

Plaintiffs allege that the Zoo has violated Section 9 of the Endangered Species Act (“ESA”) by unlawfully “taking” an endangered species, which is defined to include “harming” and “harassing” such a species. Plaintiffs allege four ways in which the Zoo is harming and harassing Lucky in violation of the ESA: (1) keeping her alone without any Asian elephant companions; (2) keeping her in a small enclosure which fails to meet minimum size standards set by the Association of Zoos and Aquariums (“AZA”); (3) depriving her of adequate shelter from the sun; and (4) forcing her to live on a hard, unnatural, species-inappropriate substrate. Docket no. 1 at 15, 18, 19, 20. Plaintiffs seek a declaration that the Zoo’s current treatment of Lucky violates Section 9 of the ESA and request that this Court grant injunctive relief by either ordering the transfer of Lucky to an elephant sanctuary in Tennessee or alternatively ordering the Zoo to remedy its treatment of Lucky.

II. Procedural History

Plaintiffs filed their original complaint on December 1, 2015. Docket no. 1. On December 23, the Zoo filed a motion to dismiss, which this Court denied on January 27, 2016. Docket nos. 8, 16. The case proceeded through discovery; fact discovery closed on November 1, 2016, and expert discovery closed on March 6, 2017.

There are currently three pending motions, all of which were filed by the Zoo. By two of these motions, the Zoo seeks to exclude the opinions of the Plaintiffs’ experts—Dr. Philip Ensley, a veterinarian, and Scott Blais, an expert on captive elephant behaviors. Docket nos. 59 (Ensley Motion), 61 (Blais Motion). The third motion is the Zoo’s motion for summary judgment. Docket no. 53. All motions are fully briefed.

The Zoo argues that it is entitled to summary judgment for numerous reasons: (1) the Animal Welfare Act (“AWA”), rather than the ESA, governs the treatment of animals in

captivity, such as Lucky, and the AWA contains no citizen-suit provision; (2) the Zoo's conduct does not, as a matter of law, constitute "harm" or "harassment" under the ESA because it is not "gravely threatening"; (3) the Zoo's simple possession of Lucky does not violate the ESA; (4) Plaintiffs' requested injunctive relief of transfer of Lucky to an elephant sanctuary is legally inappropriate because the ESA does not provide for a forfeiture remedy; and (5) Plaintiffs' claims lack factual support. The Zoo's first and second arguments fail as a matter of law. The Court need not reach the third argument and the fourth argument can be addressed at trial if necessary. The Zoo succeeds in part on the fifth argument.

III. Lucky's Health, Care, and Well-Being

a. Age

Lucky, at 57 years old, is considered geriatric by elephant standards, and is equivalent to a 90 year-old human. Docket no. 53-2 at 5. The median life expectancy for an Asian elephant living in North America is 46 years old, and Lucky is the tenth oldest living Asian elephant in North America out of 210. *Id.*

b. Care

Lucky's care team has five members. Docket no. 53-2 at 8. Officially titled "animal care specialists," these team members have progressed through the ranks of novice and handler, ultimately becoming trainers. *Id.* at 8–10. These specialists engage in daily enrichment activities with Lucky, bathe her, train her, and provide foot care. *Id.* at 9, 11. Two members of this team are Randee Gonzalez, the Zoo's elephant manager who has cared for Lucky since 1998, and Mike Huff, the Zoo's senior elephant keeper who has cared for Lucky since 2006. *Id.* at 4; Docket no. 53-6 at 3.

The Zoo has a separate staff of three full-time veterinarians. Docket no. 53-3 at 3–4. The Zoo’s veterinary director is Dr. Rob Coke, who has been in this position since August 2002. Docket no. 53-3 at 4. Doctors Debbie Meyers and Adriana Pastor began working at the Zoo in the second half of 2016. *Id.* at 3. The veterinary staff performs an annual physical on Lucky, at which they examine her teeth and oral cavity, examine her whole body by making her walk, and conduct radiographs on her feet. Docket no. 53-4 at 3–4. The staff also washes her trunk and takes fecal samples on an annual basis. *Id.* at 4–5. About four times per year, the veterinary staff takes blood samples. *Id.* If Lucky’s health at a particular time requires more frequent attention than the hour-long, annual physical, the staff performs further work as-needed. *Id.* at 3–5.

c. Health

Lucky has several health problems. Some of these problems are not at issue in this lawsuit, and will not be discussed in this order.¹ Lucky’s other issues and their causes, however, are the crux of this dispute.

i. Lucky’s Mental Health (and its Physical Manifestations)

The parties dispute whether Lucky engages in “stereotypic behavior,” which Dr. Ensley, Plaintiffs’ veterinary expert, explains is “repetitive meaningless activity the result of inadequate mental stimulation, depression, frustration, and dysfunction causing as well repetitive motion injury.” Docket no. 70-1 at 8. Dr. Ted Friend, an expert on animal science for the Zoo, defines stereotypic behavior similarly. Docket no. 70-4 at 5.

The Zoo acknowledges Lucky’s behavior in this regard, but characterizes it as “normal, anticipatory behavior, such as swaying back and forth on her feet by the barn door before feeding time.” Docket no. 53. Dr. Friend reviewed videos that the Plaintiffs’ experts have watched; he

¹ For example, Lucky’s teeth are not at issue in this lawsuit. *See* Docket no. 53 at 7 (describing Lucky’s teeth with reference to the summary judgment evidence).

believes that Lucky's behavior is merely "anticipatory," that it reflects Lucky's "excite[ment] about an upcoming event," and even if it is "stereotypic," that stereotypic behavior is not necessarily an indicator of an animal's well-being. Docket no. 53-10 at 4. He added that Plaintiffs have no support for a causal connection between any of the allegedly deficient Zoo conditions and Lucky's allegedly stereotypic behavior. *Id.* He acknowledges that Asian elephants can exhibit stereotypic behavior due to being confined in solitude, although he did not state that this was the case with Lucky. Docket no. 70-4 at 9-10. Dr. Ramiro Isaza, the Zoo's veterinary expert, made a similar acknowledgment. Docket no. 70-8 at 8-9.

Plaintiffs view Lucky's behavior as stereotypic and believe it has harmful effects. According to Dr. Ensley,

Lucky exhibits stereotypic behavior which manifests by a rocking or swaying back and forth behavior documented in her records. Stereotypic behavior is repetitive meaningless activity the result of inadequate mental stimulation, depression, frustration, and dysfunction causing as well repetitive motion injury. This repetitive, meaningless behavior is not documented in wild elephants. Lucky suffers from chronic mastitis that may have been initiated by, and currently enhanced with stereotypic suckling of her mammary gland likely preventing resolution of this condition.

Docket no. 70-1 at 8. Dr. Ensley's report culls several instances of "Swaying/Rocking Stereotypic Behavior" from Lucky's medical records. *Id.* at 53-54. These notes include several references to swaying at the gate and swaying in relation to feedings, but they also include numerous other instances of swaying. *Id.* For example, on March 8, 2011, Dr. Ensley quotes the records as saying that Lucky "[p]articipated in KC but spent most of the day along the back wall swaying." *Id.* at 54. Contrary to Dr. Friend's assertion that Plaintiffs lack evidence of a connection between Lucky's living conditions and potentially stereotypic behaviors, Dr. Ensley believes that, based on a review of certain literature and his own knowledge and experience, "[t]he chaining and confining of elephants in a reduced space in captivity is a cause of

stereotypic behavior.” *Id.* at 38. In short, Dr. Ensley concludes that “Lucky suffers mentally, which manifests in stereotypic swaying behavior.” *Id.* at 80.

Dr. Ensley opines that Lucky’s stereotypic behavior, sometimes in the form of a lateral “rocking” from side to side, puts abnormal pressure on Lucky’s nails. *Id.* at 20. He added at his deposition that Lucky has suffered from mammary gland mastitis for the past 30 to 40 years, which may have been caused by her stereotypic behavior. Docket no. 70-3 at 14.

Blais, Plaintiffs’ expert on captive elephant behavior, also has opinions of Lucky’s behavior and mental health that are contrary to the Zoo’s view:

As a direct result of her under stimulating environment, Lucky does not generally exhibit [the] nuanced behaviors [of a typical elephant]. The primary aspect of her life that changes is the different people walking past whom Lucky appears to tune out or dismiss, as she frequently stands with her back to the public. Lucky’s enclosure is limited and sterile and has changed little since her arrival in 1962.

Docket no. 70-7 at 9. Blais believes that Lucky “exhibits stereotypic behavioral patterns, like head-bobbing and swaying.” *Id.* at 18. He disagrees with the Zoo’s characterization of these behaviors as merely “anticipatory” and believes that with appropriate changes to Lucky’s environment, they can be greatly reduced. *Id.* Blais also noted, though, that all elephants living in captivity exhibit “some degree of stereotypical behavior.” Docket no. 61-2 at 62.

ii. Feet

Lucky’s feet are a major point of contention between the parties. The Zoo characterizes Lucky’s foot problems as “minor.” Docket no. 53 at 7. According to Dr. Coke, the Zoo’s veterinary director, Lucky has “foot abscesses in the nail bed, she has had various degrees of cracking and — but people call it nail abscesses or water blisters or water abscesses.” Docket no. 53-3 at 18. Dr. Coke explains that Lucky is “very right-handed,” and so when she digs, kicks, or plays—primarily with her right foot—she suffers these lesions. *Id.* Dr. Coke stated that these

abscesses resolve with routine foot care, such as daily cleanings and trimmings of the nails and cuticles. *Id.* at 19. Dr. Coke and several others involved in Lucky's care and medical treatment stated that these foot issues were relatively minor, tended to go away on their own with routine treatment, and never caused Lucky any serious health problems. *Id.* at 19; *e.g.*, Docket no. 53-4 at 7–8. Dr. Isaza found some problems with Lucky's feet by reviewing radiographs, but said that these problems were common in geriatric elephants. Docket no. 53-2 at 21. Still, Dr. Isaza acknowledged that there is a recognized difference of opinion among experts in the elephant community regarding the causes of foot problems (and arthritis) in captive elephants, adding that these medical issues may have numerous causes and controversies may exist as to which factors play the biggest roles. Docket no. 70-8 at 16–17.

Plaintiffs view Lucky's foot issues as much more serious. Dr. Ensley, after examining radiographs of Lucky, stated at his deposition that, among other things, Lucky suffered from abscessed tracts (which are indicative of osteomyelitis and bone infection) and boney lysis, both of which are "life-threatening." Docket no. 70-3 at 9–10. Later in his deposition, Dr. Ensley affirmed that, based on a review of her medical and husbandry records, Lucky suffered from "life-threatening" foot issues, including "chronic foot abscesses with life-threatening bone infection and degenerative joint diseases, limb impairment, and crippling lameness." *Id.* at 25.

iii. Arthritis

Lucky has arthritis. According to Dr. Isaza, it is "clinically mild" and appropriate for her age:

Lucky's history of arthritis highlights that overall, her arthritis has been clinically mild and manageable throughout her geriatric years. In my opinion Lucky has arthritis that is common for her geriatric age, however, I have personally managed several younger elephants with much more severe arthritis. It is my opinion that her mild arthritis is far from "life-threatening" or "crippling" and that she is currently well managed with medical treatments.

Docket no. 53-2 at 21. Dr. Isaza explains that Lucky's arthritis was first treated symptomatically in October 2010 due to lameness in one of her legs. *Id.* at 20. That lameness resolved. *Id.* Five years later, Lucky was diagnosed with arthritis in her left hip, and since then, the clinical assessment of her pain due to arthritis has shifted through her legs, knees, and hips. *See id.* Dr. Isaza said that Lucky's arthritis has been appropriately treated, including with proper dosages of ibuprofen. *Id.* Dr. Isaza admitted that arthritis can have a single cause or multiple causes and that Lucky's arthritis is likely caused by multiple factors, with the parties disagreeing over which factors are playing the most important roles in causing it. Docket no. 70-8 at 16–17.

Dr. Ensley describes Lucky's arthritis in different terms, characterizing it as "life-threatening." Docket no. 70-3 at 9; Docket no. 70-1 at 6. Ensley's report states that Lucky's "chronic" arthritis "has resulted in her inability to consistently lay down resulting in sleep deprivation and harassment by forcing her to sleep while standing up." Docket no. 70-1 at 7. The report, pointing to Lucky's medical records, recites numerous references to arthritis and accompanying treatment, beginning in 2006. *Id.* at 44–49. Dr. Ensley, instead of characterizing Lucky's arthritis as a result of her old age, opines that "the cumulative effects of an inadequate enclosure with regard to space and unyielding substrate result[] in chronic arthritis." *Id.* at 80; *see also id.* at 6–7 ("These conditions[, including arthritis,] are enhanced by an enclosure that may have some areas of soft sandy surface; however, taken on whole is made up of hard unnatural species-inappropriate substrate coupled with concrete or concrete with essentially unyielding barn flooring materials."). At his deposition, he explained that there may be numerous causes of arthritis in elephants. Docket no. 70-3 at 6–7. He added that arthritis in elephants can be caused by stereotypic behavior. *Id.* at 6.

Blais opines that the size of Lucky's enclosure contributes to her arthritis. Docket no. 70-6 at 18. He explains that because her enclosure is too small, Lucky is unable to walk long distances, as is typical for elephants. *Id.* As a result, Lucky's lifestyle is more sedentary than ideal, resulting in a shortened gait that caused her arthritis. *Id.* Blais acknowledges that it is unclear whether Lucky's shortened gait caused her arthritis or vice versa. *Id.* at 18, 21. Regardless of whether Lucky's shortened gait is a cause or an effect of her arthritis, Blais stated that her lack of a full range of motion will continue to contribute to the degeneration of her arthritis. *Id.* at 21. As Blais further explained, "[e]lephants naturally walk 30 to 50 miles a day over diverse and challenging substrates," which "force[s] the animals to utilize their muscles in a way that does not occur in small spaces." *Id.* at 22–23. Blais expressed concerns over the Zoo's treatment of Lucky's arthritis because the long-term use of ibuprofen has been linked to kidney failure. Docket no. 70-7 at 20.

iv. Overall Welfare

In general, Dr. Isaza sums up the Zoo's view of Lucky's welfare in his report:

Lucky is in good physical condition for an Asian elephant of her age. Any abnormalities noted above were all minor and typical for a geriatric elephant. In my opinion, there was no evidence of any condition that is "life-threatening" or even negatively influencing her current welfare and quality of life. In my opinion, the most important clinical finding is the abnormal wearing of all of her molar teeth. However, although the teeth are worn, she is able to chew and digest enough food to maintain a 4/5 body condition score.

