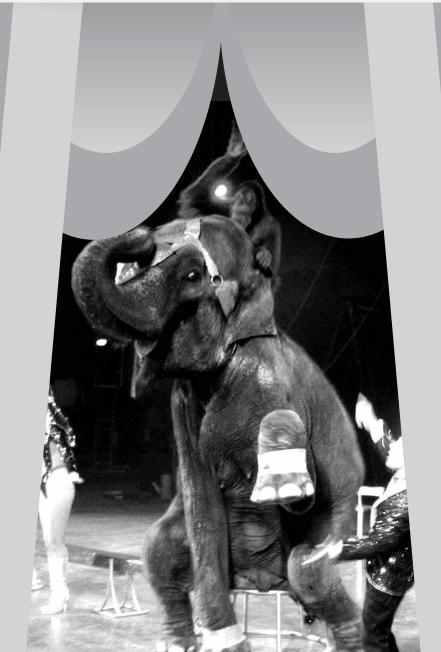
An examination of the state of UK circuses with wild animals







Born Free Foundation and RSPCA (2006). It's time parliament changed its Act. © Born Free Foundation / RSPCA



Born Free Foundation

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The Born Free Foundation is an international wildlife charity that works to influence, inspire and encourage a greater respect for wild animals by working to prevent the suffering of animals in captivity and protect wildlife in the wild. Incorporating both a proactive and reactive approach, Born Free responds to public concerns by working together with governments and NGOs to improve the welfare of individual animals. Born Free's compassionate conservation agenda ensures the survival of threatened wildlife and their habitats, while recognising the needs of people living in and around those habitats.

Since 1984, the Born Free Foundation has been campaigning against the use of captive wild animals in entertainment. Notable achievements include: publishing a report in 1986 about captive polar bears exposing distressing abnormal behaviour in the majority of polar bears in captivity in UK zoos; publishing a report in 1987 with the Whale and Dolphin Conservation Society (WDCS) which contributed to the closure of the UK's remaining dolphinaria and the release of 3 of the last captive dolphins into the wild in 1991; between 1988 and 1989, Born Free carried out the first review of the European zoo industry which assisted in the development of the European Zoo Directive which now requires that all European zoos be licensed; in 1994 Born Free co-authored The Zoo Inquiry with WSPA which challenged the claims of the UK zoo industry; in 1996 Born Free was invited by the All Party Parliamentary Group for Animal Welfare to join the Circus Working Group which published a report on the UK animal circus industry, "Welfare of Circus Animals in England and Wales" (1998); in 2001 Born Free launched Travellers' Alert, an online campaign to expose wild animal suffering abroad; Born Free published a further report reviewing the performance of the UK zoo industry in 2001; and in 2005 Born Free founded a coalition of European animal welfare organisations to focus on captive wild animal issues.



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The RSPCA's purpose is to promote kindness and to prevent or suppress cruelty to animals. Its work extends to concern for all animals in all circumstances, including wild, laboratory, companion and farm animals, and those used in entertainment, education and the workplace.

The RSPCA's inspectorate, regional staff and volunteers work round the clock to help animals in distress. The Society acts to enforce the law relating to animal welfare where it has the power to do so; while animal hospitals, rehoming centres and clinics receive and treat companion animals, equines and wildlife. The RSPCA also campaigns in the UK and Europe to achieve legal and social reform.

Cover photograph courtesy of Animal Public e.V www.animal-public.de

Contents

1. Introduction – The Circus in the UK	2
2. The Public, the Experts and the Government Public Opinion APGAW and the Circus Working Group EFRA	3 3 3 3
3. Circus Animals and the Law 3.1 The Animal Welfare Bill 3.2 Circus Legislation Worldwide	4 4 5
4. Wild Animals in UK Circuses	8
5. Circus Animal Welfare 5.1 Training 5.2 Performance 5.3 Abnormal Behaviour	9 9 9 10
6. Circus Animal Welfare - Individual Species 6.1 Elephants 6.2 Bears 6.3 Big Cats 6.4 Zebra 6.5 Camels 6.6 Pythons	11 11 13 14 15 16
7. Public Safety	25
8. International Movements and Animal Trade	27
9. Discussion	28
10. Recommendations	30
References	31
Acknowledgements	34

Glossary

Ankus (or Ankush) - An elephant hook or goad, used by some handlers as a tool to pull or push elephants

Circus - A place where animals are kept or introduced wholly or mainly for the purposes of performing tricks or manoeuvres at that place (DEFRA 2004)

Conspecific - An organism of the same species as another organism

Stereotypic behaviour - Behaviours that are repetitive and invariant with no obvious goal or function

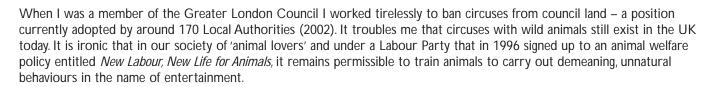
Wild animal - Any animal not normally domesticated in the UK (DEFRA 2004)

Winter quarters - Permanent establishment to which circuses return after the touring season and which may temporarily or permanently house animals



I became a Member of Parliament in 1983 and over the last 22 years I have spoken out passionately on behalf of animals, seeking parliamentary support, wherever possible, for animal welfare issues. In that time I have witnessed a number of important steps forward





This comprehensive report is the result of an extensive investigation by researchers at the Born Free Foundation. The report brings us up-to-date on this contentious issue, building on previous findings by other organisations. The authors, with a combined experience of 35 years in animal welfare science, investigation and campaigning, have taken the imminent publication of the Animal Welfare Bill as an opportunity to challenge the Government's stated intention to introduce self-regulation of animal circuses. Compiled following a number of site visits, a thorough literature review and an assessment of relevant worldwide legislation, Born Free has provided extensive documentary evidence as to why there should be an end to the use of wild animals in circuses.

Along with most reasonable people, I welcome the Animal Welfare Bill which will set new, improved standards for the welfare and treatment of animals under the care of humans. The inclusion of the "Five Freedoms" (the acknowledged basic needs of an animal) is certainly an important step forward. However, while I had hoped their inclusion would guarantee consistency, I am disappointed to learn that the Government seeks to further regulate circuses with animals. Clearly the provision of an animal's needs cannot be guaranteed in a circus and in my view regulation is not the answer.

Public access to circuses is usually limited to witnessing performances in the ring and short visits to the animals' accommodation afterwards. Little is known about conditions behind the scenes, the training methods and the standards of the winter quarters. The findings of this report speak for themselves and, together with Born Free's accompanying DVD "It's time parliament changed its Act", make a strong case for an end to the use of animals, particularly wild animals, in circuses. This is a position I whole-heartedly support and I encourage all Parliamentarians to read the report, engage with the issue, sign EDM 468 and lend their support to measures which will bring this particular chapter in our exploitation of animals to a timely close.

Lord Stratford

This Report is dedicated to Tony Banks, the animals' champion 1943-2006

Executive Summary

Many believe the milestone animal cruelty case involving individuals from the Chipperfield family in 1997-1999 was a turning point in hastening the decline in the popularity of circuses that use wild animals in the UK. It exposed practices that shocked an innocent public.

In 2001, the foot-and-mouth disease epidemic also took its toll, forcing many circuses with animals to cease touring for an extended period of time.

Today, three resident UK circuses with wild animals remain. They spend much of the year on the road, travelling hundreds of miles to perform. However, there are currently no restrictions to prevent the number of circuses, or the number of wild animals performing in circuses, from increasing.

The technological revolution of the last 20 years has resulted in a greater understanding and knowledge of wild animals and their natural environments. People no longer expect to see animals performing degrading tricks, dressed in clothes or performing manoeuvres to music. Instead, millions marvel at their natural attributes via television and the Internet, or travel to see them in their wild habitats. On the whole, the public is generally shocked to learn that circuses with lions and tigers, a bear and even an elephant still exist in the UK. The majority (80%) find the use of wild animals in circuses unacceptable (MORI Poll, 2005).

The recognition of animals as 'sentient beings' (experiencing feelings similar to those felt by humans, such as affection and fear) is now widely accepted across the world and legislation is slowly catching up, acknowledging a greater respect for and understanding of animals' needs and how best to protect them in law. In the UK, the Animal Welfare Bill reflects current thinking and could help ensure that the basic needs of animals under the care of humans are met by providing a "suitable environment" that allows them to "exhibit normal behaviour" and receive "protection from pain, suffering, injury and disease". This legislation will revolutionise animal welfare in England and Wales, replacing laws written almost 100 years ago.

Currently, certain aspects of circus operation are regulated under the Performing Animals (Regulation) Act of 1925 but this gives little regard to the needs of animals. The Animal Welfare Bill appears to have recognised this and seeks to ensure that an animal's basic needs must be provided for. However, in order to be consistent, it must explicitly further acknowledge that the basic needs of an animal remain the same, irrespective of the circumstances in which the animal is kept – an animal's needs should not be compromised to enable its use in a circus. A wild animal kept in a circus has the same needs as a similar animal held in other captive environments - for example, a zoo.

The animal circus, by its very nature, operates in such a way as to facilitate ease of frequent transportation and to ensure day-to-day animal control. Due to their dependency on regular travel, circuses cannot provide sizeable and complex living conditions but instead may subject their animals to:

- cramped conditions in beastwagons
- restricted movement due to tethering / chaining
- repeated and extended transportation
- repeated loading and unloading
- inadequate and unnatural social environments
- a lack of privacy
- high noise levels

Despite the difficulties in assessing living conditions, animal management practices and animal behaviour in circuses, the evidence that has been collected has shown that the impact of circuses on animal welfare is serious and potentially debilitating. Problems that can arise include:

- physiological stress responses
- mental and physical suffering
- bouts of abnormal behaviour
- health risks from inadequate hygiene
- dietary deficiencies

The solution to this archaic exploitation of wild animals is not further regulation through Codes of Practice (as currently favoured by Government and planned for 2009) but rather an end to the use of wild animals in circuses. This view is supported by the House of Commons Environment, Food and Rural Affairs Committee (2005) and the Associate Parliamentary Group for Animal Welfare (APGAW), following their extensive report on circuses published in 1998. However, the Government's current position is that the Animal Welfare Bill will not seek to end such practices.

The Born Free Foundation and the RSPCA, as well as other UK animal welfare organisations including Animal Defenders International, acknowledge a need for consistency in the implementation of the Bill that recognises that the basic needs of animals must be universally applied, regardless of circumstance. We contend that the circus is simply unable to meet these basic needs.

