## INVESTIGATION REPORT

# SPRUCE HAVEN WILDLIFE AND PETTING ZOO (SAULT STE. MARIE, ONTARIO) <br> OCTOBER 2013 

Prepared by Behavioral \& Environmental Solutions Prepared for Zoocheck Canada

## Table of Contents

### 1.0 Consultants

2.0 Introduction
3.0 Investigation Procedure

Figure 3.1 Spruce Haven Zoo Species List
4.0 Evaluation Method
5.0 Discussion
6.0 Recommendations
6.1 Spruce Haven Zoo
6.2 Ontario Society for the Prevention of Cruelty to Animals (OSPCA)
6.3 Ontario Ministry of Natural Resources
6.4 Corporation of The City of Sault Ste. Marie
7.0 Evaluations by Species
7.1 Lions
7.2 Cougars
7.3 Lynx
7.4 Wolves
7.5 Coyote
7.6 American Black Bear
7.7 Raccoon
7.8 Ungulates
7.9 Domestic/Other Animals
8.0 References

### 1.0 Consultants

Else M.B. Poulsen

Currently acting as the company's lead consultant Else Poulsen is the founding director of Behavioral \& Environmental Solutions; a collective of consultants who specialize in trouble-shooting captive wildlife management issues effecting zoos, sanctuaries, wildlife rehabilitators, and animal welfare organizations. Poulsen has over 25 years of expert experience working in accredited and non-accredited captive wildlife facilities in professional and management positions beginning her career as wildlife biologist in Alberta, Canada. She is a graduate of Brock University, Ontario, Canada and a holds diploma in professional zookeeping from the City of Calgary. Poulsen is an accomplished technical and non-fiction writer, whose first book Smiling Bears - A Zookeeper Explores the Behavior and Emotional Life of Bears was short listed for the prestigious Canadian 2010 Edna Staebler Award for Non-Fiction.

## Lydia R. Lefebvre

Lydia Lefebvre acts as a captive wildlife management consultant for Behavioral \& Environmental Solutions specializing in captive wildlife facility condition assessments relative to industry best practise and regulatory standards. She has 15 years of professional experience conducting animal welfare, health and safety, and environmental investigations for the Ontario Society for the Prevention of Cruelty to Animals, Blue Heron Environmental, the Northern Ontario Animal Welfare Society, and Zoocheck Canada. In addition, she became proficient in current best practise wildlife husbandry techniques and environmental enrichment programming while working as a zookeeper. Lefebvre has earned diplomas in Parks and Forest Recreation and Ecotourism Management at Sir Sanford Fleming College, Ontario, Canada, and is continuing her education in Biological Sciences at the University of Western Ontario. She has the distinction of having worked as field technician banding wild geese in Canada's polar bear habitat.

### 2.0 Introduction

Behavioral \& Environmental Solutions was contracted in September of 2013 to perform a follow up investigation of the Spruce Haven Zoo, which is also referred to as the Spruce Haven Wildlife and Petting Zoo on their website. ${ }^{1}$ Zoocheck has conducted a series of investigations of this facility over a period of four years since 2010. ${ }^{2,3}$

The Spruce Haven Zoo is located at 2016 Third Line West in Sault Ste. Marie, Ontario. It is a family business; a tourist attraction that charges an entry fee for visitors, offers children's group tours and animal handling demonstrations. The zoo houses both wild and domestic animals, has a petting area and a reptile room. The facility website states that they have "more than 100 " animals. ${ }^{1}$

The zoo's mission, as stated on the website, "is to be a safe haven for disadvantaged animals and birds." In addition, it states that "some [animals] will be relesed [released] or placed with other[s] zoos or caring organizations. Others [animals] not suitable for release or replacement have a permanent safe home at Spruce Haven and receive the attention needed to be happy." The Ontario Ministry of Natural Resources does not

recognize the Spruce Haven Zoo as an authorized wildlife rehabilitator. ${ }^{4}$ Therefore the facility is not in a legal position to release and/or administer to any injured or orphaned native wildlife that may be given to it by the public.

In addition, the website states that the zoo has become Sault Ste. Marie's municipal zoo. The City of Sault Ste. Marie denied this claim and maintains that the zoo is entirely privately owned and operated. ${ }^{5}$ The owners also operate a boarding kennel for domestic dogs on the property, neighbouring the zoo animal menagerie.

### 3.0 Investigation Procedure

The Spruce Haven Zoo was investigated on Tuesday, September 3, 2013 from 10:30 AM to 12:40 PM. The purpose was to investigate all aspects of animal husbandry, housing and care that were apparent from the public areas within the given time frame. On the day of the audit the weather was clear and sunny with a high of $22^{\circ} \mathrm{C}$ and a low of $11^{\circ} \mathrm{C}$. It had rained on the two days prior to the visit. There were three other patrons attending the zoo during the investigation. Due to the constraints of a confidential assessment the reptile room, the off exhibit areas, and any rehabilitation facilities that might exist were not accessible to the investigator.

The organisation of the animal enclosures appeared ad hoc and they were not laid out according to the geographic location of wild habitats or taxonomic groupings for educational purposes, or for the biological needs of the animals. It was difficult to accurately identify and confirm the total number of animals within some of the enclosures. A species list of resident animals (Figure 1) which is not exhaustive was compiled from; i/ the animals identified during the investigation, ii/ zoo signage, iii/ the facility pamphlet, and iv/ website.

Figure 3.1 Spruce Haven Zoo Species List
Mammalia (Mammals)
Carnivora (Carnivores)
Felidae (Big Cats)

1. Panthera leo spp. (Lions)

Felinae (Felines)
2. Puma concolor spp (Cougar)
3. Lynx spp (Lynx)

Canidae (Wolves, Coyote etc.)
4. Canis lupus spp. (Wolf)
5. Canis latrans spp. (Coyote)

Ursidae
6. Ursus americanus (American black bear)


2-126 Main Street West Grimsby

Procyonidae (Raccoon, etc.)
7. Procyon lotor (Raccoon)

Perissodactyla (Odd-toed Ungulate)
8. Equus (Horse, Donkey, etc.)
9. Equus ferus caballus (Shetland Pony/Miniature Horse)
10. Equus africanus asinus (Donkey)

Artiodactyla (Even-toed Ungulate)
Camelids (Camel sp.)
11. Lama glama (Llama)

Cervids (Deer sp.)
12. Cervus nippon (Sika deer)
13. Dama dama (fallow deer)
14. Odocoileus virginianus (White-tail deer)

Bovids (Goat spp., etc.)
15. Capra aegagrus hircus (Domestic goat spp.)
16. Ovis aries (Sheep spp.)
17. Bos grunniens (Yak spp.)
18. Capra caucasica (West Caucasian Tur)

Suidae
19. Sus scrofa domestica (Domestic pig)

Rodentia (Rodent)
Lagomorphs (Rabbit)
20. Oryctolagus cuniculus (Domestic Rabbit)
21. Chinchillidae sp. (Chinchilla)

Aves (Birds)
Anseriformes (Waterfowl)
22. Anas platyrhynchos domesticus (Domestic Ducks)
23. Anser anser domesticus (Domestic Geese)
24. Branta Canadensis (Canada Geese)

Galliformes (Pheasants)
25. Gallus domesticus spp. (Domestic Chicken)
26. Meleagris gallopavo or Meleagris sp. (Wild and/or Domestic Turkey)

Psittaciformes (Parrots)
27. Psittacine sp.


### 4.0 Evaluation Method

The evaluation of the zoo was completed using the Ontario Regulation 60/09, Standards of Care under the Ontario Society for the Prevention of Cruelty to Animals Act. The Standards of Care contains sections which cover all animals, dogs that live outdoors, captive wildlife and captive primates. Only the sections that apply were used in the evaluation. In some cases care standards for all animals and captive wildlife were similar and so these points of the act were combined during the evaluation and were counted as one point. Thirty two points in the standards of care were used in the evaluation. Similar points were combined thus yielding a total of twenty three points. If a point was deemed to comply or to not comply with the law, that point would in effect comply or not comply with the combined sections. This also means that correcting the offending issue would address more than one section in the law.

The points were rated as being $\mathrm{i} /$ in compliance with the law, ii/ being non-compliant with the law, or iii/ unable to determine an accurate rating. The points that were graded as "unable to determine" were not automatically assumed to be in conflict with the law. These points required more information that was not available to the inspector, and that could only be obtained by doing further on-site investigation, speaking with zoo owners or staff, a veterinarian or other qualified experts. Comments are included with some of the points to justify and elaborate on the reasons for the results. Evaluations and notes are separated by species while some are grouped together. Any sizes given for the zoo's enclosures are only rough estimates made by observation. It was not possible to measure each enclosure and the sizes and measurements mentioned are not an accurate reflection of the actual sizes.

Staff were encountered but not engaged three times during the visit since they appeared to be busy with tasks. One staff person appeared to be measuring the size of the bear enclosure. No education staff were on hand throughout the facility to answer questions from the public, to clarify information on the signage, or to help identify animals. Upon exiting the facility, there was no one available in the office building to answer questions.

### 5.0 Discussion

The Spruce Haven Zoo, The Ontario Ministry of Natural Resources (OMNR), the Corporation of the City of Sault Ste. Marie, and the Ontario Society for the Prevention of Cruelty to Animals (OSPCA) have historically failed the wild and domestic animals held at the Spruce Haven Zoo. In 2010 Zoocheck performed an inspection of the facility. ${ }^{2}$ Although the results of that investigation were reported to the OSPCA and the OMNR, and the City of Sault Ste. Marie were made aware of the problems, life for the animals at the facility has changed very little.

In 2010, Zoocheck concluded:
"The simplistic cage and enclosure designs, lack of space (particularly for carnivores), poor utilization of vertical space, barren hardpan substrates, lack of complexity, lack of furnishings, almost complete absence of enrichment, minimal privacy and shelter areas,

lack of bedding, ad hoc, often inadequate water containers, filthy water, lack of food containers, inappropriate proximity of predators to prey and damaged, bent and/or loose barriers and all problematic and fail to satisfy provincial standards." ${ }^{2}$

In general, some of the easy fixes have been done such as; the provision of better water containers for some (but not all) animals, the repair of some fences and entryways, the provision of some furnishings, and the addition of bedding materials for some animals. Grossly undersized, simplistic, non-species-specific cage structures with non-complex stagnant interiors still house the majority of the animals.

The most egregious problem discovered during this inspection and ensuing literature and media research were the markedly underweight lions, bear, and donkey. Their lack of significant body fat revealed skeletal bodies with inappropriately little muscle development. The lions and the American black bear are reported by statements allegedly made by the owners to the media and by supporters on their Facebook page to have been at the zoo since they were young. ${ }^{18,19}$ Thus, it's possible that appropriate muscle mass either did not develop due to a lack of proper nutrition and/or exercise, or the muscle atrophied over time due to inappropriately small and sterile enclosures that do not encourage natural movement and/or behaviour. One or two underweight animals in a collection of approximately 100 might suggest that a disease, disorder, or condition particular to that individual may be at fault. Typically, captive animals such as lions and bears tend to become overweight due to inactivity, not underweight. The presence of four underweight large mammals that are some of the zoo's cornerstone show animals, whose photos are freely posted on their social media page, suggests either a lack of knowledge about the proper nutritional requirements of these species, a lack of funds to purchase nutritionally sound foods, or both. The posting of numerous photos of the lions on the Friends of Spruce Haven Facebook page (on September 17, 23, October 2, 10, 2013) with remarks made about the cats' body condition suggests that the OSPCA may have recently ordered the facility to increase their diets.

Overall the results of this investigation point to systemic issues with inappropriately small, non-species-specific enclosures limiting natural movements and behaviours that can cause mental and physical distress and public safety issues due to dilapidated or insubstantial building materials, or cage design flaws that are causing the majority of the contraventions with the law.

Many of the animals are at risk of or are experiencing psychological stress due to the proximity of other animal enclosures and the small enclosure sizes which limit their ability and options for escaping the view of the public and other animals. For most animals the only way to remain out of view is to enter their shelters. They should be presented with an option that allows them to remain out of view while outside of their shelters. In addition, the zoo animals are subjected to the ceaseless barking of the dogs boarded at their kennel business located on the property.

Comprehensive species-specific enrichment programming would help to mitigate some of the serious challenges to the animals' mental and physical well-being housed in small enclosures. A fully featured enrichment program must address the needs of individual animals in the following five areas; i/ social, ii/ cognitive, iii/ physical habitat, iv/ sensory,

and $\mathrm{v} / \mathrm{food}$. Items added to the various enclosures at the Spruce Haven Zoo such as a few logs strewn about or a felled tree were ad hoc and not necessarily meaningful to the specie's genetic urges. Developing such a program requires carefully researching reputable sources to gain information on a species natural history to determine how that species uses its wild habitat for daily and seasonal living. Contacting an Association of Zoos and Aquariums (AZA) accredited institution for information and assistance is recommended.

Therefore, Zoocheck's call for improvement in 2010 as stated below, still holds true:
"Spruce Haven Zoo's animal cages and enclosures would benefit from landscaping (e.g. berms, hillside alcoves, gullies), structural enhancements, furnishings (e.g., rocks, logs \& branches with intact bark, brush piles, climbing apparatus, aerial walkways, suspended hammocks, pools, misters, mud wallows, suspended objects to push or pull, platforms) and objects (e.g. Boomer balls, horse toys, animal hides, barrels), dietary enrichment (e.g., novel food items, browse, scatter feeding, hanging feeders) and other forms of enrichment."2

The zoo houses large carnivores that in the event of an escape could kill or seriously injure staff members or the public. The zoo is a dangerous place to work or visit because of the weak and poor construction of many of the enclosures. This a safety risk for the animals as well since they could ultimately be seriously injured or killed as a result. Governments have an inherent responsibility to keep its citizens safe. In accordance Ontario's Fish and wildlife Conservation Act, the Ontario Ministry of Natural Resources issues zoo licenses which is more of a perfunctory act since they have no jurisdiction over exotic animals such as lions and tigers. Part 3, Section 46.2 of the Act does stipulate that those who house native species have a responsibility to keep them from escaping. Thus the Government of Ontario would hold some liability in the case of injury or death caused by an escaped animal from a licensed zoo. Since The Corporation of the City of Sault Ste. Marie has not instituted a by-law that bans privately owned animal menageries they bare some of the responsibility for the zoo's continued operation within their city limits. To protect its citizens the Corporation should at the very least develop a Dangerous Animal Escape Emergency Response Plan.

Signage throughout the facility was inconsistent, absent or poorly maintained. The office contained some items on display for the purpose of education or entertainment but again it did not appear to be current or maintained. To claim that the Spruce Haven Zoo offers an important educational experience based on this visit would be misleading. Due to the constraints of the investigation it was not determined what educational information if any is provided through the zoo's guided tour programs for children. The deplorable means by which some animals were housed presents the public with inaccurate information about the needs of individual species and their overall sentience. The Ontario Ministry of Natural Resources licencing requirements for keeping captive indigenous wildlife requires that animals be able to exhibit natural movement and behaviours to facilitate public education and interpretation. Clearly the OMNR has failed to enforce this requirement.


According to a video clip on Local 2 News, an on-line news report, the owners of the Spruce Haven Zoo, are downsizing due to their age after being in business for 26 years years. ${ }^{20}$ However, the zoo just bred their two wolves in 2013 which generated a litter of two additional wolves. On September 10, 2013, in SooToday.com, the parent pair was reported as being a twin pair of wolves. ${ }^{21}$ If this is accurate, then the zoo indiscriminately bred a brother and sister wolf producing two first-generation inbred pups. Since the origin of the parent pair is unknown it is possible that the young are second-generation or greater. Inbreeding depression increases homozygosity, recessive genetic expression, and the incidence of other deleterious traits, and it decreases the genetic fitness of the population.

It is suggested on the Spruce Haven Zoo website and on the Friends of Spruce Haven Facebook page that the facility rehabilitates wildlife for release. ${ }^{1,22}$ One of the animals that is discussed as having been rehabilitated and released on the Facebook page is a raccoon which notably is a rabies vector species that requires not just an Ontario rehabilitators' authorization but also an Ontario Rabies Vector Species course and exam. The Spruce Haven Zoo does not have any provincially authorized rehabilitators on-site, nor have they ever had authorized rehabilitators on staff. ${ }^{4}$ In addition they do not have any staff with the Ontario Rabies Vector Species course and exam. There appears to be a local culture that allows the zoo to rehabilitate wildlife without proper government authority. In a personal communication with OMNR staff it became apparent that not only were they aware of the practise but had on occasion brought wildlife to the zoo for rehabilitation and release. A bear cub was mentioned specifically. ${ }^{4}$

### 6.0 Recommendations

Species-specific issues and recommendations are described in section 7.0 Evaluations by Species. An overview of those recommendations are discussed below.

