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#### Foreword

Ontario has been referred to as the "wild west" of the captive wildlife business. Unlike most other Canadian provinces, almost anyone in Ontario can acquire wild animals (including endangered species), confine them in "home-made" enclosures, post a sign and open a "zoo" for public viewing. No license is required and no provincial government agency will inspect zoo premises to determine whether or not animal welfare and public safety considerations have been adequately addressed.

This lack of regulation has resulted in a proliferation of zoos and roadside menageries across the province. Ontario now has more of these facilities than any other province, including many of the worst in Canada.

Numerous popular articles and books claim modern zoos now provide better environments for animals, and focus attention on important education and conservation initiatives. Unfortunately, this isn't the case for most of Ontario's captive wildlife facilities.

Little changed from their 19<sup>th</sup> century predecessors, the majority of these zoos remain essentially menagerie-style collections of animals constituted to satisfy personal (on the part of the proprietors) or public curiosity and a desire to view wild animals "up close." Most are an affront to anyone concerned about the wellbeing of captive wild animals.

For many animals in Ontario's zoos, life is hell. Days of boredom and misery become weeks of boredom and misery. Weeks become months, and months become years. From birth until death, many of these unfortunate wild creatures exist in conditions of severe hardship and deprivation. This intolerable situation must be brought to an end.

In an effort to focus attention on the plight of captive wild animals in Ontario, to initiate debate on their wellbeing, and to contribute to the improvement of zoos generally by providing recommendations for change, the World Society for the Protection of Animals (WSPA) Canada and Zoocheck Canada Inc. asked British veterinarian/animal behaviourist Dr. Samantha Lindley to conduct an inspection of a number of Ontario zoos.

Dr. Lindley's findings are alarming. They are a stark indicator that the situation for captive wildlife in Ontario is desperate.

We must all accept responsibility for the current state of affairs and work diligently to change them. Reputable members of the zoo community must become active in improving zoos, helping to force the closure of the worst offenders and lobbying for legislative change.

Humane societies across the province must focus attention on the physical and behavioural suffering of captive wild animals. They must actively exercise their authority under the Ontario SPCA Act and the Criminal Code of Canada to end their abuse and neglect.

And every concerned citizen must make their views known to local and provincial politicians and policy-makers until government policy, regulations and legislative initiatives are adopted that provide meaningful protection to captive wild animals.

The animals deserve no less.

Silia Smith, World Society for the Protection of Animals (WSPA) Canada

Rob Laidlaw, Zoocheck Canada Inc.

#### **About the Author**

Dr. Samantha Lindley is a British veterinarian experienced in conducting animal welfare audits of zoos and circuses in the United Kingdom.

Dr. Lindley's work for British and Irish animal charities includes zoo and circus reports for the Born Free Foundation, Irish Society for the Prevention of Cruelty to Animals (ISPCA), International Animal Welfare Alliance, and the Alliance for Animal Rights. She also serves as Honorary Veterinary Advisor to the Captive Animals Protection Society (CAPS).

In 1994, at the request of the ISPCA, Dr. Lindley visited a small holding in Limerick, Eire. Her investigation resulted in a successful international rescue operation, which involved the seizure and relocation of a number of exotic animals, including a former circus bear (Molly) who was placed in the Bear With Us Sanctuary in Ontario.

Having completed an internship at Glasgow University Veterinary School, Dr. Lindley spent four years in mixed practice before moving to referral practice in Animal Behaviour Therapy.

After an additional four years as a behaviourist with Dr. Roger Mugford's Animal Behaviour Centre, Surrey, United Kingdom (UK), she moved back to Scotland. She now operates a referral behaviour clinic at the Glasgow Veterinary School and serves as a featured lecturer to final-year veterinary students.

While Rome Burns . . .

#### Introduction

In August 1997, at the request of Zoocheck Canada and the World Society for the Protection of Animals (WSPA), I visited a number of collections of wild and exotic animals in Ontario.

These collections exist under a variety of names: zoos, ranches, sanctuaries and safari parks. All have at least this one thing in common—under Ontario legislation, no regulations exist to control their activities.

Effectively, this means that any individual or organization can purchase or otherwise acquire any native North American animal species or exotic animal (for these purposes defined here as other than native) and care for it in any way they may see fit.

Although one would think that the Criminal Code of Canada regarding cruelty to animals or the Ontario Society for the Prevention of Cruelty to Animals Act regarding the alleviation of distress would provide protection for captive wildlife, enforcement and prosecution problems minimize their potential effectiveness.

Evidently the absence of effective legislation in Ontario has led to a proliferation of "roadside" zoos. In some instances these often start with one or two animals, sometimes rescued with the best of intentions from other institutions, or from the wild. The collection then snowballs and outgrows the financial and management capabilities of the owner who has, at some point, opened up to the public, hoping to increase revenue and make up the ever increasing shortfall in budget. More animals and more "glamorous" animals are then "needed" to attract more public and greater revenue, so the difficulties for the owner and for the animals increase.

This report should be seen as a "snapshot" image of these institutions and as such it is likely to be criticized for being too limited, particularly in its time-frame. I prefer to see it as a still from a movie: although the images are fixed, the information gleaned from the position of the players, their expressions, their attitude, make-up and costume tells us that certain events and situations are likely to have preceded that moment and that certain events will come afterwards. We also know that there will have been other players and other observers. What we do not yet know is the whole plot or the ending. This is still for the politicians, the public and the animals' owners to determine.

Samantha Lindley, BVSc, MRCVS

#### **Zoos in Ontario: A Discussion**

The inspections of the zoos will be described in detail in the following pages. Some discussion of the parameters on which I based the inspections, each zoo's background in terms of welfare and behaviour, as well as an explanation of how my conclusions were drawn will be useful

#### The "Ideal" Zoo?

One might expect that any inspection of zoological institutions would be based on a comparison with some actual ideal. Describing an ideal zoo is, however, difficult. This is not due to a nihilistic attitude to zoos on my part: the zoos themselves have constantly changed their own descriptions, aims, objectives and entire raison d'être over the years.

This has, in part, been due to public pressure to move away from the menagerie-type set-up in which many different species are displayed in what are effectively cages (however well disguised!). It has, I trust, also been motivated by a desire on the part of many zoologists and zoo directors to provide a "better" environment for the animals in their facilities.

# **Get-aways**

In describing accommodation and enclosures, I will be referring to "get-aways," meaning those areas of the on-view enclosures into which animals may retreat to remove themselves from the public gaze or from contact with other animals in the same enclosure. The availability of such cover is recommended by the Canadian Association of Zoos and Aquariums (CAZA). Despite this recommendation, many zoos still do not incorporate get-aways into their enclosures, or do so only half-heartedly so that they fail to achieve their objective. The reasons behind this are, again, the "perceived" demands of the public. The public, cry the zoos, complain that if they cannot see the exhibits, they will not come and turnstile revenue will drop.

These institutions need to take a stand and change the public expectations by example. Having to look and watch and wait for a glimpse of a particular animal in a wooded enclosure is arguably more exciting than seeing it lying on concrete, performing none of its natural behaviours. If education is part of the agenda, then let the public be educated as to why these animals must have the opportunity to escape from view.

#### **Safety and Security**

Much emphasis is placed in the reports on safety and security. Both CAZA and the European Association of Zoos and Aquariums (EAZA) set standards by which they hope to protect the public from potentially dangerous animals. It could be argued that the animals must in turn be protected from the public and the public protected from themselves.

There is an extraordinary reliance, in all of the Ontario zoos visited, on the public displaying

common sense. This good faith, while touching, is not borne out by reports from zoos worldwide of people jumping into lion enclosures, putting arms through cages and so on.

The need for a perimeter fence should be obvious; this is the final barrier between the zoo and the public at large. Double doors, creating an airlock-type effect, is basic good husbandry when it comes to enclosure design. The principle is to allow the entry of personnel into the enclosure without the animal slipping past them and out the open door. I saw only one enclosure with this feature in all the zoos I visited.

The enclosures themselves need to be constructed with the species in mind, both for the welfare of that animal and for the public's safety, bearing in mind their ability to jump, dig, burrow or simply destroy. For animals who present a hazard to the staff, there should also be a system of separating off parts of the enclosure; not surprisingly, many more of these systems were in place. What was surprising, however, was the number of pens in which there was no possibility of isolating an animal.

A stand-off barrier should be constructed so that the public cannot reach the enclosure barrier. This will also reduce the animal's stress at being brought into so close a proximity to people. Zoonosis (diseases that can be transmitted between species) may be transferred via touch or via the respiratory route and this is another reason for providing adequate standoff.

Most of the enclosures inspected had no stand-off at all or had one which was so close to the enclosure barrier as to be pointless. Many of the enclosures themselves were of flimsy construction, poor design or, more often, both. Fencing was rusted, buckled and stapled to the inside of fence posts where it could be easily dislodged. Most fencing was not buried and there were breaches to security created by the animals themselves (occasionally by incoming feral animals such as rabbits, rats, etc.).

#### **Education**

The educational merits of many of the zoos visited is questionable. So many of the exhibits are in such impoverished conditions that only miseducation and a devaluing of wildlife in the eyes of the visitor is likely to be achieved. Education in zoos, as in so many walks of life, can only be accomplished by imaginative use of the resources at hand. This may be in the form of well designed, strategically placed signs, not with just the species name, but information regarding their behaviour, location, diet in the wild, etc..

Literature, interactive video, talks and the like provide valuable supplementation. There is a potential for some institutions to provide valuable information regarding native North American species, their conservation status and the possibilities for breeding and rehabilitation programmes. Most of the zoos visited made no effort to educate, and signs were poor, sparse and frequently wrong. Instead they appear to have opted to jump on the not-somerry-go-round of breeding, dealing and maintaining a captive population of animals whose only likely future is to provide more offspring for other roadside zoos or the exotic pet trade. This appears to be the case with the cougar especially, which was present in almost every collection.

#### **Behaviour**

While lip service is paid to the psychological needs of animals in the EAZA and CAZA standards, there is much controversy regarding psychological stress, mental suffering and using behaviour as a signifier of problems in management. Because behaviour assessments can only be subjective, it is argued that they cannot be used to measure "stress" and are therefore invalid

Here we have our first problem of semantics. We cannot measure "stress" as though it were simply a state which one has or does not have. We must state what the stress is (i.e., what it is that we are actually measuring) be it physical stress, heat stress, or stress caused by fear. Using the word "stress" on its own becomes meaningless. The word "welfare" has fallen victim to much the same fate. An animal, if we are to believe what we read, "has welfare" (good or bad) and it is "stressed"; these terms being apparently sufficiently clear to convey what we mean. So we must be specific in what we mean when describing animal suffering or indeed wellbeing. Simply stating that an animal looks "happy" or looks "stressed" is not sufficient.

So-called scientific (and therefore objective) measurements of stress can be confusing for the same reasons: measuring blood cortical or other parameters is not useful to prove that an animal is "stressed" at a given time; it must be clear how that parameter relates to a particular kind of stress (e.g., exhaustion, fear, overheating, etc.). However, we can describe behaviour accurately.

