

University of Veterinary Medicine Budapest
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**Wild animals in circuses, a comparison of international legislations and animal
welfare aspects**

**Vadon élő állatok a cirkuszokban - nemzetközi kitekintés és állatvédelmi
aspektusok**

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ABSTRACT

This text provides some insight into the lives of wild animals exhibited in menageries, focusing on the welfare and legal aspects. How a circus environment and other cofactors can influence the welfare, health, and behavior of these animals. Captive animals in circuses are more likely to develop abnormal behavior patterns like stereotypies due to stress and lack of proper stimuli. Certain health issues are more commonly seen in captive animals than their wild conspecifics. The correlation between high stress levels, housing and keeping conditions, handling, and the effect it may exert on animals in captivity. The text also includes a comparison of legislations and prohibition implemented by different governments to regulate and restrict the keeping of wild animals in circuses. For this thesis 10 countries have been chosen, and their laws reviewed and compared.

Ez a tanulmány betekintést nyújt a menzszériákban és cirkuszokban bemutatott vadállatok életébe, a jogi és állatjóléti szempontokra összpontosítva. Mi játszik szerepet ezen állatok viselkedésében, mi hat az egészségükre, és jólétükre. A cirkuszokban, fogságban tartott vadállatok sokkal hajlamosabbak abnormális viselkedésformákat kialakítani -mint például a sztereotíp mozgásformák- a stressznek és az ingerszegény környezetnek köszönhetően. Egyes egészségügyi problémákat jóval gyakrabban tapasztalhatunk fogságban tartott vadállatok esetében, mint a vadon élő társaiknál. A magas stressz szint, a tartási és elhelyezési körülmények, és az állatokkal való bánásmód bizonyítható hatást gyakorol a fogságban élő vadállatokra. Az állatjóléti kérdéseken túl a tanulmány összehasonlítja azt, hogy egyes országok milyen megszorításokat és jogi szabályozásokat alkalmaznak annak érdekében, hogy korlátozzák a cirkuszokban a vadállatok tartását. Az összehasonlításhoz 10 ország lett kiválasztva, amelyek jogi szabályozását röviden át is tekinti a dolgozat.

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1. Introduction

Exotic animals performing tricks in a circus ring is a childhood memory many share. The excitement of seeing an elephant for the first time wearing a colorful costume and performing tricks. Watching a tiger jump through hoops on fire, and the amusement when a costumed monkey bicycles through a ring. As children these are things we find exciting and fun. But as we grow, we become more aware of our surroundings, and it becomes clearer that what we see in the circus ring is not in fact as amusing as it was believed to be.

Throughout its history, the circus has been a form of entertainment all over the world. A circus is defined as a travelling company of performers, these performers may include clowns, acrobats, and trained animals. It is believed that the first appearance of circuses occurred sometime during the 18th century. There is some evidence suggesting that the history of circuses had its origin as far back as to the Ancient Rome, where at certain locations chariot races with horses as well as displays with trained animals were held as a form of entertainment. The modern circus first made its appearance in London, in 1768, where a cavalry officer performed horse riding tricks at an amphitheater. Animals being trained and used to perform in acts have been a part of the circuses from the very beginning. However, the first wild animals were first introduced into the circus ring around 1831, when presumably a French trainer entered a cage with a tiger during a performance in Germany. The trend continued and other trainers over the world followed performing shows and circus acts involving exotic animals. Continuing into the 19th century and throughout, innumerable species of animals, including wild species such as hippopotamuses, polar bears, and rhinoceroses, were trained to perform tricks in the circus ring. In the modern day, wild animals performing in the ring is something that is still commonly seen in many countries.

Though the use of wild animals in forms of entertainment have been a popular traditional practice for a long time, in the more recent years there has been an increasing effort from scientists, animal organizations, activists as well as veterinarians to put an end to the practice, attempting to raise the public awareness about the animal welfare of the wild animals being displayed in circuses. Many of the tricks and postures we see executed by these animals are very different from what they would naturally exhibit if they were in the wild.

The ethics of using wild animals for the purpose of entertainment have been an increasing concern worldwide, and the public are now calling for a change all over the world. Researchers and animal behaviorists have acknowledged that the welfare of wild animals exhibited in circuses cannot be reasonably guaranteed, despite efforts to improve conditions for the animals, for example of in form of using enrichment, or increasing the time spent in resting paddocks.

Furthermore, opinion polls carried out by member states within the EU, clearly shows the publics wish to prohibit the usage of wild animals in the circus, and the discussion on the ethics of using wild animals for the purpose of entertainment is becoming increasingly relevant. As a result, many countries have adopted new legislations, restrictions, and prohibitions. With measures to limit or prohibit the use of animals in circuses having already been implemented in 49 countries, this notably mirrors the public's desire to phase out the use of wild animals in traveling circuses.

2. Literature review

Currently 24 member states of the EU have adopted partial or total bans on the use of wild animals exclusively, or in some cases animals in general, to be exhibited in menageries. A total of 49 countries throughout the world have implemented total, partial or regional restrictions regarding the exhibition and display of wild animals in travelling circuses (Worldwide summary, 2022). In recent years the public has shown an increased interest in the topic, showing great concern for the welfare and safety aspects keeping of wild animals. (Global circus Issue, 2022)

In October 2021, a petition started by Eurogroup for Animals as a part of their stop circus suffering campaign on March 3rd, 2021, was handed over to European parliament, in front of the Berlaymont's building in Belgium. The petition handed over was signed by 1 million European citizens (One million citizens, 2021).

The Federation of Veterinarians of Europe (VFE) have been urging the European & national competent authorities to ban the use of wild animal in circuses in Europe (Federal Veterinary Association, 2010). The Federation has published position papers over the years, the most recent released in 2015, arguing that circuses represent an outdated traditional view of wild animals, especially elephants, lions, and tigers, and that it is not truly possible to fulfill the needs of non-domesticated animals while travelling with circuses. Highlighting how within a travelling circus, the confined housing conditions and stressful environment prevents the wild animals from exhibiting their natural behaviors, as well as negatively impacting the mental state of the animals (Federal Veterinary Association, 2010).

In September 2015, Eurogroup for animals released a statement identifying some of the most important concerns regarding the welfare aspects of wild animals being used in circuses (Ethological needs and welfare, 2015). 27 scientists with extensive background and research within ecology, ethology, and wildlife biology signed the document, highlighting five main concerns:

- 1) Limited space available – the circus animals spend majority of their life in small, confined conditions. Where only a small percentage of their daily life consists of performing or training. Their enclosures are considerably smaller than the minimum standard zoo outdoor enclosures. (Iossa et al., 2009).

2) Maternal separation – Circus animals are in many cases separated from their mothers at a young age, some are separated the infant stage to be hand-reared, this regularly leads to increased stress-responses, and elevated stress levels, evidence had indicated that early maternal separation may also relate to abnormal behavior pattern later in life. (Latham et al, 2008). It can also be linked to reproductive disorders of the captive animals.