1. Introduction - The Circus in the UK



Anne the elephant with Bobby Roberts, 2003

The display of exotic animals can be traced back to Ancient Egyptian, Greek and Roman times. Whilst wild animals were regularly held in menageries in Britain (the Tower of London menagerie was initiated in 1235), travelling performances resembling modern circuses gained popularity in the late 18th Century, with the modern circus (i.e. the Big Top) appearing in the mid 19th Century.

In 1997, 17 circuses toured the UK with a total of 92 wild animals, including 16 elephants, 2 bears, 33 big cats, 22 camels and 2 zebras or zebra hybrids (Creamer & Phillips 1998). A possible turning point in the decline in the popularity of circuses followed the animal cruelty case involving individuals from the Chipperfield family in 1997-1999, where evidence of harsh training regimes was exposed. However, the impact of the foot-and-mouth disease outbreak of 2000/2001 may have been responsible, in part, for a recent decline in the number of circuses with wild animals. Restrictions were placed on the movement of animals, forcing circuses to leave many animals in permanent or temporary accommodation, dispose of them, or cease touring. Circus King, for example, which toured with a number of wild animals including several elephants and big cats, is believed to have ceased using animals as a result of the outbreak.

In 2005, it is believed that 3 circuses toured Great Britain with a total of approximately 33 wild animals (see Table 3) (but see Section 4 for Northern Ireland). While on tour, these animals may be held in stabling tents, in temporary cages, in the "beastwagon" a long lorry containing small adjacent cages - or in temporary paddocks that may be enclosed by electric tape, depending on the species. There are generally 1 or 2 performances each day, after which the public may be allowed to see the animals in their holding accommodation.

Circuses tend to be present at a site for about 5 days, taking a further 2 days to decamp, travel and set up again. Animals may travel in separate trailers or lorries, which may double as indoor accommodation on site, or in the beastwagon. Circuses appear to favour traditional sites and areas around the country, but itineraries are not always predictable, and there may be considerable distances

between performance sites. The touring season can last for most of the year and include some weeks around Christmas, with the circus returning to its off-show, permanent "winter quarters" for 2 or 3 months.

There is little to suggest that the routines and practices employed by UK circuses differ significantly from those abroad.



Circus Hoffenburg, Ireland, 2005

2. The Public, the Experts and the Government - A growing consensus

Public Opinion

Recent decades have seen increasing public exposure to media such as television documentaries and to foreign travel, allowing people the opportunity to observe either directly or indirectly animals in the wild, their natural behaviour and habitats. In addition, examples of animal cruelty such as those uncovered during the investigation and successful prosecution of individuals from the Chipperfield family in 1997-1999 have aroused considerable public concern. It is of little surprise therefore that there has been a concurrent decline in the popularity of circuses featuring performing wild animals, which in turn may have led to circuses disposing of their wild animal acts.

There have been several polls that serve to indicate this change in public opinion:

Wild animals

72% of those questioned in 1999 thought that the use of wild animals in circuses was not acceptable (1999 MORI poll) 80% of those questioned in 2005 thought that the use of wild animals in circuses was not acceptable (2005 MORI poll)

All animals (wild and domestic)

63% of those questioned in 2004 wanted an end to all animals in circuses (2004 NOP poll) 65% of those questioned in 2005 wanted an end to all animals in circuses (2005 MORI poll) (Sources: Animal Defenders International (2005); RSPCA)

98.9% of readers of the Sunday Mirror newspaper who expressed a view thought that the UK's only remaining circus elephant (see section 6.1 – UK Circus elephant) should retire (2005).

In addition, to date (11/01/06), 92 Members of Parliament have signed Early Day Motion No. 468 recognising that the circus environment cannot provide for the needs of wild animals.

All Party Parliamentary Group for Animal Welfare and the Circus Working Group

As a result of the perceived need for examination of current legislation, practice and theory relating to the welfare and management of all circus animals, the Circus Working Group was formed in 1996 at the invitation of the All Party Parliamentary Group for Animal Welfare (APGAW). Its members included representatives from the British Veterinary Association, RSPCA, Born Free Foundation, Chartered Institute of Environmental Health, Association of Circus Proprietors, and the Wildlife Conservation Research Unit of the University of Oxford. Following 2 years of investigation, "A Report into the Welfare of Circus Animals in England and Wales" was published in 1998. Despite indicating numerous areas of concern regarding the welfare of animals in circuses, including inadequate accommodation and the prevalence of abnormal behaviour, and recommending possible courses of action, including prohibitions on species or the introduction of minimum welfare standards and licensing, to date no changes in legislation or practice have been made to address circus animal welfare.

The Environment Food and Rural Affairs Committee

The Environment, Food and Rural Affairs Committee (EFRA) is a cross-party committee appointed by the House of Commons to examine the expenditure, administration, and policy of the Department for Environment, Food and Rural Affairs (DEFRA) and its associated bodies. In its examination of the Animal Welfare Bill, the Committee has recommended that:

The use of wild animals in circuses be prohibited

The use of all other performing animals in circuses, television, theatre, films, advertising etc. be licensed

(EFRA 2005)

3. Circus Animals and the Law

Prior to the implementation of the Animal Welfare Bill, the main legislation covering circus animals remains the Performing Animals (Regulation) Act 1925. The focus of the Act is public and employee safety, and makes little reference to animal requirements or welfare. It has been acknowledged that the Performing Animals (Regulation) Act 1925 does not provide circus animals with similar standards of welfare to that which would be expected in other captive facilities (DEFRA 2002).

3.1 The Animal Welfare Bill

The Animal Welfare Bill seeks to harmonise and modernise numerous aspects of animal welfare legislation, some of which date from 1911. Among other measures, it introduces a duty on owners and keepers of all vertebrate animals to ensure the welfare of their animals. The Bill stipulates that it is the duty of a person responsible for animals to ensure their welfare, whereby a person must ensure that the "needs" of animals are met:

"A person commits an offence if he does not take such steps as are reasonable in all the circumstances to ensure that the needs of an animal for which he is responsible are met to the extent required by good practice"

These needs are based on the "Five Freedoms" adopted by the Farm Animal Welfare Council and the OIE (World Organisation for Animal Health), and modified and adopted in the Secretary of State's Standards for Modern Zoo Practice (DEFRA 2004). They recognise that animals have inherent requirements, and have been identified as the provision of:

Draft Animal Welfare Bill	Explanatory notes (adapted from DEFRA 2004)
Suitable environment	Consistent with species requirements, including shade, shelter, temperature etc. Digging animals must be provided with suitable substrate; climbing animals must be provided with climbing structures etc.
Suitable diet	Incorporating species-specific methods of presenting nutritionally balanced food at an appropriate frequency and access to potable water.
Ability to express normal behaviour patterns	Accommodation should take account of the natural habitat of the species, and incorporate structures and materials required by animals to perform behaviour typical of the species.
Housing with, or apart from, other animals	Animals of social species should be maintained in compatible social groups; solitary species housed separately etc.
Protection from pain, suffering, injury and disease	Provision of animal health care; enclosure safety; prevention of harm; protection from unnecessary fear.

Table 1: The needs of animals, as outlined in the draft Animal Welfare Bill

The Secretary of State's Standards of Modern Zoo Practice (DEFRA 2004) is used here to provide additional explanation as to what might be expected under these needs, since the draft Bill does not outline them in full.

It seems entirely reasonable that the welfare of wild animals in circuses should be at least of a standard equivalent to the welfare of conspecifics in other situations (e.g. zoos, sanctuaries), an approach that DEFRA has adopted when outlining proposals for performing animals under the Animal Welfare Bill, and reiterated by the Minister for Animal Welfare, Ben Bradshaw MP:

"I would want ... standards to ensure that the welfare of an animal performing in a circus or elsewhere is not compromised in comparison with that of a similar animal kept by man for other purposes"

(Ben Bradshaw, pers. corres. 2004)

It is therefore necessary to examine the welfare of animals in circuses in the light of requirements, guidelines and recommendations for captive wild animals in zoos and similar establishments, in order to ascertain whether consistent welfare standards can or cannot be delivered regardless of circumstances.

3.2 Circus Legislation Worldwide

Table 2 (overleaf) outlines summary legislation from a number of countries worldwide that have prohibitions on wild animals in circuses. Austria, Costa Rica, Israel and Singapore have complete prohibitions on wild animals in circuses; Czech Republic, Denmark, Finland, India and Sweden have prohibitions on certain species; and Belgium, Estonia and Poland have prohibitions on wild-caught individual animals.

In some cases, it has been possible to gain an insight into the reasons for implementing these prohibitions. For example, the use of all wild animals in circuses has been banned in Singapore, where the Agri-Food and Veterinary Authority cites compromised animal welfare resulting from inadequate housing and abuse, public safety issues and increasing public concern for the animals as the grounds for the restriction (2000). Similar issues are reiterated by authorities and concerned NGOs worldwide.

At least 5 EU countries other than the UK (Czech Republic, France, Hungary, Portugal, Slovakia) are believed to be preparing new regulations, special provisions or guidelines concerning circuses (Galhardo 2005).

In addition there are numerous other restrictions at a local and regional level, and in the UK many Local Authorities already prohibit circuses with animals from performing on public land (Atkinson 2004). Although not discussed in detail here, these restrictions indicate the significant level of concern at all levels of society about the use of wild animals in circuses (see Section 2).

Summary:

- The Performing Animals (Regulation) Act 1925 does not address animal welfare in circuses.
- The Animal Welfare Bill will introduce a duty for animal keepers/owners to ensure that the basic needs of their animals are met.
- The welfare of wild animals in circuses should be equivalent to conspecifics in other situations.
- At least 4 countries, including 1 EU Member State, have already prohibited the use of wild animals in circuses.
- At least 5 other EU Member States are currently preparing new circus regulations.