Description is a starting point and should be distinguished from making a judgement about what that behaviour means. Once the description is placed in context, with a history and a knowledge of what is normal, along with information regarding current husbandry, then we can start to make objective decisions about what that behaviour is telling us.

# **Stereotypic Behaviour**

This term will appear frequently throughout the text of the reports on the zoos of Ontario. It is another expression that is too easily used and, even in its proper usage, subject to debate. There have been various definitions of stereotypic behaviour:

"Repeated, relatively invariate sequence of movements that has no obvious purpose." (Broom)

"The prolonged, obsessive performance of apparently purposeless activity." (Webster)

"It is a form of behaviour that occupies the animal for most of its periods of activity without any apparent normal stimulus bringing it into operation." (Jordan and Ormrod)

The words "ritualized" and "clockwork-like" have been used to describe these behaviours.

The salient points are that the behaviours:

- a. do not occur in the wild
- b. are repetitive
- c. are apparently functionless.

I offer the following as a partial explanation of how I might come to a decision about whether or not a given animal were displaying stereotypic behaviour. One might, for example, see an animal that is pacing up and down the perimeter fence of its enclosure. Simply to draw the conclusion then that the animal is displaying stereotypic behaviour from the description would be wrong. It may be a displacement activity just prior to feeding; it may even be the first time that the animal has displayed that behaviour. However, if one then examines the animal's environment, and its immediate history, one might glean perhaps the fact that feeding time is not for another few hours and evidence that there is a well-worn path along the fencing where the animal is now pacing. Add to this the ease with which the animal is distracted from its activity and how soon it returns to it and one can start to draw conclusions about the behaviour. Additional evidence such as expression, the way the feet are placed, certain movements of the head and neck that are common to many animals displaying stereotypic behaviours, means that an experienced eye can quickly fit the available information together.

The expression "obsessive-compulsive" has also been used although arguably this is misleading because it is a term drawn from human psychiatry. Although obsessive-compulsive disorders (OCDs) are referred to throughout the literature on companion animal behaviour problems, we can neither say with certainty that the patient is obsessed nor feels a compulsion in the way we would normally understand it. Since some obsessive-compulsive disorders are thought to stem from a lack of self-esteem and problems with self-image, the term is inappropriate for the behaviour with which we are dealing.

# Stereotypic Behaviour vs. Displacement Behaviour

Stereotyped behaviour should be distinguished from displacement behaviour with which it could be confused by the uninitiated. Displacement behaviour usually occurs when an animal (or human for that matter) is frustrated in its aims (e.g., to obtain food or to win a confrontation). The behaviour may be unrelated to the original aim (e.g., grooming, scratching or pacing) and its purpose would appear to be an attempt to reduce the feelings of conflict and frustration.

Many dogs will chase their tails in response to excitement or anxiety. Nevertheless, it is only when the stimulus cannot be discerned, when the behaviour continues relentlessly, interferes with the animal's normal behavioural repertoire, cannot be easily interrupted and is rapidly resumed that the behaviour is said to have become stereotyped.

It is probable by extending the argument that a displacement activity helps to relieve frustration and conflict, and by the discovery that endorphins are released in animals who are performing stereotypies, that the suggestion arose that these behaviours were a way of coping for the animal and were therefore not necessarily a "bad thing." Indeed, the argument has run that with the release of natural opiates the animal is even "happy" in its activity, as though on some kind of "high." The fact that endorphins are released when the body is under a stressful

stimulus such as pain reverses this line of thinking.

The discussion is still based upon whether or not stereotypies are a sign of:

- a. conscious distress
- b. an indication that the animal is coping with its lifestyle
- c mental disturbance

Lawrence and Rushden (1993) conclude that "abnormal or stereotypic behaviour is an indication of chronic suffering caused by frustration, boredom, depression, and anxiety" but that they may be a form of "coping". The difficulty with the term "coping" is that it can imply that an animal or person is dealing successfully with its new situation, by whatever means. However, while an animal or person is busy coping, they find it increasingly difficult to cope with other challenges, such as infection, temperature changes, conflict within a group, etc.. And however one regards the arguments, the bottom line is that these behaviours are produced as a result of an unsatisfactory environment/husbandry and that some degree of mental suffering has occurred along the way.

There is one more significant, but frequently overlooked, behavioural change. While some animals (and humans) express their frustrations and conflicts in the performance of outwardly recognizable behaviours, it should be remembered that inactivity and lethargy can also be signs of a depressive mental state. Beyond this is what the psychologists term "learned helplessness."

Here it is worth quoting what John Webster has to say about this state, in his book <u>A Cool</u> Eye Towards Eden:

...a loss of responsiveness to stimuli in animals, acquired after long periods in which they have been denied the opportunity to perform constructive behaviours designed to achieve pleasure (e.g. food) or avoid pain (e.g. electric shocks). This is sometimes described as an adaptive response an interpretation which I find chilling. Learned helplessness defines the state of mind in which an animal has given up. I prefer to call it hopelessness.

#### **The Conservation Argument**

The conservation argument for the existence of zoos does not play a part in the stories of the roadside zoos of Ontario. Most animals are purely exhibits, while others appear to be breeding machines. It is difficult enough for the larger institutions to resource, research and successfully carry out breeding and reintroduction programs. They are fraught with difficulties, not least of which is the danger of releasing diseased animals into a vulnerable wild population or releasing animals with no ability of survival in the wild.

So, can we reasonably expect these smaller collections to play their part? We can if the conservation argument is one that they are using to justify their existence. It is not, however, a challenge to which they can rise and they should desist from trotting out education and

conservation as a raison d'être, unless they can show how they achieve these aims.

Instead of the haphazard selection of species typical in Ontario zoos, conservation-oriented facilities have responded to the urgency of the conservation message to give them at least some direction regarding choice of species and reasons for breeding (involvement in endangered species breeding programs). Education and research have been thrown onto the back of the bandwagon, which was, for a while, gathering pace, but which is now in danger of decelerating and, in some cases, stopping altogether.

The reality is that many zoos are trying to achieve their three new objectives (conservation, education, research) within the old menagerie framework. This is despite the innovative work of zoo industry veterans such as David Hancocks at the Arizona Sonora Desert Museum, demonstrating that zoos do not need big, glamorous, dangerous or fierce animals to attract the public. And attracting the public is the point at which the great and glorious ideals of conservation, education and research tend to fall down. All zoos need revenue and for most, their main source of revenue is directly linked to how many people come through their turnstiles.

Most zoos still work on the premise that the public has a "right" to see such and such a species in downtown wherever, but none can really answer why. The entrepreneurs of Victorian England argued much the same when transporting and "displaying savages" captured on their travels, but they were, in essence, creating a market for their "product." It is time for zoological institutions to change their market and recreate their "product."

Public awareness about wildlife issues is now at a level far greater than at any point in the past. Many zoo visitors now reject the notion that seeing animals in totally artificial environments is educational.

Research on captive animals yields information only on captive animals and is therefore part of the circular argument. Conservation is fruitless unless the environment as a whole is taken care of. If not, all we produce is a subpopulation of captive bred animals going round and around the institutions of the world.

Unfortunately, the zoos which were visited in Ontario were, for the most part, at the bottom of this evolutionary scale of zoos. Like the basic Victorian menagerie, they were often impoverished, dirty, misguided and imposed such a degree of suffering on their animals that many displayed signs of severe mental disturbance.

#### The Welfare Issue

This is a subject which deserves, and of course has received, volumes in which to explore the issues involved. A recent paper published in the Universities Federation for Animal Welfare (UFAW) journal *Animal Welfare* describes three overlapping ethical concerns:

(1) that animals should lead natural lives through the development and use of theirnatural adaptations and capabilities, (2) that animals should feel well by being free

from prolonged and intense fear and other negative states, and by experiencing normal pleasures, and (3), that animals should function well, in the sense of satisfactory health, growth and normal functioning of physiological and behavioural systems.

Not everyone is in agreement that all three concerns are of equal relevance. Another issue is whether or not animal welfare standards should be improved for our sake (e.g., in production terms, or even for our own moral good) or whether the animals deserve such considerations for their own sakes. Whatever one's thoughts on this, since all the animals discussed in the report are sentient creatures, surely few could argue with the demand that they be allowed all three of the above considerations.

The argument is still put forward that if an animal appears fit and healthy (often, in captive wild and exotic animals, fitness is measured by longevity) and can reproduce, then ipso facto its welfare must be "good." It is my considered opinion, one shared by many others, that this argument is incorrect.

Firstly, many of these species (as is true of some domestic species) do not readily display pain, and disease is often far progressed before obvious signs are apparent; therefore, survival is not alone a measure of welfare. Both people and animals survive under the most appalling conditions.

The same is true of reproductive capability; it is after all the raison d'être of every species (perhaps with the notable exception of man) to reproduce itself. Although specific disease, metabolic disorders and problems with nutrition may impair fertility, these in themselves do not necessarily cause suffering. However, both human and animal will and do mate and reproduce under conditions of extreme poverty, hardship, ill health and mental disturbance. This is summed up by Duncan (1993) when he writes, "...neither health nor lack of stress nor fitness is necessary and/or sufficient to conclude that an animal has good welfare. Welfare is dependent on what the animals feel."

Lastly, is the issue of death and euthanasia. For a veterinarian, being able to euthanize animals whose quality of life has deteriorated—or will inevitably deteriorate—beyond that which it should have to endure, remains a privilege and not a burden. In short: **Death is not a welfare issue**. Waste and wanton destruction are of course unacceptable, but the maintenance of life at all costs (and those are usually met by the animal) is equally so. In my opinion, it is the responsibility of those involved in animal welfare (and I make no distinction between welfare and rights) to educate the public in this matter. If not, we will continue to see the removal of animals from one collection to another, which is so minutely improved in the perception of the animal, that the transport stresses involved, the adaptation to a new routine and the preservation of all the same indicators of mental suffering mean that euthanasia would have been the more humane option.

As a scientist, one is taught to start with a hypothesis and then to try to disprove it (the "null hypothesis"). If we are to be both scientific and compassionate then I believe that we must begin with the following hypothesis:

To remove an animal from its normal social structure, from its normal environment and to restrict its natural range of behaviours and the choices it makes about its day to day life, imposes some degree of suffering on that animal.

If, by starting with this hypothesis, we give the animals the benefit of the doubt while at the same time setting out to disprove it, we should at least then give them the consideration they need. To start from the reverse hypothesis would be, at best, to take a long, slow time about reaching our conclusions and, at worst, be a case of fiddling while Rome burns.

# **Bergeron's Exotic Animal Sanctuary**

Picton, Ontario

Date of visit: 21/8/97

The sanctuary does have some advantages over some of the others I visited, the main one being that the Bergerons have enlisted the help of Rob Kello, a Jersey Zoo trained zoologist who conducts the "cat feeding time" talks, daily through July and August. Nonetheless, it has a number of glaring faults, most of which the owners are aware.