### 6.1 Spruce Haven Zoo

1. Veterinary - Of immediate concern are the weights of the lions, the bear, and the donkey. The Spruce Haven Zoo must have the body condition and health status for each of these animals evaluated and remedied by a qualified wildlife veterinarian.
2. Safety - The Spruce Haven Zoo needs to immediately identify the enclosure construction weaknesses and develop a plan to address these deficiencies. Current Association of Zoos and Aquarium (AZA), European Association of Zoos and Aquaria (EAZA), and Canadian Association of Zoos and Aquarium (CAZA) standards and/or Global Federation of Sanctuaries (GFAS) standards should be used to assess the condition of the enclosures. If standards are not available for a particular species then experienced professionals with species-specific knowledge should be consulted. Once an enclosure is accessed as unsafe and/or inadequate for holding a particular species of animal plans should made to $\mathrm{i} /$ remove animal from the deficient enclosure, $\mathrm{ii} /$ relocate animal to different on-site enclosure or rehome animal to new facility, iii/ immediately renovate existing enclosure to adhere to standards, iv/ build new enclosure according to standards. Animals with enclosures that pose the most risk are the African lions, coyote,

lynx, American black bear, wolves and cougars. In addition, an inspection and maintenance schedule must be developed for monitoring enclosures for deficiencies.
3. It is not clear if there is a facility Emergency Response Plan in place at Spruce Haven Zoo that includes i/ dangerous animal escape, ii/ human in dangerous animal enclosure, iii/ fire or other Acts of God, iv/ non-dangerous animal escape, v/ venomous animal bite. It is unknown if the zoo houses venomous snakes, lizards, or amphibians in their reptile room. An emergency response plan, regularly scheduled re-evaluation of the plan, staff training, and regularly scheduled mock emergency drills are imperative.
4. It is not clear if the owners of the Spruce Haven Zoo have liability insurance that covers the injury or death of staff, volunteers, and the public due to the facilities negligence in housing dangerous animals in safety deficient enclosures. This should be immediately assessed.
5. The design, size and furnishings of many enclosures, particularly the carnivore exhibits, need to be assessed and redesigned or rebuilt to encourage animals to perform species-specific movements and behaviours in their enclosures. Spruce Haven Zoo must use accredited zoo or sanctuary standards as a guideline, as well as the assistance of captive wildlife management experts. If the zoo is unable to provide proper enclosure sizes and opportunities for animals to perform natural movements and behaviours then it should seek alternate accredited facilities and organisations that can aid in the rehoming of the animals. Animals with enclosures that require the most attention include the African lions, coyote, raccoon, lynx, American black bear, wolves, cougars, and the petting zoo animals.
6. A species-specific enrichment program must be developed immediately for each animal residing at the zoo. It is recommended that the assistance of species-specific captive wildlife management experts be sought.
7. All animals must immediately be provided with bedding materials befitting the genetic requirements of the species.
8. The Spruce Haven Zoo must cease all wildlife rehabilitation and release practises until such a time as they acquire the appropriate certification from the Ontario Ministry of Natural Resources.

### 6.2 Ontario Society for the Prevention of Cruelty to Animals (OSPCA)

1. In evaluating the status of the facility the OSPCA should refer to and apply the current Association of Zoos and Aquarium (AZA), European Association of Zoos and Aquaria (EAZA), and Canadian Association of Zoos and Aquarium (CAZA) standards, Global Federation of Sanctuaries (GFAS) standards, and/or the National Farm Animal Care Council (NFACC) Codes of Practice for the Care and Handling of Farm Animals.
2. The OSPCA must enforce their standards with regards to the safety and construction of enclosures.

3. The OSPCA must have species-specific captive wildlife management professionals assist with zoo and exotic animal investigations and inspections.

## 6. 3 Ontario Ministry of Natural Resources

1. The Ontario Ministry of Natural Resources must re-evaluate their qualification standards for a zoo license to include, at minimum, a written examination similar to the requirements for wildlife rehabilitation.
2. The Ontario Ministry of Natural Resources in Sault Ste. Marie must enforce their current licencing requirements for housing captive indigenous wildlife safely at the Spruce Haven Zoo specifically regarding i/achieving a distance from public and other animals, ii/ achieving a full range of body movements and physical movements normally performed, and iii/ the expression of natural behaviours to facilitate public education and interpretation. By not achieving a distance from public in a possible escape, the province becomes liable for any and all injuries or death caused to humans due to the government's negligence.
3. The Ontario Ministry of Natural Resources in Sault Ste. Marie must enforce their current authorization requirements for wildlife rehabilitation and release at the Spruce Haven Zoo, rather than promote a local culture of illegal wildlife rehabilitation and release. This is particularly critical as the zoo appears to be rehabilitating and releasing rabies vector species.

### 6.4 Corporation of The City of Sault Ste. Marie

2. It is recommended that the Corporation of the City of Sault Ste. Marie consider developing a by-law that prohibits the private ownership and display of dangerous exotic wildlife species. As such by-laws become more common in Canadian municipalities; the City of Sault Ste. Marie should consider their liability in allowing a privately owned zoo within their city limits that negligently holds exotic wildlife in unsafe conditions.
3. The City of Sault Ste. Marie must develop an emergency response plan should they be required to attend a dangerous animal escape at the Spruce Haven Zoo in order to protect both their residents and emergency response staff such as the police force, fire department and EMS.

### 7.0 Evaluations by Species

### 7.1 Lions

Number of Individuals, Sex and Age
Two lions were kept together. They both appeared to be adult females.


## Enclosure

The lion enclosure could have been approximately $7.6 \times 15 \mathrm{~m}$. ( $25 \times 50 \mathrm{ft}$. ) and $116 \mathrm{~m}^{2}$ (1250 $\mathrm{ft}^{2}$ ) in area. The Association of Zoos and Aquariums (AZA) Lion Care Manual recommends that the minimum size of an enclosure to house $1-3$ adult lions is $929 \mathrm{~m}^{2}$
$\left(10,000 \mathrm{ft}^{2}\right) .{ }^{10}$ That is 8 times larger than the Spruce Haven Zoo enclosures. There were two separated sections to this enclosure which the lions accessed through an open guillotine style door. The front half of the enclosure appeared to be about five body lengths of the lion in width and depth. The back half of the enclosure appeared to be about five body lengths of the lion in width and five to six body lengths in depth. The size of both sections of the enclosure were small and comparable to indoor holding areas or quarantine rooms primarily meant to hold animals overnight or for short periods of time in zoos accredited by the Association of Zoos and Aquariums' (AZA). The enclosure was constructed with wooden support beams and wire mesh fencing. The wood appeared to be painted brown. The estimated height of the perimeter fence is 3 m . ( 10 ft .) high with an attached $60-90 \mathrm{~cm}$. (2-3 ft.) overhang fence angled inward. The mesh size of the overhang was larger than the enclosure fencing. A strand of electric wiring was run along the top inside of the enclosure. The substrate on both sides was hard pan dirt flooring. There were some tall trees within the enclosure but no other vegetation or plant material growing within the enclosure. The trees provided shade and were accessible to the lions for climbing. The ground in the enclosure was damp and wet with the recent rainfall but did not appear to create a muddy surface for the lions and both lions appeared dry. The enclosure was surrounded by coniferous trees that provided shade and possibly some protection from the wind.

Shelter
A shelter was provided in one section of the enclosure in the form of a four-sided covered wooden shelter. Both lions could fit lying down on the roof of the shelter. Bedding material, that appeared to be straw, could be seen inside the shelter.

## Enrichment

Items that could be seen in the enclosure included two tires, what appeared to be a small chew bone dog toy, and two old wooden logs.

## Neighbouring Animals in Collection

The lions were in the first enclosure of a row of enclosures attached to one another. They were closest in proximity to the dog kennels that were attached to the office building where the public accesses the facility. A coyote was housed directly next door to the lions and they had access to the coyote through the fencing. A solid piece of what appeared to be metal roofing material was placed horizontally between the two enclosures at ground level that rose vertically in a possible effort to separate the two species. The separation barrier did not reach the top of the fencing and was about 2.5 m . ( 8 ft .) high.


## Summary of Compliances as per Ontario Regulation 60/09 OSPCA Act Of the 23 points evaluated

1. 9 are in compliance with the law,
2. 8 do not comply with the law,
3. 6 could not be determined.

## Summary of Concerns

The most pressing issues for the lions include:

1. The veterinary care of the lions,
2. The security and safety of the enclosure design posing a danger to the public,
3. The small size of the enclosure limiting natural movement and behaviour of the lions,
4. The need for a nontoxic container for water,
5. A follow up visit in the winter months to determine how the zoo manages the lions in cold weather and an assessment of the animals' condition.

Discussion of Compliance as per Ontario Regulation 60/09 OSPCA Act
Contraventions
2. (1) Every animal must be provided with adequate and appropriate food and water.

Does not comply.
Food: Unable to determine diet.
Water: Does not comply. The container for the water source was not appropriate as it was metal and rusted. Water should be provided in a nontoxic container. Further investigation is needed to determine how water is provided during winter months when water sources could freeze.
2. (3) Every animal must be provided with the care necessary for its general welfare.

Does not comply.
This rating is based on section 2. (1) a long term exposure to contaminants in drinking water due to the rusty container, and on sections 2. (6a) \& 5. (1a) \& 5. (2a) \& 5. (2c), there is not enough space to perform natural behaviour.
2. (6a) Every animal must be provided with adequate and appropriate space to enable the animals to move naturally and to exercise \& 5. (1a) A pen or other enclosed structure or area for wildlife kept in captivity must be of and adequate and appropriate size to facilitate and stimulate natural movement and behaviour \& 5. (2a) \& (2c) A pen or other enclosed structure or area for widllife kept in captivity must have features and furnishings that facilitate and stimulate the natural movement and behaviour of each animal in the pen or other enclosed structure or area; surfaces and other materials that accommodate the natural movement and behaviour of each animal in the pen or other enclosed structure or area.


Does not comply.
The greatest limiting factor in the enclosure is the lack of space as it abates the lions' movement and behaviour as well as the zoo's ability to add features and furnishings to stimulate those. The size of the enclosure was too small to house even one adult African lion long term. The lions exhibited movements such as walking and jumping on and off of the roof of the shelter, but there was not enough space for them to run. Even without the wall between the two sections of the enclosure there would not be sufficient space.

The Association of Zoos and Aquariums (AZA) Lion Care Manual recommends that the minimum size of an enclosure to house $1-3$ adult lions is $929 \mathrm{~m}^{2}\left(10,000 \mathrm{ft}^{2}\right) .{ }^{10}$ That is 8 times larger than the Spruce Haven Zoo enclosures.

In addition, environmental complexity is lacking in the Spruce Haven Zoo lion enclosure. The AZA manual delineates the critical features that enhance enclosure complexity befitting the lions' genetic urges to express their natural behaviours:
"The best lion exhibits safely replicate the features of the lion's natural habitat. This will encourage natural behaviors, which will result in healthier animals and provide an educational and inspirational experience for zoo guests. Lions are territorial animals that patrol and protect a well-defined area from intrusion by other conspecifics. In the wild, territorial borders are typically marked with scent, and this behavior is also seen in zoos. Lions are largely terrestrial, and do best when maintained outdoors, at least during warmer weather, in large spacious enclosures designed to encourage speciesappropriate behaviors such as resting, walking, hunting, stalking, grooming, playing, breeding, etc. (Schaller, 1972) ${ }^{11}$. Enclosures should be planted with grasses and bushes for visual privacy from guests and conspecifics, trees for shade, and include various substrates, surfaces to mark, deadfall for scratching, and other aspects in their enclosure that will change their pathways and create complex behavioral opportunities. This varied topography will help create multi-leveled pathways that may reduce development of stereotypic behaviors such as pacing. All enclosures should allow each animal the ability to retreat from conspecifics through the use of visual barriers, such as rock outcroppings, hills, and foliage, without limiting an animal's access to food, water, heat, or shade." ${ }^{10}$
2. (7a) If an animal is confined to a pen or other enclosed structure or area the pen or other enclosed structure or area, and any structures or material in it, must be in a state of good repair.

Does not comply.
This facility does not comply due to the rusty water container mentioned above in 2. (1) Due to the constraints of the inspection it was not possible to determine what condition the shelter or the overhang fencing was in. While the structure may be in acceptable repair, the materials used to construct the enclosure are not adequate to safely secure the housing of African lions.
2. (7b) If an animal is confined to a pen or other enclosed structure or area the pen or other enclosed structure or area, and any surfaces, structures and materials in it, must

be made of and contain only materials that are (i) safe and non-toxic for the animal, and (ii) of a texture and design that will not bruise, cut or otherwise injure the animal. \& 5 . (3a\&b) A pen or enclosed structure or area for wildlife kept in captivity must be made of and contain only materials that are, non-toxic for the animals kept in the pen or other enclosed structure or area; and of a texture and design that will not bruise, cut or otherwise injure the animals.

Does not comply.
This facility does not comply due to the rusty water container mentioned above in 2. (1). Despite the weak construction of the enclosure there did not appear to be any imminent danger to the animals. There did not appear to be any signs of the lions having chewed or eaten the wood. The shelter appeared to be constructed of raw wood and has some wear but also did not appear as though the lions were causing excessive damage.
4. (2) Wildlife kept in captivity must be provided with a daily routine that facilitates and stimulates natural movement and behaviour.

Does not comply.
See above comments regarding space under 2. (6a) \& 5. (1a) \& 5. (2a) \& 5. (2c).
The daily routine could not be determined without interviewing staff. No evidence of an enrichment program was observed and could not be determined without interviewing staff. Determining if natural movement and behaviours occurred would require longer observation periods than afforded. Daily routines that include feeding, cleaning and enriching the lives and environments of the animals are essential to encouraging natural movement and behaviour. Denying animals access to appropriate space, materials and the opportunity to perform natural movements and behaviors can cause psychological stress [5.(1b)], problems with natural growth [5.(1c)], injury or undue stress among animals [4. (3)], and possibly pose a danger to the animal [2. (7c)].
5. (1b) A pen or other enclosed structure or area for wildlife kept in captivity must be of an adequate and appropriate size, to enable each animal in the pen or other enclosed structure or area to keep an adequate and appropriate distance from the other animals and people so that it is not psychologically stressed \& 5. (2d) A pen or other enclosed structure or area for wildlife kept in captivity must have, one or more areas that are out of view of spectators.

Does not comply.
The enclosure is not large enough to provide the lions with adequate distance between each other and the public. The lions could only remain out of view of the public if they went into the shelter, however they could not remain out of view of the public and their cage mate at the same time. For this reason the enclosure was deemed not to comply with this regulation. Two sides of the enclosure were not accessible by the public and one of those sides was shared by another enclosure marked coyote. The lions could remain out of view of the coyote if they were next to the shared fence where a solid barrier was placed against the fencing, in the shelter or lying on the opposite side of the shelter. The lions were also subject to the continuous barking of dogs held at the kennel

and occupied one of the closest enclosures to the kennels. The dogs barked during the entire visit.
5. (4b) A pen or other enclosed structure or area for wildlife kept in captivity and any gates or other barriers to it, including moats, must be designed, constructed and locked or otherwise secured to prevent, animals escaping from the pen or other enclosed structure or area by climbing, jumping, digging, burrowing or any other means.

Does not comply.
The estimated height of the perimeter fence is 3 m . ( 10 ft .) high with an attached $60-90$ cm . (2-3 ft.) overhang fence angled inward. It is too short when taking into consideration the lions' access to the roof of their shelter. Due to the small size of the entire enclosure the shelter is very close, possibly 1-1.5m(4-5 ft.), from the sides of the enclosure. If a lion stands on the roof of the shelter it elevates the animal, about 1.2 -1.5 m . (4-5 ft.) off the ground. Thus the lion only has $2-2.4 \mathrm{~m}$. ( $7-8 \mathrm{ft}$.) distance to jump in order to scale the fence. If the average lion is approximately 1.5 m . ( 5 ft .) long from head to end of torso, then the distance to jump is considerably shortened to a diagonal height of $60-90 \mathrm{~cm}$. (2-3 ft.).

The enclosure was constructed of a wooden frame and metal mesh fencing, neither of which are indestructible by adult lions. It is imperative that further investigation identify if the zoo has a an inspection and maintenance schedule, as a lion escape poses a serious threat to the local community and would be in violation of this standard. The barrier features, if any exist, at the base of enclosure that prevent the lions from digging out should also be determined. The integrity of the overhang fencing and the gauge should also be inspected as its construction appeared to be loose and sagging.

The AZA Lion Care Manual recommends a minimum fence height of $4.5 \mathrm{~m}(15 \mathrm{ft}$.) with an overhang. ${ }^{11}$ In addition, the manual warns that some lions can easily climb chain link fence and that electric fencing should only be used as an additional deterrent, not as the primary means of security. In the presence of soft soils they recommend that attached underground chain link fencing be buried 90 cm . (36 in.) deep or 90 cm . (36 in.) into the exhibit as flooring. ${ }^{11}$ A minimum of 8 gauge should be used for hard wire mesh or chain link fencing. The current gauge and height of the fencing material and the digging deterrents in place need to be accurately determined as the current construction of the enclosure puts the public and animal safety at risk and thus are in violation of the law.

## In Compliance

## 2. (6b) Every animal must be provided with adequate and appropriate sanitary conditions.

Complies.
Further investigation is needed to confirm the condition of the inside of the shelter. Two to three piles of feces were visible inside the enclosure but the amount was not excessive and could have been deposited that day. There was wet ground in the enclosure with the recent rains but overall it appeared to drain well enough that the ground did not seem too muddy or to have water pooling.


Due to the small size of the enclosure, urine saturation and fecal contamination of the soil are possible. However there was no visual evidence of that. Urine saturation and fecal contamination of the soil changes the dynamics of the microbe communities in the ground, and can contaminate new foods thrown onto it, and can contaminate paw pads that the lions then ingest when grooming themselves. This needs to be further investigated.
2. (6c) Every animal must be provided with adequate and appropriate ventilation.

Complies.
This was an open, outdoor enclosure.
2. (6d) Every animal must be provided with adequate and appropriate light.

Complies.
This was an open, outdoor enclosure.
2. (7c) If an animal is confined to a pen or other enclosed structure or area, the pen or other enclosed structure or area must not contain one or more other animals that may pose a danger to the animal.

Complies.
At the time of the investigation the lions appeared to tolerate one another. Small enclosures with limited space can increase the risk of aggression among cage mates. This enclosure was too small to house even one African lion long term.
4. (3) Wildlife kept in captivity must be kept in compatible social groups to ensure the general welfare of the individual animals and of the group and to ensure that each animal in the group is not at risk of injury or undue stress from dominant animals of the same or a different species.

