

UNITED STATES DISTRICT COURT  
DISTRICT OF MASSACHUSETTS

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JOYCE ROWLEY, )  
Plaintiff, )  
)  
v. ) CIVIL ACTION  
NO. 17-11809-WGY  
CITY OF NEW BEDFORD, )  
MASSACHUSETTS, )  
)  
Defendant. )  
)

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YOUNG, D.J.

September 24, 2019

**FINDINGS OF FACT, RULINGS OF LAW, AND  
ORDER FOR JUDGMENT**

**I. INTRODUCTION**

This is a case about elephants -- specifically, Asian elephants.

Asian elephants . . . usually weigh[] well under eleven thousand pounds and st[an]d about seven to nine feet tall at the shoulder, as opposed to African elephants, who could weigh as much as fifteen thousand pounds and reach thirteen feet in height. Both male and female African elephants have tusks, while only some Asian males have tusks, and none of the females do. Their body shapes differ, too: Asians are more compact; Africans lankier, with a more concave back. The Africans' ears are enormous and wide (like maps of Africa, it's said) -- the biggest mammal ears in the world -- while those of the Asian elephant are smaller and closer to square.

In fact, the African and Asian elephants are not only separate species but separate genera -- a whole other level of taxonomic rank, as distinct in genetic heritage as a cheetah is from a lion. And some say it shows in their temperaments -- the Africans active and more high-strung; the Asians more serene.

Physically, all elephants are astonishing. They are the largest animals walking on land. And their appetites are commensurate . . . . , gathering their food with those incredible trunks. Longer and heavier than a man, and much, much stronger, the trunks provide elephants with a sense of smell that may be five times more acute than that of a bloodhound. And by narrowing or widening their nostrils like musical instruments, they can modulate the sound of their voices.

They have extraordinary brains built for memory and insight, and they use them to negotiate one of the most advanced and complex societies of all mammals. To those who have spent time with them, elephants often seem philosophical and perceptive, and appear to have deep feelings. They can cooperate with one another and have been known to break tusks trying to hoist injured relatives back on their feet. Further, their behavior suggests they have an understanding of death, something believed to be rare among nonhuman animals.

Vicki Constantine Croke, Elephant Company: The Inspiring Story of an Unlikely Hero and the Animals Who Helped Him Save Lives in World War II 22-23 (Random House 2014). The Court takes judicial notice of these facts. See Fed. R. Evid. 201. Asian elephants are an endangered species. 50 C.F.R. § 17.11(h); see also 41 Fed. Reg. 24062, 24066 (June 14, 1976).

Joyce Rowley ("Rowley") sued the City of New Bedford ("City") under the Endangered Species Act, 16 U.S.C. §§ 1531-1544. Am. Compl., ECF No. 47. She alleged that the City is harming and harassing two geriatric Asian elephants, Emily and Ruth, in violation of the Endangered Species Act. See id.; 16 U.S.C. § 1540(g)(1). This Court has already determined that Rowley has standing to pursue this claim. Rowley v. City of New Bedford, 333 F. Supp. 3d 30, 39-40 (D. Mass. 2018).

## II. THE LEGAL FRAMEWORK

### A. The Endangered Species Act

Congress first enacted the Endangered Species Act, 16 U.S.C. §§ 1531-1544, in December 1973. Pub. L. No. 93-205, 87 Stat. 884 (Dec. 28, 1973). The tripartite mission of the Endangered Species Act is to (1) "provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved," (2) "provide a program for the conservation of such endangered species and threatened species," and (3) take appropriate steps to carry out the United States' commitments in various international treaties and conventions regarding species conservation. 16 U.S.C. § 1531(b).

Section nine of the Endangered Species Act makes it illegal for any individual to "take" any endangered species. 16 U.S.C. § 1538(a)(1)(B). The Supreme Court has emphasized evidence that Congress intended the word "take" to cover "every conceivable way in which a person can 'take' or attempt to 'take' any fish or wildlife." Babbitt v. Sweet Home Chapter of Cmtys. for a Great Or., 515 U.S. 687, 704 (1995) (quoting S. Rep. No. 93-307, at 7 (1973)). Far from prohibiting only intentional acts, section nine reaches "more than the deliberate actions of hunters and trappers." Id. at 705.

The Endangered Species Act itself defines "take" to mean "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). Here, Rowley's claims rely on the prohibition on harassing and harming endangered species. See Am. Compl. ¶¶ 95, 104-30.

The Fish and Wildlife Service, the agency within the United States Department of the Interior tasked with implementing the Endangered Species Act, see 16 U.S.C. § 1537a(a), has promulgated regulations defining the terms "harm" and "harass" in the context of the Endangered Species Act.

### **1. Harming an Endangered Species**

The Fish and Wildlife Service defines "harm" in the definition of "take" in the Endangered Species Act to mean:

[A]n 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; see also Babbitt, 515 U.S. at 703 (deferring to regulation's interpretation of "harm") (citing Chevron U.S.A. Inc. v. Natural Resources Defense Council, Inc., 467 U.S. 837 (1984)).

### **2. Harassment of an Endangered Species**

The Fish and Wildlife Service defines "harass" in the definition of "take" in the Endangered Species Act to mean:

[A]n 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.

Id.