# **Safety and Security**

Security is generally poor. I pointed out the undermining of the fences of the tiger enclosures, the lack of stand-off barriers at many of the cages, and the makeshift creation of a hinge with a spoon and baler twine. As well, there is no perimeter fence and the site faces directly onto a public road. The Bergerons did not appear to be concerned and claimed the lack of security wasn't a problem because their animals were not going to escape, and even if they did, they wouldn't wander off, but instead would go straight to the back door of their house.

Security measures are extremely important for the protection of animals, staff and the public, not only on a day to day basis, but during those times when normally passive, predictable animals are hurt, frightened, distressed, disturbed, or acting abnormally. Failure to incorporate adequate security measures can lead to animal escapes and human injury.

A second run of fencing is situated between the public and the cats. The stand-off barrier is more than adequate and may also reduce stress in the cats. The wolves are also physically distanced from the public by the arrangement of their enclosure. They seemed to be interacting with each other, instead of reacting to stimuli from outside of their cage.

# Care and Feeding

Many of the cats were hand-raised and bottle-fed. Although I would fundamentally disagree with their policy of removing all the young cats and bottle-feeding them, it has to be said that these cats do, on the whole, appear more content than others I have seen.

Proponents of the practice argue that bottle-feeding makes for a more contented animal (I don't agree, but let us say, for the sake of argument that it is so). Creating an animal which is neither wild (because it is captive and does not maintain the same behavioural repertoire as its wild counterparts), nor tame (because it can never be truly so), forces that animal into a biological limbo. It doesn't fit in anywhere. This is especially true of wild animals that have been declawed, defanged or castrated.

While it is possible, in certain circumstances, that these hand-raised, bottle-fed animals may be more docile or "contented" (e.g., they may well be able to have their injections without the need for sedation), I have to ask for what end?

It cannot now be argued that, in some great plan, these animals are going to be "returned to the wild" or used as breeding stock for future wild generations. These individuals and their offspring would never survive in the wild. So what is their purpose? They live and die in captivity because someone wanted an unusual pet. There is no role for these animals in terms of conservation or education.

#### **Education**

Education is a mixed bag here. The talks given by Rob Kello are well presented and intelligent and describe the aims and "philosophy" of the sanctuary. I felt and expressed that the feeding of the cats at this time induced an unnecessary amount of stress and aggression between both those being fed at the time and those waiting to be fed. Although the behaviour was not stereotypic, the lions were pacing in anticipation of their feed.

Aside from the talks, the cage signing is variable, from the detail of the cataract operation on the two young tigers, to no signs at all on some of the cages. The cage containing the "coydog" (a cross between a coyote and a domestic dog) treated the subject as though this were a legitimate species and even put a question mark next to status (i.e., endangered or otherwise). I suggested that since this dog had been rescued (he was of unpredictable temperament) that an issue could have been made of the irresponsible nature of breeding coyotes and dogs, and wolves and dogs. This would have at least given this animal's solitary existence some purpose.

#### Conservation

Conservation is not really an issue here. All the male tigers are neutered, a responsible action on the part of the Bergerons, but there are plans to create a lion pride of a dozen or so animals. While this sounds like an appealing idea, it is neither feasible nor responsible given the resources at hand and given that there are more lions in captivity than can be housed. They are not endangered and their breeding here will not serve any useful purpose. A pride does not exist in a static form—it is in a state of flux, with adolescent males leaving when they are perceived as a threat to their sire. I would urge the Bergerons to rethink this plan.

#### **Behaviour**

The smaller cats all showed evidence of stereotypic pacing. They require more space and a substantially increased level of enrichment (i.e., cover, platforms, species appropriate shelters, etc.). Apart from the pacing and the displacement activity seen at the time of feeding, no other disturbed behaviours were observed. This is probably due to the distance between the public and the animals, better cover and some maintained social/family structure.

#### **Enclosures**

The enclosures are variable. There is not as much use of vertical space as I would like to see, except perhaps in the cougar cage. The jaguar den is too small and inadequate. The smaller cats have some cover (foliage and rocks) and there is good use made of the rocks and logs in

the tiger enclosures. The site is far too exposed and there is little or no shade or shelter. Some camouflage netting was employed in the tiger cage, but a lot more of this is needed to create even a temporary difference. The owners are aware that the tigers should be provided with a pool and plans are apparently in hand to change all the enclosures, move all the animals around and provide more space and better facilities for them all. How all this is to be paid for is another matter. Attempts are being made to grow trees for shade, but of course this takes time.

# **Breeding**

The cougars have been bred and two pairs moved on, although I was told that there would be no more breeding of them now. I have been alarmed at the number of cougars which are circulating in captivity in Ontario. These are, presumably, having no impact on wild populations since they are self maintaining, but it does give the public the impression that this cat is no longer in danger in the wild. The vast majority of these animals are part of a biologically pointless captive population being maintained and expanded annually.

#### **Conclusions**

This sanctuary demonstrates what seem to be the fundamental pitfalls of owning exotic and wild species. The owners expressed that only they can care for animals which are in need of a home and "rescuing." Consequently, they find it difficult to say "no" and rapidly outstrip their available resources. It will require a great deal of financial investment to maintain it as it is, let alone improve it as it needs to be improved.

Bergeron's Exotic Animal Sanctuary has a chance to be a responsible centre for the care of exotics, or it can go down the road of its contemporaries and squander the opportunity by being too ambitious and too stubborn to accept and work within their limitations.

#### Recommendations

- 1. Do not take additional animals into the collection unless a significant change in circumstances occurs.
- 2. Shelve the plan to create a pride of lions.
- 3. Make plans to create shade and shelter areas for the animals a priority.
- 4. Increase the size of the enclosure for the jaguar.
- 5. Stop all animal breeding.
- 6. Immediately employ security measures such as perimeter fencing, double door entry systems on cages, and securing fencing at, or below, ground level.
- 7. Stop public feeding of the foxes.

- 8. Incorporate a pool into the tiger enclosure.
- 9. Improve indoor shelters.
- 10. Install standoff barriers around the small cat cages, increase their pen size, and substantially upgrade interior furnishings.
- 11. Establish and implement an aggressive program of environmental enrichment for all exhibits.

# Greenview Aviaries, Park and Zoo

Morpeth, Ontario

Date of visit: 20/8/97

As one would expect from the name, birds take precedence at Greenview Aviaries, Park and Zoo. Although they fare better than some of the other species at this zoo, some unusual management decisions have been made, regardless of bird species and their requirements for perching, shelter, space, etc.

# **Safety and Security**

Security was poor. There were no double-doors on any of the cages. A young primate in a small glass cage could have been removed easily by simply undoing the catch on the cage.

#### **Education**

At present the signing and information is variable and rather on the quaint, anecdotal side (e.g., one of the primates likes ice cream).

#### **Behaviour**

The jaguars and the lynx were showing disturbed behaviour, along with the others already described. Neither of the jaguars had any getaway and there was considerable aggression between the two, from their separated cages.

#### **Enclosures**

The first sight that greeted one on entering the premises was that of rabbits, kinkajou and skunk on wire floored cages. I have already outlined the welfare issues surrounding the use of wire floors. The pathetic site of the two kinkajous squashed into a hollow log to get off the wire illustrates this point sufficiently.

There was some imagination used in the raccoon cages, with hollow tree trunks and other cage furniture. However, this was spoiled by encouraging the public to feed them, thus precipitating aggression.

Many of the outdoor bird enclosures were adequate, if identical and not allowing for individual needs. There was a pleasant pond, which was in danger of being overcrowded. For some reason there was a pen of ducks opposite this pond with no access to either it or even any token paddling pool as there was in other enclosures.

Indoors, I found a pair of cockatoos in a grossly undersized cage, reminiscent of a pet shop display. The upstairs section housed far too many birds for the available flight space; any disease would spread rapidly, and food was piled up in the dishes.

A large cage containing baboons was situated opposite the dog kennels. The male baboon was pacing psychotically up and down the perimeter, the pacing accompanied by head twisting on the turn. Although the inside shelter looked adequate in terms of size, in fact the floor was open barred which meant that the baboons, once inside, had to perch around the edges. It was constructed of breeze blocks, which may afford some insulation in the winter, but if there is no bedding, heat preservation would be difficult.

A singly housed rhesus monkey was fur plucking extensively and was housed on wire. Two capuchin monkeys and a couple of green vervet monkeys were also housed on wire.

For some reason, whilst other primates languished on wire floors, the squirrel monkeys and the lemur had shavings and branches. Their lot could have been improved further by varying the feeding, encouraging foraging and the use of hessian strips to act as visual baffles from each other and the public.

The wolf cage was exposed and open to both the public gaze and to the elements. This is one of a number of obviously new cages, which, whilst they may be more secure and more durable, are harsh and unyielding in environmental terms. Zoo management is going to have to work hard in order to make them more animal and visitor friendly.

There was one solitary lioness called "Jennie", the inevitable "pet" it would seem. Her cage contained one chewed tire and was otherwise all concrete and metal.

The deer, ostriches, llama, cattle and horses fare well enough, but the sheep need more shelter. The donkeys, however, were cribbing badly (chewing the wooden fence of their enclosure) and they need more oral occupation (i.e., grass and hay).

There was a solitary pig in a run with some rabbits; the pig was apparently suffering from a skin condition and should not have been left without shade or wallow, or where the public had such ready access to it.

# **Size of Enclosures**

One cage measuring approximately twenty by fifteen feet with six cougars was far too overcrowded. They had been provided with a swinging log to play with—an intelligent piece of cage furniture, but of no use to these animals when the social grouping is wrong and when there are no screens, visual baffles or room to escape from each other and the public.

The bear exhibit is a disgrace. The animal is housed in an L-shaped concrete pen, with a small box for shelter and a rectangular concrete based pool no more than 4ft by 3ft. It was pacing stereotypically.

The marmosets were in a tiny cage, far too close to the public gaze and had evidently been given at least a day's supply of food in one lot, rather than breaking up the feeding pattern to introduce a little variety and interest. (One assumes that this overfeeding policy has more to do with time management than with animal management).

The reptile cages are also too small and too barren.

#### "Shut-out"

There appears to be a selective "shut-out" policy (a policy which forces animals to stay in the outside viewing area when they would prefer to stay off view.) This usually follows complaints from the visitors that they are not getting their money's worth. To shut the animals out however, forces them to have to deal with that which they find stressful and it denies them choice. The usual reasons for them retiring from view are inadequate on-exhibit get-away, poor or non-existent cover and too close a proximity to the public or other animals.

Occasionally a shut-out policy is used because it facilitates certain aspects of management. The animals are only fed and watered either inside or out, so they are then easily moved for cleaning, etc. It is a lazy tool which also relies on a degree of hunger and thirst being experienced by the animals. For whatever reason the tiger and the jaguars were shut out of their indoor accommodation.

#### **Conclusions**

Greenview Aviaries, Park and Zoo is an unusual mixture of reasonably competent management, amateurish half-hearted attempts at environmental improvements, and total welfare failures.

Almost undoubtedly, the collection has outgrown the capabilities of the owners to deal with it and hence resources are spread randomly and piecemeal throughout the enterprise. It would appear as though the aesthetics of the grounds occupy a good deal of staff time and that ventures to improve the lot of the animals are short-lived or occur only when the money is available.