3) Limited social interactions – Some of the most popular circus animals such as elephants and large carnivore species being highly social animals are significantly affected (Kurt, 1986). The animals are often inhibited from obtaining a normal social dynamic due to being kept either in solitude, or in groups smaller than their wild conspecifics. Further increasing the consequences affecting their welfare, reproduction, and behavior (Price & Stoinski, 2007)

4) Travelling – The frequent travelling is significantly connected to high stress in wild animals. Contrary to domesticated habituated animals, wild animals show increasing signs of psychological distress and stress-related behavior during transport. (Montes I et al., 2004)

5) Training and performance – Training methods used, are previously rumored to be fear based, with physical punishment subjected onto animals during training. Though some evidence suggest that most establishments use reward-based training. Furthermore, the shows where the animals are made to perform in front of a spectating audience creates an extremely stressful environment, the artificial lighting, aversive sounds, unusual sights, and smell impressions can cause severe stress.

In the European Union, as of August 2022, the banning of wild animals from circuses falls under the responsibility of the different member states. The European Commission entrusts each members states with the responsibility of providing sanctuary or appropriate accommodation for the animals that can no longer be used in the circuses due to a possible nationwide ban. However, the circuses within EU must comply with the Council Regulation 338/97/EC (9 December 1996) on the protection of species of wild fauna and flora by regulation trade therein, the European Commission Regulation (EC) 1739/2005 which lays out the animal health requirement for transporting animals of circuses between member states. Council directive 92/65/EEC initiating specific requirements animal health requirement, governing the trade and /or import of circus animals moved between EU member states. Though many EU member states still do not have specific regulations in place to enforce the animal welfare of circus animals, some states have started the process

of adopting legal prohibitions and bans on keeping either exclusively wild animals or all animals.

At this time 24 EU countries have implemented nationwide bans and prohibitions, prohibiting the usage of certain animal species in circuses, and restricting the trade, breeding, and transportation, out of these 24, 11 have adopted nationwide bans on all species of wild animals or bans on any animal species to be kept in a circus (Federal circus bill, 2022). Some countries in the EU have not yet implemented nationwide bans but have instead adopted local bans and restriction limited to certain regions, examples are Germany, Spain, and Italy. Within the UK, England, Wales, and Scotland have implemented nationwide bans on wild animals in circuses, while as in Northern Ireland, there are no such legislation in place.

3. Definitions

To this thesis, a “circus” is defined as a travelling exhibition or fair that includes one or more species of wild animals, and where these animals are kept and used to perform in front of an audience for the purpose of entertainment.

A wild animal is defined as those animals’ species that exist in wild populations in their country of origin, species who are morphologically, physiologically unaltered from their wild relatives. Still possessing the same genetic makeup, while retaining their natural instincts, needs and behaviors as their wild counterpart. These animal species have remained unchanged, despite potential generations of breeding and human influence.

4. Ethical concerns of wild animals used in circuses.

Establishments like circuses have for a long time been considered as places that fail to maintain even the minimum requirements for the welfare and care of their animals, resulting abnormal physical, behavior and mental changes in the animals. Due to this, the association of animal maltreatment and circuses are closely connected. Traditionally a wide variety of wild animal species have been kept in captivity for the purpose of entertainment. There are still many captive animals being all over the world, kept in zoos, animal parks, and traveling circuses. Animal welfare have always been an important topic, but the focus on good animal welfare and the quality of life of the animals in questions has been an increasing concern in recent years. To better understand whether the basic needs of

a wild animal in captivity are met, as well as evaluating their quality of life, it is necessary to carefully consider the species-specific requirements of each animal species kept in captivity.

4.1.1. Animal welfare aspects

A technical report released by the University of Bristol in May 2009, are wild animals suited to a travelling circus life? (Iossa et al., 2009) The article compiles a comprehensive synopsis of the animal welfare of captive circus animals. The comparison of the conditions of non-domesticated animals with the conditions of the same species kept in a zoo environment was made, and the results showed that compared to their zoo counterpart a captive animal in a circus spend majority of their daily lives in confinement with limited physical activity, and when placed in exercise pens, the circus enclosures were notably smaller than the minimum standards set for zoo enclosures (Iossa et al., 2009) The report also focused the limitation these animals faced socially, behaviorally and the effect traveling circus have on the health, diet, and general welfare of these animals. In 2016, the Giraffe Conservation Foundation released a report on the welfare of wild animal in a traveling circus, as a response to the Welsh government requesting an impartial literature review and analysis of the scientific evidence available regarding traveling circuses, being able to provide the optimal requirements of welfare for their captive animals, as set out under the animal welfare act 2006. The report showed that circuses fail to provide some of the most basic needs for many wild animals, such as social groups and sufficient space, this is according to a report released by the University of Bristol (Dorning et al., 2016). In relation with the animal welfare act 2006 in the UK, anyone responsible for an animal failing to provide for its welfare, by not providing sufficient space, nutrition, environment, social needs are guilty of a criminal offence (Animal Welfare Act /2006/).

On May 4th, 2022, an online article was published by journal of animal behavior and biometeorology, reviewing a study from the perspective of the five domains proposed for evaluating animal welfare (Daniel Mota-Rojasa et al., 2022). The original five domains model was developed by Professor David Mellor (Mellor, 2016) it has been adopted by the World Association of Zoos and Aquariums (WAZA) as a part of their animal welfare strategy (Five Domains, 2021). The study allowed for a better understanding and insight of the effects circuses may have on the mental and physical states of the animals in their

possession. Figure 1 describes how the five-domain model comprises four physical and functional domains comprises both positive and negative experiences that may alter the collective experience. The model consists of the physical domains, (1) Nutrition, (2) Environment, (3) Physical health, (4) Behavior. The final domain (5) being a Mental domain. When evaluating the model, it is necessary to assess the positive and negative states of the animal, looking at the collective states it is possible to evaluate the level of welfare.

Looking at the first functional state, nutrition, the states include restrictions and availability of food in the circus environment.

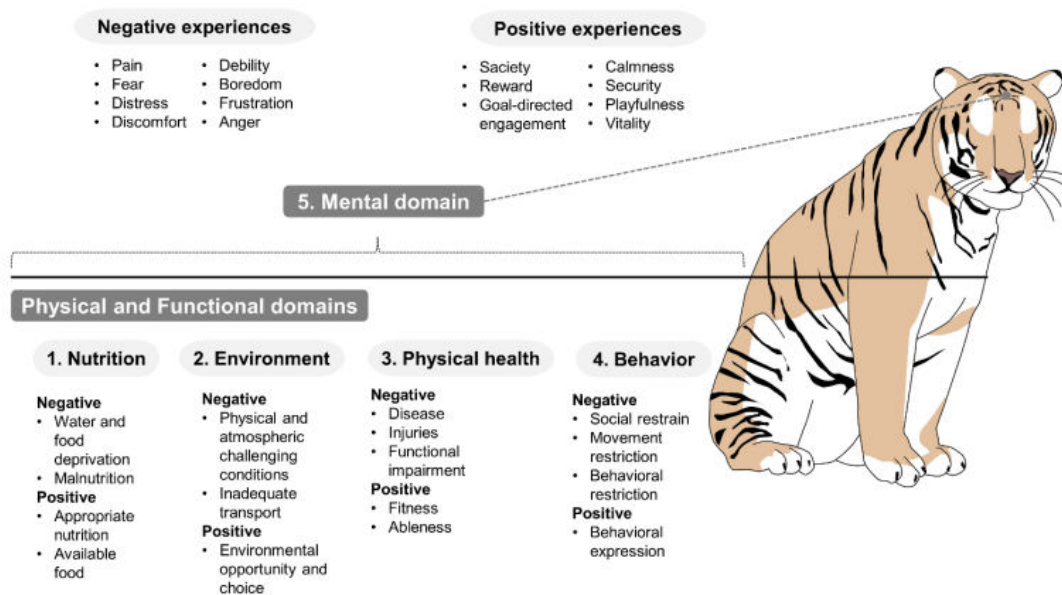


Figure 1: The five domains of circus animal, showing the division of the 5 states into both physical and mental domains. And in each of the domain there are both positive and negative states that may influence the overall picture of welfare of the animal. (Mota-Rojasa et al, 2022)