Complies.
See above comments 2. (7c)
5. (1c) A pen or other enclosed structure or area for wildlife kept in captivity must be of an adequate and appropriate size, to ensure that the natural growth of each animal in the pen or other enclosed structure or area is not restricted.

Complies.
It was not possible to determine if or how the lack of space in the enclosure has affected the natural growth of the individual animals as the enclosure limits the animals' abilities to perform natural behaviours and it was not known how long the lions have been held in this enclosure.
5. (2b) \& (2e) A pen or other enclosed structure or area for wildlife kept in captivity must have, shelter from the elements that can accommodate all the animals in the pen or

other enclosed structure or area at the same time; one or more sleeping areas that can accommodate all the animals in the pen or other enclosed structure ore area at the same time and that are accessible to all the animals at all times.

Complies.
The enclosure provided enough space for both lions to rest either on the ground or on the shelter roof. It appears as though both lions could fit in the shelter as they were both able to lie on the roof during the investigation. Although it is desirable to offer more options for shelter and space in an enclosure with more than one individual in order to accommodate dominant behaviour over subordinate animals, the lions appeared to share the enclosure and the shelter roof during the investigation. See point 2. (6e) regarding appropriate protection from the elements, including harmful temperatures.
5. (4a) A pen or other enclosed structure or area for wildlife kept in captivity and any gates or other barriers to it, including moats, must be designed, constructed and locked or otherwise secured to prevent, interaction with people that may be unsafe or inappropriate for the wildlife.

Complies.
Public stand-off barriers were in place to keep visitors at a distance from the lions. However the materials used to construct the enclosure and locking mechanisms are inadequate for the secure housing of lions.
5. (5) A pen or other enclosed structure or area for wildlife kept in captivity and any gates or other barriers to it, including moats, must be designed, constructed and maintained in a manner that presents no harm to the wildlife.

Complies.
At the time of the investigation there was no visible harm to the lions with regards to the enclosure. Should the animals attempt to escape or destroy the wooden frame they could harm themselves in the process.

## Unable To Determine

2. (2) Every animal must be provided with adequate and appropriate medical attention.

Unable to determine.
The investigator was unable to determine if the lions were under the care of a qualified veterinarian due to the constraints of the investigation. However, some ribs and vertebrae of both lions were clearly visible. This is especially concerning with the upcoming winter as body fat and muscle will help cope with harsh winter weather. It is recommended that a qualified expert evaluate the health and body condition of the lions.

The AZA Lion Care Manual recommends that an adult female African lion requires approximately 2.7 kg . [6 lb.] of whole and processed food per day on a diet containing $1.75 \mathrm{kcal} / \mathrm{g}$. , and individual feeding rates should be evaluated and readjusted based on regular assessment of body condition scores and weights. ${ }^{10}$ If only one of the two lions

held at the Spruce Haven Zoo was thin with ribs and vertebrae protruding that might suggest a personal disease, disorder, or condition. However, both lions appear underweight suggesting a serious issue with receiving proper nourishment. The body condition of both lions has been evaluated according to the AZA Lion Care Manual, Nine-point Body Condition Scoring System for Lions (pp.57-58). One lioness is rated as a 2-3 Low with minimal fat covering, articulations angular and some bones visible. The other lioness is rated as a 4 Moderate to Low with slight fat covering, bones barely noticeable, articulations apparent but smooth body appearance.
2. (4) Every animal must be transported in a manner that ensures its physical safety and general welfare.

Unable to determine.
2. (5) Every animal must be provided with an adequate and appropriate resting and sleeping area.

Unable to determine.
Needs further investigation regarding the amount of bedding inside the shelter and alternatives to hard surfaces. It is unclear if there is enough bedding material in the enclosure to offer the animals an alternative to the hard roof of the shelter or ground. Due to the small enclosure size the ground surfaces can become hard packed and there is no visible access to vegetation for the animals to rest on. Since animals in captivity are not able to seek out relief from the hard surfaces in their enclosure they must to be provided with an alternative.
2. (6e) Every animal must be provided with adequate and appropriate protection from the elements, including harmful temperatures.

Unable to determine.
This needs to be investigated further. It could not be determined if the shelter was appropriate for the winter for a species found in warmer climates. It would be necessary to determine if the shelter was insulated, offered sufficient protection from the wind, and if the ground within the shelter remained dry during wet weather. It would also require information from the owners or staff to determine if additional bedding material was provided to add insulation and for raising the animals off the ground, and if they added rubber flaps to the shelter in the winter months. Under the OSPCA Act, outdoor dogs, even breeds accustomed to winter climates, are required to have weather proofed and insulated shelters. Qualified individuals and the OSPCA would have to determine what minimum shelter requirements a warm climate species such as the African lion would require during the winter months for that area. The physical condition of the individual animals needs to be considered as well since they may burn more energy in order to cope with the colder weather especially if the shelter was not adequate as this could adversely affect their health and body condition. The Association of Zoos and Aquariums' Lion Care Manual states that lions can tolerate temperatures as low as $1.1^{\circ} \mathrm{C}$ and that supplemental heat or indoor enclosures should be provided if temperatures are lower than $10^{\circ} \mathrm{C}$. According to Environment Canada the Sault Ste.


Marie area can receive average lows six months out of the year which are below $-1.1^{\circ} \mathrm{C}$ (ranging from $-1.8^{\circ} \mathrm{C}$ to $-14.8^{\circ} \mathrm{C}$ for six months of the year) with a record low as cold as $38.9^{\circ} \mathrm{C}$.
2. (8) Every animal that is to be killed must be killed by a method that is humane and minimizes the pain and distress to the animal; an animal's pain and distress are deemed to be minimized if it is killed by a method that produces rapid, irreversible unconsciousness and prompt subsequent death.

Unable to determine.
5. (4c) A pen or other enclosed structure or area for wildlife kept in captivity and any gates or other barriers to it, including moats, must be designed, constructed and locked or otherwise secured to prevent, animals or people (other than people who are required to enter the enclosure as part of their duties) from entering the pen or other enclosed structure or area by climbing, jumping, digging, burrowing or any other means.

Unable to determine.

### 7.2 Cougars

Number of Individuals, Sex and Age
Two adult cougars were housed together. One cougar was said to be 'the' female by a staff member during the investigation thus suggesting that the other was a male.

## Enclosure

The two cougars were housed together in an enclosure constructed with metal support posts and metal chain link fencing. The enclosure was about $15 \times 18 \mathrm{~m} .(50 \times 60 \mathrm{ft}$.) equalling $279 \mathrm{~m}^{2}\left(3,000 \mathrm{ft}^{2}\right)$ in area. The fence height was approximately $3 \mathrm{~m} .(11 \mathrm{ft}$. high with an additional wire mesh overhang approximately 1 m . ( $3-4 \mathrm{ft}$.) wide. The enclosure had electric fencing inside along the top of the enclosure fencing. Concrete pieces were visible through the dirt at the base of the enclosure fence in some areas. The concrete appeared to be loose as a chunk was visible in the enclosure detached from the fence line. A large blue plastic tub held drinking water that appeared to be clean. The enclosure had a separate back section that could be closed off to secure the animals for cleaning and was accessible to the animals. It is not known if it was used for this. One cougar was resting on the ground during the visit, while the other cat interspersed resting with chasing the public back and forth at the fence. A staff member passed by during the investigation and said that the cat was the female and she often exhibited this sort of behaviour. The female cougar displayed the ability to run within the enclosure and was also able to run from the back section of the enclosure to the front. Due to the size of the enclosure some ground vegetation was present as well as some small and medium sized trees. The surrounding trees offered shade and possibly some wind protection. Unlike other enclosures at the facility this one offered its occupants a more appropriate amount of space.


## Shelter

One wooden shelter was visible in a back corner of the enclosure. It appeared to have two entrances as though there was a top and bottom level to the shelter. There was a raised wooden platform approximately $0.5-1 \mathrm{~m}$. (2-3 ft.) off the ground that provided resting space on and below it.

Summary of Compliances as per Ontario Regulation 60/09 OSPCA Act
Of the 23 points evaluated:

1. 16 are in compliance with the law,
2. 7 could not be determined.

Summary of Concerns
The most pressing concern for the cougars would be to confirm the security and safety of the enclosure design.

## Discussion of Compliance as per Ontario Regulation 60/09 OSPCA Act

## In Compliance

2. (1) Every animal must be provided with adequate and appropriate food and water.

Food. Unable to determine diet.
Water. Complies
2. (3) Every animal must be provided with the care necessary for its general welfare.

Complies.
2. (5) Every animal must be provided with an adequate and appropriate resting and sleeping area

Complies.
2. (6a) Every animal must be provided with adequate and appropriate space to enable the animals to move naturally and to exercise \& 5. (1a) A pen or other enclosed structure or area for wildlife kept in captivity must be of and adequate and appropriate size to facilitate and stimulate natural movement and behaviour \& 5. (2a) \& (2c) A pen or other enclosed structure or area for wildlife kept in captivity must have features and furnishings that facilitate and stimulate the natural movement and behaviour of each animal in the pen or other enclosed structure or area; surfaces and other materials that accommodate the natural movement and behaviour of each animal in the pen or other enclosed structure or area.

Complies.
The cougars had one of the larger enclosures in the facility for the carnivores. The cougar that was said to be the female was observed to be able to run.

2. (6b) Every animal must be provided with adequate and appropriate sanitary conditions.

Complies.
2. (6c) Every animal must be provided with adequate and appropriate ventilation.

Complies.
This was an open, outdoor enclosure.
2. (6d) Every animal must be provided with adequate and appropriate light.

Complies.
This was an open, outdoor enclosure.
2. (7a) If an animal is confined to a pen or other enclosed structure or area the pen or other enclosed structure or area, and any structures or material in it, must be in a state of good repair.

Complies
2. (7b) If an animal is confined to a pen or other enclosed structure or area the pen or other enclosed structure or area, and any surfaces, structures and materials in it, must be made of and contain only materials that are (i) safe and non-toxic for the animal, and (ii) of a texture and design that will not bruise, cut or otherwise injure the animal. \& 5. (3a \& b) A pen or enclosed structure or area for wildlife kept in captivity must be made of and contain only materials that are, non-toxic for the animals kept in the pen or other enclosed structure or area; and of a texture and design that will not bruise, cut or otherwise injure the animals.

Complies.
2. (7c) If an animal is confined to a pen or other enclosed structure or area the pen or other enclosed structure or area must not contain one or more other animals that may pose a danger to the animal.

Complies.
The cougars appeared to tolerate one another during the inspection and presented no evidence that would prove otherwise.
4. (3) Wildlife kept in captivity must be kept in compatible social groups to ensure the general welfare of the individual animals and of the group and to ensure that each animal in the group is not at risk of injury or undue stress from dominant animals of the same or a different species.

Complies.

5. (1b) A pen or other enclosed structure or area for wildlife kept in captivity must be of an adequate and appropriate size, to enable each animal in the pen or other enclosed structure or area to keep an adequate and appropriate distance from the other animals and people so that it is not psychologically stressed \& 5 (2d) A pen or other enclosed structure or area for wildlife kept in captivity must have, one or more areas that are out of view of spectators.

Complies.
The cougars could move out of view of the public or each other by entering the shelters or moving to the other section of the enclosure that was not accessible to public viewing.
5. (1c) A pen or other enclosed structure or area for wildlife kept in captivity must be of an adequate and appropriate size, to ensure that the natural growth of each animal in the pen or other enclosed structure or area is not restricted.

Complies.
5. (4a) A pen or other enclosed structure or area for wildlife kept in captivity and any gates or other barriers to it, including moats, must be designed, constructed and locked or otherwise secured to prevent, interaction with people that may be unsafe or inappropriate for the wildlife.

Complies.
5. (4c) A pen or other enclosed structure or area for wildlife kept in captivity and any gates or other barriers to it, including moats, must be designed, constructed and locked or otherwise secured to prevent, animals or people (other than people who are required to enter the enclosure as part of their duties) from entering the pen or other enclosed structure or area by climbing, jumping, digging, burrowing or any other means.

Complies.
5. (5) A pen or other enclosed structure or area for wildlife kept in captivity and any gates or other barriers to it, including moats, must be designed, constructed and maintained in a manner that presents no harm to the wildlife.

Complies.

## Unable To Determine

2. (2) Every animal must be provided with adequate and appropriate medical attention.

Unable to determine.

2. (4) Every animal must be transported in a manner that ensures its physical safety and general welfare.

Unable to determine.
2. (6e) Every animal must be provided with adequate and appropriate protection from the elements, including harmful temperatures.

Unable to determine.
A wooden shelter was accessible in the enclosure. Further investigation is needed to confirm if the shelter is suitable as it was not easily visible from the public area. The enclosure was provided with some shade and wind protection by the surrounding trees and vegetation. It would be necessary to determine if the shelter offered sufficient protection from the wind, and if the ground within the shelter remained dry during wet weather. It would also require information from the owners or staff to determine if additional husbandry measures were taken during the winter such as bedding material being provided for insulation and for raising the animals off the ground, and if they added flaps to the shelter door way. It is unknown if both animals could use the shelter at the same time and if they would tolerate each other in the shelter.
2. (8) Every animal that is to be killed must be killed by a method that is humane and minimizes the pain and distress to the animal; an animal's pain and distress are deemed to be minimized if it is killed by a method that produces rapid, irreversible unconsciousness and prompt subsequent death.

Unable to determine.
4. (2) Wildlife kept in captivity must be provided with a daily routine that facilitates and stimulates natural movement and behaviour.

Unable to determine.
The daily routine could not be determined without interviewing staff. No evidence of an enrichment program was observed and could not be determined without interviewing staff. Determining if natural movement and behaviours occurred would require longer observation periods than afforded. Daily routines that include feeding, cleaning and enriching the lives and environments of the animals are essential to encouraging natural movement and behaviour. Denying animals access to appropriate space, materials and the opportunity to perform natural movements and behaviors can cause psychological stress [5.(1b)], problems with natural growth [5.(1c)], injury or undue stress among animals [4. (3)], and possibly pose a danger to the animal [2. (7c)].
5. (2b) \& (2e) A pen or other enclosed structure or area for wildlife kept in captivity must have, shelter from the elements that can accommodate all the animals in the pen or other enclosed structure or area at the same time; one or more sleeping areas that can accommodate all the animals in the pen or other enclosed structure ore area at the same time and that are accessible to all the animals at all times.


Unable to determine.
See point 2. (6e) regarding appropriate protection from the elements, including harmful temperatures.
5. (4b) A pen or other enclosed structure or area for wildlife kept in captivity and any gates or other barriers to it, including moats, must be designed, constructed and locked
or otherwise secured to prevent, animals escaping from the pen or other enclosed structure or area by climbing, jumping, digging, burrowing or any other means.

Unable to determine.
The enclosure was one of few that was constructed with metal framing instead of wood. It also had chain link fence which had much smaller openings than the metal mesh used throughout the zoo and was therefore safer with regards to animals or people reaching in or out of the enclosure. Some concrete was noted at the base of the enclosure possibly as a digging barrier or base for the enclosure but only small sections of it was visible. The concrete appeared loose as a chunk of it was visible in the enclosure away from the fence line. The security of the back section of the enclosure could not be determined as it could not be accessed by the public.

### 7.3 Lynx

Number of Individuals, Sex and Age
One adult lynx.

## Enclosure

The lynx was housed in the row of attached enclosures that included the lions, coyote and the raccoon. The enclosure was constructed with wooden beam posts and wire mesh fencing. The enclosure was narrow and measured about 2 to 3 body lengths of the lynx; possibly $2.4 \times 4.9 \mathrm{~m}$. ( $8 \times 16 \mathrm{ft}$.) equalling $12 \mathrm{~m}^{2}\left(128 \mathrm{ft}^{2}\right)$. The Global Federation of Animal Sanctuaries' (GFAS) Standards for Felid Sanctuaries recommends that a lynx enclosure be $83.6 \mathrm{~m}^{2}\left(900 \mathrm{ft}^{2}\right)$ per pair of compatible medium sized felids with a height 3.7 m . ( 12 ft .). ${ }^{12}$ That is 10.5 times as large as the Spruce Haven Zoo enclosure. The fence height was about 2.5 m . ( 8 ft .) high with an additional 1.2 m . ( 4 ft .) of raised roof area canopied with wire mesh fencing. The wooden beams of the roof construction allowed the lynx to use the vertical space somewhat by walking on the beams above the enclosure. During the inspection, the lynx was pacing along this wood frame during the visit. The enclosure had natural soil substrate, about two or three small trees with foliage and no growing ground vegetation. The front of the enclosure was viewed by the public. The back of the enclosure abutted the coyote enclosure and the two sides neighboured the raccoon and the lion enclosures respectively. There was a pathway for the staff between the lynx and lion enclosures. A black rubber bucket with relatively clear water was in one corner. The back fence of the enclosure that was shared with the coyote enclosure appeared to be connected by a closed door made of wood and metal mesh fencing. No separate holding area for the lynx to facilitate cleaning was identified during the inspection. Since the coyote enclosure appears to have two sections it is possible

that the middle enclosure between the string of three acts as a shared holding area during cleaning. It is also possible that staff go in with the lynx for cleaning but this was not determined. If this were the case then the lynx and coyote would have access to one another through the fencing.

Shelter
A wooden box could be viewed in the enclosure that presumably acted as a nest box. However, it was partially hidden from view and could not be properly assessed as such.

Summary of Compliances as per Ontario Regulation 60/09 OSPCA Act Of the 23 points evaluated:

1. 12 are in compliance with the law,
2. 3 do not comply with the law,
3. 8 could not be determined.

