Big-Cat Report: Ringling Bros. Circus (Red Unit)
by Jay Pratte, B.S., M.A.

Background

I willingly submit the following statement and supporting information in regard to the physiological and psychological welfare of big cats in a circus environment—in particular, the tigers in the Red Unit of the Ringling Bros. Circus. My report is based on over 25 years of experience with animal behavior and welfare, of which much personal focus has been given to the felid family.

I am an animal training, behavior, and welfare consultant for the Association of Zoos and Aquariums (AZA), Bear Care Group (BCG), the U.S. Department of Agriculture (USDA), the Global Federation of Animal Sanctuaries (GFAS), the Humane Society of the United States (HSUS), and People for the Ethical Treatment of Animals (PETA). I received a Bachelor of Science degree in zoology and behavioral psychology from the University of Alberta and a Masters of Interdisciplinary Studies in zoo and aquarium leadership from George Mason University. I have 25 years of experience training both domestic and exotic species, and my personal experience has included every member of the big cat family. This training includes (but is not limited to) daily husbandry and management, public demonstrations, and advanced medical training.

For more than two decades, I have worked with organizations across North America on improving animal welfare, including private sanctuaries, rehabilitation agencies, traveling circuses, government institutions, and both accredited and non-accredited zoos. I teach comprehensive behavior and welfare assessment techniques and strive to develop a better understanding of behavior-based care for animals with keepers and caregivers. This entails analyzing the environment that the animals live in, assessing their current (and past) physical, psychological, and medical condition(s) and then observing behavioral patterns. This information is then combined into a comprehensive plan to improve the responsiveness to the animals' needs and provide improved care for each individual. I have spent time in China, Kenya, Romania, and Vietnam working directly with animal caregivers from these (and surrounding) regions to assess very specific needs for animals in captive situations in those areas. I work regularly with international rescue and welfare agencies Animals Asia and Wildlife SOS on consulting with regard to improving behavior-based husbandry practices, particularly in reference to animals they have rescued from illegal trafficking or other human activities.

Training, behavior, and animal welfare are all inextricably linked to an animal's overall well-being. Much of my experience with behavioral management is rooted in understanding natural behaviors for animals and how captive facilities can better manage the housing and exhibition of animals to meet their genetic behavioral predispositions. Failing to meet animals' needs in captive institutions results in physiological, medical, and behavioral issues. Assessing behavior and welfare and subsequently advising on alternate, progressive approaches to animal care is an intrinsic part of this skill set.

I have published numerous papers on exotic animal care, welfare, behavior, and training, and a reference list is attached as **Appendix I**. I am also an adjunct professor at the University of Nebraska at Omaha, where I teach courses and labs in Animal Behavior, as well as the Special Topics course of my own design, "Human-Animal Interactions." I regularly attend and host workshops, symposia, and conferences dedicated to improving animal care and welfare. The papers, presentations, and workshops presented are attached as **Appendix II**.

The statements presented here are the result of five years of research into the welfare of animals in circuses around the world (for Human-Animal Interactions), including attending various circus performances throughout my life and, specifically, direct personal observations at two separate performances by the Ringling Bros. Red Unit in Lincoln, Nebraska, on June 4, 2016. The information presented is based on observation of the environment, the animals' behaviors, physical appearance, and movement, both during each show and before at the scheduled "Animal Encounters," as well as direct conversation with three staff members: big cat trainer Tabayara Maluenda (Taba), Victor (a trainer working for Taba), and one woman supervising the encounter area before the 3 p.m. show. Photos are included where appropriate, and full-sized versions can be seen in **Appendix III**.

Visitors to the circus are excited to view the animals up close and to see them "perform." The announcers, trainers, and staff state that the animals are managed with rewards and through trust. However, what is actually occurring is environmental and physiological neglect, psychological abuse, and coercing the tigers to behave through dominance and fear-based techniques. What may appear benign to the public or to inexperienced inspectors is readily apparent to individuals with significant animal experience as diminished welfare:

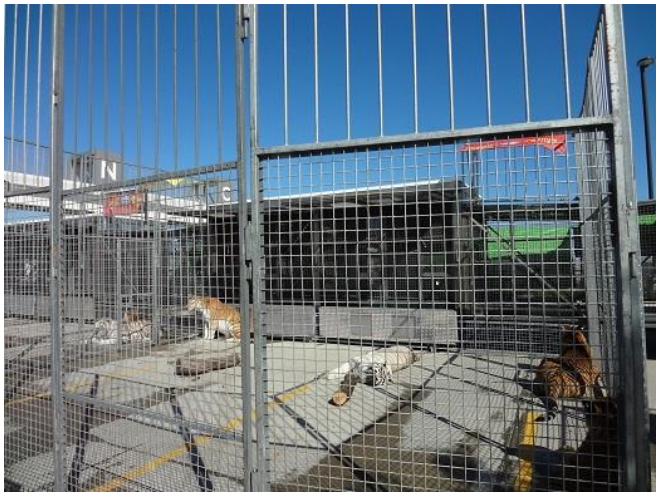
- **Housing:** While the tiger's "enclosures" appeared clean, the living environments were overly sterile. Cats were forced to share space with other animals and had no means of avoiding other cats' presence or conflict. The tigers had minimal to no shade or pools and were housed on concrete. Animals were not regularly provided with respite from high temperatures or environmental conditions. These conditions do not meet AZA or USDA standards and guidelines.
- **Physiological/medical:** While to the untrained public guest, the tigers appear "healthy," I observed several issues of concern, including obesity, hygromas, cracked foot pads, cuts, punctures, and scarring. These issues are easily treated and/or avoided, but the appropriate level of care is not apparent.
- **Psychological:** The big cats exhibit several signs of severe and chronic stress, including (but not limited to) fear and displacement behaviors resulting from inability to avoid other animals, stereotypic behaviors (pacing, over-grooming, and tail-chewing), and aggression to other animals and to trainers.
- **Behavioral:** The tigers I observed are coerced and forced into exhibiting desired behaviors and performing for the public using dominance and fear-based techniques. The cats routinely exhibited fear, aggression, and stress-related behaviors in outside holding areas as well as during performances. This method of controlling the animals and the subsequent physiological and hormonal changes will permanently impair learning as well as appropriate behavior expression for the species and result in irreversible neurological changes.