Domain 1: Nutrition

The information on the diet of captive circus animals is limited. However, it is obvious that wild animals in menageries have very different diet from their wild counterpart. The nutrition of these animals can be considered as a great limitation, as they often fail to provide the same quality and quantity to their captive animals partly due to lack of knowledge (Robbins, 2022). For example, both Asian and African elephants (*Elephas maximus* & *Loxodonta Africana*) in the wild, will spend majority of their time feeding, anywhere between 40-75% time of their time is spent consuming a variety of different

plants while moving over distances (Sukumar et al., 1990). In a circus the grazing opportunity is greatly reduced, and the restrictions limit their physical activity, their diet consisting of grain and concentrate. When kept on sand surfaces the animals are more likely to ingest sand and stones. This is due to them ingesting their food from the ground, which may lead to their food being mixed with substrates, causing impactions. (Sukumar, 1990).

Large carnivore cats, such as Bengal tigers (*Panthera tigris tigris*), a common cat seen in the circus ring, in the wild will hunt and consume a wide variety of prey such as species of deer, chitals (*Axis axis*) and sambar (*Rusa unicolor*) (Simcharoen et al., 2018). While in captivity they are fed a diet mainly consisting of beef or chicken. Captive cats are occasional feeders, in their natural environment they are likely to consume large amount of meat and viscera at once but may also go longer periods without consuming feed. In captivity the limited variation of nutrients, frequency of feeding, as well as the restricted physical conditions contributed to the development of nutritional imbalances, stress. The animals in captivity are at a higher risk of obesity, pathological conditions such as reproductive, cardiovascular disorders and in some cases death (Goodchild et al., 2008).

Domain 2: Environment

The environment in which captive animals are housed play a massive part into their welfare, the set up and dimension of the enclosure contributes to their ability to exhibit natural patterns of behavior or limit them from doing so, this in turn will affect the welfare (Bryan et al., 2017). Housing may not only impact their physical health, but their mental state as well, when animals are restricted from being in physical activity due the confined space, while being deprived from appropriate stimulation they are much more predisposed to develop stress and in turn development of stress related behavior. Unsuitable keeping systems can also be linked to stress induced behavior (Poole 1988; Kurt 1986). Furthermore, the stress may manifest into stereotypical behavior patterns, such as pacing, pawing or bar chewing, which is commonly observed in large captive felines and polar bears (Wechsler 1991; Kurt 1986). Captivity related stress can manifest in short term behavioral and psychological alterations, as well as chronic long-term effects. Examples of

behavioral alteration due to stress can be reduced exploratory behavior, apathy, aggression, and freeze response.

It has been suggested that since captive animals cannot escape its stressor, due to its confinement, and that the inability to control their own environment may be the greatest stress factor of them all. Some trainer and circus operators have argued that if an animal has been made accustomed to smaller enclosures they do not suffer, and in some cases, they prefer their pens and enclosures. In their natural habitat elephant have been known to move over long distances while feeding and looking for water, while wild tigers and lions cover larger territories. The Bengal tigers (*Panthera tigris tigris*) will cover territories ranging in between 7 to 1000 km². (Breton and Barrot, 2014) In captivity their enclosures size may vary between establishments, but there is no argument that a circus enclosure cannot be compared to a wild habitat. The minimum size requirements are also significantly smaller than a zoo enclosure.

Another stress factor of the circus is the frequent travelling, in these circumstances the animals are confined in containers, while on the road. This can increase the stress levels due to the forced movements of the vehicles, constricted space and changing of environment in form of sound and smells. The constant vibrations of the moving vehicles represent a stressor as well (Montes et al., 2004) Some animals may have become habituated to the frequent travel, and in these cases the stress level may be somewhat decreased, this is something often observed in domesticated animal species. (Grandin, 1997). While travelling there are also a higher likelihood of dehydration, fatigue, and immunosuppression in case of long journeys, where temperature, loading density may not be regulated. Elephants can be sensitive to meteorological changes, which can have serious negative impact on their health (Poole, 1988).

Part of the life of a menagerie animal is spent in shows, or performances in front of an audience. The stressors affiliated with the performances can be compiled to but not limited to the artificial lighting, unknown smells, sights, and loud noises (Iossa et al., 2009; Hossey, 2000).

Domain 3: Physical health

Though there are many factors attributing to the physical health of an animals, wild animals in captivity due will often develop physical and mental disorder that is rarely documented. Due to the physical restrictions and lack of exercise considering only a small percentage, 1-9%, of their daily lives is spent training and performing, the exercise pens limited space, captive animals have a higher disposition to develop obesity causing further health issues such as diabetes or reproductive problems documented in captive lemurs (Goodchild et al., 2008). The increased weight is followed by joint defects, lameness, damaged feet.

Captive wild cats have shown an increased disposition to bone pathologies due to a lack of dietary calcium, resulting increased porosity of the long bones. This was documented in 1968 by Patricia Scott, by comparing radiograph from upper forelimbs (humerus) of two lions, a wild specimen and the second animal from a zoo. (Scott, 1968). Dental disorders in elephants under human care is not uncommon (Edwards et al, 2019).

Captive polar bears (*Ursus maritimus*) may suffer from inappetence and depression due to hot weather temperatures (Fagre et al., 2015) in wet condition there is higher incidence of foot pathologies, such as infections and foot abscesses (Wendler, 2019). This is a consequence of animals being kept far from their natural geographical distribution. Elephants are usually well adapted to warmer climates, but are highly sensitive to temperature, especially low temperatures and shifting temperatures can negatively impacting their health. After cooling down, it may take a long time to warm up again (Poole, 1988). Which may result in immunosuppression, causing further health issues. The lack of mud, usually used as a natural skin cleaner in nature, can lead to skin diseases such as dermatitis, hyperkeratosis, or pressure sores. Decreased reproduction and related disorders are such as ovarian cysts can be observed in captive animals (Edwards et al., 2019).

During training and performance acts, there are risks of injuries whenever the animals are forced into abnormal postures and movements, potentially leading to damages to the musculoskeletal system. There has been reports of elephants with asphyxiation and hernias, due to increased pressure on the diaphragm whole forced into sternal positions (Kuntze, 1989) as well as camels with spinal damages.

Domain 4: Behavior

Social interaction in the circus is very limited. Young animals are often separated from their mother and hand reared before initiating training, seen in primates, elephants, and felines. Consequences to maternal separation commonly observed is decreased social development, there is evidence of reproductive abilities being negatively impacted.

