



Animals in Travelling Circuses: The science on suffering



ADI Recommendations

The Animal Welfare Bill states that an animal's needs shall be taken to include–

- (a) its need for a suitable environment,
- (b) its need for a suitable diet,
- (c) its need to be able to exhibit normal behaviour patterns,
- (d) any need it has to be housed with, or apart from, other animals, and
- (e) its need to be protected from pain, suffering, injury and disease.

However, the circumstances to be taken into consideration of the above include–

- (a) any lawful purpose for which the animal is kept, and
- (b) any lawful activity undertaken in relation to the animal.

ADI would prefer to see a complete prohibition on the use of animals in travelling circuses, on grounds of welfare, on the face of the Bill.

However, if prohibitions must be under regulation then ADI believes that we must ensure that such regulations or code of practice will not negate the provisions listed in (a) to (e) of the "needs" paragraph. There is no logical reason to treat a privately owned horse, or a tiger in a zoo, differently from their counterparts in a circus. *Nor would it be ethically justified.*

Many domestic species are currently exhibited in UK circuses, but in the eventuality of a ban on "*certain non-domesticated species*" (as announced by the Department of Environment, Food and Rural Affairs (Defra)), it is highly probable that a greater variety of both domestic and wild or exotic species may be sourced by circuses in an attempt to circumvent the ban. It could also cause confusion about what is or is not allowed.

A circus touring Europe in April 2006 has in its menagerie 3 penguins, 2 snakes and piranhas, and previously included an octopus. Such acts could appear in the UK – in the past a shark show, sea lions and hybrids such as zebroids (zebra/donkey crosses) and ligers (lion/tiger crosses), have all toured the UK. Already two major UK circuses, in clear defiance of the public and parliamentary mood, have said that they wish to add elephants and bears to their touring menageries in 2006.

ADI has been responsible for obtaining the evidence for almost all of the circus industry cruelty convictions to date. We fear that the principles for protection of animals laid down in the Bill will be seriously undermined if animal protection groups are left in the same position as now – that we must gather evidence and commence proceedings before a circus has left the area, or even the country.

Furthermore ADI is concerned that organisations such as ourselves will be obliged to gather evidence on every new species that appears in a circus.

ADI recommends something more simple:

Defra should reverse the proposal – prohibit the use of all animals in travelling circuses, and if felt necessary, make provision for the Secretary of State to allow certain acts, by animals of certain species, under licence.

This would correctly place the onus of evidence on the circuses – those who wish to use animals in travelling circuses would have to provide evidence of adequate arrangements for husbandry and welfare.

If good welfare provision can be demonstrated, the Secretary of State licences that particular species, or performance.

Given the small scale of the industry such a system would not be unduly problematic. By contrast retrospectively reviewing each species as it turns up with a circus would be, we believe, problematic and expensive.

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1. Introduction

ADI believes, as a result of our empirical evidence from observation data, videotape and photographs, that animal suffering is inherent in the travelling circus environment. We have backed up this evidence with further research in the scientific literature on the effects upon animals of transport and confinement.

ADI Field Officers work alongside circus workers recording daily routines, husbandry practices and physical and psychological effects on the animals, using notes, videotape and photographs. Apart from our evidence there is little data available on the accommodation, husbandry practices and effects on animals of travelling with a circus.

We have therefore reviewed and discussed the scientific literature available on studies of animals during transport, in confinement and in captivity for other industries such as zoos, transport of horses as well as laboratory studies. This information can be read across to the travelling circus situation.

We believe that the evidence presented here confirms that animal suffering is inherent in the travelling circus. It confirms that suffering is not restricted to wild (or exotic) species but is evident in all species, including domesticated species. Indeed the view that it is only 'wild' animals that might suffer appears to be based more upon assumption than actual evidence.

Moreover it is of concern that the 1997 Transport of Animals Regulations provide exemptions for animals that live on their transporter, for example that such animals are not required to be unloaded for rest periods. This means that whilst animals transported for purposes of agriculture or other activities must be unloaded at intervals for food and resting, circus animals may stay on board. This is an unacceptable state of affairs, considering there is evidence to demonstrate that remaining on a transporter after the duration of a journey is detrimental to animal health and welfare (see 2.2.2 and Section 6 onwards).

Sections 2 to 5 of this report contain our review and discussion of the scientific literature on animal suffering during transport, captivity and confinement.

Sections 6-12 contain a summary of ADI's empirical evidence based upon studies which now amount to tens of thousands of hours of observations and hundreds of hours of videotape.

Welfare & Stress

In the following review of the scientific literature we have covered both wild and domestic species, including cattle, sheep, pigs and deer.

The behavioural repertoire of a domestic animal is still highly influenced by its wild ancestry, i.e. herding behaviour in both domestic and wild horses, predator responses in domestic and wild herbivores, therefore studies on domestic species give an indication to how related exotic species may respond to certain stimuli.

The definition of welfare we will use here is the following: *"The welfare of an animal is determined by its capacity to avoid suffering and sustain fitness"* (Webster, 1994; 2005). Suffering is defined as *"to undergo or experience pain or loss or damage or disablement"* (The Concise Oxford Dictionary, 1981) and includes mental as well as physical suffering. *"Sustaining fitness"* includes mental and physical fitness and it is a positive aspect of the animal's life. So, welfare is not just about 'doing things' to animals to make them feel better and to keep them fit (feed them well, inject them against disease), but is more importantly about giving the animal some degree of control over its environment (Broom, 1991; Webster, 1994; 2005). Animals should have some degree of control over their environment in order to be able to avoid pain and mental suffering and to be able to work to maintain a degree of fitness compatible with continued existence.

Measuring welfare is difficult, but in the scientific literature a number of possible welfare indicators can be found. For example, physiological indicators of a

reduced welfare can be an elevated heart rate or an elevated cortisol level; a behavioural indicator of a reduced welfare can be the occurrence of stereotypical behaviour (Broom & Johnson, 1993).

A stereotypy is a repeated, relatively invariable sequence of movements, which has no obvious function (Broom & Johnson, 1993). Stereotypies provide good indicators of long-term coping problems and have been described in, for example, battery hens and in pigs (Fraser (1975) in Maas (2000)), circus tigers (Nevil & Friend, 2003), horses (Brion (1964) in Maas (2000)) and autistic children and prisoners (Levy (1944) in Maas (2000)), as well as in many other species in farms, zoos, laboratories and other captive situations. It is important to note that in the wild abnormal behaviours like stereotypies do not arise.

Broom & Johnson (1993) state *"In natural conditions, animals are constantly stimulated by changes in their physical and social environments. Where animals are brought under closer environmental control, on farms, in zoos, or in people's homes as pets, the levels of some of the components of stimulation are reduced, while others are increased"*. Animals have expectations of the consequences of different types of activity; where these do not materialise, the animals are not able to utilise fully their own array of controlling procedures (Broom & Johnson, 1993). Some animals respond to a lack of stimulation and a lack of control over their environment with apathy, others with stereotypies or an increased aggression (Broom & Johnson, 1993). Both a lack of stimulation and a lack of environmental control are inherent in circus life. Stereotypies are particularly evident in 'wild' species but also seen in domestic animals, such as farm animals and horses.

Broom & Johnson (1993) state: *"... in most cases we do not know whether a stereotypy is helping the individual to cope with the conditions, has helped in the past but is no longer doing so, or has never helped and has always been a behavioural pathology. But in all cases the stereotypy indicates that the individual has some difficulty in coping with the conditions, so it is an indicator of poor welfare"*.