While the conditions that the animals endure could be improved to meet industry standards, there is no evidence of this in the observable husbandry and conditions. These conditions are representative of my observations of other circus environments over the past several years.

Housing

Tigers are generally solitary animals and have expansive territories in the wild. Their natural habitat is exceptionally complex, with trees, undergrowth, water sources, and a constantly changing environment. The cats would constantly have behavioral choices available to them, whether those would be to sleep, forage, hunt, search for mates, mark their territory, swim or immerse themselves, etc.

The tigers housed by the Red Unit for the Lincoln shows were in the parking lot/staging area behind the Pinnacle Bank Arena. The "indoor" houses were at the rear of each temporary enclosure, which was enclosed by temporary metal interlocked fence panels. A secondary wired fence was erected as a barrier between the public and the cat enclosures, which were in full sun exposure. The only narrow areas of shade available to the animals were immediately next to the houses, and in the morning (the temperature was over 80 degrees at 10:30 a.m., and the heat index was over 90) there was virtually no usable area to escape from the sun. Access was provided to the cats to non-cooled indoor housing in the afternoon, but not in the morning. The enclosures were set up on concrete, and the animals had no respite from the elements. There was access to drinking water, but no pools (see photo to the right). The concrete areas were relatively free of waste or food, having clearly been cleaned before public viewing.



Cats were housed in groups, usually a minimum of three per area. They were unable to avoid one another when space or social conflicts occurred. As naturally solitary animals, tigers do not inherently possess the genetic programming allowing for constant social interactions. For *any* animal, the inability to avoid potential conflict or injury with another animal runs absolutely counter to all instinctive responses to the sympathetic nervous system's "fight or flight" reaction. The inability to remove oneself from a conflict (or display and cause the intruder to leave) will result in significant increases in stress, potential injury, and long-term psychological issues (see Psychological section).

In the hour preceding each show, I witnessed multiple altercations between cats (see photo on right). There was also significant physiological evidence (see Medical section) that

this is not an uncommon occurrence. When the cats do have inside access, there is only one visible shift door in each area, so they are forced to pass one another. Animals may potentially be trapped by another individual with no safe escape route. There was little to no air movement to cool the animals, and in the afternoon, in particular, most of them were panting heavily and unwilling to move. At 2:30 p.m., the temperature was reported to be 86 degrees and the heat index was well over 90. I had no means of recording the temperature of the concrete, but it was exceptionally hot to the touch. In the wild and in more appropriate, complex enclosures, tigers will move to cooler, shaded locations when they are available, or immerse themselves in water to cool down as required. Trees, undergrowth, caves, pools, and streams would all be places a solitary individual would retreat to in order both to feel safe and thermoregulate appropriately. Conversely, in winter conditions, the opposite issues with temperature extremes would exist.

USDA

9 C.F.R. § 3.127 - Facilities, outdoor.

(a) Shelter from sunlight. When sunlight is likely to cause overheating or discomfort of the animals, sufficient shade by natural or artificial means shall be provided to allow all animals kept outdoors to protect themselves from direct sunlight.

(b) Shelter from inclement weather. Natural or artificial shelter appropriate to the local climatic conditions for the species concerned shall be provided for all animals kept outdoors to afford them protection and to prevent discomfort to such animals. Individual animals shall be acclimated before they are exposed to the extremes of the individual climate.

Along with the absence of pools, fans, or other environmental control devices, there was a noticeable lack of enrichment. Again, tigers require an immensely complex natural environment. Their physical surroundings would have tremendous variation and provide innumerable behavioral options. Captive tigers have access only to what their human caregivers provide them with. Enrichment should include pools, toys (that are kept novel by changing them regularly), bones or whole prey items, different substrates to investigate and lie on, etc. There are no limits to how the animals' enclosures could be enriched to provide stimulating physical and mental activities. There is simply no evidence of this standard of care by Ringling. A couple of small logs were placed in each area. I inquired about the lack or enrichment for the cats, and both Victor and Taba informed me that they "had not had time" to provide enrichment. They also said that they normally provided pools and balls but that they had not been in Lincoln long enough—and were not going to be there long enough—to put everything out for the animals. I was told that the circus had arrived on Wednesday and was packing up and leaving Monday or Tuesday. This is a period of five to six days with no enriching stimuli. It is reasonable to suspect that the animals are not provided enrichment during transport. If this pattern holds whenever there is "no time," then these animals are living nearly constantly in a sterile environment, which could easily be improved with a small amount of planning and little cost or effort. (See Psychological section.)

The big cats are also missing a number of items that are considered to be minimum standards in big-cat husbandry in captivity. According to AZA management guidelines (see References):

AZA

A cage for a *single* animal should measure at least 20 ft (6.1 m) wide x 15 ft (4.6 m) deep (300 sq.ft/27.9 sq.m); *cages should be 50% larger per additional animal*. Outdoor cages should have vertical jumpwalls at least 16 ft (4.88 m) high or be provided with tops at least 10 ft (3.1 m) high. Shift cages should measure at least 8 ft by 8 ft (2.44 m x 2.44 m).

The enclosures erected on the concrete for the cats were significantly smaller than the minimum industry guidelines for one individual animal. Multiple animals were housed together with no accompanying increase in area. The travel enclosures are visible behind the outdoor pens and are clearly even smaller than these recommendations outline.

AZA

Although both lions and tigers are terrestrial in nature, they benefit from raised shelves or ledges for sleeping and resting. Multiple resting spaces at various elevations should be included with at least one resting location per individual.

Natural behavior for a big cat is to lie down or rest in an area that is raised off the ground. This is a genetic response for animals who survey their territories for intruders or prey. Raised shelves also provide options beyond concrete or other types of hard, inflexible flooring and give cats the opportunity to avoid lying on wet or soiled surfaces.