Table 2: Legislation from countries with restrictions on the use of wild animals in circuses

Country	Legislation/ Authority	Species Restrictions	Basis for restrictions/ Supplementary information
Austria	Federal Act on the Protection of Animals (Animal Protection Act – TSchG). Effective 01/01/2005	All wild animals	The prohibition on wild animals in circuses was a long-standing demand of the animal welfare sector. The impact on the national economy was minimal. The prohibition reflected growing public awareness of the problems with circuses, and the trend in favour of alternative circuses without wild animals. (Vier Pfoten, pers. corres. 2005)
Belgium	Royal Decree, 12 Sept 2005, pursuant to Article 6.2 of the law relating to animal welfare. Effective 01/05/05	All wild-caught animals	A law prohibiting wild animals in circuses was approved in July 2004 in Belgium, only to be cancelled for legal irregularities (Galhardo 2005).
Costa Rica	Legislation on Animal Health 30580, 9th July 2002 by Ministry of Environment and Energy; The Ministry of Agriculture and Livestock and The Ministry of Health	All wild animals	
Czech Republic	Section 14a, Act No. 246/1992 Sb.	New born primates, Pinnipeds, Cetaceans (except Delphinids), Rhinoceros, Hippopotamus, Giraffe	
Denmark	Act on the Protection of Animals No. 386, 6th June 1991, amended by Act No. 183, 14th April 1993	All wild animals (Except, after individual evaluation: Elephants, Equids, Sea lions, Reindeer, Mustelids, Viverrids, Procyonids, Rodents, Birds, Non-venomous snakes, Turtles)	The Justice Ministry's Council Regarding Maintenance of Special Animals has recommended that the Ministry ban elephants and sea lions from circuses, since the animals were subjected to undue stress during training and shows, and that they spent far too many hours restrained in trailers en route to new cities (Reported on denmark.dk 05/12/03, accessed 05/07/05)
Estonia	Animal Protection Act 1992	All wild-caught animals	
Finland	Act on Animal Protection 1996	Monkeys, Ruminants (non- domesticated), Perissodactyls (non-domesticated), Marsupials Seals, Elephants, Rhinoceros Birds of Prey, Ostriches Carnivores, Crocodilians	"The prohibition was not based on scientific research but more to the practical experience and welfare problems encountered. The circuses perform on lengthy tours around the country, usually lasting several months during when all the animals have to be accommodated in their transport vehicles. The situation was found to be quite unsatisfactory in respect of animal welfare. Wild animal species were considered more to be more delicate and not so easily adjusted to this type of accommodation and management, that the decision was made to prohibit their use in circuses" (Ministry of Agriculture and Forestry, pers. corres. per Captive Animal Welfare Finland)

Country	Legislation/ Authority	Species Restrictions	Basis for restrictions/ Supplementary information
India	Prevention of Cruelty Act 1960, by notification issued 14th Oct 1998 by Ministry of Social Justice and Empowerment	Bears, Monkeys, Lions, Tigers, Leopards	
Israel	Nature and Parks Authority (2000), following 1994 Animal Welfare Law	All wild animals	
New Zealand	Animal Welfare (Circuses) Code of Welfare 2004	Recommended best practice: All wild animals	Species that require large living spaces and complex environments should not be held in a circus.
Norway	[No restrictions in legislation]	None	"It is difficult to achieve satisfactory conditions for the animals. Particularly the following conditions represent welfare challenges:
			The animals are transported a lot and the transport regulation is not adapted to circus animals. The animals have reduced freedom of movement during transport and for some species also outside of transport hours. Elephants often show stereotypical behaviour. No control of training and training methods as this is an international industry, often with foreign animals and owners.
			Animal keeping which is based on a large extent of transport of the animals is questionable particularly for large species and species with special behavioural needs" (Parliamentary Report 12 Regarding Animal Husbandry and Animal Welfare 11/05/05)
Poland	Animal Protection Act 1997	All wild-caught animals	
Singapore	Agri-Food and Veterinary Authority (2002)	All wild animals	In the interests of public safety and animal welfare. Increasing incidences of mishaps, accidents and abuse in recent years, resulting in serious injuries and death. Increasing public concern for the welfare of performing wild animals in travelling circuses. Reports of abuse and mistreatment of animals by circus owners and trainers have become more regular. Prolonged periods spent by wild animals in cages/containers may compromise their welfare (Agri-Food and Veterinary Authority 29th Dec 2000)
Sweden	Animal Welfare Ordinance 1988	Monkeys, Carnivores Pinnipeds (except sea lions) Rhinoceros, Hippopotamus Deer (except reindeer), Giraffe Kangaroo, Bird of prey Ratites, Crocodilians	

4. Wild Animals in UK Circuses

Currently 3 UK circuses display wild animals (all numbers approximate):

	Bobby Roberts Super Circus	Great British Circus¹	(Peter) Jolly's Circus ^{2,3}
Asian elephant Elephas maximus	1 ("Anne", female)	-	-
Tiger Panthera tigris	-	7	-
Lion Panthera leo	-	5	-
Black bear, American Ursus americanus	-	-	1 ("Ming", female)
Camel, Bactrian Camelus bactrianus	-	8	2
Zebra <i>Equus burchelli</i>	-	3	1
Python <i>Boid</i> sp.	-	-	5

Table 3: Wild animals in UK circuses 2005

¹Also has several reindeer – classification as wild or domestic unconfirmed ²May also have crocodilians – unconfirmed at time of going to press ³Also has ankole cattle – classification as wild or domestic unconfirmed

In addition, at least three circuses resident in Ireland are known to regularly cross the border into Northern Ireland with wild animals, which include elephants (ARAN, pers. corres. 2005). These animals, in addition to those circus animals in transit (see Section 8), would indicate that the annual resident and temporary population of circus animals in the UK may be considerably higher than indicated in the table above.

It is important to note that Peter Jolly's Circus has recently advertised for more wild animal acts for the 2006 season:

"Wanted for forthcoming UK tour commencing March 2006. Bottle fed black bear cubs and lion and tiger cubs for new exciting wild animal big cage act. To enhance current fakir [Eastern magician] number we also require baby alligators"

"Peter Jolly's Circus require for 2006 UK tour, elephant act. Would consider single animal act but would prefer minimum of two animals"

(Lewis 2005)

This indicates that the declining trend in the number of wild animals in circuses in the UK may be, at least temporarily, reversed.

It is important to note that there are a large number of circuses with wild animals in Continental Europe. With few restrictions preventing these circuses or their animal acts from entering the UK, the number of wild animals in circuses in this country could increase dramatically without warning (see Section 8).

Summary:

- There are believed to be at least 33 wild animals in UK circuses.
- Irish circuses with wild animals regularly enter Northern Ireland.
- At least one UK circus is planning to acquire and use more wild animals, including elephants.

5. Circus Animal Welfare

The welfare of animals in circuses appears to be dependent, at least in part, on the infrastructure, resources and routine of the circus. Circuses travel frequently, and the mobility of housing is a limiting factor as it relates to the size and complexity of living conditions available for animals. Wild animals in circuses are therefore subjected to a number of factors that similar animals in zoos, for example, are not. Standard features of circus life such as regular and repeated transport, limited size and complexity of housing, the rigors of training and performances, are issues with potential negative impact on animal welfare that are not faced by the vast majority of zoo animals. There may also be further differences relating to factors such as dietary consistency (Houck 1993), the quality of keeper training (Rietschel 2002b), continuity of veterinary care (Circus Working Group 1998) and animal management.

In general terms, the differences between zoos and circuses for the animals include:

	Zoo	Circus
Training for performance?	No	Yes
Used for performance?	No	Yes
Frequent travel?	No	Yes
Frequent handling for travel/performance?	No	Yes
Larger, complex environment?	Yes	No
Permanent animal accommodation?	Yes	No

Table 4: General comparison between zoos and circuses¹

5.1 Training

Positive or negative reinforcement (rewards or punishment) may be used in training animals. Although training regimes and methods used in circuses cannot readily be observed, there is no evidence that positive reinforcement is always used (Circus Working Group 1998), and there has been strong evidence from circuses in the UK and abroad that harsh negative reinforcement techniques are employed. For example, in circus elephants:

"training can be severe using techniques that include prolonged hitting by the elephant trainer with clubs, stabbing with the point of the ankus [elephant hook], electric prods, prolonged chaining and food deprivation"

Joel Parrott – Director, Oakland Zoo (Parrott 2000)

For zoo animals in the UK, all training programmes should provide a *"net welfare benefit"* to the animal (DEFRA 2004). Since training in the circus has performance for visitors as its overriding objective, the welfare benefits to the animal are unclear.

5.2 Performance

The performances of wild animals in the circus vary greatly, from simply posing as photographic props to more active or postural tricks and manoeuvres. Although performance is potentially one of the most stressful situations experienced by a circus animal (Cox 1998), there is insufficient evidence to comment on the short- or long-term welfare implications of such performances (although inappropriate tricks have been implicated in causing joint problems in elephants (Lindau 1970, cited in Wiesner 1986); and stereotypic behaviour is associated with performances in circus elephants (Friend 1999) and tigers (Krawczel et al. 2005)). Interestingly, animals in zoos "must not be provoked for the benefit of the viewing public" (DEFRA 2004). If similar standards were applied to circus animals, it is unclear whether this would preclude some or all big cat performances, for example.

What is clear, however, is that performances form a very small part of a circus animal's day, with the majority of time spent travelling or in holding accommodation. Consequently, and in light of records of abuse and cruelty inflicted on circus animals, it would be unwise to regard the circus lifestyle as providing sufficient exercise, environmental enrichment or a welfare benefit for the animals involved.

^{&#}x27;The table is intended to highlight general practice across zoos and circuses – it is acknowledged that there may be exceptions. For example, some zoos frequently train or handle animals for performances.

5.3 Abnormal behaviour

It is known that wild animals in captivity often display abnormal behaviour, with a particular problem being repetitive, seemingly functionless actions referred to as stereotypic behaviour. Stereotypic behaviour may be the result of frustrated needs, or be a coping mechanism developed in a current or previous inadequate or stressful environment, and the presence of stereotypic behaviour is generally acknowledged to be an indicator of current or previous poor welfare. Evidence exists for stereotypic behaviour being significant in circus animals (e.g. Friend & Parker 1999, Gruber 2000, Krawczel et al. 2005, Schmid 1995), and this is supported by anecdotal evidence and video footage. Indeed, legislation in New Zealand attempts to tackle the problem, stating that animals displaying continuous signs of distress must not be held or used in circuses. Presence of stereotypic behaviour in some species may serve as partial evidence that circuses are unable to meet the needs of wild animals.

In general, many sources agree that:

"It is difficult... to meet the needs of non-domestic animals within the constraints of circus life"

(Cornwall 1997)

Summary:

- There are significant differences between the husbandry and animal care provided by zoos and circuses, yet there is no difference between the fundamental needs of wild animals in each situation.
- Training in circuses can involve cruelty.
- Circus performance may be stressful.
- There is substantial evidence that circus animals show abnormal behaviour.
- The needs of wild animals cannot be met in circuses.