The second concept is stress. Stress can be defined as *"stimulation beyond the capacity for complete adaptation"* (Broom & Johnson, 1993), i.e. that the animal's coping mechanisms are taxed. When these mechanisms break down, the result is *distress*.

Conclusions on Evidence from literature

The travelling circus is not a suitable environment for an animal, because restrictions of space, time, mobility of equipment and facilities mean that no animal will be able to behave as it would in its natural environment. Many of the species commonly kept in circuses have highly specialised behaviour, making it impossible to cater for them in the circus.

We acknowledge that suffering in both humans and animals is difficult to prove. However if animals are behaving in a way that would give rise to concern were they any other species, then *we should assume that such concern is justified until proven otherwise*; it should be a reflection of a humane society to allow the potential victims the benefit of the doubt.

The following is a brief review of the scientific evidence forming the basis of our opinion.

2. Travelling

Frequent periods of transportation, and long periods in transporters, are the norm for animals in circuses. During a performance season, circuses can visit many different sites, all over the country, covering long distances by road and often staying at each site for just a few days before moving on. Consequently animals have to endure a lifestyle of continuous travel and unstable environments. For example, in 2005 Zippo's Circus travelled over 1900 kilometres from January to October, and The Great British Circus travelled over 1000 kilometres between February and October.

Furthermore evidence from our observations shows that it is common practice for circus animals to remain on their transporters for many hours before and after a journey, due to workers being occupied with other activities (ADI observation data).

A scientific review of research on the transportation of horses concluded that: *“Although some horses adapt to transport much better than others, transport is generally associated with lower reproductive rates, increased disease incidence, a temporary reduction in athletic performance and the alteration of many other physiological traits that are indicative of stress... Transported horses can be subjected to a wide range of potential stressors, including isolation from herd-mates, forced close proximity to unfamiliar or aggressive horses, novel or threatening surroundings, exposure to new pathogens, restraint of normal activity patterns, forced adoption of an abnormal posture, extremes in temperature, water and feed deprivation, and blowing dust and particulate matter. Transport has long been associated with morbidity in horses”.* (Friend, 2001).

This paper was making particular reference to horses. In the remaining part of this chapter, we will present scientific support to show that these welfare problems occur across a wide range of species, across varied durations and conditions of transport. Proof that transport, which is a key factor in travelling circus life, is indeed a welfare problem for animals.

2.1 Exotic Species

- Research on alpacas, ungulates of the camel family, (ungulates also include horse, deer, sheep, cattle, rhinoceros) shows that transport for just 30 minutes was sufficient to induce hypercortisolaemia, and it took four hours after transportation for serum cortisol levels to return to normal levels (Anderson et al., 1999). These animals were transported in familiar groups, for only 30 minutes to and from the research farm, i.e. their usual environments. However circus animals are often transported for longer periods, and transported to unfamiliar locations.
- Circus tigers have shown a wide range of abnormal behaviours (coping strategies), whilst travelling, including stereotypic behaviours such as pacing, which increased as transport duration increased (Nevil & Friend, 2003; and ADI observation data).
- In captive black rhinoceroses a connection between transport and the immediate development of a skin disease was found (Munson et al, 1998).
- Many species are known to suffer from 'capture myopathy', a syndrome that occurs in wild (free ranging and captive) mammals and birds, and is associated with the stress of capture, restraint and transportation. In ungulates, the syndrome is characterised clinically by depression, muscular stiffness, lack of coordination, paralysis, metabolic acidosis and death (Montanè, 2002).

ADI has videotape evidence featuring stereotypic behaviours in almost all of the circus animal species examined, including horses and ponies, llamas, camels, giraffes, elephants, lions, tigers and bears.

2.2 Domestic Species

There are a multitude of studies on the transportation of horses and of other animals commonly used in agriculture, and this data can be read across to the travelling circus situation.

2.2.1 Horses

Horses are kept in travelling circuses, yet evidence shows that horses suffer during transportation. Equine expert and veterinary behaviourist, Paul McGreevy,

discusses transportation of horses in his book 'Equine behaviour – a guide for veterinarians and equine scientists':

"Horses brace themselves against and in anticipation of the changes in momentum during road transport by adopting certain body postures (notably the base wide stance). Efforts expended by horses as they continually adjust their posture during transit reflect both muscular and emotional stress related to road conditions and the drivers' behaviour. All of these efforts are readily evaluated by monitoring heart rates during transport. Horses have been shown to have higher heart rates in a moving vehicle than in a stationary vehicle, and although heart rates decreased significantly during a road journey, they did not return to resting levels. Transport stress may increase susceptibility to diseases, including an equine herpes virus and salmonellosis infections" (McGreevy, 2004).

- A study on the effects of 24 hour transport in horses showed that *"Plasma cortisol concentration increased during loading and the first 3 hours of transport and continued to rise throughout the 24 hours, to peak at the termination of transport...after the stressor (i.e. transportation) ceased, cortisol dramatically declined"* (Stull & Rodiek, 2000).
- Many studies show that transport induces weight loss in some animals. Immediately following transit in one study, the horses showed a 6% weight loss, which they thought could be due to *"heat dissipation, sweat loss, and decreased gut fill during transit"* but there was still a 3% deficiency in weight loss 24 hours after the transportation period (Stull & Rodiek, 2000).
- The immune system of horses is compromised by the effects of transportation. Stull and Rodiek (2000) conclude that this could result in increased susceptibility of the horses to infectious diseases. Another similar study by Stull et al. (2004), found elevations in cortisol concentration, white blood cell count and other physiological changes which led to the same conclusion. It also acknowledges that *"a small window of immunological uncertainty follows long-term transportation, enhancing the potential risk of infectious disease in susceptible individuals"*.
- Aggression among horses is increased during transportation, especially when many horses are transported together (Collins et al., 2000). It has been shown that about 20% of all horses receive some type of injury during transportation, most of which occurs to the head and face (Stull (1999) in Speer et al., (2001)). Another paper reports *"many incidences of aggressive horses repeatedly biting an adjacent horse in an apparent effort to get the horse to move away"* (Collins et al., 2000).

ADI observation data has included evidence of aggression in horses during transport, and in stable tents. Some animals cannot use exercise enclosures when these are provided, if they are aggressive or difficult (e.g. stallions).

2.2.2 Cattle

Transport is thought to be one of the most potent stressors for cattle (Fazio et al., 2005). Stressors involved in the transportation of cattle result in: altered nutritional status and animal behaviour, reduced body weight gain, feed consumption, and immune function, and increased mortality (Coffey, 2001).

- Long term transportation in cattle has been found to increase secretion of ACTH (adrenocorticotropin), a hormonal regulator of immune responsiveness, and therefore exert a negative effect on the immune system. When the cattle are 'rested' and fed on board their transporter when it is stationary, their ACTH levels remain high and are only reduced when the cattle are removed from the truck and rested and fed in stalls for 24 hours (Dixit et al., 2001).
- Transport stress induces an increase in the activity of thyroid and adrenal function in cattle that is evident after even short distance road transport and continues to increase after long distance transport (Fazio et al., 2005).



Excessive periods in transporters.

Case Study: Great British Circus.
Observations – 26 & 27 March 2006.

Journey: Laceby, Grimsby to Marston, Birmingham.

Actual journey time: 3 hours 25 minutes

2 Horses, 2 ponies, 4 reindeer, 4 llamas: Time spent on transporters (from being loaded to being unloaded) 17 to 17.5 hours

9 Lions and tigers: 27 hours (on beastwagon before any access to exercise cage)

NB: A previously reported (*'Animals in UK Circuses'*, 2003) a journey of just 15 miles took just 26 minutes; however the camels remained in their transporter for 4 hours and the tigers in their beastwagon for 24 hours.