AZA

All enclosures should allow each animal the ability to retreat from conspecifics through the use of visual barriers … without limiting an animal's access to food, water, heat, or shade. Sufficient numbers of holding spaces should be available to separate cats individually when the need arises, and these should be interconnected to allow maximum flexibility.

Both exhibit and holding spaces should be designed with a means of egress to avoid being trapped [by other animals] in corners. Holding cages and exhibits with at least two doors will help prevent trapping and/or one animal excluding another from access.

These guidelines are generalized for multiple cat species by the AZA and should be considered at the very least minimum guidelines or standards for any captive felid. Based on my personal observations, the housing environments for the Red Unit big cats are well below any acceptable standards and negatively impact their welfare.

Physiological/Medical

The cats appear, at first glance, to be generally healthy. The first and most immediate observation regarding the Red Unit cats is the chronic obesity of a significant percentage of them (see photos on right and below). Most, if not all, of them are overweight to some degree, and several of the cats would be rated as a "5" on the AZA's Felid Taxon Advisory Group's body condition chart, or an "8–9" on the Purina chart (**Appendix II**, Figures 1 and 2). Obesity in mammals results in short- and long-term medical complications, including (but not limited to):

- Liver, kidney, and other internal organ failures
- Arthritis and other painful joint and spine conditions
- Respiratory distress

- Heart disease and reduced circulatory efficiency
- Hygromas at joints, the result of repeated joint trauma on hard surfaces that regularly swell with fluid (see below)
- Possible hyperkeratosis—thickening of the skin at joints increasing the risk of infection
- Reduced ability to thermoregulate effectively—this is a particularly significant issue in regard to the housing concerns described above (see Housing section)

I observed several cats limping, walking gingerly and carefully to avoid painful jolts, and struggling actually to stand up or to perform cued behaviors during a show. The heavier cats were panting constantly throughout the day and clearly enduring increased physical distress. A few of them had hygromas at their joints, some of which were severe (see photo on right). These are caused by repeated trauma from lying on hard surfaces. Severe inflammation may develop, and ulceration, infection, abscesses, granulomas, and fistulas may occur. They can be easily managed by providing softer substrates and raised sleeping surfaces, and existing hygromas should be drained and treated appropriately (Merck). There is no evidence of any attention to this issue with these tigers.

The obesity concerns are further compounded by an inconsistent diet. When I inquired as to where the circus staff acquired food—specifically,

in regard to traveling between multiple locales around the country—Victor told me that they find whatever meat products are available at each stop. This fluctuation in diet quality will impact the animals' desire to eat, metabolism, and weight. For example, Dallas Crown ground meat was sold within certain specific ranges of fat percentage. Even a five percent change in fat content would significantly alter individual animal weights within a period of days. Lack of consistency in quality control regularly results in contamination of meat (often via spoilage, salmonella, etc.), resulting in sick or immunologically compromised animals. Obesity concerns cannot be appropriately addressed with an inconsistent diet.

Of the cats who were observable at closer range from the guest viewing area, more than half had cracked pads on their paws (see photo on right). This, historically, is a result of constantly living on concrete or metal floors, which are hosed clean and remain wet for long periods of time. These cracks will also dry out and are extremely painful to the animals when they move—and even when they're at rest. Severe cracks can also become infected, causing further skin and tissue damage. Big cats will often groom and lick cracked pads, which over time can develop into a stereotypic behavior, particularly in such a sterile, non-enriched environment. (See Housing and Psychological sections.)

I observed at least three aggressive interactions between the cats (see Psychological and Behavioral sections) during two hour-long observation periods outside before the shows. One resulted in a cut on one cat's front leg/shoulder that I was unable to photograph, and all the altercations caused punctures and pulled tufts of fur from the cats (see photo on right). There are also small scars covering the bodies of several cats (see photo on top of next page). Many are healed, and some had formed scabs. These are likely from improperly housing these cats in groups, resulting in increased frequency of aggressive interactions.

Per USDA, 9 C.F.R. § 3.128.: Enclosures shall be constructed and maintained so as to provide sufficient space to allow each animal to make ***normal*** postural and ***social adjustments*** with adequate freedom of movement.

Some of the wounds and scars are likely from exposure to pests, as ulcerated or infected insect bites or stings could result in small lesions and scars. Biting flies and mosquitoes were visible throughout the day, and at no time did I observe any type of preventive treatment administered to the animals, nor was any environmental prevention visible.

The animals should be housed appropriately to minimize inappropriate social interactions and receive immediate medical attention to any skin injuries in order to prevent and treat infections as well as abscesses. The AZA big-cat guidelines also outline that areas where the cats are housed and exhibited should be treated for pests and maintained as free of such. While this is likely a challenge, with the transitory nature of animal housing in a circus environment, the animals all endure ongoing physical distress and medical issues as a result.

Many of the issues with housing could be addressed with improved space, separation, and attention to industry guidelines.

Psychological

The transport cages, temporary housing, and temporary enclosures do not adequately meet any of the AZA guidelines for big-cat husbandry and clearly do not meet several USDA guidelines. For this section, I will specifically address the issues resulting in psychological distress.

The inadequate and inappropriate social housing prevents individuals from being able to evade one another, resulting in repeated conflicts and adverse interactions (see photo on right). This inability to avoid conflict, or even the presence of other animals (including humans), will result in psychological distress for the animal. The blood cortisol levels that result from stress can trigger aggression toward other animals or trainers, displacement behavior, apathy, learned helplessness, and even severe capture myopathy (see below).

The sterile environment does not meet any of the cats' genetic expectations. The animals are unable to express normal behaviors (see Housing section) and therefore experience long periods of inactivity or mindless activity, which results in permanent long-term changes to the body, brain, neural, and endocrine systems. Even if provided with "a pool and a ball," enrichment needs to be novel in order to stimulate investigation and solicit normal feline behaviors. The results of such sterility and lack of environmental change are often stereotypic behaviors, inappropriate social interactions, lethargy or apathy, and learned helplessness at being unable to alter their own environments.