This definition includes a carve-out that exempts from the definition of "harass":

generally accepted: (1) [a]nimal husbandry practices that meet or exceed the minimum standards for facilities and care under the Animal Welfare Act, (2) [b]reeding procedures, or (3) [p]rovisions 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.

#### **B. The Animal Welfare Act**

Because the City is engaged in animal husbandry practices with "animals intended . . . for exhibition purposes," see 7 U.S.C. § 2131, the Animal Welfare Act exclusion applies to Rowley's harassment claims.

Before the enactment of the Endangered Species Act, Congress enacted the Animal Welfare Act, 7 U.S.C. §§ 2131-2159, Pub. L. No. 89-544, 80 Stat. 350 (Aug. 24, 1966), with the following goals:

(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; (2) to assure the humane treatment of animals during transportation in commerce; and (3) to protect the owners of animals from the theft of their animals by preventing the sale or use of animals which have been stolen.

Id. § 2131.

Congress charged the United States Department of Agriculture ("Department of Agriculture") with enforcing this statute. Id. §§ 2132(b), 2133, 2146. To implement the Animal Welfare Act's protections, the Department of Agriculture promulgates regulations that set standards for facilities and care of animals in captivity, see, e.g., 9 C.F.R. §§ 3.125-3.142 (setting standards for the "handling, care, treatment, and transportation of warmblooded animals other than dogs, cats, rabbits, hamsters, guinea pigs, nonhuman primates, and marine mammals"), which it enforces through licensing and compliance inspections, see 7 U.S.C. § 2146(a). Unlike the Endangered Species Act, the Animal Welfare Act does not include a citizen suit provision. See Graham v. San Antonio Zoological Soc'y, 261 F. Supp. 3d 711, 737 (W.D. Tex. 2017).

There are at least four recent District Court cases that have grappled with the interplay between Animal Welfare Act requirements and the Endangered Species Act's harassment-based "take" prohibition. See Graham, 261 F. Supp. 3d at 739-43 (collecting cases).

The general consensus among these courts is that the regulations that the Department of Agriculture promulgates pursuant to the Animal Welfare Act are the substantive standards by which a court ought assess harassment-based "take" claims under the Endangered Species Act. See id. at 745. The findings

of past inspections by the Animal and Plant Health Inspection Service ("USDA-APHIS," the agency within Department of Agriculture charged with enforcing the Animal Welfare Act) are relevant to a court's assessment of whether an entity has violated the Animal Welfare Act by violating its implementing regulations but are not dispositive. See id. at 745-46.

The United States District Court for the Western District of Texas clearly described the role of USDA-APHIS assessments as follows:

APHIS determinations of past and present violations (or a lack thereof) are certainly evidence of [a harassment finding under the Endangered Species Act], 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 the [Animal Welfare Act], does not permit a finding of no liability simply because of a previous determination of no [Animal Welfare Act] violation; instead, it substitutes the compliance standards of the [Animal Welfare Act] as the substantive standard for whether an Endangered Species Act violation has occurred, and requires such a determination to be made through the typical adversarial process.

Graham, 261 F. Supp. 3d at 745.

The court in Graham thus concluded that a claim that a zoo has violated the Endangered Species Act by "harassing" a captive endangered species requires the court to determine, first, if the zoo's practices are generally accepted, and, second, whether the zoo's practices comply with the governing Animal Welfare Act regulations. Id. at

745-46. "The burden is on the plaintiffs to show that the Animal Welfare Act's minimum standards were not met," however. Id. at 741 (citing Kuehl v. Sellner, 161 F. Supp. 3d 678, 718 (N.D. Iowa 2016); Hill v. Coggins, No. 2:13-cv-47, 2016 U.S. Dist. LEXIS 42374, at \*31-32 (W.D.N.C. Mar. 30, 2016)). The court held that it was to undertake this inquiry independently -- considering, but not simply deferring to -- any prior findings by the USDA-APHIS. Id. at 745-46.

The court in Graham further held that "whether the Zoo committed a take under the Endangered Species Act by 'harming' [a captive elephant] is a separate legal issue requiring a separate analysis of the facts, and is not at all dependent on [Animal Welfare Act] compliance." Id. at 728, 746-48 (citing Kuehl, 161 F. Supp. 3d at 715-16; Hill v. Coggins, 2016 U.S. Dist. LEXIS 42374, at \*31-32).<sup>1</sup>

In Kuehl v. Sellner, the District Court for the Northern District of Iowa found after a bench trial that the defendants, a rural family-run zoo and its owner-operators, had violated the Endangered Species Act by harassing captive lemurs and both harming and harassing

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<sup>1</sup> After the court granted summary judgment on some harassment-based "take" claims but denied it as to others, the parties in Graham settled before trial. Order, Civ. A. No. 5:15-cv-01054-XR (W.D. Tex. Dec. 5, 2017), ECF No. 78.

captive tigers. 161 F. Supp. 3d at 718. The court's determination that the defendants had harassed the lemurs and tigers was based on an evaluation of the zoo's compliance with the substantive standards in the Animal Welfare Act's implementing regulations. Id. at 710-18. While some of the conduct that the court found to constitute harassment had previously been subject to penalties by the USDA-APHIS for non-compliance, the court also found harassment in certain conduct that the USDA-APHIS had not found to violate Animal Welfare Act regulations. Id. For example, relying on the plaintiffs' expert witness, the court found that the social isolation of the lemurs disrupted their behavioral patterns and thus constituted a "take" under the Endangered Species Act (even though the USDA-APHIS had not previously sanctioned the defendants for any conduct related to the animals' social isolation). Id. at 710-11.