Docket no. 53-2 at 8. Dr. Isaza recognizes that when it comes to elephant welfare, "Welfare is difficult to measure . . . Welfare is a state of being, a subjective assessment and subjective to each person that makes that. So what I call a healthy person, another person may say, no, that's not healthy. And similar with welfare." Docket no. 70-8 at 10.

Dr. Ensley's report is to the contrary:

Lucky is an Asian elephant, estimated to be 56 years of age, with multiple chronic medical problems, some of which are life threatening, as a direct result of her past and current standard of care and living conditions at the San Antonio Zoo. Lucky suffers from chronic life threatening foot abscesses, chronic arthritis, and degenerative joint disease with digital bone infection, bone lysis, and limb impairment all documented in her medical records which manifest in the form of chronic lameness, and a stiffened unnatural gait. Lucky's chronic musculoskeletal disease, rendering her essentially to be cripple [sic], relies upon non-steroidal anti-inflammatory medications which in effect provide pain masking relief.

Docket no. 70-1 at 6-7.

Blais, who thinks that Lucky is in "moderate" physical condition, is somewhere in the middle:

There is no indication that I see with Lucky, based on what I viewed, that Lucky is near death. . . . The simple truth is that because of the lack of space that's being offered every day as to her compromise [sic]. Does that mean she's in grave risk of dying tomorrow? Not necessarily. But every day does influence and negatively influence her overall well-being.

Docket no. 53-16 at 8.

IV. Lucky's Living Conditions and Their Relationship to Her Health

Plaintiffs allege four main ways in which the Zoo's treatment of Lucky and her living conditions violates the ESA. The following facts are organized based on Plaintiffs' claims.

a. Companionship

The parties do not dispute Lucky's history of companionship during her time at the Zoo:

When [Lucky] arrived, she was first paired with Ginny, an unrelated Asian elephant that was five years older than Lucky. They lived together for 42 years, and apparently socially bonded together. During that time, they also lived with two other female Asian elephants and one African elephant named Alport. After Ginny died in 2004, Lucky was housed with Alport for about three years until she died in 2007. While looking for a companion elephant, Lucky was housed alone for about three years until the arrival of Boo, a 56 year-old female Asian elephant, in 2010. Boo was housed at the [Zoo] with Lucky for only three years because she died of cancer. Again, Lucky was housed alone for about three years until the

arrival of Nicole and Karen in early 2016. She is currently living with these two elephants.

Docket no. 53-2 at 6 (Dr. Isaza’s report summarizing Lucky’s social history) (citations omitted). In total, the 57 year-old Lucky has lived at the Zoo for 55 years. *Id.* She has lived with the companionship of another elephant there for approximately 50 years. *Id.*

Nicole and Karen—Lucky’s current companions—were circus elephants and are owned by Feld Entertainment, a company affiliated with the Ringling Brothers Circus. Docket no. 70-2 at 7. Nicole and Karen live at the Zoo pursuant to a loan agreement between the Zoo and Feld. *Id.* Either party can terminate the agreement for either or both of Nicole and Karen at any time after giving 30 days’ notice. *Id.* at 8. In the event that the loan agreement is terminated, Nicole and/or Karen would return to Feld’s Center for Elephant Conservation in Florida. *Id.* Though the Zoo views this arrangement as indefinite and does not believe that it or Feld have any intention of terminating the agreement, it is possible that Feld could terminate the agreement, leaving Lucky alone in her enclosure. Docket no. 70-2 at 8.

The parties dispute the effects of Lucky’s companionship (and lack thereof). The Zoo, in short, argues that “Plaintiffs put forth no competent evidence to prove that Lucky has been—or would be—‘harmed’ or ‘harassed’ by being the only elephant in the Zoo’s elephant enclosure.” Docket no. 53 at 11. As affirmative evidence of this point, the Zoo cites Dr. Friend’s report, which states that “there is no indication that [Lucky’s] welfare is poor.” Docket no. 53-10 at 7. Beyond this broad assertion, Dr. Friend explains that Lucky’s allegedly stereotypic behavior is in fact not stereotypic, and is in fact normal, anticipatory behavior. *Id.* at 6–9. Dr. Friend also asserts that, even if this behavior is “stereotypic” or somehow indicative of Lucky being in a “trance-like” state, “applied ethologists have warned that the simple occurrence of stereotypic behavior should never be used as the sole index of welfare.” *Id.* at 8. Dr. Friend acknowledged,

however, that captive Asian elephants can exhibit stereotypic behavior as a result of being separated from other elephants. Docket no. 70-4 at 9–10. He remembers this being the case with a male Asian elephant living in a Houston zoo whose stereotypic “rocking” was “probably stimulated by his being separated.” *Id.* Similarly, Dr. Izasa stated that living alone could hypothetically be a factor in the development of abnormal behavior, although some elephants may actually prefer to live alone. Docket no. 70-8 at 8–9.

Plaintiffs’ view of Lucky’s allegedly stereotypic behavior is discussed above—in short, they argue that Lucky’s behavior is stereotypic and is harmful. As this behavior relates to Lucky’s lack of companionship, Plaintiffs point to Blais’ report and deposition. Blais, describing the natural familial structure of an Asian elephant (which consists of at least 25 members), stated that “Lucky’s social life has been far from normal” due to her captivity at the Zoo. Docket no. 70-7 at 11; *see also id.* at 8 (“[Lucky’s] life in the zoo has not offered any semblance of normalcy for her species.”). Blais points out that the Zoo has not met AZA standards governing the social interactions of captive elephants, both by mixing Lucky (an Asian elephant) with Alport (an African elephant) and by failing to keep three total elephants in Lucky’s enclosure at all times. *Id.* at 11, n. 5. According to Blais, “[a]s a direct result of her under stimulating environment, Lucky does not generally exhibit [the] nuanced behaviors” that are indicative of a normal elephant’s extensive cognitive abilities. *Id.* at 9; *see also* Docket no. 70-6 at 11 (indicating that Lucky’s abnormal gait and stereotypical behavior are caused in part by her limited social opportunities). Blais believes that “[w]ith a change of environment, within the complex[,] stimulating and nurturing life of an expansive sanctuary, these stereotypic behavior patterns are generally reduced by up to 80%, and in some [elephants] they are eliminated entirely.” Docket no. 70-7 at 18. Despite his acknowledgement that all elephants in captivity

(with or without companionship) exhibit “some degree of stereotypical behavior,” Blais did not elaborate on the degree and severity of Lucky’s stereotypic behavior in relation to that of other captive elephants. Docket no. 61-2 at 62.

b. Size of Enclosure

As of October 27, 2016, Lucky’s enclosure was 16,883 square feet, or about .37 acres. Docket no. 53-11; Docket no. 70-7 at 9. The parties disagree as to whether this is adequate space for Lucky.

Dr. Isaza’s report states that “[t]here is a legitimate controversy about the amount of area needed for Asian elephants and how much an elephant needs to walk to maintain good health.” Docket no. 53-2 at 12. Clarifying what he meant by “legitimate controversy,” Dr. Isaza explained “[t]hat means among informed professionals, one person may have a — one opinion, the other person may have another opinion and they discuss them and therefore it’s both — both sides can be valid, so it’s a legitimate controversy.” Docket no. 70-8 at 14. Dr. Isaza believes that, based on his inspection of the enclosure and certain studies and standards, Lucky’s enclosure is adequately sized. Docket no. 53-2 at 10–12. Dr. Isaza believes there is no evidence to support Plaintiffs’ claim that Lucky’s enclosure is inadequately size and insinuates that Lucky living past the median age for a captive Asian elephant in the same enclosure means that the enclosure is adequately sized. *Id.* at 12.

According to Plaintiffs’ own complaint, AZA regulations recommend that an enclosure for three elephants should be a minimum of 16,200 square feet. Docket no. 1 at 18. Plaintiffs nonetheless argue that the 16,833 square foot enclosure is too small. Blais states that the AZA’s minimum standards “are deemed grossly insufficient by elephant experts around the globe.” Docket no. 70-7 at 9. With respect to Lucky’s particular enclosure, Blais notes that part of the

16,883 square foot measurement includes a holding area, which the elephants cannot always access; because he estimates this area blocks off about 1,000 feet from the elephants, subtracting it from the total 16,883 square feet of the enclosures drops it below AZA recommendations. *Id.* Blais attributes numerous health issues at least in part to Lucky's small enclosure, including arthritis, gait limitations, foot infections, and various mental health issues. Docket no. 70-6 at 10–11. In his report, Blais emphasizes that an undersized enclosure limits an elephant's social and mental well-being. Docket no. 70-7 at 15. In sum, Blais stated that “Lucky is ailing in captivity because of—substantially because of the limited space” of her enclosure. Docket no. 70-6 at 7.

Blais' opinions about the space required for elephants living in captivity go beyond Lucky. At his deposition, he stated that “I would be confident to say that the vast majority of captive elephants are ailing because of the confinement that is associated with zoological facilities.” Docket no. 61-2 at 21. Blais' report asserts that “[z]oo elephants are ailing, and zoos lack the space to adequately expand to meet these elephants' needs.” Docket no. 70-7 at 5–6. He stated that the inadequate amount of space provided by many zoos and elephant sanctuaries is “a significant reason for their ailments.” Docket no. 61-2 at 22. Though he was non-committal on stating an exact, ideal amount of space for a captive elephant—in part because differences in terrain give different amounts of space a different character—Blais acknowledged that in some cases even as much as 100 acres would not suffice. *Id.* at 22–23. Blais agreed with the following statement taken from the website of his elephant sanctuary: “The end result of the multimillion dollar expansions [of zoos' elephant enclosures] have little increased benefit for the elephants, it matters little if the space is 1/2 an acre or 3 acres, it is still woefully inadequate.” *Id.* at 23. Blais is aware of no zoos in North America that “provide substantial enough space to adequately care

for — adequately provide the psychological, social, and physical stimulation necessary for health and well-being.” Docket no. 61-2 at 34.

c. Shelter from the Sun

The Zoo states that throughout different times of the day, the many various structures in Lucky’s enclosure will cast shade in different directions. The Zoo identifies a pool, “two large shade tarps” in the center of the enclosure, “two wooden umbrella-shaped structures” in the center of the enclosure, and “a large rock wall” on the western side of the enclosure, all of which cast shade throughout the day and allow “Lucky [to walk] into shaded areas whenever she wants to.” Docket no. 53 at 12. These assertions are supported by descriptions of Lucky’s enclosure and pool, a survey, a Google Earth image, and video of Lucky in her enclosure. *See id.* at 12–13 (citing Docket no. 53-1 at 18–19, Docket no. 53-8 at 7–9, Docket no. 53-11, Docket no. 53-13 at 3). The Zoo also points out that its veterinarians have never diagnosed Lucky with sunburns or heat exhaustion. Docket no. 53-3 at 11–13. Dr. Isaza likewise found no evidence of sunburn or heat exhaustion in Lucky’s medical records or after conducting a physical examination. Docket no. 53-2 at 22.

Dr. Ensley’s report recites several instances of heat stress by quoting Lucky’s medical records. Docket no. 70-1 at 50–51 (“vet alert: began showing signs of heat stress at ~1:00 p.m.; did not get into barn until 3:00 p.m.”). Plaintiffs also point out that, aside from exposing Lucky to too much heat, the lack of shade in the enclosure contributes to certain eye problems. Dr. Ensley stated at his deposition that Lucky is “constantly standing out in the sun, which enhances her, in my opinion, eye condition, her keratitis.” Docket no. 70-3 at 17; *see also* Docket no. 70-1 at 8 (“Lucky’s medical record reveals that she suffers from chronic corneal opacities, which are further exacerbated by exposure to bright sunlight.”).

d. Substrate

The substrate refers to the ground's surface in Lucky's enclosure. The parties offer differing accounts of the appropriateness of the substrate, and whether it detrimentally affects Lucky's health. They also offer differing accounts of scientific literature that purports to analyze the San Antonio Zoo's substrate.

Plaintiffs' soil expert, Philip King, conducted geotechnical engineering testing and evaluated the near surface soil conditions of Lucky's enclosure. Docket no. 53-14. His report indicates that the outdoor substrate is composed of the following materials in different areas: grass (comparable to a grass lawn); five to six inches of sand (comparable to a volleyball court) over top of a harder base (comparable to an unpaved road or parking lot); eight inches of mulch (comparable to a playground) over top of crushed limestone; clay (ranging from medium to very dense); and concrete (in the elephants' pool). Docket no. 53-14 at 2–3. At his deposition, King estimated that about 60% enclosure was sand-covered, 30% clay, and 10% grass and mulch. Docket no. 53-15 at 3–4; Docket no. 61-8 at 2. According to King, with the exception of the concrete pool, the substrate was composed of “natural” materials. *Id.* at 3. Beyond the outdoor enclosure, the Zoo points out that the floor of Lucky's barn has a concrete foundation that is covered by a rubber matting that is commonly used in zoos. Docket no. 53-10 at 12. The elephant sanctuary in Tennessee—to which Plaintiffs seek to relocate Lucky—also uses a rubber-coated concrete floor in its barn. Docket no. 53-16 at 9.

From the Zoo's perspective, Dr. Friend's report states that “there is no evidence that the substrate at the San Antonio Zoo is unnaturally hard, nor is there any evidence that the substrate is causing any harm to Lucky. Further, I am aware of no scientific studies or literature that support Plaintiffs' theory that ‘hard substrate’ causes stereotypic behavior in elephants—or any

other animal for that matter. In any case, as explained above, Lucky does not exhibit spontaneous stereotypic behavior.” Docket no. 53-10 at 12. Dr. Isaza reaches similar conclusions, and notes that some scientific literature characterizes surfaces such as grass, sand, and rubber padding as “soft” surfaces. Docket no. 53-2 at 14. Dr. Isaza, like Dr. Friend, questions the effects of “hard” surfaces, including their contribution to Lucky’s arthritis, sleep deprivation, and inability to lie down. *Id.* at 14–18. Somewhat to the contrary, though, the Zoo’s veterinary director, Dr. Coke, acknowledged that soil density is important to the health of an elephant’s foot: “The harder the substrate has been — the hardness of the substrate, harder being more negatively impactful to the health of the foot of the elephant.” Docket no. 70-9 at 5.

For Plaintiffs, Dr. Ensley does not challenge the underlying results of King’s surface analysis, but characterizes some of the surfaces as hard. For example, Dr. Ensley states that the sand and grass surfaces in the enclosure are compacted. Docket no. 70-1 at 59. He explains that “[t]he lack of space causes the natural substrates to become hard packed because the elephants are walking over the same ground constantly.” *Id.* at 81. Plaintiffs also point out that the substrate has been altered since this lawsuit began, and the present substrate that has been analyzed by King and others is not the same as the one that Lucky lived on for many years, such that the Zoo does not account for the substrate’s past effects on Lucky. *See* Docket no. 70 at 27–28. The Zoo disputes this assertion. Docket no. 71 at 24–25.