I observed two cats exhibiting a stereotypic motor behavior, one in the morning and another in the afternoon, where they would pace along one section of the fence (see photo on right). Stereotypies are identified by the lack of function for the behavior. From years of experience, I can identify when a cat has "blanked out" and is engaging in stereotypic behaviors to shut out the world, allowing the brain to produce endorphins from a repetitive activity. Over time, these actions become habitual and increase the animal's stress levels and accompanying physical problems. I also observed cats licking their paws continuously, exacerbating cracking, and one was stereotypically over-grooming his or her tail. These are well-documented big-cat stereotyped behaviors, and they are indicative of poor welfare and a lack of psychological stimulation.

Per USDA 9 C.F.R. § 3.128: Space requirements; Enclosures shall be constructed and maintained so as to provide sufficient space to allow each animal to make normal postural and social adjustments with adequate freedom of movement. ***Inadequate space may be indicated by evidence of malnutrition, poor condition, debility, stress, or abnormal behavior patterns.***

During my discussion with the female supervisor in the afternoon, she happily relayed that when the circus acquires new tigers as cubs, general circus staff are allowed and encouraged to play with and handle the cubs. The trainers explained to me that their reasoning is to get the cats used to being around people. This would indeed habituate them to the unnatural contact with humans. However, big cats are not domesticated. Their genetic programming is the same as a wild counterpart. To force cubs to interact with another species interferes with normal neural development. This results in cats developing a behavioral repertoire that is in constant conflict with their natural instincts. These conflicts are overridden by the circus trainers using fear and punishment (see Behavioral section), creating further distress and other permanent neural problems (see below).

The USDA recently changed its guidelines for the handling of cubs. Public interactions with cubs under four weeks of ages are not permitted, as the cubs cannot thermoregulate on their own and rely on their mother's milk for disease immunity. These guidelines recommend that cubs stay with their mothers and healthy siblings as long as possible after birth, which would naturally

be until between one and two years of age. This is also when the cubs would learn appropriate genetic behavioral patterns and social interaction skills (see below). The AZA does not recommend unprotected contact with big cats, either by staff or the public (any non-trainers or general circus staff would fall into the public category).

Removal of cubs from their mothers to be hand-reared for public entertainment immediately compromises both the short-term and long-term welfare of the infants pulled. Carnivore cubs under one or two years of age are at a critical learning juncture, when they would be learning necessary life skills from their mothers and species-appropriate social skills from mother, siblings, and conspecifics. Human-reared cubs who suffer from improper (or a lack of) maternal rearing and socialization:

a. Regularly develop extreme aggression to cage-mates and human caretakers, are less likely to reproduce, and demonstrate a significant increase in solitary or socially inappropriate behaviors (Mellen, 2005; Meder, 1989).
b. Suffer from neglect (i.e., through maternal deprivation), which leads to long-term depressive traits and impaired coping skills—specifically in long-term potentiation, or LTP, which compromises an animal's ability to learn new skills over the course of his or her life and adapt appropriately to new situations (Pryce *et al.*, 2005).

The tiger cubs at Ringling Bros. have been removed from maternal care as cubs. Human care of tiger cubs, unless medically necessary, cannot appropriately replace species-appropriate maternal care.

These observations are not an exhaustive list of the psychological neglect and trauma that these cats endure daily. They do indicate poor animal welfare and neglect on the part of Ringling Bros. and the animal caregivers. These psychological issues are compounded by the behavioral environment and treatment by humans. Changes in management to meet industry minimum standards, psychological well-being, and long-term health would not be impossible but would require a different approach than is currently applied.

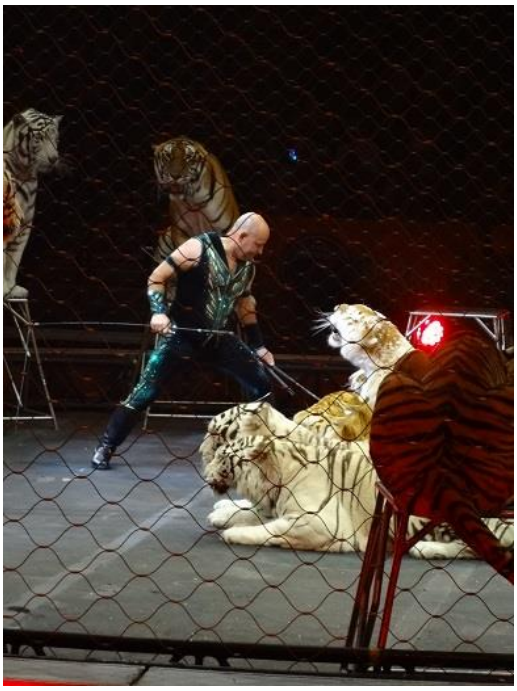
Behavioral

All the issues listed above with housing, sterile environments, medical issues, and neglect in general cause acute and chronic trauma. Yet the primary reason that I chose to write this report was because of how big cats in the circus are treated by their trainers and circus staff. Circuses are unable to meet the genetic behavioral expectations that these animals have evolved, and the animals endure compromised welfare as a result. Specifically, I observed that the big cats in Ringling Bros.' Red Unit were treated with aversive stimuli that they were unable to avoid and are managed through fear, coercion, and punishment.

The primary means that I observed at Ringling Bros. to coerce the cats to respond in a desired manner is to yell at them, bang on the cages, and use long goads, prods, or whips to force them to move in a specific direction or to back off when approaching another animal or human too closely. These prods are ubiquitous. They are in the trainers' hands, the assistants carry them, and they are left strategically near the cats to remain readily available (see photos on right).

The application of all these punitive stimuli causes the cats to react in fear, with aggression, and with displaced behavior (redirecting an adverse reaction to another individual). I observed these responses exhibited both in the outdoor holding enclosures and in the ring while Taba was performing. As you can see in this photo, the cats' postures while in the ring with the trainer(s) are indicative of a fear of consequences if they do not perform as coerced. The hunched shoulders, ears-back position is anticipatory of conflict or tension. Subtle changes then indicate fear or potential aggression, but this body language was consistent throughout both shows, indicating stress, fear, and psychological duress.