In Hill v. Coggins, the United States District Court for the Western District of North Carolina found after a bench trial that the plaintiffs had failed to demonstrate that the defendants, owners and operators of the Cherokee Bear Zoo, had harmed or harassed captive grizzly bears pursuant to the Endangered Species Act. 2016 U.S. Dist. LEXIS 42374, at \*37-38. In so finding, the court relied on

the fact that the plaintiffs had failed to show any evidence of instances in which the zoo's treatment of the grizzly bears had violated any Animal Welfare Act regulations governing animal treatment. Id. at \*33-34. The court failed to analyze separately whether the defendants' practices were also generally accepted animal husbandry practices, however. See id.; 50 C.F.R. § 17.3. On appeal, the Fourth Circuit corrected this error, clarifying that the exclusion in the Fish and Wildlife Service's definition of "harass" requires that the practice be both (1) "generally accepted" and (2) compliant with the Animal Welfare Act to withstand scrutiny under the Endangered Species Act. Hill v. Coggins, 867 F.3d 499, 509-10 (4th Cir. 2017).

The United States District Court for the Southern District of Florida in People for the Ethical Treatment of Animals, Inc. v. Miami Seaquarium granted summary judgment for the Seaquarium, concluding that People for the Ethical Treatment of Animals ("PETA") had introduced no evidence that the captive killer whale's living conditions "gravely threaten[ed]" her existence, and cast some doubt on the applicability of the Endangered Species Act to endangered species in captivity. 189 F. Supp. 3d 1327, 1355 (S.D.

Fla. 2016).<sup>2</sup> As the court in Graham noted, this “gravely threatening” standard exists nowhere in the Endangered Species Act or Animal Welfare Act or regulations implementing those statutes, and “was created -- without citation -- by the PETA court.” Graham, 261 F. Supp. 3d at 743 (discussing Miami Seaquarium, 189 F. Supp. 3d at 1351). The Eleventh Circuit affirmed the grant of summary judgment in Miami Seaquarium, holding that -- while it may not require a grave risk of death -- “harassment” and “harm” under the Endangered Species Act require a “threat of serious harm.” People for the Ethical Treatment of Animals, Inc. v. Miami Seaquarium, 879 F.3d 1142, 1144, 1147-50 (11th Cir. 2018) (per curiam).<sup>3</sup>

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<sup>2</sup> In People for the Ethical Treatment of Animals, Inc. v. Tri-State Zoological Park of W. Md., Inc., the United States District Court for the District of Maryland rejected the Miami Seaquarium court’s reasoning on the potential conflict between the Endangered Species Act and the Animal Welfare Act as they pertain to endangered species in captivity. See Civ. A. No. MJG-17-2148, 2018 U.S. Dist. LEXIS 6638, at \*11-14 (D. Md. Jan. 16, 2018). The Maryland District Court noted that the Miami Seaquarium logic represented a minority view among district courts to have addressed the issue, and one that the Fourth Circuit repudiated in Hill v. Coggins, 867 F.3d at 510. Tri-State, 2018 U.S. Dist. LEXIS 6638, at \*11-14.

<sup>3</sup> The Miami Seaquarium case is less relevant than others the Court addresses here because it analyzed the living conditions of marine mammals, which the National Marine Fisheries Service regulates, instead of the Fish and Wildlife Service. See 189 F. Supp. 3d at 1333.

In responding to a challenge to the Tri-State Zoo in Maryland, the United States District Court for the District of Maryland ruled that PETA's allegations that the zoo housed lemurs, tigers, and a lion in an inappropriate social setting; failed to provide adequate enrichment to lemurs, tigers, and a lion; failed adequately to protect lemurs, tigers, and a lion from the elements; and failed to provide adequate veterinary care to a lion plausibly stated a claim for a harassment- or harm-based "take" violation of the Endangered Species Act. People for the Ethical Treatment of Animals, Inc. v. Tri-State Zoological Park of W. Md., Inc., 2018 U.S. Dist. LEXIS 6638, at \*15-18. The Maryland District Court later granted partial summary judgment to PETA, 2019 U.S. Dist. LEXIS 112366, at \*1 (D. Md. July 8, 2019), ruling that "the zoo unlawfully took Cayenne," a tiger, through a "lack of basic veterinary care," id. at \*18-19.

In sum, this Court must determine whether the City is harming or harassing Ruth and Emily pursuant to the Endangered Species Act. If any of the City's intentional or negligent conduct "creates the likelihood of injury to [the elephants] by annoying [them] to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, or sheltering," that conduct constitutes

a "take" and violates the Endangered Species Act, unless the conduct is a generally accepted and Animal Welfare Act-compliant animal husbandry practice. See 50 C.F.R. § 17.3. In addition, the City has committed a "take" if its conduct "actually kills or injures" the elephants. See id.