The newer enclosures must have been costly, and it is a pity that the money was not put into providing new accommodation for the existing stock, especially those forced to live on wire floor surfaces.

No doubt it is hoped, as is often the case with many zoos, that the megafauna will attract more visitors. As is also too often the case, it is these species which pay the heaviest price.

#### Recommendations

- 1. This zoo should concentrate on birds since that is obviously where their interest and knowledge lies. Making a feature of the different species would make the exhibits more interesting and increase their educational value. Increasing the sizes and numbers of ponds would improve matters for the birds and be more pleasant and informative for the visitors.
- 2. Do not take in any more stock, rescued, homeless or otherwise.
- 3. Reduce stock numbers if possible. Prevent primates from reproducing by contraception,

not by separation and isolation.

- 4. Remove the bear, build it a large, wooded enclosure, or euthanize. The bear should not remain in its present quarters.
- 5. If necessary neuter or use contraception to stop breeding the cougars. Separate the group if a larger pen cannot be made. Use vertical space, platforms, visual baffles, shelters with plenty of exits/entrances and plenty of natural cover using rocks, foliage, trees, etc.. This recommendation applies to jaguars as well.
- 6. Scrap all wire floored cages. Put a solid floor and bedding into the baboon enclosure and provide cover and visual baffles to distance them from both the public and the dogs.
- 7. Stand-off barriers should be erected outside all cages putting a minimum of four feet between the public and the enclosure.
- 8. Stop the public from feeding any of the animals.
- 9. Improve the reptile facilities or disperse to a specialist facility or qualified collector.
- 10. Do away with the pet shop-like space inside the main building. The accommodation here is totally unacceptable for the species displayed
- 11. "Soften" the new enclosures by including movable structures for the primates, and provide cover such as shelters and platforms for all animals. Add windbreaks and visual baffles.
- 12. Establish and implement an aggressive program of environmental enrichment for all exhibits.

If these measures cannot be undertaken, or some plan put in place to begin them and reasonable progress made, then all non-bird species should be dispersed to more suitable accommodation elsewhere.

# **The Killman Zoo** Caledonia, Ontario

Date of visit: 17/8/97

On entering the zoo, visitors are greeted with signs advertising fresh bison meat, ferrets and rabbits for sale. One sign also states that the zoo is attempting to breed wolf hybrids, whether for sale to the public or to dealers is unclear. But visitors are immediately given the impression that this institution is a cross between a meat wholesaler and a pet shop, rather than a serious zoological collection.

The generally run down state of many of the enclosures and buildings does little to dispel this impression. It is obvious that the owners are prodigiously proud of their building work and there are numerous hand painted signs (many of them with spelling mistakes or inaccurate information) describing the animals (or at least those which were there in 1994 which is when most of the signs appear to have been written). The signs also attribute the building work to the Killman family.

# **Safety and Security**

Unfortunately, the security of the enclosures leaves much to be desired. There are no double-entry gates into any of the enclosures; chain link fencing is stapled in many instances to the inside of enclosure posts; and the posts themselves are flimsy and would not stand up to serious attempts by the animals to dislodge or break them. Most of the doors and gates have no padlocks and use only one inadequate bolt on the outside of the door to secure them. Enclosure maintenance appears to involve little more than the addition of a few more layers of mesh overlaying the rusted or inadequate fencing which is present.

The opportunities for egress, both during cleaning and feeding, or for the public to enter are numerous. Most of the "shelters" (usually no more than crude box constructions with some kind of sheeting in front of the entrance) do not have any system by which the animal can be restrained inside whilst the attendant enters the pen. Stand-off barriers are either non-existent or are too close to the enclosures to be of any benefit to the animal or confer any degree of restraint or safety on the public.

The wapiti enclosure is one of the car park boundaries and there is an optimistic hand painted sign to the public to "stay back". The same sense of optimism must have been in place when constructing the "perimeter fence", which is less than six feet high in places and consists of patched together metalwork, iron, wood and little else but good luck to keep potential escapees from becoming "at large".

Public safety is not only ill-served by the generally poor state of the enclosures, but the active encouragement of petting and feeding the domestic animals (poultry, goats, rabbits, etc.) is not combined with any warnings or suggestions of hand washing, not eating, etc.. In the United Kingdom, there has been a recent case of severe *E. coli* infection passed to a boy after

handling a goat at a so-called "petting farm". *Salmonella spp.*, *Campylobacter spp.*, *Listeria spp.*, *Mycobacterium spp.*, and *Brucella spp.*, to name but a few zoonoses which could be transmitted this way. Reverse zoonosis (i.e., human to animal) or simply the spread of disease around the collection, is also a potential risk.

In terms of disease, there appear to be no facilities for isolating or removing from show any sick or injured animals, and no adequate facilities for treating them. One jaguar was lame at the time of the visit; it would not be an easy proposition to dart, remove and investigate that animal if the problem doesn't resolve itself.

# **Care and Feeding**

Feeding would appear to be adequate, at least in terms of quantity. However, there was uneaten food left to rot in many of the cages and the animals appeared overweight in many instances. It must be remembered that overfeeding constitutes poor husbandry and that an animal only needs to be 10% overweight to be clinically obese. Many of these animals would be far leaner, but far fitter, in their wild state. Obesity puts a strain on the organs (e.g., heart, liver), the joints (particularly those which are weight bearing), and predisposes to other disease states

The feeding of peanuts indiscriminately to nearly all species was encouraged by their sale on entry and was not supervised. The high fat/ protein content of peanuts is not a balanced part of the nutrition of most of the species and is hardly suitable for small ruminants. It also encourages begging and consequent competition with the potential for aggression between group members.

# **Drinking Water**

At the time of our visit, the owner was attempting to fill the water containers in the enclosures in the non-wooded section of the zoo. This he was doing with a watering can which, not surprisingly, he had to keep going off to refill. Also, not surprisingly, some of the drinking bowls were empty or dirty. This he was blaming on his father who "is not as picky as I am."

An honest and worthwhile pursuit, one might think, but consider the time taken to water all the stock in this way, set against the other husbandry tasks which must be performed on a daily basis. If anything demonstrated the amateurish approach to the running of the zoo it was this, and it clearly showed in what a precarious position the animals were, relying on such husbandry for their wellbeing. Consider the long Canadian winter and how often those bowls must be frozen. From where is the water fetched when the outside pipes are frozen and how long does it take? The writer herself has had to cart water to cattle on a winter's day and it can take several hours when one is not geared up for the possibility.

# Education

In my opinion the educational value of the Killman Zoo is poor. The owner himself did not know how many animals he was in charge of and his knowledge of the climatic needs of the

primates was seriously distorted. The information given on the crude signs relates to the names of the animal, their species, their age and in the case of the cats, an explanation and warning about their territorial marking by spraying urine (to offset complaints about the smell, from the wording, rather than from an educational standpoint).

#### Behaviour

Every cat (five cougars, four jaguars, five African lions, seven tigers, three caracal lynx, three Canadian lynx, two serval and one amur leopard) which was active at the time of the visit (it was mid afternoon and one would expect less activity at this time of day) was displaying stereotypic behaviour. In every case this consisted of relentless pacing; the three Canadian lynx were particularly notable in this respect, as was the black jaguar and the single tiger. The behaviour was characterized by repetitive, functionless movement, with identical placing of the feet, identical points for turning, identical movements of the head, etc. The often described "far away" look or gaze into the "middle distance" was evident.

The single-housed baboon "Chelsea" (bought at auction, according to the owner) was also displaying stereotypic movements along the ledge and the floor. Attempts to integrate her with the group had apparently failed, but they were going to try again. Success in this venture is likely to prove elusive since there are not the facilities for gradual introduction and as an incoming female she is likely to precipitate and be the victim of some serious fighting.

Some of the tigers and lions had been housed together (reminiscent of circus animal management) and there was aggression amongst and between the groups, which was more than high spirited play between the youngsters.

#### **Enclosure Sizes**

All of the cat enclosures were undersized. The so-called outside run for the lions did not appear operational and would probably prove hazardous from a security point of view if used. The cages contained the most minimal furniture; there were no on-view get-away areas; and the shelters were undersized and not constructed with the species concerned in consideration. There was little or no use of vertical space (i.e., high platforms), which at the very least would have given the cats the chance to escape to a raised vantage point.

The zoo property incorporates a segment of woodland which could have been far better utilized. The trees, where they happened to grow inside the pens, were protected with meshing, thereby removing a potential outlet for natural behaviours (e.g., scratching, climbing).

#### **Environmental Enrichment**

Environmental enrichment is a term which for me has become somewhat of a bête noire mainly because everyone assumes that they know what it means, when they don't, and because it has become synonymous with throwing a few tires and traffic cones into a pen and assuming that the animal's perception of its environment has suddenly improved out of all

recognition.

There is also the implication that it is somehow an additional measure to normal husbandry, almost the bestowing of an enormous favour upon the animals, rather than the barest necessity in what is an inevitably impoverished world.

Any attempt to enrich an environment must be active, changing, varied and sensible of the individual requirements of the species involved. (For example, there is no point in providing climbing structures for an animal which habitually burrows). A couple of old tires hanging from a rope is not environmental enrichment and their token presence does not relieve this zoo of its responsibility to provide a more interesting and varied environment for (in particular) its cats, most of whom are displaying signs of mental suffering. The writer suspects, however, that it is not within the resources or capabilities of the zoo to provide such an environment and they should therefore stop keeping cats altogether.

# **Siting of Enclosures**

Most of the cages placed the cats within clear sight of each other, if not actually next door. So not only do the cats have to contend with the public encroaching on their meager territory, but they have to spend time marking and patrolling their territories, such as they are, in relation to the other cats in their vicinity. This population density (without considering the fact that most of these species live on different continents and would never have to meet, let alone deal with each other in the wild) would never occur in a natural situation and places considerable pressure on the cats.

This should not be seen as some crude form of behavioural enrichment; for five minutes the situation may be stimulating, even exciting, but consider the insidious drip-drip of tension, all day, every day. To draw a human analogy, it could be likened to having a hostile neighbour whom one has to meet every time one steps outside the front door. The strain of having to face even a potential, not necessarily actual, confrontation can take its toll even on the most balanced individual.

#### Conclusions

It is clear that the zoo's population of cats has increased since the visit of veterinarian John Gripper two years ago. According to Mark Killman, the breeding of Snow monkeys is also set to increase, because he "likes them".

It would appear that the maintenance and construction of enclosures has not improved and any attempts to cater to the welfare and behavioural needs of the animals has gone sadly awry. Potentially, the zoo setting is pleasant enough and it's unfortunate that better use of the woodland site has not been made.

The approach to public health and safety is disappointing and there is a constant and very real potential for animal escape.

The whole zoo is run in an amateurish way, with "pet" sales on the side to provide supplemental income.

Cats of all species are suffering from impoverished environments, with only token efforts being made to provide enrichment for them. The cobwebs growing in the tires were a testimony to their failure to enrich.