Elephants are highly social animals who in the wild live in family groups with a complex social hierarchy and a matriarch, where skills and knowledge are passed down through generations (Kurt, 1986; Moss, 1988). Similar social hierarchies are seen in orcas (*Orcinus orca*) in the wild. In captivity, and especially in a circus environment, the frequent moving between establishments will damage the bonds of animals when they are separated from their groups. In case of lion cubs born in captivity, they may be allowed a few days before the cubs are separated from their mother and raised like pets, this makes it is easier to manage the animals when it is time to start the training. Hand rearing and social deficiencies has a strong connection to breeding difficulties in captive animals such as primates and elephants, not to mention behavioral abnormalities (Price and Stoinski, 2007).

Stereotypical behaviors seen in captive animals are usually the result of confined space, insufficient exercise, insufficient stimuli, or overstimulation. The combination of boredom, frustration and limited makes animals more prone to developing such abnormal patterns (Mason, 1991). The phrase stereotypies refer to when normal behavior patterns are replaced by an increased frequency of abnormal, repetitive behavior that seem entirely meaningless (Mason, 2006) Stereotypies may manifest in ways where the animal are exhibiting repetitive behavior, such as pacing, weaving, circling and in some instances, it can manifest in form of self-mutilation or self-harm.

Self-mutilation is often the result of increased arousal and the inability to appropriately deal with the increased neurological stimuli experienced, in psittacine birds individuals in captivity will often show different degrees of feather picking and feather mutilation. (Jenkins, 2001). A study involving 22 captive chimpanzees (*Pan troglodytes*), the individual animals spread out over 3 different institutions, studied how abnormal behaviors can be associated with increased glucocorticoids, which in turn can be directly related decreased well-being. (Pizzutto et al., 2015). Chimpanzees (*Pan troglodytes*) were studied over a 6-month period and approximately 4800 registries were made per animal, with 3

fecal samples collected weekly to measure glucocorticoid metabolites. Stereotypical behavior observed was represented in approximately 14 %, among the animals exhibiting such behavior approximately 38 % was executing self-mutilation. The representing animals had different levels of alopecia. The study suggested a positive correlation between the amount of the body surface affected with alopecia, and the levels of glucocorticoid metabolites in the feces. The result indicates that this type of measurement can help evaluate how well wild animals adapt to their lives in captivity and may also be a direct indicator of presence of chronic stress in such animals (Pizzutto et al., 2015)

The development of such stereotypies can be linked to captive animals decreased opportunity to exhibit their natural exploratory, motivated behavior, thus, stereotypies have been associated with poor animal welfare and the environment being less than optimal. Tigers will in the will spend a large portion of their days resting, approximately around 18 and sleeping, with short periods of activity around dawn. Though carnivore cats are provided with exercise and stimuli through training, and performing is not sufficient, making them much more prone to adopting behavior such as pacing. While elephants have been exhibiting abnormal patterns such as weaving, or repeated pacing, likely due to confinement and lack of social interactions. The methods of containment can strongly influence behavior. In 1995 a study comparing the behavior of circus elephants kept in shackles and in paddocks was performed (Schmid, 1995). After observing groups of elephants for 72 hours, it was observed that elephants kept in paddocks exhibited a higher percentage of comfort behaviors, such throwing sand on their bodies, or using tools like sticks to scratch their skin. The individuals that were shackled displayed less comfort behavior, due to their physical confinement. The paddocked elephants were also more frequently seen exhibiting playful behavior. Social behavior however was observed in both groups, in an equal percentage (Schmid, 1995).

Another form of abnormal behavior seen in circus animals, is the behavior that is impacted on them by humans. Where the animals adopt unnatural postures and behavior that have, they would not exhibit in the wild. Examples may primates or bears riding bicycles, elephants balancing on small pedestals, or animals' hula hooping and jumping through hoops. There is some argument that training may be considered as beneficial to their physical and mental health, as using positive reinforcement-based techniques increased the dopamine release, due to brain centers activating a reward system when an animal

associates a reward to follow desired behavior. However, the questions raised regarding whether the training of circus animals involve the conditioning by using fear or pain. Dancing bears in India is an example, where the bear cubs after being separated from the mother around 4 weeks of age, undergo the extraction of their canines, multiple piercing of their snouts as a part of the training (D'Cruze, 2011). Studies show that animals taught using methods through conditioning by fear, long term negative endocrine alterations can occur, leading to long term negative psychological effects (Shechner et al., 2014).

Domain 5: Mental state

The shifting environment the of the circus, with repeated performances, training session and restraints can be affiliated with mental deterioration seen in wild animals in captivity. There is a high prevalence of anxiety in captive animals, arguably because of the presence of many environmental stressors and social deprivation. During a circus act, the unpredictable surrounding, with unfamiliar sounds from an audience, and lighting can trigger fight of flight response, or induce a stress related response to being forced into unnatural postures and behaviors (Hossey, 2000)

Due to physical restraints and confinement, and example being as picketing elephant, where their legs are tide diagonally, one front limb tied to the opposite hindlimb. Is associated with high occurrence of stereotypical behavior such and swaying or swinging their bodies, head and truck (TH friend, 1999). When picketed, the elephants are allowed to socialize with other animals of their group, while their movement is restricted, this and similar practices of restraint has a negative effect on the emotional state of the animals (TH friend, 1999) Confined animals lacking both mental and physical stimuli have a higher prevalence of stress related behavior which may manifest in hyper-aggression, depression, and stereotypies. Enrichment has proven to be healthy and beneficial for animals, but whether a circus can provide appropriate and sufficient alternatives is arguable. Animals being on stage and being introduced to certain form of stimuli, may count as enrichment, and help prevent boredom, or better it easier to provide medical attention as the animal become adjusted to human handling.

4.1.2. Tame versus domesticated animals

Though wild animals such as elephants, bears, lions, zebras, used within a circus have been bred for over multiple generations by humans for the purpose of entertainment, they cannot be considered as domesticated animals. A domesticated animal is an animal that has been selectively bred over generations, breeding for beneficial traits over long period, thus leading to an alteration in their appearance, genetic makeup, and behavior (Price, 1984). Domesticated animals are genetically differentiated from their wild ancestors, and may no longer share the natural instincts, behavior with their predecessors. There are some major differences between an animal that is domesticated and a wild animal in captivity. One point being that companion animals, or a animals bred as livestock are genetically determined to tolerate humans and have adapted to living under human manipulation (Price, 1984). However, a wild animal that have been bred by humans, will still share the same life cycle, genetic makeup, behavior, and instincts as their wild counterpart. These animals are genetically indistinguishable from a wild animal belonging to the same species. (生物多样性, definitions for the term “wild animal”, 2020) Though captive animals used in circuses have been bred over potentially multiple generation, do not share the genetic disposition to humans, instead they and are conditioned to tolerate humans. Even though they have grown accustomed to human presence and handling, they are not domesticated, instead they can be defined as tamed animals (Harris et al, 2006). The term “tame” can be restricted to individual animals only, while as the term domesticated may refer to the species of animals, that have been bred selectively over long periods to develop traits that are useful for humans (Price, 1999).