### **III. FINDINGS OF FACT**

The City owns and operates the Buttonwood Park Zoo. The zoo is an Association of Zoos and Aquariums accredited institution. Trial Tr. Day 3 at 39:14-18, ECF No. 77.

In April 1968, the City purchased Emily, a four-year-old Asian elephant, from Southwick's Zoo (then the Mendon Animal Farm), and transferred her to the Buttonwood Park Zoo. Trial Ex. 4, Association Zoos & Aquariums Elephant Profile Form & City New Bedford Board Park Commissioners Letter Dec. 31, 1967 ("Emily Profile & Board Park Commissioners 1967 Letter") 1, 6. There is no evidence to suggest Emily was anything but a healthy, young elephant at the time of the City's purchase. See Trial Tr. Day 3 at 43:25-44:2.

About fifteen years later, however, when Dr. Michael Ryer arrived at the zoo to become a zookeeper, he found that Emily "was not behaviorally adjusted well at all." Trial Tr. Day 1 at 92:11, ECF No. 75. Her living conditions in 1982 were not acceptable, according to veterinarian Dr. Ryer; she was chained in the barn sixteen hours a day on a concrete floor with poor

drainage and no ventilation. Id. at 93:6-19. When Emily returned from her training stay at a zoo in Louisiana, however, she was a changed elephant -- she was able to "be worked without fear of . . . one of the keepers getting hurt," Trial Tr. Day 2 at 18:19-20, ECF No. 76, and she returned to improved living quarters, Trial Tr. Day 1 at 106:9-11.

Ruth is the hard luck elephant. She is somewhat older and a bit (a thousand pounds) smaller than Emily. Trial Tr. Day 1 at 101:24-25; Trial Tr. Day 3 at 78:21-79:6, 80:2-10; Trial Ex. 5, Association Zoos & Aquariums Elephant Profile Form & Arrival Report ("Ruth Profile & Arrival Report") 1. Benson's Animal Farm in New Hampshire once owned her. Ruth Profile & Arrival Report 1.

In 1986, she was found abandoned in a truck on a dump site in Danvers, Massachusetts. Id. at 5-6; Trial Tr. Day 2 at 85:12-17. The Animal Rescue League of Boston apparently took her from there. Ruth Profile & Arrival Report 5, 7. A United States Department of the Interior report from the time she was seized indicates that Ruth suffered several ailments: her ear condition was fair, with one hole and ragged edges on each ear; her skin was fair to poor; her tail and skin had an extreme build-up of necrotic tissue; she had scars on her legs (indicative of excessive chain wear) and chin (more than twenty hook scars); and she was underweight, among other issues. Id.

at 5-6. This report further noted that Ruth was a "striker, hitter, but not to the point of killing," and "[r]epeatedly struck out at keepers." Id.

Ruth's trunk was of particular concern when she was rescued. The 1986 report stated that Ruth had "[l]ittle control of dist[al] area; no fine control of finger; appears paralyzed in proximal area and peduncle; must use head to swing trunk. Does appear to affect her ability to feed." Id. at 6.

The City soon took possession of Ruth. Id. at 7. Dr. Ryer, then a zookeeper at the City's zoo, confirmed Ruth's partial trunk paralysis and overall poor health upon her arrival at the Buttonwood Park Zoo elephant habitat. Trial Tr. Day 1 at 97:4-10.

In the City's care, Ruth has become docile and, at least in the eyes of the City's zookeepers,<sup>4</sup> she appears affectionate and warmly responsive to her treatment. See Trial Tr. Day 2 at 22:7-17, 77:11-78:6.

Emily is now fifty-five years old. Emily Profile & Board Park Commissioners 1967 Letter 1. Aside from a brief period from November 1983 to July 1985, when she went to Baton Rouge,

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<sup>4</sup> Experts caution against anthropomorphizing elephant behavior and attributing to them human emotions. What is clear is that both zookeepers and attending veterinarians are affectionate toward both Emily and Ruth.

Louisiana for training (during which time the City renovated her barn), Emily Profile & Board Park Commissioners 1967 Letter 1; Trial Tr. Day 1 at 93:21-24, 96:7, Emily has resided at the Buttonwood Park Zoo, for apparently forty-nine of her fifty-five years. Id.<sup>5</sup>

Ruth, however, was approximately twenty-eight years old when she was rescued by the Animal Rescue League of Boston, seized by the United States Department of the Interior, and delivered into the City's care. Ruth Profile & Arrival Report 1, 5. She is thus approximately sixty-one years old and has resided at the Buttonwood Park Zoo for the last thirty-three years, together with Emily. Id.

Emily and Ruth are thus among the oldest living Asian elephants in a zoo setting in America. See Trial Ex. 15, Robert J. Wiese & Kevin Willis, Calculation of Longevity and Life Expectancy in Captive Elephants, 23 Zoo Biology 365-73 (2004) (estimating average life expectancy for Asian elephants in captivity in North America at 44.8 years).

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<sup>5</sup> Indeed, because Emily's captivity predates the classification of Asian elephants as endangered in 1976 and the Endangered Species Act itself in 1973, some of the Endangered Species Act's protections may not apply to her. See 16 U.S.C. § 1538(b). Critically, however, the Endangered Species Act's prohibition on taking does protect Emily. See id.; Am. Soc'y for the Prevention of Cruelty to Animals v. Ringling Bros. & Barnum & Bailey Circus, 502 F. Supp. 2d 103, 107-10 (D.D.C. 2007).

