INTRODUCTION

Zoocheck Canada is a national animal protection charity that works to protect the interests of wildlife in captivity and in the wild. We are supported by thousands of members, supporters and constituents across the country. For almost twenty years, we have investigated and assessed captive conditions for animals across Canada. We are the only organization with this expertise and mandate in the country.

Zoocheck’s primary focus is the physical and psychological health and welfare of individual animals held in captivity. Our extensive experience studying and assessing the physical and behavioural impacts that confinement has on captive animals, as well as the various situations in which they are kept, puts us in an excellent position to comment on the potential threats posed to human health and safety by inadequate handling and restraint procedures, inappropriate caging and by the animals themselves.

The potential public safety risks inherent in the handling and confinement of captive wild animals have received significant attention in recent months. Some captive facilities (including zoos, private menageries and circuses and traveling shows) have decided to develop safety procedure policies that purport to anticipate and address these risks. Following are Zoocheck’s comments regarding a sample circus ‘Recapture Plan’ for an escaped or charging elephant.

COMMENTARY

The use of wild animals in circuses and traveling shows is inherently dangerous, particularly to circus staff who work with the animals, and to children who come into contact with them through rides and photo opportunities. The wild animals used in circus performances tend to be large and powerful, with many possessing sharp canine teeth and claws capable of causing serious injury or death. Even in the best of circumstances, the strength and physical characteristics of many animals in circuses and traveling shows – notably elephants, tigers, lions and bears – make them dangerous animals to deal with. The risks that many animals used in circus performances pose to public health and safety through direct attack, escape or temporary loss of handler control increases considerably because of poor animal welfare conditions, inadequate safety measures, and excessive handling and transport.

Despite the best efforts of circus staff to protect the public, elephant escapes resulting in property destruction, injury to members of the public and even the death of animal trainers have occurred on many occasions. By their very nature, circuses and traveling shows cannot meet the extensive needs of the variety of wild and exotic animals that they use. They should therefore, not be allowed to keep them. Constant travel, cramped living conditions and lack of interaction with members of their own species, coupled with the stress that can arise from training and performing, make the life of an animal in the circus particularly problematic.

1 For a detailed list of incidents involving performing animals, please refer to: www.zoocheck.com/programs/entertain/Incident.shtml.
Animals that live in the circus exist in unnatural social groups, amidst unnatural physical surroundings. Many, who are social by nature, live a solitary existence. They are denied the opportunity to engage in many of their natural behaviours (related, for example, to mating, weaning, dominance, hunting and foraging) and frequently assume unnatural, often self-destructive behaviours. Each of these factors in itself, and particularly in combination, can be extremely stressful for wild animals. This type of stress can cause the animal to react negatively to their environment and novel situations resulting in escapes and attacks. This can ultimately lead to injuries to both the animals in the circus, people attending the event and/or property damage.

**Why circus animals suffer**

Animals in circuses and traveling shows suffer for a number of reasons. These include, but are not limited to housing, physical punishment, and psychological distress. Housing is the most obvious infringement on an animal's well-being. Housing in the circus has not changed substantially in the past 150 years. Our knowledge about animals however, has increased considerably.

There are two basic types of housing used in all circuses and traveling shows. The first is the beast wagon. This is a small, mobile cage generally used for all species of big cats, bears and primates. Many people believe that circus animals are only transported from one performing venue to another in these small cages. The truth is that generally, except when they are performing, the animals live in these cages. They eat, sleep, urinate and defecate in the same small area. These cages and restraints incorporate few, if any, of the safety features found in professional zoo cages. In addition, the routine handling and moving of animals, often in close proximity to members of the public, substantially increases the chances of animal escapes and attacks.

The second type of restraint used is chains or tethers. These are generally used for elephants and ungulates. In some cases these animals are provided with small electrically fenced areas that allow them a minimal degree of free movement during daylight hours, but this is only a marginal improvement as they are not typically provided with anywhere near the amount of space they require to express species-typical behaviours.

Circus and traveling show animals are confined in these restricted environments for the bulk of their lives. This can sometimes be as much as 23 out of 24 hours each day, 40-50 weeks each year. They have no opportunity to engage in a full range of natural movements and behaviours.