#### Recommendations

Radical reconstruction of all enclosures would need to be carried out to satisfy basic security and welfare considerations, as well as a dramatic alteration in attitude of the management, and a significant reduction in animal numbers.

Mark Killman himself told me that he earns very little from the enterprise, barely enough to keep him in chain link fencing to replace wear and tear. There is therefore little chance that the funds will be forthcoming to make the kinds of improvements that are necessary.

If measures for improvement cannot be undertaken, or some plan put in place to begin them and reasonable progress made, then the animals in this zoo should be dispersed to more suitable accommodation elsewhere.

# Lazy Acre Farm Alvanley, Ontario

Date of visit: 19/8/97

Lazy Acre Farm is a horse-riding establishment in a woodland setting.

There is no admission fee to see the animals. A sign stated that the farm carries out a great deal of rehabilitation work and that donations towards this would be appreciated. Indeed, I believe that they are locally relied upon to provide this service, a fact which fills the writer with alarm having inspected the establishment.

# **Safety and Security**

This zoo had no stand-off barriers to speak of. Security consisted of a few yellow ropes here and there and an undeserved reliance on the inherent good sense of the visitors, a quality that proved to be sadly lacking as I proceeded.

The deer enclosure had large-mesh fencing which was buckled at ground level. Most of the chain link fencing in the older enclosures was rusted. There were no double doors and only the flimsiest of bolts and locks on the doors. There were two newer pens of superior construction.

The male ostrich was preoccupied pulling up the fencing to his enclosure; this was not difficult since there had been no attempt made to bury it. At the same time a visiting family was encouraging the eldest son to put his arm through the gap between the gate and the fencing to provoke the female, who was rising to the bait with understandable enthusiasm. This particular enclosure was a little way into the woods and unsupervised.

# Care and Feeding

The public was encouraged to feed the animals with food dispensers at the goat pen. Not surprisingly the goats were overfed. Goats tend to lay down a layer of abdominal fat before the subcutaneous fat appears, so a goat which appears well covered is actually obese. Overfeeding, particularly of concentrate type ration (including grain) predisposes an animal to acidosis of the rumen and, in the chronic state, may affect the structure of the foot, leading to laminitis.

This, along with the appalling state of the overgrown hooves of some of the goats and of the donkey/mule, highlights such obvious deficiencies in the standard of animal husbandry that one is forced to wonder from where the avowed expertise in rehabilitating wildlife is to come. If the management standards do not extend to elementary foot care for domestic stock, I must question the ability of Lazy Acre Farm to look after sick and injured wild birds and mammals.

#### Education

The educational value of Lazy Acre Farm is negligible at best. There is no effective signing to speak of and, if they are in the process of rehabilitating wildlife, then they would do well to explain which of the animals were in the process of being so cared for.

There were a number of owls and raptors in tiny cages deep in the woods. These, one presumed, were injured, but were hardly going to be best cared for under such conditions. Not one of them would have been able to stretch their wings, let alone fly and exactly the same cage design had been employed for each, regardless of species.

#### Conservation

Conservation is not an issue at Lazy Acre Farm; it simply does not enter the equation.

#### Behaviour

The behaviour of most of the animals was indicative of the poor management and barren environment. The coatimundi were stereotypically pacing; these are animals which would be extremely active in the wild, but their pen measured approximately six feet by five feet and contained minimal cage furniture.

The black bear was housed in a pen of about ten by fifteen feet; its shelter was of a box-like construction in one corner. It was pacing relentlessly up and down, unaware of my presence, fixated on a point beyond me. This is a species which has a home range in the order of 90 sq. km and spends a good deal of time looking for food. Being housed in a pathetically tiny enclosure with no enrichment of any kind, is it any wonder that this bear should be going literally out of its mind with boredom/frustration?

It may well be that this is a rescued cub and is not fit for rehabilitation to the wild. This is not an excuse for keeping it in such conditions. Several options for the bear exist. Either send the bear to a better equipped facility (Lazy Acres' resources seem overstretched as it is), or provide a wooded, quarter acre enclosure on-site.

One of the newer enclosures appeared to be empty except for something feathered and clearly very dead in the doorway of a shelter. On inquiry I was told that this was the cougar's enclosure and that he was so fed up with being "hassled by kids" that as soon as he heard the noise of the public, he retired into his shelter. Stereotypies are one way of "coping" or, we could argue, opting out, in an attempt to make life more bearable. Withdrawal is another way; some animals withdraw physically, some mentally, and some do both. This cougar should have been taken off display; not forced to spend the majority of the day inside its house, positioned as it was next to the car park.

#### **Hygiene and Disease**

Hygiene and disease risk was of concern here. The petting zoo arrangement places both public and animals at risk of disease transmission unless precautions are taken, which they were not. The goats, the coatimundi and the marble fox (all housed in the same vicinity) were all pruritic (itchy) to a degree which would imply a possible ectoparasite infestation.

The cage which contained what appeared to be a bobcat was filthy, as was the capybara enclosure. The latter had no grass (although the pen was dirt floored) and no attempt was made to provide it with water, apart from drinking water (capybara are large semi-aquatic rodents from South America).

The marble fox was singly housed on a filthy dirt floor. It had no bedding and when moving, displayed an intention tremor of the forelimbs; its hind limbs appeared to have a permanent tremor. This may be a recovered distemper case with the classic persistent encephalitis, but would certainly appear to have a neurological problem of some sort. I wonder what possible justification there is for keeping this animal alive and on display.

The donkey enclosure had the appearance of a swamp, despite the fact that this was summer. A very small, run down shelter was provided, but the rest of the paddock was excessively muddy. As previously mentioned the feet were overgrown and, given that this was a riding establishment with, one presumes, fairly regular access to a farrier, there are no excuses for such a condition to go untreated.

#### **Conclusions**

It would appear that the exotic/wild animals in this collection are very much of secondary importance to the main business of Lazy Acre Farm, which is horseback riding. Indeed, the few horses I saw there appeared to be in very good condition. How then, can the management allow the continued existence of the rest of their animals under such squalid conditions?

Perhaps, as many of these collections start, one or two species were taken in because they had the space and the animals needed homes. No doubt the intention was admirable enough. But it now should be clear that they have long outstripped their knowledge of husbandry, their resources, and their capabilities to care for such a diverse range of species, to have them on display to the public, and to care for and attempt to rehabilitate the injured and sick.

#### Recommendations

The owners need to decide whether rehabilitation of sick and injured wildlife is really where their interest lies and whether they are prepared to invest time and resources into pursuing this venture. If they do, then they must endeavour to undergo some training in basic wild animal husbandry and care. They must also have regular visits from a veterinarian, experienced in wildlife care, to provide treatment and advice on care and whether or not a given individual should be euthanized. This would then mean that they should sensibly restrict themselves to this task and this task only. Taking on exotics and/or homeless native wildlife from other

collections should not be within their remit.

On the positive side they could then undertake to provide valuable educational information, on native wildlife, their habitat, the problems they encounter in the wild and the challenges of rehabilitation.

If the owners are not interested in this avenue, then I see little merit in making recommendations to marginally improve the lot of the animals already present, because it is unlikely that these would be pursued.

That said, the following improvements should be undertaken at a minimum:

- 1. Provide a pool for the capybara, some grazing and some foliage.
- 2. Move the donkey out of the woods into one of the regular paddocks.
- 3. Trim the goats hooves and those of the donkey (should be done by a farrier).
- 4. Extend the cage of the coatimundi, incorporating trees, hollow branches, visual baffles, earth mounds and platforms and branches at different levels throughout the cage which should be at least four times as large as at present.
- 5. Determine the cause of pruritus and treat.
- 6. Stop the public feeding of the goats and supervise the petting area, providing hygenic facilities for washing hands, before and after (the present shack in the woods is not acceptable).
- 7. Supervise all areas of the exhibits and provide proper stand-off barriers (railings at least four feet away from the enclosures.)
- 8. Build new enclosures for all birds, providing such space, perches, nesting boxes, visual baffles, etc. as are required by each individual species (i.e., not a job lot).
- 9. Build new wooded black bear and cougar enclosures, each at least ½ an acre in size, or relocate the animals to more appropriate accommodation elsewhere.
- 10. Establish and implement an aggressive program of environmental enrichment for all exhibits.

If these necessary changes cannot be made then it is my opinion that the collection should close.

# Marineland of Canada

Niagara Falls, Ontario

Date of visit: 18/8/97

My first impression of Marineland is that this is a park which cannot decide whether to be an amusement centre, an animal feedlot or marine circus.

Of particular note are the vast walkways, trimmed by not inexpensive paving. Yet, to look at the impoverished state of the deer, elk and bison enclosures, one might assume that this is a park on the brink of insolvency.

There are areas of what appears to be landfill; there is grass and woodland—all of which would provide a more suitable habitat for the animals than that which they occupy at this time. The irony on leaving the deer park was to encounter the grass verges being mown, whilst the deer and other ruminants grazed dirt.

Provisions for *public health and safety* raise serious concerns. The risk of injury, zoonotic disease transmission and risk to animal health is high in every area of the park. The spectacle of children leaning over to be "kissed" by an orca or to hug a dolphin is irresponsible from a public safety perspective, and no longer considered an appropriate conservation message.

The *general theme* of Marineland gives a sense of the medieval. Sadly, this is in keeping with the attitude it fosters regarding our relationship with animals. Not only are they reliant on the keepers for their food and shelter (such as it is) but they must beg for both food and attention. In the case of the deer and elk, they have to relinquish shade and shelter and overcome their natural flight responses to obtain it.

The marine mammals must perform tricks and be seen to have been "vanquished" by humans for the sake of entertainment, before they are "rewarded". Such is the educational message available to the public at Marineland, in particular the children.

These are the general impressions of the author, perhaps formed more strongly because, in the UK, there is now nothing equivalent to Marineland. Dolphinaria used to be common in Britain, but latterly the public regarded such institutions with more distaste than interest. Seals and sea lions continue to be kept in UK zoos and some are still made to perform tricks, but there continue to be problems with their husbandry and criticisms of such a spectacle. The more specific comments on the husbandry and welfare of the animals are set out below:

#### The Deer Park

The does and bucks appear to alternate in their occupation of the two available paddocks. The term is used loosely for they are dirt and shale enclosures, one with concrete walkways for the public.

There are signs warning that children be supervised, but no official supervision operates and consequently the public behaves as they wish. Indeed, I observed members of the public feeding the deer Marineland brochures. The deer crowd around the public, pulling cartons of food from their hands with children shrieking and running amok amongst them.

It is questionable as to what else the deer are fed; there are empty hayracks in the rear enclosure but no evidence of provision of roughage. These are animals adapted to spending long periods of the day grazing and browsing. High levels of concentrate-type food disrupt the acid-base balance of the digestion, leading to ill thrift and occasional acute abdominal problems. Behaviourally, denying access to grazing and/or other types of roughage deprives the deer of any oral occupation. This can lead to abnormal behaviours such as displacement activities, but more commonly many of the deer are attempting to graze the dirt. The ingestion of soil irritates the intestinal lining and contributes to digestive problems.