Dr. Ensley cites scientific literature that supports a causal link between elephant health problems and substrate hardness. *See, e.g.*, Docket no. 70-1 at 16–17 (quoting a veterinary text, *The Elephant’s Foot*, to support the “general consensus that ‘lack of exercise, long hours, standing on hard substrates, and contamination resulting from standing in their own excreta are major contributors to elephant foot problems.’”). One of these sources is a study by Michele

Miller, Jennifer N. Hogan, and Cheryl L. Meehan entitled Housing and Demographic Risk Factors Impacting Foot and Musculoskeletal Health in African Elephants [*Loxodonta africana*] and Asian Elephants [*Elephas maximus*] in North American Zoos. Docket no. 59-9 [hereinafter Miller Study]. It characterizes “grass, sand, and rubber padding” as “soft” substrates. *Id.* at 13. This study found that “one of the main housing risk factors for increased foot and musculoskeletal abnormalities was time spent on hard surfaces.” *Id.* In reaching this conclusion, the Miller Study examined numerous elephant enclosures and discounted areas with mixed substrate types: “While many environments had multiple substrate types, our modeling process only included environments that had 100% coverage of hard or soft substrate.” *Id.* at 9–11; *see also id.* at 13 (“Since our objective was to measure the amount of time the elephants spent in contact with different substrate types, we therefore focused the analysis on substrate categories where we knew the environment consisted of 100% coverage of hard substrate or 100% coverage of soft substrate. This is a conservative approach, as time spent in environments with substrate coverage that was large, but less than 100%, was not captured in this analysis.”).

The Miller Study examined the San Antonio Zoo and Lucky’s enclosure at the time the study was conducted in 2012. Dr. Cheryl L. Meehan, one of the study’s co-authors, provided a declaration explaining the data collected from the San Antonio Zoo. Docket no. 71-5. Dr. Meehan said that when the Zoo was examined for the study, the majority of the substrate was sand or rubber padding.² *Id.* at 2. Dr. Meehan stated that because “[n]one of the enclosures at the San Antonio Zoo met the criterion for 100% hard substrate,” Lucky spent no time on “hard flooring,” which the study defined as “areas with 100% hard flooring.” *Id.* at 2. Therefore, based on the study’s analyses, “the elephants of the San Antonio Zoo would not be expected to have

² In particular, the corral was 100% sand; the main exhibit was 85% sand, 6% stone aggregate, 5% grass, 3% dirt, and 1% concrete; the parlor was 90% rubber padding and 10% concrete; and the three stalls were all 100% rubber padding. Docket no. 71-5 at 2.

increased risk of foot abnormalities or musculoskeletal disorders as a result of enclosure substrate.” *Id.*

The parties disagree over the application of the Miller Study. Because the majority of Lucky’s enclosure is “soft” substances—sand, grass, and rubber-coated concrete—the Zoo argues that the Miller Study forecloses the Plaintiffs’ argument that the substrate is harming Lucky. *See* Docket no. 52 at 18. Additionally, the Zoo cites Dr. Meehan’s specific insight into the San Antonio Zoo as establishing that the Miller Study supports their position. Docket no. 71 at 23–25. Plaintiffs, on the other hand, argue that simply categorizing any sand-covered surface as “soft” does not account for the compaction of sand-covered surfaces observed by Dr. Ensley. *See* Docket no. 70 at 27. By all accounts, though, the Miller Study supports a causal link between hard substrates and health problems.

e. Inspection Results

The Zoo is subject to inspections by an individual from Animal Plant Health Inspection Services (“APHIS”), a division of the United States Department of Agriculture (“USDA”). As summary judgment evidence, the Zoo produced its past three years’ worth of APHIS inspection reports. Docket no. 53-7. Inspections from November 2016, September 2016, June 2016, July 2015, March 2015, October 2014, July 2014, and April 2014 revealed no non-compliant items with respect to Lucky or any other Asian elephants.³ *Id.*; *see also* Docket no. 53-8 at 3 (“[T]he USDA has consistently inspected the zoo for years . . . and there’s never been a violation of the AWA found in relation to elephants at the San Antonio Zoo.”).

At his deposition, Blais was asked “[d]o you know or have you heard that there have been focused inspections by USDA at the San Antonio Zoo in connection with the elephant

³ The legal standards for compliance, which are based on the Animal Welfare Act, are discussed in detail later in this order.

enclosure, and USDA has not found violations when it's done those inspections?" Docket no. 61-2 at 64. He replied "I'm not aware that they've had focused inspections. It doesn't surprise me that there's no violations because the standards are grossly minimal." *Id.* Blais also acknowledged that he had not seen the Zoo doing anything that does not meet the minimal standards for normal animal husbandry practices. *Id.*

ANALYSIS

The procedural posture of this case, its several pending motions, and the complexity of its legal theories make the Court's task more difficult than simply determining whether there is a genuine issue of material fact. First, the Court will consider the Zoo's two pending *Daubert* motions in order to define the scope of permissible summary judgment evidence; because a court on summary judgment should only consider admissible evidence, if Plaintiffs' experts are disqualified by the Zoo's *Daubert* motions, it would be inappropriate to consider those experts at this stage. *See* FED. R. CIV. P. 56(c). Next, the Court will define Plaintiffs' claims and burden of proof, as this will set the proper context for determining whether the Zoo is entitled to summary judgment. After setting forth the nature of Plaintiffs' claims and burden of proof, along with the scope of permissible summary judgment evidence, the Court will determine whether there are any genuine issues of material fact.

I. The Zoo's *Daubert* Motions

The Zoo seeks to exclude testimony from Dr. Ensley and Blais. Docket no. 59 (Ensley Motion); Docket no. 61 (Blais Motion). The experts' substantive opinions are set forth in the background section above; this section will add factual details from each expert relating to the bases for their opinions. The court will first set forth the legal standards applicable to both motions, then address each motion in turn.

a. Standard of Review

Rule 702 of the Federal Rules of Evidence provides for the admissibility of expert testimony if it will “help the trier of fact to understand the evidence or to determine a fact in issue.” FED. R. EVID. 702. Additionally, the testimony must be “based on sufficient facts or data” and be “the product of reliable principles and methods” that the expert has “reliably applied” to the facts of the case at hand. *Id.*

As a preliminary matter, the Court must determine whether the proffered witness qualifies as an expert. “Before a district court may allow a witness to testify as an expert, it must be assured that the proffered witness is qualified to testify by virtue of his ‘knowledge, skill, experience, training, or education.’” *United States v. Cooks*, 589 F.3d 173, 179 (5th Cir. 2009) (quoting FED. R. EVID. 702). Generally, if there is some reasonable indication of qualifications, the court may admit the expert’s testimony, and then the expert’s qualifications become an issue for the trier of fact, rather than for the court. *Rushing v. Kansas City S. Ry. Co.*, 185 F.3d 496, 507 (5th Cir. 1999).

If the expert is qualified, then the Supreme Court’s decision in *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993) provides the analytical framework for determining the admissibility of expert testimony. *Daubert* requires the district courts to act as “gatekeepers” to ensure expert testimony meets Rule 702’s standards. *Id.* at 589. This role requires “that an expert’s testimony both rests on a reliable foundation and is relevant to the task at hand.” *Id.* at 597; *Pipitone v. Biomatrix, Inc.*, 288 F.3d 239, 244 (5th Cir. 2002) (“In short, expert testimony is admissible only if it is both relevant and reliable.”).

The reliability inquiry entails a preliminary assessment of whether the reasoning or methodology underlying the testimony is scientifically valid and can be properly applied to the

facts in issue. *Id.* at 592–93. In *Daubert*, the Supreme Court enumerated five nonexclusive factors to consider when assessing whether the methodology upon which an expert rests his opinion is reliable: (1) whether the expert’s theory can be or has been tested, (2) whether the theory has been subject to peer review and publication, (3) the known or potential rate of error of a technique or theory when applied, (4) the existence and maintenance of standards and controls, and (5) the degree to which the technique or theory has been generally accepted in the scientific community. *Id.* at 593–94; *Burleson v. Tex. Dep’t of Criminal Justice*, 393 F.3d 577, 584 (5th Cir. 2004).

The test for determining reliability is flexible and can adapt to the particular circumstances underlying the testimony at issue. *Kumho Tire Co., Ltd. v. Carmichael*, 526 U.S. 137, 138 (1999); *see also Black v. Food Lion, Inc.*, 171 F.3d 308, 311–12 (“In the vast majority of cases, the district court first should decide whether the factors mentioned in *Daubert* are appropriate.”). The point of this inquiry “is to make certain that an expert, whether basing testimony upon professional studies or personal experience, employs in the courtroom the same level of intellectual rigor that characterizes the practice of an expert in the relevant field.” *Kumho Tire*, 526 U.S. at 152.

In applying the *Daubert* test, the proponent of expert testimony has the burden to prove by a preponderance of the evidence that evidence is reliable (not that it is correct). *Moore v. Ashland Chem. Inc.*, 151 F.3d 269, 276 (5th Cir. 1998). Expert testimony must be reliable “at each and every step” because “[t]he reliability inquiry applies to all aspects of an expert’s testimony: the methodology, the facts underlying the expert’s opinion, the link between the facts and the conclusion, *et alia*.” *Knight v. Kirby Inland Marine Inc.*, 482 F.3d 347, 355 (5th Cir. 2007) (quoting *Heller v. Shaw Indus, Inc.*, 167 F.3d 146, 155 (3d Cir. 1999)). Meanwhile, “[t]he

expert's assurances that he has utilized generally accepted scientific methodology [are] insufficient." *Moore*, 151 F.3d at 276. Critically, however, the district court must "approach its task with proper deference to the jury's role as the arbiter of disputes between conflicting opinions." *United States v. 14.38 Acres of Land, More or Less Sit. in Leflore Cty., Miss.*, 80 F.3d 1074, 1077 (5th Cir. 1996) (internal quotations omitted).

Somewhat independently, "[t]he court may exclude relevant evidence if its probative value is substantially outweighed by a danger of one or more of the following: unfair prejudice, confusing the issues, misleading the jury, undue delay, wasting time, or needlessly presenting cumulative evidence." FED. R. EVID. 403.

b. Discussion

i. The Zoo's motion to exclude testimony from Dr. Philip Ensley is denied.

Dr. Ensley is a retired practicing zoo veterinarian of over 30 years who worked with Asian elephants (among many other species) while employed by the Zoological Society of San Diego. Docket no. 70-1 at 4. In reaching his opinions in this case, he reviewed video footage and photographs of Lucky, Lucky's medical and husbandry records, numerous depositions of Zoo staff and others, and King's expert report on Lucky's substrate, among other things. *Id.* at 9. Dr. Ensley spent about a day and a half observing Lucky at the Zoo, but he did not conduct his own, full-fledged veterinary examination of Lucky. Docket no. 59-3 at 36. His 82-page expert report spends about 30 pages reviewing scientific and veterinary literature and texts. *Id.* at 11–42. The Zoo does not challenge his qualifications.

1. Dr. Ensley’s opinions are relevant, even though they do not specifically conclude whether the Zoo’s animal husbandry practices are AWA compliant.

The Zoo argues that Dr. Ensley’s opinions should be excluded because “the legal issue in this case is whether the Zoo fails to meet the standards for animal husbandry required by the AWA” and Dr. Ensley’s opinions “fail[] to address AWA compliance issues at all.” Docket no. 59 (Ensley Motion); *see also* Docket no. 61 at 6 n. 11 (making a similar argument to exclude Blais’ opinions). This argument fails for two reasons.

First, whether the Zoo’s animal husbandry practices comply with the AWA is certainly one of the legal issues in this case, but it is not the *sole* legal issue involved because it relates only to whether the Zoo committed a “take” by “harassing” Lucky. As discussed below, whether the Zoo committed a take under the ESA by “harming” Lucky is a separate legal issue requiring a separate analysis of the facts, and is not at all dependent on AWA compliance. Thus, even assuming that Dr. Ensley’s opinions are irrelevant to whether the Zoo is AWA compliant, they are still relevant to whether the Zoo harms Lucky.

Second, Dr. Ensley’s opinions are relevant to AWA compliance because they could assist the finder of fact in determining whether the Zoo’s animal husbandry practices are AWA compliant even if his opinions do not expressly make such findings. The Zoo is correct that Dr. Ensley does not explicitly address AWA compliance, as Dr. Ensley does not purport to be expert in the AWA’s standards. Nevertheless, when Dr. Ensley says, for example, that Lucky’s wounds such as “pressure sores [and] decubital ulcers are a direct result of laying down on unyielding surfaces,” this opinion (assuming it is otherwise admissible) is relevant to certain AWA regulations regarding facilities. Docket no. 59-2 at 43 (Ensley Report); *see also* 9 C.F.R. § 3.125 (“The facility must be constructed of such material and of such strength as appropriate for the

animals involved.”). Though Dr. Ensley does not express ultimate legal conclusions on AWA compliance, his opinions would help a fact finder make that determination. In this respect, Dr. Ensley’s opinions (and Blais’ opinions)⁴ are relevant.

2. Dr. Ensley’s opinions are sufficiently reliable to be considered by the finder of fact.

The Zoo argues that Dr. Ensley’s opinions are unreliable and should be excluded under *Daubert* for four reasons: (1) he allegedly misstates the facts; (2) his “review of the literature” allegedly provides no basis for his opinions; (3) his reliance on the Miller Study, Docket no. 59-9, allegedly undercuts his causation opinions; and (4) there is allegedly too great an analytical gap between the facts and his opinions.

On the first point, the Zoo repeatedly attacks the substance of Dr. Ensley’s opinions regarding the severity of Lucky’s arthritis and foot problems. Contrary to Dr. Ensley’s opinions, the Zoo asserts that Lucky is not a “cripple” and her conditions are not “life-threatening.” The Zoo argues that Dr. Ensley is alone among Lucky’s vets and handlers in reaching a conclusion this extreme. Similarly, the Zoo also points to instances where Dr. Ensley’s opinions allegedly mischaracterize the surfaces in Lucky’s enclosure.⁵ But as the Zoo’s own veterinary expert, Dr. Isaza, stated at his deposition, “Welfare [of an elephant] is difficult to measure . . . Welfare is a

⁴ As noted, the Zoo makes the same argument with respect to Blais’ opinions. *See* Docket no. 61 at 6, n. 11. For the same reasons this argument fails as to Dr. Ensley, it fails as to Blais. When Blais opines, for example, that the Zoo’s 16,400 square foot enclosure for Lucky “offers limited psychological, emotional and physical stimulation and is known to be a root cause of many of the ailments that plague captive elephants,” this opinion (assuming it is otherwise admissible) is relevant to AWA compliance. Docket no. 61-2 at 8–9 (Blais Report); *see also* 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. Inadequate space may be indicated by evidence of malnutrition, poor condition, debility, stress, or abnormal behavior patterns.”).