## Summary of Concerns

The most concerning issues for the lynx include:

1. The small size of the enclosure limiting natural movement and behaviour,
2. The lack of privacy and the potential for psychological stress due to the small size of the enclosure and proximity to other species and the public.

Discussion of Compliance as per Ontario Regulation 60/09 OSPCA Act
Contraventions
2. (3) Every animal must be provided with the care necessary for its general welfare.

Does not comply.
This enclosure does not comply relative to 2. (6a) \& 5. (1a) \& 5. (2a) \& 5. (2c), regarding insufficiant space to perform natural behaviour. It is possible that the lynx has access to a larger enclosure but this could not be determined.

The Global Federation of Animal Sanctuaries' (GFAS) Standards for Felid Sanctuaries recommends that a lynx enclosure be $83.6 \mathrm{~m}^{2}\left(900 \mathrm{ft} .^{2}\right)$ per pair of compatible medium sized felids with a height 3.7 m . (12 ft.). ${ }^{12}$ That is 10.5 times as large as the Spruce Haven Zoo enclosure. In addition, facilities meeting only the minimum requirements for enclosure space are required to "employ additional environmental enrichment, focusing on physical and mental exercise rather than food, to compensate for reduced space and complexity." ${ }^{12}$ GFAS further stipulates that shift areas or enclosures for small to medium sized felids be a minimum of $37.2 \mathrm{~m}^{2}\left(400 \mathrm{ft}^{2}\right)$ with a height of $2.4 \mathrm{~m}(8 \mathrm{ft}$.).

Following are a list of enclosure criteria that increase complexity deemed critical for lynx welfare by GFAS:
"1. The habitat and living conditions are species appropriate and replicate, in as much as possible, the felids' wild habitat with a balance between hygiene and the species' physiological and psychological needs. This includes adequate space, both vertical and horizontal, and appropriate space, in terms of diversity and complexity.

2. The physical space provides varied opportunities for the felids to interact with the environment and key elements are changed often, resulting in a dynamic living space.
3. The habitat provides appropriate visual, olfactory, and acoustic barriers.
4. Climbing felid species are provided with appropriate three-dimensional environments to accommodate an array of locomotory and foraging behaviors, as well as appropriate sleeping and resting areas, including nesting and bedding materials.
5. Felid species who naturally dig and root are provided with suitable substrates, nesting and bedding as species appropriate."12

At the time of the inspection the lynx enclosure at Spruce Haven Zoo did not have these features.
2. (6a) Every animal must be provided with adequate and appropriate space to enable the animals to move naturally and to exercise \& 5. (1a) A pen or other enclosed structure or area for wildlife kept in captivity must be of and adequate and appropriate size to facilitate and stimulate natural movement and behaviour \& 5. (2a) \& (2c) A pen or other enclosed structure or area for wildlife kept in captivity must have features and furnishings that facilitate and stimulate the natural movement and behaviour of each animal in the pen or other enclosed structure or area; surfaces and other materials that accommodate the natural movement and behaviour of each animal in the pen or other enclosed structure or area.

Does not comply.
The enclosure was too small to house a lynx and did not allow for natural movement and exercise such as running. The lynx did have the opportunity to jump onto the shelter roof and use the enclosure frame to climb and walk on. The size of the enclosure is comparable to indoor holding areas in many accredited zoos or quarantine rooms which are primarily meant to hold animals overnight or for short periods of time. The back of the lynx enclosure is shared with the coyote enclosure and there appears to be a door between the two. No separate holding area for the lynx to facilitate cleaning was identified during the inspection. Since the coyote enclosure appears to have two sections it could be possible that the part of the coyote enclosure is either used to facilitate cleaning of the lynx enclosure and may sometimes be shared by the two species one at a time. This would need to be investigated further and could potentially offer the lynx occasional access to a larger enclosure that might allow for natural movement and exercise. Additional resting areas could be added to the enclosure especially in the vertical space as only beams were visible and the lynx would benefit from an elevated resting platform. The enclosure was barren and would benefit from more furnishings in addition to the shelter, however the size of the enclosure is so small that the addition of furnishings on the ground would ultimately limit what little exercise space that was available.
4. (2) Wildlife kept in captivity must be provided with a daily routine that facilitates and stimulates natural movement and behaviour.

Does not comply.
See above comments regarding space under 2. (6a) \& 5. (1a) \& 5. (2a) \& 5. (2c).


The daily routine could not be determined without interviewing staff. No evidence of an enrichment program was observed and could not be determined without interviewing staff. Determining if natural movement and behaviours occurred would require longer observation periods than afforded. Daily routines that include feeding, cleaning and enriching the lives and environments of the animals are essential to encouraging natural movement and behaviour. Denying animals access to appropriate space, materials and the opportunity to perform natural movements and behaviors can cause psychological stress [5.(1b)], problems with natural growth [5.(1c)], injury or undue stress among animals [4. (3)], and possibly pose a danger to the animal [2. (7c)].

## In Compliance

2. (1) Every animal must be provided with adequate and appropriate food and water.

Food. Unable to determine diet.
Water. Complies. The black rubber bucket contained relatively clear water. The outside of the dish was muddy. The ground was still damp and muddy in some areas from the previous days' rain and it could not be determined if the dirt had just accumulated from that morning. If staff are unable to maintain the water throughout the day it is recommended that alternative measures are taken to keep the water source cleaner, offering more than one water source, or offering a water source that is raised off the ground.
2. (6b) Every animal must be provided with adequate and appropriate sanitary conditions.

Complies.
Due to the small size of the enclosure, urine saturation and fecal contamination of the soil are possible. However there was no visual evidence of that. Urine saturation and fecal contamination of the soil changes the dynamics of the microbe communities in the ground, and can contaminate new foods thrown onto it, and can contaminate paw pads and fur that the lynx then ingests when grooming itself. This needs to be further investigated.
2. (6c) Every animal must be provided with adequate and appropriate ventilation.

Complies.
This was an open, outdoor enclosure.
2. (6d) Every animal must be provided with adequate and appropriate light.

Complies.
This was an open, outdoor enclosure.

2. (7a) If an animal is confined to a pen or other enclosed structure or area the pen or other enclosed structure or area, and any structures or material in it, must be in a state of good repair.

Complies.
2. (7b) If an animal is confined to a pen or other enclosed structure or area the pen or other enclosed structure or area, and any surfaces, structures and materials in it, must be made of and contain only materials that are (i) safe and non-toxic for the animal, and
(ii) of a texture and design that will not bruise, cut or otherwise injure the animal. \& 5 . (3a\&b) A pen or enclosed structure or area for wildlife kept in captivity must be made of and contain only materials that are, non-toxic for the animals kept in the pen or other enclosed structure or area; and of a texture and design that will not bruise, cut or otherwise injure the animals.

Complies.
2. (7c) If an animal is confined to a pen or other enclosed structure or area the pen or other enclosed structure or area must not contain one or more other animals that may pose a danger to the animal.

Complies
4. (3) Wildlife kept in captivity must be kept in compatible social groups to ensure the general welfare of the individual animals and of the group and to ensure that each animal in the group is not at risk of injury or undue stress from dominant animals of the same or a different species.

Complies.
5. (1c) A pen or other enclosed structure or area for wildlife kept in captivity must be of an adequate and appropriate size, to ensure that the natural growth of each animal in the pen or other enclosed structure or area is not restricted.

Complies It was not possible to determine if or how the lack of space in the enclosure has affected the natural growth of the individual animal as the enclosure limits the animal's abilities to perform natural behaviours and it was not known how long the lynx may have been held in this enclosure.
5. (2b) \& (2e) A pen or other enclosed structure or area for wildlife kept in captivity must have, shelter from the elements that can accommodate all the animals in the pen or other enclosed structure or area at the same time; one or more sleeping areas that can accommodate all the animals in the pen or other enclosed structure ore area at the same time and that are accessible to all the animals at all times.


Complies.
See point 2. (6e) regarding appropriate protection from the elements, including harmful temperatures.
5. (4a) A pen or other enclosed structure or area for wildlife kept in captivity and any gates or other barriers to it, including moats, must be designed, constructed and locked or otherwise secured to prevent, interaction with people that may be unsafe or inappropriate for the wildlife.

Complies.
A holding area was not visible for the lynx so it is unclear as to how the enclosure is safely cleaned and maintained by staff.
5. (5) A pen or other enclosed structure or area for wildlife kept in captivity and any gates or other barriers to it, including moats, must be designed, constructed and maintained in a manner that presents no harm to the wildlife.

Complies.
Unable To Determine
2. (2) Every animal must be provided with adequate and appropriate medical attention.

Unable to determine.
2. (4) Every animal must be transported in a manner that ensures its physical safety and general welfare.

Unable to determine.
2. (5) Every animal must be provided with an adequate and appropriate resting and sleeping area

Unable to determine.
Needs further investigation to determine if the shelter offers bedding and relief from hard surfaces. There is space to rest on the ground, on the wood roof of the shelter, and in the shelter. Due to the small enclosure size the ground surfaces can become hard packed and there was no visible access to vegetation for the lynx to rest on. Since animals in captivity are not able to seek out relief from the hard surfaces in their enclosure they need to be provided with an alternative.
2. (6e) Every animal must be provided with adequate and appropriate protection from the elements, including harmful temperatures.

Unable to determine.
Further investigation is needed to confirm if the wooden shelter is suitable as the inside was not easily visible from the public access. The surrounding trees and vegetation did

provide the enclosure with some shade and protection from the wind. It would be necessary to determine if the shelter offered sufficient protection from the wind, and if the ground within the shelter remained dry during wet weather. It would also require information from the owners or staff to determine if additional measures are taken for the winter such as the addition of bedding material for insulation and to raise the lynx off the cold ground, and if they add flaps to the shelter entrance.
2. (8) Every animal that is to be killed must be killed by a method that is humane and minimizes the pain and distress to the animal; an animal's pain and distress are deemed to be minimized if it is killed by a method that produces rapid, irreversible unconsciousness and prompt subsequent death.

Unable to determine.
5. (1b) A pen or other enclosed structure or area for wildlife kept in captivity must be of an adequate and appropriate size, to enable each animal in the pen or other enclosed structure or area to keep an adequate and appropriate distance from the other animals and people so that it is not psychologically stressed \& 5 (2d) A pen or other enclosed structure or area for wildlife kept in captivity must have, one or more areas that are out of view of spectators.

Unable to determine.
Due to the small size of the enclosure the only escape possible from the view of spectators is in the shelter. However, the shelter is against the fence line that is open to public viewing. This is not ideal. If the lynx wished to be out of view of the public it must put itself in proximity to the people it is trying to avoid.
5. (4b) A pen or other enclosed structure or area for wildlife kept in captivity and any gates or other barriers to it, including moats, must be designed, constructed and locked or otherwise secured to prevent, animals escaping from the pen or other enclosed structure or area by climbing, jumping, digging, burrowing or any other means.

Unable to determine.
Requires further investigation to determine if digging barriers are in place and to determine the integrity of the wire mesh fencing and roof covering. The fencing appeared loose at the top but that could not be confirmed.
5. (4c) A pen or other enclosed structure or area for wildlife kept in captivity and any gates or other barriers to it, including moats, must be designed, constructed and locked or otherwise secured to prevent, animals or people (other than people who are required to enter the enclosure as part of their duties) from entering the pen or other enclosed structure or area by climbing, jumping, digging, burrowing or any other means.

Unable to determine.


### 7.4 Wolves

Number of Individuals, Sex and Age
Four wolves were housed together in an enclosure that abuts the backyard of the private home of the owners. A staff member told the investigator that their two adult wolves bred and had a litter of two pups in 2013. Thus, this is a family group which includes two adults and two subadults. During the visit the wolves remained in their dens but were later observed to be running around the enclosure as the investigator was leaving the zoo. Due to distance constraints the investigator was not able to confirm the age or size of pack members.

## Enclosure

The enclosure is estimated to be $12 \times 20 \mathrm{~m}$. ( $39 \times 65 \mathrm{ft}$.) equalling $240 \mathrm{~m}^{2}\left(2,583 \mathrm{ft}^{2}\right)$ in area. ${ }^{14}$ The AZA Large Canid (Canidae) Care Manual recommends that a single generation breeding group enclosure be $930 \mathrm{~m} 2(10,000 \mathrm{ft} 2)$. That is approximately 4 times the size of the Spruce Haven Zoo exhibit. The fence was approximately $2.5-3 \mathrm{~m}$. ( $8-10 \mathrm{ft}$.) in height. The enclosure was constructed with wooden support posts and wire mesh fencing. The gauge of the fencing appeared too thin for housing wolves, and it rose above some of the wooden posts by about 0.3 m . ( 1 ft.$)$. A second layer of wire mesh fencing overlapped the enclosure fencing. This fencing was shorter and had smaller square openings and appeared to be a measure put in place to prevent either people or animals from putting hands and arms through the primary fence. Electric fencing was visible in the enclosure along the top of the fencing. There appeared to be a single strand of barbed wire that was strung along the top of the fence. Only a small section of fenceline, approximately 2 m . ( 6 ft .), offered public viewing. The enclosure construction appeared very inadequate for housing wolves. No overhang fencing was seen. The enclosure had natural soil substrate, some patches of grass and was surrounded by trees that provided shade and wind protection. Four old logs were visible and four small piles of either coniferous trees or bows were laid out within the enclosure. Some shallow depressions in the soil were visible where some digging may have occurred.

## Shelter

The shelter area was approximately $2.5 \times 3 \mathrm{~m}\left(8 \times 10 \mathrm{ft}\right.$.) equalling an area of $7.5 \mathrm{~m}^{2}(81$ $\mathrm{ft}^{2}$ ). A staff person confirmed that the wolves had dens. It appeared that the shelter was built over the dens. The walls were constructed with vertical logs of different heights and two pieces of flat plywood were used as the roofing. A row of vertical logs created a sort of center wall in the shelter. It is unknown if there are two dens in the shelter area side by side or if the logs act as a barrier wall in one larger shelter. The shelter was at the far end of the enclosure away from the public viewing area and therefore was difficult to assess.

## Summary of Compliances as per Ontario Regulation 60/09 OSPCA Act

 Of the 23 points evaluated:1. 10 are in compliance with the law,
2. 4 do not comply with the law,
3. 9 could not be determined.


## Summary of Concerns

The most concerning issues for the wolves include:

1. The security of the enclosure design relative to public safety,
2. The zoo's decision to breed wolves when it appears enclosure space is limited as well as the means to properly maintain enclosures,
3. The zoo's ability and resources to manage the wolf group in the future as the relationships and group dynamics change.

## Discussion of Compliance as per Ontario Regulation 60/09 OSPCA Act

Contraventions
2. (7b) If an animal is confined to a pen or other enclosed structure or area the pen or other enclosed structure or area, and any surfaces, structures and materials in it, must be made of and contain only materials that are (i) safe and non-toxic for the animal, and (ii) of a texture and design that will not bruise, cut or otherwise injure the animal. \& 5 . (3a\&b) A pen or enclosed structure or area for wildlife kept in captivity must be made of and contain only materials that are, non-toxic for the animals kept in the pen or other enclosed structure or area; and of a texture and design that will not bruise, cut or otherwise injure the animals..

Does not comply
Barbed wire was seen along the top of the fencing and the animals could cut themselves. The Global Federation of Animal Sanctuaries Standards for Canid Sanctuaries states that barbed or razor wire are not used to contain canids ${ }^{15}$.
5. (4a) A pen or other enclosed structure or area for wildlife kept in captivity and any gates or other barriers to it, including moats, must be designed, constructed and locked or otherwise secured to prevent, interaction with people that may be unsafe or inappropriate for the wildlife.

Does not comply.
The public stand-off barrier was not adequate, was loose and could be stepped around by the public. A log was laid out that could easily be stepped over and around. A small orange traffic cone and warning signs were in place. Two tires were also leaning against the public accessed section of fence of the enclosure. A holding area was not visible so it is not clear if the staff need to go in with the wolves to clean the enclosure which poses a human safety hazard.
5. (4b) A pen or other enclosed structure or area for wildlife kept in captivity and any gates or other barriers to it, including moats, must be designed, constructed and locked or otherwise secured to prevent, animals escaping from the pen or other enclosed structure or area by climbing, jumping, digging, burrowing or any other means.

Does not comply.
This needs further investigation to determine if digging barriers are in place. The wire mesh fencing is inadequate. To prevent wolves from digging underneath the perimeter

fence the AZA Large Canid (Canidae) Care Manual recommends the use of 91 cm . (3 ft .) of chain link fencing attached to the base of the perimeter fence at a $90^{\circ}$ angle and buried $15-30 \mathrm{~cm}$. (6-12 in.) below the ground and the use of concrete footings at gates or areas where fencing can not be buried. ${ }^{13}$ The manual also states that large canids have the ability to climb mesh fencing, thus climbing barriers should be used. The minimum fence height recommended is 2.5 m . ( 8.2 ft .) in addition to a 1 m . ( 39 in .) overhanging climbing barrier at a $35-45^{\circ}$ upward angle. Also, the AZA recommends the use of a minimum of 9 gauge steel wire in 5 cm . (2 in.) square chain link fabric attached to metal line pipes and terminal posts set in concrete. The manual warns against loose fencing that allows canids to get their carnassial teeth close enough to bite through the mesh which they note occurred at one member facility using 9 gauge chain link fencing. The escape of large carnivore poses a threat to staff and the local community. The current construction of the enclosure places both human and the animal safety at risk.
5. (5) A pen or other enclosed structure or area for wildlife kept in captivity and any gates or other barriers to it, including moats, must be designed, constructed and maintained in a manner that presents no harm to the wildlife.