Over the years Emily and Ruth have spent at the City Zoo, elephant husbandry has undergone a near complete reversal. Years ago, elephants were managed by guides or bullhooks -- think a maharajah's mahout with his goad. Touching the elephant at a guidepoint with the guide led a trained elephant to exhibit the desired behavior; i.e. moving, stopping, and the like. Advanced training might include kneeling, stepping up on a pedestal, raising one or two legs, holding a banner in her trunk -- you get the idea.

Today, the zookeepers allow the elephants to roam at will throughout the zoo's habitat, which seeks to replicate -- as far as possible -- the elephants' natural surroundings. Elephants are enticed by the prospect of forage out of their barn to allow for its cleaning. Today, human contact with the elephants is kept to a minimum. While the elephant caretakers routinely have "hands-on" contact with the elephants, they do so almost exclusively "through a protective barrier." Trial Ex. 16, Elephant Mgmt. Policy & Elephant Keeper Handbook (Buttonwood Park Zoo 9th ed. 2018) 4, 9. But see Trial Ex. 17, Buttonwood Park Zoo Protocols for Sharing Unrestricted Space with Elephants 2018.

Rowley faults the City for being behind the curve in every respect. The Court finds the contrary to be true. Indeed, commendably, the City has supported its zoo with an adequate

budget; has attracted a cadre of dedicated, professional, empathetic, and innovative zookeepers; and has employed top notch veterinarians wherever necessary. The pace of change at the City Zoo has been commensurate with the evolution of elephant husbandry. Hydraulic fences limn the elephant stalls within their barn, allowing the elephants to move as the zookeepers desire without the need for guides. The barn's concrete floor has been covered with thick sand (easier on the elephants' feet), and sand is banked up against one wall of each stall so an elephant at rest leans against a sand bank rather than kneeling and lying down (more difficult for geriatric elephants with aging joints). Outside, forage is made available not only on the ground but on a raised, lattice-like wooden structure which seeks to replicate the elephant's natural environment and encourages her to exercise her trunk to seek out food where it would normally be found in the forest.

The zoo's accomplishments are not, however, an unbroken record of evolving improvements (although this is generally so). The elephant barn lacks a hydraulic hoist (to lift an elephant if necessary in case of injury or sickness), and the roof still leaks (although not over the animal spaces). More seriously, human negligence is not unknown. In January 2014, the door to the elephant barn was left unlocked and Ruth wandered out into a New England blizzard, suffering frostbite to her ears, vulva,

and tail. Trial Ex. 19, USDA Settlement Agreement 3; see also Trial Tr. Day 2 at 90:9-91:13.

There are larger issues as well. Asian elephants range naturally across the Indian sub-continent<sup>6</sup> and throughout Southeast Asia<sup>7</sup> and the Indonesian archipelago. Now New Bedford, Massachusetts has many fine attractions, but lush tropical forests and mangrove swamps are not among them. The elephant habitat at the City Zoo is somewhat larger than 3/4 of an acre and, while one could possibly conjure the dusty Deccan plains (ignoring the New England white oaks), by no stretch of the imagination could anyone believe these two elephants live in their "natural" surroundings.

The zookeepers ensure that Emily and Ruth have delicacies like bamboo in addition to their normal diet of hay and livestock grains. See Trial Tr. Day 3 at 32:22-33:14; Trial Tr. Day 2 at 70:7-10. Moreover, in collaboration with the Massachusetts College of Art and Design, the zookeepers have

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<sup>6</sup> Alexander faced Porus' Asian elephants at the Hydaspes in 326 B.C.E. The British used them as pack animals on the march from Kandahar to Kabul during the ill-fated invasion of Afghanistan, 1839-1842. See William Dalrymple, Return of a King (Knopf 2013); George MacDonald Fraser, Flashman (Plume 1984).

<sup>7</sup> See Croke, supra. For a sensitive, albeit Western, discussion of the terrain and its peoples, see generally the distinguished author John Masters, Bugles and a Tiger (Viking 1956) and The Road Past Mandalay (Harper 1961), the autobiography of his service in the 4th Gurkha Rifles in the old Indian Army.

developed “toys” for the elephants which are intended to maximize elephant dexterity. Emily is said to favor the xylophone. See Trial Tr. Day 3 at 37:13-39:6; Laura Crimaldi, MassArt Students Create Toys for Elephants at New Bedford Zoo, Boston Globe (May 13, 2019), <https://www.bostonglobe.com/metro/2019/05/13/massart-students-create-toys-for-elephants-new-bedford-zoo/EGB79VBrsiZB3TgUjpmpn0/story.html>.

None of this will do, says Rowley, arguing that Emily and Ruth ought be transported to a 34,000 acre elephant sanctuary in Tennessee to live out the remainder of their lives in a setting more closely resembling their natural habitat. Am. Compl. ¶ 97. She is in good company. See Charles Seibert, The Swazi 17, N.Y. Times Mag. 26-33, 42, 45 (July 14, 2019) (arguing that elephants ought not be kept in captivity at all).