⁵ The Zoo dedicates a large portion of its *Daubert* briefing to reciting evidence of the substrate’s “soft” character. *See, e.g.*, Docket no. 68 at 4–8. In doing so, the Zoo argues that Dr. Ensley is not a soil expert, and those who *are* soil experts have not opined as to the effects of the substrate on Lucky. Both of these points are well taken, but do not undermine the reliability of Dr. Ensley’s opinions. Nowhere does Dr. Ensley purport to be a soil expert, but he does purport to explain what effects the substrate has on Lucky based on his veterinary expertise and review of the literature. Dr. Isaza does the same. *See* Docket no. 53-2 at 14–18.

state of being, a subjective assessment and subjective to each person that makes that. *So what I call a healthy person, another person may say, no, that's not healthy. And similar with welfare.*" Docket no. 70-8 at 10 (emphasis added).

Though the Zoo argues that "Plaintiffs' response fails to point to any analysis (in the absence of a full veterinary exam) that Dr. Ensley conducted to provide a basis for his inflammatory opinion[s]," Dr. Ensley's report itself summarizes that analysis—Dr. Ensley provides a detailed recitation of his observations and how they lead to his conclusions. *See, e.g.,* Docket no. 70-1 at 59. On each of the points that the Zoo says Dr. Ensley "mischaracterizes," Dr. Ensley has examined much of the same evidence available to the Zoo and has simply reached a contrary conclusion on the basis of that evidence.⁶ The result is not an *unreliable* opinion but merely a *different* one, which, as Plaintiffs put it, "highlights the existence of questions of fact." Docket no. 64 at 11. In other words, what the Zoo characterizes as "false premises" of Dr. Ensley's opinions are in actuality contested questions of fact.

The Zoo's objections to Dr. Ensley's review of scientific literature and reliance on the Miller Study to support his causation theory are likewise without merit for purposes of the *Daubert* inquiry. The literature reviewed by Dr. Ensley (and cited in his report) provides a sound basis for his opinions.⁷ As to the Miller Study, the parties' disagreement over its application to

⁶ Dr. Ensley and Dr. Isaza rely on substantially similar evidence in reaching their conclusions. *Compare* Docket no. 70-1 at 9, 111–13 (Ensley report) *with* Docket no. 53-2 at 31–32 (Isaza report).

⁷ The following excerpts from Dr. Ensley's report are quoted portions of scientific literature that support the contention that certain of Lucky's living conditions can contribute to her health problems: "Wet conditions and inadequate exercise are predisposing factors [to certain foot problems]," Docket no. 70-1 at 12 (emphasis added); "Degenerative joint disease . . . is apparently more common in captive than in wild elephants. Debate concerning the cause of degenerative joint disease in captive elephants has centered on husbandry. Some researchers believe that elephants forced to live out their lives on hard surfaces such as bare concrete . . . most often develop degenerative joint disease," *id.* at 14; "Actions that might be taken to prevent degenerative joint disease in elephants include providing a dirt exercise yard, providing concrete floors with a warm heat system built into them, [and] padding the concrete surfaces on which elephants are house," *id.* at 15; "Major contributors to foot problems in elephants are lack of exercise, standing on hard substrates, and contamination resulting from standing in their own excrement," *id.*; "[Arthritic and rheumatoid disorders which affect the bones and joints of the extremities] are rarely reported in

the present case again exemplifies the underlying fact issues over whether Lucky's substrate is species appropriate. The Zoo is correct that the Miller Study categorizes "sand, grass and rubber padding" as "soft" and "concrete and stone aggregate" as "hard." Docket no. 59-9 at 9. But Lucky's substrate includes a mixture of materials (including clay) that were not mentioned by the Miller Study. Further, as Dr. Meehan's declaration seems to suggest, the data collected by the Miller Study from the San Antonio Zoo reveals only that Lucky spent no time on areas where the entire surface is composed of 100% hard materials. Docket no. 71-5 at 2. It is difficult to extrapolate this study to the present case to say that it renders Dr. Ensley's analysis unreliable when Lucky's substrate is indisputably composed of a combination of various hard and soft materials. *See* Miller Study, Docket no. 59-9 at 5 ("We wanted to calculate the time that elephants spent in contact with each substrate type [as between hard or soft] so to confirm this we determined which environments were comprised of 100% hard and 100% soft substrate and calculated the percent time each elephant spent in environments that met this criteria from detailed housing time budgets."). As a result, these criticisms of the application of certain scientific literature to Dr. Ensley's opinions go to the weight, not admissibility, of Dr. Ensley's testimony, and are best left for full development on cross examination.

Finally, there is not an "analytical gap" between the facts and Dr. Ensley's opinions that renders them unreliable. Though Dr. Ensley did not perform his own veterinary exam, he bases

wild elephants who generally walk a lot," *id.* at 16; "[Foot abscesses] are caused by internal blood supply disruption, which is a sign or symptom of the multitude of problems associated with keeping elephants in captivity. We feel that the elephant is not genetically programmed to withstand the constant gravitational pressure of living on hard surfaces . . . Elephants certainly didn't evolve to stand motionless for long periods of time," *id.* at 20; "Abnormal Behaviors- Repetitive or 'stereotypical' behaviors can have the same effect as poor conformation on an elephant's feet," *id.* at 21; "Mechanical trauma due to repetitive loading stress on hard surfaces is probably a major factor in the development of joint disease," *id.* at 23; *see generally* Docket no. 59-9 (Miller Study). This list is by no means exhaustive of the references in Dr. Ensley's report.

With this survey of scientific support in mind, the present case is distinct from *Moore v. Ashland Chem. Inc.*, in which the Fifth Circuit affirmed a district court's exclusion of an expert who had "*no scientific support* for his general theory." 151 F.3d 269, 278-79 (5th Cir. 1998) (emphasis added); *see also Gen. Elec. Co. v. Joiner*, 522 U.S. 136, 144-45 (1997) (affirming district court's exclusion of expert testimony that was based on four studies, two of which were factually distinct and two of which did not support the causal link suggested by the expert).

his opinions (including his causation opinion) on his day-and-a-half long observation of Lucky and her living conditions, along with the numerous examples of scientific literature discussed above. Dr. Ensley’s citations reveal a relative scientific consensus about the potential causes of many of Lucky’s medical issues. *See supra* footnote 7. And though Dr. Ensley does not attribute much significance to Lucky’s age in causing many of her health problems, he at least acknowledges that it can play a role, which is consistent with the methodology and results of the Miller Study and the Zoo’s own veterinary expert. *See* Docket no. 59-3 (Dr. Ensley stating at his deposition that “[a]ge can be a factor if an animal is spending its life on improper — what we consider today to be improper substrate or hardened or unyielding substrate . . . There are many factors that contribute to arthritis.”); Docket no. 59-9 at 14 (Miller Study indicating that age along with several other factors contribute to foot problems and degenerative processes of the musculoskeletal system in elephants); Docket no. 70-8 at 16–17 (Dr. Isaza agreeing at his deposition that there is a recognized difference of opinion among elephant experts and veterinarians regarding the causes of foot problems and arthritis in captive elephants).⁸

3. The prejudicial effect of Dr. Ensley’s opinions does not substantially outweigh their probative value under FED. R. EVID. 403.

Last, the Zoo presents two arguments for excluding Dr. Ensley’s opinions under Federal Rule of Evidence 403, which permits a court to exclude evidence where “its probative value is substantially outweighed by a danger of . . . unfair prejudice,” among other things. *See Viterbo v. Dow Chem. Co.*, 826 F.2d 420, 422 (5th Cir. 1987) (“[An expert opinion’s] lack of reliable support may render it more prejudicial than probative, making it inadmissible under FED. R.

⁸ For this reason, the present case is distinct from another aspect of *Moore*, which involved the discretion afforded to a district court in finding an expert’s testimony unreliable for failing to consider alternative explanations. 151 F.3d at 279 (“The district court was also entitled to conclude that [the plaintiff’s] personal habits and medical history made [the expert’s] theory even more unreliable” where the expert did not consider them).

EVID. 403.”). Under Rule 403, the Zoo first argues that Dr. Ensley’s opinions are irrelevant because they do not speak to AWA compliance, but for the reasons discussed above, Dr. Ensley’s opinions are relevant. Second, the Zoo argues that the Court should exclude Dr. Ensley’s opinions under Rule 403 because “Ensley presents his opinions as if they were facts, but they are contrary to the undisputed facts.” Docket no. 59 at 14. Specifically, the Zoo objects to Dr. Ensley’s statements that Lucky is a “cripple” and suffers from life-threatening health issues as “inflammatory rhetoric, unsupported by objective facts, render[ing] his opinion unfairly prejudicial because it confuses the issues, misleads the fact finder, and offers no probative value.” *Id.* (internal quotations omitted). This argument merely restates the Zoo’s previous argument that Dr. Ensley’s opinions are unreliable because they misstate facts, and fails for the same reason—namely, that Dr. Ensley’s purported “false premises” are simply different conclusions based on different experts’ analyses of the same underlying evidence.

For the foregoing reasons, the Zoo’s motion to exclude the opinions of Dr. Ensley is denied.

ii. The Zoo’s motion to exclude testimony from Scott Blais is granted in part and denied in part.

Blais has “worked with elephants for more than 25 years,” including in his recent role as founder and CEO of the nonprofit Global Sanctuary for Elephants. Docket no. 70-7 at 2. In short, he has worked with captive elephants in a variety of capacities, including training them and conducting behavioral evaluations. *Id.* at 3. His work with captive elephants has been featured in a variety of news outlets and publications (including scientific, ethical, and historical pieces, among others). *Id.* at 5. In forming his opinions on Lucky, Blais has been monitoring Lucky’s behavioral and physical health since 2010. *Id.* at 7. He has reviewed photos, medical documents, depositions from the Zoo’s staff, a plan of Lucky’s enclosure (including dimensions), “more than

200 hours of video,” and “direct inquiries with individuals who have observed Lucky’s behavior.” *Id.* at 7–8. Outside of challenges to certain aspects of his opinions that the Zoo characterizes as veterinary opinions, there are no challenges to his general qualifications.

The Zoo makes several arguments to exclude Blais’ opinions. First, it argues that Blais’ opinions are not relevant because they apply to all zoo elephants and have no probative value relating to Lucky and because Blais does not offer ultimate conclusions as to the Zoo’s compliance with AWA standards. Second, the Zoo argues that Blais’ opinions lack a sufficiently reliable methodology. Finally, the Zoo argues that Blais is not qualified to give expert veterinary testimony because he is not a veterinarian.

1. Blais’ opinions are relevant even though they discuss the size of enclosures at other zoos.⁹

The Zoo characterizes Plaintiffs’ main claim with respect to the size of Lucky’s enclosure as an objection to the Zoo’s non-compliance with the AZA recommendation of a 16,200 square foot enclosure. The Zoo then attacks Blais’ broad conclusions regarding the inadequacy of zoo elephant enclosures that exceed this recommendation—“Mr. Blais’ opinion is that it matters not whether a zoo meets the AZA’s size recommendation, because all zoo elephants will continue to suffer the same ailments unless they are given access to ‘more than 100 acres.’” Docket no. 61 at 5–6 (quoting Blais’ deposition); *see also* Docket no. 69 at 3 (“Mr. Blais irrelevantly opines that even if the Zoo were to exceed the AZA size recommendation of 16,200 square feet *hundreds* of time over, Lucky would still experience the same harm from lack of adequate space.” (emphasis original, footnote omitted)).

⁹ As discussed above, the Zoo’s argument that Blais’ opinions are irrelevant because they do not address AWA compliance fails. *See supra* footnote 4 and accompanying text. This section addresses only the Zoo’s additional argument for why Blais’ opinions are irrelevant.

This view of Plaintiffs' complaint is far too narrow. Plaintiffs' complaint invokes AZA size minimums, which Blais admits would be inadequate even if the Zoo minimally complied with them. But Plaintiffs do not seek simply to enforce AZA requirements. Instead, Plaintiffs' legal theory is that the small size of Lucky's enclosure "harms" or "harasses" her, and therefore, that the Zoo has violated the ESA by committing a "take." This theory does not necessarily depend on AZA compliance or non-compliance, though Plaintiffs do indeed reference AZA requirements as a relevant data point in assessing the size of Lucky's enclosure. Thus, while Blais' opinions may be broad or even ideologically driven, the Zoo misses the mark in saying that they are *irrelevant* to whether Lucky's enclosure is adequately sized. Instead, an assessment of the size of Lucky's enclosure, how it affects her, and whether it is appropriate is precisely the determination that must be made by the finder of fact, and Blais' opinions speak precisely to these questions.

Further, to the extent that the Zoo objects to Blais' testimony as irrelevant because it apply to other zoos' elephant enclosures and not to Lucky's in particular, the Zoo mischaracterizes Blais' opinions. Though he sets forth some broad opinions about the size of elephant enclosures in general, Blais also makes specific conclusions as to Lucky's enclosure. For example, the Zoo argues that Blais "opines that Lucky—just like *all* other elephants in zoos—is being 'detrimentally impacted' by lack of space." Docket no. 61 at 5 (emphasis original) (quoting Docket no. 70-7 at 10). Yet this portion of Blais' report is specifically stating that *Lucky* is being "detrimentally impacted" by being unable to walk with full strides for long distances due to the size of her enclosure. Docket no. 70-7 at 10. Additionally, much of Blais' broad and allegedly irrelevant testimony was procured *by the Zoo* at its deposition of Blais. For example, at Blais' deposition, the Zoo read a sentence from the website of Blais' elephant

sanctuary and asked him whether he agreed with it, even though Blais' expert report does not contain that sentence. Docket no. 61-2 at 23. Despite being the party who asked the question, the Zoo now argues that the answer should be excluded as irrelevant. For these reasons, Blais' opinions are relevant.

2. Blais' opinions are excluded in part because they are unreliable.

The parties' arguments over Blais' reliability and methodology boil down to how much leniency from the typical *Daubert* factors is appropriate. The Zoo argues for strict adherence to the traditional *Daubert* inquiry, adding that even if some deviation is appropriate, neither Blais nor Plaintiffs "have even attempted to articulate a methodology . . . to evaluate, much less a methodology that shows any signs of reliability." Docket no. 69 at 10. Plaintiffs, on the other hand, rely on Blais' professional experience and personal observations, along with his reliance on "generally accepted theories in the elephant community" to argue that Blais' testimony should be permitted.