Does not comply
Barbed wire was seen along the top of the fencing and the animals could cut themselves. The Global Federation of Animal Sanctuaries Standards for Canid Sanctuaries states that .barbed or razor wire are not used to contain canids ${ }^{15}$.

## In Compliance

2. (3) Every animal must be provided with the care necessary for its general welfare.

Complies.
2. (5) Every animal must be provided with an adequate and appropriate resting and sleeping area.

Complies.
All four wolves were able to stay within the shelter during the visit. This complies until the subadults reach the period of natural dispersion at 18 months of age and will attempt to disperse. Then the subadults will need separate quarters far from their parents or will need to be completely removed from the enclosure. There were locations within the enclosure to rest in the sun, in the shade, on the shelter roof, on the ground in vegetation, or on the piled coniferous tree bows.
2. (6b) Every animal must be provided with adequate and appropriate sanitary conditions.

Complies.

2. (6c) Every animal must be provided with adequate and appropriate ventilation.

Complies.
This was an open, outdoor enclosure.
2. (6d) Every animal must be provided with adequate and appropriate light.

Complies.
This was an open, outdoor enclosure.
2. (7c) If an animal is confined to a pen or other enclosed structure or area the pen or other enclosed structure or area must not contain one or more other animals that may pose a danger to the animal.

Complies.
The wolves are a family group and appeared to tolerate one another once they did come out of the dens. The wolves were only viewed briefly and from a distance. As the pups mature zoo owners and staff will have to manage the group as the relationships and tolerance levels may change.

The AZA Large Canid (Canidae) Care Manual delineates the social problems that will occur from the breeding of this adult pair:
"Breeding pairs with young rarely have social incompatibility problems until the pups reach approximately 18 months of age. ...adolescent animals would normally disperse from the family group at this time. Without the ability to disperse, social and sexual maturation in the family pack can result in incest and/or pack conflict. It is best to remove 18 month old individuals from the pack and keep them separated by sex, ...
Contraception of all the reproductively mature members in a large family pack containing adults and their mature offspring has not been effective in reducing pack conflict.,"13
4. (3) Wildlife kept in captivity must be kept in compatible social groups to ensure the general welfare of the individual animals and of the group and to ensure that each animal in the group is not at risk of injury or undue stress from dominant animals of the same or a different species.

Complies.
Wolves are a family group and appeared to tolerate one another. As the pups mature zoo owners and staff will have to manage the group as the relationships and tolerance levels may change.
5. (1b) A pen or other enclosed structure or area for wildlife kept in captivity must be of an adequate and appropriate size, to enable each animal in the pen or other enclosed structure or area to keep an adequate and appropriate distance from the other animals and people so that it is not psychologically stressed \& 5. (2d) A pen or other enclosed

structure or area for wildlife kept in captivity must have, one or more areas that are out of view of spectators.

Complies.
All four wolves were able to stay out of view of spectators during the visit and only one small section of the enclosure was accessible to public viewing. It is unknown if the wolves can maintain an adequate distance from humans and pets associated with the private home on the property which has a backyard that is directly across from the wolf enclosure.
5. (1c) A pen or other enclosed structure or area for wildlife kept in captivity must be of an adequate and appropriate size, to ensure that the natural growth of each animal in the pen or other enclosed structure or area is not restricted.

Complies.
5. (2b) \& (2e) A pen or other enclosed structure or area for wildlife kept in captivity must have, shelter from the elements that can accommodate all the animals in the pen or other enclosed structure or area at the same time; one or more sleeping areas that can accommodate all the animals in the pen or other enclosed structure ore area at the same time and that are accessible to all the animals at all times

Complies.
All four wolves were able to remain in the den together. As the pups mature zoo owners and staff will have to manage the group as the relationships between the adult wolves may change.
See point 2. (6e) regarding appropriate protection from the elements, including harmful temperatures.

## Unable To Determine

2. (1) Every animal must be provided with adequate and appropriate food and water.

Food. Not able to determine diet. Water. Unable to determine.
2. (2) Every animal must be provided with adequate and appropriate medical attention.

Unable to determine.
2. (4) Every animal must be transported in a manner that ensures its physical safety and general welfare.

Unable to determine.
2. (6a) Every animal must be provided with adequate and appropriate space to enable the animals to move naturally and to exercise \& 5. (1a) A pen or other enclosed structure

or area for wildlife kept in captivity must be of and adequate and appropriate size to facilitate and stimulate natural movement and behaviour \& 5. (2a) \& (2c) A pen or other enclosed structure or area for wildlife kept in captivity must have features and furnishings that facilitate and stimulate the natural movement and behaviour of each animal in the pen or other enclosed structure or area; surfaces and other materials that accommodate the natural movement and behaviour of each animal in the pen or other enclosed structure or area.

Unable to determine.
Upon leaving the facility individuals could be seen running within the enclosure. The AZA Large Canid (Canidae) Care Manual recommends that a single generation breeding group enclosure be 930 m 2 ( $10,000 \mathrm{ft} 2$ ). That is approximately 4 times the size of the Spruce Haven Zoo exhibit. In addition, the manual delineates the social problems that will occur when the cubs reach the period of natural dispersion at the age of 18 months.

Thus this family grouping will need to be managed within the next 8-10 months such that the young are able to move away from the parents.
2. (6e) Every animal must be provided with adequate and appropriate protection from the elements, including harmful temperatures.

Unable to determine.
Wolves have access to dens with wood covering and reinforcement. All four wolves were not visible when viewing the enclosure as a staff member said they can hide in the dens. The proper drainage of the dens needs to be further investigated to confirm compliance and if additional measures are taken by the zoo in the winter months. Some shade and wind protection was provided by the trees surrounding the enclosure.
2. (7a) If an animal is confined to a pen or other enclosed structure or area the pen or other enclosed structure or area, and any structures or material in it, must be in a state of good repair.

Unable to determine.
2. (8) Every animal that is to be killed must be killed by a method that is humane and minimizes the pain and distress to the animal; an animal's pain and distress are deemed to be minimized if it is killed by a method that produces rapid, irreversible unconsciousness and prompt subsequent death.

Unable to determine.
4. (2) Wildlife kept in captivity must be provided with a daily routine that facilitates and stimulates natural movement and behaviour.

Unable to determine.
The daily routine could not be determined without interviewing staff. No evidence of an enrichment program was observed and could not be determined without interviewing staff. Determining if natural movement and behaviours occurred would require longer

observation periods than afforded. Daily routines that include feeding, cleaning and enriching the lives and environments of the animals are essential to encouraging natural movement and behaviour. Denying animals access to appropriate space, materials and the opportunity to perform natural movements and behaviors can cause psychological stress [5.(1b)], problems with natural growth [5.(1c)], injury or undue stress among animals [4. (3)], and possibly pose a danger to the animal [2. (7c)].
5. (4c) A pen or other enclosed structure or area for wildlife kept in captivity and any gates or other barriers to it, including moats, must be designed, constructed and locked or otherwise secured to prevent, animals or people (other than people who are required to enter the enclosure as part of their duties) from entering the pen or other enclosed structure or area by climbing, jumping, digging, burrowing or any other means.

Unable to determine.
It was not possible to properly view the entire fence line and enclosure.

### 7.5 Coyote

Number of Individuals, Sex and Age
An enclosure labelled "Coyote" was observed to have one adult animal in the enclosure that lay on the roof of the shelter for the duration of the investigation which did not provide the investigator with an opportunity for further identification. For the purpose of this report the animal is referred to as a coyote.

## Enclosure

It appears likely that the coyote had access to two sections in its enclosure or has access to what was once a separate enclosure. If this is the case the animal may have access to more space but confirming this from the public viewing area was difficult. The primary enclosure was approximately $6 \times 6 \mathrm{~m}$. ( $20 \times 20 \mathrm{ft}$.) equalling $37 \mathrm{~m}^{2}\left(400 \mathrm{ft}{ }^{2}\right)$ or if it has access to two sections then it could have been approximately $6 \times 12 \mathrm{~m}(20 \times 40$ ft .) equalling $800 \mathrm{ft}^{2}{ }^{\left(74 \mathrm{~m}^{2}\right)}$ in area. The AZA Large Canid (Canidae) Care Manual recommends that an enclosure housing $1-2$ individuals be $465 \mathrm{~m}^{2}\left(5,000 \mathrm{ft}^{2}\right)$ in area. ${ }^{13}$ This is over 6 times as large as the total of both enclosures at the Spruce Haven Zoo.

The enclosure was attached to the row of enclosures that housed the lions, the raccoon and a lynx. The enclosure shared one fence line with the lions next door. In an effort to separate the two species a solid piece of material, which looked like metal roofing, was placed between the two enclosures starting at the ground and went up about 2.5 m . (8 ft .). The other two sides of the enclosure abutted the lynx and the racoon exhibits respectively. Similar makeshift visual barriers were also in place similar the metal roofing material and wood. However the lions and lynx may well have been able to look into the coyote enclosure from above when they stood on the shelter roofs or platforms in their enclosures. The lynx and coyote shared a fence line without any barriers. The coyote enclosure was constructed of wooden support beams and wire mesh fencing. The surrounding coniferous trees provided shade and possibly some wind protection. The substrate was hard pan dirt and there were trees within the perimeter enclosure.


## Shelters

Two wooden shelters were located in the first section of the enclosure and some bedding was visible inside one of them. The animal was able to lay on the roof of the shelter. It was difficult to determine if the animal could fit properly in the shelter as the roof had some overhang and because of the distance from the viewing area.

## Signage

The signage was inconsistent. A sign indicating "Red Foxes" was posted on the inside of the second section of the enclosure while another sign labelled that enclosure as "Coyote".

Summary of Compliances as per Ontario Regulation 60/09 OSPCA Act Of the 23 points evaluated:

1. 12 are in compliance with the law,
2. 2 do not comply with the law,
3. 9 could not be determined.

## Summary of Concerns

The most concerning issues for the coyote include:

1. The security and safety of the enclosure design poses a possible danger to the public,
2. The size of the enclosure and whether the enclosure size permits natural movement and behaviour.

## Discussion of Compliance as per Ontario Regulation 60/09 OSPCA Act

## Contraventions

5. (4b) A pen or other enclosed structure or area for wildlife kept in captivity and any gates or other barriers to it, including moats, must be designed, constructed and locked or otherwise secured to prevent, animals escaping from the pen or other enclosed structure or area by climbing, jumping, digging, burrowing or any other means.

Does not comply.
This needs further investigation to determine if digging barriers are in place and if the mesh fencing is of adequate strength and height to prevent escape or climbing. Electric fencing was not apparent. To prevent canids from digging out of an enclosure the AZA Large Canid (Canidae) Care Manual recommends 91 cm . (3 ft.) of chain-link fencing at the base of the perimeter fencing attached at a $90^{\circ}$ angle and buried $15-30 \mathrm{~cm}$. (6-12 in.) below the ground and the use of concrete footings at gates or areas where fencing cannot be buried. ${ }^{13}$ The manual also states that large canids have the ability to climb mesh fencing, thus climbing barriers should be used. The minimum fence height recommended is 2.5 m . ( 8.2 ft .) in addition to a 1 m . ( 3.3 ft .) overhanging climbing barrier at a $35-45^{\circ}$ upward angle. Further, the manual recommends a minimum of 9 gauge steel wire mesh in 5 cm . (2 in.) square chain-link fabric with the use of metal line pipes and terminal posts set in concrete. The AZA warns against loose fencing that allows canids to get their carnassial teeth close enough to bite through the mesh which was

noted to have occurred at one facility using 9 gauge chain link mesh fencing. Although the enclosure fence was estimated at 3 m . ( 10 ft .), no overhang fencing or climbing barriers were observed.
5. (4c) A pen or other enclosed structure or area for wildlife kept in captivity and any gates or other barriers to it, including moats, must be designed, constructed and locked or otherwise secured to prevent, animals or people (other than people who are required to enter the enclosure as part of their duties) from entering the pen or other enclosed structure or area by climbing, jumping, digging, burrowing or any other means.

Does not comply.
The door accessing the coyote enclosure was not fully locked. The doorway was divided into two section, a top section and smaller bottom section. The top had a lock on it while the bottom section had on a metal hook latching the door closed.

## In Compliance

2. (6b) Every animal must be provided with adequate and appropriate sanitary conditions.

Complies
2. (6c) Every animal must be provided with adequate and appropriate ventilation.

Complies.
This was an open, outdoor enclosure.
2. (6d) Every animal must be provided with adequate and appropriate light.

Complies.
This was an open, outdoor enclosure.
2. (7a) If an animal is confined to a pen or other enclosed structure or area the pen or other enclosed structure or area, and any structures or material in it, must be in a state of good repair.

Complies.
2. (7b) If an animal is confined to a pen or other enclosed structure or area the pen or other enclosed structure or area, and any surfaces, structures and materials in it, must be made of and contain only materials that are (i) safe and non-toxic for the animal, and (ii) of a texture and design that will not bruise, cut or otherwise injure the animal \& 5 . (3a\&b) A pen or enclosed structure or area for wildlife kept in captivity must be made of and contain only materials that are, non-toxic for the animals kept in the pen or other

enclosed structure or area; and of a texture and design that will not bruise, cut or otherwise injure the animals.

Complies.
2. (7c) If an animal is confined to a pen or other enclosed structure or area the pen or other enclosed structure or area must not contain one or more other animals that may pose a danger to the animal.

Complies.
Only one animal was observed in the enclosure.
4. (3) Wildlife kept in captivity must be kept in compatible social groups to ensure the general welfare of the individual animals and of the group and to ensure that each animal in the group is not at risk of injury or undue stress from dominant animals of the same or a different species.

Complies.
5. (1b) A pen or other enclosed structure or area for wildlife kept in captivity must be of
an adequate and appropriate size, to enable each animal in the pen or other enclosed structure or area to keep an adequate and appropriate distance from the other animals and people so that it is not psychologically stressed \& 5(2d) A pen or other enclosed structure or area for wildlife kept in captivity must have, one or more areas that are out of view of spectators.

Complies.
A shelter provided an area out of view of the spectators who could only access the enclosure from two sides. However two sides of the enclosure were shared with other animals, the lions on one side with a visual barrier, and the lynx and raccoon along the other side. The close proximity to other animals can cause psychological stress although it appears the zoo has taken some measures with the addition of partial visual barriers.
5. (1c) A pen or other enclosed structure or area for wildlife kept in captivity must be of an adequate and appropriate size, to ensure that the natural growth of each animal in the pen or other enclosed structure or area is not restricted.

Complies.
5. (2b) \& (2e) A pen or other enclosed structure or area for wildlife kept in captivity must have, shelter from the elements that can accommodate all the animals in the pen or other enclosed structure or area at the same time; one or more sleeping areas that can accommodate all the animals in the pen or other enclosed structure ore area at the same time and that are accessible to all the animals at all times.


Complies.
There were enough resting spaces to accommodate one individual. There appears to be two shelters in the enclosure. See point 2. (6e) regarding appropriate protection from the elements, including harmful temperatures.
5. (4a) A pen or other enclosed structure or area for wildlife kept in captivity and any gates or other barriers to it, including moats, must be designed, constructed and locked or otherwise secured to prevent, interaction with people that may be unsafe or inappropriate for the wildlife.

Complies.
5. (5) A pen or other enclosed structure or area for wildlife kept in captivity and any gates or other barriers to it, including moats, must be designed, constructed and maintained in a manner that presents no harm to the wildlife.

Complies.
Unable to Determine
2. (1) Every animal must be provided with adequate and appropriate food and water.

Unable to determine.
A water dish was visible with water in it but it was too far from the public viewing area to assess.
2. (2) Every animal must be provided with adequate and appropriate medical attention.

Unable to determine
2. (3) Every animal must be provided with the care necessary for its general welfare.

Unable to determine.
This needs further investigation, based on 2. (6a) \& 5 . (1a) \& 5. (2a) \& 5 (2c), regarding having enough space to perform natural behaviour.

The AZA Large Canid (Canidae) Care Manual recommends the following criteria in environmental complexity to promote and maintain mental and physical well-being.
"Large canids are primarily cursorial animals, and should be provided with flat, smooth run-able ground so that they can walk, trot, or run. Earthen berms or long slopes are desirable topographical features. However, enclosures should not be barren. Many plants, furniture of varying sizes, and a variety of walk-able surfaces are highly recommended. Enclosures should be furnished with deadfall, logs, or boulders, and should be planted with trees and shrubs to provide shelter, shade, and escape from conspecifics. Natural or artificial shelters should be provided in both on and off exhibit areas to allow animals privacy and escape from inclement weather or insects. Examples

of appropriate shelters include: hollow logs, rock overhangs, underground dens, deadfall, logs, boulders, trees, bushes, holding buildings, and artificial den boxes made of wood or PVC.

Many canids use elevated areas (e.g. berms, tops of den boxes, elevated platforms) for resting, which can promote better visibility for both canids and zoo visitors. Exhibit furniture should not be situated close to the primary containment barrier where animals could use it for climbing, jumping, and escape. Large canids should be housed on natural substrates such as grass, dirt, sand, or forest litter. Natural substrates allow and encourage species-appropriate behaviors such as walking, trotting, running, caching food items, and digging shallow depressions for resting. The combination of substrate, topography, and furnishings will help to increase the quality of the exhibit from the animals' perspective. Large canids will occasionally dig their own dens, and may be encouraged to do so by providing the proper substrate in the enclosure. ${ }^{13}$
2. (4) Every animal must be transported in a manner that ensures its physical safety and general welfare.