Important as these larger issues may be, they are beyond the purview of this Court, immaterial because they are of no legal consequence to the outcome of this action. See Fed. R. Evid. 401. This is an action under the citizen suit provision of the Endangered Species Act. 16 U.S.C. § 1540(g). That Act, as the Fish and Wildlife Service has authoritatively interpreted it and in conjunction with the Animal Welfare Act, contemplates that endangered species may be kept in captivity. See 50 C.F.R. § 17.3 (excluding from the definition of “take,” as “applied to captive wildlife,” “generally accepted” husbandry practices

satisfying Animal Welfare Act standards); 7 U.S.C. § 2131 (explaining that the Animal Welfare Act is designed to "to insure that animals intended for . . . exhibition purposes . . . are provided humane care and treatment"). The reference standard for an endangered species in captivity is not a goal requiring the least restrictive environment or the most natural possible setting. Rather, it is generally accepted and appropriate animal husbandry. See 50 C.F.R. § 17.3. This is a familiar concept, taught by 4-H groups to youth across the nation. When I was growing up, the Boy Scouts offered a merit badge in Animal Industry. See Boy Scouts of America, Handbook for Boys 509 (New York: Boy Scouts of America, 1943).

Therefore, important as the questions posed by Rowley and Seibert may be, this Court eschews analyzing them and, having made its findings of fact, turns to the specific legal issues which require the Court's attention. The Court will make additional, issue-specific findings where necessary.

#### **IV. RULINGS OF LAW**

##### **A. Veterinary Care**

By mandate of the Code of Federal Regulations, "[e]ach . . . exhibitor shall have an attending veterinarian who shall provide adequate veterinary care to its animals." 9 C.F.R. § 2.40(a). The attending veterinarian must be employed "under formal arrangements," id. § 2.40(a)(1), and must have the

authority to provide and oversee adequate care, id.

§ 2.40(a)(2). In addition, the "exhibitor shall establish and maintain programs of adequate veterinary care that include . . . [t]he use of appropriate methods to prevent, control, diagnose, and treat diseases and injuries, and the availability of emergency, weekend, and holiday care." Id. § 2.40(b).

A zookeeper inspects Ruth and Emily each morning and completes a "Daily Animal Health Checklist." Trial Tr. Day 1 at 46:10-47:17. If any issue comes up, the zookeeper gets in touch with the Zoo's "elephant manager and the vet staff, the staff veterinarian or even the vet technician" promptly to resolve it. See id. at 47:7-17.

From at least 2000 to 2005, the City employed a full-time on-site veterinarian at the Buttonwood Park Zoo, Dr. Ryer. Id. at 112:8-11, 115:15. It is not clear when in the course of the next ten years the City employed a full-time on-site veterinarian, but the Zoo regularly called in Dr. Ryer for a consultation when medical issues arose. See id. at 118:13-119:1. One witness testified that when the City employed no full-time on-site veterinarian, it contracted with a veterinarian who would visit the elephants once per week. See id. at 47:18-48:3.

As of July 30, 2015, the City once again employed a full-time on-site veterinarian, Dr. Elizabeth Arnett-Chinn. Trial

Ex. 8, Independent Panel Review Buttonwood Park Zoo Elephant Program ("Independent Panel Review") 3. Although she subsequently resigned, the record also reflects that the City employed a full-time on-site veterinarian in 2018, see Trial Ex. 10, Final Report Visiting Committee Accreditation Commission ("Final Report Accreditation Commission") 8, and also did so at the time of the trial, see Trial Tr. Day 1 at 47:18-23.

In 2016, Ruth developed a severe gastrointestinal issue. Absent competent and professional veterinary care, there was a strong probability she would die. Trial Tr. Day 2 at 22:24-24:8, 27:3-9. The City provided such care, providing not only care through the Zoo's staff veterinarian but flying in a renowned large animal veterinarian from Tennessee to care for Ruth. Id. at 24:13-25:8. The medical team employed enemas to re-hydrate Ruth. Id. at 25:13-22. This process consisted of injecting 30 to 60 gallons of an electrolyte solution into the elephant's rectum three or four times a day for one week using clean 30-gallon trash buckets and a hose. Id. at 25:13-26:6. Ruth was compliant throughout the entire process, despite simultaneously undergoing other procedures such as having her blood drawn, a fact that the veterinarian attributed to her own positive relationship with Ruth and to the elephant's trust in the zookeepers. Id. at 26:10-27:2.

Ruth also receives phenylbutazone, a non-steroidal anti-inflammatory medication that treats her arthritis. Trial Tr. Day 1 at 129:1-10; Trial Tr. Day 2 at 4:20-5:5.

As the findings above exemplify, Ruth (and Emily) have received and are receiving adequate veterinary care in all the respects required by 9 C.F.R. § 2.40. The City's veterinary care practices were "generally accepted," 50 C.F.R. § 17.3, given that a qualified professional oversaw them, and, in times of unusual crisis, profitably consulted with between five and ten "elephant veterinarians around the country." Trial Tr. Day 2 at 24:11-20. The veterinary care that Ruth and Emily receive does not "actually injure" them. See 50 C.F.R. § 17.3. Thus, this Court rules that the City has provided generally accepted, Animal Welfare Act-compliant veterinary care for Ruth and Emily. The City's veterinary care for Ruth and Emily neither harms nor harasses them.