The five factors enumerated by *Daubert* for determining whether an expert's testimony is sufficiently reliable are: (1) whether the expert's theory can be or has been tested, (2) whether the theory has been subject to peer review and publication, (3) the known or potential rate of error of a technique or theory when applied, (4) the existence and maintenance of standards and controls, and (5) the degree to which the technique or theory has been generally accepted in the scientific community. 509 U.S. at 593–94. Importantly, the first step in this "flexible" test is often determining "whether the factors mentioned in *Daubert* are appropriate." *Kumho Tire*, 526 U.S. at 138; *Food Lion*, 171 F.3d at 311–12. Nevertheless, district courts are not required "to reinvent the wheel every time expert testimony is offered in court." *Food Lion*, 171 F.3d at 311.

“‘[N]o one denies that an expert might draw a conclusion from a set of observations based on extensive and specialized experience.’ Accordingly, [the Fifth Circuit] has upheld the admission of expert testimony where it was based on the expert’s specialized knowledge, training, experience, and first-hand observation while supported by solid evidence in the scientific community.” *Pipitone v. Biomatrix, Inc.*, 288 F.3d 239, 247 (5th Cir. 2002) (quoting *Kumho Tire*, 526 U.S. at 156). On this point, *St. Martin v. Mobil Exploration & Producing U.S. Inc.* illustrates the application of “alternative indices” of reliability where an expert bases his opinions primarily on personal observation. 224 F.3d 402, 406–07 (5th Cir. 2000). There, a group of private landowners sued a group of oil companies, alleging that the oil companies damaged a marsh ecosystem on their properties. *Id.* at 403. The landowners succeeded at a bench trial, and on appeal, the oil companies argued that the district court erred by refusing to exclude the landowners’ expert who testified to the cause of the damage to the marsh. *Id.* at 406. The Fifth Circuit affirmed, applying a version of the five *Daubert* factors that Plaintiffs here urge this Court to apply. *Id.* at 406–07. Recognizing that “[e]ach marsh will have different forces acting upon it, depending upon its specific location and its surroundings,” the Fifth Circuit did not rigidly apply the *Daubert* factors because “a court could not rationally expect that a marshland expert would have published a peer-reviewed paper on each possible permutation of factors or each damaged area of marsh.” *Id.* at 406. The court recounted in detail the expert’s qualifications and site visits, finding ultimately that “the district court properly considered alternative indices of his testimony’s reliability and relevance.” *Id.* at 407.

This rationale provides a sound basis for permitting Blais’ testimony in one respect but excluding it as to all others. This Court could not rationally expect that an elephant expert would have published a peer-reviewed study on Lucky in particular, along with each of her individual

ailments. Thus, when Blais testifies as to Lucky’s behaviors based on his own observations of those behaviors, his professional experience in working with elephants and his extensive personal observations render his opinions reliable. Similarly, Blais’ opinion that Lucky’s stride is shortened is sufficiently reliable based on Blais’ experience working with similar animals and his review of video footage of Lucky walking.¹⁰ These opinions are like those of the marsh expert in *St. Martin*, who made detailed observations of specific features of the marsh and interpreted his observations based on his own experience to reach his conclusions. Thus, Blais’ descriptive opinions regarding Lucky’s behavior and activity are admissible because these opinions—related specifically to Lucky and Lucky only—could otherwise never be deemed reliable under the peer-review-required rigidity of a typical *Daubert* inquiry and because Blais has sufficient experience and observations to make them reliable.¹¹ To the extent that the Zoo questions or disagrees with Blais’ observations, the Zoo is free to develop these issues on cross examination. *See* Docket no. 61 at 12–13.

It is one thing for Blais to say that Lucky’s behavior is stereotypic or that she walks with a shortened stride, as these are the types of observations that evade the typical *Daubert* inquiry but are captured by Blais’ unique experience. It is quite another for him to opine as to what *causes* these behaviors and conditions, and *St. Martin* is distinct in this regard.¹² Scientific

¹⁰ The Zoo objects to Blais’ testimony regarding a shortened stride because Blais did not look for changes in Lucky’s stride length over a period of time, which Blais himself admitted would be a reliable and empirical way to assess an elephant’s stride length. Docket no. 61 at 9–10 (citing Docket no. 61-2 at 36). But Blais also made clear that this method would be best only to determine whether an elephant’s stride has *changed* over time, not whether it is or always has been shortened compared to that of an ideal, healthy elephant.

¹¹ Notably, the testimony of Dr. Friend, the Zoo’s expert and a professor of animal science, is based in large part on examining many of the same sources and videos. *See, e.g.*, Docket no. 53-10 at 7 (opining that a video of Lucky reviewed by Blais “clearly shows that Lucky’s rocking and excitement is anticipatory.”).

¹² Though *St. Martin* addressed the admissibility of a marsh expert’s *causation* opinion, the Fifth Circuit’s opinion could hardly be read as exempting all causation evidence from the typical *Daubert* inquiry. Indeed, the court noted the particular idiosyncrasies of marsh loss causation, which made peer review of any particular marsh loss difficult: “All experts agreed at trial that marsh deterioration can be caused by a complex and synergistic interaction

literature describing the causes of various elephant ailments exists in droves and is not dependent on the particular nuance of Lucky alone. Indeed, the Zoo points out several examples. Docket no. 53-2 at 11. Dr. Ensley does the same. *See supra* footnote 7. Blais does not. *See generally* Docket no. 70-7; Docket no. 61-2 at 33 (Blais testifying at his deposition that he knows of studies indicating that limited space is a cause of ailments in elephants but failing to identify any such studies). Though there are unquestionably situations where an expert can rely on his experience and personal observations in forming a reliable opinion, this is not the case where he does so to the exclusion of a vast world of scientific literature.

Blais' methodology is his reliance on "commonly accepted fact" or things that "[are] known." Docket no. 61-2 at 33. When asked at his deposition to identify sources, authorities, articles, or studies that support these conclusions, Blais was unable to recall any, noting only that these sources exist. *Id.* He added that the reports that he reviewed are noted in his expert report, but a review of his report reveals no specific citations to outside authorities supporting his causation opinions. *Id.*; *see generally* Docket no. 70-7. Because "[t]he expert's assurances that he has utilized generally accepted scientific methodology [are] insufficient," Blais' reliance on unidentified "commonly accepted fact" does not render his causation opinion reliable. *Moore*, 151 F.3d 269, 276 (5th Cir. 1998). For this reason, Blais' causation opinions are excluded.

3. Blais is not subject to exclusion for giving unqualified veterinary testimony.

The Zoo last argues that Blais' opinions should be excluded because Blais is not qualified to give expert veterinary testimony. Having already excluded Blais' causation opinions as unreliable, the only issues remaining are Blais' opinions regarding Lucky's abbreviated stride

among several different factors. The precise factors and their relative importance will vary with individual areas of marsh loss." *St. Martin*, 224 F.3d at 406 n. 4.

and her stereotypic behavior. Docket no. 61 at 13. The parties do not dispute that Blais is not a veterinarian.

Though Blais has neither a medical degree (nor a degree of any kind), his professional experience and training with elephants is extensive. *See* Docket no. 70-7 at 1–6, 24–25. Based on his experience in training, observing, and working with elephants, he is qualified to provide sufficiently reliable testimony based on his observations of Lucky’s behavior. His lack of a degree goes to the weight, not admissibility, of his testimony.

In sum, Blais’ testimony is admissible to the extent that he merely observes the existence of certain conditions in Lucky based on his experience working with animals. His testimony is excluded as unreliable to the extent that he attributes causal significance to these conditions.

II. Plaintiffs’ Claims and Burden of Proof

Having analyzed the Zoo’s motions to exclude to determine the scope of summary judgment evidence, the Court now turns to Plaintiffs’ burden of proof on its claims so that it may then properly analyze these claims in light of the evidence. Determining Plaintiffs’ burden of proof and the nature of their claims turns on the relationship between the ESA and the AWA. An analysis of this relationship, along with the relevant statutory and regulatory definitions, implicates many of the arguments that the Zoo asserts in its motion for summary judgment.

The Court finds that the Zoo may violate the ESA by harassing or harming Lucky as these terms are defined by Fish and Wildlife Service (“FWS”) regulations that do not include a “gravely threatening” qualifier that the Zoo urges the Court to apply. Furthermore, though the Zoo will avoid liability for harassing Lucky where its animal husbandry practices comply with the AWA, the Zoo must first in fact comply with the AWA, and the Plaintiffs carry the burden of

proving the Zoo's non-compliance. Finally, to the extent that the Zoo complies with the AWA, this compliance precludes ESA liability for *harassing* Lucky, but not for *harming* her.

a. The Statutory and Regulatory Scheme of the ESA and AWA

i. The ESA

The stated purposes of the ESA are “to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved [and] to provide a program for the conservation of such endangered species and threatened species.” 16 U.S.C. § 1531(b). The ESA contains a citizen-suit provision, allowing any person to commence a civil suit on his own behalf to enjoin any person who is alleged to be in violation of the Act. 16 U.S.C. § 1540(g)(1). Under Section 9 of the ESA (codified at 16 U.S.C. § 1538), “it is unlawful for any person subject to the jurisdiction of the United States *to . . . take* any [endangered species of fish or wildlife listed pursuant to section 1533 of this title] within the United States or the territorial sea of the United States.” 16 U.S.C. § 1538(a)(1)(B) (emphasis added).¹³

“The term ‘take’ means to *harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.*” 16 U.S.C. § 1532(19) (emphasis added). Interpreting the legislative history behind use of the term “take,” the Supreme Court has recognized that

Congress intended ‘take’ to apply broadly to cover indirect as well as purposeful actions. The Senate Report stressed that “[t]ake’ is defined . . . in the broadest possible manner to include every conceivable way in which a person can ‘take’ or attempt to ‘take’ any fish or wildlife.” S. Rep. No. 93–307, p. 7 (1973). U.S. Code Cong. & Admin. News 1973, pp. 2989, 2995. The House Report stated that “the broadest possible terms” were used to define restrictions on takings. H.R. Rep. No. 93–412, p. 15 (1973). The House Report underscored the breadth of the

¹³ The ESA also makes it unlawful to “*possess . . . any such species taken in violation of [§ 1538(a)(1)(B)].*” 16 U.S.C. § 1538(a)(1)(D). The parties argue over whether the Zoo violates the ESA by “possess[ing]” Lucky. Legally, though, this question is irrelevant, and the Court need not decide it. Plaintiff’s main theory of liability is that the Zoo committed an ESA-prohibited “take,” as defined in the statute. If the Zoo has, it may also be unlawfully “possess[ing]” Lucky, but it will already be liable for an unlawful “take” in the first place. If it has not committed a “take,” it has not violated the ESA’s anti-possession provision.

“take” definition by noting that it included “harassment, *whether intentional or not.*” *Id.* at 11 (emphasis added). The Report explained that the definition “would allow, for example, the Secretary to regulate or prohibit the activities of birdwatchers where the effect of those activities might disturb the birds and make it difficult for them to hatch or raise their young.” *Ibid.* These comments . . . support the Secretary’s interpretation that the term “take” in § 9 reached far more than the deliberate actions of hunters and trappers.

Babbitt v. Sweet Home Chapter of Cmty. for a Great Or., 515 U.S. 687, 704–05 (1995) (some alterations added).

Regulations promulgated by the FWS under the ESA define “harm” (as used in the definition of “take”) as “an act which actually kills or injures wildlife. Such act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.”

50 C.F.R. § 17.3. This same regulation defines “harass” (again, as used in the definition of “take”) as

an intentional or negligent act or omission which creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, or sheltering. *This definition, when applied to captive wildlife, does not include generally accepted:*

- (1) *Animal husbandry practices that meet or exceed the minimum standards for facilities and care under the [AWA],*
- (2) Breeding procedures, or
- (3) Provisions of veterinary care for confining, tranquilizing, or anesthetizing, when such practices, procedures, or provisions are not likely to result in injury to the wildlife.

Id. (emphasis added). As emphasized, the exclusionary language in the definition of “harass” applies only to “captive wildlife,” like Lucky. *See id.*

ii. The AWA

The AWA is a separate piece of legislation from the ESA, but as noted in the definition of “harass,” there is some overlap. The two relevant purposes of the AWA are “(1) 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; [and] (2) to assure the humane treatment of animals during transportation in commerce.” 7 U.S.C. § 2131. The AWA, unlike the ESA, does not have a citizen suit provision. Congress charged the USDA with enforcing the AWA, and in particular, issuing licenses to dealers and exhibitors of captive animals and setting standards for proper care and treatment of these animals. 7 U.S.C. § 2133, 2146. APHIS is a wing of the USDA that is tasked with carrying out many of these administrative, regulatory, and enforcement functions. *See, e.g.*, 9 C.F.R. § 2.3 (“Each applicant for an initial license must be inspected by APHIS and demonstrate compliance with the regulations and standards . . . before APHIS will issue a license.”).

Beyond enforcement, regulations promulgated under the AWA also set minimum, substantive standards for facilities and care. These regulations, separated by types of animals, govern a wide variety of aspects of animal captivity, including facilities and operating standards, animal health and husbandry standards, and transportation standards. *E.g.*, 9 C.F.R. § 3.129–132 (defining “Specifications for the Humane Handling, Care, Treatment, and Transportation of Warmblooded Animals Other than Dogs, Cats, Rabbits, Hamsters, Guinea Pigs, Nonhuman Primates, and Marine Mammals.”).

With reference to this statutory and regulatory backdrop, the Zoo’s argument is essentially that it has complied with the AWA in full, meaning that it cannot have “harassed” Lucky under the definition of “take” in the ESA. According to the Zoo, “[an] ESA ‘take’ can

occur with respect to an animal *in captivity* only through a violation of the AWA,” and “generally accepted [a]nimal husbandry practices that meet or exceed the minimum standards for facilities and care under the [AWA]” are not harassment under the ESA. Docket no. 53 at 20 (emphasis added). Because APHIS has never found violations of these standards with respect to the Zoo’s treatment of Lucky, the Zoo argues that it has not harassed Lucky. Additionally, the Zoo argues that because its AWA compliance exempts it from “take” liability for *harassing* Lucky, it is likewise exempt from liability for *harming* her.

iii. The current definition of “harass” according to the FWS

The FWS’s current definition of “harass,” which now includes an exception for generally accepted, AWA compliant animal husbandry practices, was created in 1998, and substantial guidance can be gleaned from FWS interpretations and history:

The purpose of amending the [FWS’] definition of “harass” is to exclude proper animal husbandry practices that are not likely to result in injury from the prohibition against “take.” Since captive animals can be subjected to improper husbandry as well as to harm and other taking activities, the [FWS] considers it prudent to maintain such protections, consistent with Congressional intent.

It is true that the [ESA] applies to all specimens that comprise a “species” (as defined in the [ESA]) that has been listed as endangered or threatened, and in general does not distinguish between wild and captive specimens thereof. However, the definition of “take” in the [ESA] clearly applies to individual specimens or groups of specimens, and the captive or non-captive status of a particular specimen is a significant factor in determining whether particular actions would “harass” that specimen or whether such actions would “enhance the propagation or survival” of the species. The [FWS] believes that ample authority is provided by the [ESA] to adopt the regulatory amendments set out in this final rule as a proper interpretation of the statutory provisions of the [ESA].