Unable to determine.
2. (5) Every animal must be provided with an adequate and appropriate resting and sleeping area

Unable to determine.
This needs further investigation to determine access to bedding and/or other alternatives to hard packed ground or wood surfaces for resting. It was not possible to see inside the shelter during the investigation to assess if there was adequate bedding provided. Ground surfaces in small enclosures can become hard packed and there was no visible access to vegetation for the animals to rest on. Since animals in captivity are not able to seek out relief from the hard surfaces in their enclosure they need to be provided with an alternative.
2. (6a) Every animal must be provided with adequate and appropriate space to enable the animals to move naturally and to exercise \& 5. (1a) A pen or other enclosed structure or area for wildlife kept in captivity must be of and adequate and appropriate size to facilitate and stimulate natural movement and behaviour \& 5. (2a) \& (2c) A pen or other enclosed structure or area for wildlife kept in captivity must have features and furnishings that facilitate and stimulate the natural movement and behaviour of each animal in the pen or other enclosed structure or area; surfaces and other materials that accommodate the natural movement and behaviour of each animal in the pen or other enclosed structure or area.

Unable to determine.
This needs further investigation. It appears as though the animal has access to two sections in its enclosure or has access to what once was a separate enclosure through an opening. If this is the case the animal may have access to more space but visibility of the area was limited. It is unclear if the animal would have enough space to run naturally

or if the barrier between the two enclosures prevents natural movement such as running. There were two shelters that offered an area to jump and rest on. The AZA Large Canid (Canidae) Care Manual recommends that an enclosure housing 1-2 individuals be 465 $\mathrm{m}^{2}\left(5,000 \mathrm{ft}^{2}\right)$ in area. ${ }^{13}$ This is over 6 times as large as the total of both enclosures at the Spruce Haven Zoo.
2. (6e) Every animal must be provided with adequate and appropriate protection from the elements, including harmful temperatures.

Unable to determine
Needs further investigation to confirm if wooden shelter is suitable as it was not easily visible from the public access. The enclosure did provide some shade and wind protection with the surrounding trees and vegetation. It would be necessary to determine if the shelter offered sufficient protection from the wind, and if the ground within the shelter remained dry during wet weather. It would also require information from the owners or staff to determine if additional measures were taken for the winter such as bedding material being provided for insulation and for raising the animals off the ground, and if they added flaps to the shelter in the winter months as some facilities do. The Association of Zoos Aquariums' Large Canid Care Manual recommends that coyotes and wolves be provided with dry den structures and dry bedding such as straw with shelter from wind and rain.
2. (8) Every animal that is to be killed must be killed by a method that is humane and minimizes the pain and distress to the animal; an animal's pain and distress are deemed to be minimized if it is killed by a method that produces rapid, irreversible unconsciousness and prompt subsequent death.

Unable to determine.
4. (2) Wildlife kept in captivity must be provided with a daily routine that facilitates and stimulates natural movement and behaviour.

Unable to determine.
Was not able to determine if the enclosure allowed for natural movement as mentioned in 2. (6a) \& 5. (1a) \& 5. (2a) \& 5. (2c).

The daily routine could not be determined without interviewing staff. No evidence of an enrichment program was observed and could not be determined without interviewing staff. Determining if natural movement and behaviours occurred would require longer observation periods than afforded. Daily routines that include feeding, cleaning and enriching the lives and environments of the animals are essential to encouraging natural movement and behaviour. Denying animals access to appropriate space, materials and the opportunity to perform natural movements and behaviors can cause psychological stress [5.(1b)], problems with natural growth [5.(1c)], injury or undue stress among animals [4. (3)], and possibly pose a danger to the animal [2. (7c)].


### 7.6 American Black Bear

Number of Individuals, Sex and Age
One adult American black bear was observed during this investigation. According to local newspaper interviews accessed online the bear is a 26 year old male known as Ben.

## Body Condition

The bear was not very active during the investigation and was resting most of the time. The bear's coat condition was poor. It was matted in areas that appeared to be shedding and was lacklustre throughout. American black bears molt one time annually, from the spring to early summer. Thus the current condition suggests that the bear does not have the appropriate furnishings in the enclosure such as a vertical tree with rough bark to use for grooming, is unable to groom due to a physical impediment such as arthritis, has lost interest in grooming (which is common for bears that live in substandard environments), is suffering from a nutritional imbalance, or a combination of any or all of these conditions. The body condition of the bear appeared thin and underweight especially for September when American black bears should be hyper feeding in order to gain weight for winter hibernation. Initially the bear was mouthing and licking what appeared to be a piece of meat or bone resting on the inside of its right hind leg. Upon further inspection the object appeared to be attached to the bear and resembled an abnormal growth. It remained attached while the bear moved. The possible growth protruded from the inside of the bear's leg, was hairless, pink, and had a wider lumpy end on it.

## Enclosure

The black bear was housed in a detached single enclosure constructed of metal support posts with metal mesh fencing. The enclosure was approximately $7.5 \times 7.5 \mathrm{~m}$. ( $25 \times 25$ ft .) equalling $56 \mathrm{~m}^{2}\left(625 \mathrm{ft}^{2}\right)$ in area. The European Association of Zoos and Aquaria AZA Ursid Husbandry Guidelines states that one bear requires a minimum of $300 \mathrm{~m}^{2}(3,225$ $\mathrm{ft}^{2}$ ) which is 5 times larger than Ben's enclosure. ${ }^{6}$ The fencing appeared to be about 3 m . ( 10 ft .) high with a $0.5-1 \mathrm{~m}$. (2-3 ft.) inward angled overhang. There was electric fencing attached to the inside top of the fencing. An overhang fence that appeared to be a lesser gauge was attached at the top of the enclosure with metal bars. There was a poured concrete base at the bottom of the fencing. The substrate in the enclosure was hard pan dirt and there was one small patch of grass in the enclosure. Furnishings included a sunken household bathtub that was almost full of clear water and a tire hanging from a chain mounted to a wooden frame that was constructed around the shelter. A small holding area approximately $2 \mathrm{mx} 2.5 \mathrm{~m}(6 \mathrm{ft} . \times 8 \mathrm{ft}$.) was attached to the enclosure. The surrounding trees shaded and possibly protected the enclosure from the wind. The enclosure was too small for permanent housing and comparable in size to temporary indoor holding areas used in accredited zoos for quarantine, overnight stays, or for short term holding. There was a three gallon, black rubber feeding tub in the enclosure. The investigator was unable to determine the contents.


## Shelter

A four-sided, covered wooden structure acted as a shelter near the center of the enclosure. It appeared to have either a visual barrier or wind break in front of it made of wood. The shelter was between 1 to 2 body lengths of the bear (from head to rump) in length and about 1 body length of the bear in width.

## Enrichment

Additional items in the enclosure included 3 to 4 old logs strewn about, a small newly felled coniferous tree, and one tire lying on the ground.

Summary of Compliances as per Ontario Regulation 60/09 OSPCA Act Of the 23 points evaluated:

1. 13 are in compliance with the law,
2. 3 do not comply with the law,
3. 7 could not be determined.

## Summary of Concerns

The most imperative issues for the bear include:

1. The physical and medical status of the bear based on the points mentioned under section 2. (2),
2. The small size of the enclosure limiting natural movement and behaviour,
3. The lack of privacy and potential psychological stress due to the small size of the enclosure and proximity to other species and the public.

## Discussion of Compliance as per Ontario Regulation 60/09 OSPCA Act

Contraventions
2. (3) Every animal must be provided with the care necessary for its general welfare.

Does not comply.
This enclosure does not comply based on $2 .(6 a) \& 5 .(1 a) \& 5 .(2 a) \& 5 .(2 c)$, there is not enough space to perform natural behaviour.

This enclosure was relatively barren and did not provide the habitat complexity required to stimulate or encourage the expression of normal appetitive and/or other life sustaining behaviours. The space did not provide varied opportunities for the bear to interact with his environment and elements did not appear to be changed often resulting in a stagnant living space.
2. (6a) \& 5. (1a) \& 5. (2a) \& 5. (2c) Every animal must be provided with adequate and appropriate space, features and furnishing to enable the animal to move naturally and to exercise/show natural behaviour.


Does not comply.
The size of the enclosure is too small to provide permanent housing for an adult American black bear. There are not enough features or space to allow the bear to run, dig or climb which are necessary natural bear behaviours. The European Association of Zoos and Aquaria AZA Ursid Husbandry Guidelines states that one bear requires a minimum of $300 \mathrm{~m}^{2}\left(3,225 \mathrm{ft}^{2}\right)$ which is 5 times larger than Ben's enclosure. ${ }^{6}$

The North Carolina Captive Wildlife Regulations 15A NCAC 10H . 0302 Minimum Standards in section 5Bii state that American black bears require "at least one acre in extent for one or two bears and an additional one-eighth acre for each additional bear." ${ }^{7}$ This is 70 times larger than Ben's enclosure.

In addition, section 5Biv-viii of the law requires that:
"At least one-half of the area of confinement is wooded with living trees, shrubs and other perennial vegetation capable of providing shelter from sun and wind. The area of confinement contains a pool not less than one and one-half feet deep and not less than four by five feet in size. Provision is made for a den for each bear to which the bear may retire for rest, shelter from the elements, or respite from public observation. The area of confinement presents an overall appearance of a natural habitat and affords the bears protection from harassment or annoyance. Provisions are made for food and water that are adequate to maintain good health and for maintenance of sanitation."7
4. (2) Wildlife kept in captivity must be provided with a daily routine that facilitates and stimulates natural movement and behaviour.

Does not comply.
See above comments regarding space under 2. (6a) \& 5. (1a) \& 5. (2a) \& 5. (2c).
The daily routine could not be determined without interviewing staff. No evidence of an enrichment program was observed and could not be determined without interviewing staff. Determining if natural movement and behaviours occurred would require longer observation periods than afforded. Daily routines that include feeding, cleaning and enriching the lives and environments of the animals are essential to encouraging natural movement and behaviour. Denying animals access to appropriate space, materials and the opportunity to perform natural movements and behaviors can cause psychological stress [5.(1b)], problems with natural growth [5.(1c)], injury or undue stress among animals [4. (3)], and possibly pose a danger to the animal [2. (7c)].

The chain used to hang the tire inside the enclosure appeared clean and the apparatus appeared to be new. However, while giving an animal new items to explore is good it does not constitute a comprehensive or successful enrichment program. The EAZA Ursid Husbandry Guidelines defines meaningful bear enrichment as having two vital components:

"There are two approaches to enriching the animals' environment. Both are necessary to achieve positive results.

1. Including within enclosures facilities which enable the animals to undertake a wide range of natural activities by providing a variety of natural materials, structures and substrates.
2. Day-to-day enrichment by offering a daily range of stimuli, which stimulate different senses and elicit natural behaviours." ${ }^{6}$

## In Compliance

2. (6b) Every animal must be provided with adequate and appropriate sanitary conditions.

Complies
Due to the small size of the enclosure, urine saturation and fecal contamination of the soil are possible. However there was no visual evidence of that. Urine saturation and fecal contamination of the soil changes the dynamics of the microbe communities in the ground, and can contaminate new foods thrown onto it, and can contaminate paw pads and fur that the bear then ingests when grooming himself. This needs to be further investigated.
2. (6c) Every animal must be provided with adequate and appropriate ventilation.

Complies.
This was an open, outdoor enclosure.
2. (6d) Every animal must be provided with adequate and appropriate light.

Complies.
This was an open, outdoor enclosure.
2. (7a) If an animal is confined to a pen or other enclosed structure or area the pen or other enclosed structure or area, and any structures or material in it, must be in a state of good repair.

Complies.
2. (7b) \& 5. (3a \& b) If an animal is confined to a pen or other enclosed structure or area the pen or other enclosed structure or area, and any surfaces, structures and materials in it, must be made of and contain only materials that are (i) safe and non-toxic for the animal, and (ii) of a texture and design that will not bruise, cut or otherwise injure the animal.

Complies.

2. (7c) If an animal is confined to a pen or other enclosed structure or area the pen or other enclosed structure or area must not contain one or more other animals that may pose a danger to the animal.

Complies.
4. (3) Wildlife kept in captivity must be kept in compatible social groups to ensure the general welfare of the individual animals and of the group and to ensure that each animal in the group is not at risk of injury or undue stress from dominant animals of the same or a different species.

Complies .
5. (1b) \& 5(2d) A pen or other enclosed structure or area for wildlife kept in captivity must be of an adequate and appropriate size, to enable each animal in the pen or other enclosed structure or area to keep an adequate and appropriate distance from the other animals and people so that it is not psychologically stressed and one or more areas that are out of view of spectators.

Complies.
Although the bear could go into his shelter or behind the barrier in front of the shelter and be shielded from the view of public and other animals thus complying with the law, the conditions of the enclosure were far from ideal. The enclosure could be accessed from three sides by the public, with the fourth side exposed to another animal enclosure. Only a walking path separated the bear enclosure from the row of enclosures holding the African lions, the lynx, the raccoon and the wolf. The constant barking of dogs from the kennel could be clearly heard from the bear enclosure and the barking persisted during the entire visit.
5. (1c) A pen or other enclosed structure or area for wildlife kept in captivity must be of an adequate and appropriate size, to ensure that the natural growth of each animal in the pen or other enclosed structure or area is not restricted.

Complies.
It was not possible to determine if or how the lack of space in the enclosure has affected the natural growth of the individual animal as the bear may not have had any opportunities during its entire captive life to run, climb or perform other natural behaviours inhibited by the small enclosure and hard packed ground.
5. (2b) \& (2e) A pen or other enclosed structure or area for wildlife kept in captivity must have, shelter from the elements that can accommodate all the animals in the pen or other enclosed structure or area at the same time; one or more sleeping areas that can accommodate all the animals in the pen or other enclosed structure ore area at the same time and that are accessible to all the animals at all times.


Complies.
See point 2. (6e) regarding appropriate protection from the elements, including harmful temperatures.
5. (4a) A pen or other enclosed structure or area for wildlife kept in captivity and any gates or other barriers to it, including moats, must be designed, constructed and locked or otherwise secured to prevent, interaction with people that may be unsafe or inappropriate for the wildlife.

Complies.
5. (4c) A pen or other enclosed structure or area for wildlife kept in captivity and any gates or other barriers to it, including moats, must be designed, constructed and locked or otherwise secured to prevent, animals or people (other than people who are required to enter the enclosure as part of their duties) from entering the pen or other enclosed structure or area by climbing, jumping, digging, burrowing or any other means.

Complies.
5. (5) A pen or other enclosed structure or area for wildlife kept in captivity and any gates or other barriers to it, including moats, must be designed, constructed and maintained in a manner that presents no harm to the wildlife.

Complies.

## Unable To Determine

2. (1) Every animal must be provided with adequate and appropriate food and water.

Food - Unable to determine
Water - Unable to determine. It is unclear if the dish in the enclosure was used as a water source as the bath tub would not be a suitable water source if the bear uses it to bath in.
2. (2) Every animal must be provided with adequate and appropriate medical attention.

Unable to Determine.
This bear had the appearance of being alarmingly underweight for the time of year. All American black bears go through a period of metabolic depression in winter which requires of them that they hibernate. In preparation for this period the bears experience a fall period of hyperphagia where they exhibit increased appetites and feeding behaviour. In addition to seemingly having no fat reserves for the upcoming winter, he also had the appearance of lacking significant muscle mass befitting an adult American black bear male. This bear has the appearance of a Condition 1 Body Score of the five point body scoring chart as described by Dr. Heather Bacon;

"Pelvis and scapulae protruding, [and] ribs easily palpated. Angular appearance, with no body fat rounding out silhouette. A hollow will be noted between the pelvis and last rib showing virtually no fat." ${ }^{8}$

It is unknown if this animal is currently under veterinary care by a qualified wildlife veterinarian, but it is recommended that the health status of this bear be immediately evaluated by a qualified professionals based on the following observations.

1. Possible growth on the inside right leg,
2. Thin body condition,
3. Poor coat condition,
4. Above points combined with the advanced age of the bear,
5. Above points combine with the time of year when bears ideally put on weight in preparation for the upcoming winter.
6. (4) Every animal must be transported in a manner that ensures its physical safety and general welfare.

Unable to determine.
2. (5) \& 5. (2e) \& 5. (2b) Every animal must be provided with an adequate and appropriate resting, sleeping and shelter area, with one or more areas that is accessible and can accommodate all animals.

Unable to determine.
Needs further investigation regarding bedding and alternatives to hard surfaces. The enclosure provided enough space for the bear to rest either on the ground or potentially in the shelter. It was not possible to ascertain if bedding material was available in the shelter that would offer the bear an alternative to the hard packed ground. According to zoo statements in a local newspaper the bear is 26 years old. ${ }^{9}$ Geriatric animals in zoos require special considerations for their care as they age. Soft bedding can provide relief from hard surfaces for young and old animals alike but especially animals who may be suffering from age related conditions such as arthritis or insufficient body fat to act as a cushion.
2. (6e) Every animal must be provided with adequate and appropriate protection from the elements, including harmful temperatures.

Unable to determine.
This needs further investigation to determine if the shelter offers protection from the rain, good drainage of the shelter floor, if seasonal modifications are made to the shelter to provide for the bear's general well-being and behavioural needs such as hibernation.

2. (8) Every animal that is to be killed must be killed by a method that is humane and minimizes the pain and distress to the animal; an animal's pain and distress are deemed to be minimized if it is killed by a method that produces rapid, irreversible unconsciousness and prompt subsequent death.

Unable to determine.
5. (4b) A pen or other enclosed structure or area for wildlife kept in captivity and any gates or other barriers to it, including moats, must be designed, constructed and locked or otherwise secured to prevent, animals escaping from the pen or other enclosed structure or area by climbing, jumping, digging, burrowing or any other means.