#### **B. Food and Shelter**

The Court finds and rules that Emily and Ruth are provided wholesome, palatable food free from contamination in sufficient quantity and nutritive value to maintain them in good health. Trial Tr. Day 3 at 33:2-14. Thus, the City complies with applicable nutrition regulations. See 9 C.F.R. § 3.129(a) ("The food shall be wholesome, palatable, and free from contamination and of sufficient quantity and nutritive value to maintain all

animals in good health."). Further, the Visiting Committee to the Accreditation Commission of the Association of Zoos and Aquariums found in 2018 that the Buttonwood Park Zoo provides the animals in its care with "diets of adequate quality and quantity" that are "prepared and stored hygienically" and "provided in a way that promotes the physical and psychological well-being of the animals," which supports the Court's conclusion that the elephants' diet is also generally accepted. See Final Report Accreditation Commission 10.

Regarding shelter, the Code of Federal Regulations requires that elephants, among other warmblooded animals, be housed in "structurally sound" facilities "in good repair," 9 C.F.R. § 3.125(a), with adequate water and power, id. § 3.125(b), as well as proper means of storing food, disposing of waste, and maintaining cleanliness, id. § 3.125(c)-(e). The City's outdoor facilities must provide the elephants shelter from bothersome sunlight and inclement weather, while being properly drained and fenced. Id. § 3.127. And there must be enough "space to allow each animal to make normal postural and social adjustments with adequate freedom of movement." Id. § 3.128.

The Zoo's elephant barn is appropriate to the local New Bedford climatic conditions and is otherwise suitable for housing these two elephants. While USDA-APHIS sanctioned the City in 2014 for allowing Ruth to get out during a blizzard, see

Trial Ex. 1, Citation & Notification of Penalty; Trial Ex. 19, USDA Settlement Agreement 3; Trial Tr. Day 2 at 90:9-12, the City has since made substantial renovations to the barn, and no such incident has recurred. See Final Report Accreditation Commission 27. Specifically, each elephant has adequate freedom of movement within the barn and sufficient space to stand, drink, and sleep. See id.; Trial Tr. Day 1 at 36:10-24 (zookeeper testifying to automated water system in barn that Ruth and Emily can reach with their trunks); Trial Tr. Day 2 at 68:13-24.

Further, the City provides shelter to Ruth and Emily that is in accordance with generally accepted animal husbandry practices. See Final Report Accreditation Commission 7.

The Court thus rules that the City fully complies with 9 C.F.R. §§ 3.125, 127, 128, & 129.<sup>8</sup> The City's accreditation by the Association for Zoos and Aquariums, which sets standards for animal care above the minimum standards required by Animal Welfare Act regulations, supports the Court's conclusion that the shelter and food that the City provides the elephants are consistent with generally accepted animal husbandry practices

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<sup>8</sup> The Court rules only on Rowley's request for prospective relief. See Am. Compl. ¶¶ 104-06. Although the Court observes that Ruth's frostbite may have constituted "harm" under the Endangered Species Act, the Court holds that the City is not causing Ruth "harm" today. See Final Report Accreditation Commission 27.

and do not harm or harass them. See Final Report Accreditation Commission 7, 10; Trial Tr. Day 3 at 39:14-18.

### **C. Social Opportunities and Enrichment**

The Department of Agriculture has not promulgated any regulations imposing standards for socialization and enrichment for the psychological wellbeing of animals that are not primates. Cf. 9 C.F.R. § 3.81; Kuehl, 161 F. Supp. 3d at 710-11 (ruling that keeping lemurs -- primates -- in social isolation was harassment). In addition, the parties have not introduced evidence that maintaining two Asian elephants in captivity together satisfies the "generally accepted" standard in the captive wildlife exclusion to a harassment-based take. See 50 C.F.R. § 17.3.

Thus the Court considers whether a lack of social opportunities for Ruth and Emily amounts to a "take" under the Endangered Species Act, which is to say, "an act which actually kills or injures wildlife" or "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." See id.

Emily and Ruth (female Asian elephants) are the only two elephants in the care of the City. Although Emily and Ruth may well feel lonely at times, the evidence does not establish that

the City's actions have significantly disrupted their normal behavioral patterns in an injurious manner.<sup>9</sup>

As for enrichment, the general fact-finding above limns the innovative efforts of the City's zookeepers to enrich the elephants' existence. In Kuehl, the court held that captive

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<sup>9</sup> A significant area of dispute at trial was whether Emily and Ruth engage in stereotypic behaviors. Stereotypic behaviors are behaviors with no purpose, Trial Tr. Day 1 at 41:5-9, which can indicate a captive animal's mental stress, see Graham, 261 F. Supp. 3d at 717-18. Rowley suggests that Ruth's and Emily's repetitive behaviors are "abnormal behavior" and thus are per se evidence that the City's actions or inaction "significantly disrupt [their] normal behavioral patterns," 50 C.F.R. § 17.3. See, e.g., Trial Tr. Day 1 at 7:20-8:2.

If the evidence leaned in favor of a conclusion that Ruth and Emily regularly do engage in stereotypic behaviors, not just normal anticipatory ones, that could be evidence of harm or harassment under the Endangered Species Act. Cf. Graham, 261 F. Supp. 3d at 749.

