterinarian must advise on and the zoo operator must comply with any special isolation and cleaning procedures that are necessary prior to reusing the enclosures
- If zoo staff will administer prescription drugs for veterinary purposes, the veterinarian must provide a prescription and written procedures for this activity and authorize the staff to carry out these activities
- The zoo must have the necessary facilities and equipment or have access to such equipment as
 defined by the zoo veterinarian to capture and restrain animals for veterinary purposes
- All deaths from the zoo collection must be reported to the zoo veterinarian who will determine if any follow up action is required
- Necropsies and testing will be mandatory for species identified by SRD and AAFRD disease specialists when the zoo permit is issued and may require animal parts to be submitted to SRD/AAFRD
- The necropsies must be performed immediately after death or arrangements made to keep the dead animal(s) in cold storage or freezer facilities until the necropsy can be performed. Dead animals awaiting necropsy must be stored in a dedicated storage area
- All animal carcasses must be disposed of in accordance with federal, provincial and municipal regulation, unless arrangements have been made to donate the carcasses to institutions such as universities and museums. Donated carcasses must have a veterinary certificate indicating there is no risk of transmitting a communicable disease."

Zoocheck Canada has not had sight of any agreement on the veterinarian client relationship, health management plan, or euthanasia protocols.

I was unable to directly assess the provision of veterinary care but: the dilapidation of the zoo, the poor quality of diets and the unhygienic and inappropriate presentation of food, the chronic obesity of some animals, badly overgrown hooves and claws, and most importantly a total lack of routine hygiene throughout the 'zoo', suggest that there is little or no training of or understanding in the staff and that the delivery of prophylactic medical care is poor at best. It also strongly suggests that expert veterinary visits are infrequent. These are all urgent and pressing matters: the welfare of the vast majority of species within this collection is not being addressed. (Exhibit)

Zoos generally undertake necropsies on all significant individuals when they die in order to keep track of diseases within a collection. And necropsies and testing on some species may be made mandatory by SRD and AAFRD (though again Zoocheck Canada has not seen the agreement). However, within a few weeks of my visits the female tigress died and was disposed of without post mortem examination. This is was a significant animal in the collection and the lack of interest taken is incompatible with good zoo practice.

"The zoo must adhere to all provincial and federal regulations for animal health testing. (e.g., all Cervids over 12 months of age that die must be submitted for chronic wasting disease – CWD – testing as per provincial regulations). The zoo operator must contact the CFIA regarding testing Cervids and Bovids"

I do not know if this is being adhered to at Guzoo.

D. Animal Behaviour Husbandry Standards: "The purpose of these standards is to facilitate development of animal enrichment that improves the psychological well being of the animals. Enrichment consists of a range of measures, including fixed exhibit features, non-fixed features and novel objects that attempt to provide a more stimulating environment for the animals. Training involves positive reinforcement of behaviours that facilitate animal husbandry activities while reducing stress on the animals. The standards for enrichment and training are:"

- "There must be a written document outlining an enrichment program for each species, species group or species assemblage (if appropriate) at the exhibit level that may include fixed features, non-fixed features and how food is made available.
- Fixed features might include contoured surface topography, giant rocks, mature trees, streams, pools, walls and screens.
- Non-fixed features and novel objects might include small trees, branches, logs, log piles, small rock piles, brush mounds, root balls, moveable sand/bark/mulch pits, sod, other novel substrates, burrows, nesting boxes, pipes, tubes, visual baffles, shade structures, moveable climbing apparatus, platforms, hammocks, bungy cords, rope ladders, hanging rings, scratching posts, sprinklers, water jets, rafts, brushes, puzzle feeders, boomer balls, nylabones, traffic cones, wooden rings, and cardboard boxes. Vertical structure is important and a useful stimulant even for normally terrestrial animals."

Zoocheck Canada has not seen any written documentation outlining an appropriate environmental enrichment program at Guzoo. But enrichment for many species is poor, in particular for the more demanding species in the 'zoo': including many of the cage birds, large cats, bears and primates. One of the main tenants of non-fixed environmental enrichment is that there should be a variety of objects available and that these should be varied and altered so as to maintain an interest in the animals. In the tiger and lion enclosure for example there were boomer balls but these were lying in one corner, and appeared to be unused. The weathered toys given to the cockatoos unchanged and ignored. In other areas, such as with the primates, the enrichment offered was often monotonously repeated, hard and not useful: for example the plastic spindles that risk rotating, are slippery (especially in the wet), and uncomfortable to use. (Exhibit)

The above are examples of token enrichment, not of management working with an enrichment program for the benefit of the animals.

With regards to fixed enrichment many enclosures were also found severely lacking. Substrates in the porcupine, primate and many carnivore facilities were insufficiently varied preventing much natural behaviour. Some, such as the lion and tiger enclosures had inadequate elevated resting places, neither was there provision of adequate rubbing, marking and scratching posts. (Exhibit)

"Food enrichments might include hiding food or leaving carcasses whole or parts intact to make food acquisition more challenging."