Animals can also suffer from physical abuse. Despite claims to the contrary, physical abuse and domination of performing animals is still a relatively common method of training and control. Physical punishment – apart from the obvious pain it causes, can be particularly distressing to an animal when the reasons for the punishment are not consistent or understood. For example, a trainer may lose his/her temper and lash out and there is nothing the animal can do to prevent this from happening. The animal becomes confused and stressed because it doesn’t understand why it is being punished. This is particularly problematic if this kind of abuse is a regular occurrence. Although signs of psychological stress and suffering can be difficult to recognize, they can be severe and debilitating.

The generally poor welfare of most animals in circuses and traveling shows directly impacts on staff and public safety, as animals are more unpredictable because they are less content. They are deprived of an ability to engage in natural movements and behaviours, even more so than most animals in zoos, so they become bored, frustrated and stressed. Some constantly search for escape routes, or start to display abnormal behaviours, such as pacing, head bobbing and
bar chewing. Others start to withdraw into themselves and interact less with their surroundings. Disturbed and chronically stressed animals are less predictable and reliable, which makes interactions with them much riskier.

**The physiological basis of suffering**

Most experts recognize that captive wild animals must be given an opportunity to make a meaningful contribution to the quality of their own lives. They must have some control over what they do. In circuses and traveling shows they do not. They exist in a regimented form of institutionalized care. It is commonly believed that healthy physical appearance is an indicator of positive welfare. Animals can look healthy however – and still be suffering.

The extreme confinement and artificial conditions that circus animals endure are inherently cruel. Lack of movement and exercise often result in physical problems such as obesity; skeletal disorders; decreases in strength and cardiovascular fitness; sores from rubbing against cage walls or from standing or lying on hard surfaces; and changes to the endocrine system and other body functions.

But physical changes are not all the animals have to deal with. Being forced to sit, stand or lie in the same small space all day and all night inevitably leads to unpleasant emotional states as well, such as various states of deprivation, frustration and boredom.

In an attempt to cope, many animals withdraw into themselves. They interact less with their surroundings and begin to display abnormal, often self-destructive behaviours, like bar-biting, tongue playing, pacing, head bobbing and rocking. Others just sit, lie or sleep for extremely long periods of time. Unfortunately, these attempts to cope do not address the source of the problem – being confined in a tiny, barren cage – so the situation gets progressively worse. During this process, bodily systems will also be affected. There may be harmful changes to the endocrine and immune systems, heart rate and blood pressure, respiration and other body functions.

The animals can’t adapt to their surroundings, so they suffer.

**Safety**

*When discussing safety at the circus, it is important to note that the safety of staff, visitors and animals lies with the people or organizations that host and promote the performances, as well as the circus owners and operators.*

All circus staff must be knowledgeable about what procedures to follow in the event of an animal escape, attack, natural disaster or any other circumstance that may put staff, public or animals at risk. It is their collaborative responsibility to ensure that sufficient measures are in place and that staff members are adequately trained to react calmly, professionally and quickly should an emergency occur.
Recapture plan

Attached to this report is a typical recapture plan for an escaped circus elephant. This one-page document lacks the detail necessary to make it useful to staff who may rely on it in an emergency situation or to the organizations and municipalities hosting the circus that may also suddenly find themselves in a position of having to respond to an animal-related emergency.

To highlight just a few of the deficiencies inherent in this plan, we have listed some unanswered questions that arose during our review of the document:

**NOTICE TO ALL PERFORMERS:**

Under no circumstances are any performers or staff allowed to attempt restraining or capture of an escaped elephant.

- What are the roles of circus staff members during an elephant escape?
- Do they receive training for such situations?
- Are circus staff trained in first aid?
- Who provides care to any injured visitor, staff member or animal?
- Is the hospital informed that large, exotic animals are being brought into a city?

The head trainer will have a loaded tranquilizer gun on his person during this type of situation.