To decide otherwise would place those persons holding captive specimens of a listed species in an untenable position. If providing for the maintenance and veterinary care of a live animal were considered to be “harassment,” those persons holding such specimens in captivity would be forced to obtain a permit or give up possession since any failure to provide proper care and maintenance would be an unlawful “taking.” Since Congress chose not to prohibit the mere possession of lawfully-taken listed species in Section 9(a)(1) of the Act, the

Service believes that congressional intent supports the proposition that measures necessary for the proper care and maintenance of listed wildlife in captivity do not constitute “harassment” or “taking.”

Captive-bred Wildlife Regulation, 63 Fed. Reg. 48634-02, 1998 WL 597499 (Sept. 11, 1998).

Based on this logic, the FWS added the AWA compliance exclusion to the definition of harass.

The definition of harm contains no similar exclusion.

b. The Court’s previous order denying the Zoo’s motion to dismiss

In a previous order, the Court denied the Zoo’s motion to dismiss based on similar theories. *See* Docket no. 16. The Court reasoned that Plaintiffs’ allegations regarding Lucky’s solitude and other conditions of her enclosure “could constitute ‘harm.’” *Id.* at 4 (citing 50 C.F.R. § 17.3) (alterations original).

In addition, the Court addressed Plaintiffs’ allegations of harassment, and, by reference to the regulatory definition of that term, concluded that the ESA applies to and protects captive wildlife:

The Zoo’s argument that captive wildlife is not protected under the ESA is also undercut by the language in the ESA that defines “harass.” Specifically, excluded from the definition is animal husbandry practices that meet or exceed the minimum standards for facilities and care under the [AWA]. Accordingly, Congress meant to apply captive wildlife to the protections under the ESA, but exempted certain acceptable animal husbandry practices . . . This ruling, of course, is no ruling on the merits of whether acceptable animal husbandry practices have been met.

Id. at 4–5. By this order, the Court rejected one argument that the Zoo now re-asserts in its motion for summary judgment—that the AWA alone, rather than the ESA, governs the treatment of animals in captivity, and the AWA’s lack of a citizen suit provision therefore forecloses Plaintiffs’ ability to bring their claims.

c. Subsequent case law

i. *Kuehl v. Sellner*

Since the Court denied the Zoo's motion to dismiss in January 2016, at least three other federal district courts have issued relevant opinions on the relationship between the ESA and the AWA where plaintiffs allege a Section 9 violation by committing a harm- or harassment-based "take" of a protected species. The first was *Kuehl v. Sellner*, in which the U.S District Court for the Northern District of Iowa found, after a bench trial, that defendants violated the ESA's anti-taking provision by harassing and harming endangered lemurs and tigers held in captivity in a zoo. 161 F. Supp. 3d 678, 710–18 (N.D. Iowa 2016).

The court conducted a detailed factual analysis, making numerous findings of harassment and harm based on tigers' and lemurs' veterinary care and living conditions. As the Zoo here correctly points out, many of the court's findings were specifically tied to AWA violations previously identified by APHIS. *E.g., id.* at 712 (noting an APHIS' officer's findings of uncleanliness in lemur confinements and ultimately concluding that for these and other reasons, the unsanitary conditions constituted "harassment"). Most relevant here, though, is the court's finding that the zoo "harassed" its lemurs—highly cognitive and social animals—by forcing them to live in social isolation, which disrupted their behavioral patterns and therefore constituted a "take" in violation of the ESA. *Id.* at 710–11. Importantly, of all the previous AWA violations identified by APHIS and referenced by the court, none were tied to this social isolation-based form of harassment, and the court made this finding almost exclusively in reliance on the testimony of an expert in the behavior and care of lemurs.¹⁴ *Id.* Ultimately, the

¹⁴ The Zoo here points out that "the USDA cited the *Kuehl* defendants for hundreds of AWA violations, including many violations specifically in connection with the lemurs. 161 F. Supp. 3d at 696–701 (quoting USDA reports that, among other violations specific to lemurs, found that lemur enclosure 'did not facilitate good husbandry

court granted the plaintiffs declaratory and injunctive relief “[t]o prevent further ‘taking’ in violation of the ESA” based on numerous findings of “harm” and “harassment” to the zoo’s lemurs and tigers. *Id.* at 718.

Kuehl provides several takeaways. First, the court found that the zoo violated the ESA by harassing its lemurs through social isolation, even though APHIS had previously found no corresponding violations of the AWA based on this conduct. Second, previous regulatory findings of AWA violations were evidence of harassment- and harm-based takings with respect to other conditions, such as cleanliness of living conditions. Synthesizing these two points and the broader factual analysis, the court conducted its own, independent analysis of the evidence presented—which included APHIS’ findings of previous violations of the AWA—to determine whether the zoo’s animal husbandry practices met AWA standards. Finally, the court conducted separate analyses of whether the zoo’s conduct “harmed” the animals and whether it “harassed” them.

ii. *Hill v. Coggins*

The next case to address a similar issue was *Hill v. Coggins*, 2:13-CV-00047-MR-DLH, 2016 WL 1251190 (W.D.N.C. Mar. 30, 2016). There, the court found after a bench trial that the plaintiffs failed to carry their burden of showing that the defendants’ treatment of four threatened grizzly bears held in captivity constituted “harm” as defined in the ESA and accompanying regulations. *Hill*, 2016 WL 1251190 at *12. Further, the court made a similar but separate

practices,’ ‘two weeks of animal waste’ was found in lemur enclosure, and cobwebs and ‘build-up of dark brown/black grime’ was found).” Docket no. 71 at 7. This characterization is generally accurate.

Nevertheless, this reading of the *Kuehl* court’s findings misinterprets Plaintiffs’ correct reading of the case and inappropriately generalizes what the court actually found. Specifically as to social isolation of lemurs at the zoo in *Kuehl*, the USDA (through APHIS) did not previously find any violations of the AWA. The court did not rely on any of the findings, testimony, or other evidence supplied by any APHIS veterinary medical officers in assessing whether the zoo harassed its lemurs by socially isolating them. Relying almost exclusively on expert testimony of a lemur expert at trial, the court found that the zoo, by socially isolating its lemurs, did not satisfy the AWA’s generally accepted animal husbandry standards and therefore harassed its lemurs. None of the AWA violations in *Kuehl*, collected in the San Antonio Zoo’s briefing, are related to this specific finding by the *Kuehl* court.

finding with respect to the plaintiffs’ allegation that the defendants harassed the bears. *Id.* at *12–13. In the course of making the “harassment” finding, the court analyzed the definition of “harassment,” and in particular, its exclusion of generally accepted, AWA compliant animal husbandry practices. The court read “the plain language of 50 C.F.R. § 17.3” as meaning that “[o]nly when the exhibitor’s practices fail to meet the minimum standards established by the [AWA] can such practices constitute ‘harassment’ of a captive endangered or threatened species.” *Id.* The court continually cited the plaintiffs’ failure to present any evidence showing a violation of the applicable AWA regulations. *Id.* And in concluding, the court noted that

The USDA has concluded that the pit enclosures do not violate the provisions of [a regulation related to enclosure size] when it has conducted quarterly inspections of the [zoo’s] facilities, in that it has never cited the [zoo] for providing inadequate space for the grizzly bears. In fact, the USDA has never cited the [zoo] for any violation of the AWA. While corrective action has been requested on occasion, the [zoo] has promptly responded to the USDA’s requests. As a result, the [zoo] has continually maintained its Class C exhibitor license.

Id.

The lessons from *Hill* are similar to those of *Kuehl*—those who hold an animal in captivity can violate the ESA if they commit a taking by “harassing” that animal, but the burden is on the plaintiffs to show that the AWA’s minimum standards were not met. Further, as in *Kuehl*, the court in *Hill* analyzed previous findings of AWA compliance by APHIS as evidence of non-harassment (or more precisely, as evidence that an exhibitor’s conduct fits within the “generally accepted animal husbandry practices” exclusion), and analyzed “harm” as a separate ESA violation from “harassment.”

iii. *PETA v. Miami Seaquarium*

The final recent decision in this area is *People for the Ethical Treatment of Animals, Inc. v. Miami Seaquarium*, 189 F. Supp. 3d 1327 (S.D. Fla. 2016) [hereinafter *PETA*]. The court’s

opinion in *PETA* arose from an animal rights group’s challenge to the living conditions of Lolita—an endangered captive killer whale living at the defendant’s “Seaquarium” facility. *PETA*, 189 F. Supp. 3d at 1333–34. On the defendant’s motion for summary judgment, the court undertook an extensive analysis to determine what Congress meant by “take” as used in Section 9 of the ESA. *Id.* at 1343. The court began by looking to the statutory definition of “take” and comparing its list of ten prohibited verbs—“harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct.” *Id.* at 1345 (quoting 16 U.S.C. § 1532(19)). Pointing to a dissenting Justice Scalia’s observation that “the proscribed conduct overlaps in some respects”¹⁵ and seeking to limit Congress’s broad purpose by applying the statutory canon of “*noscitur a sociis*” (“a word is known by the company it keeps”), the court held that “harm” and “harass” should be interpreted with the same level of “impact” as the eight other terms in the definition of “take.” *Id.* Applying a separate canon of statutory construction, “*esjudem generis*” (“that general words or principles, when appearing in conjunction with particular classes of things, will not be considered broadly, but rather will be limited to the meaning of the more particular and specific words”), the court reached the same conclusion: “the Court’s textual interpretation of ‘harm’ and ‘harass’ as used to describe ‘take’ in the ESA section 9(a)(1) is human conduct that amounts to a seizure or is gravely threatening, or has the potential to seize or gravely threaten the life of a member of a protected species.” *Id.* at 1346–47. Notably, however, the court does not cite a source for its “gravely threatening” standard. *See generally id.*

Blending its textual analysis with legislative history and administrative interpretations, the court stated that the types of harm that violate the ESA are “distinct from concerns regarding

¹⁵ “As recognized by the Supreme Court, the proscribed conduct overlaps in some respects. For example, there is no meaningful difference between the terms ‘trap’ and ‘capture’; and, there is only a pedantic distinction between ‘wound’ and ‘harm,’ the former and more narrow term involving the piercing or laceration of skin, and the latter, broader term involving a physical injury of some kind. *Babbitt*, 515 U.S. at 721, 115 S.Ct. 2407 (Scalia, J., dissenting) ([T]he word trap in the definition otherwise . . . adds nothing to the word capture.’)” *PETA*, 189 F. Supp. 3d at 1345 (footnotes and some citations omitted).

the humane treatment and welfare of an animal in captivity.” *Id.* at 1350–51. Against this backdrop of the ESA and AWA, the trial court stated that

it is clear that the AWA is intended for the specific purpose of protecting animals in captivity that are used by licensees for exhibition or research purposes. 7 U.S.C. § 2131(1). It is equally clear that APHIS has implemented the Congressional intent embodied in the AWA for the humane treatment and care of such animals by promulgating regulations concerning subjects such as the appropriate spatial dimensions for captive marine mammals’ enclosures, social companionship, and veterinary care. *See* 9 C.F.R. Ch. 1, Subch. A, Pt. 3, Subprt. E. Nonetheless, Plaintiffs argue that this Court should address the conditions of Lolita’s captivity under the ESA section 9(a)(1) because the Seaquarium has independent obligations under the ESA not to “harm” or “harass” Lolita in the manner alleged, and because APHIS, when issuing its findings, failed to consider “compliance issues” uncovered during discovery in this matter . . .

The flaw in Plaintiffs’ position is that their expansive interpretation of the words “harm” and “harass” in the ESA section 9(a)(1), if adopted by this Court, would bring the ESA into conflict with the AWA. It would displace a long established regulatory framework providing for licensing and oversight of exhibitors and researchers by APHIS, it would expose licensed exhibitors and researchers to liability to special interest groups despite their compliance with APHIS’ captive care standards, and would substitute the judgment of a federal trial court judge for the technical expertise of the responsible agency. *Marsh v. Or. Nat. Res. Council*, 490 U.S. 360, 375–77 (1989); *see Tug Allie-B, Inc. v. United States*, 273 F.3d 936, 941 (11th Cir. 2001) (holding courts should avoid a construction of two statutes that leads to a “dichomotous [sic] result”).

Id. at 1354–55. In granting summary judgment against plaintiff’s claims, the trial court found that “[t]here is simply no evidence from the experts or otherwise that these conditions and concomitant injuries, individually or collectively, gravely threaten Lolita’s existence. Thus, while in a literal sense the conditions and injuries of which Plaintiffs complain are within the ambit of the ordinary meaning of ‘harm’ and ‘harass,’ it cannot be said that they rise to the level of grave harm that is required to constitute a ‘take’ by a licensed exhibitor under the ESA.” *Id.* at 1355.

PETA is not binding on this Court, and for three reasons, it largely is unpersuasive. First, because *PETA* dealt with Lolita, a marine mammal, the relevant regulations administering the

AWA (and adopted by reference in the ESA) were promulgated by the National Marine Fisheries Service (“NMFS”); in the present case dealing with Lucky, a terrestrial mammal, the relevant regulations are promulgated by the FWS. *See id.* at 1344. NMFS regulations and FWS regulations define “harm” similarly. *Compare* 50 C.F.R. § 222.102 (NMFS definition) *with* 50 C.F.R. § 17.3 (FWS definition). But NMFS regulations do not define “harass,” while FWS regulations do.

Second, despite not being governed by the FWS definition of “harass” or having an equivalent NMFS definition, the court in *PETA* looked to the FWS’ statements in creating its definition of “harass.” *PETA*, 189 F. Supp. 3d at 1350–51 (quoting at length *Captive-bred Wildlife Regulation*, 63 Fed. Reg. 48634-02, 1998 WL 597499). The court cited this FWS language, and the resulting definition of “harass” as support for the proposition that “the types of harm—more specifically, the acute nature of harm—the ESA was designed to safeguard against are, on the whole, distinct from concerns regarding the humane treatment and welfare of an animal in captivity.” *Id.* at 1351. In doing so, the court took this language out of context, reading it to apply to *any taking*, when it was specifically linked to only one way in which a taking could occur (i.e., harassment). The Zoo makes this same mistake in invoking this FWS language.