Although wild boar carcasses were offered to the big cats, there was little evidence of

food enrichment for other species. Unfortunately, any good that may have come from the provision of these carcasses was undone by their not being cleared away properly before rotting and posing a nutrition and health hazard. The remains of food items should be removed for an enclosure within 24 hours, and sooner with many perishable items.

- "The zoo operator must ensure that any new materials introduced in an enclosure are not toxic to the enclosed species."

Other than the dangers to the animals from exposure to decomposing carcasses, I did not see any evidence of toxic materials in contact with animals. However, old wooden posts, support and wooden planking are used extensively throughout the zoo, and one would want to know that these had not been treated with toxic preservatives or paints (such as tar and lead based products).

 "Any enrichment structures or procedures must not pose a safety hazard for the animals, staff or the public."

The environmental enrichment offered to the primates was poor and sometimes dangerous. Hanging ropes in the Japanese macaque cage had frayed ends. Such oversight has been known to cause entrapment and strangulation of primates. It is symptomatic of the lack of care and management within the zoo. (Exhibit)

"Zoo operators should reference the many books published (e.g., Organizations such as the Association of British Wild Animal Keepers) and monthly magazines (e.g., The Shape of Enrichment) outlining enrichment items and strategies for a range of animal species."

I would not know if these sources were being accessed. They are rich sources of information and one would hope that there would be much more interest and activity in this area if they had been properly referred to.

"The focus of training will be to develop behaviours that facilitate husbandry or veterinary care in a manner that reduces stress and gives animals choices to participate in the activity. There should also be a training focus on increasing positive responses of species appropriate behaviour for operational purposes."

There was no evidence of useful animal training being undertaken at the zoo, and animals around the collection were observed begging the public for food.

The only obvious 'training' going on was the habituation of very young wild animals to human proximity and handling. This is nothing but destructive to their future socialization, breeding and conservation prospects. It provides negative, though cuddly, educational messages to visitors, especially children. (Exhibit)

E. General Animal Care Standards: "This heading sets out some general standards for animal care that have not been covered under animal care headings B, C and D. The general animal care standards are:"

- "Animals should be displayed, when feasible and possible, in exhibits replicating their wild habitat and in numbers sufficient to meet their social and behavioural needs."

This should apply to both inside and outdoor enclosures, particularly if the animals are required to stay indoors for any prolonged periods due to inclement weather, etc.

Many of the indoor facilities were not available to the public, and therefore I am unable to comment on their suitability.

- "Food must be stored in a manner which preserves the nutritional integrity of the material until fed, prevents contamination by organic, inorganic or chemical contaminants and prevents access by pest species."

The food storage facilities were not accessible to the public, and again I cannot comment.

- "Animals must be provided with nutritious food as set out in the veterinary written agreement and a potable water source must be available to all animals at all times."

Whilst I have not had sight of the written 'Veterinary Agreement', the Animal Care Protocol states that all water bowls should be "checked daily, cleaned and replenished as necessary". During both of my visits I found that potable water was not available to the many animals (the drinking utensils were generally foul and fouled). The food often did not meet the requirements of the Animal Care Protocol, nor did it appear to be supplemented.

- "Food and water must be offered in such a way that it is available to all animals. Therefore, competition among animals must be monitored."

There was no evidence of competition for resources between animals within their enclosures during my visits.

- "Feeding of animals by visitors must not be allowed except in specific circumstances where food prepared by the zoo is provided to the public and amounts are carefully controlled."

This was encouraged and rife during both of my visits. There was an open freezer near the entrance to the petting area full of bags of pretzels. There was a collection box beside it. Pretzels are a salt starchy food, unbalanced and not appropriate as a zoo animal feed. The visitors were allowed to feed this without direction and in an unrestricted fashion throughout the collection. This was done were it was observed by the staff and volunteers, and also were it was not monitored in any way. (Exhibit)

- "Feeding and watering containers must be kept clean and self-feeders and watering devices must be checked daily."

These were filthy dirty throughout the collection, and in my opinion provided significant hazard to the health and wellbeing of the animals. (Exhibit)

- "Animal food must not be stored in the same area as animal drugs, or with food for humans. Food preparation areas must be separate from all other areas."

Please see above. Given my experiences in the 'zoo' I cannot feel confident that these conditions were being met, nor in the hygiene of preparation areas.

- "If the collection includes fish, pinnipeds, cetaceans or other aquatic animals, there must be a written protocol and associated equipment for monitoring water quality."

The only species to which this was applicable during the times of my visits were the red-eared terrapins (turtles/sliders). I do not know if an appropriate protocol was in

place, and being practiced.

- "Buildings and substrates to which animals have access must be kept clean as follows:"

This was not the case in all areas that could be assessed. Guzoo is a disgustingly filthy place: a disgrace.

 "Washable surfaces must be washed clean and disinfected regularly to prevent potentially dangerous accumulations of organic and inorganic materials and organisms."