- How will the trainer know when this type of situation will occur?
- Is the trainer in the circus ring when the animals are performing?
- Is the loaded tranquilizer gun on his person at all times?
- Is the loaded tranquilizer gun on his person during the time elephant rides are given to children?
- How is it ensured that children and other members of the public will not have contact with the gun or with its contents during the rides, when visitors are in extremely close proximity of both the trainers and the animals?
- How is this individual trained in the use of firing weapons containing dangerous chemicals in a crowded public venue?
- What type of tranquilizer gun is used?
- Where is the tranquilizer gun stored when it is not with the trainer?
- Is it accessible at all times?
- Is there another member of staff who is trained to use the tranquilizer gun safely and effectively?
- What drug is used to tranquilize the elephant?
- Is the trainer knowledgeable on how to handle potent drugs in public venues?
- Where are the drugs kept?
- How many staff members are trained in the use of the firearm?
- What is the dosage of tranquilizer for different animals?
- Where is this information kept?
- How do staff members get access to this information in an emergency situation?

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2 All text in *italics* is taken directly from a typical Circus Recapture Plan for an escaped elephant. See attached.
• Is a veterinarian on site for the duration of the circus? If not, how and when will the veterinarian be contacted during emergencies?
• How is the animal treated post anesthesia?

A listing of all drugs and equipment the circus will use in the capture of any elephant is to be provided by fax to the facility where the circus is being held, before 4pm A.S.T., the Friday before the circus is to arrive.

• Are there safety concerns for the transport of dangerous drugs and tranquilizing equipment into/across Canada?
• How are these items stored during travel?
• Is there a recovery plan if the drugs were to spill, get lost, or were stolen?
• How is the public notified of such an incident?
• What other drugs and equipment will be traveling with the circus?
• What equipment is needed in the capture of an elephant?
• Does this equipment pose a risk to public safety?

The following are the steps that the trainer will follow in the event of an escaped and/or rampaging elephant:

1) The head trainer will attempt to coax and calm the elephant with the use of positive reinforcement (voice) along with treats.

• Is it possible to calm a frantic animal with the use of a voice?
• How will the trainer attempt to give the elephant treats as she is running through the circus tent and potentially into city streets?
• How will the elephant be calmed with hundreds of frightened, screaming men, women and children running around her?
• How will the trainer protect himself, the elephant and the public, while still maintaining a position that allows him to give commands to an agitated and terrified animal?

2) If step 1 fails, the trainer will attempt to bluff the elephant for a very short period of time by raising his voice.

• What is considered a very short period of time when an elephant has escaped in an urban environment and is threatening public safety?
• If voice commands did not work initially (i.e. in step one) is there reason to believe that they should work later if repeated more loudly?
• One could infer that "bluffing" means to scare the elephant, but since no definition is provided we cannot provide comment on this procedure.
3) If step 2 fails, the elephant will be tranquilized. Once the tranquilizer has taken effect, the elephant will be restrained on the spot. A trailer with the remaining elephants will be brought to the site of the tranquilized elephant for a calming effect.

• How long does it take for the tranquilizer to take effect?
• What happens to the trainer, elephant and members of the public during this time?
• Who deals with crowd control?
• How is the public's safety guaranteed?
• Who loads up the remaining elephants into their trailer if the trainer is attempting to calm the escaped animal?
• What happens if these animals are also agitated/scared by this situation?
• How is the trailer with the remaining elephants moved to the site of the tranquilized animal?
• Would this not put all of the animals in a stressful situation?

4) The secondary trainer will respond to the above in the absence of the head trainer.

• Is this individual also trained in the use of the tranquilizer gun?
• Does he/she have training in the firing of potent drugs in public venues?
• Is this plan rehearsed frequently to ensure that all circus staff are familiar with their role in the event of an emergency?
• Are there other staff members who are trained to use the firearm?

Additional comments

When a potentially dangerous animal escapes from a circus and threatens human safety – circus and law enforcement officials may attempt to kill the animal using a “kill rifle.” But killing an enraged elephant, pumped full of adrenaline, is easier said than done. In one US incident, police fired more than 80 bullets into an escaped elephant, but it took three additional rounds in the skull from an assault rifle with armour-piercing bullets to finally kill the animal.