When the goads or whips are raised, the cats flinch and shy back every time. When animals move forward as if to strike or react, they are yelled at and either quickly struck or startled back with whip cracks in the air or on the ground nearby. I observed multiple situations in which the tigers displayed definite aggression toward Taba (see photos top of next page). These animals do not have a trusting relationship with staff and endure this punitive, adverse environment daily.



The use of punishment and aversive techniques lead to permanent physiological and psychological changes in learning ability, behavior, and coping mechanisms in animals.

A. Punishment will eventually inhibit the punished act. The refusal to work or other resultant conflicts (such as avoidance, escape, and displaced aggression) will increase with continued repetitions of the punishment (Gwinn).
B. Only performance-contingent reward behavior was found to affect subordinate performance significantly (i.e., positive reinforcement). Contingent punishment had no effects on improving performance (Podsakoff *et al.*).
C. Prior exposure to punishment and aversion methods actually *reduce* extinction of an acquired fear response, increase disruptive effects during an approach-avoidance conflict, and suppress response of both conditioned and unconditioned activity (Boe *et al.*). Essentially, the cats will not learn *not* to be afraid and cannot react to situations appropriately for the species.
D. Short-term and long-term psychological trauma results in permanent changes to the brain, nervous and endocrine systems. Animals are incapable of learning in circumstances in which they are stressed or traumatized, as the more primitive amygdala in the brain (responsible for fight, flight, etc.), which change permanently as a result of stress, will override learning or conditioning (Dr. Bacon).

The tigers I observed are under constant psychological duress, which results in acute and chronic medical concerns for these animals. Staff members manage the cats using aversive stimuli, fear, and dominance tactics. The cats cannot remove themselves from these situations, nor can they remove the aversive stimuli, which leads to the types of behavioral problems mentioned previously. The cats redirect aggression and fear to the trainers and other animals (see photo on right). The cumulative effects of distress will likely shorten these animals' lives and, in severe cases, lead to myopathy, injury, or even death.

Ironically, during announcements before the circus shows, the Ringling MC announces that animals are all trained using "reward and repetition." I observed only two or three separate instances of a food reward being offered to one of the tigers. Each time, it was to lure the animal to leave the ring and into the transfer cages or else to lure one specific animal back out for a solo performance. The cats know only fear, dominance, and punishment.

Conversely, the dogs I observed were coached by two of the ringmasters through performances using *only* praise and food rewards. The dog show was energetic, and the animals were clearly engaged and willing to work for their trainers. There was clear evidence of a trusting relationship, and while dogs are truly a domesticated species, the mechanics of learning remain the same. The historical means of breaking and forcing big cats to work is the direct opposite of the dog trainers' example and further evidence of the trauma that the cats regularly endure in the circus environment.

The other aspect that is not immediately evident to the general public but that you see in this type of dominance-based situation is that the animals develop a fear of the "alpha" or primary trainer/handler. This relationship is very specific to that individual, and even when it exists, the more skilled handlers suffer injuries. Victor has several scars and informed me that "we get a lot of bites and scratches." While the tigers demonstrated a complete mistrust of all the people I observed interacting with them and reacted adversely to the equipment, no other person likely instills the same learned fear and helplessness as the primary. Someone with less experience forcing the cats to his will while attempting to watch for any potential aggressive responses is at a distinct risk of the animals taking advantage of the situation, most likely injuring or killing that person. I have observed such behavior firsthand with numerous species, including lions, bears, elephants, and even domesticated dogs. When the animals suffer chronic levels of stress and mistreatment, at some point, they will react when they believe they finally have an opportunity to change their environment. There is no doubt in my mind what would happen to the big cat that attacked a person in a circus environment, as evidenced by the incident in Florida for which the USDA issued a warning to Ringling Bros. when a staff member shot a tiger to death after the animal injured another person who had been in an enclosure with the tiger.

Taba and Victor believe that they care for the big cats well and seem unaware that the animals are enduring trauma and neglect. This is not uncommon with people who keep animals in captive situations without proper training on how to manage them. It is also not exclusive to exotic animals, as people often fail to see that they are treating their own pets abusively and neglectfully. The closest example that I can provide to demonstrate objectively how someone can *believe* that they have animals' best interests in mind yet still force them to live in substandard conditions and endure reduced welfare is the research into animal hoarding.

Excerpted from several peer-reviewed psychology journal articles (listed in References):

- Justifications for their behavior included an intense love of animals, the feeling that animals were surrogate children, the belief that no one else would or could take care of them, and the fear that the animals would be euthanized.
- Hoarders also lack awareness of their animals' distress, or make up their own rules for what constitutes distress.
- It is related to how people define themselves, and one of the important things we have to do when confronting individuals is recognize how important their feeling that they are somehow rescuing or helping animals is.
- Caring for animals is part of their identity. There are physiological mechanisms to prevent the awareness that they are causing pain and suffering.
- Considerable physical and psychological animal suffering occurs without professed intent to harm, in conjunction with a strong human-animal bond, and with lack of insight as to the true nature of the situation.
- Denial frequently colors public discourse on the topic, and the lack of intent, coupled with professed good intentions, often mitigates the seriousness of these crimes in the eyes of the law.

I have observed these exact circumstances in animal-hoarding cases, in abhorrent backyard captivity scenarios, and in pet neglect and abuse cases. During my conversations with Taba, Victor, and the female supervisor, it was clear to me that all the above points apply to the Ringling Bros. big-cat staff. The staff members may believe that they care for the cats, but, in reality, the animals live in an environment of suffering, with little chance of change in the future.

Summary

Animals in circuses have historically not been treated well, leading many countries, states, and municipalities around the world to ban circuses with animal acts. Some regions have focused specifically on exotic-animal acts. It is a clear sign of progress when authorities recognize that animals deserve better welfare and care. Circuses do not promote conservation, education, or the advancement of animal welfare or management techniques. They are a cruel relic from human history, and for welfare reasons, big cats should be banned from circus exhibition and placed in more appropriate environments with trained, skilled caregivers.