This was patently not done, nor did there seem to be any attempt to do so. As laid out in the Animal Care Protocol, all water bowls and feeding stations/bowls should be scrubbed and cleaned daily. All medium sized and smaller enclosures should be at least spot cleaned daily. It is a specific requirement of the Province's Standards, and is an essential element of good animal husbandry. A long-term volunteer advised me that the cages of the big cats were cleaned only twice weekly, in spite of the Animal Care Protocol (Zoo Development Plan, Appendix A-4, amendment of May 5th 2006) stating that this should be done daily. What is happening at Guzoo is specifically against the requirements of the Alberta Zoo Standards and AZA Standards: it is not acceptable.

"Substrates which cannot be washed must be cleaned of gross waste (e.g., perishable food and animal waste) on a daily basis for enclosures smaller than 0.5 acres) and less frequently for larger enclosures. The animal care protocol may indicate longer cleaning intervals for some species to reduce psychological stress. To facilitate cleaning all areas of the enclosures must be accessible to keepers."

In spite of the Animal Care Protocol, this was not done. Many of the smaller enclosure were filthy with feces, littered with uneaten food, and some with general rubbish. (Exhibit)

The paddocks and their feeding sites were covered in feces. The feed was not provided on cleanable surfaces, but offered repeatedly in the same areas, piling new food on old and often onto soiled substrates. This immediately fouls the feed and increases the risks of disease. Similar problems were noted in most of the enclosures, although due to the unmanaged overgrowth in many I was unable to examine the substrates without entering. (Exhibit)

The presence of piles of feces (many days old) together with the presence of contaminated and rotting food, is a real indictment of this 'Accredited Zoo'.

- "Substrates such as loose bedding material must be changed if soiled with feces and urine and any bedding provided must be kept dry and changed on a regular basis."

Enclosures and paddocks were poorly drained with areas becoming severely poached. Many of the animal shelters were similarly affected, they had been cheaply constructed, and poorly designed and maintained. Although my visits were carried out in the summertime the poaching of soils and potential for flooding was evident. It was particularly obvious after a brief downpour of rain. In the winter this would become a real problem and a seriously risk to the wellbeing of the animals. This has already been reported upon by Zoocheck Canada (2011). (Exhibit

- "Animal waste must be disposed of in an approved manner according to provincial and municipal

regulation."

Whilst I have no direct experience of the disposal of animal waste at Guzoo, I can say that it appears to be piled up in various places around the zoo. It is also uncomfortably close to the adjacent farm, and I am concerned for the possibility for cross contamination. As mentioned above there were large piles of animal waste stored on the farm premises. This is a poorly managed facility. I would not have confidence in them meeting any applicable requirements. (Exhibit)

 "Where animals are dependent upon heating, cooling, aeration, filtration or other systems for their survival, these must be equipped with warning devices and have emergency backup systems available."

I saw no evidence of backup and warning systems for essential services. I am not confident that they are adequately provided for, nor maintained in good working order. I refer you to my comments below on power outages.

This Standard should apply to the majority of animal houses and shelters in the zoo throughout the winter where supplementary heat ought to be provided: in particular to the primates, caged birds and reptiles.

- "There must be a contingency plan for the animals in the zoo in the case of an emergency such as fire, flood or power outage."

I have not had sight of this.

Power outage would be particularly important and should automatically set off alarms. They would increase the risks at the 'zoo' due to the subsequent failure of electric fences (and if these are on a separate generating supply this too should be alarmed and backed up in case of failure). Automatically triggered emergency backup generators of adequate power should be present on site: these should be fully serviced, fuelled and with a fully documented history.

Further observations and comments:

In addition to the above, many animals are not kept in proper social structures. Many are highly social and require the company of others. This is the very best form of behavioural enrichment. For example, at Guzoo the macaw and other parrots are often kept singly and not paired, and the Capuchin monkeys as a 'pair' rather than as a troupe. Furthermore, they are often kept in incompatible groups such as in the mixed bird aviary or with predator and prey in too close a proximity, such as the lynx and swans, or big cats and the canids and hoof stock.

There is no effective biological separation, from the perspective of disease control, of the zoo and farm animals. As I understand it this is contrary to the conditions set out for Guzoo. The wapiti and farm cattle and horses are in direct contact with only a singe fence separating them. I could not get close enough to check the quality and height of the fence, but this is not an effective separation. The miniature zebu and

donkey that were in the paddock next to the zoo office had been moved to a small and tatty paddock near the farm yards, I suspect thy may have entered the farm yard/biosecurity area to get there. If this was the case it would be likely to breach separation protocols.

During this report I have referred to the Calgary Zoo as an example of better and responsible animal management in a zoo situation. I hope this may give the Court a better understanding of some of the pressing problems at Guzoo. In doing so I am not suggesting that all is well with the Calgary Zoo, it is not. However, it is a good example of a North American zoo. And, it would have been easy for the management of Guzoo to visit and see what level of containment is required, the type of management needed, and hopefully to have sort advise. It would appear that they have taken on little professional advice, and that they have learnt nothing from their near and readily accessible neighbour.

The lack of apparent care, knowledge and management in this institution is systemic. It is in my opinion beyond the abilities of the current ownership and management to correct this. This is a desperate and urgent situation and Guzoo should be closed forthwith. It has a decommissioning plan, and it should be put into action.