- Studies have found that long term transportation in cattle results in an increase in heart rate and body temperature (Dixit et al., 2001).

2.2.3 Sheep

Transport compromises the welfare of sheep. Some studies have found experiences associated with loading to be particularly stressful.

- There was an increase in core temperature in sheep after 2.5 hours of road transport (Parrot et al., 1999).
- Sheep show heart rate and cortisol increases in response to transport (Baldock & Sibly, 1990., Cockram et al, 1996., Hall & Bradshaw, 1998).

2.3 Effects of Transport on Reproduction

Animals in circuses are transported throughout their life cycle, regardless of age, condition or reproductive status. Transporting animals whilst pregnant gives rise to particular cause for concern, as discussed in the scientific literature. For example:

- Pregnant horses transported for 9 hours showed signs of prolonged stress which are associated with abortion or reabsorption of early pregnancies (a change in concentration of ascorbic acid in plasma and in tissue) (Baucus et al., 1990a). The study also showed that transportation caused increases in serum progesterone and cortisol, which are other indicators of stress.
- Thirty mares were tested daily throughout one normal oestrous cycle and it was found that there was an increase in LH concentrations in transported mares (LH is a hormone that regulates the release of progesterone and oestrogen in female animals) and an increase in cortisol and in the concentrations of plasma ascorbic acid. The paper concludes that 12 hour transportation of mares induces "*hormonal and plasma ascorbic acid responses indicative of stress*" (Baucus et al., 1990b).

Whilst it is a common view that horses and other animals become accustomed to transport, we have not seen any scientific evidence that this is the case.

In ADI's view, the fact that an animal is repeating an experience does not necessarily make it less traumatic, it may in fact sensitise it to the trauma. Many of the reference papers we have reviewed for the above describe the effects of a single journey, but one must assume that since multiple and frequent journeys are made by circus animals, at least some of these effects will be multiplied.

3. Husbandry and Close Confinement

Poor husbandry in the circus may not be intentional, but it is to an extent unavoidable given the travelling nature of circuses and the temporary enclosures, living spaces and transporters that the animals have to inhabit.

Even reptile species such as snakes, which are considered extremely difficult to keep as pets due to their highly specialised needs (such as specific temperature and light requirements) are currently legal in a circus.

The constant moving and changing environmental conditions cause disruption of normal behavioural patterns which are likely to leave animals inherently vulnerable to stress and disease. For example, McGreevy (2004) describes how the timing of sleep is very important in horses. By preference horses would sleep in the early afternoon and therefore it is generally advised that there should be a minimum of activity at this time. However in the circus, transport, training and performance do not take this into account.



Excessive periods in transporters.

Case Study: Zippo's Circus.

Observations 2 & 3 April 2006.

Journey: Oxford to Blackheath, SE London.

Actual journey time: 2 hours

4 horses, 3 ponies: Time spent on transporters (from being loaded to being unloaded), 4hrs 15mins and 4hrs 55 mins.

This is not unusual: We reported in 'Animals in UK Circuses' (2003) that a journey of just 11 miles (Chiswick to Kingsbury) took 40 minutes, whilst the animals remained in their transporters for 2 hours and 12 minutes.

It should be noted that ADI Field Officer timings are backed by contemporaneous notes, videotape and photographs.

These timings do not support the statement by Zippo's Circus, read to the House of Commons by Peter Luff, MP, on 14.03.06:

"The practice at my circus is that after their last performance the 7 horses and ponies are loaded into their horse transporter and driven to the next venue. Since my circus travels mainly within the M25 these journeys are between 5 miles and 25 miles long and it is rare for journey times to be longer than one hour. The stables are then immediately erected at the new venue, in an area which has already been marked out for them. Erecting the stables takes less than an hour. The horses are then unloaded and stabled on clean bedding with fresh water and best quality hay. So the average journey time takes one hour, and the time the horses wait in the horse transporter while the stables are built up is less than one hour. The whole process is over in less than 2 hours."

ADI Statement about Zippo's misleading claim regarding the ADI MORI opinion poll of October 2005:

Zippo's Circus has claimed both in the Houses of Parliament and in the media, that the ADI MORI poll of October 2005 has been withdrawn by MORI. This is not the case. MORI stand by their data and have issued a statement to this effect.



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Left: Horses tethered to the outside of their stables at Zippos circus.

The problem with a travelling circus is that animals can remain tethered for long periods of time while workers are busy, or on breaks.



Animal Defenders International

If it were just for a week, or in a permanent facility with scope for variation of environment, these stalls could be considered to be adequate.

However the problem for circus horses is that they live in these temporary facilities for most of the year – either on a lorry or in these stables.

Exercise enclosures, when provided, are not always used, due to time restrictions.

Horse & pony husbandry

Case Study: Zippo's Circus.
Observations 2 & 3 April 2006.

4 horses, 3 ponies

Housing: Individual approx. 3 metres x 3 metres stalls inside a tent (tethered for at least part of this time).

There was no exercise enclosure present for the horses or ponies on either the 2nd or 3rd. On 6th April there was an exercise enclosure (approximately 35 by 10 metres) but no animals were seen to use it. During observations a year earlier, on 22 and 23 April 2005, no exercise enclosure had been provided.

ADI has previously noted that circus exercise enclosures generally are not large or numerous enough (given the restrictions of individual sites) to allow all of the animals to be exercised each day. Our *'Animals in UK Circuses'* (2003) report noted that during three days of observations at this circus, the exercise enclosures were not used at all.

Enclosures with a restricted amount of space can create a stressful environment for an animal. When animals are housed in groups, the space restrictions can precipitate increased aggression between individuals, where lower ranking animals cannot escape and more injuries occur through fighting (Cassinello & Pieters, 2000).

It is now widely accepted by the zoo fraternity that environmental enrichment – the process of improving or enhancing animal environments and care within the context of their inhabitants' behavioural biology, i.e. keeping the animals as close as possible to their natural environments (Young, 2003) – is essential to the welfare of captive animals.

Environmental enrichment is a dynamic process requiring species-specific modification which, with the best will in the world, simply cannot be provided in a meaningful way in a circus. The high level of abnormal behaviour seen in circus animals testifies to the absence of useful environmental stimulation (ADI observation data).

3.1 Elephants

Elephants in circuses are commonly shackled as a method of control and confinement, involving the chaining of one foreleg and one hind leg to the ground. This kind of fixation restricts the freedom of movement to such a degree that these animals are not able to exhibit most of their species' typical behaviours. It also restricts social interactions because contact is limited to an immediate neighbouring elephant shackled beside them (Schmid, 1995). Although many circuses now claim to give their elephants some degree of regular access to a pen or outdoor enclosure, it is debatable how much time they can spend in such an enclosure when the circus is always on the move and the elephants have to be prepared for their performances. These animals also tend to be chained overnight, from the time that the workers finish their day, to when they arrive for work the next day – this can mean over 50% of their time (ADI observation data).

However even when elephants are able to spend time unchained, they are still subject to conditions of close confinement. Consequently stereotypies occur in captive elephants, regardless of the method of husbandry used.