It is my professional and expert opinion that the tigers I observed before and during the Ringling Bros. Red Unit shows are suffering from neglect as well as ongoing physical and psychological trauma and are not provided with the proper care and welfare necessary for any felid species. If conditions cannot be improved within the structure of the circus, regardless of its transitional

nature, then the big cats would be better served by living in a certified or accredited institution dedicated to both the immediate and long-term welfare of the animals.

Jay Pratte, B.S., M.A.
August 25, 2016

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Appendix I: Peer-reviewed Publications

It's What They Do. The Shape of Enrichment, Vol.12, No.4, November, 2003.

Options for Training Side Presentation in Large Canids and Felids. Animal Keeper's Forum, Vol. 30, No. 9, September, 2003. P 390-391.

The Four Faces of Operant Conditioning. AAZK Animal Keeper's Forum, Vol. 34, No. 11, November, 2004.

Don't Shoot the Keeper: A Practical Guide to Training Your Co-workers. Pratte and Binney, AAZK Animal Keeper's Forum, January, 2005.

Tools of the Trade: Variety is the Spice of Life. AAZK Animal Keeper's Forum, Vol. 32, No. 6, July, 2005.

Teaching Operant Conditioning Methods and Training Program Management in China. AAZK Animal Keeper's Forum, October, 2006. P 420-426.

Formation of a Critical Incident Stress Management Team at the Dallas Zoo. Fitzgerald et al. Special edition on Crisis Management in Zoos. Animal Keepers' Forum, Vol. 34, No. 11/12, Nov/Dec. 2007. P 502-505.

Making a Connection with Keeper Talks. Pratte and Cavarra, AAZK Animal Keeper's Forum, February, 2007. P 80-84.

Proper Use of Cues. AAZK Animal Keeper's Forum, Vol. 36, No. 9. September, 2009. P 376-379.

Spatial Memory Recall in the Giant Panda *(Ailuropoda melanoleuca).* Perdue, et al. Journal of Comparative Psychology, Vol 123, No.3, 2009. P 275-279.

Training Bears for Voluntary Blood Collection. AAZK Animal Keeper's Forum, Vol. 37, No. 6. June, 2010. P 281-288.

When Maintenance Doesn't Require a Work Order. Pratte and Kezer, AAZK Animal Keeper's Forum, Vol 38, No 1, January 2011. P 18-20.

Basic Bear Training Techniques. Updated 2011. Resources: www.BearCareGroup.org.

Ideas to Help New Training Programs. AAZK Animal Keeper's Forum, Vol 39, No 3, March 2012. P 139-141.

Ideas to Help New Training Programs (Part 2). AAZK Animal Keeper's Forum, Vol 39, No 6, June 2012. P 282-286.

Papers at Professional Conferences

- ***Creating Habitats from a Whole Lotta Nothin'.*** Proceedings, AAZK National Conference, 1999.
- ***Training Three Juvenile Indochinese Tigers from Scratch.*** Proceedings, AAZK National Conference, 2001.
- ***Free Trip to Africa.*** Proceedings, AAZK National Conference 2002.
- ***Expanding our Career Horizons: A Panda Department's Journey.*** Proceedings, AAZK National Conference, 2004.
- ***Teaching Operant Conditioning Methods and Training Program Management in China.*** Proceedings, AAZK National Conference, 2006.
- ***Formation of a Critical Incident Stress Management Team at the Dallas Zoo.*** Proceedings, AAZK National Conference, 2006.
- ***Giant Pandas and Research: Spatial Memory Recall and Training Methods***. Proceedings, AAZK National Conference, 2007.
- ***Training Bears for Voluntary Blood Collection***. Advancing Bear Care, San Francisco, CA, 2009.
- ***Basic Bear Training Techniques.*** Advancing Bear Care, Banff, Alberta, Canada, 2011.
- ***Xenoglossy: What are they really hearing?*** Advancing Bear Care, New Jersey, 2013.

Conference and Symposia Workshops

- National Behavioral Husbandry Committee member since 2001. Worked with committee to present training and husbandry workshops at the national conferences in 2001, 2002, 2004, 2006, 2007.
- Bear "Training 101" workshops at international Advancing Bear Care conferences in 2007, 2009, 2011.
- Advancing Bear Care conference, Pomona, CA, 2007: Goal and training program planning workshop for bear managers in China.
- Advancing Bear Care conference, San Francisco, CA, 2009: Voluntary bear blood collection training workshop.
- Advancing Bear Care conference, Banff, Alberta, 2011: Management of giant pandas; focus group.
- Advancing Bear Care conference, New Jersey, 2013. Advanced operant conditioning techniques and program management.
- USDA "Lions, Tigers and Bears" Symposium, Kansas City, MO, July, 2014. Using Operant Conditioning Techniques for Long-Term Behavioral Management.
- Advancing Bear Care workshop, Brasov, Romania, October, 2014. Training 101; Comprehending Learning; Practicum at Brasov Zoo.
- Advancing Bear Care workshop, Hanoi, Vietnam, October/November, 2015. Training 101; Comprehending Learning; Practicums at Hanoi Zoo & Animals Asia Sanctuary at Tam Dao.