There are a variety of pistols available to dispatch animals. Some circus recapture plans make simple reference to keeping "a tranquilizer gun" on hand in case of an emergency. However, a "tranquilizer gun" provides no detail on what system is used. It is important to note that, "the use of remote darting equipment requires the precautions and judgment mandatory when handling any firearm. The proper use of the projectile syringe requires marksmanship and practice. No information is provided on staff training and practice with the proposed firearm or education on the chemical immobilization of animals.

In addition, the use of dangerous drugs in a public venue poses great risks to public and animal safety. Xylazine, is one of the drugs proposed for use when attempting to tranquilize an agitated elephant. "For maximal effect, xylazine should be given to a confined, quiet animal. Given intra-muscularly, the onset of signs occurs in 5-10 minutes, with maximum sedative effect occurring at 20 minutes." Unless professional, qualified individuals are present, it will be

difficult, if not impossible for untrained staff to recognize when it is safe to approach the escaped animal. This situation has the potential to put both the animal and staff members at risk. Therefore, it is necessary to ensure that only qualified individuals handle powerful drugs such as xylazine. Since “the carcinogenic, mutagenic and teratogenic effects of xylazine on humans is not known” 5, it is imperative that they are handled with the utmost respect and concern for public safety.

It is important to note that elephants are not the only animals that should be of concern with respect to circuses and traveling shows and public safety. Numerous documented accounts of other performing animals escaping from the circus, attacking trainers and causing disturbances in urban locations exist 6.

The typical circus recapture plan leaves much to the imagination and provides no vital information to staff members regarding what appropriate action they should take, should an animal escape. Generally, no mention is given to the plan rehearsal and how often staff members run through mock escapes to test their knowledge of the procedures, use of equipment and professionalism when dealing with agitated people and animals in an emergency situation. Given the lack of details provided here, in the absence of a thorough, well thought out and detailed plan, it is doubtful that a highly coordinated effort between staff members during an emergency would take place.

Some performing animals pose an additional risk to public health because they carry transmissible diseases. For instance, some elephants are known to carry a strain of Tuberculosis (TB) that can be passed on to humans. Although healthy adults are not as likely to contract the disease, children can be much more susceptible - and children are typically the ones who come into direct contact with elephants and other animals at the circus, receiving rides or having their pictures taken with them.

In July, 2002, all of the Tarzan Zerbini Circus elephants performing at Shrine Circus shows were deported to the United States by Canadian authorities because they had been exposed to another elephant who had tested positive for TB.

QUALIFICATION

Before closing, we must note that the lack of detail in the sample recapture plan discussed above does not necessarily mean that some of the issues raised here have not been otherwise addressed by individual circuses and/or traveling shows. However, given the importance of public safety and security issues, the high level of concern by citizens in the community for their safety and for that of their children and the potential threats which safety plans are supposed to mitigate, a detailed written plan not only ensures that staff and/or volunteers who assume any responsibilities at the circus are aware of these various details, but it also ensures that the circus and its owners and promoters have turned their minds to these many possibilities. A thorough, clearly laid out safety plan is evidence that the owner(s) of the circus and those organizations and/or individuals hosting it, have at least given some consideration to how they would handle the variety of compromising situations that could arise.

5 MSDS on Xylazine - Boehringer Ingleheim Vetmedica, Inc.
6 Please see www.zoocheck.com for more information.
CONCLUSIONS

People watching animals in circuses and traveling shows tend to think of them as amusing and cute. They forget that these are wild, potentially dangerous animals. The chronic stressors experienced by animals in traveling situations in general and the constant noise and commotion of the circus in particular, enhances the danger. Even if animals have their spirits broken so that they will normally submit to their trainers, wild animals remain just that: wild. Even those born in captivity continue to be wild; animals become "domesticated" only after hundreds or thousands of generations of breeding for particular physical and behavioural characteristics that make them amenable to human handling and contact. Wild animals are never entirely predictable and never completely under control. Therefore, when they are in close proximity to people they present a serious risk to public health and safety. That risk will never be entirely eliminated and can only be addressed by a plan which anticipates and thoroughly addresses the many possible situations that can arise. We have yet to review a recapture plan which does just that.