Certain species are slightly more complicated, such Camelidae. In some countries they are considered as domesticated, and species of camels such as the Bactrian camel (*Camelus bactrianus*), commonly seen in the circus ring (Ji., et al 2009). Camels and its relatives, such as dromedaries (*Camelus dromedarius*) and llamas (*Lama glama*) have been a part of the circus history. Whether camels may be deemed as domesticated or tamed is the source of some disagreement. Some argue that since domesticated camels are morphologically and physiologically like their wild counterparts, they cannot truly be deemed domesticated. The fact the origin and history of their domestication lacking evidence, there is some

further arguments in regard to their definition (Ji., et al 2009). Certain countries consider Camelidae species as domesticated, for example such as Norway and Denmark.

4.1.3 Training methods

Throughout the traditional history of the circus and their performance acts involving animals, not much have changed when it comes to the tricks the animals perform to entertain the human crowd. A 4000 kg elephant may be seen balancing on a small pedestal, bears dancing alongside human performers, using hula hoops, or riding bicycles wearing costumes and big cats jumping through hoops. These trained movements and tricks different from the natural behavior and postures one would observe in the wild. A valid argument is that the use of wild animals in circuses has little value as anything else but entertainment for a human audience.

The training the animals undergo to learn these tricks have throughout the history of circuses been secretive and it is hard to find accurate data on the subject. There have been records due to former circus performers, and trainers sharing their experiences of their time working with captive animals. Occasions where investigators have come forward and shed light onto the ways the animals are trained. Historically training methods have involved inducing fear and pain to make an animal execute a desired behavior. Elephant hooks, electric shock devices, whips and sticks have been used to control animals, in the past. In some circus acts the whips are part of the show as “the tamer of beasts” stand a in ring with tigers or lions, performing tricks.

However, there are also records showing trainer using positive reinforcement training, where a desired behavior is rewarded, and training promoting fear reduced behavior, in 1990, Kiley-Worthington, spent over 200 hours observing British circuses, while observing she witnessed training sessions (Kiley-Worthington, 1989b). Though sticks and whips were occasionally used to control animals as a form of negative reinforcement, she stated that she never saw evidence of cruelty, instead the training was mainly based on positive reinforcement, and reducing fear related behavior. According to her observations some animals expressed anxiety when introduced to new trainers before becoming adjusted, while others exhibited typical avoidance behavior. However, during the observation period the amount of training observed was not sufficient to give an accurate picture.

4.1.4. Public security

Another concern is related to the fact that while these animals have grown accustomed to human handling, they remain wild animals and can be potentially very dangerous and may pose great risk to the public security and the safety of humans. Throughout the history of circuses there have been records of animals causing damage, injuries and even fatalities of humans, including children. A google search of “escaped circus animals” shows 11000 results. From 1994 to 2019, 478 incidents with wild circus animal were reported. The highest number of incidents reported has been in Germany, closely followed by France and Italy. This according to an article released by Eurogroup for Animals.

In 2019 a Siberian tiger (*Panthera tigris altaica*) escaped a circus during a performance in Xinxiang city of central China. The tiger climbed over the performance cage, causing panic in the audience. After 12 hours of searching the tiger was located and successfully tranquilized. While being transported to a Xinxiang Zoo for safekeeping the animal reportedly passed away and was found dead on arrival to the zoo. The tiger likely passed due to internal injuries after being hit by a car (Performing Tiger Escapes (2019)). In 1994, Honolulu Hawaii, and African bush elephant (*Loxodonta Africana*) named Tyke escaped during a show, severely injuring her handler before killing her trainer. While trying to escape the elephant nearly crushed a publicist stationed on a nearby parking lot. Tyke was chased by police for 4 hours before collapsing and dying from multiple injuries and wounds. The police had shot the elephant 86 times before she collapsed and succumbed to her injuries (Remembering Tyke, 2020). Germany, 2019, two zebras escaped a circus in the northern state of Mecklenburg-Western Pomerania. One zebra was shot dead by police, after causing a traffic accident and damaging cars. The second zebra was returned to the circus after successful capture (Nikolic, 2019).

Similar cases have occurred all over the world on numerous occasions, the highest incidence of circus animal related accident occur in Germany and further proves that despite security measures, training and preventions, there is no guarantee that it will ever be fully safe to keep wild animals in such conditions. It is no argument that the circus environment causes a lot of stress onto the animals in general. During a performance the exposure to artificial light, unknown sounds, smells, sights, and impressions can cause high stress and lead animals becoming very dangerous (Hossey, 2000). It is important to

remember that wild species with their instincts are likely to react like wild animals under stress, simply because that is exactly what they are.

5. Overview of legislations

Below I have compiled summaries of the different legislation and the regulation from the 10 comparison countries of my choosing, regarding the laws of holding an exhibiting wild animal species in the circus. The summaries better allow for an overview and understating of what the legislation of each country entails, and a comparison of the difference of each country

Cyprus

Legislation: The Animal Protection and Welfare act of 1994 (46(I)/1994)

Cyprus has effectively banned the usage of any species of animals including marine species and those defined as wild animals to be part of exhibitions or display. Following its implementation in 2007, January 1st, the law states in part 3 § 11, it is prohibited to install and operate a circus that within their program includes any animal species to be used in performances, parades, and exhibitions. Anyone who fails to comply, will be guilty of this offense and in case of conviction is subject to the penalties provided by this Law for the specific offense. The purpose of the law is to establish a general framework of the rules of conduct when handling animals to ensure their health and wellbeing.

Norway

Legislations: FOR-2016-09-05-1035- Regulations of animal welfare while displaying animals

LOV-2009-06-19-97 – Animal welfare law

Norway has adopted nationwide bans, effectively prohibited the holding and display of wild animals in circuses and any form of temporary display. During September 2016 the Norwegian government announced new changes in the legislations (FOR-2016-09-05-1035), which were officially implemented from January 1st, 2017. The legislation covers the keeping and usage of mammals, birds, reptiles, amphibians, fish, decapods, and cephalopods in the circus, animal amusement parks and temporary display. The original legislation was implemented with the purpose of improving and maintaining good animal welfare and respect for animals being displayed in front of an audience, after its amendment in 2017, all wild animal species are prohibited to be used and displayed, while as only domesticated species, including Camelidae species are permitted.

After the 2017 amendment, in accordance with the legislation anyone with the intention of displaying animals must send in an application and report the intention to the Norwegian food safety authority. The handler must produce sufficient and correct documentation of the animal species to be displayed, number of animals within a species within the establishment. Keep correct and updated journals of births, injuries and diseases shall be kept for a period of minimum 5 years. Deceased animals must be reported and documented with probable cause of death to the Norwegian food safety authority.

Failure to comply with the legislation, such as displaying prohibited species, or failure to provide adequate care, training, diet, and general welfare for the animals is punishable in accordance with the animal welfare law § 37.

Denmark

Legislation: BEK Nr 1750 of 30/11/2020 – Order on the keeping and display of animals in circuses...etc. (Dyreværnsloven (2022))

The executive order applies to the keeping of displaying of animals in circuses, amusement parks and similar establishments that as part of their business display animals performing in front of an audience.