Appendix II:

Big cat [Figure 1] and domestic cat [Figure 2] physical assessment charts (From AZA Felid TAG and Purina)

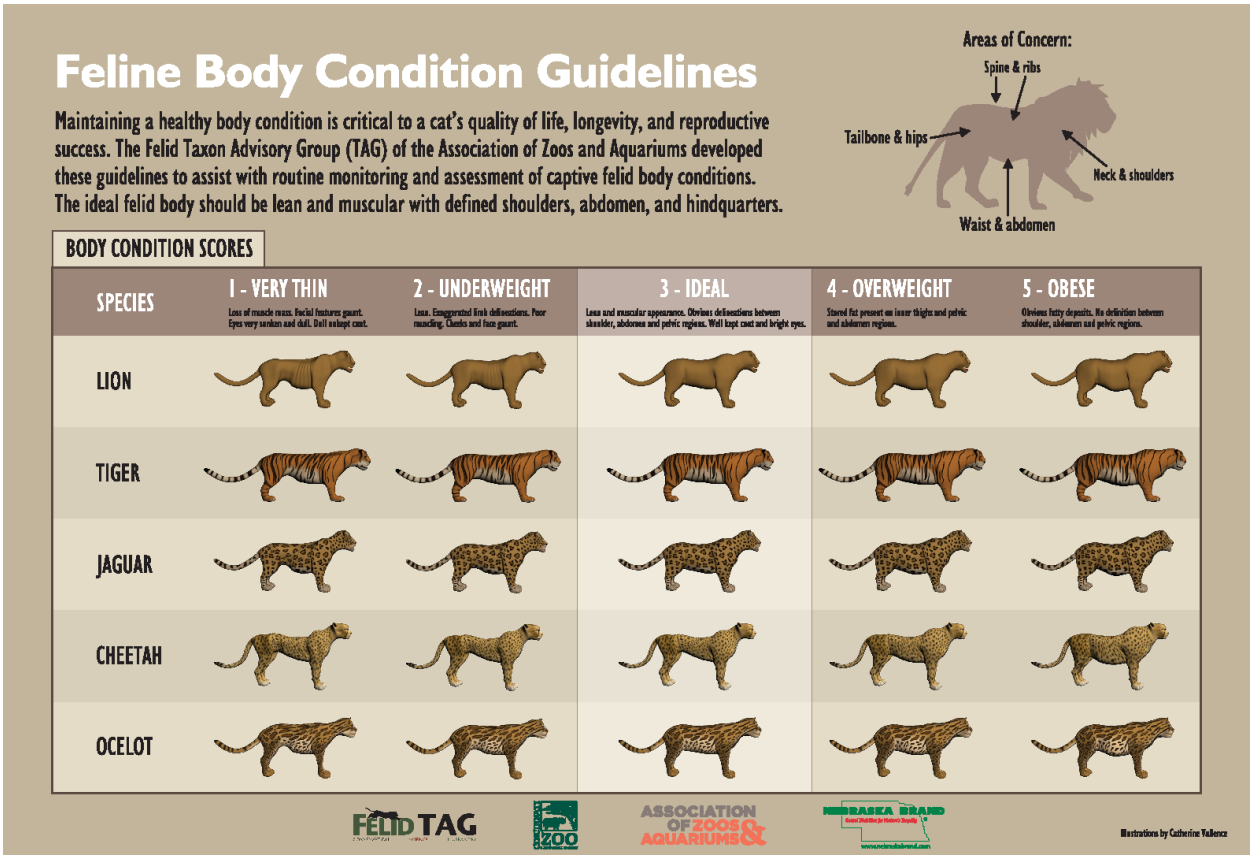


Figure 1

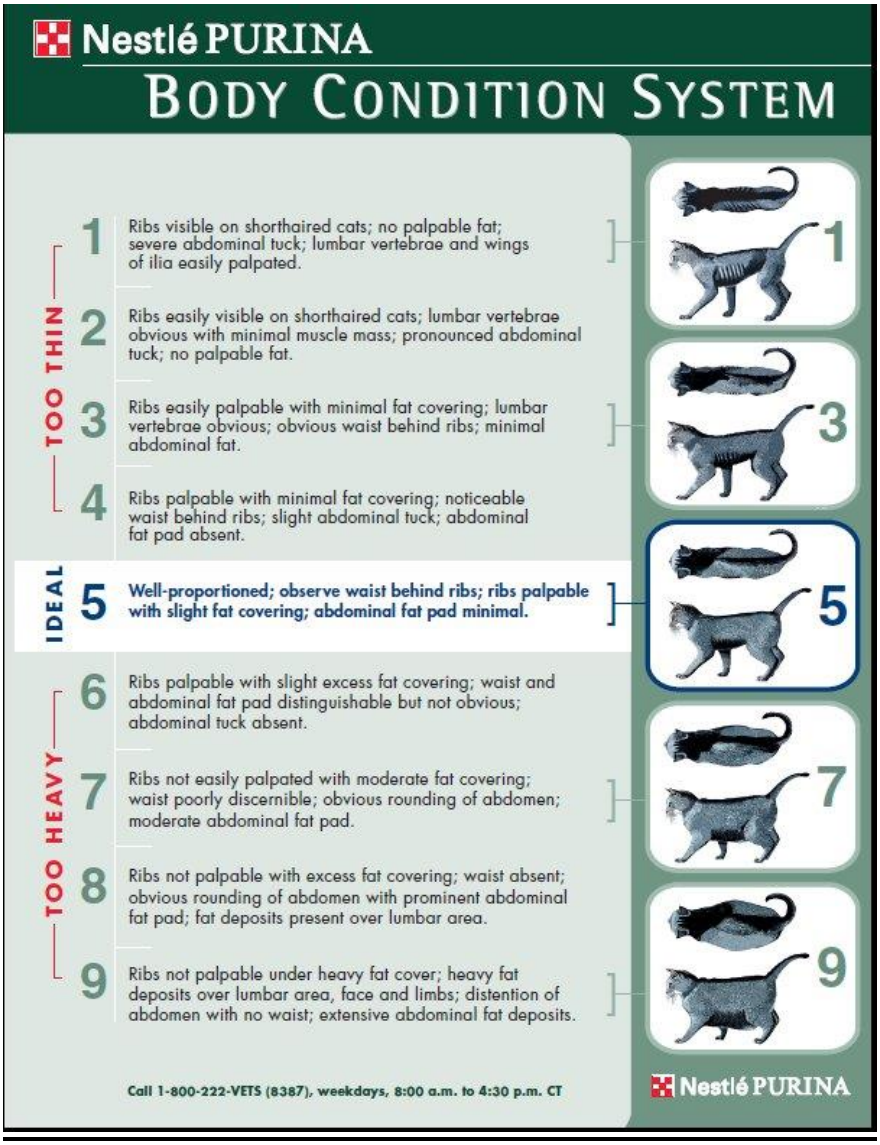

Nestlé PURINA
BODY CONDITION SYSTEM
TOO THIN
1 Ribs visible on shorthaired cats; no palpable fat; severe abdominal tuck; lumbar vertebrae and wings of ilia easily palpated.
2 Ribs easily visible on shorthaired cats; lumbar vertebrae obvious with minimal muscle mass; pronounced abdominal tuck; no palpable fat.
3 Ribs easily palpable with minimal fat covering; lumbar vertebrae obvious; obvious waist behind ribs; minimal abdominal fat.
4 Ribs palpable with minimal fat covering; noticeable waist behind ribs; slight abdominal tuck; abdominal fat pad absent.
IDEAL
5 Well-proportioned; observe waist behind ribs; ribs palpable with slight fat covering; abdominal fat pad minimal.
TOO HEAVY
6 Ribs palpable with slight excess fat covering; waist and abdominal fat pad distinguishable but not obvious; abdominal tuck absent.
7 Ribs not easily palpated with moderate fat covering; waist poorly discernible; obvious rounding of abdomen; moderate abdominal fat pad.