6. Circus Animal Welfare – Individual Species

The following section attempts to outline and summarise the impact circuses have on the welfare of species currently held in UK circuses (2005):

6.1 Elephants

UK Circus Elephant

There is currently only one elephant in a resident UK circus. Anne is believed to be between 38-52 years old (the confusion arises from inconsistent documentation), and is used by Bobby Roberts Super Circus (www.bobby-roberts.co.uk). She has been kept without the company of other elephants since 2002, and is used for photographic opportunities in the circus performance interval, and for advertising work¹. Anne is acknowledged by her owner to have arthritis. She has been observed chained by a front and back foot in a temporary stable tent, spending many hours in her transport vehicle or in a small temporary paddock surrounded by a single electric wire. She has also been observed being transported on single journeys of over 100 miles by road between performance sites¹. Environmental enrichment items may exist but have not been observed.

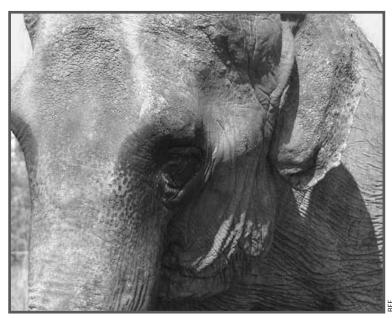


뜼

Research has shown that:

- All circus elephants observed in one study displayed stereotypic weaving behaviour (Schmid 1995).
- Chaining or shackling of circus elephants is associated with higher levels of stereotypic behaviour, when compared with allowing the animals access to relatively small electric pens (Friend & Parker 1999, Gruber 2000, Schmid 1995). This is thought to be the result of the reduction in the ability to express normal behaviour patterns, such as foraging, social interaction, play and locomotion (Gruber 2000).
- Chaining may also be associated with reduced, and consequently inadequate, levels of daily exercise (Rietschel 2002b).
- Foot care is an important aspect of captive elephant husbandry (Clubb & Mason 2002) and this is regularly found to be inadequate in circuses (Rietschel 2002b).
- Elephants that are chained for significant periods of the day are thought to suffer from a higher incidence of foot problems, and various studies have implicated chaining in the development of joint problems such as arthritis (cited in Clubb & Mason 2002).
- "Transportation is an important aspect of life for circus elephants" (p. 8, Williams & Friend 2003). Elephants spent up to 93.2% of the time observed performing stereotypic weaving behaviour in transport vehicles a substantially greater proportion of time than when chained (Friend 1999, Williams & Friend 2003)
- Chronic arthritis in circus elephants may result from excessive pressure being put on limb joints during training and being made to perform inappropriate movements (Lindau 1970, cited in Wiesner 1986). Elephants suffering from arthritic pain may be reluctant to lie down to rest, despite continuous standing exacerbating their condition (Cox 1998). During transport, research has shown that circus elephants spent the majority of the time standing (Williams & Friend 2003).
- Concern has been raised about the condition of the skin of circus elephants. Travelling circuses do not provide a bathing pool, and are unlikely to be able to provide elephants with dirt / soil / branches / scratching posts for their own skin care on a regular basis. It is likely that washing and brushing by keepers, should it occur, is no substitute for these items (Ormrod 1983; Rietschel 2002b).

Captive elephants require significant programmes of environmental enrichment to reduce the likelihood of boredom and
associated problems (FZGBI 2002; Clubb & Mason 2002). Circuses have been reported to omit even simple feeding
enrichment such as providing branches and leaves (Rietschel 2002b), in addition to not providing complex social and
environmental stimuli to ensure high standards of welfare for their elephants.



 Circus elephants are often seen to have dark greasy circles around their eyes (see picture left). This is thought to be where a lubricant is applied to prevent eye secretions from drying and becoming difficult to remove (Carol Buckley, pers. corres. 2005). It is likely that this is used as an alternative to daily bathing, despite being completely inadequate.

Asian elephant (*Elephas maximus*) and African elephant (*Loxodonta africana*)

Elephants live in tropical regions; savannahs, forests, rainforests, wet marshes, thornbush and semi-desert scrub of Africa; and grasslands and forests of Asia. Elephants are highly intelligent and have the largest social network of any mammal studied other than humans. Females live in stable, family groups of about 4-12 individuals lead by a matriarch, where they remain throughout their lifetime. Wild elephants regularly live up to the age of approximately 65 years. Wild Asian elephants have an average home range of 3000-4000km², while African elephants have an average of approximately 1500 km². On average, wild elephants travel between 1km and 30km a day. Wild elephants spend 60% to 80% of their time foraging for food and water. With large brains and advanced thought processes, elephants have tool using abilities similar to those of great apes, the ability to solve discrimination tasks quickly, and long memories. (Sources - Clubb & Mason 2002; Joyce Poole pers. corresp. 2005; Sukumar 1989)



Guidelines for Captive Elephants: See Table 5, p. 18-19

6.2 Bears

UK Circus Bear

Ming is an American black bear, believed to be in her 20's. She is currently used at Peter Jolly's circus and has been observed by Born Free researchers in a totally unfurnished outdoor cage placed on grass, with a small trailer for an indoor enclosure. She is believed to have been hand-reared and is brought into the circus ring to drink a bottle of milk.





Research has shown that:

- Stereotypic behaviour is a common problem in captive bears (Carlstead & Seidensticker 1991).
- Bears kept in small and poorly furnished enclosures tend to develop stereotypic behaviour (Forthman et al. 1992, cited in Montaudouin & Pape 2005).
- Bears observed in circuses spent at least 30% of their time performing stereotypic pacing behaviour (Kiley-Worthington 1990, cited in Cox 1998).
- The presence of a pool is associated with decreased levels of stereotypic behaviour (Montaudouin & Pape 2005).
- Feeding enrichment, enabling bears to forage, is associated with decreased levels of stereotypic behaviour (Carlstead and Seidensticker 1991).
- Bears locked in indoor cages at night show higher levels of stereotypic behaviour (Montaudouin & Pape 2005).
- Hand-reared bears performed abnormal behaviours more frequently than mother-reared bears (Liu et al. 2003, cited in Montaudouin & Pape 2005).

American black bear (Ursus americanus)

Black bears are normally found only in woodland areas, preferring forests with abundant undergrowth, but within such habitat they are highly adaptable. The black bear is an agile climber, even in adulthood. Black bears spend most of their time alone. Female home ranges are 3 to 40 km². (Source - IBA n.d.)



Guidelines for Captive Bears: See Table 6, p. 20

6.3 Big cats

UK Circus Big Cats

The tigers and lions at the Great British Circus (www.greatbritishcircus.co.uk) have been observed in small cages in beastwagons (approximately 2x1 body-lengths), and three tigers have been observed in a small "exercise" cage

(approximately 4x4 body-lengths). Some tigers have been observed performing in the circus ring, jumping through hoops, sitting on stools and rearing up on command.





Most research on captive big cats of particular relevance to circuses has involved the study of tigers. While there are some differences in biology and behaviour between the species of big cat, the majority of legislation and guidelines (see Table 7) treat big cats species similarly. With the exception of social requirements and the need for pools and climbing structures, many of the requirements for tigers may apply to other big cats (e.g. lions) in the circus.

Research has shown that:

- The conditions and routines of circuses make keeping big cats in a suitable species-specific environment impossible or possible only to a very limited extent (Rietschel 2002a).
- Captive carnivores are known for exhibiting stereotypic, self-destructive or abnormal behaviours (AAZK n.d.; Clubb & Mason 2003).
- Naturally wide-ranging species of carnivore, such as lions and tigers, show the most evidence of stress or psychological problems in captivity (Clubb & Mason 2003).
- Lions in captivity face problems of obesity, inactivity and stereotypic behaviour (Altman et al. 2005).
- Circus tigers have been shown to exhibit stereotypic pacing behaviour up 54.3% of the time prior to performances (Krawczel et al., 2005).
- Tigers have evolved in dispersed social systems with limited social interactions. Studies of captive tigers suggest that the presence of tigers in neighbouring cages causes stress and frustration, and leads to stereotypic pacing behaviour (De Rouck et al. 2005).
- Circus animal housing for big cats is of a much smaller size than zoo enclosures (Kiley Worthington 1990, cited in Cox 1998) with enforced close proximity to neighbours and few visual, auditory and olfactory barriers between neighbouring conspecifics. Circus training and performance in groups actually necessitates contact with conspecifics. Consequently, the conditions in circuses are likely to be stressful for tigers.
- Big cats in circuses may be housed in close proximity to other circus animals including other cat species, zebra, horses, camels, goats etc. The presence of prey species in nearby enclosures is likely to influence pacing behaviour in big cats (cited in De Rouck 2005), and may therefore be a cause of stress. Indeed, it is very likely that the presence of other cat species may influence pacing behaviour in tigers (De Rouck 2005).

- Tigers exhibit marked stress responses when transported. This occurs even in tigers habituated to transport. Circus tigers have been shown to exhibit body temperature increases as a result of transport conditions (Nevill et al. 2004). The stress responses continued even after transport had finished (Dembiec et al. 2004).
- Deficiencies in feeding and animal health are acknowledged to occur in big cats in circuses (Rietschel 2002a). For example, mineral imbalances resulting from the diet of circus animals is known to cause osteodystrophia fibrosa in big cats (Wiesner 1986).
- Disturbances resulting from high noise levels etc. are thought to have been responsible for gastroenteritis in tigers (Cociu et al. 1974, cited in Cox 1998). Circus tigers are likely to be subjected to high levels of noise from machinery, traffic, the public etc.

Lion (Panthera leo)

Lions are normally found in open woodland areas and thick bush, scrub and grass. Lions are highly social, and groups can consist of 2-20 individuals. Lions are often active at night. Pride home ranges are 26 to 226 km².

(Source - Nowell & Jackson 1996)



Tiger (Panthera tigris)

Tigers are found in a variety of habitats, generally including dense vegetation cover and access to water. Tigers readily enter water, and have been observed swimming considerable distances. Tigers are generally solitary. Home ranges vary from 10 to 1000 km². (Source – Nowell & Jackson 1996)



Guidelines for Big Cats: See Table 7, p. 21

6.4 Zebra

UK Circus Zebras

The zebras at the Great British Circus have been observed in a small paddock without a stand-off barrier, while the zebra at Peter Jolly's Circus was observed tethered in a stable tent.