Third, and most importantly, the court in *PETA* added a “gravely threatening” qualifier to the definitions of “harm” and “harass.” There is no support for this standard in the ESA, the AWA, or the relevant regulations. The “gravely threatening” standard that the Zoo here urges this Court to adopt was created—without citation—by the *PETA* court. Although the *PETA* court’s invocation of statutory canons of construction and foray into legislative history are thorough in depth, they overlook that the FWS has promulgated clear, straightforward definitions of these terms, obviating the need for such inquiries. In particular, by holding that “a licensed

exhibitor ‘take[s]’ a captive animal in violation of the ESA’s section 9(a)(1) only when its conduct gravely threatens the animal’s survival,” the *PETA* court ignored limiting language in these definitions that raises the legal standard above literal notions of “harm” and “harass”:

Harass in the definition of “take” in the Act means an intentional or negligent act or omission which creates the likelihood of injury to wildlife by annoying it *to such an extent as to significantly disrupt* normal behavioral patterns. . . .

Harm in the definition of “take” in the Act means an act which actually kills or injures wildlife. Such act may include *significant* habitat modification or degradation where it actually kills or injures wildlife by *significantly* impairing essential behavioral patterns, including breeding, feeding or sheltering.

50 C.F.R. § 17.3 (emphasis added). As shown, the FWS’ definitions of these terms require significance from the acts that “harm” or “harass.” This language, consistent with the *PETA* court’s textual analyses and discussion of legislative intent, shows that the nature of an act that violates the ESA must be more than any minor injury or harm in the literal sense, but must have some notion of significance, though the language comes far short of requiring a “grave[] threat.” No other court has added a “gravely threatening” standard, nor have any others added their own, similar qualifiers to the definitions of “harm” and “harass.” *See Kuehl*, 161 F. Supp. 3d at 709 (applying the plain-language definitions of “harm” and “harass” without modifying 50 C.F.R. § 17.3); *Hill*, 2016 WL 1251160 at *12–13 (same).

For these reasons, this Court rejects the Zoo’s argument that its conduct, as a matter of law, does not “harm” or “harass” Lucky because it is not “gravely threatening.”

d. Discussion

- i. With respect to a harassment-based “take” under the ESA, the Zoo’s compliance with the AWA’s substantive standards for generally accepted animal husbandry practices precludes liability only if the Zoo actually complies with the AWA.**

The Zoo argues that “when APHIS determines that there is no AWA violation, there is no ESA take liability—as a matter of law.” Docket no. 53 at 24. This assertion is at odds with the case law (including even *PETA* to a certain extent). Instead, this Court concludes that APHIS determinations of AWA compliance are evidence of AWA compliance for purposes of ESA take liability, but the court must independently assess the Zoo’s animal husbandry practices under the AWA.

Kuehl and *Hill* embody this conclusion. In both cases, the courts’ analyses looked to APHIS’ determinations of AWA violations for guidance. In *Kuehl*, the court noted numerous areas where APHIS found AWA violations, and went on to analyze additional evidence presented at trial as it related to those violations. *See* 161 F.3d at 710–18. Crucially, though, with respect to the zoo’s harassment of its lemurs through social isolation, the court made this determination in the absence of a prior APHIS finding of an AWA violation. *Id.* at 710–11. Similarly, in *Hill*, the court looked to the defendants’ near-spotless AWA compliance record as evidence that they did not violate the ESA by harassing their bears. 2016 WL 1251190 at *14. But this AWA compliance record alone did not permit the court to short-circuit its analysis and make an automatic finding of no liability; instead, the court additionally and repeatedly noted the plaintiffs’ failure to present evidence and carry their burden of proof. *Id.* at *13 (“The *Plaintiffs have failed to prove* by a preponderance of the evidence that the pit enclosures fail to comply with 9 C.F.R. § 3.128 . . . *There is no evidence that* any of the bears are malnourished, in poor condition, or physically weak . . . *[T]here is no evidence that* the bears have exhibited signs of

stress or abnormal behavior patterns as a result of the size of their enclosures . . . [T]here is no evidence that the bears have exhibited signs of stress or abnormal behavior patterns beyond what any grizzly bear would exhibit as a result of being held in captivity.” (emphasis added)). Even in *PETA*, the court examined the summary judgment evidence, despite its own admonition that doing so might “substitute the judgment of a federal trial court judge for the technical expertise of the responsible agency.”¹⁶ 189 F. Supp. 3d at 1354–55.

This point from *PETA* warrants further discussion, as this Court is mindful of the regulatory functions served by APHIS in enforcing the AWA. APHIS is a wing of the USDA and is composed of animal experts, which the federal courts are not. Still, the relevant regulatory and statutory language, as applied by *Kuehl* and *Hill*, compels the district courts to examine the evidence surrounding an exhibitor’s animal husbandry practices.

The definition of “harass” clearly excludes “generally accepted [a]nimal husbandry practices that meet or exceed the minimum standards for facilities and care under the [AWA].” For this exclusion to prevent harassment-based liability, there must first be a determination that an exhibitor’s husbandry practices satisfy the AWA requirements. As shown by *Kuehl* and *Hill*, APHIS determinations of past and present violations (or a lack thereof) are certainly evidence of this finding, but are neither necessary to support nor sufficient to warrant such a finding. Thus, the regulatory definition of “harass,” by excluding animal husbandry practices that comply with

¹⁶ In its concluding paragraph, the court stated “[t]here is simply no evidence from the experts or otherwise that these conditions and concomitant injuries, individually or collectively, gravely threaten Lolita’s existence. Thus, while in a literal sense the conditions and injuries of which Plaintiffs complain are within the ambit of the ordinary meaning of ‘harm’ and ‘harass,’ it cannot be said that they rise to the level of grave harm that is required to constitute a ‘take’ by a licensed exhibitor under the ESA.” *Id.* at 1355.

In a footnote, the court added a more detailed critique of some of the plaintiffs’ summary judgment evidence—“The Court notes the speculative and unreliable quality of the experts’ causation opinions: that Lolita’s blisters and wrinkles *might* be caused by sun exposure; that her illnesses *might* be caused by, and her medications *might* be necessary, because of the stress of her tank design and cohabitation with the [pacific white-sided dolphins]; and she *might* have wear in her teeth due to stereotypic behavior.” *Id.* at 1355 n. 27 (emphasis original, citations omitted).

the AWA, does not permit a finding of no liability simply because of a previous determination of no AWA violation; instead, it substitutes the compliance standards of the AWA as the substantive standard for whether an ESA violation has occurred, and requires such a determination to be made through the typical adversarial process.

Supporting this framework for assessing “take” claims under the ESA is the FWS’ findings with respect to the definition of “harass.” In creating the present definition of “harass” (and its AWA-compliant animal husbandry exclusion), the FWS stated that “[s]ince *captive animals can be subjected to improper husbandry as well as to harm and other taking activities*, the [FWS] considers it prudent to maintain such protections, consistent with Congressional intent.” *Captive-bred Wildlife Regulation*, 63 Fed. Reg. 48634-02, 1998 WL 597499 (emphasis added). This statement recognizes that the ESA’s anti-taking provision protects captive wildlife.¹⁷ The FWS goes further: “the captive or non-captive status of a particular specimen is a *significant factor* in determining whether particular actions would ‘harass’ that specimen or whether such actions would ‘enhance the propagation or survival’ of the species.” *Id.* (emphasis added). By stating that an animal’s status as captive or non-captive was a “significant factor” (rather than the single, determinative factor), the FWS meant simply that the ESA applies differently—but nevertheless still applies—to captive wildlife. Ultimately, by recognizing “that measures necessary for the proper care and maintenance of listed wildlife in captivity do not

¹⁷ This statement is also contrary to the Zoo’s argument that Plaintiffs’ claims are barred because they concern “the subject matter of the AWA” and the AWA does not contain a citizen suit provision. The premise of the Zoo’s argument on this point is that the AWA in some way displaces all ESA liability related to the treatment of captive wildlife. This is not so. As discussed in its previous order denying the Zoo’s motion to dismiss, this Court reasoned that the very existence of the AWA compliance exemption shows that the ESA still *applies* to captive wildlife, but that the AWA simply provides the substantive standard for defining liability under the ESA. The FWS’ guidance here reinforces that conclusion, and defeats the Zoo’s argument.

Additionally, the Zoo’s argument on this point assumes that where the AWA and the ESA overlap (i.e., in cases involving captive, endangered animals), the ESA must yield to the AWA. Yet this argument overlooks that the ESA affords heightened protections to endangered species because they are endangered, not because of their captive status. The Court does not read the statutory and regulatory framework as abrogating these protections simply because an endangered animal is held in captivity. Rather, the framework makes the appropriate adjustment for an ESA-protected animal in captivity through the AWA compliance exclusion in the definition of “harass.”

constitute ‘harassment’ or ‘taking,’” the FWS supported adding the AWA-compliance exclusion to the definition of “harass” in order to borrow from and incorporate a pre-existing and substantive legal framework for determining whether a “take” has occurred under the ESA.

Thus, to succeed on their ESA harassment-based “take” claims, Plaintiffs must show that the Zoo’s acts towards Lucky are not generally accepted, AWA compliant animal husbandry practices. If APHIS has previously found that these acts do (or do not) comply with the AWA, these findings are merely evidence of AWA compliance, and such findings do not automatically result in the defeat (or success) of Plaintiffs’ claims.

ii. Because “harm” and “harass” are separately defined ways to commit a “take,” Plaintiffs may prove that the Zoo violated the ESA by doing either.

The Zoo argues that “AWA-compliant zoos do not ‘harm.’” Docket no. 71 at 12. This argument is not supported by the definition of “harm.” As described, 50 C.F.R. § 17.3 defines both “harm” and “harass” for purposes of a “take” under the ESA. The definition of “harass” contains a clear exclusion of generally accepted, AWA-compliant animal husbandry practices. The definition of “harm” does not. AWA-compliant practices are not “harassment” based on these definitions, but the FWS’ failure to include a similar exclusion in the language of “harm” indicates that no such exclusion was intended. It would be inappropriate for this Court to write in an AWA compliance exclusion to the definition of “harm” when one simply is not there and could have been added contemporaneously with the addition of that exclusion in the definition of “harass.”

Again, this result is consistent with the case law. Both *Kuehl* and *Hill* treat “harm” and “harass” allegations separately. For example, in *Kuehl*, the court found that the zoo’s veterinary practices “harmed” the zoo’s tigers without making a corresponding finding that the zoo’s

veterinary practices “harassed” those tigers. 161 F. Supp. 3d at 715–16. On the flip side, the court found that the zoo “harassed” its lemurs by socially isolating them, but made no finding that the zoo “harmed” its lemurs through social isolation. *Id.* at 710–11. And the court made several explicit findings regarding harm *and* harassment with respect to certain practices, indicating that some of the zoo’s practices implicated these two analyses separately, but that perhaps some evidence was relevant to both questions. For example, after discussing the zoo’s alleged failure to provide appropriate environmental enrichment for its tigers, the court made findings regarding both harassment *and* harm:

The Court concludes that Plaintiffs’ evidence falls short of supporting a finding that the tigers are “harassed” or “harmed” within the meaning of the [ESA] due to lack of environmental enrichment. While the amount of enrichment provided by [the zoo] appears to be nominal, the Court cannot say that the limited enrichment “creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns.”¹⁸ 50 C.F.R. § 17.3. Furthermore, because the lack of enrichment does not “actually kill[] or injure[]” the tigers, it does not meet the definition of “harm” within the meaning of “take” in the Endangered Species Act.

Id. at 717–18 (alterations original, footnote added).

Similarly, the court in *Hill* conducted separate analyses of whether wildlife was “harmed” and “harassed.” 2016 WL 1251190, at *12–14. The court concluded that public feedings of threatened bears at the zoo did not “harm” the bears based on the possibility that the bears may swallow foreign objects or contract communicable diseases. *Id.* at *12. Independently, the court concluded that the zoo’s animal husbandry practices, such as the sizes of the bears’ enclosures, did not “harass” the bears. *Id.* at *13–14. To the extent that the court recognized the AWA compliance exception to ESA liability, the court limited this exception to only harassment-based liability: “Only when the exhibitor’s practices fail to meet the minimum standards established by

¹⁸ For clarity, this Court points out that this language from *Kuehl* tracks the definition of “harass” verbatim.

the [AWA] can such practices constitute ‘harassment’ of a captive endangered or threatened species.” *Id.* at *13.¹⁹

The Zoo makes three arguments to avoid harm-based liability. First, relying on *PETA*’s analysis of legislative history, it argues that the “harms” caused by the Zoo arise from “categorically different act[s] than [those] that ‘actually kill[] or injure[]’ an animal.” Docket no. 71 at 12. For the same reasons that this Court rejects the *PETA* court’s “gravely threatening” requirement, it rejects this argument as well.

Second, the Zoo points to the FWS’ statement that “proper care and maintenance of listed wildlife in captivity do[es] not constitute ‘harassment’ or ‘taking.’” Docket no. 71 at 13 (emphasis in the Zoo’s briefing). This citation, though, makes the same mistake that the *PETA* court made by taking the FWS’ language out of context. By this statement, the FWS was speaking precisely about the definition of “harass” and proposed changes thereto. The FWS *was not* discussing broader changes to what constitutes a “take” under the ESA or the broader scope of ESA coverage. Again, the definition of “harass” was changed to exclude certain AWA-compliant practices, but the FWS *did not* add this exclusion to any other forms of “taking.” Reading this language otherwise would import an AWA compliance exception to the very definition of “take” rather than simply the definition of “harass.”

Finally, by reference to the definitions of harm and harass, the Zoo argues that “[i]f a zoo’s AWA-compliant husbandry practices cannot, as a matter of law, constitute ‘harassment,’ they *a fortiori* cannot be a ‘harm.’” Docket no. 71 at 13. Here, the Zoo quotes the definitions:

¹⁹ *Kuehl* and *Hill* affirmatively support a separate theory of “take” liability for “harming,” and *PETA* is especially unavailing on this point. Here, the Court must interpret regulatory definitions governing the harassment of terrestrial mammals that did not apply in *PETA* and were only briefly mentioned as providing contextual support for the court’s conclusions regarding Lolita, a marine mammal. *See* 189 F. Supp. 3d at 1350 (briefly mentioning the FWS’ definition of “harass” in 50 C.F.R. § 17.3); *id.* at 1344 (“The NMFS has not promulgated a definition of ‘harass.’”).

“Harm” is defined as “an act which actually kills or injures wildlife,” while “harass” is defined as “an intentional or negligent act or omission which creates the likelihood of injury to wildlife.” 50 C.F.R. § 17.3. Thus, if an act “actually kills or injures wildlife,” it also meets the much lower threshold of “creat[ing] the likelihood of injury to wildlife.” Plaintiffs do not and cannot point to any act—whether hypothetical or real—that, on the one hand, does not “create the likelihood of injury to wildlife,” but, on the other hand, “actually kills or injures wildlife.”