Unable to determine.
This needs to be further investigated to determine the depth of the concrete footing and if there is underground fencing to prevent the bear from digging out under the perimeter fence. The integrity of the overhang fencing and the gauge of that fencing should also be inspected as its construction appeared weaker than the enclosure's perimeter fence. Although the fence has electric fencing at the top, electric fencing should never be considered the first line of defence against escape. Electric fencing should only act as a deterrent.

### 7.7 Raccoon

Number of Individuals, Sex and Age
One adult raccoon.

## Enclosure

The enclosure was at the end of a row of attached enclosures that included the lions, coyote and lynx. The enclosure was constructed with wooden beam posts and wire mesh fencing. The size of the enclosure was estimated to be $2.4 \times 2.4 \mathrm{~m} .(8 \times 8 \mathrm{ft}$.) equalling $6 \mathrm{~m}^{2}\left(64 \mathrm{ft}^{2}\right)$ in area. The AZA Small Carnivore Taxon Advisory Group recommends a minimum exhibit space of at least $43.6 \mathrm{~m}^{2}\left(469 \mathrm{ft}^{2}\right)$ for 1-2 animals with an increase of $25 \%$ for each additional animal. ${ }^{16}$ That is approximately 7.5 times larger than the Spruce Haven Zoo exhibit. The enclosure had a wire mesh fencing roof. Two sides of the enclosure were accessible to the public; one side was shared with the coyote enclosure and another side with the lynx. The two sides of the enclosure that were accessed by the public faced the cougar enclosure and the bear enclosure. The substrate was natural soil with no growing vegetation within the enclosure. The enclosure was surrounded by large trees which provided shade and possibly protection from the wind. Visual barriers of wood and metal were in place at the same level as the raised shelter box but not along the bottom of the enclosure where the lynx and coyote were visible in their enclosures. A water dish and a second empty container were on the ground in the enclosure.

Shelter
The enclosure had a wooden shelter box raised off the ground about 1-1.5 m (4-5 ft.) and mounted on the side of the enclosure. A second shelter box was at ground level

against the visual barrier on the side of the enclosure that was shared with the coyote enclosure. Some bedding material that appeared to be straw could be seen in the shelter box on the ground.

## Enrichment

Some old logs were in the enclosure along with a plastic toy and a stuffed toy.
Summary of Compliances as per Ontario Regulation 60/09 OSPCA Act
Of the 23 points evaluated:

1. 14 are in compliance with the law,
2. 2 do not comply with the law,
3. 7 could not be determined.

Summary of Concerns
The most concerning issue for the raccoon is the potential for psychological stress due to the fact that it was visually accessible to natural predators (coyotes, lynx, lions and cougars) and incomplete visual barriers between the enclosures.

## Discussion of Compliance as per Ontario Regulation 60/09 OSPCA Act

## Contraventions

2. (3) Every animal must be provided with the care necessary for its general welfare.

Does not comply based on 5 . (1b) \& 5. (2d).
This enclosure is deemed to be too small to adequately care for the raccoon's general welfare. The AZA Procyonid (Procyonidae) Care Manual states that, "Most species [Procyonid] travel extensively in search of food and if locomotion is overly constrained they may revert to stereotypy. Animals with insufficient space to exercise adequately may become obese and are much more likely to seek for, and find a way to escape from their enclosures. ...enclosure complexity is as important as enclosure size in meeting locomotory requirements of most species. Enclosures should be large enough to provide appropriate locomotory substrates." ${ }^{16}$
5. (1b) A pen or other enclosed structure or area for wildlife kept in captivity must be of an adequate and appropriate size, to enable each animal in the pen or other enclosed
structure or area to keep an adequate and appropriate distance from the other animals and people so that it is not psychologically stressed \& 5. (2d) A pen or other enclosed structure or area for wildlife kept in captivity must have, one or more areas that are out of view of spectators.

Does not comply.
The raccoon is surrounded by enclosures that house predatory animals. Visual barriers are in place but they only cover part of the enclosure wall shared with other species.


The raccoon can be viewed overhead by the lynx. When at ground level it can be viewed from the lynx enclosure and the coyote enclosure. The two sides of the enclosure not accessed by other animals are accessed by the public who can see directly into the shelter boxes and these areas are also across from the cougar and the black bear enclosure.

## In Compliance

2. (1) Every animal must be provided with adequate and appropriate food and water.

Complies.
Water was provided in a container that appeared dirty, however the ground was still damp and muddy in some areas and it could not be determined if the dirt had just accumulated from that morning. If staff were unable to maintain the water cleanliness throughout the day then alternatives should be considered to keeping the water source cleaner such as offering more than one water source for the raccoon, and/or placing a water dish off the ground.
Food: Unable to determine to determine diet.
2. (5) Every animal must be provided with an adequate and appropriate resting and sleeping area.

Complies.
The raccoon had access to two shelters, one with bedding, and a resting area on a shelter roof.
2. (6b) Every animal must be provided with adequate and appropriate sanitary conditions.

Complies.
2. (6c) Every animal must be provided with adequate and appropriate ventilation.

Complies.
This was an open, outdoor enclosure.
2. (6d) Every animal must be provided with adequate and appropriate light.

Complies.
This was open, outdoor enclosure.
2. (7a) If an animal is confined to a pen or other enclosed structure or area the pen or other enclosed structure or area, and any structures or material in it, must be in a state of good repair.

Complies.

2. (7b) If an animal is confined to a pen or other enclosed structure or area the pen or other enclosed structure or area, and any surfaces, structures and materials in it, must be made of and contain only materials that are (i) safe and non-toxic for the animal, and (ii) of a texture and design that will not bruise, cut or otherwise injure the animal. \& 5 . (3a\&b) A pen or enclosed structure or area for wildlife kept in captivity must be made of and contain only materials that are, non-toxic for the animals kept in the pen or other enclosed structure or area; and of a texture and design that will not bruise, cut or otherwise injure the animals.

Complies.
2. (7c) If an animal is confined to a pen or other enclosed structure or area the pen or other enclosed structure or area must not contain one or more other animals that may pose a danger to the animal.

Complies.
4. (3) Wildlife kept in captivity must be kept in compatible social groups to ensure the general welfare of the individual animals and of the group and to ensure that each animal in the group is not at risk of injury or undue stress from dominant animals of the same or a different species.

Complies
5. (1c) A pen or other enclosed structure or area for wildlife kept in captivity must be of an adequate and appropriate size, to ensure that the natural growth of each animal in the pen or other enclosed structure or area is not restricted.

Complies
5. (2b) \& (2e) A pen or other enclosed structure or area for wildlife kept in captivity must have, shelter from the elements that can accommodate all the animals in the pen or other enclosed structure or area at the same time; one or more sleeping areas that can accommodate all the animals in the pen or other enclosed structure ore area at the same time and that are accessible to all the animals at all times.

Complies.
See point 2. (6e) regarding appropriate protection from the elements, including harmful temperatures.
5. (4a) A pen or other enclosed structure or area for wildlife kept in captivity and any gates or other barriers to it, including moats, must be designed, constructed and locked
or otherwise secured to prevent, interaction with people that may be unsafe or inappropriate for the wildlife.

Complies.

5. (4b) A pen or other enclosed structure or area for wildlife kept in captivity and any gates or other barriers to it, including moats, must be designed, constructed and locked or otherwise secured to prevent, animals escaping from the pen or other enclosed structure or area by climbing, jumping, digging, burrowing or any other means.

Complies.
5. (5) A pen or other enclosed structure or area for wildlife kept in captivity and any gates or other barriers to it, including moats, must be designed, constructed and maintained in a manner that presents no harm to the wildlife.

Complies.
Unable To Determine
2. (2) Every animal must be provided with adequate and appropriate medical attention.

Unable to determine.
2. (4) Every animal must be transported in a manner that ensures its physical safety and general welfare.

Unable to determine.
2. (6a) Every animal must be provided with adequate and appropriate space to enable the animals to move naturally and to exercise \& 5. (1a) A pen or other enclosed structure or area for wildlife kept in captivity must be of and adequate and appropriate size to facilitate and stimulate natural movement and behaviour \& 5. (2a) \& (2c) A pen or other enclosed structure or area for wildlife kept in captivity must have features and furnishings that facilitate and stimulate the natural movement and behaviour of each animal in the pen or other enclosed structure or area; surfaces and other materials that accommodate the natural movement and behaviour of each animal in the pen or other enclosed structure or area.

Unable to determine.
This needs further investigation to determine if the size of the enclosure is adequate for the long term housing of a raccoon. In addition, better use could be made of the vertical space in the enclosure. What space that is available to the raccoon may be avoided due to the exposure to the surrounding predatory animals. Thus effective visual barriers must be put in place.

The size of the enclosure was estimated to be $2.4 \times 2.4 \mathrm{~m} .\left(8 \times 8 \mathrm{ft}\right.$.) equalling $6 \mathrm{~m}^{2}$ ( $64 \mathrm{ft}^{2}$ ) in area. The AZA Small Carnivore Taxon Advisory Group recommends a minimum exhibit space of at least $43.6 \mathrm{~m}^{2}\left(469 \mathrm{ft}^{2}\right)$ for 1-2 animals with an increase of $25 \%$ for each additional animal. ${ }^{16}$ That is approximately 7.5 times larger than the Spruce Haven Zoo exhibit.

2. (6e) Every animal must be provided with adequate and appropriate protection from the elements, including harmful temperatures.

Unable to determine.
Needs further investigation to determine if shelter boxes will provide adequate protection from the elements and if additional bedding or other measures are taken by the zoo for the winter.
2. (8) Every animal that is to be killed must be killed by a method that is humane and minimizes the pain and distress to the animal; an animal's pain and distress are deemed to be minimized if it is killed by a method that produces rapid, irreversible unconsciousness and prompt subsequent death.

Unable to determine.
4. (2) Wildlife kept in captivity must be provided with a daily routine that facilitates and stimulates natural movement and behaviour.

Unable to determine.
The daily routine could not be determined without interviewing staff. No evidence of an enrichment program was observed and could not be determined without interviewing staff. Determining if natural movement and behaviours occurred would require longer observation periods than afforded. Daily routines that include feeding, cleaning and enriching the lives and environments of the animals are essential to encouraging natural movement and behaviour. Denying animals access to appropriate space, materials and the opportunity to perform natural movements and behaviors can cause psychological stress [5.(1b)], problems with natural growth [5.(1c)], injury or undue stress among animals [4. (3)], and possibly pose a danger to the animal [2. (7c)]. Although there were two human toys for children visible in the enclosure giving an animal novel items does not create a comprehensive or successful enrichment program. These items are also not species-specific or meaningful enrichment to a raccoon.
5. (4c) A pen or other enclosed structure or area for wildlife kept in captivity and any gates or other barriers to it, including moats, must be designed, constructed and locked or otherwise secured to prevent, animals or people (other than people who are required to enter the enclosure as part of their duties) from entering the pen or other enclosed structure or area by climbing, jumping, digging, burrowing or any other means.

Unable to determine.
This needs further investigation as the enclosure is adjacent to the coyote and lynx and it was not possible to determine the integrity of the top fencing of the lynx enclosure and what digging barriers are in place for the coyote and lynx.


### 7.8 Ungulates

Number of Individuals, Sex and Age
The animals included in this section are the yaks, deer (fallow, sika, white tail), and West Caucasian Tur. The separate animal enclosures were large enough that animals could remain out of view of the public and therefore could not be accurately counted or identified. The enclosures for these species were similar and for this reason they are evaluated in the same section.

## Enclosure

At least five enclosures were identified but it is possible there were more. The constraints of the investigation made it impossible to access all areas around the enclosures and the distance made it difficult to visually distinguish where fence lines or barriers where located. Many of the enclosures for these species consisted of large fenced in areas with access to shelters and shade. The enclosures offered access to trees and grass vegetation. Water sources could be viewed at the public fence lines and sometimes plastic containers could be seen in the distance. Feeding stations, metal or wooden racks for holding feed, were visible in enclosures. Some were empty and what looked like hay could be seen on the ground. It is unclear if the hay in the stations was eaten first and additional hay placed on the ground was being eaten last. Public standoff barriers were not used or were makeshift and inadequate. Most individuals were able to escape or distance themselves from public view as the shelters were at the far ends of the enclosures or shelter was offered by large areas with trees and vegetation. A barn was also present on the property but it was not clear which enclosures had access to it as it as it was not accessible.

Five ungulate enclosures were identified during the investigation and later measured using Google Earth. ${ }^{14}$ The yak enclosure contained a group of $4-5$ individuals and it was approximately $30 \times 40 \mathrm{~m}(98 \times 131 \mathrm{ft}$.) equalling $1,200 \mathrm{~m} 2$ ( 0.30 acre). The West Caucasian tur enclosure contained one animal and it measured $30 \times 30 \mathrm{~m} .(98 \times 98 \mathrm{ft}$.) equalling $900 \mathrm{~m}^{2}$ ( 0.22 acre) in area. The tur enclosure contained a shelter that was $3 \times 4$ $\mathrm{m}\left(9 \times 13 \mathrm{ft}^{2}\right)$ equalling $12 \mathrm{~m}^{2}\left(129 \mathrm{ft}^{2}\right)$ in area. The first of three deer enclosures contained one white tailed deer and it measured $45 \times 20 \mathrm{~m}(148 \times 66 \mathrm{ft}$.) equalling 900 $\mathrm{m}^{2}(0.22$ acre $)$ in area. It contained a shelter that was $3 \times 4 \mathrm{~m}\left(9 \times 13 \mathrm{ft}\right.$.) equalling $12 \mathrm{~m}^{2}$ ( $129 \mathrm{ft}^{2}$ ) in area. The second deer enclosure contained one ungulate (possibly the Japanese Sika deer) and it measured $30 \times 30 \mathrm{~m}$. ( $98 \times 98 \mathrm{ft}$.) equalling $900 \mathrm{~m}^{2}(0.22$ acre) in area. The investigator was not able measure the shelter. The third of the deer enclosures contained $4-5$ ungulates (possibly fallow deer) and it measured $50 \times 70$ ( $164 \times 230 \mathrm{ft}$.) equalling $3,500 \mathrm{~m}^{2}(0.86$ acre) in area. It contained a shelter that was 4 x 4 m . ( $13 \times 13 \mathrm{ft}$.) equalling $16 \mathrm{~m}^{2}\left(172 \mathrm{ft}^{2}\right)$ in area.

Summary of Compliances as per Ontario Regulation 60/09 OSPCA Act Of the 23 points evaluated:

1. 13 are in compliance with the law,
2. 10 could not be determined.


## Summary of Concerns

The most concerning issues for the ungulates include:

1. The confirmation of water sources and how water is provided during the winter months,
2. The shelter capacity and protection from the elements for each enclosure.

Discussion of Compliance as per Ontario Regulation 60/09 OSPCA Act

## In Compliance

2. (3) Every animal must be provided with the care necessary for its general welfare.

Complies.
2. (5) Every animal must be provided with an adequate and appropriate resting and sleeping area.

Complies.
There was space for animals to rest either in shelters or on vegetation.
2. (6a) Every animal must be provided with adequate and appropriate space to enable the animals to move naturally and to exercise \& 5. (1a) A pen or other enclosed structure or area for wildlife kept in captivity must be of and adequate and appropriate size to facilitate and stimulate natural movement and behaviour \& 5. (2a) \& (2c) A pen or other enclosed structure or area for wildlife kept in captivity must have features and furnishings that facilitate and stimulate the natural movement and behaviour of each animal in the pen or other enclosed structure or area; surfaces and other materials that accommodate the natural movement and behaviour of each animal in the pen or other enclosed structure or area.

Complies.
2. (6b) Every animal must be provided with adequate and appropriate sanitary conditions.

Complies.
2. (6c) Every animal must be provided with adequate and appropriate ventilation.

Complies.
This was an open, outdoor enclosure.
2. (6d) Every animal must be provided with adequate and appropriate light.

Complies.
This was an open, outdoor enclosure.

2. (7c) If an animal is confined to a pen or other enclosed structure or area the pen or other enclosed structure or area must not contain one or more other animals that may pose a danger to the animal.

Complies.
4. (3) Wildlife kept in captivity must be kept in compatible social groups to ensure the general welfare of the individual animals and of the group and to ensure that each animal in the group is not at risk of injury or undue stress from dominant animals of the same or a different species.

Complies.
5. (1b) A pen or other enclosed structure or area for wildlife kept in captivity must be of an adequate and appropriate size, to enable each animal in the pen or other enclosed structure or area to keep an adequate and appropriate distance from the other animals and people so that it is not psychologically stressed \& 5(2d) A pen or other enclosed structure or area for wildlife kept in captivity must have, one or more areas that are out of view of spectators.

Complies.
5. (1c) A pen or other enclosed structure or area for wildlife kept in captivity must be of an adequate and appropriate size, to ensure that the natural growth of each animal in the pen or other enclosed structure or area is not restricted.

Complies
Unable To Determine
2. (1) Every animal must be provided with adequate and appropriate food and water.

Food. Unable to determine due to size of enclosure and distance from viewing area. Most enclosures had visible hay, browse or vegetation present. Would need to determine if this was consistent for all of the animals.

Water. Unable to determine. Most enclosures had visible water sources. Would need to determine if this was consistent for all of the animals as it was not possible to verify the amount, quality and cleanliness of the water for all ungulates and how it is provided in the winter months.
2. (2) Every animal must be provided with adequate and appropriate medical attention.

Unable to determine.

2. (4) Every animal must be transported in a manner that ensures its physical safety and general welfare.

Unable to determine.
2. (6e) Every animal must be provided with adequate and appropriate protection from the elements, including harmful temperatures.