Burchell's zebra (Equus burchelli)

Burchell's zebras are social. They live in small groups made up of a stallion and 2-6 mares and their foals. There is a dominance hierarchy among the females in the group. Zebra home ranges vary from 30 to 600 km². (Source – Kingdon 1997; Nowak 1997)



Guidelines for Zebras: See Table 8, p. 22

6.5 Camels

UK Circus Camels

The camels at the Great British Circus have been observed in a small pen without a stand-off barrier (see photo below left), while the camels at Peter Jolly's Circus were observed tethered in a stable tent.





Bactrian Camel (Camelus bactrianus)

Average herd size of 6-10 individuals Bactrian camels may live up to 50 years

(Source - Nowak 1997)



Guidelines for Camelids: See Table 9, p. 23

6.6 Pythons

UK Circus Pythons

The pythons at Jolly's Circus have been observed to be used briefly during the performance draped around the necks of human performers, and were housed in a solid wooden chest with a lid, with some of the snakes tied inside sacks.



The minimum circus guidelines for Vienna (subsequently superseded by a national prohibition on wild animals in circuses in 2005) state that:

"Circuses cannot give reptiles a possibility [sic] to behave in a manner in accordance with their natural instincts"

"Reptiles react very sensitively to all sorts of vibrations and temperature changes and are therefore totally unsuited for frequent transport"

(OECCV 1997)

The authors of these guidelines (a veterinarian, a zoo director and a zoologist) regard the keeping of reptiles in circuses as unacceptable.

Python (Python molurus)

Pythons are found in a variety of habitats including rainforests, river valleys, woodlands, scrublands, grassy marshes, and semi-rocky foothills. They are usually found in habitats with areas that can provide sufficient cover. This species is never found very far from water sources, and seems to prefer very damp terrain. *Python molurus* is a solitary species (Source – Padgett 2003)



Guidelines for Pythons: See Table 10, p. 24

Table 5: Summary of recommendations, guidelines and requirements for the husbandry and management of ELEPHANTS in captivity

	ARAZPA (2004)	AZA (2001) (2002)	Belgium	FZGBI (2002)	EAZA	Kerala	Nova Scotia	Switzerland	TA0S (n.d.)
Min. group size	Must maintain elephants in situations representing social organisation in the wild	3 It is inappropriate to keep female elephants singly		4			Circuses must not maintain single elephants. Must always be able to see and touch other elephants		5 No female elephant should be kept in solitary isolation except in the case of contagious disease
Outdoor area	900m² for 1-2 elephants (Victoria)	167m² for 1 elephant, with extra 84m² per additional animal	100m² for 1 elephant, with extra 100m² per additional animal	2000m² for 8 elephants, with extra 200m² per additional animal / 500m² for 1 male	400m² for 3 elephants, with extra 100m² per additional animal		600m² for 1-2 elephants, with extra 200m² per additional animal	500m² for1-3 elephants, with extra 100m² per additional animal	8094m²
Outdoor fencing	2m (Victoria)								1.5m Hot wire fencing should never be used as primary fencing
Outdoor access		Elephants be kept outside as much as possible	At least 4 hours per day				Majority of daylight hours		
Indoor area		37.2 m²	15m² for 1 elephant, with extra 15m² per additional animal	200m² for 4 elephants, with extra 50m² per additional animal / 50m² for 1 male	36m² for 1 female, 45m² for 1 male	45 m²		15m²	92.9 m²
Indoor height	6m (male)			6m (male)		4.8m			4.8 m
Min.temp. indoors				15 °c					18.3 °c
Indoor substrate	Must be impervious to water, quick drying and well-drained	Must be impervious to water, quick drying and well-drained		Should be impervious to water, quick drying and well drained should have properties that include insulation					
Indoor structure	Indoor facilities should be designed so that they enable elephants to access outdoor enclosures overnight			There should be high-level feeders for hay and browse					

	ARAZPA (2004)	AZA (2001) (2002)	Belgium	FZGBI (2002)	EAZA	Kerala	Nova Scotia	Switzerland	TAOS (n.d.)
Lighting	Elephants should have access to sunlight on a daily basis			Areas should be lit					
Environmental enrichment	The design of facilities must include behavioural and environmental enrichment opportunities	Fresh browse and produce should be used as dietary supplements and enrichment.		It is essential that the captive environment is enriched			Daily variation of durable objects to play with		Keeper directed activities and public exhibition are not considered enrichment
Transport		Elephant transport trailers should have adequate heating or cooling systems to maintain the temperature between 12.8- 21.1°C with adequate ventilation		Elephants must be transported only for breeding, movement between zoos and veterinary purposes		Cruelty includes - "Conveying or carrying, whether in any vehicle or not, an elephant in such a manner or position as to subject it to unnecessary pain or suffering or cause accident" Trucks <12 ft long should not be used for carrying adult elephants			
Chaining	Not to be routinely chained overnight	Elephants should not be chained for the majority of a 24 hour period, except for veterinary treatment or transport. Chained foot must be alternated daily.	Elephants should not be chained	3 hrs / day max. Should not be chained at night	3 hrs / day max.		Only at night, during storms, while the trainer / handler is absent from the circus or in emergency Only around one leg. Minimum chain length 4m		Chains should never be used to restrain elephants
Bathing	Pools should be included in all outdoor enclosures. Warm water should be provided in elephant houses for wash-downs and cleaning	Must have regular access to water source for cooling / bathing. Outdoors, must have access to sand / soil at all times for dust bathing. Skin must be inspected daily and cared for through bathing.		Must have access to water. In winter, "warm water should be available for washing down animals". Access to sand / soil or dust bathing. Provision of objects for rubbing and scratching		Cruelty includes: "Not providing proper bathing facilities to an elephant"		Bathing or showering opportunities to be used all year round. Access to scratching posts and sand / mud for skin care	Baths should be given daily

Table 6: Summary of recommendations, guidelines and requirements for the husbandry and management of BEARS in captivity

		Ames (1998)	Belgium	Germany	Johnson (1997)	Switzerland	Vienna
Indoor Enclosure	Area		6m² for 1-2 bears	24m² for 1-2 bears, with extra 6m² per additional animal	2.25m² for 1 bear	6m² for 1 bear	15m² per bear
	Height			2.2m	1.5m		2.5m
	Enrichment	Including bedding and nesting material			Sleeping platforms		Litter and enrichment items
Outdoor Enclosure	Area		400m² for 1-2 bears, with extra 20m² per additional animal	75m² for 1-2 bears, with extra 10m² per additional animal	37.2m² for 1-2 bears, with extra 3.7m² per additional animal	150m² for 1-2 bears, with extra 20m² per additional animal	100m² for 1-2 bears, with extra 20m² per additional animal
	Height						
	Enrichment	Yes	Climbing opportunities and enrichment items	Material for investigation (logs, branches, sand etc.)		Digging and climbing opportunities. Enrichment items	Digging, scratching and bathing opportunities
	Access			At least 6 hours per day			At least 8 hours per day
Pool				Area = 4m² Depth = 0.8m	Area = 6m² for 1-2 bears, with extra 2.7m² per additional animal Depth = 1m	Area 10m² for 1-2 bears, with extra 2m² per additional animal Depth = 1m	
Other		Visual barriers / escape from view should be provided		Visual barriers / escape from view should be provided			Visual barriers / escape from view should be provided

Table 7: Summary of recommendations, guidelines and requirements for the husbandry and management of BIG CATS in captivity

		Belgium 2005	Belgium 2012	Germany	New South Wales	New Zealand	Nova Scotia	Richardson (1997)	Shoemaker (1997)	Switzerland
Indoor Enclosure	Area	9m² for 1-2 cats, with extra 6m² per additional animal	12m² for 1 lion / 15m² for 1 tiger						5.95m ²	30m² for 1-2 cats, with extra 15m² per additional animal
	Height	2.2m	3m	2.2m						
	Enrichment			Should be provided	Bedding					
Outdoor Enclosure	Area	30m² for 1 cat, with extra 10m² per additional animal	100m² for 1 cat, with extra 20m² per additional animal	50m² for 1-5 cats, with extra 5m² per additional animal	20m² for 1 cat, with extra 10m² per additional animal	50m² for 1-4 cats, with extra 10m² per additional animal	20m² for 1 cat, with extra 10m² per additional animal	10x20 body lengths= 392- 1568m². Should allow cage mates to distance themselves from each other	28m² for 1 cat, with extra 50% per additional animal	80m² for 1-2 cats, with extra 20m² per additional animal
	Height	2.2m	3m		2m	3m	3m		3.1m	
	Enrichment	Tree trunks, plat- forms, climbing apparatus	Climbing opportunities (tigers)	Cage furniture and enrichment items	Climbing opportunities, resting platforms and wood for scratching and marking	Climbing opportunities and resting platforms	Climbing opportunities, resting platforms and wood for scratching and marking			Climbing opportunities, resting platforms
	Access	At least 4 hours per day		At least 4 hours per day	At least 6 hours per day		At all times, except during training and performance			
Other		Pool should be provided (tigers)	Pool should be provided (tigers). Minimum area = 30m² Depth = 1.2m	Pool should be provided (tigers). Visual barriers should be provided				Animals should be viewed from maximum of 2 sides of enclosure. Visual barriers should be provided		Pool should be provided (tigers). Visual barriers should be provided

Table 8: Summary of recommendations, guidelines and requirements for the husbandry and management of ZEBRAS in captivity

		Belgium	Brazil	Forthman (1998)	Germany	New South Wales	Nova Scotia	Reindl (1997)	Switzerland	Vienna
Grouping		Minimum group size of 3 animals		No singles or pairs			Should be housed with conspecifics		Visual contact with conspecifics	
Indoor enclosure	Area	10m² per zebra							8m² per zebra	12m² per zebra
Outdoor enclosure	Агеа	1000m² for 3-5 zebra	300m² for 1-2 zebra	5000m ²	250m² for 1-10 zebra	100m² for 1 zebra, with extra 50m² per additional animal	100m² for 1 zebra, with extra 50m² per additional animal	200m² for 1-3 zebra, with extra 70m² per additional animal	500-1000m² for 1-4 or 5 zebra (depending on species), with 80-100m² per additional animal	150m² for 1-3 zebra with extra 25m² per additional animal
	Access						Should be housed in paddock when at performance site			At least 8 hours per day
Tethering						Only at night, during storms and to temporarily separate an aggressive animal	Only at night, during storms and to temporarily separate an aggressive animal			Should not be tied
Other						Visual barriers or escape from view should be provided	Visual barriers or escape from view should be provided		Rubbing posts and sand or mud for skin care	Branches for enrichment, opportunity for sand-bathing