Insects & other invertebrates		All poisonous species	Manatees	All species
Fish		Shark, rays, electric eels, etc.	The Rhinoceros family	All species
Reptiles		Crocodiles: All species Bridge lizard: All species Lizards: All species Snakes, all venomous snakes	The tapir family	All species
Penguins		All species	The hippopotamus family	Both species
Sewage animal & marsupials		All species	The pig family	All non-domesticated species
Monkeys, lemurs & ghost monkeys		All species	The peccari family	All species of navel pig
The dog family		All non-domesticated species	The giraffe family	All species
The cat family		All non-domesticated species	The elephant family	Both species
The bear family		All species	The antilocaprid family	Pronghorn
The half bear family		All species	The deer family	All non-domesticated species
The hyena family		All species	Bovidae family	All non-domesticated species, including all antilopes
Seals		True seals: All species Walrus Sea lions	The horse family	Zebra and zebra crossings
Whales		All species including dolphin, orcas and porpoises		

Table 1: All species that are prohibited to be held and displayed for the purpose of entertainment in Denmark (Dyreværnsloven, Annex 2, 2022).

As of August 2022, Denmark has implemented a national ban, effectively prohibiting the keeping and exhibition of wild animal species within a circus or similar establishment. All

non-domesticated species are prohibited to be held and displayed for the purpose of amusement. The legislation excludes wild animals kept within zoos, animal parks, etc.

Punishment may be liable for anyone who keeps and displays animals that are listed as prohibited species in accordance with the negative list as stated in Annex 1. “The negative list” comprises all animal species that are prohibited to keep and exhibit in circus, amusement parks, and similar establishments. Animals listed in Annex 2 are the animal species that may be kept and displayed if certain requirements are met (Table 2). The positive list in Annex 2 mainly comprises domesticated species including Camelidae and its relative, as Denmark consider these species to be domesticated.

Germany

Legislation: BGBl. I p. 3436 – Animal Protection Act

At the present time Germany have not implemented a nationwide ban prohibiting nor any restrictions on the keeping of wild species of animals in their circuses.

Protection for animals that are being used in entertainment falls under the German animal welfare act (Tierschutzgesetz, TierSchG), first implemented in 1972, most recent was amendment on 10th of august 2021. Consisting of 22 sections, and further subdivided in 12 principles the German act of animal protection lays down basic regulations as well as requirements on the keeping of animal husbandry, which can be applied to circus animals. The purpose of the law is to protect the life and wellbeing of animals as fellow creatures, determining the responsibility of humans to avoid causing harm, pain and suffering to animals without just cause. The Act provides regulations on the keeping, looking after and killing animals. Section 2, § 3 relates to all animals, prohibiting the usage of animals for film recording, performance shows, advertisements, or similar events, that may cause pain, suffering or harm to the animal. Furthermore, certain sections and paragraphs are more applicable to circus animals; According to section 7, §11 no 4 and 8 d, anyone who keeps animals in a zoo or facility where animals are kept and displayed require official permission from a competent authority. §11 no 8 further defines how the permission for displaying animals on different location may only be granted if the animals do not belong to a species whose exhibition at changing locations is prohibited based on a legal decree.

Non-commercially circuses are required to notify competent authority of the intended place of residence of each location change, at the latest when leaving the previous place of residence. The notification to the authority must contain number animal species involved, name of responsible person, the facilities and rooms intended.

Despite not having nationwide bans, some cities and German municipalities have made the decision to ban circuses with certain species of wild animals. This carried out by prohibiting circuses to rent public property. A circus may however take legal action against municipal prohibition, though in most cases their complaints have been dismissed.

Spain

Legislation: (CE) n° 1739/2005

As of 2022, Spain has yet to implement a nationwide ban on the use of wild animals in menageries, there are no restrictions on the species that can be exhibited within a circus. The indication of the legislation mainly comprises the regulations and requirements the licensing, and necessary documentation on animals kept in the circus. The number of animals in total and number of individual if each specie must be registered. Regarding welfare, the health standard of circus animals is based on the legislation of community's principles relating to intracommunity trade in farmed domestic animals, as well as council directive Council Directive 91/68/EEC of 28 January 1991, regulating heath standards of intra community trade of ovine and caprine species. However, the regulation standards should be modified to in accordance with the specific issued the relevant species may pose, when kept in circuses and fairs.

Despite the government not implementing a nationwide bam, throughout Spain municipalities have adopted local bans on the use of wild animals in circuses. As of now, there are more than 400 towns and cities with bans in place.

Hungary

Legislation: 222/2007. (VIII. 29.) Government decree – on the detailed rules for licensing and maintaining the establishment and operation

The legislation that was implemented on 29.08.2007, comprises the regulation and requirements for the keeping of animal in a menagerie, general animal protection, operation of temporary and permanent menageries, while as setting down basic requirements ensuring the wellbeing and safety of the animals, and their needs being met. The decree prohibits usage of training methods and tools causing pain, fear and physical or psychological harm to the animals. Minimum space requirement for the housing condition and for transportation facilities of the circus animals are listed.

In accordance with § 12 of the decree, after its implementation, it is prohibited to keep and include any wild animal in a menagerie that has been captured after the regulation entering into force. Furthermore, no new rhinoceroses, elephants and primates may be acquired, trained, or included for the purpose of circus performances. Part 5 of § 12, after January 1st, 2010, it became prohibited to acquire, include and train wild caught species included in Appendix I of the Convention on International Trade in Endangered Species of Wild Fauna and Flora, adopted in Washington on March 3, 1973, for the purpose of circus performances. Appendix I lists all species that are threatened with extinction, that are or may be affected by trade, the appendix I lists a total of 1082 species as well as 36 subspecies of animals.

The United Kingdom

England

Legislation: Wild Animals in Travelling Circuses act 2019

The legislation effectively prohibits the usage of any wild animal species in travelling menageries in England. The ban came into force of the 20th of January 2020. Should a circus officer fail to comply with the amendment, they are guilty of an offence and liable on summary conviction to a fine. An English travelling circus may keep and exhibit animals that are considered as domesticated in the performance acts,

Performing Animals (Regulation) Act 1925

Wales

Legislation: Wild Animals and Circuses (Wales) Act 2020

The purpose of the decree is to an offence to use wild animals in traveling circuses, as well as promoting miscellaneous changes to the licensing of owning dangerous animals. The amendment came into force on the 30th of November 2020. According to the regulation a circus operator who exhibits or permits the display of a wild animal is guilty of an offence and is liable on conviction to a fine.

Scotland

Legislation: Wild Animals in Travelling Circuses (Scotland) Act 2018.

The legislation was implemented on 25th of May 2018, making Scotland the first nation in the United Kingdom to ban wild animals in traveling circuses. Similarly, to the previously mentioned UK nations, a person who uses, causes, or permits the usage of a wild animal in traveling circus is guilty of committing an offence. The person committing an offence is liable on conviction to a fine. According to the act, a wild animal being used is defined as a wild animal, performing, being exhibited, or displayed.

Northern Ireland

Legislation: Currently Northern Ireland have no specific regulation prohibiting the use of wild animals in a circus. However, on 28th of December 2006, The Dangerous Wild Animals (Northern Ireland) Order 2004, came into effect. It is here certain species of wild animals kept included in circuses will be categorized. The act imposes requirements on the licensing of those who intent to keep dangerous animals. The persons keeping a dangerous animal in their possession must maintain a safe environment and conditions for both the animals in question, as well as humans. Requirements for the environmental conditions, and providing care, welfare, and safety of the dangerous animals. There are currently no circuses in Northern Ireland possessing wild animals.