Many of the deer are listless, pruritic (itchy) and badly bothered by flies. There is almost no shade and only one automatic drinker was seen, despite there being upwards of one hundred animals. Many of the females are scarred; this may be as a result of self-trauma, lice or old myiasis (fly strike/maggot infestation) wounds, but some sores are still fresh and attracting the flies

The males are confined behind a double gate. They too have no shade or shelter and apparently only one automatic drinker. Most were shedding their velvet when the author was present, but there was no provision of any natural substrate against which they could rub.

The result was a most unhealthy looking shed, with flies surrounding the bloody antlers and dried blood all over the gates and the drinker.

These enclosures do not mimic the natural habitat of the deer in any way. The substrate is entirely unsuitable; the dry gravelled dirt will irritate the delicate interdigital skin and predispose the deer to acute lameness from *Fusiformis* type infections, particularly in damp conditions.

The paddocks will be muddy at times and there is no evidence of any shelters. The deer are overcrowded, which may predispose them to carrying a heavy parasite burden—one hopes that worm control is more efficient than fly control in the husbandry of these animals.

From a *public health* point of view, there are no warnings regarding the washing of hands after handling the deer. Infections from bacteria such as *E.coli*, *Camplyobacter* and *Salmonella spp* could be easily passed on.

# The Red Deer, the Elk and the Bison

The red deer have an inadequately sized shelter and no evidence of hay fed throughout the day. Again, the handouts from the public draw them away from what little shade there is to lie in groups against the fence. The ground is far flintier than in the deer park and more damaging to the feet. The problems of dirt grazing apply to all three species.

The fencing between the deer and the elk is poor and has been shoddily repaired with mesh that is buckled and twisted. It poses a threat to youngsters when they force their heads through and is a source of injury from rubbing.

The older elk are well grown, but the younger ones are thin and appear possibly to be undernourished, either because there is too much competition for food or because of a heavy endoparasite burden. Scarring and open wounds are commonplace and the distress caused by flies as acute here as elsewhere.

*The bison exhibit* attracts the same criticisms; it is an overcrowded and barren enclosure and an utterly pointless source of miseducation for the public.

## The Black Bears

Here we discover the only sign in the park and it tells us about the variation in colour of the black bears, that they are fed on meat, fish, fruit and vegetables but that *they have been known to like sweets and honey*.

Such is the reasoning behind selling vast quantities of marshmallows to the public to spend the day *feeding the bears*. This in turn encourages them to beg and precipitates much aggression between competing individuals. There are many bears with torn ears and scars which is evidence of frequent fighting. The author counted twenty-nine bears which is far too high a number to have in such an enclosure.

There are only three den entrances visible and no areas of get-away or shelter either from the public or from other bears.

*The enclosure* is barren and the pool from which the bears beg is filthy, despite the fact that it appears to be their only source of drinking water.

In common with many such exhibits, the public look down on the bears which, due to their inability to escape scrutiny, is universally considered unacceptable by experts in bear husbandry.

Many of the bears are displaying *stereotypic behaviours*; those functionless, repetitive movements that initially arise from conflict and eventually signal the development of a psychosis. These behaviours are seen commonly in bears (and other species) in captivity and, far from being a sign of "coping" as is sometimes claimed, they can be more accurately described as a failure to cope and a reflection of mental suffering.

In terms of *physical health*, the feeding of sweets by the public is irresponsible and will lead to a high incidence of caries, dental abscessation with consequent pain and possible systemic infection. Who would regularly feed a child a diet of sweets and not expect to pay a high price in dental disease and obesity?

**Public safety** at this enclosure is abysmal. The likelihood of a child taking a tumble over the

edge of the pool is high, since there is no standoff. The wooden posts that line the sides of the pen have 4-6inch gaps between them and, in places, are no higher than five feet and could be easily breached from either side.

In short, this is essentially an overcrowded pit that does nothing for either the welfare of the bears or the understanding and safety of the public.

## The Marine Show

It seems inconceivable to have to comment on the inadequate size of the orca pool. There can be no possible excuse for keeping these animals in such a confined and barren environment, where they can perform none of their natural range of behaviours and where they are isolated from their family groups.

# **Training and Behaviour**

The insistence that only "100% total positive reinforcement" training is used with the animals is misleading. No training can be 100% positive, i.e., only desired behaviours are rewarded.

Such a training would be protracted and limited since one would have to wait for the animal to perform spontaneously a given behaviour, match a command signal to it and simultaneously reward it. This is called "instrumental learning" and is a useful technique for many species. It is, by its nature, limited to those behaviours that would normally be performed.

It may well be that much of the training has been achieved in this way, but where the trainers make a virtue of their methods they then go on to demonstrate the "time out" technique. It is my opinion that this is a very powerful <u>punishment</u> for intelligent animals who rely on humans for food and affection/attention. The "time out" technique relies on withdrawing attention and affection in the hope that the animal will then work harder to obtain these considerations.

It is a punishment used widely in training dogs and indeed children (a child having a tantrum in public will soon stop if no one takes any notice and the parent pretends to walk away). It removes the need for confrontation and physical punishment and in these respects is more humane and often less confusing than other forms of reprimand.

However, it is open to exploitation; a child who appears to be misbehaving may be genuinely distressed; a dog who is growling may be suffering pain—withdrawing attention repeatedly in these circumstances will create further distress and psychological problems.

Using this technique with the whales in order to get them to perform tricks for the umpteenth time in a day is likely an exploitation of this punishment and should not be described as "positive reinforcement".

It was noticed that one of the sea lions mistimed the juggling trick and was not rewarded even when he repeated it correctly. Not only is this poor training but also is a good example of how the whims of the trainer can randomly and confusingly punish the animal.

# **Physical Health**

The painting of pools blue/green is solely to facilitate spectator viewing. However, the consequently high reflectivity of the pool base in sunlight increases the risk of photophobia developing in the pinnipeds.

The intensity of the reflected light causes a reactive blepharospasm (spasm of the eyelids) which, if it occurs frequently, can lead to a secondary keratitis (inflammation of the surface of the eye). Even without a keratitis there is discomfort; the equivalent of humans having to constantly squint and blink in bright sunlight.

Splash, one of the sea lions being used in the dolphin show, presented with what appeared to be blepharospasm. Whether this was due to the bright spotlights being used or a more chronic condition is not possible to say since there was no public access to the holding pools for the seal and sea lions.

# The Dolphins

It would appear that, not only do the two dolphins have an extremely small pool in which to live out their lives, but they also have no access to the open air as the pool is entirely indoors.

The downstairs viewing means that the dolphins have to confine themselves to the back pool for privacy. The noise created by the acoustics of the auditorium above and the shouting children at the poolside may be distressing to the dolphins and interfere with echolocation and communication.

The arguments that the dolphins "appear happy" or that they would not perform if they did not want to, have no basis. First of all they are easy to train and there is after all, precious little else to occupy their intelligence and interrupt the tedium of their barren environment. Secondly, the dolphins are constantly rewarded with food for doing "tricks". However, the measure of the enjoyment of an activity, is whether or not the behaviour would be performed for its own sake. Thirdly, there is no choice for the dolphin. Performing an activity when it is the only available option is not a measure of the desirability of the behaviour.

Mental and physical disease is the result of failing to adapt to stressful situations, even when there are no outward signs of distress. Anecdotal stories of dolphin "suicides" in captivity abound and could be dismissed on the grounds of anthropomorphism, although psychotic behaviour can lead to self trauma and death. But in attempting to provide care for an animal, humans must give that individual the benefit of the doubt that removal of its normal environment, social structure and behavioural repertoire *will* have a detrimental effect on its health and wellbeing, whether or not that reflects in its physical appearance.

#### Recommendations

#### **Bears:**

- 1. Use the earth from the new aquarium site to build up and landscape the bear enclosure to provide get-away areas.
- 2. Stop the public feeding of the bears. Erect stand-off barriers to discourage their now habituated begging behaviour and vary the husbandry. For example, disperse food at irregular (both spatial and temporal) intervals throughout the enclosure thereby reducing competition and providing forage; place logs and fresh branches in varying positions throughout the enclosure and provide boomer balls etc.
- 3. Provide fresh drinking water and clean up the pool in the bear exhibit, providing filtration.
- 4. Use contraceptives to stop any further breeding by the bears.

# **Ungulates:**

- 5. Use existing grass and woodland to disperse the deer population throughout the park.
- 6. Stop any further ungulate breeding by instituting management changes.
- 7. Stop feeding by the public and provide hay where there is reduced grazing.
- 8. Rotate existing paddocks; plough and seed. Provide more shelters for the short term.

# **Marine Mammals:**

- 9. Immediately cease breeding marine mammals at Marineland.
- 10. Stop the marine performances. Use the existing stadia for presentations regarding the difficulties of keeping marine mammals in captivity.
- 11. Retire the existing orcas and dolphins to an ocean pen, and discuss the rehabilitation and release possibilities with cetacean biologists.

#### General:

- 12. In the short term, disperse the entire animal collection to more spacious accommodation.
- 13. Next, expand the amusement side of the park and diminish and eventually dissolve the animal collection.

# Northwoods Buffalo and Exotic Animal Ranch

Seagrave, Ontario

Date of visit: 22/8/97

The card for Northwoods Buffalo and Exotic Animal Ranch advertises as "breeding stock" the following species: buffalo (bison), Arctic wolves, Timber wolves, Siberian tigers, African lions, jaguars, cougars, Pot-bellied pigs, Sika deer, bears, peacocks and wild turkeys.

Obviously, considerable effort has been put into this facility and its enclosures. It was a surprise then, to discover that amongst this clean and well presented set of pens, I encountered the worst examples of disturbed behaviour and apparently clinically ill animals I had so far witnessed in Ontario.

Many of the crippled, aged and infirm animals (e.g., the Polar bear) may have come from other collections or been rescued. No doubt they will have "arrived in that state" or worse. However, that is not the explanation for the condition of all animals in the collection.

Further, modern zoo ethics have moved away from preserving life at any cost. Animals whose psychotic behaviour is fixed, whose age or infirmity mean that their quality of life is diminished to the extent that they are suffering and are likely to continue that way with no prospect of relief, should be euthanized.

If they are under veterinary care, they should not be subjected to the continual stresses of being on view. If their condition is not serious, or if their removal from a family or group is likely to be deleterious to the social structure as a whole, then adequate explanation as to their condition should be provided to the zoo visitor.

# **Safety and Security**

Security relied mainly on electric fencing, so I trust a back up generator was in place. There were some public stand-off barriers but none in front of the lions or the cougars, although the latter did sport the only example of a double door system I saw in the Ontario zoos I inspected. There was no perimeter fence around the facility and the black bear and polar bear enclosures extended beyond the natural entrance boundary of the ranch.

During my visit there was little or no supervision on the grounds. In fact, I had to go to the house to alert someone about a goat kid which had escaped.