Table 9: Summary of recommendations, guidelines and requirements for the husbandry and management of CAMELS in captivity

		Belgium	Brazil	Forthman (1998)	Germany	New South Wales / Nova Scotia	Switzerland	Vienna
Grouping				At least 6		Camels must always have visual access to conspecifics. Should be housed with conspecifics whenever possible		Should be kept in small groups or at least pairs
Indoor enclosure	Area	8m² per camel	10m ²		12m² for 1 camel, with extra 4m² per additional animal		8m² per camel	12m² per camel
Outdoor enclosure	Area	500m² for 2-5 camels, with extra 20m² per additional animal	200m ² for 1-2 camels	Moderately large to large enclosure	150m² for 1-3 camels, with extra 25m² per additional animal	100m² for 1 camel, with extra 50m² per additional animal	300m² for 1-3 camels, with extra 50m² per additional animal	300m² for 2-3 camels, with extra 50m² per additional animal
	Access							At least 8 hours per day
Tethering						Tethering is only allowable at night, during storms and to temporarily separate an aggressive animal		Should not be tied
Other			Trees and sand pit available	Rubbing posts		Visual barriers or escape from view should be provided		Sand or earth ground, branches for enrichment

Table 10: Summary of recommendations, guidelines and requirements for the husbandry and management of PYTHONS in captivity

		Belgium	Brazil	DEFRA (2004)	New South Wales	Switzerland
Grouping						Social structures must be respected Individual keeping not to be excluded
Enclosure	Area	0.5-8m² for 1-2 snakes, with extra 0.25-4m² per additional animal (dependant on species)	2m² for 1 snake (1-2m in length), with extra 2m² per additional animal			2/3 x 1/2 body length for 1-2 snakes, with extra 1/7 area per additional animal
	Height	1.5m	1.5m (for snake 1-2m in length)			
	Enrichment			Climbing opportunities should be provided		Horizontal / vertical climbing opportunities Raised lying surfaces
Temperature		Heat source		Must provide controllable thermal gradient around preferred temperature		
Lighting				Local photoperiod should be followed		
Air quality				Ventilation should be provided without compromising temperature		
Water		Yes		May be required		Heated pool for bathing
Other				Rough surfaces to aid skin sloughing Basking and concealment site	Circus display must meet standards for static display (i.e. zoos)	

Key to Tables 5-10:

Belgium – Arrêté Royal Visant à Garantir le Bien-Être des Animaux Utilisés dans les Cirques ou les Expositions Itinérantes pour l'Amusement du Public. 2 Sept 2005

Brazil - Proposed legislation from Sociedade de Zoológicos do Brasil. Available online at: http://www.szb.org.br/in_zoologicos.doc (n.d.)

Germany – Guidelines for the Keeping, Training and Use of Animals in Circus Enterprises or Similar Facilities. Federal Ministry of Consumer Protection, Food and Agriculture 2000

Kerala (India) – Captive Elephant Management Rules (Draft). Available online at: http://www.elephantcare.org/protodoc_files/capmanag.pdf (n.d.)

New South Wales (Australia) – Standards for Exhibiting Circus Animals in New South Wales – Exhibited Animals Protection Act 1995

New Zealand - Animal Welfare (Circuses) Code of Welfare 2004. MAF, New Zealand

Nova Scotia (Canada) – Standards for Exhibiting Circus Animals in Nova Scotia. 2002

Switzerland – Swiss Animal Protection Ordinance of May 27, 1981 (as per November 1, 1998)

Vienna (Austria) – Office of the Environmental Commissioner of the City of Vienna (1997). Guidelines for the Keeping of Wild Animals in Circuses. Office of the Environmental Commissioner of the City of Vienna

For other sources, see References

7. Public Safety

Circuses may present opportunities for animals to escape, or to come into contact with members of the public. The following incidents have occurred in circuses in 2005 alone:

Date	Location	Incident	Source
November 2005	Portugal	Tiger tore off part of worker's arm	The Times, 12/11/05
Sept 2005	Bolivia	Lion escaped	www.channelcincinnati.com
July 2005	Ireland	Monkey bit and scratched visitor	www.greenconsumerguide.com, 28/07/05
July 2005	The Netherlands	Elephant escaped	Jeroen van Kernebeek, pers. corres.
July 2005	Czech Republic	Elephant fell into crowd, injuring visitor	The Times, 09/07/05
July 2005	Spain	Elephant escaped	www.bruneidirect.com
July 2005	The Netherlands	Elephant escaped	Jeroen van Kernebeek, pers. corres.
July 2005	Ireland	Elephant gored and severely injured worker	RTE News, 27/06/05
May 2005	The Netherlands	Sea lion escaped	Jeroen van Kernebeek, pers. corres.
May 2005	New Zealand	Elephant escaped	www.monstersandcritics.com, 01/06/05
May 2005	Norway	Elephants crushed worker	www.news.co.au, 05/05/05
April 2005	USA	Elephant kicked and severely injured worker	www.local6.com, 15/04/05
April 2005	South Korea	Elephants escaped during parade and injured member of public	MSNBC News, 20/04/05; www.local6.com , 20/04/05
March 2005	USA	Camel escaped	ABC 7 News
January 2005	USA	Elephant trampled worker to death	CBS News, 01/02/2005

Table 11: Worldwide incidents involving wild animals in circuses with implications for public safety

These and many other incidents involving captive wild animals can be found on the Captive Wild Animal Protection Coalition (CWAPC) website (www.cwapc.org).

The list above represents only those incidents that have been reported in the readily-accessible English-language media. It is highly likely that there have been more incidents worldwide in 2005, and recent years have seen hundreds of circus animals escape, injure or even kill visitors or circus workers. Wild animals remain unpredictable and a potential risk to people, despite appearing placid or under the control of handlers. The tragic death of Angela Taylor, a British tourist who was killed when an elephant ran amok during a display in Thailand (2001), serves as a reminder of the damage wild animals can cause without warning, even when apparently individually supervised by handlers (http://news.bbc.co.uk/1/hi/uk/725426.stm).



Bobby Roberts Super Circus, 2000

An Asian elephant, Bactrian camels and zebras in UK circuses have recently been observed to be accessible to the public without supervision or adequate barriers (see photos p.15 and p.16). In the Secretary of State's Standards for Modern Zoo Practice, these species are categorised as animals of "Greater Risk" to people, likely to cause serious injury or be a serious threat to life (Appendix 12). The same species in zoos must be separated from the public by a barrier designed to prevent physical contact between humans and animals (DEFRA 2004).

The use of these animals as photographic props must also be called into question in the context of public safety. For example, members of the public visiting Bobby Roberts Super Circus are encouraged to stand next to Anne the elephant during photographic sessions, while supervised by the circus owner. However, a trainer with a stick or even an ankus is unlikely to be able to control an elephant determined to charge or to strike out. Indeed, in 2003 Anne reportedly injured a member of the public by striking out with her trunk (Chester Chronicle, 13/09/03).

Zoonotic disease

There is a risk of transmission of disease between circus animals and visitors, especially if contact occurs. For example, several circus elephants have been diagnosed as being infected with tuberculosis (*Mycobacterium tuberculosis*) (e.g. Ryan 1997) and Bactrian camels in a European circus have been diagnosed with *Mycobacterium bovis* (Pavlik et al. 2002). All captive elephants in the USA should be tested for tuberculosis every year by a veterinarian (National Tuberculosis Working Group 2003), yet such screening is not a requirement in the UK, despite circus animals being exposed to large numbers of human visitors and potentially livestock (when circus situated on farmland), from which they may contract diseases such as tuberculosis.

Wild animals are increasingly implicated on a global scale as sources of infectious diseases, and it is therefore imperative that circus animals be regarded as potential carriers of disease. Even with veterinary care and screening, there is a potential risk which increases given the close contact that takes place between circus animals and people.

Summary:

- Wild animals are unpredictable and dangerous.
- There is little that can be done if a wild animal becomes aggressive or scared.
- People have been injured or killed by circus animals.
- Wild animals in circuses may also be carriers or reservoirs of infectious disease.
- Wild animals in circuses represent a risk to visitors and circus workers.

8. International Movements and Animal Trade

There are a number of international regulations governing the international movement of animals. Of particular relevance to circuses is the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) which, in general terms, regulates the international movement of wild animals found on:

- Appendix 1: which includes species that are threatened with extinction and that are or may be affected by international trade
- Appendix 2: which includes species that, although not necessarily threatened with extinction, may become so unless trade is regulated.

Captive-bred individuals of Appendix 1 species are considered subject to the same restrictions as Appendix 2.

The EU has approximately mirrored the CITES Appendices for movement of wildlife between Member States (EC Council Regulation No. 338/97, 1996 as amended), with the designation Annex A and B being roughly equivalent to CITES Appendix 1 and 2.

Despite these regulations, it is extremely difficult to build an accurate picture of the international movements of circus animals. Import permits are only required for animals covered by the CITES entering the EU from non-EU countries. The import and export of circus animals between EU Member States are not regulated beyond certificates allowing commercial use of Annex A species. Many wild animals in circuses are captive-bred, and may thus be effectively exempted from CITES or current EU regulations. Nonetheless, between 1990-2004, Asian and African elephants, tigers, lions, chimpanzees, macaques, dolphins, brown bears, Asiatic black bears, hippopotamus, alligators, pythons, crocodiles and caiman were imported to the UK from non-EU countries for circus purposes (from CITES Trade Database¹).

The online CITES trade database¹ only makes available information regarding the species name and number of animals involved in each cross-border transaction, thereby making it impossible to establish whether transactions are in fact repeated movements of the same animals, or different animals each time. The stated purpose for transactions that includes circuses also includes all travelling exhibits, and thus features many animals (and even plants) that are not destined for use in a circus (as defined). These problems have been highlighted in previous reports (e.g. Creamer & Phillips 1998; Turner & Travers 2005), yet remain an obstacle to accurately establishing the origin and numbers of circus animals. The situation is further confused because circuses may not travel internationally with their full complement of animals. Some animals may be left in winter quarters or in temporary facilities while the circus travels abroad.