8 Ribs not palpable with excess fat covering; waist absent; obvious rounding of abdomen with prominent abdominal fat pad; fat deposits present over lumbar area.
9 Ribs not palpable under heavy fat cover; heavy fat deposits over lumbar area, face and limbs; distention of abdomen with no waist; extensive abdominal fat deposits.
Call 1-800-222-VETS (8387), weekdays, 8:00 a.m. to 4:30 p.m. CT
1
3
5
7
9
Nestlé PURINA

Figure 2

Appendix III: Photographs

Sterile enclosures

Inability to avoid cagemates

Obesity issues

More obesity issues

Hygromas

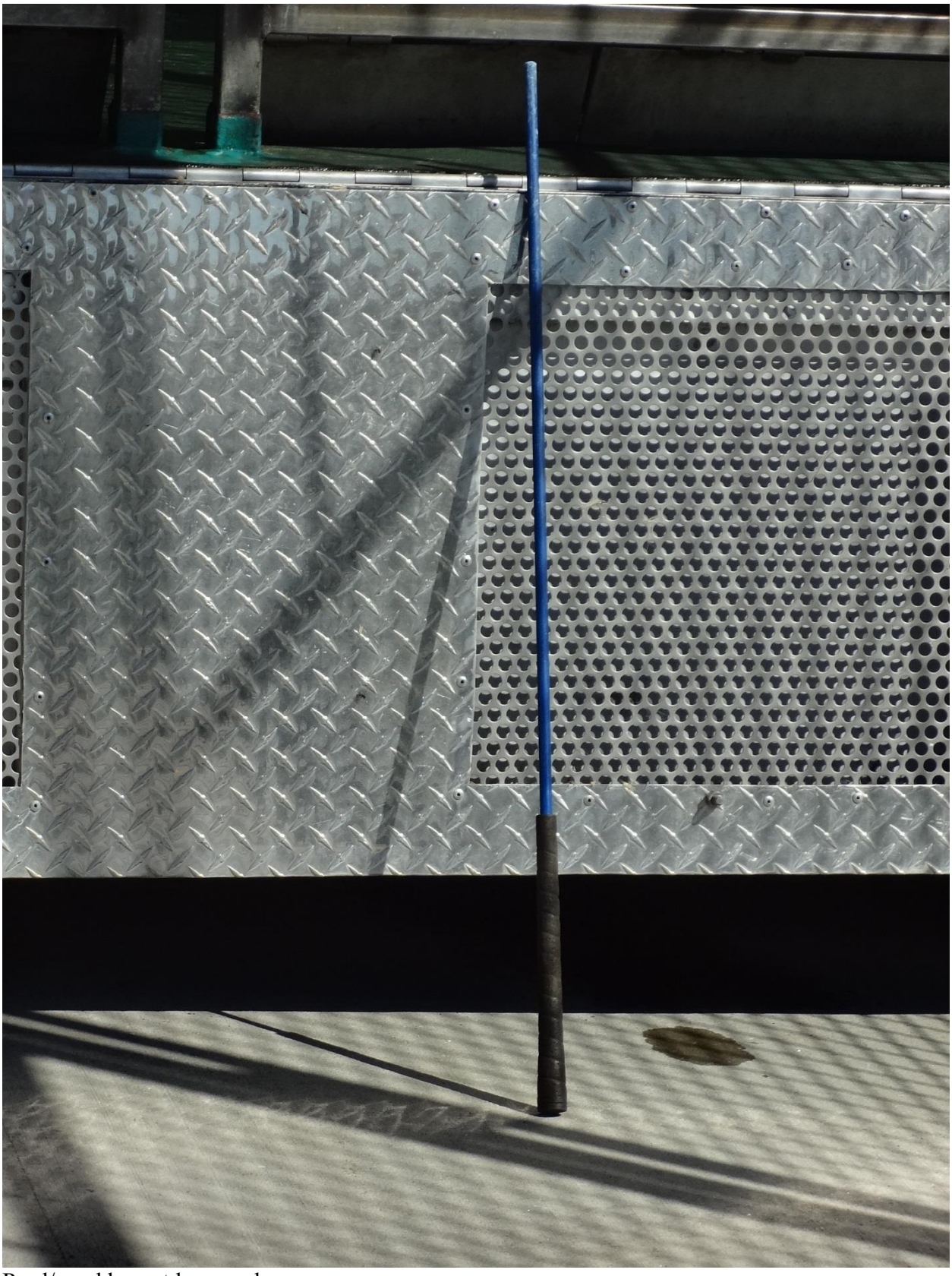
Cracked pads

Hair tufts after altercation

Multiple small abrasions/punctures/scars

Inability to avoid cagemates

Stereotypic motor behavior (pacing)



Prod/goad by outdoor enclosures

Staff carrying prod/goad

Multiple tigers exhibiting ears-back aggressive/fear postures

Aggressive warning display

Trainer forcing behaviors through dominance, fear, use of goad and whip

Cats exhibiting aggressive responses to trainers and one another in confined space