- One study of circus elephants found that, "*Weaving was the most common stereotypic behaviour in the elephants, regardless of whether they were picketed or penned*" (Friend & Parker, 1999).
- Another study which saw stereotypic behaviours in all the elephants observed, concluded that "*the welfare of closely confined elephants can be poor*" (Kirken & Broom, 2002).
- High levels of stereotypic and abnormal behaviours were observed in all the elephants involved in the study, which was undertaken in a circus holding facility. This study showed that stereotypic behaviour differs between individuals and that changing the methods of husbandry (i.e. shackling versus unshackling), only reduces stereotypies in some individuals. For some elephants it was impossible to identify one underlying cause of stereotypy. Many aspects of the circus environment were found to cause stereotypic behaviours in elephants, such as the lack of social contact, anticipation of food or other significant predictable event, the presence or absence of people, the size of their enclosure and their proximity to other specific individual elephants. It was also observed that as well as stereotypies, some circus elephants show other types of abnormal behaviours, such as an abnormal amount of time being inactive, probably as a result of being confined in an un-stimulating environment (Kirken & Broom, 2002).

ADI observation data (videotaped) has shown stereotypic behaviours in all circus animal species studied.



Llama, Reindeer, Camel husbandry

Case Study: Great British Circus.
Observations 26, 27 & 29 March 2006.

4 reindeer.

Housing: approx. 4 metres x 2.5 metres stall.

No exercise enclosure provided. During the period of observation the animals were not walked or exercised, neither did they appear in the show.

4 llamas.

Housing: In pairs in stalls approx. 2.5 metres x 2.5 metres.

No exercise enclosure provided. During the period of observation the animals were not walked or exercised at all.

6 Bactrian camels.

Housing: 5 camels kept in stall approx. 12 metres x 3.5 metres, another camel kept in a stall approx. 8 metres x 3.5 metres in a stable tent. The animals were also observed tethered to a lorry outside.

No exercise enclosure provided. During the period the animals were not walked or exercised, apart from their brief spell in the ring. One camel did not perform and therefore remained in its stall all of the time.

3.2 Ungulates

Ungulate species typically belong to one of two specialised feeding guilds, browsing or grazing, and in the wild they spend a significant percentage of their daily time budget eating. Circuses cannot provide permanent outdoor paddocks for grazing and animals are often confined to indoor stalls or their transporters for much of the time. Moreover ADI observation data has shown that when outdoor paddocks are provided, these can be on concrete or tarmac, when the circus has taken whatever space is available. Sites tend to maximise audience space, rather than make the animals a priority. This severely restricts the ability to carry out natural feeding behaviours in these highly specialised animals.

For example, in the wild, giraffes must use their tongue to remove tree leaves and avoid thorns. The absence of this specific challenge in captivity creates a behavioural vacuum and the resultant frustration can cause oral stereotypic behaviours such as excessive licking, bar biting and tongue playing (Bashaw et al., 2001). The number of hours an animal is housed indoors can be used to predict the occurrence of stereotypic licking behaviours in ungulate species (Bashaw et al., 2001). Frustrated feeding motivation may also result in locomotor stereotypies, such as pacing (Bashaw et al., 2001).

In addition to feeding, indoor enclosures tend to provide less quantity and variety of stimulation than outdoor enclosures, something that is very important for reducing the occurrence of stereotypic behaviours in general (Bashaw et al., 2001).

- Farmed deer that are housed indoors during winter, exhibit higher levels of aggression, resulting in a greater degree of injury to individuals than deer that are confined outdoors in pasture. They also show an increase in behaviours such as 'chewing' each other and their enclosure (Pollard & Littlejohn, 1998).
- Dama gazelle show more aggression towards their herd mates when housed in smaller enclosures, particularly dominant individuals (Cassinello & Pieters, 2000).
- A survey of 257 zoo housed giraffe and okapi found that 79.7% of the animals showed at least one form of stereotypy (Bashaw et al., 2001).
- A study on captive black rhinoceros (Carlstead et al., 1999) found that they are highly sensitive and respond negatively to the environment and/or social conditions of captivity:
- Captivity influences the behaviour and breeding success of male and female black rhinos differently.
- Males are affected by limited enclosure area and by how their olfactory environment is altered by husbandry practices such as using a chlorine disinfectant. Female black rhinos are sensitive and react negatively to some aspect of concrete enclosure walls, either the acoustical properties or the visual separation from conspecifics (companions of the same species).
- A high degree of public accessibility along the perimeter of their enclosures is a potential stressor for both sexes, but especially males. Mortality in captive black rhinos was strongly linked to the percentage of public access along the perimeter of the enclosure.

Another study has found that captive black rhinoceroses appear predisposed to a skin disease which has not been identified in wild black rhinoceroses. This disease was found to show a link with periods of physical or environmental stress events, such as capture, transportation, sudden cold temperatures and the introduction of a new rhinoceros (Munson et al., 1998). It was also suggested that the unvaried diet of captive rhinoceroses compared to their wild counterparts (in the wild they have been observed to browse for more than 200 species of plants) might play a role in the development of this disease.

The studies of ungulates demonstrate once again the complexity of captive animals' needs, and confirms that travelling circuses simply cannot facilitate these needs.



Lion and tiger husbandry

Case Study: Great British Circus.
Observations 26, 27 & 29 March 2006.

9 tigers, 5 lions.

Housing: The big cats were in three groups (5 tigers, 2 tigers, and 3 lions) in three beastwagons, cages on the backs of lorries, each measuring approx. 2.5 metres x 12 metres.

An exercise cage was not present on 26th or 27th March, but on 29th March it had been erected and was used for at least two tigers.

It is important to note that this exercise cage (measuring approx. 8.5 metres by 13.5 metres) whilst an improvement on the space available in a cage on the back of a lorry, remains inadequate for 14 big cats. In its brochure the circus describes this as "the big exercise cage". The cage has minimal enrichment in the form of a few logs and a pedestal less than .5 metres off the ground.

Five lions and four tigers did not appear in the show – effectively a travelling zoo, without the welfare provisions of the Zoo Licensing Act 1980.

3.3 Carnivores

The scientific literature show that carnivores, in particular members of the cat family and bears, suffer as a result of captivity. This evidence has mainly been gathered in zoo studies, where the animals have a permanent residence. In most modern zoos, efforts are now made to create a habitat as close to the animals' natural environment as possible.

However due to the travelling nature of circuses, it is impossible to provide the animals with these things, therefore one can assume that any negative effects of captivity seen in zoos will be worse in the circus environment.

A study of captive cheetahs (Wells, et al., 2004) found that:

- Captive cheetahs suffer diseases that do not occur in their wild counterparts. These diseases are exacerbated after movement suggesting an environmental effect .
- The study showed that where the animals were moved between facilities for breeding programs showed that in eight out of 15 animals there was a post-movement increase in corticoid concentration. Six animals showed a prolonged stress response. Of the seven animals that did not have an increase in corticoid concentration, four animals had a single peak immediately after movement. The authors conclude that moving to different environments causes a stress response in cheetahs.
- Corticoid responses were found to increase if an animal is moved on-exhibit (on display to public viewing) and decrease if moved off-exhibit (away from public viewing). Thus indicating a negative welfare response to exposure to the general public (Wells et al., 2004).

The results of this study on cheetahs is not surprising considering that cheetahs in the wild are solitary, have large home ranges and avoid human contact.

Carnivores frequently show stereotypic behaviours such as pacing when in captivity. A study by Lyons et al. (1997) looked at 9 species of felids in 11 different enclosures at Edinburgh Zoo. The study found that *"stereotypic pacing was recorded at various levels in 15 out of 19 cats (79%), the levels varying between 1% and 32% of scans"*. The complexity of the animals' enclosure is thought to play a big role in the incidences of such behaviours.

A study on leopard cats (Carlstead et al., 1993), found that translocating cats to novel cages provokes an initial increase in adrenocortical activity and increased hiding behaviour, and the cats failed to adapt to a new environment.

Captive clouded leopards show a variety of signs that could be considered indicative of distress and/or poor well being; a high frequency of stereotypic behaviours, apathy, self mutilation (e.g. fur plucking, tail chewing), and marked intersexual aggression (i.e. mate injury and mate killing). They also show a record of poor breeding success and health problems (Wielebnowski et al., 2002).

3.4 Domesticated Species

Domestic animals such as budgerigars, cats, dogs and horses are kept in circuses. Although there are few scientific studies applicable to the circus situation these animals are subject to many of the same welfare problems as the exotic species. Indicators of poor welfare may be less obvious in these domesticated animals than in captive wild animals, but there is evidence to show that they do suffer as a result of poor husbandry or confinement situations.

- Dogs have an inherent desire for social contact and are not suited to being confined alone in cages or kennels. Studies have shown that housing dogs alone results in boredom, under-stimulation and the development of behaviour problems. Both visual and tactile contact with other dogs is shown to improve a dog's psychological well-being and alter negative behaviour patterns (Wells & Hepper, 1998).



Horse & pony husbandry.

Case Study: Great British Circus.
Observations 26, 27 and 29 March 2006.

2 horses, 2 ponies.

Housing: Individual approx. 2.5 metres x 2.5 metres stall inside a tent (the animals were not tethered in their stalls).

No exercise enclosure provided.

During the period of observation the animals were not walked or exercised apart from their brief spell in the ring.

- Both domestic horses and captive exotic equids, such as zebra and Przewalski horses are known to show a variety of stereotypic behaviours when stabled or confined, including, crib-biting, wind-sucking, wood-chewing, weaving, pawing, door and box kicking, self-biting and head tossing (McGreevy, 2004).
- Domestic cats may show increased hiding behaviours as a response to stimuli or changes in their environment and to avoid interactions with other cats or people. They are more likely to respond to poor environmental conditions by becoming inactive and by inhibiting normal behaviours such as self-maintenance (feeding, grooming and elimination), exploration or play, than by actively showing abnormal behaviour (Rochlitz, 1999).

"... , neither early training nor genetic selection can push the individual beyond its biological potential and a profound lack of stimulation is something to which no vertebrate animal is likely to be able to adapt" (Broom & Johnson, 1993).

4. Inappropriate Social Groupings and Isolation

It is vitally important to house species in appropriate group structures. For many species social living provides more benefits than simply finding food and avoiding predation, it is a major source of stimulation. The social environment of many species represents a constant source of complex mental stimulation, the complexity and variety of which we could never hope to replace by any form of environmental enrichment (Young, 2003).

Changing social groupings and dynamics, removing an animal for training, performance or transport can lead to periods of social isolation, or can bring animals into contact with new groups. Often individual animals are exchanged between circuses or lent to another circus for a season resulting in long term disruption of social groups.

Social species such as elephants are often kept in isolation, such is the case with Anne the elephant (the last remaining elephant in a UK circus), while animals that are solitary, such as tigers, are often kept in groups (Nevill & Friend, 2003).

4.1 Social Isolation and Separation from Companions

The detrimental effects of social deprivation and separation have been widely documented in many species and are known to cause behavioural and physiological indications of stress (Tarou et al., 2000).

- During a study of social separation in giraffes, a resident male was removed from his two female companions. The removal of the male resulted in the females showing protest behaviours, including increased activity, stereotypical behaviour, and increased contact behaviour with each other. They also showed decreased habitat utilisation. These results supported the findings of studies previously carried out in other species, particularly non-human primates, where the first change in behaviour is protest, characterised by increases in vocalisations, locomotion and stereotypical behaviour, as well as contact and clinging if the animal is housed with peers during the separation. Giraffes are not known to be highly social animals in the wild, yet their aversion to this kind of social separation proves that a complex social structure is not a prerequisite for social attachment (Tarou et al., 2000).
- Spectacled bears have been documented displaying stereotypic repetitive head-tossing behaviours as a result of social frustration when they were prevented from interacting with other bears that were in close proximity to them (Fischbacher & Schmid, 1999).
- In the wild elephants live in groups and display complex social behaviour. The natural grouping of both African and Asian elephants is of a family unit and the social bonds between the members of the family are very strong (Macdonald, 2004). Such family units are not possible in the circus environment where

elephant groupings are varied and changeable. Supporting this, is a study on circus elephants where it was found that the limited opportunity for social contact was the principle causal factor in the female Asian elephant's stereotypy (Kirkden & Broom, 2002).

- Piglets, when isolated from others, show increased frequency of sitting and decreased time spent active, increased frequency of escape attempts, decreased frequency of play and increased frequency of pawing behaviour and a lower degree of interest in novel objects; all of which changes are considered to reflect a negative impact on the piglets' welfare (Herskin & Jensen, 2000).
- Social separation in cattle is known to induce struggling and large increases in vocalisation, heart rate and plasma cortisol concentrations. The mere presence of other cattle is sufficient to prevent struggling and vocalisation, regardless of peer identity, a finding that shows that a non-specific attachment can develop between individuals and their peers (Boissy & Le Neindre, 1997).

4.2 Forced Proximity with other Animals

In the wild tigers are solitary animals, coming together only for mating. A study on circus tigers describes how circuses often transport tigers in groups and that severe fights can break out (Nevill & Friend, 2003). The paper describes how 'major movement' in the back of the truck could be felt by the driver in the cab indicating fighting. Whenever this happened, the method of stopping the fight was 'sudden application of the brakes' which would cause the fight to cease until the truck could be stopped to separate the tigers. This is clearly an unacceptable situation.

Travelling circuses frequently put different species of large cats together and have even created a lion-tiger cross, calling it a "*liger*". However putting these species together can cause serious aggression, as demonstrated by the attack by a male tiger on a lioness at Circus Harlequin, mentioned earlier.

Studies of captive ungulate species have shown that increased social density may produce competition for resources, especially food, which could then increase the likelihood of stereotypic licking (Bashaw et al., 2001).

4.3 Inappropriate Groupings with other Species

As well as suffering from the effects of isolation, animals also suffer when forced to live in close proximity to another species, as is often the case in circuses. The suffering is further increased when the other species is a natural predator or prey of the animal in question; as documented in ADI observations.

When next to cattle or pigs, farmed red deer stayed as far as possible from them, and were generally more active, showed more agonistic interactions and had elevated plasma cortisol concentrations. Some of the deer had been previously familiarised with the presence of cattle but the results of the study showed that these more 'experienced' animals did not habituate to the experience of the unusual grouping and there was even evidence to suggest that previous exposure to cattle made red deer more aversive to them (Abeyesinghe et al., 1997).

Like other ungulates, deer have evolved a naturally exaggerated flight distance as an adaptation for escape from predators and in a confinement situation where they are housed close to other species, they cannot prevent these other animals from entering their 'flight zone'.

Obviously ruminants and omnivores like pigs do not pose a predatory threat to deer, but they may pose other threats: Firstly, the fact that they are not familiar means that they will be perceived as a potential threat, secondly other animals may pose a threat or competition over resources and thirdly different species of animal have evolved specialised means of communicating with one another and the unpredictability of noise from another species and an inability to read each others signals may cause problems in mixed species groups (Abeyesinghe et al., 1997).

4.4 Close Proximity of Predator and Prey Species

Prey species show specific adaptations that allow recognition, avoidance and defence against predators (Apfelbach et al., 2005). However in the restrictions of a travelling circus environment, animals such as horses, other ungulates and smaller animals are frequently exposed to the presence of one or more predator species, such as dogs, tigers, lions, bears etc. Predator species may also become stressed and frustrated by the presence of prey species that they are unable to hunt, or of competitors which they cannot compete with.

- Studies on mammalian changes in behaviour when exposed to the presence of a predator, have shown responses such as, anxiety-like behaviour and long lasting neural circuit changes in the brain (Adamec et al., 2005).
- For many mammalian species an adaptation for predator avoidance is sensitivity towards predator-derived odours (Apfelbach, 2005). A recent review of the latest research on the effect of predator odours in mammalian prey species describes how pregnant female rodents exposed to predator odours may give birth to smaller litters and exposure to such odours in early life can hinder normal development (Apfelbach et al., 2005). This paper documents a long list of mammalian species where avoidance of predator odours has been studied and documented, including, rodents, possums and sheep.
- Behavioural effects shown in animals exposed to predator odours include, inhibition of activity, suppression of non-defensive behaviours such as foraging, feeding and grooming and shifts to habitats or secure locations where such odours are not present (Apfelbach et al., 2005).
- Even closely related animals such as different species of exotic cats can find the presence of the other species aversive. A zoo study investigating the low reproductive success rate of small exotic cats in captivity pointed out that most of these cats are solitary in nature, yet in captivity are routinely housed in pairs and managed in close proximity both to other species of small cats and larger cats which they may perceive as potential predators (Mellen, 1991) or competing for resources and territory. Cats mainly work to avoid contact with other cats and show abnormal and stress behaviours when their core territory is encroached upon. This was cited as one of the potential factors to explain the lack of breeding success with this species in captivity.

5. Summary of scientific case

Collectively the evidence provided here demonstrates that animals, whether exotic or domesticated, are likely to be suffering as a result of living in a travelling circus–

- transport has been shown to cause many indicators of stress, for example increased heart rates, rises in body temperature, lowered immunity to illness and disease, changes in hormone levels that are known to affect pregnancies, weight loss, increased instances of aggression and stereotypic behaviours.
- husbandry practices which are inadequate and space limitations make it impossible for animals to express normal behaviour. This in turn leads to high levels of stereotypies and other abnormal behaviours, increased aggression towards other animals, increased susceptibility to disease, greater mortality and the presence of physiological indicators of stress.
- Inappropriate social groupings cause a multitude of negative effects on animals–
 - Isolation or separation from companions leads to complex changes in behaviour, often a decreased interest in surroundings, stereotypies, increased heart rate and vocalisations, and higher levels of physiological stress indicators.
 - Animals forced to live in close proximity with one another show increases



The case of Narla

Tigers are naturally solitary animals, normally coming together only for mating. However in the circus they are kept in groups in crowded conditions, and sometimes the large cat species are even grouped together.

Narla, a lioness with Circus Harlequin (now known as The Great British Circus) was attacked and mauled by a male tiger. She was described by workers as being "*close to death*". Narla was treated for her injuries by her presenter, Alex Lacey (a director of the circus), and remained on tour.

At the time the circus was advertising itself as "*RSPCA Inspected*". By coincidence a local RSPCA inspector paid a visit shortly after the attack. The workers quickly hid the semi-conscious Narla behind bales of straw. The RSPCA official stood just feet from the stricken lioness chatting to the circus workers, completely unaware of her presence.

The incident confirms several problems: The dangers of attack and injury to big cats when travelling with circuses through workers' ignorance of the needs of the animals in their care; that sick and injured animals continue to tour; the temporary nature of the circus encampment with its multiple vehicles, cages, and equipment make the concealment of a sick animal relatively easy.



in fighting and competitive behaviours and greater incidences of stereotypies.

- When different species are mixed or have to live in close proximity to one another, they show a range of avoidance behaviours and spend more time being alert, as well as increases in heart rate and other physiological stress indicators.
- When predators are in close proximity to prey, the prey species show anxiety behaviours, changes in the nervous system, a suppression of feeding and grooming behaviours, often a lowered breeding success and when they do breed, the presence of predator odour can lead to smaller litter sizes and hinder the normal development of the young.

It is important to remember that in a circus–

- living space is necessarily limited to the back of a lorry;
- exercise enclosures, if erected, are frequently not used by some (or all) of the animals due to time restrictions in the working day; not enough space; difficult, competitive or aggressive animals;
- animals are frequently being transported to different parts of the country;
- animals are left shut in their transporters for many hours longer than a journey has taken to complete;
- animals are vulnerable to abuse due to inadequately trained staff, working under time pressure.

The balance of this evidence suggests that the horse is a sentinel for suffering.

Whilst horses have a long-established relationship with humans, there is clear evidence of the suffering of horses in all aspects of circus life. Therefore, how much more will other species, especially those more inherently fearful of humans, suffer?

We have seen no evidence of an absence of suffering as a result of the conditions imposed on animals in travelling circuses. Which begs the question, how much should a civilised society allow animals to endure, for the sake of entertainment?

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6. Evidence presented to Parliament

ADI presented the report of the first in-depth study of the use of animals in circuses in 1998, at a House of Commons reception. Since that time, several further reports have been presented, all based upon empirical evidence – observations, videotapes, and photographs. We have summarised the evidence we have presented, below.

Report & video: *'The Ugliest Show on Earth'* (1998): From 1996 to 1998 undercover Field Officers from ADI worked in 13 UK travelling circuses and winter quarters and 5 foreign circuses using animals from the UK.

The study looked at accommodation, health, husbandry, physical and psychological effects on the animals, and the circus culture. Uniquely, this study was from the inside of this close-knit and secretive community – our Field Officers became circus workers.

This is the most detailed investigation into the use of animals in circuses to date – over 7,000 hours of observations backed up by 800 hours of videotape, and thousands of photographs. The report was launched at the House of Commons.

Over 200 MPs signed an Early Day Motion calling for a ban.

ADI has followed up with further studies in both the UK and Europe, publishing reports on the subject in 2001, 2003 and 2004.

An earlier study in 1989, had been restricted to observations when the circus workers were aware that they were being watched. (Kiley-Worthington, M. 'Animals in Circuses', 1989).

In both the ADI study and the earlier study, abnormal behaviour was observed in all species – indicative of poor welfare, environment, and husbandry.

7. Numbers of Animals in UK circuses

Species grouping	1997	2005	%change
Exotics	124	47	-62%
Domestics	213	125	-41%
Birds	10	36	+260%
TOTAL (all sp.)	350	208	-41%

- In 1997, there were 350 animals touring with UK circuses, including 16 elephants and 31 lions and tigers.
- In 1997, most common were horses and ponies (almost half of all the animals), but also included were camels, dogs, domestic cats, leopards, a rhinoceros, sixteen elephants, fifteen lions and sixteen tigers, sea lions, and others.
- 85 animals were supplied to circuses overseas, including eleven bears, three elephants, fifteen horses and ponies, one hippopotamus, three leopards, nine lions, twenty-three tigers and a wolf.
- Some animals stay abroad for years, traversing the globe from Europe, to the USA, Japan and the Far East, often not returning to the UK due to quarantine regulations. Some die abroad after years of travelling.
- In 2005, the total number of animals in UK circuses had dropped to around 200 animals, including 1 elephant and 12-15 lions and tigers.
- Now is a very good time to end the use of animals in circuses. These animals could be phased out.