In addition, circus animals enter the UK in transit. For example, newspaper reports from 2005 have indicated that at least two shipments of circus elephants have been in transit between Ireland and Continental Europe (Sunday People, 02/10/05; Western Telegraph 16/02/05). It would seem that, with minimal documentation, circus animals may pass through the UK unobserved.

There are large numbers of wild animals in circuses in European countries such as Germany (e.g. 90 elephants in circuses – Animal Public e.V., pers. corres.) and France (e.g. 490 big cats in circuses – One Voice, pers. corres.), and the lack of restrictions on importing circus animals would indicate the enormous potential for foreign circuses to travel to the UK to perform. As mentioned previously (see section 1), at least 3 circuses from Ireland regularly enter Northern Ireland with their wild animals. Thus, the relatively small number of circuses with wild animals currently operating in the UK could increase at any time.

As this report was going to press, the Commission Regulation (EC) No. 1739/2005 of 21 October 2005 was published, outlining animal health requirements for the movement of circus animals between EU Member States to apply from 1 January 2007. This legislation stipulates a number of requirements for the international movement of circus animals within the EU, and may enable some traceability of these animals. However, until this legislation is applied, the situation remains as described.

1 http://www.cites.org/eng/resources/trade.shtml

Summary:

- Foreign circuses with wild animals can tour in the UK.
- Resident circuses can easily acquire more wild animals and are planning to do so.
- The number of wild animals in circuses in the UK may increase significantly without warning.

9. Discussion

Circuses present wild animals with a number of social, physical, psychological and environmental challenges that can have a significant negative impact on their welfare. Small restricted enclosures lacking in environmental complexity, inappropriate social grouping, frequent and extended travel, training and performance and many other aspects of circus life impact on the welfare of wild animals:

"Circus animals do experience compromised welfare. Animals do show psychological, physical and physiological signs of stress"

(Cox 1998)

It is clear that circuses are unable to provide wild animals with either a suitable environment or opportunities to express natural behaviour. For example, a black bear that would spend the majority of its time in the wild foraging in a complex environment may be housed in a completely bare cage. An elephant that may walk many miles each day in the wild feeding as part of an extended family unit may be housed in a small temporary paddock, or be chained to the floor of a temporary shelter. In the case of all species of wild animal in UK circuses, there are significant differences between the perceived behavioural and environmental needs and the reality of what they are provided with.

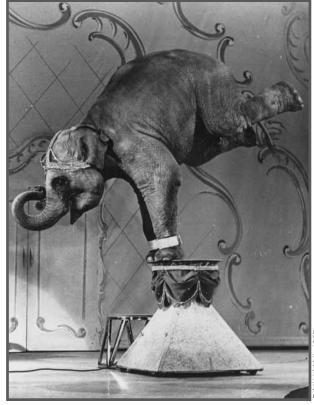
Similarly, circus animals are rarely kept in appropriate social groups: social species such as elephants and zebra are frequently housed alone, while solitary tigers and pythons are placed in enforced proximity with conspecifics. Predators and prey may be housed within sight of each other, without visual barriers.

The challenges facing wild animals kept in circuses are not endured to the same degree by conspecifics in other captive establishments such as zoos. Zoos in the UK are subject to relatively detailed legislation and guidelines (see DEFRA 2004) which are not applied to a circus situation. Consequently, despite having equivalent needs, it seems clear that animals in circuses have a lower standard of welfare than similar animals in zoos.

DEFRA have asserted that "not all non-domesticated species, most of which are captive-bred, are unsuitable for performing in circuses" (in EFRA 2005). There is no evidence to support this statement. On the contrary, wild animal species have not been subjected to many hundreds of generations of selective breeding for preferred traits in captivity, and are consequently not adapted to close association with humans. Many aspects of the circus lifestyle such as travel, handling, training and performance, along with a restricted environment, would indicate that all wild animal species are unsuitable for use in circuses. Captive-bred wild animals have inherent needs to perform equivalent behaviours to their wild-born counterparts. Being born in captivity does not make a tiger, for example, more or less tractable or dangerous, or change its need to express normal tiger behaviour, compared to a wild-born tiger.

UK zoo standards do not make special provision for captive-bred individual animals that would allow them to be subjected to different conditions than wild-born individuals (DEFRA 2004). The same should be the case in circuses. Indeed, the legal definition of "wild" applies regardless of an animal's place of birth.

Many countries specify minimum conditions that circuses and zoos must comply with. In addition, numerous guidelines and recommendations outlining the captive care of species used in circuses have been published. Inspection of the information in Tables 5-10 shows that current circus conditions rarely, if ever, meet these minimum standards. For example, it is generally agreed that elephants should not be maintained alone, and yet Anne (Bobby Roberts Super Circus, 2005) has been alone since 2002; she has been observed chained indoors despite recommendations that elephants should rarely, if ever, be chained; she has occasional access to a temporary paddock that appears to be under the recommended size; and there is no evidence to suggest that she has access to bathing facilities or environmental enrichment, despite both being regarded as necessities for captive elephants. Similar discrepancies exist between the current conditions for other wild animal species in UK circuses and the recommended minimum guidelines for their care.



ILY MAIL 1987

It is clear that the welfare of wild animals in UK circuses must be addressed, but the best approach to take remains debatable:

Option 1 - Full prohibition

Total prohibition on the use of all animals in circuses, including domestic and wild animals.

Option 2 - Prohibition of wild animals

This would follow the lead of several countries, including Austria, Costa Rica, Israel and Singapore, which have prohibited the use of all wild animals in circuses (see Table 2). The reasons cited for these prohibitions include:

- Animal welfare concerns; reports of animal abuse and the prolonged periods circus animals spend in inadequate accommodation
- Changing public attitudes and increased concern for animal welfare
- Risks to public health and safety
- The minimal economic impact of prohibition

Option 3 - Improved standards

Legislation that recognises the needs of animals, and thus sets improved standards of care, similar to the approach adopted by several countries including Belgium and New Zealand (see Table 2).

The approach proposed by DEFRA under the Animal Welfare Bill (as outlined in EFRA 2005) rests on an inspection and licensing system in conjunction with a code of practice, and is arguably flawed. The Performing Animals Act 1925 currently empowers Local Authorities and the police to inspect circuses (DEFRA 2001), yet this is not consistently carried out. In 1996, only 61 out of 94 Local Authorities inspected circuses visiting their constituencies, and these inspections may have focussed on issues other than animal welfare concerns (Circus Working Group 1998). In general, as with the licensing of zoos, it falls to Environmental Health Officers (or their equivalent) to carry out Local Authority inspections. It is recognised that the expertise of these officers primarily lies in enforcement of public health and safety issues, not in assessment of animals' needs and welfare (Circus Working Group 1998). In addition, Local Authority record-keeping and inspection in relation to the licensing of zoos has been found to be inconsistent (Born Free Foundation, unpubl. data), and there is nothing to suggest that similar problems will not be encountered in licensing and inspecting circuses. A regime of licensing and inspection will not provide a solution to the problems facing wild animals in circuses.

The Association of Circus Proprietors have adopted a code of practice for the use of animals in circuses, and Performing Animals Welfare Standards International (PAWSI) have compiled minimum standards for the welfare of animals in performances (PAWSI 2004). However, not only does industry-based regulation of welfare standards lack transparency, but the evidence presented in this report indicates that such schemes have been ineffective at ensuring that the needs of wild animals in circuses are met in a manner consistent with the needs of the same species kept under different circumstances.

The relatively small number of wild animals currently used by circuses in the UK should encourage fast and effective legislative change. As matters stand, the impact of changes leading to an end to the use of animals in circuses will be limited and manageable. However, the numbers of wild animals in circuses in the UK could increase dramatically, given the lack of restrictions on international movement. This would make resolving that issue potentially more difficult in the future. Legislative change must make provision for both resident animals, those animals that currently enter the UK in transit and for foreign-based circuses that may temporarily perform in the UK. It must be remembered that if the keeping of wild animals in circuses is phased-out, the longevity of certain species (e.g. elephants, camels) may mean that measures must be taken to ensure that the needs of these animals are met for the rest of their lives.

It is clear that advances in knowledge of animal welfare and husbandry, and changes in public opinion which increasingly rejects the use of animals in circuses, have not been matched by improvements in the welfare of wild animals in circuses and, given the transient nature of circuses, are highly unlikely to ever be effectively addressed.

The onus is on the UK not just to match legislation from other countries, but to ensure that the needs of wild animals are fully met. The Born Free Foundation and the RSPCA would advocate that the only sensible and effective approach to resolving this situation would be an end to the use of animals, and in particular wild animals, in circuses.

10. Recommendations

The Born Free Foundation and the RSPCA recommends that:

- As a priority, the Animal Welfare Bill must ensure an end to the use of wild animals in circuses in the UK
- Parliament and the Animal Welfare Bill recognise that the fundamental needs of animals as set out under Clause 8, Subsection (2) remain consistent, irrespective of the animals' circumstances
- Circuses should immediately be prohibited from acquiring new animals or breeding from their existing animals
- In the event of a prohibition, the wild animals currently held in UK circuses be rehomed in suitable circumstances that provide lifetime care
- The same legislation and standards applied to UK resident circuses shall apply to foreign circuses temporarily visiting the UK or those in transit through the UK with wild animals
- Circuses be prevented from disposing of wild animals to unsuitable circumstances in the UK or abroad
- Parliament encourages other EU Member States to adopt higher standards of animal welfare and controls on the use of wild animals in circuses
- Parliament recognise the cultural value and economic viability of non-animal circuses

References:

AAZK (American Association of Zoo Keepers) (n.d.) Carnivore Enrichment Guidelines. AAZK. Available online at: www.torontozoo.com/meet_animals/enrichment/carnivore_enrichment.htm. Accessed 16/08/05

Altman JD, Gross KL & Lowry SR (2005). Nutritional and behavioural effects of gorge and fast feeding in captive lions. Journal of Applied Animal Welfare Science 8(1): 47-57

Animal Defenders International (2005). Press release 14/10/05

ARAZPA (2004). Guidelines for Management of Elephants in Australasian (ARAZPA) Zoos. ARAZPA

Atkinson R (2004). Banning Animals in Circuses - A Worldwide Perspective. RSPCA Internal Report

AZA (American Zoo and Aquarium Association) (2001). AZA Standards for Elephant Management and Care. AZA