6. Material and methods

The literature reviewed in this thesis have been accessed through published articles online, news articles and books concerning the subject circus animals. The subject being the

welfare and tradition of circus animals, and the different legislations. The focus being on the captive wild animal species exhibited historically in circuses throughout the world. A total of 10 countries were chosen to be compared. Articles and books were accessed through platform such, and google scholar, PubMed, while legislations were found from governmental sites from each country.

7. Discussion & Results

Throughout the world around 49 countries have implemented partial or complete bans on the use of wild animals in a circus, 24 of them are within the EU. In this thesis 10 countries have been selected and data regarding their legislation have been collected. While comparing the different legislations of the countries above there are some clear similarities as well as differences. Out of all ten countries only two of them lack some form of nationwide restriction on the use of wild animals in circuses. Germany and Spain, consequently both these countries have some of the highest occurrences of incidents involving wild animals in the EU. Some argue that the cause is partly due to the lack of efficient federal regulation. The lack of a nationwide ban is not because due to a lack of effort.

In Germany, the federal council have passed federal council initiatives on three separate occasions, in 2006, 2011, and 2016, for a ban in of wild animals in the circus. On each occasion the German federal government have rejected the initiatives. Circus animals are protected under the German Animal protection act, the legislation consist of requirements of all the legal aspects, but also strict regulations on the welfare and care of the circus animal as fellow creatures. The Spanish laws relating the circus animals, have more focus on licensing, and proper documentation, though there are some aspects s in the legislation relating to the care and welfare, it is a small portion.

Despite neither country having a nationwide ban, municipalities have taken matter into their own hands and have adopted local ban prohibiting use of wild animals in the circuses. More than 400 municipalities in Spain have adopted their own local prohibitions, including major cities such as Barcelona and the capitol Madrid. Similarly multiple German municipalities have implemented bans prohibiting certain species of wild animals to be exhibited in the circus, this is executed through refusing to rent out public property to

circuses with wild animals in their possession, different regions of Berlin no longer rent out public property to circuses with wild animals. However, private property can still be rented out for the purpose of hosting a circus, regardless of the species under their care.

		Nationwide ban wild on animals in circus	Ban on all animals in circus	No nationwide ban or restrictions	Regional/local bans on wild animals in the circus	Legal Restrictions on use of circus animals	Year of implementation of restriction or ban
Norway		✓					2017
Denmark		✓					2022
Germany				✓	✓		No governmental restrictions implemented
Spain				✓	✓		No governmental restrictions implemented
Hungary						✓	2007
England		✓					2020
Wales		✓					2020
Scotland		✓					2018
Northern Ireland				✓			No governmental restrictions implemented
Cyprus		✓	✓				2007

Table 2: Comparison on presence or absence of prohibiting legislations of each country, showing which have implemented total or partial bans, the year of their implantation.

The two Scandinavian countries included, Norway and Denmark also share a lot of similarities within their legislations, whereas prohibition of wild animals in circuses are

banned nationwide in both countries. The Norwegian amendment entered into force on 1st of January in 2017, and Denmark amendment was implemented four years later, on 1st of January 2021. Failure to comply with the regulations, is punishable by law, in either country, the offender guilty of an offence will under conviction be liable to a fine. Though wild species are banned, both Scandinavian countries still permit the use of camels, dromedaries, and llamas in their circuses, this because they go under the definition as domesticated, this despite some argument that these species cannot be considered as domesticated. The requirement on how to keep, care for and manage camels and its relatives, with appropriate diet and adequately sized housing, is strictly regulated in either country.

Only one of the countries included in this article, has adopted a total ban on all animals in circus. Cyprus implemented a nationwide ban on the use of wild animals as early as January 1st, 2007. Following the amendment, no species of animals are permitted to be exhibited in a circus or a similar establishment, that involves the display of animals as part of their business. One of the general provisions of the decree, is that animals must always treated and handled in a way that best suits their psychological and ethical needs. This is not the only country within the EU where the ban does not only involve wild animals, but also extends to all other species of animals as well. Greece and Malta similarly have adopted bans on all species of animals to be displayed in circuses, and though there are currently only three EU countries with total ban in place, they pave the way for other countries to follow.

The Hungarian legislation differs a little from the rest in the fact that though there are prohibition in place relating to certain species that cannot be obtained for the purpose of performing in circuses. According to the legislation implemented in 2007, it is prohibited to obtain and exhibit any animal in a circus, that has been captured after the implementation date. The Hungarian legislation protecting endangered and threatened species that may be affected by trade. However, there are a prohibition does not cater to all wild species. One big difference that separates Hungary from both Germany and Spain is the legal aspects of the prohibitions put in place. In Hungary the adopted ban is legally binding and implemented by the Hungarian government. While as municipalities are responsible for the localized bans in Spain and Germany.

When it comes to the United Kingdom, as of August 2022, three out of four countries have very similar legislations in place, all implemented in close succession to each other. Scotland, England, and Wales have all adopted nationwide bans on the use of wild animals in circuses. All three nations still permit the display of domesticated species for entertainment purposes, like Norway and Denmark. The final country, Northern Ireland, has no specific restrictions in place, and wild animals are permitted in circuses. Despite there being no legally binding prohibition in place, there are currently no circuses in Northern Ireland with wild animals in their possession.

8. Conclusion

Circuses with animals as a part of their program have been part of tradition since the time of ancient Greece, but it is time to continue the tradition without the animals. With the concerns about the emotional and physical welfare of circus animals, in particular the wild species, displayed becoming and increasing growing over the recent years. Veterinarians, scientists, animal behaviorists and activists have actively been putting their efforts into preventing the exhibition of these animals by expressing the desire to implement bans prohibiting them from being displayed. The public has shown their support of the cause. The concerns of the ethics of exhibiting wild animals have been reflected in the national prohibitions and restrictions adopted by 49 world countries. This is a good step in the right direction, though it is only the beginning.

If we are to look at the welfare of these animals by looking at a model of the five domains, taking into consideration both the positive as well as the negative factors, the truth is that the list of negative factors outgrows the positive ones rather fast. Though captive animals are provided with food, protected from weather effects, and medical attention, when necessary, there are things that can never be provided. They are not protected from being exposed to unpredictable situations during a performance, being transported for long periods of time in confined conditions, neither from being separated from their mothers at a young age. Instead, the way a travelling circus is constructed, and its temporary nature it means that the animals providing them with adequate exercise and stimuli is not manageable, which means that their welfare in the end is compromised for the sake of our entertainment. The evidence shows that high stress levels are common in captive animals, and it negatively impacts their physical health, reproductive abilities, and psychological state.

Though many countries have adopted bans, total or partial, on keeping wild animals in traveling menageries, and despite increasing efforts being made all over the world to increase these numbers, there are some valid concerns that follows. Circuses with prohibited animals under their care, are still able to pass through the territories of the countries with implemented prohibitions, and with a greater number of countries working on proposing and adopting bans all over the world, while others remain neutral. A consequence is the distance between the places a circus may be authorized to perform are increasing. Thus, some circuses may end up travelling for long distances to reach the locations where they are still permitted to perform with their animals. This in turn means that their animal may end up spending even longer periods in confined spaces of lorries and trailers, while travelling in-between locations. Not to mention the risk of spreading disease over large distances, when transporting animals over country lines.