- A MORI opinion poll in 2005 commissioned by ADI reveals that:
 - more than twice as many people now visit animal-free circuses as opposed to those with animals.
 - In the last 5 years, attendance at animal-free circuses has risen from 6% to 16%.
 - Animal circuses remain slumped at 7% attendance.
- Statistically at least, there is a clear correlation that as an animal circus closes it is replaced with an animal-free circus.
It is likely the industry would thrive without the stigma of animal suffering.

8. Accommodation, health, psychological effects, travelling

- More than any other industry, due to the nature of a travelling circus – with the concomitant restrictions on cage sizes and poor environment – the evidence has shown that travelling circuses cannot adequately provide for the basic welfare and environmental needs of the animals in their care.
- Travelling circuses present a series of recognised animal welfare problems, including:
 - Excessive periods of time spent shut inside transporters – whether travelling or not;
 - temporary facilities lacking space and environmental enrichment for most of the year;
 - limited exercise enclosures that are only available to some of the animals – for example too many animals for the space provided; use of the facility on a rota system cannot be maintained; ‘difficult’ animals not being allowed into the enclosure;
 - travelling whilst sick, injured, or pregnant, and forced to give birth on the road in a noisy environment;
 - violence and force being commonplace – part of the circus culture and husbandry practices – accepted as a means to move animals about;
 - complex or unnatural tricks (such as hind leg walking) requiring very close control and domination during training, resulting in violence.
 - Inappropriate groupings and positioning of caging (e.g. mixing of species – or prey species close to predators; herd species kept alone).
- No other working animals spend almost their entire year (up to 8 months) in temporary travelling accommodation.
- Space will always be limited, and facilities poor.
- ADI studies found, for example:
 - Horses and ponies spending up to 96% of the time tied on short ropes and in stalls and time in the ring is strictly controlled and restricted.
 - Tigers and lions spending between 75-99% of their time in their travelling cages, on the back of transporters, in severely cramped conditions.
 - Elephants were shown to be spending 70-98% of their time chained to the ground by two legs, only able to take one step forwards and one backwards (there is now just one UK circus elephant, but such husbandry remains the global circus norm)

- Therefore it is essential that an Animal Welfare Bill allows for the prohibition of the use of specific species in specific circumstances, on grounds of welfare.
- At time of writing, Clause 25 of the Scottish Bill provides for regulations to be made prohibiting the keeping of a specified type of animal at domestic or any other form of premises.

Transport & life in transporters:

- Animal transport regulations are difficult to enforce because of the nature of the industry – incidents recorded include:
 - A seriously ill lioness moved twice, and treated by the circus workers;
 - tigers and lions sharing their transporter with circus equipment;
 - animals on the road performing during pregnancy, and giving birth on tour;
 - a sick elephant (Anne, with Bobby Roberts' Circus) shut in her transport wagon for almost 18 hours when the journey itself was 25 miles and took 45 minutes;
 - horses kept in their transporter for over 18 hours for the same journey;
 - a Shetland pony was kept on board a transporter for 25.75 hours despite the total journey time being five hours
 - camels spent 16.5 hours on a lorry for a five hour journey, whilst another camel was in a lorry for 23 hours for a journey of just a few hours
 - a bear spent almost 39 hours in his container on the back of a lorry with 15 minutes break for a performance;
 - sea lions spent 80% of their time in their cage on the transporter;
 - a llama was kept in a small stall tethered to a rope measuring 1m, for 96% of the time

at one circus, horses spent 23 hours a day in stables

Furthermore, in winter quarters (permanent training centres), lions, tigers, and other cats have been recorded left in their cages from between 72% and 99% of the time. These are frequently the same cages used for travelling. In one facility, a giraffe remained in a small stall in a barn for the entire time for 3 months. Five elephants spent almost their entire time in a barn for up to four months (period varied with each elephant).

Health:

- A range of injuries and illnesses have been observed which can be related to the UK weather, lack of protection from the elements, poor accommodation, poor husbandry, some of these include:-
 - lions suffering joint problems;
 - horses with hoof problems;
 - injuries from equipment and chains;
 - injuries from attacks by staff or other animals;
 - eye, stomach and other infections;
 - lameness;
 - animals such as large cats with the tip of the tail chopped off, as a result

of cage doors being dropped on them in the rush to get them in or out

- elephants with a variety of health problems, including skin, abscesses, joints, feet, etc.
- an ADI veterinary inspection of an elephant (Anne) confirmed that she has arthritis. She has continued to travel with the circus.
- Pregnant animals in shows (lions and camels).

9. Training, Rehearsals & Performance, Abuse

- It is important that the Animal Welfare Bill specifically outlaw violence during training, and the 'cruelty offence' and 'duty of care' as they stand, will not be able to prevent violence in training if different standards of welfare are produced for performing animals.

Currently the law allows violence in training or moving an animal, provided the violence stops once the animal has complied. This has left circus animals extremely vulnerable to abuse including beatings with poles (reference: Aldershot Magistrates' Court, 1999, Chipperfield trial).

- ADI's studies of training practices have shown that the rehearsals that are frequently seen on the road, when a circus is travelling, are entirely different from actual training.
- The real training of an animal for a performance goes on in the 'winter quarters' or permanent training centre – behind closed doors and away from public view.
- Once an animal has been 'broken' it will probably spend the rest of its life plodding through variants of the same routine ...right down to the stage-managed moments when they appear to refuse to obey, or for the large cats, the 'pretend attack' on the presenter. It will perform this routine with whichever presenter has hired or purchased it for the season.
- Intimidation and abuse ranges from relatively mild daily subjugation – screaming, whipping, a kick, a punch – to a full-blown beating with iron bars, broom handles, pitchforks, buckets or whatever is to hand.
- Poorly paid (circa £10 a day), untrained workers are under pressure to move the animals fast, and do not understand the species they are dealing with, thus leading to violence.
- ADI has filmed how a full-grown lioness can be made to urinate with fear, when screamed at.
- The bars of cage tunnels and cages are banged with iron bars, and animals shouted and screamed at to get them to move quickly.
- When the animals come running into the ring, appearing to be full of enthusiasm, it is because someone is standing behind the curtain with an iron bar in their hand
- Examples ADI has on videotape include:
 - lions and tigers shouted at, poked, prodded, stones thrown at them and struck with metal bars to keep them moving
 - sharp-pointed elephant hooks to move elephants –a sharp point can also be concealed at the end of a walking stick
 - a hippo, apparently in distress, hit and jabbed about the flanks and neck with a bar
 - a tigress being beaten with a tent pole
 - a lioness being rammed in the mouth with a tent pole

- elephants being clubbed, whipped, attacked with various weapons
- camels, llamas and other animals being beaten, kicked and punched
- Ponies being repeatedly whipped during training