AZA (American Zoo and Aquarium Association) (2002). Transport Guidelines for Elephants. AZA

FZGBI (Federation of Zoological Gardens of Great Britain and Ireland – now BIAZA (British and Irish Association of Zoos and Aquariums)) (2002). Management Guidelines for the Welfare of Zoo Animals. Federation of Zoological Gardens of Great Britain and Ireland

Bradshaw B (2005). Ben Bradshaw's website. Available online at: www.benbradshaw.co.uk/column/column.php?id=45. Accessed 30/06/05

Carlstead K & Seidensticker J (1991). Seasonal variation in stereotypic pacing in an American black bear Ursus americanus. Behavioural Processes 25: 155-161

Circus Working Group (1998). A Report into the Welfare of Circus Animals in England and Wales

Clubb R & Mason G (2002). A Review of the Welfare of Zoo Elephants in Europe. A Report Commissioned for the RSPCA

Clubb R & Mason G (2003). Captivity effects on wide-ranging carnivores. Nature 425: 473-474

Cornwall J (1997). Australian Veterinary Association Members' Directory and Policy Compendium. AVA

Cox R (1998). The Welfare of Animals in Circuses: A Review. A Report for the Circus Working Group of the All Party Parliamentary Group for Animal Welfare. Wildlife Conservation Research Unit, University of Oxford

Creamer J & Phillips T (1998). The Ugliest Show on Earth. Animal Defenders, London

De Rouck M, Kitchener AC, Law G & Nelissen M (2005). A comparative study of the influence of social housing conditions on the behaviour of captive tigers (Panthera tigris). Animal Welfare 14: 229-238

DEFRA (Department for Environment, Food and Rural Affairs) (2001). DEFRA Circular 1/2002. Department for Environment, Food and Rural Affairs, UK

DEFRA (Department for Environment, Food and Rural Affairs) (2004). Secretary of State's Standards of Modern Zoo Practice. DEFRA

Dembiec DP, Snider RJ & Zanella AJ (2004). The effects of transport stress on tiger physiology and behavior. Zoo Biology 23: 335-346

EFRA (Environment Food and Rural Affairs Committee) (2005). The Draft Animal Welfare Bill: Government Reply to the Committee's Report – Fourth Special Report of Session 2004-2005. Stationary Office by order of the House of Commons

Forthman DL (1998). Toward optimal for confined ungulates. Pp: 236-261 in Shepherdson DJ et al. (Eds.): Second Nature – Environmental Enrichment for Captive Animals. Smithsonian

Friend TH (1999). Behavior of picketed circus elephants. Applied Animal Behaviour Science 62: 73-88

Friend TH & Parker ML (1999). The effect of penning versus picketing on stereotypic behavior of circus elephants. Applied Animal Behaviour Science 64: 213-225

Galhardo L (2005). Animals in Circuses: Legislation and Controls in the European Union. Eurogroup for Wildlife and Laboratory Animals / Eurogroup for Animal Welfare

Gruber TM, Friend TH, Gardner JM, Packard, Beaver B & Bushong D (2000). Variation in stereotypic behavior related to restraint in circus elephants. Zoo Biology 19: 209-221

Houck R (1993). Veterinary care of performing elephants. Pp. 453-454 in Fowler ME (Ed.): Zoo and Wild Animal Medicine: Current Therapy. 3rd Edition. Saunders Ltd.

IBA (International Association for Bear Research and Management) (n.d.) International Association for Bear Research and Management website. Available online at http://www.bearbiology.com/

Johnson LA (1997). Zoo quidelines for keeping bears in captivity. AZA - American Zoo and Aquarium Association

Kiley-Worthington M (1990). Animals in Circuses and Zoos – Chiron's World? Little Eco-Farms Publishing

Kingdon J (1997). The Kingdon Field Guide to African Mammals. Academic Press, London

Koehl D (2005). Elephants infected with Rabies virus (On-line), Absolut Elephant, Copyright © 1995-2005. Accessed 11 November 2005 at http://www.elephant.se/rabies.php

Krawczel PD, Friend TH & Windom A (2005). Stereotypic behavior of circus tigers: Effects of performance. Applied Animal Behaviour Science 95: 189-198

Lewis A (2005). Circus Friends Association of Great Britain website. Available online at:

http://pub32.bravenet.com/forum/2741825875/fetch/467083/ and http://pub32.bravenet.com/forum/2741825875/fetch/473997/

Montaudouin S & Le Pape G (2005). Comparison between 28 zoological parks: stereotypic and social behaviours of captive brown bears (Ursus arctos). Applied Animal Behaviour Science 92: 129-141

National Tuberculosis Working Group for Zoo and Wildlife Species (2003). Guidelines for the Control of Tuberculosis in Elephants. APHIS

NAWAC (National Animal Welfare Advisory Committee (New Zealand)) (2004). Animal Welfare (Circuses) Code of Welfare Report. MAF, New Zealand

Nevill CH & Friend TH (2003). The behavior of circus tigers during transport. Applied Animal Behaviour Science 82: 329-337

Nevill CH, Friend TH & Toscano MJ (2004). Survey of transport environments of circus tiger (Panthera Tigris) acts. Journal of Zoo and Wildlife Medicine 35: 167-174

Nowak R (1997). Walker's Mammals of the World. Baltimore, Maryland: The Johns Hopkins University Press.

Nowell K & Jackson P (1996). Wild Cats – Status Survey and Conservation Action Plan. IUCN/SSC Cat Specialist Group

OECCV (Office of the Environmental Commissioner of the City of Vienna) (1997). Guidelines for the Keeping of Wild Animals in Circuses. OECCV

Ormrod S (1983). The circus elephant. Proceedings of Symposium 7 of the Association of British Wild Animal Keepers. ABWAK

Padgett J (2003). Python molurus - Animal Diversity Web. Available online at: http://animaldiversity.ummz.umich.edu/site/accounts/information/Python_molurus.html. Accessed 01/11/05

Parrott J (2000). Prepared statement to the Subcommittee on Crime of the Committee on the Judiciary, US House of Representatives 13 June 2000

Pavlik I, Machackova M, Yayo Ayele W, Lamka J, Parmova I, Melicharek I, Hanzlikova M, Körmendy B, Nagy G, Cvetnic Z, Ocepek M & Lipiec M (2002). Incidence of bovine tuberculosis in wild and domestic animals other than cattle in six Central European countries during 1990-1999. Veterinární Medicína 47(5): 122-131

PAWSI (Performing Animals Welfare Standards International) (2004). PAWSI Code, Guidelines and Minimum Standards for the Welfare of Animals in the Audio Visual Industries. PAWSI

Reindl NJ (1997). Zoo guidelines for keeping equids in captivity. AZA – American Zoo and Aquarium Association

Rietschel W (2002a). [The keeping of bears and big cats in the zoo and circus]. Deutsche Tierarztliche Wochenschrift 109(3): 120-123

Rietschel W (2002b). [The keeping of elephants in the zoo and circus]. Deutsche Tierarztliche Wochenschrift 109(3): 123-126

Richardson DM (1997). Housing exotic felids. Pp. 113-115 in ABWAK: Management Guidelines for Exotic Cats. Association of British Wild Animal Keepers

Ryan CP (1997). Tuberculosis in circus elephants. Pulse 39(1): 8-9

Schmid J (1995). Keeping elephants temporarily in paddocks - the effects on their behaviour. Animal Welfare 4: 87-101

Shoemaker AH, Maruska EJ & Rockwell R (1997). Minimum Husbandry Guidelines for Mammals: Large Felids. American Association of Zoo and Aquariums

Sukumar R (1989). The Asian Elephant: Ecology and Management. Cambridge University Press

TAOS (The Association of Sanctuaries) (n.d.). Care Guidelines for Captive Elephants. Available online at: http://www.taosanctuaries.org/news/eleguide.htm

Turner D & Travers W (2005). The sources of and market for primates as pets. Pp. 32-45 in: IFAW – Born to be Wild: Primates are not Pets. International Fund for Animal Welfare, London

Wiesner H (1986). Probleme bei der Haltung von Zirkustieren. Tierärztliche Umschau 41(10): 753-755

Williams JL & Friend TH (2003). Behavior of circus elephants during transport. Journal of the Elephant Managers Association 14(3): 8-11

Legislation / Guidelines cited

Austria

Federal Act on the Protection of Animals (Animal Protection Act - TSchG)

Belgium

Royal Decree, 2 Sept 2005, pursuant to Article 6.2 of the law relating to animal welfare

Brazil

Proposed legislation from Sociedade de Zoológicos do Brasil n.d.

Costa Rica

Legislation on Animal Health 30580, 9th July 2002 by Ministry of Environment and Energy; The Ministry of Agriculture and Livestock and The Ministry of Health

Czech Republic

Section 14a, Act No. 246/1992 Sb

Denmark

Act on the Protection of Animals No. 386, 6th June 1991, amended by Act No. 183, 14th April 1993

Estonia

Animal Protection Act 1992

European Union

Commission Regulation (EC) No 1739/2005 of 21 October 2005 laying down animal health requirements for the movement of circus animals between Member States

Finland

Act on Animal Protection 1996

Germany

Guidelines for the Keeping, Training and Use of Animals in Circus Enterprises or Similar Facilities. Federal Ministry of Consumer Protection, Food and Agriculture 2000

India

Prevention of Cruelty Act 1960, by notification issued 14th Oct 1998 by Ministry of Social Justice and Empowerment

Israel

Nature and Parks Authority (2000), following Animal Welfare Law 1994

Kerala (India)

Captive Elephant Management Rules (Draft). Available online at: http://www.elephantcare.org/protodoc_files/capmanag.pdf (n.d.)

New Zealand

Animal Welfare (Circuses) Code of Welfare 2004. MAF, New Zealand

Nova Scotia (Canada)

Standards for Exhibiting Circus Animals in Nova Scotia 1999, revised 2002

New South Wales (Australia)

Exhibited Animals Protection Act - Standards for Exhibiting Circus Animals in New South Wales

Poland

Animal Protection Act 1997

Singapore

Agri-Food and Veterinary Authority (2002)

Sweden

Animal Welfare Ordinance 1988

Switzerland

Animal Protection Ordinance 1981, and Amendment 2001

Vienna (Austria)

Office of the Environmental Commissioner of the City of Vienna (1997). Guidelines for the Keeping of Wild Animals in Circuses. Office of the Environmental Commissioner of the City of Vienna

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