Another notion that should be mentioned and considered, is the fact that domesticated animal species kept in circuses also live under the same conditions as a captive animal. Though they no longer share the genetic makeup with their wild ancestors, and therefore may lack some of the behavioral needs as their predecessors, domestic species are still affected by the stressful environment, frequent travelling, and confinement, and thus their health and psychological state can be negatively affected, and potentially damaged as much as a captive animal. Whether or not the definition of domesticated should be used when referring to certain species that are still seen in the circus is arguable. Camelids, despite having a long history with humans, are still morphologically and physiologically similar to their wild ancestor, and it is likely that they may still possess some of the same behavioral needs. Considering that tame animals are in possession of the same instinct and behavioral needs as their wild relatives, one can argue that their needs cannot reasonably be met while kept within the restricting environment of a menagerie. The confinement, restraints, shifting environment not being designed to appropriately provide a wild animal with its basic needs.

More reason to work as a unified front to ensure the phasing out of circuses with wild animals, and to further extend it to include domesticated species. Using the EU as an example, the only way to move forward, would ideally be through all the member states actively working towards the same goal.

It is important to note that the wild animals that have been used in circuses, are exactly that, wild animals. Though these individuals may fall under the term as “tame” animals, they have simply been conditioned to tolerate humans handling, as opposed to domestic animals that have been genetically predisposed to tolerate human through thousands of years of selective breeding. Wild circus animals are both morphologically and physiologically identical with their wild conspecifics, and still very much in possession of the same instincts, behavioral needs, and nature. When kept in captivity where a large portion of day is spent restrained in lorries, confined spaces or enclosures that are even smaller than the average zoo enclosure, not only are they restricted from appropriate physical stimulation, but they are also deprived of the opportunity to execute the highly motivated behavior that is in their nature. A wild tiger or lion would spend large portion of their days resting well, with their food source being a wide variety of prey animals they would hunt. And elephants, who would live in groups with a highly complex social hierarchy while spending majority of their days grazing and consuming different types of plants. While in captivity their diet is more single traced consisting of beef, and chicken for carnivores, or hay and concentrates for the herbivorous giants.

The truth is that there are certain needs that cannot be fulfilled for a captive animal, particularly not an animal in the custody of a circus. The consequence to may manifest in different ways, like the negative impact it may have on the animal’s health, the alteration of their mental state and the development of stereotypical behavior. Despite providing the animals with an increased amount of physical and psychological enrichment and its positive effects, it is still not an adequate substitute. Circus handlers can ensure that the basic needs of their captive animals are met, they can provide enough feed, shelter, and medical care. However, if we are to consider quality of life, it entails a lot more than just making sure an animal is fed and cared for, it also means that and animal is provided with the opportunity to execute the natural behavior, allowing them to be animals. The way a travelling circus operates, means it is unlikely that this can reasonably be provided for the animals.

Putting the general welfare and legal aspect of the wild species exhibited aside.

These are animals that may potentially pose a risk to the public safety, and that of humans, despite training and them being accustomed to human handling, they are still wild animals.

Just like any animal, stressful scenarios can cause a stress response, which can induce a fight or flight response, creating some very dangerous situations. With the circus atmosphere being rich in potential triggers there is an increased likelihood that accidents will occur, and they historically have. This is proven by the number of incidents that have involved wild circus animals, incidents where wild animal have escaped circus facilities, caused injury and even death to humans.

Considering the number of accidents that have occurred in a period of two decades, with more than 400 accidents in the EU alone, it safe to say that wild circus animals represent certain a risk to humans. This do not apply solely to the trainers and circus workers who are working closely with these animals on daily basis, it extends beyond that. During a performance act the audience is also at risk, including children. Looking at cases from the past, despite protective measures such as cages or fencing separating the animals from the spectating audience, there is no guarantee that the animals are safe. There have been fatalities that involved audience members in the past. Unsurprisingly it is the countries that have not yet adopted bans on wild animals in their circuses, though reports of accident involving circus animals do occur in the countries with ban implemented as well, but these cases usually refer to the domesticated species that may still be kept in their care, such as camels, horses, and livestock.

Combining the animal welfare issues with the matter of public security, it further enhances the importance of phasing out the practice of exhibiting not only the wild animals, but all species for the purpose of public amusement. And though we are seeing a move in the right direction through the numerous national bans and prohibition implemented in different countries, it is not enough. To truly accomplish the goal of stopping circuses from exhibiting captive animals, it is necessary to collect the efforts and work as a unified front. In the EU it has already started, but if there are still member states without prohibition in place, it means that circuses can still perform where in the countries they are authorized to while travelling though the territories of the countries with bans in place. It is time to take action and urge others to follow, let the circus tradition continue without the animals in their program.

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Thesis progress report for veterinary students

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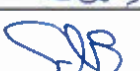






Name and title of internal supervisor: Dr. Szilvia Vetter PhD., Head of Center for Animal Welfare

Name and title of external supervisor: Dr. Schütz Éva

Department: Center for Animal Welfare











Thesis title: Wild animals in circuses, a comparison of international legislations and animal welfare aspects.

Consultation – 1st semester

Timing				Topic / Remarks of the supervisor	Signature of the supervisor
	year	month	day		
1.	2021.	03.	08.		 
2.	2021.	03.	17.		 
3.	2021.	08.	28.		 
4.	2022.	03.	16.		 
5.	2022.	06.	27.		 

Grade achieved at the end of the first semester: ...5 (excellent).....

Consultation – 2nd semester

Timing				Topic / Remarks of the supervisor	Signature of the supervisor
	year	month	day		
1.	2022.	08.	30.		 
2.	2022.	10.	10.		 
3.	2022.	10.	14.		 
4.	2022.	10.	25.		 
5.	2022.	11.	02.		 

Grade achieved at the end of the second semester:5 (excellent).....



The thesis meets the requirements of the Study and Examination Rules of the University and the Guide to Thesis Writing.

I accept the thesis and found suitable to defence,

Dr. Székely Zoltán *Dr. Soltész Zoltán*

signature of the supervisor

Signature of the student: *Juska Viktória*

Signature of the secretary of the department: *Lehoczky Zoltán*

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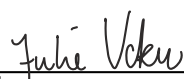
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- *facilitate professional relations and collaboration;*
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University of Veterinary Medicine

Announcement of the chosen topic of the Thesis

Name of student (capital letters): JULIE THERESE VIKEN

I would like to ask for the permission of the Head of the Center of animal welfare
Department, to write my thesis in the following topic advertised and supervised by the Department.

Budapest, 26 August 2021 (date)

Julie T. Viken
(Signature of student)

Topic of thesis:

In this thesis I will write about wild animals in circuses. It will include comparisons of rearing, keeping, training methods used. I will also write about the animal welfare aspects of these animals. Comparisons of different countries (The comparison will include international countries, both included and not in the EU), their laws and potential prohibitions put in place to protect these animals. As well as an comparison of the extent of the prohibitions, whether they have partial or complete bans, or if bans and prohibitions are absent all together.

Title of thesis:

WILD ANIMALS IN CIRCUSES, A COMPARISON OF INTERNATIONAL LEGISLATIONS AND ANIMAL WELFARE ASPECTS.

Signature of supervisors:

External supervisor:

Dr. Soltik E.



Internal supervisor:

Dr. Völgyi Szilvia

I approve:

Dr. Völgyi Szilvia

Signature of Head of department: