

**Petition  
Before the U.S. Department of Agriculture  
Animal and Plant Health Inspection Service**

**May 19, 2017**

**Requesting Rulemaking to Ensure the Use of Appropriate Methods  
to Prevent, Control, Diagnose, and Treat Diseases and Injuries in Big Cats  
Under the Federal Animal Welfare Act**



**Submitted by:**



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## I. Introduction

People for the Ethical Treatment of Animals (PETA), the Animal Legal Defense Fund (ALDF), Performing Animal Welfare Society (PAWS), Big Cat Rescue (BCR), Keepers of the Wild (Keepers), The Wildcat Sanctuary (TWS), the Global Federation of Animal Sanctuaries (GFAS), and Lions, Tigers & Bears (LTB) hereby submit this petition pursuant to 7 C.F.R. § 1.28 and 5 U.S.C. § 553(e), requesting that the U.S. Department of Agriculture’s (USDA) Animal and Plant Health Inspection Service (APHIS) commence rulemaking proceedings to amend the regulations in 9 C.F.R., part 2, to provide specific requirements to prevent, control, diagnose, and treat diseases and injuries in captive big cats of all species.

It is the responsibility of APHIS to implement regulations that further the purposes for which the federal Animal Welfare Act (AWA) was enacted.<sup>1</sup> The regulations exist, in pertinent part, “to *insure* that animals intended for use in research facilities or for exhibition purposes [or] for use as pets are provided humane care and treatment”<sup>2</sup> [*emphases added*]. The USDA has acknowledged that the AWA regulations are not always sufficient to fulfill this underlying purpose and that new regulations must be promulgated to reflect evolving scientific knowledge about bare minimum standards that are necessary to “insure” the humane treatment of a particular species.

A review of inventories reported on the APHIS Animal Care Information System Search Tool (ACIS) completed prior to the agency’s abrupt removal of the database from its website<sup>3</sup> suggested that as recently as August 2015, approximately 340 USDA licensees were keeping a total of approximately 1,900 tigers in the United States—and the total number of big cats, including tigers, lions, and interfelids, is even greater.<sup>4</sup> Roadside zoos account for the vast majority of USDA licensees with big cats in their animal inventories. As demonstrated in this petition, compelling scientific and veterinary evidence shows that the existing veterinary regulations found in 9 C.F.R. § 2.40 are insufficient to ensure that licensees are not purposely subjecting cats to breeding practices and circumstances that have been shown to create a higher risk of disease, injury, and death in big cats and are inconsistent with best practices to “prevent, control, diagnose, and treat diseases and injuries.”<sup>5</sup> The USDA itself has acknowledged a concern about the substandard care of captive big cats, noting in its position statement on the dangers of housing big cats that “AC personnel have seen too many instances where wild and exotic cats have ... suffered themselves due to poor care.”<sup>6</sup> The mere act of *creating* white tigers and hybrid cats necessarily entails “poor care,” and the USDA should take proactive steps to curtail the practice by some licensees who purposefully breed tigers and other big cats for deleterious genetic mutations and to create interspecies hybrids.

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<sup>1</sup>See 7 U.S.C. § 2151 (“The Secretary [of Agriculture] is authorized to promulgate such rules, regulations, and orders as he may deem necessary in order to effectuate the purposes of this chapter.”); 7 C.F.R. § 2.80 (a)(6) (delegating AWA enforcement authority to APHIS).

<sup>2</sup>7 U.S.C. § 2131 (1).

<sup>3</sup>See Updates to APHIS’ Website Involving Animal Welfare Act and Horse Protection Act Compliance Information, U.S. Dep’t of Agric. (Feb. 3, 2017).

<sup>4</sup>See Carney Anne Nasser, *Welcome to the Jungle: How Loopholes in the Federal Endangered Species Act and Animal Welfare Act Are Feeding a Tiger Crisis in America*, 9 Alb. Govt. L. Rev. 194, 224 (2016) (Ex. 1).

<sup>5</sup>See 9 C.F.R. § 2.40 (b)(2).

<sup>6</sup>See USDA APHIS Miscellaneous Publication 1560, *Position Statement: Large Wild and Exotic Cats Make Dangerous Pets* (Ex. 2), p. 2.

PETA, ALDF, PAWS, BCR, Keepers, TWS, GFAS, and LTB therefore request that APHIS initiate rulemaking proceedings to improve the humane treatment of big cats by prohibiting breeding practices that are known to cause a high risk of disease, injury, and death in large felids. Proposed regulatory language is included below, following an explanation of the legal and factual bases for this request. These are the primary features of this request:

1. A requested prohibition on purposely inbreeding for deleterious genetic mutations, including those that produce white tigers and white lions
2. A requested prohibition on breeding interspecies felids, such as purposely creating ligers, tigons, liligers, and other big cats who do not naturally exist in nature

## **II. Description of Petitioners**

### **A. PETA**

PETA has more than 6,500,000 members and supporters. It is the largest animal rights organization in the world and operates, in part, to promote and further the principle that animals are not ours to use for entertainment. Since its inception in 1980, it has championed ending the use of wild and exotic animals for human amusement, including the exploitation of big cats in roadside zoos and circuses. A number of PETA's members and supporters have aesthetic, recreational, educational, and emotional interests in big cats, make efforts to see them in captivity, and are harmed by seeing big cats who have been bred for deleterious genetic mutations—or are the result of such breeding practices—that are known to cause disease, injury, and long-term negative health effects. In addition, they are also harmed by seeing types of big cats who do not exist in nature.

### **B. Animal Legal Defense Fund**

ALDF, founded in 1979, is the nation's premier legal advocacy organization dedicated to protecting and advancing the interests of animals. It has championed ending the use of big cats for entertainment, including the use of tigers for roadside zoo exhibits. The group has more than 200,000 members and supporters as well as a network of more than 1,500 pro bono attorneys who share its vision of advancing legal protections for animals. Recently, ALDF helped concerned citizens in Iowa prevail in a federal Endangered Species Act lawsuit against a roadside zoo for violations relating to the facility's neglect of tigers, lions, and lemurs. A number of ALDF's members and supporters have aesthetic, recreational, educational, and emotional interests in big cats, make efforts to see them in captivity, and are harmed by seeing big cats who have been bred for deleterious genetic mutations—or are the result of such breeding practices—that are known to cause disease, injury, and long-term negative health effects. In addition, they are also harmed by seeing types of big cats who do not exist in nature.

### **C. Performing Animal Welfare Society**

PAWS was formed in 1984 by former Hollywood animal trainers Ed Stewart and the late Pat Derby in order to rescue, give sanctuary to, and advocate in behalf of captive wild animals, particularly those used in entertainment and the exotic-pet trade. PAWS maintains three GFAS-accredited sanctuaries for captive wildlife in Northern California, offering comprehensive care to a variety of species, including elephants, tigers, bears, exotic antelope, primates, and smaller wild cats. The largest sanctuary is ARK 2000, a 2,300-acre natural habitat refuge located in San

Andreas that is home to Asian and African elephants, bears, and big cats. PAWS was involved in the largest big-cat rescue in U.S. history, giving sanctuary to 39 starving and neglected tigers who were suffering in a defunct roadside facility in Colton, California. PAWS, which established the country's first elephant sanctuary, advocates in behalf of captive wild animals through legislation and public education (including the biennial International Captive Wildlife Conference) and actively works to end their use in entertainment. It is recognized internationally for its expertise in the care and management of captive wildlife. PAWS cofounder and president, Ed Stewart, serves on the Director's Advisory Committee on the Humane Care and Treatment of Wild Animals for the California Department of Fish & Wildlife and is a member of the Advisory Committee for the Detroit Zoological Society's Center for Zoo Animal Welfare.

#### **D. Big Cat Rescue**

BCR is a nonprofit, GFAS-accredited sanctuary for big and exotic cats in Tampa, Florida. It gives lifetime care to over 100 large felids, including tigers and lions, who were abandoned or seized from substandard facilities and private owners. BCR strives to educate the public about these animals and the issues that captive and wild big-cat populations face. It has been rescuing exotic cats since 1992, with the stated mission of providing "the best home we can for the cats in our care, end[ing] abuse of big cats in captivity and prevent[ing] extinction of big cats in the wild."

#### **E. Keepers of the Wild**

Keepers, an internationally recognized nonprofit sanctuary located in Valentine, Arizona, is currently home to over 140 exotic and indigenous wild animals who were rescued, surrendered, or placed there by an animal-welfare agency. Large felids at Keepers include numerous tigers, lions, and a liger. The sanctuary strives to fulfill its mission to inform the public and rescue, rehabilitate, and provide exotic and indigenous wildlife with lifelong care. Through its founder, Jonathan Kraft, it collaborates with other nonprofit animal advocacy organizations to lobby for legislation aimed at curtailing the abuse and exploitation of exotic animals in entertainment.

#### **F. The Wildcat Sanctuary**

TWS is a nonprofit rescue facility located in Sandstone, Minnesota. It provides wild cats in need with a natural sanctuary and inspires change to end the captive-wildlife crisis. Combining a natural and spacious habitat with a life unfettered by exhibition, TWS allows all residents to live wild at heart. It is committed to informing the public about the captive-wildlife crisis in order to create a world in which animal sanctuaries are no longer needed. TWS, which does not buy, breed, sell, or exhibit animals, is accredited by the American Sanctuary Association and GFAS. Director Tammy Thies has worked as a placement coordinator for big cats across the country and has helped facilitate and coordinate over 300 wild-cat placements at reputable facilities.

#### **G. Global Federation of Animal Sanctuaries**

GFAS is a nonprofit that was founded in 2007 by a group of leaders in animal protection in order to fulfill the need to differentiate organizations that provide animals with high-quality care and engage in appropriate financial and governance practices from those that don't and to support the former. GFAS satisfies this need through an internationally recognized animal sanctuary accreditation program. Eligible facilities must have nonprofit status or operate as a noncommercial entity, provide animals with excellent humane care in a non-exploitative

environment, and have ethical policies in place regarding tours, commercial trade, acquisition and disposition, and breeding. GFAS has established species-specific Standards of Excellence, including Standards for Felid Sanctuaries, to be used as the basis for accreditation.

#### **H. Lions, Tigers & Bears**

LTB is a GFAS-accredited sanctuary for big cats and bears and is situated on 93 acres in Alpine, California. It was founded in 2002 by Bobbi Brink, who has decades of experience rescuing and caring for large carnivores. She was the 2015 recipient of GFAS' Carole Noon Award for Sanctuary Excellence for her widespread work dedicated to supporting the welfare of displaced exotic big cats and bears and advocating for change in order to protect captive exotic animals in the future. LTB is frequently called upon by state officials and animal regulatory departments to care for big cats who are abandoned or confiscated. In addition, it has worked throughout the U.S., most notably in Ohio, to coordinate the rescue, safe transport, medical care, and placing of dozens of big cats who have been confiscated and/or relinquished by owners who had them in their possession illegally. In the last four years, LTB has rescued over 100 big cats and bears from Ohio alone. It is a 501(c)(3) nonprofit organization funded exclusively through private donations and grants. LTB and its dedicated staff and veterinarians are responsible for the rehabilitation and care of numerous big cats who were bred inappropriately and are at heightened risk of suffering from long-term health effects. As a true sanctuary, it does not buy, sell, breed, or trade animals.

#### **III. Statutory and Regulatory Framework**

Congress enacted the AWA, in pertinent part, to “insure” that animals used for exhibition are provided with humane care and treatment.<sup>7</sup> The AWA implementing regulations are contained in the Code of Federal Regulations, 9 C.F.R., parts 1, 2, and 3. Part 1 sets forth relevant definitions, part 2 establishes licensing requirements and uniform responsibilities for regulated entities, and part 3 contains the specifications for the handling, care, and treatment of regulated animals.

As discussed in more detail below and in the supporting materials submitted with this petition, it is well established that breeding big cats for certain rare traits is inhumane and creates an unacceptably high risk of poor welfare or neonatal mortality, including the following:

1. Health and welfare problems directly associated with the trait itself
2. Health and welfare consequences related to intensive inbreeding—such as congenital deformities, decline in overall fitness and fertility, increased susceptibility to disease and infection, and shortened life span or stillbirth—to accomplish the expression of rare and unusual traits<sup>8</sup>

The regulations in subpart D of part 2 do not sufficiently ensure that big cats are not subjected to these inhumane breeding practices and therefore fail to fulfill the AWA's mandate for ensuring the humane care of big cats by regulated entities and individuals.

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<sup>7</sup>See 7 U.S.C. § 2131 (1) (statement of congressional intent).

<sup>8</sup>See Association of Zoos & Aquariums White Paper: Welfare and Conservation Implications of Intentional Breeding for the Expression of Rare Recessive Alleles, June 2011 (Ex. 3); available at [https://www.aza.org/assets/2332/aza\\_white\\_paper\\_inbreeding\\_for\\_rare\\_alleles\\_18\\_jan\\_2012.pdf](https://www.aza.org/assets/2332/aza_white_paper_inbreeding_for_rare_alleles_18_jan_2012.pdf).

The requested rulemaking would amend part 2, subpart D, by expressly prohibiting purposely breeding big cats for rare traits or to create interspecies hybrids (e.g., “ligers” and “tigons”) who do not exist in nature.

#### **IV. Arguments in Support of Requested Action**

##### **A. Summary**

This petition is supported by the USDA’s acknowledgment that “[t]he purpose of the AWA is to **ensure** that animal[s] used in research facilities or exhibition purposes are provided humane care and treatment”<sup>9</sup> [*emphasis added*]. Existing evidence demonstrates that purposely inbreeding big cats for rare genetic traits and anomalies and crossbreeding different species to create “Frankencats” is inhumane. The existing AWA regulations fail to ensure that these practices are not purposely undertaken by licensees and therefore fail to meet the established purpose of the AWA. The regulatory framework must be amended to ensure the humane treatment of big cats by licensees and to ensure that the purpose and intent of the AWA are not being thwarted. The petitioners’ request is not only necessary to the fulfillment of the purpose and the intent of the AWA but also reflective of the positions held by groups including, but not limited to, the Association of Zoos & Aquariums (AZA),<sup>10</sup> the American Veterinary Medical Association (AVMA),<sup>11</sup> and the National Geographic Society’s Big Cats Initiative.<sup>12</sup>

##### **B. The Requested Action Is Necessary Because the Current Regulatory Framework Does Not Ensure the Use of Certain Indispensable Methods for Preventing, Controlling, Diagnosing, and Treating Diseases and Injuries in Captive Big Cats**

APHIS has promulgated generic veterinary-care regulations found at 9 C.F.R. § 2.40, “Attending Veterinarian and Adequate Veterinary Care (Dealers and Exhibitors).” The general veterinary-care regulations require that dealers and exhibitors have an attending veterinarian and provide adequate veterinary care. They also generally provide that each dealer and exhibitor “**shall establish and maintain** programs of adequate veterinary care” [*emphasis added*], including “the use of appropriate methods to prevent, control, diagnose, and treat diseases and injuries.”<sup>13</sup> The results of purposely inbreeding big cats for the expression of recessive alleles and rare traits and the deliberate creation of interspecies hybrids have been well documented and conclusively demonstrate that these practices actively increase the risk of disease, injury, and premature death in big cats. As interpreted and enforced, the generic veterinary-care regulations are insufficient to ensure that licensees are not purposely engaging in these harmful practices and

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<sup>9</sup>See, e.g., 74 Fed. Reg. 30502-01 (June 23, 2009).

<sup>10</sup>See Ex. 3.

<sup>11</sup>The AVMA House of Delegates just adopted a new policy itself regarding responsible breeding practices. While it is directed at companion animals, it is expressly not restricted to cats and dogs, and the entire purpose of the policy, like the petitioners’ proposed rule, is to “reduce or eliminate the health and welfare concerns associated with inherited conditions.” See AVMA News Release, *AVMA HOD Approves New Policy on Responsible Breeding of Companion Animals*, Jan. 14, 2017 (Ex. 4); available at <http://atwork.avma.org/2017/01/14/policy-on-inherited-disorders/>.

<sup>12</sup>Conservation scientist Luke Dollar, the program director for National Geographic Society’s Big Cats Initiative, has noted that crossbreeding between big-cat species is “unethical and is the result of greed or irresponsible breeding.” Jani Actman, *Cat Experts: Ligers and Other Designer Hybrids Pointless and Unethical*, National Geographic (Feb. 24, 2017) (Ex. 5), available at [http://news.nationalgeographic.com/2017/02/wildlife-watch-liger-tigon-big-cat-hybrid/?google\\_editors\\_picks=true](http://news.nationalgeographic.com/2017/02/wildlife-watch-liger-tigon-big-cat-hybrid/?google_editors_picks=true).

<sup>13</sup>See 9 C.F.R. § 2.40 (b)(2).

therefore fall short of fulfilling the AWA’s intended purpose of “ensuring” the humane treatment of big cats.

It is widely recognized in the scientific and zoological communities that inbreeding for rare genetic anomalies in tigers to create white coloring carries a significant risk for serious negative health conditions, including immune deficiencies, scoliosis, cleft palate, mental impairments, strabismus, other vision problems, deformities, cardiac problems, spinal problems, infertility, compromised lung development, and early death for those cats who make it past infancy.<sup>14</sup> In the case of ligers (the result of breeding a female tiger and a male lion), who are predisposed to gigantism, they experience diminished life expectancy, behavioral problems resulting from conflicting instincts, and an increased risk of developing cancer, arthritis, and other diseases.<sup>15</sup> Tigons (the result of breeding a female lion and a male tiger) are similarly not expected to survive infancy and have a diminished life expectancy if they do survive as well as a heightened risk of suffering from neurological defects, cancer, arthritis, dwarfism, depression, birth defects, and immune deficiencies.<sup>16</sup>

Deliberately breeding for recessive genes in order to create white tigers—or between species to create ligers and tigons—is known to cause disease, injury, and premature death and is therefore inconsistent with the AWA’s stated purpose and with the AWA veterinary regulations. However, the current regulatory framework has no express provision to ensure that exhibitors and dealers are not engaging in this unscrupulous behavior.

If the AWA veterinary regulations found in 9 C.F.R. § 2.40 (b)(2) truly mean that dealers and exhibitors “*shall* ... use ... appropriate methods to prevent, control, diagnose, and treat diseases and injuries” [*emphasis added*], then deliberate breeding of these cats, who must live with birth defects and other painful diseases and health problems in the rare instances that they actually survive infancy, is simply not consistent with “ensuring” humane care and treatment. If failing to treat a life-threatening or painful medical condition is a violation of 9 C.F.R. § 2.40, then it defies logic as well as the purpose and intent of the AWA that *deliberately causing* a life-threatening or painful medical condition wouldn’t similarly be considered a violation of the AWA’s minimum standards of care.

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<sup>14</sup>See Lauren Begany and C.L. Criscuolo, *Accumulation of Deleterious Mutations Due to Inbreeding in Tiger Populations* (Apr. 27, 2009) (Ex. 6); *White Tiger’s Coat Down to One Change in a Gene*, BBC News (May 23, 2013) (Ex. 7), available at <http://www.bbc.com/news/science-environment-22638341>; see also Paige Cockburn, *The Facts on White Tigers: Inbreeding ‘for Beauty and Tourism Dollars,’* Australian Broadcast Corporation (Feb. 18, 2016) (Ex. 8), available at <http://www.abc.net.au/news/2016-02-19/white-tigers-inbred-for-beauty-and-tourism-dollars/7182594>. Zoo Aquarium Association of Australasia, Position Statement: Standing of White (Leucistic and Albinistic) Lions and Tigers in the Association’s Species Management Programs (Ex. 9), available at [http://www.zooaquarium.org.au/wp-content/uploads/2016/02/1a\\_6\\_PS\\_White-lions-and-tigers.pdf](http://www.zooaquarium.org.au/wp-content/uploads/2016/02/1a_6_PS_White-lions-and-tigers.pdf); see also, Ex. 5.

<sup>15</sup>See *Ligers: A Cruelty Unveiled* (Animal Media TV) (Ex. 10).

<sup>16</sup>See *The Truth About Tigons* (Animal Media TV) (Ex. 11).



### **C. AWA Regulations Must Evolve With Scientific Knowledge to ‘Insure’ the Humane Treatment of Animals**

The USDA has acknowledged that the AWA regulations necessarily must adapt to “current general, industry, and scientific knowledge and experience.”<sup>17</sup> In furtherance of the foregoing requirement, the agency has relied on “advances [that] have been made, new information [that] has been developed, and new concepts [that] have been implemented with regard to the handling, care, treatment, and transportation of marine mammals in captivity” to support proposed amendments to the AWA regulations for marine mammals.<sup>18</sup> The USDA has also previously acknowledged that regulations that are more explicit and easier to understand “increase[] compliance and mak[e] them more effective.”<sup>19</sup> Indeed, the agency has underscored that regulatory additions and updates are necessary “to clarify the responsibilities of regulated persons under the Act . . . and to promote animal welfare.”<sup>20</sup>

Given the breadth of scientific knowledge and experience that has established how inhumane it is to inbreed or crossbreed big cats who will have a high likelihood of painful, debilitating medical conditions and/or premature death, it is incumbent upon the USDA to make the appropriate regulatory or policy interpretation modifications that it has acknowledged are necessary in order “to promote animal welfare.”<sup>21</sup>

### **V. Disease, Injury, and Death in Captive Big Cats**

#### **A. Introduction**

Deliberately breeding for genetic mutations or interspecies hybrids is inconsistent with the AWA mandate that appropriate methods be employed to prevent and control disease and injury in big cats and is universally condemned by the leading zoological accrediting bodies around the world. The problems associated with selective breeding of big cats—whether for recessive traits or to create hybrids like ligers and tigons—are twofold:

1. Health and welfare problems “directly associated with the trait itself, such as visual and neural problems associated with albinism”
2. “The health and welfare consequences related to intensive inbreeding to accomplish expression of rare and unusual traits, such as congenital deformities, decline in overall fitness and fertility, increased susceptibility to disease and infection and shortened lifespan or still birth”<sup>22</sup>

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<sup>17</sup>See, e.g., UNIFIED AGENDA USDA Animal and Plant Health Inspection Service (APHIS) (Dec. 20, 2010), 75 Fed. Reg. 79715-02.

<sup>18</sup>See RULES and REGULATIONS, USDA APHIS 9 C.F.R., Part 3 [Docket No. 93-076-15] (Jan. 3, 2001), 66 Fed. Reg. 239-01.

<sup>19</sup>See RULES and REGULATIONS, USDA APHIS 9 C.F.R., Part 3 [Docket No. 90-218] (Feb. 15, 1991), 56 Fed. Reg. 6426-01.

<sup>20</sup>RULES and REGULATIONS, USDA APHIS 9 C.F.R., Parts 2 and 3 [Docket No. 89-131] (Aug. 31, 1989), 54 Fed. Reg. 36123-01.

<sup>21</sup>See *id.*

<sup>22</sup>See Ex. 3, p. 3; see also, AZA Tiger Care Manual (Ex. 12), p. 52 (“Congenital problems have been reported, and in some instances, may be related to inbreeding.”), available at [https://www.aza.org/assets/2332/tiger\\_care\\_manual\\_2016.pdf](https://www.aza.org/assets/2332/tiger_care_manual_2016.pdf).

Indeed, all white tigers are “highly inbred, and they are the result of an unnatural hybridization between two geographically distinct subspecies.”<sup>23</sup> In its white paper detailing its position against breeding for rare genetic mutations (including white tigers), the AZA explains the following:

Breeding practices that increase the expression of single rare alleles (i.e., rare genetic traits) through intentional inbreeding, for example intentional breeding to achieve rare color-morphs such as white tigers . . . has been **clearly linked with various abnormal, debilitating, and, at times, lethal external and internal conditions and characteristics**. . . . Many of these conditions may seriously compromise the welfare of individual animals.<sup>24</sup> [*Emphasis added.*]

In clarifying its prohibition on the intentional breeding for “anomalous phenotypes,” the AZA underscored that practices involved in breeding white tigers inherently compromise the welfare of the animals.<sup>25</sup> The European Association of Zoos and Aquaria (EAZA) similarly states that its member institutions “should not engage in . . . intentional breeding practices for the Expression of Rare Recessive Alleles from the perspectives of welfare, education, population management, and conservation.”<sup>26</sup> The Zoo Aquarium Association of Australasia likewise “does not advocate the continued propagation of either leucistic or albinistic traits,” in recognition of the serious health problems—including “cleft palates, immune deficiencies, mental impairments, spinal problems and issues with lung development”—that are frequently encountered as a result of the inbreeding necessary to produce white tigers and lions.<sup>27</sup>

Because of the serious welfare problems associated with breeding for particular traits, some European and Asian countries have gone as far as passing legislation *prohibiting* selective breeding for rare traits in some species.<sup>28</sup> Additionally, the “Model Animal Welfare Act,” recently published by World Animal Net, proposes a legal framework reflective of the “best practices” for animal-welfare legislation and says this about breeding:

Breeding should only exculpate a selection for physically and mentally healthy animals and thus support and encourage positive and natural development, and not bioengineering in its most negative spin-offs. Consequently inhumane breeding practices or **breeding for unhealthy traits are prohibited**.<sup>29</sup> [*Emphasis added.*]

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<sup>23</sup>*Thirteen Thousand and Counting: How Growing Captive Tiger Populations Threaten Wild Tigers*, in *TIGERS OF THE WORLD*, Philip J. Nyhus et al., eds., 2nd ed. (2010) (Ex. 13) (discussing how it came to be that all white tigers currently in the U.S. are derived from crossbreeding Amur and Bengal tigers).

<sup>24</sup>See Ex. 3.

<sup>25</sup>See *id.* AZA spokesperson Rob Vernon has also noted that big-cat hybrids have no conservation value, as they are not found in nature. See Ex. 5.

<sup>26</sup>EAZA Position on Intentional Breeding for the Expression of Rare Recessive Alleles (Apr. 26, 2013) (Ex. 14); available at <http://www.eaza.net/assets/Uploads/Position-statements/PositionStatementRareRecessiveAlleles.pdf>.

<sup>27</sup>Ex. 9.

<sup>28</sup>See Ex. 3, p. 3; see also, Chris Pleasance, *No Need to Be Cross! Oklahoma Zoo Has World’s First Male Liliger Cub*, Daily Mail (June 6, 2014) (Ex. 15), available at <http://www.dailymail.co.uk/news/article-2650808/No-need-cross-Oklahoma-zoo-worlds-LILIGER-cub-thats-hybrid-male-lion-female-ligress.html>.

<sup>29</sup>See Janice Cox and Sabine Lennkh, *Model Animal Welfare Act: A Comprehensive Framework Law*, Section 15 “Principles of Animal Breeding,” World Animal Net (2016) (Ex. 16).

## B. White Tigers

White tigers are a result of the expression of an autosomal recessive gene carried by both the sire and the dam.<sup>30</sup> It is well documented that selectively breeding for the recessive allele to create white tigers leads to “poor welfare, poor health, and reduced fitness” in the animals.<sup>31</sup> As described by the late Dr. Ronald Tilson, who served as director of conservation at the Minnesota Zoo and as chair of the AZA Tiger Species Survival Plan Program for decades, “White tigers are an aberration artificially bred and proliferated by a few [exhibitors] who do this for economic rather than conservation reasons.”<sup>32</sup> The AZA-accredited Houston Zoo informs its patrons that “[t]he popular white tiger is not a sub-species but a color variation which is artificially bred for its public appeal.”<sup>33</sup> Edward Maruska, who served as director of the Cincinnati Zoo during the years in which the zoo was intentionally breeding white tigers, has stated that the only “positive side” of breeding white tigers is simply that the mutant cats “have proven to be immensely popular with ... visitors and have increased attendance in those institutions housing them.”<sup>34</sup> Maruska acknowledged that “on the negative side,” white tigers have “inheritable weaknesses ... that seem to be linked to the white coat.”<sup>35</sup>

Hereditary problems—many of which are considered “life threatening mutations”—associated with selective breeding to create white tigers, are “clearly documented,” including the following:

- Facial deformities
- Strabismus, which causes crossed eyes, prevents proper visual focus, impairs depth perception, and is a result of the abnormal visual pathways in a white tiger’s brain
- Retinal degeneration
- Vascular ring anomaly, which leads to an inability to feed and swallow effectively and requires surgical correction for survival
- Abnormal cranial structure development
- Cataracts
- Cleft palate
- Decline in fecundity
- Increased morbidity

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<sup>30</sup>R.W. Guillery and J.H. Kaas, *Genetic Abnormality of the Visual Pathways in a ‘White’ Tiger*, *Science* 180: 1287–1289 (June 22, 1973) (Ex. 17), <https://www.ncbi.nlm.nih.gov/pubmed/4707916>. Richard Ellis, *Tiger Bone & Rhino Horn: The Destruction of Wildlife for Traditional Chinese Medicine*, Island Press (2005) (Ex. 18), p. 156, available at

<https://books.google.com/books?id=FPmLjw2ukfAC&pg=PA156&lpg=PA156&dq=white+tiger+phantom+or+freak&source=bl&ots=fNL62TRZl6&sig=KE91suhLOgOizpmMigOpOKxqOiM&hl=en&sa=X&ved=0ahUKEwiFkKathY7SAhVGeSYKHQdEAZAQ6AEILzAD#v=onepage&q=white%20tiger%20phantom%20or%20freak&f=false>.

<sup>31</sup>See Ex. 3, p. 5.

<sup>32</sup>See Ronald Tilson, *No Stamp of Approval for White Tiger Postal Stamp*, *Journal of Zoo Biology*, 11:71-73, at 71 (1992) (hereinafter, “*No Stamp of Approval*”) (Ex. 19); see also Begany and Criscuolo, (Ex. 6) p. 3 (“people continually breed [white tigers] for economic reasons and not for conservation reasons”).

<sup>33</sup>Ex. 20 (Photograph: Houston Zoo: “Texas Tigers,” Carney Anne Nasser).

<sup>34</sup>Edward Maruska, *White Tiger: Phantom or Freak?*, TIGERS OF THE WORLD, Tilson and Seal, eds., 1st ed. (1987) (Ex. 21). The Cincinnati Zoo proliferated the availability of white tigers by breeding and selling them to other facilities, including the Tokyo Zoo and to the Toronto Zoo. A.K. Roychoudhury, *White Tigers and Their Conservation*, in TIGERS OF THE WORLD, Tilson and Seal, eds., 1st ed. (1987)(Ex.22).

<sup>35</sup>Edward Maruska, *White Tiger: Phantom or Freak?*, TIGERS OF THE WORLD, Tilson and Seal, eds., 1st ed. (1987) (Ex. 21).

- Mental impairment
- Scoliosis
- Club feet
- Spinal deformities
- Kidney abnormalities
- Parkinson's syndrome
- Cardiac defects (patent ductus arteriosis and atrial septal defect)<sup>36</sup>

This is not surprising, given that every cat in the white tiger collection in North America “traces its ancestry to a single white male known as Mohan, captured in 1951 in central India.”<sup>37</sup>

Subsequent to the death of white tigers with purely Indian bloodline lineage, captive white tigers in the U.S. are the result of not only inbreeding but also crossbreeding between Amur and Bengal tigers who carry the recessive gene.<sup>38</sup> This is why all white tigers in the U.S. are considered to be intersubspecific or “generic” tigers.<sup>39</sup> Because white tigers result from a double recessive allele, there is no way to recreate white tigers without inbreeding.<sup>40</sup>

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<sup>36</sup>See Ex. 3, p. 4; see also, Ex. 6, p. 4; Sarda Sahney, *The Myth of the Endangered White Tiger*, SCIENCE 2.0, (Aug. 30, 2007) (Ex. 21A), [http://www.science20.com/fish\\_feet/white\\_tigers\\_species\\_mortality\\_and\\_conservation\\_value](http://www.science20.com/fish_feet/white_tigers_species_mortality_and_conservation_value); *White Tigers: All White Tigers Are Inbred and Are Not Purebred*, BIG CAT RESCUE, <http://bigcatrescue.org/abuse-issues/issues/white-tigers/> (last visited Apr. 14, 2016) (Ex. 23); Xiao Xu et al., *The Genetic Basis of White Tigers*, Current Biology, Vol. 23, Issue 11, pp. 1031–1035, (June 3, 2013) (Ex. 24), available at [http://www.cell.com/current-biology/fulltext/S0960-9822\(13\)00495-8](http://www.cell.com/current-biology/fulltext/S0960-9822(13)00495-8); Ex. 17; Bush, M.; Phillips, L.G.; Montali, R.J. *Clinical Management of Captive Tigers*, in TIGERS OF THE WORLD, R.L. Tilson and U.S. Seal, eds., 1st ed. (1987)(Ex. 25); *White Tiger: Phantom or Freak?* (Ex. 21)(“If there is one glaring undesirable trait in white mutant tigers it is ophthalmic disorders. Some specimens are cross-eyed ... and there is also evidence of feline central retinal degeneration....[S]trabismus is of rare occurrence and probably linked to the white coat gene....There is further evidence of eye problems in white mutants that may be genetically linked to the white coat. In 1985 three sibling white tiger cubs were born with cataracts.”).

<sup>37</sup>See *No Stamp of Approval* (Ex. 19), at 72; *Genetic Basis of White Tigers* (Ex. 24). According to Tilson and Nyhus, “a second and separate origin of white tigers occurred at the Sioux Falls Zoo in South Dakota. A white male crossbred, half-Amur and half-Bengal tiger was crossed with a white carrier female Bengal tiger in 1976, and a litter of four white cubs and one normal colored white carrier cub were born. Subsequently, all Indiana origin bloodline white tigers died in the U.S. Thus, all white tigers currently in the U.S. are derived from crossbreeding two subspecies; they are all hybrids.” *Thirteen Thousand and Counting* (Ex. 13).

<sup>38</sup>*Thirteen Thousand and Counting* (Ex. 13).

<sup>39</sup>*Id.*

<sup>40</sup>See *No Stamp of Approval* (Ex. 19) at 71; Lee Simmons, *White Tigers: The Realities*, in TIGERS OF THE WORLD, Tilson and U.S. Seal, eds., 1st ed. (1987) (Ex. 26) (“Breeding strategies ...have often been to cross fathers with daughters or brothers with sisters. This deliberate inbreeding to increase the pairing incidence of the white gene has also apparently increased the incidence of undesirable traits.”).



PLATE 2 (Baskin, n.d.)

Picture of white tiger with cleft palate and strabismus , two of the many mutations caused by inbreeding in tiger population.

Image 1: Kenny, a white tiger born with facial deformities (Begany and Criscuolo, p. 8)

The AZA has underscored that “occasional expression of a rare and deleterious allele may occur by chance, but should not be ‘forced.’”<sup>41</sup> The last documented free-ranging white tiger was shot in India in 1958.<sup>42</sup> Whereas it has been confirmed that only a total of 12 white tigers have existed in the wild in the past century, it is widely known that the disproportionately high volume of captive white tigers who exist in the U.S. are horrifically inbred and, as stated above, can be traced back to the same white tiger originally imported into the U.S. in 1951.<sup>43</sup> Indeed, “[t]o produce white tigers or any other phenotypic curiosity, ... facilities must continuously inbreed, father to daughter, to granddaughter, and so on.”<sup>44</sup> Indeed, some scientists believe the practice of inbreeding to create white tigers in the U.S. is even more detrimental to the cats than the expression of the recessive gene:

Public admiration for exotic animals has driven the captive breeding of white tigers from only a few individuals, which are highly inbred in order to preserve this recessive trait. Inbreeding depression has thus become the primary cause of

<sup>41</sup>Begany and Criscuolo (Ex. 6), p. 5.

<sup>42</sup>Ex. 24, pp. 1031–1035.

<sup>43</sup>See Begany and Criscuolo (Ex. 6), p. 7; See Ex. 21; see also, *No Stamp of Approval* (Ex. 19) at p. 72; Ex. 18, p. 156 (“We don’t know how frequently white tigers appear in nature, but we do know that in the last one hundred years, only about a dozen have been seen in India.”), available at <https://books.google.com/books?id=FPmLjw2ukfAC&pg=PA156&lpg=PA156&dq=white+tiger+phantom+or+freak&source=bl&ots=fNL62TRZl6&sig=KE91suhLOgQizpmMigOpOKxqOiM&hl=en&sa=X&ved=0ahUKEwiFkKathY7SAhVGeSYKHQdEAZAQ6AEILzAD#v=onepage&q=white%20tiger%20phantom%20or%20freak&f=false>.

<sup>44</sup>Ex. 19.

many health problems for white tigers in captivity, such as premature death, stillbirth, and deformities [6, 8]. This has led to speculation that the white tiger trait is a genetic deformity. However, the fact that many white tigers captured or shot in the wild were mature adults suggests that a white tiger in the wild is able to survive without its fitness being substantially compromised [6]. The undesirable traits often associated with captive white tigers are thus most likely due to human-induced inbreeding.<sup>45</sup>

Captive white tigers in the U.S. today are “inbred and crossbred mixtures of Bengal and Siberian tigers.”<sup>46</sup> The DeYoung Family Zoo, a roadside zoo in Wallace, Michigan, exhibits a white tiger named Emo who was born at another facility and has a multitude of health problems and birth defects, including deformed paws and crossed eyes, resulting from inbreeding for white coloring.<sup>47</sup> Kenny, the white tiger pictured above in Image 1, died in 2008 at the age of 10 at Turpentine Creek Wildlife Refuge, a sanctuary in Arkansas that cared for him and one of his siblings for eight years after the breeder-dealer facility where he was born no longer wanted him.<sup>48</sup> These additional details reveal a glimpse into the typical circumstances involved in breeding to create white tigers:

Kenny’s parents were brother and sister. Most of his siblings were stillborn, or died very young . . . . Despite the repeated deaths, breeders kept trying to mate Kenny’s parents. Although they eventually got two to live, Kenny and his brother Willie could not be sold because of their deformities. [Kenny] died at the age of ten, around half the lifespan of a typical captive tiger.<sup>49</sup>

Dr. Tilson warned of the risks of inbreeding to create white tigers, including the deleterious physical *and* psychological effects:

By frivolously breeding tigers, for example by not maintaining genetic diversity, the result is that these offspring most likely will have lower reproductive success, some will suffer from congenital defects such as hip dysplasia and cleft palates, and a few will become so neurotic that they will attack and maim or kill their cage mates.<sup>50</sup>

Dr. Tilson further stated that white tigers are an indicator of “a growing commoditization . . . of tigers” that “affects the attitudes of millions of people, costs millions of dollars, and has an insidious and ultimately negative impact on the tigers most people care about.”<sup>51</sup>

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<sup>45</sup>Ex. 24, pp. 1031–1035.

<sup>46</sup>Ex. 18, p. 156; Ex. 13.

<sup>47</sup>See *My Life Is a Zoo: White Tiger Trouble*, Nat Geo Wild, available at <http://channel.nationalgeographic.com/wild/videos/the-inbred-tiger/> (Ex. 27).

<sup>48</sup>Stephen Luntz, *Kenny the White Tiger Reveals the Price of Inbreeding*, IFL Science (Aug. 15, 2014) (Ex. 28); available at <http://www.iflscience.com/plants-and-animals/kenny-white-tiger-reveals-price-inbreeding/>.

<sup>49</sup>*Id.*

<sup>50</sup>See Declaration of Ronald Tilson, Ph.D., ¶7 (Oct. 16, 2012) (Ex. 29). WD # 219203.

<sup>51</sup>*Thirteen Thousand and Counting* (Ex. 13).

Despite the known risks and lack of conservation value associated with breeding to create white tigers, exhibitors like Siegfried & Roy (license no. 88-C-0006) continue to mislead the public into believing that they are a rare subspecies rather than a genetic anomaly. Indeed, captive white tigers in the U.S. are the result of both inbreeding *and* “an unnatural hybridization between two geographically distinct subspecies.”<sup>52</sup>

Siegfried & Roy have had as many as 58 white tigers in their inventory at one time.<sup>53</sup> The pair continues to breed to create white tigers for exhibition at Siegfried & Roy’s Secret Garden at the Mirage in Las Vegas. Two tiger cubs with Siegfried & Roy—a “pure white” tiger and a “light golden” tiger who had been born in a litter of four on August 5, 2015—died of kidney failure and an associated infection when they were only 4 months old.<sup>54</sup>

## Two of Siegfried and Roy's tiger cubs die from infection



Image 2: From the *Las Vegas Review-Journal* (Dec. 18, 2015)

In response to concerns about these preventable deaths, the USDA stated that the complaint was “not valid” because—among other reasons—“the remaining tiger cubs kept at this facility appear to be in good body condition and well cared for in clean environments.”<sup>55</sup> This response, which totally ignores the known risks of disease and injury to the animals that Siegfried & Roy are taking when they deliberately inbreed tigers, demonstrates the need for regulatory clarification

<sup>52</sup>Ex. 13, pp. 234-35, BOX 17.1.

<sup>53</sup>See *Siegfried & Roy's Secret Garden and Dolphin Habitat*, SIEGFRIEDANDROY.COM, [http://siegfriedandroy.com/?page\\_id=151](http://siegfriedandroy.com/?page_id=151) (last visited Apr. 14, 2016) (Ex. 30); Ex. 18, p. 155. Between 1970 and 1986, the Cincinnati Zoo bred at least 52 white tigers. See *White Tiger: Phantom or Freak?* (Ex. 21).

<sup>54</sup>See John Katsilometes, *Kidney Failure Kills Two Cubs at Siegfried and Roy's Sanctuary*, *Las Vegas Sun* (Dec. 18, 2015) (Ex. 31), available at <https://lasvegassun.com/blogs/kats-report/2015/dec/18/two-tiger-cubs-at-siegfried-roys-secret-garden-die/>.

<sup>55</sup>See USDA Response to Complaint AC16-197, S&R Productions (Jan. 21, 2016) (Ex. 32).

on the methods that licensees must undertake to comply with the regulatory mandate that they “*shall* ... use ... appropriate methods to prevent, control, diagnose, and treat diseases and injuries”<sup>56</sup> [*emphasis added*]. Conducting visual inspections for external body condition and sanitation fails to “insure” the humane treatment of tigers by allowing breeding practices that all but guarantee disease and injury—in contravention of the purpose of the AWA.

Roadside zoo owners like Bhagavan “Doc” Antle, whose South Carolina roadside zoo has a notorious history of AWA violations and is currently the subject of an open USDA investigation launched in November 2015, have acknowledged that the perceived rarity of white tigers and other rare animals attracts attention:

One thing is for sure, we humans see our world in full color and white attracts our attention, our admiration, and our desire—the desire to possess, especially anything rare. Some seek to possess of [*sic*] the living being, others want the trophy body. Either way, over time the white tiger was selectively removed from nature whenever man observed it.<sup>57</sup>

While roadside zoo operators and entertainers have continued to breed, exhibit, and exploit white tigers because of their exotic appearance and popularity, accredited zoological institutions have had a longstanding disdain for the practice. Indeed, the zoological community’s perception of the white tiger is reflected in the following sentiment expressed by William Conway of the New York Zoological Society (now Wildlife Conservation Society) in 1986 at a tiger symposium hosted by the Minnesota Zoo (which has long managed the tiger species survival programs for the AZA): “White tigers are freaks. It is not the job of a zoo to show two-headed calves or white tigers.”<sup>58</sup>

Despite the well-documented health risks of breeding to create white tigers, Antle has also acknowledged that the captive supply of white tigers now “exist[s] in captivity in great abundance.”<sup>59</sup> Now that tigers can be purchased and sold through trade publications like the *Animal Finder’s Guide* for less than the cost of a purebred dog, it is clear that the individuals and entities that are making a business out of breeding and exhibiting big cats are disregarding the health and welfare of the animals in order to create something even more exotic and even more “rare” so that they can continue to profit.<sup>60</sup>

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<sup>56</sup>9 C.F.R. § 2.40 (b)(2).

<sup>57</sup>Bhagavan Antle, *White Tiger History*, TIGERS (Ex. 33), [http://www.bhagavanantle.com/white\\_tiger\\_facts.html](http://www.bhagavanantle.com/white_tiger_facts.html); see also, Matt Moore, *Myrtle Beach Animal Exhibit Under Federal Investigation*, WMBF News, June 3, 2016 (Ex. 34), <http://www.wmbfnews.com/story/32143305/myrtle-beach-animal-exhibit-under-federal-investigation>; *White Tigers: The Realities* (Ex. 26) (Describing how white tigers, despite being “highly inbred hybrids,” are a “high visibility animal,” and help generate revenue for the exhibitor.).

<sup>58</sup>Ex. 18.

<sup>59</sup>Ex. 33.

<sup>60</sup>See Ex. 8 (quoting Dr. Tilson, who stated, “Owners of white tigers say they are popular exhibit animals and increase zoo attendance and revenues as well. For private owners to say ‘we’re saving tigers’, is a lie. They are not saving tigers; they’re breeding them for profit.”); Katharine Latinen, *White Tigers and Species Survival Plans*, in TIGERS OF THE WORLD, Tilson and Seal, eds., 1st ed. (1987)(Ex. 35) (noting that breeding and exhibiting white tigers fulfills no legitimate conservation purpose, but rather is based on “whimsy or novelty and financial gain” and used as a “marketing strategy.”).



### C. Big-Cat Hybrids

The AZA frowns on the breeding of ligers and other big-cat hybrids. Indeed, as renowned big-cat experts Philip Nyhus and Dr. Tilson have unequivocally stated, “Wild tigers do not mate naturally with lions,”<sup>61</sup> and hybrid cats only exist as the result of intentional, irresponsible human interference and manipulation to create these “Frankencats.” Tilson and Nyhus have noted that breeding to create ligers and other inter-specific cross-bred cats is done solely “[i]n the interest of finding something unique to sell or show.”<sup>62</sup> Like selectively breeding for the recessive allele to create white tigers, breeding to create hybrids of two different big-cat species creates a substantial risk of injury and negative health consequences, including the following:

- Neurological defects
- High risk of neonatal mortality
- Diminished life expectancy
- Sterility
- Cancer
- Arthritis
- Genetic abnormalities
- Organ failure
- Gigantism and unsustainable growth<sup>63</sup>

Liger cubs reportedly frequently have to be delivered by cesarean section because they are abnormally large.<sup>64</sup> Despite the known risks, exhibitors like Antle, dba Myrtle Beach Safari and T.I.G.E.R.S. (license no. 56-C-0116), intentionally breed to create ligers.

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<sup>61</sup>Philip Nyhus and Ronald Tilson, *The Conservation Value of Tigers: Separating Science From Fiction*, 1 J. WildCat Conservation Legal Aid Soc’y 29, 31 (June 2009) (Ex. 36); WD # 86683.

<sup>62</sup> See Ex. 13.

<sup>63</sup>See Jason Bittel, *Hold Your Zorses: The Sad Truth About Animal Hybrids*, Slate.com (June 19, 2015) (Ex. 37), available at

[http://www.slate.com/articles/health\\_and\\_science/science/2015/06/zonkeys\\_ligers\\_the\\_sad\\_truth\\_about\\_animal\\_hybrids.html](http://www.slate.com/articles/health_and_science/science/2015/06/zonkeys_ligers_the_sad_truth_about_animal_hybrids.html); Samantha Ellis, *Birth of Baby ‘Liger’ Sparks Giant Controversy*, Global Animal (Nov. 13, 2010) (Ex. 38), available at <http://www.globalanimal.org/2010/11/13/new-baby-liger-sparks-controversy/>.

<sup>64</sup>Ex. 38.

Paw Nation, Jennifer Walters

The Myrtle Beach Safari wildlife reserve in South Carolina recently announced the birth of a baby liger, the cross between a male lion and a tigress. The adorable 4-week-old Aries is pictured here peeking out from behind his 8-year-old big brother, Hercules.



Aries may look small now, but he is expected to gain almost one pound a day, which will most likely put him at 365 pounds by his first birthday, Dr. Bhagavan Antle, director of The Institute of Greatly Endangered and Rare Species (T.I.G.E.R.S.), told the (U.K.) Daily Mail.

Aries's older brother weighs in at a whopping 900 pounds, and stands almost six feet tall. Talk about a big kitty!

Image 3: Excerpt and photograph from Samantha Ellis' "Birth of Baby 'Liger' Sparks Giant Controversy"<sup>65</sup>

Hercules, the lion pictured above, reportedly weighs 922 pounds and is the largest cat in the world.<sup>66</sup> Antle takes his science experiments to a whole new level by intentionally breeding for rare genetic mutations to create white tigers with white lions, then breeding to create hybrid "white ligers."<sup>67</sup> The Wild Animal Safari, a drive-through animal park in Pine Mountain, Georgia, breeds to create hybrid cats and reportedly had the largest known inventory of ligers in the country in 2005.<sup>68</sup> Despite admitting that ligers in its inventory have suffered from neurological disorders that manifested in "head shakes," it appears not to be deterred from continuing its breeding program.<sup>69</sup>

In Oklahoma, exhibitor Joe Schreibvogel (aka Joseph Maldonado, dba G.W. Exotic Animal Park; AWA license no. 73-C-0139) is also breeding ligers.

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<sup>65</sup>*Id.*

<sup>66</sup>Lucy Osborne, *A Roaring Success, the World's First White Ligers*, Daily Mail (Jan. 4, 2014) (Ex. 39), available at <http://www.dailymail.co.uk/news/article-2534297/A-roaring-success-worlds-white-ligers-Four-brothers-rarest-big-cats-planet.html>.

<sup>67</sup>*See id.*

<sup>68</sup>*See* Maryann Mott, *Ligers Make a 'Dynamite' Leap Into the Limelight*, National Geographic News (Aug. 5, 2005) (Ex. 40), available at [http://news.nationalgeographic.com/news/2005/08/0804\\_050804\\_ligers.html](http://news.nationalgeographic.com/news/2005/08/0804_050804_ligers.html).

<sup>69</sup>*See id.*



Image 4: Joe Schreibvogel, May 23, 2016

The photograph above, posted on Facebook on May 23, 2016, shows “Joe Exotic” with one of the numerous ligers he has produced. However, not content just to breed ligers—he’s also breeding “liligers,” the offspring of a male lion and a female liger, and “tiligers,” the offspring of a male tiger and a female liger.



Like Comment Share

1.7K Top Comments

139 shares

Write a comment...

**Jhon Smith** What kind of BIG cat is that I never seen that kind?????????  
Like · Reply · 4 · April 29 at 8:27pm

**Big Cats of Joe Exotic** Liliger.  
Like · Reply · 1 · April 29 at 9:36pm

Image 5: Joe Schreibvogel pictured with a liliger

Scroll down for video



The world's first male liliger cub (right) has been born in Oklahoma, along with a sister (left). The children are the offspring of a male lion and a female lioness, which is itself the the product of breeding between a lion and a tiger

Image 6: Liligers born at G.W. Exotic Animal Park<sup>70</sup>

Schreibvogel sells white tigers, ligers, liligers, and tiligers to private owners and exhibitors all over the country.<sup>71</sup> Transfer records show that just between May 2015 and September 2015, he sold three white tigers and three tiligers as well as a liger, who went to a private owner named Angela Bazzell in Rockwall, Texas, on August 22, 2015 for \$6,800.<sup>72</sup> While the paperwork says that the purpose of the transfer was for “feeding,”<sup>73</sup> Bazzell’s September 4, 2015, Facebook post and associated comments indicate that after purchasing the liger, she almost immediately placed the cat at another facility in Texas.<sup>74</sup>

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<sup>70</sup>See Ex. 15; see also Jonathan Symcox, *Meet the Incredibly Cute Liliger Cubs—the Offspring of a Lion and a Liger*, Mirror Online (Dec. 19, 2013) (Ex. 41), available at <http://www.mirror.co.uk/news/world-news/liliger-cubs-born-gw-interactive-2942592>.

<sup>71</sup>See e.g., Ok. Dep’t of Agric., Food & Forestry Certificates of Veterinary Inspection Nos. 1994068 (Jan. 21, 2015) (Ex. 42), 1994054 (Dec. 23, 2014) (Ex. 43), 1994055 (Dec. 23, 2014) (Ex. 44), 1994053 (Dec. 19, 2014) (Ex. 45), 1953524 (Dec. 5, 2014) (Ex. 46), 1953523 (Dec. 4, 2014) (Ex. 47), 1953522 (Dec. 4, 2014) (Ex. 48), Ok. Dep’t of Agric., Food & Forestry Certificate of Veterinary Inspection for the Transfer of a Four-Week-Old Female Liliger Cub from GW Zoo to Angela Bazzell (Aug. 22, 2015) (Ex. 49).

<sup>72</sup>See Ex. 49.

<sup>73</sup> According to a representative of the Oklahoma Department of Agriculture, the “feeding” designation is typically reserved for occasions when cattle are being sent to a feedlot prior to slaughter. It’s unclear what the purpose of the notation was on this particular CVI since the transaction was a sale/purchase.

<sup>74</sup>See Image 7.