Id. (some citations omitted and altered). Again, though, the Zoo misquotes the applicable definitions, this time by omitting certain language. To “harass” is to commit “an intentional or negligent act or omission which creates the likelihood of injury to wildlife *by annoying it to such an extent as to significantly disrupt normal behavioral patterns.*” 50 C.F.R. § 17.3 (emphasis added). By omitting the emphasized language, the Zoo disregards that many acts might not create a likelihood of injury *by annoying* wildlife, but may nonetheless actually kill or injure wildlife by means other than annoyance, therefore “harming” an animal.

e. Summary

To summarize the foregoing, the Court holds that in order for Plaintiffs to succeed on their ESA “taking” claims, they must carry the burden of showing *either* that the Zoo “harmed” or “harassed” Lucky within the meaning of 50 C.F.R. § 17.3. Under the definition of “harass,” Plaintiffs must show that the Zoo’s treatment of Lucky does not amount to generally accepted, AWA-compliant animal husbandry practices. In making this showing, APHIS determinations are evidence of AWA compliance, but are not necessarily conclusive. Finally, because this issue is presented at the summary judgment phase, there need only be a genuine issue of material fact on this question in order for Plaintiffs’ claims to proceed.

III. The Zoo’s Motion for Summary Judgment

Having defined the scope of permissible summary judgment evidence and having determined the nature of Plaintiffs’ claims and burden of proof, the Court turns to the ultimate

question before it at this stage—is the Zoo entitled to summary judgment on Plaintiffs’ claims that it committed an ESA prohibited “take” on Lucky by harming or harassing her?

a. Standard of Review

The court shall grant summary judgment if the movant shows that there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law. FED. R. CIV. P. 56(a). To establish that there is no genuine issue as to any material fact, the movant must either submit evidence that negates the existence of some material element of the non-moving party’s claim or defense, or, if the crucial issue is one for which the non-moving party will bear the burden of proof at trial, merely point out that the evidence in the record is insufficient to support an essential element of the non-movant’s claim or defense. *Lavespere v. Niagra Machine & Tool Works, Inc.*, 910 F.2d 167, 178 (5th Cir. 1990), *cert. denied*, 510 U.S. 859 (1993). Once the movant carries its initial burden, the burden shifts to the non-movant to show that summary judgment is inappropriate. *See Fields v. City of S. Hous.*, 922 F.2d 1183, 1187 (5th Cir. 1991).

In order for a court to conclude that there are no genuine issues of material fact, the court must be satisfied that no reasonable trier of fact could have found for the non-movant, or, in other words, that the evidence favoring the non-movant is insufficient to enable a reasonable jury to return a verdict for the non-movant. *See Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 250 n. 4 (1986). In making this determination, the court should review all the evidence in the record, giving credence to the evidence favoring the non-movant as well as the “evidence supporting the moving party that is uncontradicted and unimpeached, at least to the extent that evidence comes from disinterested witnesses.” *Reeves v. Sanderson Plumbing Prods., Inc.*, 530 U.S. 133, 151 (2000).

b. Discussion

There are numerous fact issues in this case that preclude a wholesale grant of summary judgment in favor of the Zoo. Summary judgment is appropriate on Plaintiffs' companionship and size-of-enclosure claims, but not on Plaintiffs' substrate and shelter-from-the-sun claims. In this regard, the background section at the beginning of this order largely speaks for itself and adequately shows the existence of numerous fact issues. Below, the Court will highlight these fact issues as they relate to each of Plaintiffs' four theories of how the Zoo is committing a take. The Court also points out that aside from the remaining fact issues in two of these four areas, there are also fact issues regarding the severity and causes of Lucky's health conditions which are apparent from the background section above.

Furthermore, the summary judgment evidence shows that fact issues remain as to both the harm *and* harass theories on Plaintiffs' substrate and shelter-from-the-sun claims. As discussed above, the Zoo cannot be committing a "take" by "harassing" Lucky if its animal husbandry practices are generally accepted and AWA compliant. In this regard, APHIS has never found a violation of AWA regulations in terms of the Zoo's treatment of its elephants, and Blais failed to identify any AWA violations himself. But the summary judgment evidence—recounted in full in the background section and highlighted below—would allow a reasonable trier of fact to infer and conclude that the Zoo's animal husbandry practices are not AWA compliant. Accordingly, summary judgment is inappropriate as to this claim.

i. The Zoo is entitled to summary judgment on Plaintiffs' companionship claims because they are moot.

Summary judgment is appropriate against Plaintiffs' claim that the Zoo is harming or harassing Lucky by forcing her to live in isolation because this claim is now moot. The theory of this claim is that social isolation damages Lucky's mental well-being and is manifested itself in

stereotypic behavior which has its own physical harms. Though experts on both sides seem to agree about the potential effects of elephant isolation in the abstract, the facts here are undisputed—Lucky no longer lives alone and is accompanied in her enclosure by two former circus elephants pursuant to a loan agreement with Feld Entertainment, which either party can terminate (seemingly unilaterally) though neither the Zoo nor Feld plans to do so.

“Mootness is the doctrine of standing in a time frame.” *Envtl. Conservation Org. v. City of Dallas*, 529 F.3d 519, 524 (5th Cir. 2008) (internal quotations omitted). “Generally, any set of circumstances that eliminates actual controversy after the commencement of a lawsuit renders that action moot.” *Ctr. for Individual Freedom v. Carmouche*, 449 F.3d 655, 661 (5th Cir. 2006). “[I]t is not enough that a dispute was very much alive when suit was filed . . . The parties must continue to have a personal stake in the outcome of the lawsuit.” *Lewis v. Cont’l Bank Corp.*, 494 U.S. 472, 477–78 (1990) (internal quotations and citations omitted). On the other hand, a dispute is not moot where “the parties maintain a concrete interest in the outcome and effective relief is available to remedy the effect of the violation,” regardless of the size of the dispute between the parties. *Dailey v. Vought Aircraft Co.*, 141 F.3d 224, 227 (5th Cir. 1998).

Plaintiffs allege that they “will suffer irreparable injury if the Zoo does not agree to transport Lucky to The Elephant Sanctuary in Tennessee, or at a minimum, remedy its treatment of Lucky.” Docket no. 1 at 13. With respect to Plaintiffs’ allegations based on Lucky’s lack of companionship, there is no further relief for the Court to grant—the Zoo already has “remed[ied] its treatment of Lucky” by finding her two suitable companions with which to live. As a result, Plaintiffs’ claim based on Lucky’s lack of companionship is now moot, and summary judgment is appropriate as to this claim.²⁰

²⁰ Though neither party addresses it, one exception to the doctrine of mootness is worth discussing. Questions that would otherwise be moot may still be reviewed in appropriate circumstances where they present

ii. The Zoo is entitled to summary judgment on Plaintiffs' claims regarding the size of Lucky's enclosure.

Under AWA regulations, “[e]nclosures 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.” 9 C.F.R. § 3.128. The exclusion of Blais’ causation testimony is fatal to Plaintiffs’ claims based on the size of Lucky’s enclosure because Blais provided the only evidence that the size of the enclosure caused Lucky’s various health issues. Dr. Isaza acknowledged that “[t]here is a legitimate controversy about the amount of area needed for Asian elephants and how much an elephant needs to walk to maintain good health.” Docket no. 53-2 at 12; *see also* Docket no. 70-8 at 14 (“[A]mong informed professionals, one person may have a — one opinion, the other person may have another opinion and they discuss them and therefore it’s both — both sides can be valid, so it’s a legitimate controversy.”). Dr. Ensley too opines that “the San Antonio Zoo’s enclosure space is less than adequate for one elephant, where now there are two additional elephants.” Docket no. 70-1 at 7. But outside of a general recognition that the space required for elephants is up for debate, Plaintiffs have no evidence to show that any of Lucky’s ailments are caused by this particular feature of her enclosure. Though Dr. Ensley opines only that Lucky’s enclosure space

“issues capable of repetition yet evading review.” *Bayou Liberty Ass’n, Inc. v. U.S. Army Corps of Engineers*, 217 F.3d 393, 398 (5th Cir. 2000) (internal quotations omitted). This exception “‘applies only in exceptional situations . . . where the following two circumstances are simultaneously present: (1) the challenged action is in its duration too short to be fully litigated prior to cessation or expiration, and (2) there is a reasonable expectation that the same complaining party will be subject to the same action again.’” *Id.* (quoting *Spencer v. Kemna*, 523 U.S. 1, 17 (1998)).

Given the loan agreement of Lucky’s two companions with Feld Entertainment, it is at least possible that the revocation of the agreement could occur at any time, leaving Lucky with no companions once again. But it is not clear that either requirement to the exception is met in this case. On the first requirement, Lucky previously was alone in her enclosure for two separate stints of three years each before the Zoo added new companions. Docket no. 53-2 at 6. A similar period would provide ample time for future claims to be fully litigated. On the second requirement, the Zoo has no intention of terminating the agreement with Feld, nor is there any indication that Feld plans to terminate the agreement. Docket no. 70-2 at 8. As a result, there is only a “mere physical or theoretical possibility” that Lucky will be left in solitude again, which is insufficient to invoke this exception to mootness. *Libertarian Party v. Dardenne*, 595 F.3d 215, 217 (5th Cir. 2010).

is “less than adequate,” he does not meaningfully²¹ attribute any of her specific ailments to the size of her enclosure. *Id.* Because Blais’ opinions on the issue are inadmissible under *Daubert*, Plaintiffs are left with no evidence on this claim, and summary judgment is appropriate here.

iii. Genuine issues of material fact preclude summary judgment on Plaintiff’s claims that Lucky lacks adequate shelter from the sun.

AWA regulations require that “[w]hen 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.” 9 C.F.R. § 3.127(a). The Zoo’s staff and veterinarians say that Lucky has never been diagnosed with sunburns or heat exhaustion, and Dr. Isaza reached a similar conclusion. Dr. Ensley reached a contrary conclusion, pointing to vet records that reference “heat stress” and opining that exposure to the sun exacerbates Lucky’s eye issues. Though the facts are relatively clear as to the structures in Lucky’s enclosure that cast shade, there is nonetheless a genuine issue of material fact as to whether the Zoo harms or harasses Lucky by providing an enclosure with inadequate shade and shelter from the sun.

iv. Genuine issues of material fact preclude summary judgment on Plaintiff’s substrate claims.

AWA regulations governing animal facilities provide that “[t]he facility must be constructed of such material and of such strength as appropriate for the animals involved. The indoor and outdoor housing facilities shall be structurally sound and shall be maintained in good repair to protect the animals from injury and to contain the animals.” 9 C.F.R. § 3.125(a). On the

²¹ At his deposition, Dr. Ensley was asked “Do you have an opinion as to whether or not the size of Lucky’s enclosure is contributing to her harm?” Docket no. 70-3 at 32. He replied, “Yes . . . It is contributing to her harm . . . The character, the construction does not allow her enough room to explore, to move about and exhibit species-specific behaviors that have been known with elephants to the degree where it has — the current and past exhibit have created the problems that she has today.” *Id.* This brief exchange is the extent of Dr. Ensley’s causation opinion as it relates to the size of Lucky’s enclosure.

appropriateness of Lucky's substrate, genuine issues of material fact as to whether the substrate "harms" or "harasses" foreclose the possibility of summary judgment.

Initially, there is a genuine issue of material fact as to the hardness of the substrate. King's report and deposition provide much detail as to the composition of the substrate. According to King, Plaintiff's soil expert, the substrate is approximately 60% sand, 30% clay, and 10% grass and mulch. Additional portions of the substrate include the harder bases underlying the mulch and sand, the rubber-coated concrete in the barn, and the concrete pool. King's report and deposition provide much clarity as to the density and hardness of certain areas, such as sand that is like a volleyball court or mulch comparable to a playground. But the summary judgment record is not conclusive on the precise hardness of many of these areas. In particular, fact issues surrounding the hardness of the clay areas (approximately one-third of the substrate) preclude summary judgment. King's report describes the clay as "[s]uperficial hard clay soil material . . . observed to be in a medium to very dense conditions [sic], similar to a sun baked clay strata." Docket no. 53-14 at 2. Though the Zoo argues that the density of this clay material (80-90 pounds per square foot) is far less than that of concrete (150 pounds per square foot), the Zoo does not explain how the density of a material affects its hardness or more importantly, Lucky's health. Docket no. 71 at 21 (quoting Docket no. 71-3 at 8, 11 (King testifying at his deposition regarding density)). And assuming, as the Zoo seems to imply, that a denser material is harder and more unyielding, this view actually undercuts the Zoo's position because many of the sandy areas in Lucky's enclosure have a density of well over 100 pounds per cubic foot. *See* Docket no. 53-14 at 4.

Aside from the disputes about the hardness of the materials that make up the substrate, the more important point is that the parties dispute what effect the substrate has on Lucky—that

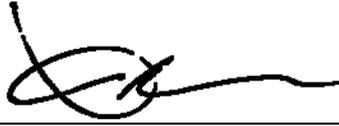
is, whether the substrate is “species-inappropriate.” *See* Docket no. 1 at 20. In this regard, the background section recounts the parties’ disputes in full detail. Dr. Ensley opines that the surface is harder and “compacted” in certain areas, that it is species inappropriate, and that Lucky suffers foot problems and arthritis as a result of it. The Zoo’s experts continually characterize the substrate as soft, though even they seem to recognize that the wrong substrate can hurt an animal. *See* Docket no. 70-9 at 5 (Zoo veterinary director Dr. Coke testifying at his deposition that “[t]he harder the substrate has been — the hardness of the substrate, harder being more negatively impactful to the health of the foot of the elephant.”). Due to these remaining fact issues, the Zoo is not entitled to summary judgment on Plaintiffs’ substrate claims.

CONCLUSION

For the foregoing reasons, the Zoo’s Motion to Exclude Expert Opinion Testimony of Dr. Philip Ensley (Docket no. 59) is DENIED. The Zoo’s Motion to Exclude Expert Opinion Testimony of Scott Blais (Docket no. 61) is GRANTED IN PART AND DENIED IN PART as described above. The Zoo’s Motion for Summary Judgment (Docket no. 53) is GRANTED IN PART AND DENIED IN PART. Summary judgment is GRANTED as to the claims that Lucky is being harmed and harassed by a lack of companionship because this claim is now moot, and summary judgment is GRANTED as to the claims that Lucky is being harmed and harassed by the small size of her enclosure because Plaintiffs fail to adduce any evidence of causation on this point. Accordingly, this case will proceed to trial on Plaintiffs’ two remaining claims—that the Zoo is harming and harassing Lucky by providing an enclosure with an inappropriate substrate and inadequate shelter from the sun.

It is so ORDERED.

SIGNED this 8th day of June, 2017.

A handwritten signature in black ink, consisting of a large, stylized initial 'X' followed by a series of loops and a long horizontal stroke extending to the right.

XAVIER RODRIGUEZ
UNITED STATES DISTRICT JUDGE