# Care and Feeding

Animal health did not appear to be well catered for. There was a baboon in one cage with its front right limb missing and sores on its hindquarters. An old jaguar was lame in its right forelimb, presumably due to the swelling on its foot; its canine teeth were well worn, exposing the pulp. Its house was an elevated box, which would be unlikely to cause it problems jumping up, but it may well be painful on jumping down. The simple inclusion of a

ramp (or treating the lameness if possible) would have eased the situation.

In a group of half a dozen tigers there was one emaciated male. He was the victim of some aggression and should not have been in the group. If he was not aged, he may have been experiencing health problems (i.e., kidney failure). Two of the bears were underweight and their coats in appalling condition. At least one each of the Timber and Arctic wolves appeared dramatically underweight, with ill-kempt, staring coats.

#### Education

I believe the animal exhibits at Northwoods Buffalo and Exotic Animal Ranch have negligible educational value. To be fair, the facility doesn't claim to be educational. Education does not seem to be part of its agenda.

#### Conservation

Likewise, conservation does not feature in its remit. The only breeding which goes on appears to be for sale and profit. One presumed that the five young lions which were languishing in tiny, barren accommodation were waiting to be sold.

#### **Behaviour**

Disturbed behaviour was observed in more than fifty percent of the animals. All primates showed a variety of pacing and head twisting. Some of the lions, the jaguar, bobcat, tigers and cougars all displayed stereotypic pacing.

Four of the five bears were psychotically pacing and one had developed a head-bobbing/weaving motion which went on for most of our visit. The polar bear was simply standing looking vacant. It's impossible to say whether this odd behaviour was indicative of mental disturbance.

The most disturbing sight of all was that of the black jaguar, white saliva covering his face, maniacally chewing the end of his tail. Self-mutilation, presumably because it evokes powerful emotional responses in humans, is perhaps the most desperate outward sign of mental suffering. The jaguar continued this behaviour for more than half an hour and was still doing it when we left. There was a hairless patch on his left hip, which may have been the result of previous self trauma.

# **Enclosures**

The enclosures were of a modern construction, sturdily built and in good repair. Strangely, no automatic drinkers had been installed. Instead, a variety of bowls and dishes were being used. There was no cage furniture, apart from the most basic platform, in the big cat enclosures.

The leopard enclosure was the best equipped with several platforms and a high vantage point. Next to the leopard, three young lions paced up and down in a totally bare cage reminiscent of

a circus beast wagon. There was no shade or shelter in the tiger enclosure and they were locked out, their indoor quarters being occupied by two other tigers. Two of the lions did have access to the inside, but despite the size of the barn which housed them, the cat cages occupied only a tiny part of the interior. The rest contained machinery and served as a makeshift slaughter facility.

The primate cages were small and barren with concrete floors. One cage employed wire flooring. The eagles were in circular, barren cages. They had the advantage of shade, but little else. They would not have been able to extend their wings fully.

#### **Conclusions**

In a way, the honesty of Northwoods Buffalo and Exotic Animal Ranch is refreshing. As a breeding and boarding establishment, not pretending to have any nobler aspirations, it has to be admired for sheer brass neck if nothing else. That is, if it weren't for the appalling state of the animals in their care.

There would not appear, on the face of it, to be any valid financial excuses for the state of Northwoods' animal care. Although the owner was pleading poverty at the time of our visit, it seems that funds have been available for buildings, land, and equipment like lawn tractors.

Northwoods Buffalo and Exotic Animal Ranch is full of disturbed, suffering animals in less than adequate conditions.

#### Recommendations

- 1. All aged, ill and infirm animals whose quality of life has diminished to the extent that they are suffering and will continue that way with no prospect of relief should be euthanized.
- 2. Upgrade cages and enclosures to modern zoo safety standards. Hot wires should be used only as a supplementary measure for containment of dangerous animals.
- 3. Develop and implement an aggressive program of facility-wide environmental/behavioural enrichment, including refurbishment of cages and enclosures.

If measures for improvement cannot be undertaken, or some plan put into place to begin them and reasonable progress made, then the animals should be dispersed to more suitable accommodation elsewhere.

# **Pineridge Zoo**Grand Bend, Ontario

Date of visit: 20/8/97

This zoo is in a pleasant woodland setting which has been utilized not at all to the benefit of the animals.

Rather than building enclosures which were spacious and incorporating the natural cover, climbing apparatus, foliage and other obvious advantages of the trees, the cages have been built in between the trees and in some cases it would appear that areas have been cleared to make way for the pens.

# **Safety and Security**

Security here was lax in the extreme. The cages mainly consisted of corrugated iron and plywood; there were no double door systems to any of the cages; and most of the metal work was rusted. The stand-off barriers were incomplete and some posed a hazard in themselves, having nails protruding from the top. The access point to the jaguar cage appeared to consist of one sheet of plywood only. The tiger cage was so constructed that it would be unlikely to withstand a concerted effort to escape.

At the time of our visit the entire complement of staff appeared to be congregated around the entrance and there was no evidence of either any supervision or any attendance to any of the animals. There was only a sign which requested that public should not "feed the animals anything you would not eat yourself" which seems a bizarre request and ignorant of the needs and good husbandry of the species involved. The top half of the porcupine cage was open and could be raised to allow easy access.

Public health and animal health appear to be poorly served. With insufficient stand-off barriers the public are allowed to be dangerously close to many of the animals. One girl was handing pieces of bread to a monkey. I would be interested to know whether these animals have been tested for hepatitis and the like, zoonotic disease being a concern.

# **Care and Feeding**

One bobcat was clearly aged/infirm, hunched and depressed. One assumes that it is under veterinary care (?), but should not under any circumstances been left on display.

The baboons were grossly obese, presumably from too much extra feeding; this induces lethargy, leads to disease and is not in the best interests of the animal.

There appears to be no provision of heating (particularly of concern for the primates). The only animals to benefit from artificial heat were the reptiles, but even on a summer's day it was clear that one infra red lamp was not sufficient for the iguana, which were forced to take

up a position in the top fork of the branch to be close to it. The alligator was provided with a plastic tub, its own length in size, and nothing else.

## **Education and Conservation**

The educational value of Pineridge Zoo is limited by its very nature. Most of the animals exist in such an impoverished environment that their normal behaviours are distorted. Signing is crude or non-existent and some of the primate species are kept in isolation. There is nothing of conservational interest at this zoo.

#### **Enclosures**

The enclosures vary in design. Most consist of mesh and wooden supports at the front and insufficient (often non-existent) housing. Some cage furniture has been provided for the primates in the form of branches, but they have no movable structures, no get-aways and restricted space.

There is little point in providing so called enrichment when the group social structure has been destroyed by isolating one or more members. It would appear that (by accident or design) use has been made in some cages of the plentiful leaf supply to provide a soft, natural substrate in which food can be scattered and foraged for. However, feeding by the public is still encouraged and promotes aggressive interactions particularly amongst the primates. The result is that the food supply is left rotting amongst the feces and the leaves.

Although the donkey accommodation has been upgraded since Dr. John Gripper's visit, footcare appears to be neglected and this needs attending to.

The wolf cage was, frankly, a hellhole! Consisting of several layers of mesh, an earth floor and dark rear section with a kennel, it was covered in chicken feathers and contained two maniacally pacing wolves.

The jaguar's cage contained only a few logs, bare earth and he appeared to have been shut out of his shelter with no water. He too was stereotypically pacing, although the dimensions of the cage meant that his pattern was repeated every five paces.

Likewise, the tiger cage contained only bare earth and was in two sections. Four strides was enough for him to reach the limits of the cage. Neither animal seemed aware of the presence of the public, being fixated on some other point, although the occasional loud noise would stimulate an increase in activity and/or agitation.

As a classic example of the standard of husbandry at Pineridge, I would cite the guinea pig cage. Most children who have owned guinea pigs would have had a better idea of how to water them than whoever attends them here. The water dish was positioned in such a way, and was so deep, that the animals had chewed one side in order to stand on the framework of the cage to reach the water.

#### **Conclusions**

What is so disappointing about Pineridge Zoo is that it has the space, the setting and the overall potential to be so much better than it is. Instead it is a squalid collection of makeshift cages, housing a largely deranged menagerie of randomly selected animals.

Every cat is showing signs of stereotypic behaviour and therefore mental suffering. Management has gone halfway in attempting to provide "enrichment" for some of the primates and then seems to have forgotten that basics like heat, company and shelter are actually essential.

The "care" of the reptiles in what resembles a garden shed is wholly amateurish and inadequate. What possible point is there in keeping an alligator in such an environment? What possible quality of life can it have?

#### Recommendations

I can see no possible justification for Pineridge Zoo to continue operating in its present form.

The kinds of change that would need to be made would include removing all the existing cages, dispersing or euthanising much of the present stock (this being dependent on where they might be rehoused and whether or not their behaviour is so fixed as to be irreversible); building enclosures to incorporate the woodland and the foliage; and establishing and implementing an aggressive program of environmental enrichment for all exhibits. This would include increased space, cover, natural substrates and play opportunities. The standard of enclosure building would need to be far superior than it is at present and the level of husbandry dramatically improved.

# Sauble Trails Mini Zoo

Owen Sound, Ontario

Date of visit: 19/8/97

This is a primarily a horse riding establishment which breeds sled dogs on the side. The other animals in the collection were, I presume, brought in to keep customers amused before their horse rides

# **Safety and Security**

Apart from the woman who took our admission fee, security was non-existent. Stand-off barriers were incomplete and anyone could simply walk to the side of them. Most of the exhibits such as the ratite birds, sheep, goats and deer were housed behind flimsy mesh fencing on ground that will be excessively muddy in the winter. One of the pot-bellied pigs had escaped, which it apparently does regularly, and lay in ambush on one of the paths. There was no supervision of the cages in the woods.

#### **Education**

The educational value of the collection was nil. There was very little information given about any of the animals. The natural behaviour of the small mammals was distorted by being housed on wire floors. No attempt was made to explain the purpose of the collection or any bearing it might have on the relevance of keeping these species captive.

#### **Enclosures**

It was hot the day of my visit (around 25 degrees) which was causing some discomfort to a number of the animals. One of the first enclosures I observed was the wolf enclosure—a small, concrete, circular enclosure, about ten feet in diameter. Apart from a small kennel in the centre of this cage, there was no shade and the male wolf was pacing rapidly around the circumference. Although I stood right next to the cage, he showed no sign that he had registered our presence.

The next sight was that of a series of raised cages, containing a variety of species including rabbits, weasels and ferrets all on wire flooring. Wire floored cages are an anathema to anyone who takes even a casual interest in animal welfare issues. The only advantage to using this type of flooring is to minimize the work involved in cleaning, since (in theory) the urine and faeces drop through the wire. The disadvantages for the animal are numerous:

- It is uncomfortable per se, but also because the system requires no bedding.
- Normal nesting and use of bedding for heat regulation is lost.
- The system is inherently cold because three sides of the box are effectively open.

- The feet of the animals are invariably damaged by having to grip the wire floor. This can be improved by carefully selecting the wire gauge size of mesh, but nevertheless trauma occurs, which is painful in itself and predisposes to infection and foot abscesses.
- The system is inherently devoid of any means by which the environment can be made more interesting, unless vertical height is used, which is not appropriate for these species and not possible in the size of cages available at this farm.