Unable to determine.
Due to the distance of some of the shelters from the public viewing area, it was not possible to properly assess them, or account for all animals in the enclosure to determine if the shelter could accommodate all of the animals together in all weather conditions. Most enclosures appeared to have shade and trees or shelters that could provide wind breaks. It was also unknown if the zoo took additional measures to provide for the animals in the winter months for example providing additional bedding or wind breaks.
2. (7a) If an animal is confined to a pen or other enclosed structure or area the pen or other enclosed structure or area, and any structures or material in it, must be in a state of good repair.

Unable to determine.
Due to the distance of some shelters from the public viewing area and the size of enclosures it was not possible to properly assess them. However fencing for many of the enclosures appeared weathered and had loose or sagging areas.
2. (7b) If an animal is confined to a pen or other enclosed structure or area the pen or other enclosed structure or area, and any surfaces, structures and materials in it, must be made of and contain only materials that are (i) safe and non-toxic for the animal, and (ii) of a texture and design that will not bruise, cut or otherwise injure the animal. \& 5. (3a \& b) A pen or enclosed structure or area for wildlife kept in captivity must be made of and contain only materials that are, non-toxic for the animals kept in the pen or other enclosed structure or area; and of a texture and design that will not bruise, cut or otherwise injure the animals..

Unable to determine.
Due to the distance of some shelters and the size of enclosures it was not possible to properly asses them. However fencing for many of the enclosures appeared weathered and had loose or sagging areas.
2. (8) Every animal that is to be killed must be killed by a method that is humane and minimizes the pain and distress to the animal; an animal's pain and distress are deemed to be minimized if it is killed by a method that produces rapid, irreversible unconsciousness and prompt subsequent death.

Unable to determine.

4. (2) Wildlife kept in captivity must be provided with a daily routine that facilitates and stimulates natural movement and behaviour.

Unable to determine.
The daily routine could not be determined without interviewing staff. No evidence of an enrichment program was observed and could not be determined without interviewing staff. Determining if natural movement and behaviours occurred would require longer observation periods than afforded. Daily routines that include feeding, cleaning and enriching the lives and environments of the animals are essential to encouraging natural movement and behaviour. Denying animals access to appropriate space, materials and the opportunity to perform natural movements and behaviors can cause psychological stress [5.(1b)], problems with natural growth [5.(1c)], injury or undue stress among animals [4. (3)], and possibly pose a danger to the animal [2. (7c)].
5. (2b) \& (2e) A pen or other enclosed structure or area for wildlife kept in captivity must have, shelter from the elements that can accommodate all the animals in the pen or other enclosed structure or area at the same time; one or more sleeping areas that can accommodate all the animals in the pen or other enclosed structure ore area at the same time and that are accessible to all the animals at all times.

Unable to determine.
Due to the distance of some of the shelters it was not possible to properly assess them, or account for all animals in the enclosure to determine if the shelter could accommodate all of the animals together in year round weather conditions. Most enclosures appeared to have shade and trees or shelters that could provide wind breaks. See point 2. (6e) regarding appropriate protection from the elements, including harmful temperatures.
5. (4a) A pen or other enclosed structure or area for wildlife kept in captivity and any gates or other barriers to it, including moats, must be designed, constructed and locked or otherwise secured to prevent, interaction with people that may be unsafe or inappropriate for the wildlife.

Unable to determine.
Public stand-off barriers were not present or inadequate.
The yaks did not have a barrier and the public could approach the fence. The metal mesh fencing for the yaks had two layers of fencing. The tallest fence line, about 6 ft .( 2 m ) high, had large enough openings to fit hands and arms through while the second layer of fencing, about $4-5 \mathrm{ft}$. (1-1.5m) high, had smaller openings that prevented people from reaching through the fencing.
Barriers around the Tur and deer enclosures were incomplete and not adequate.
Examples of barriers used included propped up pieces of wood, a length of plastic piping and string. It was possible to access the enclosure fence by moving under, over or around the public barriers or accessing a section of fence line without any public barriers in place. These fences also had a similar second layer of fencing like the yaks that prevented arms and hands from reaching through the fence.
Needs further investigation determine which ungulate species require public stand-off barriers.

5. (4b) A pen or other enclosed structure or area for wildlife kept in captivity and any gates or other barriers to it, including moats, must be designed, constructed and locked or otherwise secured to prevent, animals escaping from the pen or other enclosed structure or area by climbing, jumping, digging, burrowing or any other means.

Unable to determine due to the size and accessibility of the enclosures.
5. (4c) A pen or other enclosed structure or area for wildlife kept in captivity and any gates or other barriers to it, including moats, must be designed, constructed and locked or otherwise secured to prevent, animals or people (other than people who are required to enter the enclosure as part of their duties) from entering the pen or other enclosed structure or area by climbing, jumping, digging, burrowing or any other means.

Unable to determine based on 5. (4a).
5. (5) A pen or other enclosed structure or area for wildlife kept in captivity and any gates or other barriers to it, including moats, must be designed, constructed and maintained in a manner that presents no harm to the wildlife.

Unable to determine due to the size and accessibility of the enclosures.

### 7.9 Domestic/Other Animals

Number of Individuals, Sex, Age
Animals included in this section are the turkeys, geese, ducks, chickens, pigs, chinchilla, rabbit, donkey, lamas, goats and horses. Some animal enclosures allowed animals to remain out of view of the public and therefore could not be accurately counted or identified. These species were accessible to the public in the petting area and some enclosures for these species were similar and for this reason they are evaluated in the same section.

## Enclosure \& Shelter

Most of these animals were accessed by the public in a petting area about $20 \times 25 \mathrm{~m}$. ( $66 \times 82 \mathrm{ft}$.) equalling $625 \mathrm{~m}^{2}$ ( 0.15 acre ) in area. The public was able to enter the petting area enclosure that contained two goats and two sheep. The petting area was surrounded by other enclosures whose fence lines could be accessed that contained pigs, turkeys, a donkey, llamas, and horses. Water for the animals was available in plastic dishes on the ground in the petting area and the water was dirty and the dishes needed scrubbing.

The substrate in the petting area was predominantly hard pan dirt but there was a small section that had a few trees and vegetation that provide the goats and sheep with shade and a resting area. A wooden barn was visible in the distance and it was not known if the animals in the petting area were given access to this for shelter or if they used the shelters attached to the pig and turkey yards.


The pigs had access to a hard pack dirt yard about $4 \times 8 \mathrm{~m} .\left(13 \times 26 \mathrm{ft}\right.$.) equalling $32 \mathrm{~m}^{2}$ $\left(344 \mathrm{ft}^{2}\right)$ in area, and a wooden building about $3 \times 6 \mathrm{~m}$. ( $9 \times 20 \mathrm{ft}$.) equalling 18 m 2 (194 $\mathrm{ft}^{2}$ ) in area. Straw was provided as bedding outside and one pig was resting in it.

The turkeys had access to a hard pan dirt enclosure that measured approximately $70 \mathrm{~m}^{2}$ ( $753 \mathrm{ft}^{2}$ ) and access to a wooden building about $120 \mathrm{~m}^{2}\left(1,292 \mathrm{ft}^{2}\right)$ without apparent bedding.

The donkey, horses and llamas were kept in a large enclosure that was not easily measured due to the irregular shape, size and limited visibility. This enclosure had the metal container similar to the lions used for water but it was too far away to properly assess for corrosion and rust. One horse appeared to be housed alone in a hard pan dirt floored yard that measured about $200 \mathrm{~m}^{2}\left(2,153 \mathrm{ft}^{2}\right)$ in area. The yard was shaded by trees around the enclosure during the time of the visit. It was not clear if the horse had its own separate shelter or had access to the same building as the pigs which were located directly next to a wooden building.

There was a row of raised wooden framed and wire mesh cages in the petting area marked Ferret and Chinchilla. The bank of was separated into four sections about 1 x $1.1 \mathrm{~m} .\left(3 \times 4 \mathrm{ft}\right.$.) equalling $1 \mathrm{~m}^{2}\left(12 \mathrm{ft}^{2}\right)$ in area per section. Water bottles were attached to each cage front. Some of the bottles' water appeared yellow as though the bottle was old and discoloured or needed cleaning. The cage furnishings and interior appeared to need scrubbing. No ferrets or other animals were visible in two of the sections although a water source was attached. Two chinchillas were observed in one section and one rabbit in another. The cages had metal mesh flooring. Some relief from the mesh flooring was provided in the form of furnishings in the cages such as an old log, a plastic ice cream bucket, a plastic-like utility sink, a wooden box, a plastic pet kennel, a carpeted cat scratching post and plastic Tupperware-type dishes. Some straw was visible in the plastic containers and on the cage floor, however more should have been provided to compensate for the metal flooring that the animals had to endure. The inside of these cages appeared dirty and poorly maintained as some plastic items were chewed, yellowed and worn. There was no buildup of feces material under the cages or strong odours. Food pellets were visible in some cages. Plastic or class jars with screw lids were also seen in the cages where no animals were visible. Food pellets and two white plastic bottles could be seen in the glass jar. It appears that food is stored in the container in the cages with the animals in effect taking up the limited living space for storage. It was possible no animals were housed in these cages as none were observed during the visit. The lock attached to the chain on the rabbit cage was open. It was unclear if this was intentional as this was in the petting area where interaction with the public was expected.

Geese and ducks were held in enclosures that were not part of the petting area. The water/bath for the geese and ducks did not appear large enough to accommodate all individuals. It looked like a child's solid plastic kiddy pool. The water was dirty. Other water sources could not be seen. Wooden shelter boxes were seen but it was not clear if there were enough for all individuals in the enclosure. The ground in the enclosure was

hard pan dirt. The enclosure had shade and possible wind protection from surround trees and vegetation. The enclosure could not be completely assessed as it was not fully viewed during the visit.

Chickens were observed in the distance next to the wolf enclosure. It was not clear if they were able to roam free or where their respective enclosures and shelters were located.

## Enrichment

A ball and three small worn logs were seen in the pig enclosure. Two old tires were in the petting area. Cloth bedding and straw was seen in the row of enclosures for the ferret, chinchillas and rabbit.

## Summary of Compliances as per Ontario Regulation 60/09 OSPCA Act

 Of the 23 points evaluated:1. 11 are in compliance with the law,
2. 1 does not comply with the law,
3. 11 could not be determined and need further investigation by authorities.

## Summary of Concerns

The most concerning issues for these animals include:

1. The ability of the staff to maintain the cleanliness of water sources,
2. The sanitation and housing conditions for the chinchillas and rabbit especially during colder temperatures.

## Discussion of Compliance as per Ontario Regulation 60/09 OSPCA Act

Contraventions
2. (1) Every animal must be provided with adequate and appropriate food and water.

Food. Not able to determine diet.
Water. Does not comply. Water sources for many of these animals were dirty. It is possible clean water was provided for that day however the water containers, location and animal activity could have contributed to the dirty water. Some containers also appeared to need scrubbing. If staff are unable to maintain the cleanliness of the water throughout the day it is recommended that alternative solutions be found such as offering more water sources.

## In Compliance

2. (6c) Every animal must be provided with adequate and appropriate ventilation.

Complies.
This was an open, outdoor enclosure.

2. (6d) Every animal must be provided with adequate and appropriate light.

Complies.
This was an open, outdoor enclosure.
2. (7b) If an animal is confined to a pen or other enclosed structure or area the pen or other enclosed structure or area, and any surfaces, structures and materials in it, must be made of and contain only materials that are (i) safe and non-toxic for the animal, and (ii) of a texture and design that will not bruise, cut or otherwise injure the animal. \& 5 . (3a\&b) A pen or enclosed structure or area for wildlife kept in captivity must be made of and contain only materials that are, non-toxic for the animals kept in the pen or other enclosed structure or area; and of a texture and design that will not bruise, cut or otherwise injure the animals.

Complies.
2. (7c) If an animal is confined to a pen or other enclosed structure or area the pen or other enclosed structure or area must not contain one or more other animals that may pose a danger to the animal.

Complies.
4. (3) Wildlife kept in captivity must be kept in compatible social groups to ensure the general welfare of the individual animals and of the group and to ensure that each animal in the group is not at risk of injury or undue stress from dominant animals of the same or a different species.

Complies.
5. (1b) A pen or other enclosed structure or area for wildlife kept in captivity must be of an adequate and appropriate size, to enable each animal in the pen or other enclosed structure or area to keep an adequate and appropriate distance from the other animals and people so that it is not psychologically stressed \& 5. (2d) A pen or other enclosed structure or area for wildlife kept in captivity must have, one or more areas that are out of view of spectators.

Complies.
5. (1c) A pen or other enclosed structure or area for wildlife kept in captivity must be of an adequate and appropriate size, to ensure that the natural growth of each animal in the pen or other enclosed structure or area is not restricted.

Complies.

5. (4a) A pen or other enclosed structure or area for wildlife kept in captivity and any gates or other barriers to it, including moats, must be designed, constructed and locked or otherwise secured to prevent, interaction with people that may be unsafe or inappropriate for the wildlife.

Complies.
Many of the animals in this area were domestic or were in the petting area of the zoo where interaction with the public was expected.
5. (4b) A pen or other enclosed structure or area for wildlife kept in captivity and any gates or other barriers to it, including moats, must be designed, constructed and locked or otherwise secured to prevent, animals escaping from the pen or other enclosed structure or area by climbing, jumping, digging, burrowing or any other means.

Complies.
5. (4c) A pen or other enclosed structure or area for wildlife kept in captivity and any gates or other barriers to it, including moats, must be designed, constructed and locked or otherwise secured to prevent, animals or people (other than people who are required to enter the enclosure as part of their duties) from entering the pen or other enclosed structure or area by climbing, jumping, digging, burrowing or any other means.

Complies.
5. (5) A pen or other enclosed structure or area for wildlife kept in captivity and any gates or other barriers to it, including moats, must be designed, constructed and maintained in a manner that presents no harm to the wildlife.

Complies.
Unable to Determine
2. (2) Every animal must be provided with adequate and appropriate medical attention.

Unable to determine.
2. (3) Every animal must be provided with the care necessary for its general welfare.

Unable to determine with regards to the chinchilla and rabbit based 2.(6b)\&(6e) \&(7a), as well as the bath and water source for the ducks and geese and 2.(1) water.
2. (4) Every animal must be transported in a manner that ensures its physical safety and general welfare.

Unable to determine.
2. (5) Every animal must be provided with an adequate and appropriate resting and sleeping area.


Unable to determine.
It was not possible to see some areas due to distance or see in the shelters and if bedding materials were provided inside. It was not known how or when animals in the open petting area would be provided shelter or bedding material.
2. (6a) Every animal must be provided with adequate and appropriate space to enable the animals to move naturally and to exercise \& 5. (1a) A pen or other enclosed structure
or area for wildlife kept in captivity must be of and adequate and appropriate size to facilitate and stimulate natural movement and behaviour \& 5. (2a) \& (2c) A pen or other enclosed structure or area for wildlife kept in captivity must have features and furnishings that facilitate and stimulate the natural movement and behaviour of each animal in the pen or other enclosed structure or area; surfaces and other materials that accommodate the natural movement and behaviour of each animal in the pen or other enclosed structure or area.

Unable to determine for the ducks and geese as closer inspection of the enclosures was needed.
2. (6b) Every animal must be provided with adequate and appropriate sanitary conditions.

Unable to determine.
The bank of cages, marked ferret chinchilla and rabbit appeared to need cleaning. It was not possible to determine to what extent without opening the cages for closer examination.
2. (6e) Every animal must be provided with adequate and appropriate protection from the elements, including harmful temperatures.

Unable to determine.
It was not possible to determine what measures were taken to protect the chinchillas and rabbit from colder temperatures as their current enclosures with open mesh flooring would not provide sufficient protection. It was also not possible to determine if the animals in the open petting area were given access to the any of the surrounding shelters at night or during harsh weather conditions. It was not possible to determine what bedding materials were provided in the shelters or what additional measures the zoo might take during the winter months for shelter.
2. (7a) If an animal is confined to a pen or other enclosed structure or area the pen or other enclosed structure or area, and any structures or material in it, must be in a state of good repair.

Unable to determine.
The materials and structures in the chinchilla and rabbit enclosures were dirty, worn and appeared to be in poor repair. It was not possible to properly assess them without opening the cages.

2. (8) Every animal that is to be killed must be killed by a method that is humane and minimizes the pain and distress to the animal; an animal's pain and distress are deemed to be minimized if it is killed by a method that produces rapid, irreversible unconsciousness and prompt subsequent death.

Unable to determine.
4. (2) Wildlife kept in captivity must be provided with a daily routine that facilitates and stimulates natural movement and behaviour.

Unable to determine.
Needs further investigation with regards to geese and ducks to determine space in the enclosures.

The daily routine could not be determined without interviewing staff. No evidence of an enrichment program was observed and could not be determined without interviewing staff. Determining if natural movement and behaviours occurred would require longer observation periods than afforded. Daily routines that include feeding, cleaning and enriching the lives and environments of the animals are essential to encouraging natural movement and behaviour. Denying animals access to appropriate space, materials and the opportunity to perform natural movements and behaviors can cause psychological stress [5.(1b)], problems with natural growth [5.(1c)], injury or undue stress among animals [4. (3)], and possibly pose a danger to the animal [2. (7c)].
5. (2b) \& (2e) A pen or other enclosed structure or area for wildlife kept in captivity must have, shelter from the elements that can accommodate all the animals in the pen or other enclosed structure or area at the same time; one or more sleeping areas that can accommodate all the animals in the pen or other enclosed structure ore area at the same time and that are accessible to all the animals at all times.

Unable to determine.
It was unknown what shelter arrangements for the animals in the petting area were in place.
See point 2. (6e) regarding appropriate protection from the elements, including harmful temperatures.

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