10. Prosecutions and the Law

- If the Animal Welfare Bill does not contain a prohibition on the use of animals in travelling circuses, it will remain extremely difficult to prosecute for cruelty in a circus, without the kind of undercover investigations conducted by ADI.
- We believe that situation will still be impossible to police, because
 - the circus fraternity is secretive and closely-knit group and therefore outsiders see very little of the actual day-to-day lives of the animals.
 - It is difficult to secure evidence of cruelty in circuses because they constantly move from town to town – leaving an area before evidence can be gathered and processed;
 - For example during an ADI investigation, a female lion, Narla, was attacked by a male tiger and seriously injured. When a local RSPCA official called to look around the circus, the workers hid Narla in her cage, behind bales of straw. The official was videotaped conversing with the circus workers, standing outside the cage containing the lioness, completely unaware of her plight – just a couple of feet away.
- Similarly, local Environmental Health Officers have reported (Animal Welfare and the Law, Eds. Blackman, Humphreys & Todd, 1989, CUP) that if they find out that a circus is coming to their area, and they do manage to conduct a health and safety inspection, there is little time to take action before the circus leaves the area.
- The milestone that exposed the suffering in circuses was in 1998 – after a two year investigation, ADI issued 49 summonses for cruelty offences under the 1911 Act against circus and film industry trainer Mary Chipperfield, her husband Roger Cawley (at the time a Government Zoo inspector), and their elephant keeper.
- This resulted in 1999, with the first-ever convictions for cruelty in the industry. The Cawleys were fined and the elephant keeper imprisoned.
- However, the trial also established that the law allows any level of violence to be inflicted upon an animal up to the point that it complies with the command.
- ADI believes that for circus animals, any Code of Practice will negate the new Animal Welfare Act's intended protection.
- Only if the beating continues after the animal has complied, it is illegal. As the Magistrate at the time stated: *"...it is not for us to judge if that is right – it is legal"*.

11. Defra's Proposed Code of Practice

- The Code of Practice that Defra has suggested could be used for circuses (as detailed in their annex to the Draft Bill) is called '*Standards for the care and welfare of circus animals on tour*' and has been proposed by the Association of Circus Proprietors (ACP) and written by David Hibling.
- This code has been circulated to all local authorities by Defra, despite objections from all major animal welfare groups on the grounds that the code is poorly drafted, and could misguide local authorities into believing that all circuses travelling in the UK are members of the ACP (not the case), and that the standards are approved by Defra.
- ADI is concerned that the author of the code, David Hibling, a ringmaster who appeared as a defence witness for Mary Chipperfield Cawley at her trial for cruelty to a baby chimpanzee is not an appropriate authority for such a code. During the trial, Hibling was shown three videos of assaults on the baby chimp and asked: "See anything which would constitute cruelty?" Hibling replied unequivocally, "No". Asked: "Would you do what Mary Cawley did?" Hibling replied "Yes". Mary Cawley was convicted of twelve counts of cruelty based on the video. Hibling was also shown video of Roger Cawley whipping a sick young elephant, Flora, making her run faster and faster. Hibling again saw nothing cruel. Roger Cawley was convicted of cruelty to Flora.
- ADI's objection (and that of other welfare groups at the time) is that the proposed code contains rather fanciful, impractical concepts which cannot be applied to touring circuses. It will therefore be meaningless.
- For travelling circus animals there are at least two types of accommodation – the permanent quarters used for approximately 4 months per year, and temporary/travelling accommodation used for approximately 8 months of the year – with the latter changing week by week depending on the available space and facilities of the next site.
- This makes the annual inspection outlined in the Annexes to the Draft Bill impractical from the outset, in relation to travelling circuses.
- This Code of Practice will inevitably leave animals in the entertainment industry with an automatic downgrading of protection – it could mean that a horse in a riding stable could be treated differently to a horse in a circus, or a tiger in a circus differently from one in a zoo.
- ADI believes this clause leaves the door open to second-class protection for animals used in commercial enterprises, since the Duty of Care will be obvious when the animal is a personal pet, but swept aside because it will be difficult to enforce in a travelling circus.
- On the other hand, ADI recommends that static circus shows, and use of animals in other areas of entertainment such as film and television, can indeed be governed by a suitable code of practice and strict regulation and licensing.

12. Political and Public Support

EDM 1626: Animal Welfare (No. 2) 13.02.2006

Mike Hancock. 108 signatures.

That this House commends the work of Animal Defenders International in collecting video evidence of the abnormal behaviour and suffering of animals in travelling circuses, and notes this shows that travelling circuses cannot adequately provide for the basic welfare needs of their animals and as such fail the welfare test of the Animal Welfare Bill; notes that circus animals spend excessive periods of time shut in transporters, whether travelling or not, are forced to live in temporary facilities lacking appropriate space and environmental enrichment, and often in inappropriate groupings of animals; further notes that violence is commonplace and part of the circus culture, and no other working animals spend such a long time, normally at least eight months, in temporary mobile accommodation, thus making animal transport regulations difficult to police and enforce, and that the arrangements for circus animals are entirely different from the higher quality accommodation and transport arrangements of animals being transported for racing, horse shows, dog shows and similar events; and therefore urges that the Animal Welfare Bill is used to end the use of animals in travelling circuses and to take measures to protect performing animals in permanent facilities through regulation and to end the currently legal use of violence to train animals for the purposes of entertainment.

EDM 468 CIRCUS ANIMAL WELFARE 29.06.2005

Norman Baker. 107 signatures.

That this House is concerned about the welfare of wild animals in circuses; notes the large body of evidence collected by the Born Free Foundation, Animal Defenders International, RSPCA and others showing that a circus environment cannot provide for the needs of wild animals, including Anne the elephant; is appalled that Anne the elephant is still being moved around the country with Bobby Roberts Super Circus even though she suffers from arthritis; asserts that it would be in her best interests to be retired from circus life; recognises that the proposed duty of care requirement cannot be met in a circus environment; and calls on the Government to introduce measures to end the use of wild animals in circuses in the forthcoming Animal Welfare Bill.

EDM 714: Cruelty to Animals 14.06.1999

Kerry Pollard. 76 signatures.

Protest at leniency of Mary Chipperfield Promotions Ltd., sentences.

EDM 767: Cruelty to Animals 22.02.2000

Kerry Pollard. 61 signatures.

Protest at leniency of Mary Chipperfield Promotions Ltd., sentences.

EDM 787: Animal Defenders and Circus Animals 12.02.1998

Joan Humble. 214 signatures.

That this House congratulates the investigators working for Animal Defenders for the excellent and thorough report, 'The Ugliest Show on Earth', detailing appalling abuse and cruelty inflicted on circus animals by keepers and other circus people; is horrified that such gratuitous cruelty occurs in this day and age; is deeply concerned about the threat to public safety from escaped circus animals caused by inadequately constructed housing and exercise facilities; notes that circuses

exist in a legal loophole, inadequately regulated, licensed and inspected; and calls for a ban on the use of animals in travelling circuses and the extension of the Zoo Licensing Act 1981 to cover the permanent holding facilities thus regulating staffing, housing, food and other welfare issues, public safety, hygiene, breeding, transport, sale and other disposal of the animals.

ADI Survey of 318 Local Authorities:

- 39% had banned all animal acts
- 17% had banned just wild animal acts
- 22.5% continued to allow animal circuses
- 21.5% said they never received requests from circuses with animals

Banning the use of animal acts from circuses has been tested politically and enforced on local authority land. It is a popular move with the public.

Public Opinion

A 2005 MORI Poll for ADI showed that:

- 65% say ban all animal circus acts.
- 80% say ban all wild animal circus acts.
- 90% against whipping and beating when training circus animals.
- Only 7% strongly opposed the calls for bans.
- more than twice as many people now visit animal-free circuses as opposed to those with animals.
- In the last 5 years, attendance at animal-free circuses has risen from 6% to 16%.
- Animal circuses remain slumped at 7% attendance.
- The most popular forms of animal entertainment attended are:
 - aquariums (50% of respondents)
 - zoos (39%)
 - safari parks (22%).

A 2004 NOP opinion poll for ADI revealed:

- 63% of the public wanted to see all animal acts banned from circuses
- only 8% disagreed.



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