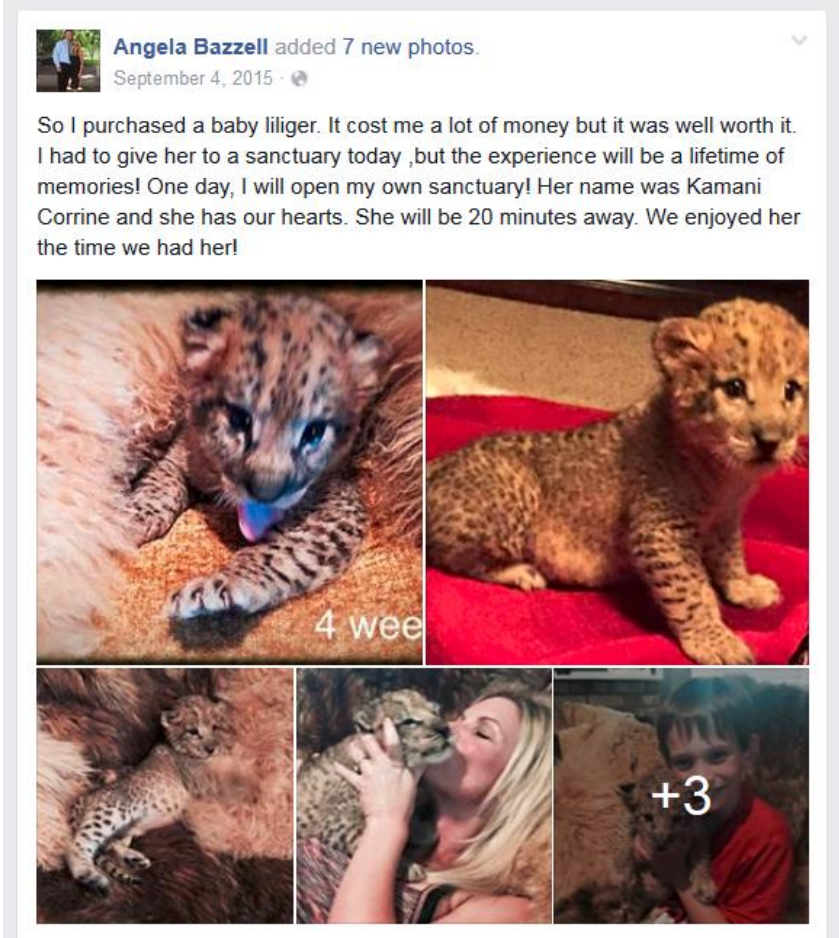


Image 7: Facebook post by Angela Bazzell from September 4, 2015, regarding her purchase of a liger (accessed April 12, 2017)



Image 8: Facebook comments on Angela Bazzell’s page from September 17, 2015, evidencing her purchase of the liger for \$6,800 (accessed April 19, 2016)

Despite the known serious health risks associated with breeding to create ligers and other hybrids, exhibitors like G.W. Exotic persist because they can benefit financially from creating “rare” cats who don’t actually exist in the wild, and they’re willing to risk the health of the animals in order to sell to private individuals like Bazzell, who are not equipped to care for big cats—certainly not big cats with complicated behavioral and health problems. Indeed, less than *two weeks* transpired between the date of the transfer of the infant liger to Bazzell and her post stating that she was unable to keep her.

## VI. Proposed Rule Change

We propose that the following addition, section (c), be added to the existing AWA veterinary-care regulations:

9 C.F.R. § 2.40

### § 2.40 Attending veterinarian and adequate veterinary care (dealers and exhibitors).

(a) Each dealer or exhibitor shall have an attending veterinarian who shall provide adequate veterinary care to its animals in compliance with this section.

(1) Each dealer and exhibitor shall employ an attending veterinarian under formal arrangements. In the case of a part-time attending veterinarian or consultant arrangements, the formal arrangements shall include a written program of veterinary care and regularly scheduled visits to the premises of the dealer or exhibitor; and

(2) Each dealer and exhibitor shall assure that the attending veterinarian has appropriate authority to ensure the provision of adequate veterinary care and to oversee the adequacy of other aspects of animal care and use.

(b) Each dealer or exhibitor shall establish and maintain programs of adequate veterinary care that include:

(1) The availability of appropriate facilities, personnel, equipment, and services to comply with the provisions of this subchapter;

(2) The use of appropriate methods to prevent, control, diagnose, and treat diseases and injuries, and the availability of emergency, weekend, and holiday care;

(3) Daily observation of all animals to assess their health and well-being; Provided, however, That daily observation of animals may be accomplished by someone other than the attending veterinarian; and Provided, further, That a mechanism of direct and frequent communication is required so that timely and accurate information on problems of animal health, behavior, and well-being is conveyed to the attending veterinarian;

(4) Adequate guidance to personnel involved in the care and use of animals regarding handling, immobilization, anesthesia, analgesia, tranquilization, and euthanasia; and

(5) Adequate pre-procedural and post-procedural care in accordance with established veterinary medical and nursing procedures.

**(c) Each dealer or exhibitor housing big cats shall include within its written program of veterinary care details specifying the methods and practices being employed to prevent inbreeding and selective breeding for deleterious genetic mutations that are associated with a known risk of disease, injury, or death, including breeding to create white tigers, ligers, tigons, and other variations of interfelid hybrids.**

SOURCE: [54 FR 36147](#), Aug. 31, 1989; [58 FR 39129](#), July 22, 1993; [60 FR 64115](#), Dec. 14, 1995; [66 FR 239](#), Jan. 3, 2001; [66 FR 21061](#), April 27, 2001, unless otherwise noted.

In the alternative, given our position that selectively breeding for rare and deleterious genetic anomalies or to create felids who do not exist in the wild already violates the letter and spirit of 9 C.F.R. § 2.40 (b)(2), we would propose that the USDA use the following language, should it elect to clarify its position on the selective breeding for rare characteristics with an amendment to its Animal Care Policy Manual<sup>75</sup>:

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<sup>75</sup> USDA Animal Care Policy Manual (Ex. 50), *available at* [https://www.aphis.usda.gov/animal\\_welfare/downloads/Animal%20Care%20Policy%20Manual.pdf](https://www.aphis.usda.gov/animal_welfare/downloads/Animal%20Care%20Policy%20Manual.pdf).



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**Subject:**     **Methods to Prevent Known Risk of Disease and Injury in Big Cats**

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**References:**   AWA Section 2143  
                  9 C.F.R., Part 2, Section 2.40

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**Justification:** Provides requested guidance. The Animal Welfare Act (AWA) requires that all regulated animals be provided with adequate veterinary care, specifically methods to prevent known risks of disease and injury.

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**Policy:**       **Selective Breeding of Big Cats for Rare Genetic Mutations or to Create Interspecies Hybrids**

Selective breeding of big cats for rare genetic expressions, such as to create white tigers, and the intentional breeding of different big-cat species to create ligers, tigons, liligers, titigons, and other interfelid species hybrids have been deliberately pursued by exhibitors and dealers in order to engineer the creation of rare and exotic-looking cats for purposes of attracting interest from buyers and facility visitors. These breeding practices are not innocuous and are condemned and prohibited by the zoological and conservation communities because of their known risk for causing neonatal mortality, birth defects, blindness, and other serious medical conditions that negatively affect the welfare, quality of life, and life expectancy of the cats.

The intentional breeding for rare genetic traits in big cats—including breeding to create white tigers, ligers, tigons, and other hybrid big cats—is an indication that veterinary-care methods are not sufficient to prevent the risk of disease and injury in big cats.

The Association of Zoos & Aquariums (AZA) has a position on these issues that supports APHIS' recommendation. A full text of the AZA position on breeding for rare color morphs is available here:

[https://www.aza.org/uploadedFiles/About\\_Us/AZA%20White%20Paper%20Inbreeding%20for%20Rare%20Alleles%2018%20Jan%202012.pdf](https://www.aza.org/uploadedFiles/About_Us/AZA%20White%20Paper%20Inbreeding%20for%20Rare%20Alleles%2018%20Jan%202012.pdf).