There were an extraordinary number of ferrets, raccoons, foxes, and even some mink (the signage indicated mink but I did not actually observe them). The zoo trailed off into some woodland. Scattered here and there were a number of wire floored cages in such a state of neglect and squalor that one at first assumed that they were unoccupied. Unfortunately, that optimism was short-lived; the cages were found to contain ferrets and skunk plus an assortment of old plastic wrappers, accumulations of feces in the corners and a random selection of variously efficient/appropriate water drinkers. The housing in the woodland pens for many of the animals (rhea, deer, etc.) was inadequate, particularly in inclement weather, despite some natural shelter provided by the wood itself.

Outside the wood were a series of enclosures housing more wolves, foxes, a macaque, a lynx, a cougar and some birds of various species. These cages appeared to have been constructed with earth floors overlaid with wire. However, a good deal of the wire both in the fox cage and the wolf enclosure had been undermined by large excavations in the earth. This further reduced the space available to the occupants.

In addition, the fox cage contained buckled, protuberant metal which may cause injury. The size of enclosures for the cougar and wolves in particular were woefully small. The cougar was also positioned within sight of the pack of sled dogs, the noise of which one could hear throughout the site. The solitary deer and solitary sheep were another testimony to either a failure in husbandry or a failure to care about the normal social structure of the animals.

Public health and animal health were not catered for and there appeared to be no facilities for isolating any sick or injured animals, except onto a wire floor and then only if said animal were of the appropriate size.

#### **Behaviour**

Behaviour of animals on wire flooring is always difficult to assess for the very reason that it is so distorted. Not surprisingly, those animals which had access to floored shelters remained in them unless disturbed

The wolves in both enclosures were displaying stereotypic pacing, were unresponsive to our presence and apparently unaware of the rest of their surroundings. No attempt had been made to improve the lot of any of the animals, with the possible exception of the lynx, which at least had some branches and could reach a high vantage point above the gaze of the public. It had no get-away, however, and its cage was in an extremely exposed site.

The cougar was housed in a cage with some foliage (natural overgrowth) and was pacing the perimeter of its enclosure. There was no room for any significant cage furniture, no get-away and constant exposure to the passing public and to the dogs chained opposite. (Cougar are inherently frightened of dogs).

#### Conservation

Breeding appeared to be high on the agenda, but for what reason, one could only speculate. It goes without saying that conservation issues were not at the forefront of this collection's aims and objectives.

## **Conclusions**

The Sauble Trails Mini-Zoo is squalid and dirty. Maintenance is not a priority and security is poor. There is no perimeter fence and the zoo sprawls in a seemingly unregulated manner throughout the woods. There would appear to be breeding of species such as raccoons, ferrets and foxes and these are kept in a variety of environments. There are no concessions to requirements for space, expression of natural behaviours (except mating) comfort or other aspects of physical and mental wellbeing.

The most anachronistic and unpleasant thing about this zoo is the wire floored cages which are an insult to the welfare of the animals so housed. There are herd animals kept singly and the predator species (e.g., wolves, lynx, cougar) are housed in tiny, exposed and mostly barren cages in various stages of disrepair. These animals are displaying signs of mental disturbance.

#### Recommendations

- 1. Breeding should stop forthwith.
- 2. The wire cages should be removed and destroyed.
- 3. The emu, rhea, sheep and deer should be relocated to a more suitable environment.
- 4. Ideally, a safe, professionally constructed enclosure should be built within the wood, comprising at least an acre to house the wolves. These should be neutered and introduced, if possible, as one pack.
- 5. The cougar run should be extended down the side of the woodland (not adjacent to any proposed wolf enclosure) and include natural foliage to act as visual baffles, extensive cage furniture, the height of the cage extended (at least twelve feet) and use made of the vertical space with platforms, branches etc.
- 6. A similar enterprise could be attempted for the lynx, but these almost invariably display stereotypic behaviour in captivity and, if there are no realistic prospects for this animal, it may be better euthanized.

7. Establish and implement an aggressive program of environmental enrichment and upgrading for all exhibits.

Whether the owners of Sauble Trails have the capability or, indeed, the inclination to make any of these changes remains to be seen. If not, then I hope that the nauseating spectacle of this establishment is shunned by the discerning public and thereby forced to close.

# **Storybook Park** Owen Sound, Ontario

Date of visit: 20/7/97

The most striking aspect of what is essentially a children's theme park is that the "innocence" of the storybook themes are crudely juxtaposed with the scenes of aggression from the macaques and the mental distress of the tiger.

From going on cute little train rides and looking at Humpty Dumpty, the children then watched in fascination the screaming of the (other) primates as they competed for the handouts. This was all part of the entertainment.

# **Safety and Security**

Security has obviously been improved since the visit two years ago of Dr. John Gripper. There are now stand-off barriers, but the security of the cougar cage looks questionable. There are no double doors on either this or the tiger enclosure.

# **Care and Feeding**

Feeding by the public is encouraged. The sheep and deer are consequently constantly searching for grazing on the bare earth and there was no evidence of any roughage being fed to either species. The animals are therefore motivated to come forward for handouts (the deer enclosure has a hole in the fence designed especially to facilitate this). The sheep are overweight, but as is the case with the deer and the llama, there is no continuing oral activity (i.e., no grazing).

Sheep are ruminants which spend a large part of their day eating grass and browse and an equally significant part of the day ruminating ("chewing the cud"). The feeding of ration in the form of corn or grain not only upsets the acid-base balance of the rumen, predisposing the animal to acidosis and associated diseases, but leaves them little else to do.

Feeding by the public also precipitates aggression and nowhere was this more apparent than in the macaque cage. Squabbling over corn had reached an intense level whilst I was watching and there was nowhere for the potential loser to retreat.

#### **Education/Conservation**

The educational value of the park is negligible; the animals are just a sideshow and there is nothing of any conservational relevance.

#### **Behaviour**

Behaviour of the animals clearly demonstrated the inadequacies of the accommodation and

general husbandry. From the begging behaviour of the deer, through the dirt grazing by the sheep to the stereotypies of the primates and the cats, normal behaviour was conspicuous by its absence. The tiger was found stereotypically pacing the perimeter of his enclosure. He was poorly groomed, often a sign of illness, ill thrift or behavioural abnormality in cats and was fixated on a point beyond his cage in the "middle distance".

Not only were the macaques fighting over the food, there was also considerable aggression displayed toward the public. This is common in many primate exhibits where the public is allowed too close to the enclosure and the animals are not allowed to exist, as it were, in their own world. Aggression between group members is, to some extent normal, but here there is no escape and therefore often no resolution of the conflict and a danger of real injury. Self trauma, probably the most distressing outward demonstration of mental anguish in any species, was also apparent. One of the primates was repeatedly running up the side of the cage and banging his head against the metal canopy.

## **Enclosures**

The enclosures were inadequate for all species. The lack of grazing has already been described, but the macaque cage was reminiscent of the worst Victorian-style menagerie cage. It was circular, about five feet in diameter and about twelve feet high. Capped by a canopy containing one small box-like shelter, the floor of the enclosure was concrete, presumably to facilitate cleaning, judging by the adjacent hosepipe. Operator convenience however, should not take priority over the wellbeing of the animals. In fact, at the time I was there, one of the youngsters had the clip from the hosepipe stuck around his foot and was in some distress trying to dislodge it.

The cougar cage belonged to the same Victorian menagerie or, perhaps, was more reminiscent of a circus beast wagon. There was a bare concrete floor, a platform and absolutely nothing else—no getaway, no foliage, nothing to relieve the monotony of the sterile cage or to even attempt to make best use of the pitiful space.

The cage for the tigers was inadequately sized, had no pool, no get-away areas, and no foliage or furniture. It was also situated opposite the deer enclosure, although, frankly, I believe that, judging by the appearance of the tiger, he had long since ceased to care about or notice his environment

#### Conclusions

Aesthetically, the place looks clean and orderly, but essentially conditions for the animals have not improved since Dr. Gripper's visit two years ago.

#### Recommendations

1. All primates should be in larger cages with indoor and outdoor runs. The flooring should be of natural substrate and a significant proportion of their daily ration should be scattered as forage throughout such as woodchips. There should be extensive cage furniture, with

movable branches, swinging ropes and toys, and these should be changed and moved around frequently. There should be visual baffles and adequate get away from group members and from the public.

- 2. There should be no more public feeding of any of the animals. If it is not practical to maintain paddocks for the ruminants then "zero grazing" should be employed (i.e., grass cut and taken to the animals) and the provision of roughage such as hay.
- 3. Both the tiger and the cougar enclosures need scrapping. Rebuilt enclosures should contain extensive foliage, water (i.e., a pool deep enough to lie in), cage furniture and getaway (on view). The mental state of the stereotyped tiger needs assessing and if the behaviour is fixated then he should be euthanized.

Unless the cages and enclosures can be radically altered, then the existence of the animal aspect of this park should cease.

#### **Recommendations for the Control of Zoos**

- 1. That no person or group of persons or organisations be allowed to own or keep any native wild animal (i.e., indigenous to the province or country) or exotic animal (non-native) without obtaining a license.
- 2. That the license be renewable yearly only after inspection of the premises, the animals, the health and movement (including deaths) records.
- 3. That the license be first granted for six months only in the case of a first time owner.
- 4. That the license be the subject of a law whereby failure to obtain a license or the breaching of the license is an offence.
- 5. That inspection teams should consist of veterinarians, zoologists, environmental and public health officers, and representatives from recognised animal welfare groups with expertise in this field. The teams should be designed such that no one group/individual interest is over represented.
- 6. That special inspections may be carried out either on a "spot check" basis or as a response to a specific complaint. Inspection teams should be empowered to put into place seizure/relocation/euthanasia orders where necessary.
- 7. That guidelines be prepared for standards of enclosure, including size and layout, proximity to public and other animals, and that the license be granted partially on the basis of conformity to these guidelines.
- 8. Standards and guidelines may well be based on existing standards established by the Canadian Association of Zoos and Aquariums (CAZA) and the European Association of Zoos and Aquariums (EAZA), but that new guidelines be drawn up with advice from all of the above as well as input from the animal protection community with expertise in the area of captive wildlife.
- 9. That the owner/keepers be required to show that they have undergone some formal training in the management of each species under their care.
- 10. That the individual animal or collection be under the care of a veterinarian experienced in the species concerned and that the veterinarian be required to make routine visits once monthly, complete health records and be present at the annual inspection.
- 11. That the veterinarian is called upon to attend any non-routine emergency problems (or a colleague in his/her absence).
- 12. That perimeter fence and double door systems be in place and secure on every premises and in every enclosure.

13. That any animal showing signs of mental disturbance be attended to with the same urgency as a physical illness, with expert help called upon if necessary to put in place every possible measure to alleviate that suffering. If this fails, then two veterinarians should be empowered to advise and carry out either relocation or euthanasia of that animal.				

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<sup>&</sup>lt;sup>1</sup> Now called the Canadian Association of Zoos and Aquariums (CAZA)