Rowley elicited evidence at trial that Ruth and Emily engage in the behaviors of swaying, bobbing, and pacing. See Trial Tr. Day 1 at 42:4-12, 73:20-74:11. She failed, however, to prove that these behaviors are stereotypic.

The evidence at trial was mixed at best as to whether Ruth and Emily engage in stereotypy. See, e.g., Trial Tr. Day 1 at 39:10-40:8 (zookeeper describing Ruth and Emily's swaying, bobbing, and pacing as anticipatory, not stereotypic, behavior); id. at 42:4-19 (same); id. at 73:20-74:6 (former elephant keeper testifying that the elephants' "swaying" is a result of them "trying to get our attention" and is thus more "anticipatory" than "stereotypic[]"); Trial Tr. Day 3 at 113:6-114:17 (Rowley describing video footage of Emily and Ruth while eating and swaying as "stereotyping").

Rowley failed to carry her burden of proving that Ruth and Emily regularly engage in stereotypic behaviors, and, moreover, did not prove that the City's action or inaction caused the behaviors that she describes as stereotypy. Accordingly, the Court cannot rule that the elephants' repetitive behaviors evidence that the City has actually injured them or significantly disrupted their normal behavioral patterns.

tigers were not harassed or harmed by a psychologically dull environment even when they were provided only "nominal" enrichment. 161 F. Supp. 3d at 718. Emily and Ruth are not so impoverished. The Court rules that the City follows adequate and generally accepted animal husbandry practices in these regards. Moreover, there is insufficient evidence to establish the likelihood of significant disruption of normal behavioral patterns.

**D. Failure to Protect Ruth**

This is the most difficult issue in this case. Rowley claims that the City has allowed Ruth to be harassed and harmed over the years through Emily's aggressive actions toward her. Indeed, years ago, Emily bit off the tip of Ruth's tail. Trial Tr. Day 1 at 63:5-25. Years later, after the frostbite incident, when Ruth's tail was bandaged up, Emily (perhaps out of curiosity) used her trunk to toy with the bandage, causing Ruth to squeal in apparent pain and move away. Sporadically over the years there have been incidents where, while Ruth has been peacefully feeding, Emily has come up and shouldered her out of the way in order to enjoy that particular foodstuff herself. There is ample available food and Ruth, although dispossessed, shambles off to feed elsewhere. Ruth is not malnourished.

Rowley, albeit a keen and frequent visitor to the City's elephants, is neither a zookeeper nor a veterinarian. She characterizes these incidents as "attacks" by Emily upon Ruth. The zookeepers consider them normal dominant animal behavior (Emily being the larger and heavier elephant). See, e.g. Trial Tr. Day 1 at 60:17-18, 62:20-25, 64:1-65:18. The skilled veterinarians who testified tend to side with the zookeepers but are quick to point out that only a specialist in elephant behavior could give a sound answer.

Under the Fish and Wildlife Service's regulations, to "harm" an endangered species means intentionally or negligently to engage in "an act which actually kills or injures wildlife," and encompasses conduct "significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering." 50 C.F.R. § 17.3. As stated above, to "harass" such a species means:

[a]n 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.

Id. One may thus violate the "harassment" requirement without actually causing "harm" to wildlife. See Hill, 867 F.3d at 511 (observing that "the regulatory definition of harass contains requirements that are less demanding . . . than are the requirements contained in the regulatory definition of harm").

In the absence of directly applicable expert testimony about elephant behavior, and recognizing that Rowley bears the burden of proof, this Court concludes that she has not proved that the City was harassing or harming Ruth in violation of the law by negligently allowing Emily to attack her.

Then, a few days ago, Rowley filed a "motion to confiscate" in which she raises some new and disturbing allegations, viz. as a result of increased elephant conflict, the City's zookeepers have restricted Ruth's access to the outer barn, causing her emotional and physical distress. Mem. Favor Confiscation ("Confiscation Mem."), ECF No. 86; see also Suppl. Mem. Favor Forfeiture, ECF No. 90.

Even as alleged by Rowley, it appears that the City's response is precisely what responsible elephant management requires. Rowley's allegations in the motion to confiscate suggest that the zookeepers have decided to provide separate feedings to the two elephants to ensure that Ruth gets adequate nutrition despite Emily's displacement behaviors, see Trial Tr. Day 2 at 95:4-96:15. Confiscation Mem. 3. Rather than proving that the City fails to protect Ruth from Emily's aggression, see id., these allegations demonstrate that the City is proactively responding to changes in the social dynamic between the two elephants to ensure that both animals are comfortable and are able to meet their needs to the extent possible.

Some of Rowley's allegations in her latest motion raise some concerns for the Court about the City's provision of adequate shelter during the summer months. See Aff. Joyce Rowley ¶¶ 6-7, 10-14, ECF No. 87. Rowley is not an elephant expert, however, nor is this Court. Accordingly, Rowley's allegations here do not suffice to persuade the Court that it ought revise its rulings in this case.

**V. CONCLUSION**

For these reasons, the Court finds and rules that there has been no violation of the Endangered Species Act. Judgment shall enter for the City.

**SO ORDERED.**

/s/ William G. Young  
WILLIAM G. YOUNG  
DISTRICT JUDGE