



THE OFFICIAL PUBLICATION OF THE NEW YORK STATE BAR ASSOCIATION'S COMMITTEE ON ANIMALS AND THE LAW

From the Chair

As I was doing research for the upcoming Committee on Animals and the Law Annual Meeting Program - Companion Animals and COVID-19: Expected and Unexpected Legal Considerations, I was reminded of the vital role that animals play in the lives of human beings. Many of us know this on a personal level and have seen it with friends and family. Animals provide companionship, comfort, and protection, without uttering a single word. During this time of COVID-19, companionship and comfort have become even more important as the loss of loved ones, quarantining, and social distancing have become commonplace. We must remember, however, that animals are not here for us, but rather to be with us on this Earth. That is why we, as animal lawyers, should do our best to provide them protection under the law. And, of course, we, too, can return the favor and provide them companionship and comfort.

Thank you for taking a moment to read the latest edition of Laws and Paws! I also want to thank Kirk Passamonti, Molly Armus, Florence Fass, and Cheryl Sovern for their work on the Publications Subcommittee. There would be no Laws and Paws without them. Enjoy!

Ashlee Cartwright, Chair, Committee on Animals and the Law

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Committee on Animals and the Law 2021 Annual Meeting

On January 25, 2021 the Committee on Animals and the Law will hold its annual CLE program. This years program will be held virtually and will start with a panel discussion on the topic of "Companion Animals and the Pandemic: What Lawyers Should Know to Help Their Clients." The program will be presented by experts in their fields and will offer a practical discussion of laws relating to animals. Topics discussed will include getting a new companion animal; distinctions between service, therapy and emotional support animals; housing and landlord/tenant concerns; domestic violence; separation and divorce companion animal disputes; changes in veterinary practices and stray animals. This segment will be followed by a presentation on "Preparing For Emergencies," which will cover what happens if you are no longer able to care for your animal and creating a Legally Sound Pet Plan.

To register, please visit www.NYSBA.org.



Ashlee Cartwright, Esq., Committee Chairperson
Charis Nick-Torok, Esq., Committee Co-Chairperson
Kirk Passamonti, Esq., Publications Subcommittee Chairperson
Barbara Ahen, Esq., Secretary

**DOT’S AIR CARRIER ACCESS ACT FINAL RULE:
Psychiatric Support Animals are In; Emotional Support Animals are Out.
By Cheryl L. Sovern, Esq.**

On December 2, 2020, the United States Department of Transportation (“DOT”) announced its final rule on traveling by air with service animals.¹ This rule amends the Department’s Air Carrier Access Act (ACAA) and becomes effective 30 days after publication in the Federal Register which will occur sometime in early 2021.²

To understand the impact that the amendment to the ACAA will have on airplane flights with animals, we should review the definitions and terms previously used. The DOT, in the ACAA, had previously defined service animals as any guide dog, signal dog, or other animal individually trained to work or perform tasks for an individual with a disability, including, but not limited to, guiding individuals with impaired vision, alerting individuals with impaired hearing to intruders or sounds, providing minimal protection or rescue work, pulling a wheelchair, or fetching dropped items.³

Under the Americans with Disabilities Act (“ADA”), the term psychiatric service animal refers to “a dog that has been trained to perform tasks that assist individuals with disabilities to detect the onset of psychiatric episodes and lessen their effects. Tasks performed by psychiatric service animals may include reminding the handler to take medicine, providing safety checks or room searches, or turning on lights for persons with Post Traumatic Stress Disorder, interrupting self-mutilation by persons with disassociative identity disorders, and keeping disoriented individuals from danger.”⁴ The psychiatric service animals are trained (either professionally or by the owner) to assist with these tasks. DOT has now adopted a similar definition.⁵

Conversely, emotional support animal, as defined by the DOT, refers to, “any animal shown by documentation to be necessary for the emotional well-being of a passenger.”⁶ Emotional support animals do not have to be trained.

Under the DOT’s previous rule, U.S. airlines were required to transport all service animals, psychiatric service animals and emotional support animals regardless of species with a few narrow

¹14 CFR Part 382

²<https://www.transportation.gov/sites/dot.gov/files/2020-12/Service%20Animal%20Final%20Rule.pdf>

³49 CFR § 37.3

⁴<https://adata.org/guide/service-animals-and-emotional-support-animals>

⁵<https://www.transportation.gov/sites/dot.gov/files/2020-12/Service%20Animal%20Final%20Rule.pdf> @ page 73.

⁶<https://www.transportation.gov/sites/dot.gov/files/2020-12/Service%20Animal%20Final%20Rule.pdf>

exceptions (i.e., snakes, reptiles, ferrets, rodents, and spiders) and other discretionary factors which could be used to ban such transportation including the size/weight of the animal, whether it would pose a direct threat to others, disruption to the cabin, etc.⁷ Over the years, there have been instances where unusual animals made the news for either being allowed to fly in the cabin or because it was banned from flying.

In January, 2018, a passenger was banned from taking a flight with a large peacock on United Airlines out of Newark, New Jersey en route to Los Angeles, California. The passenger claimed the peacock was her emotional support animal and even offered to pay for a seat for the peacock, but the airlines refused to allow her to board.⁸ In 2014, an emotional support pig named Hobie was originally allowed to board a US Airways flight, but was removed before takeoff when the pig defecated and squealed once onboard.⁹

Prior to the enactment of the new 2021 ACAA amendment, U.S. based airlines were required to recognize both psychiatric service animals and emotional support animals as service animals, but allowed the airlines to require both to provide a letter at least 48-hours in advance of the flight from a licensed mental health professional setting forth the passenger's need for a psychiatric service or emotional support animal. Documentation was not required for service animals and DOT required airlines to accept service animals based only on the credible verbal assurances of the passengers.

Also before the enactment of the new 2021 ACAA amendment, U.S. based airlines were not permitted to charge for the transport of service animals and there was no rule establishing a limit on the number of service animals a passenger could bring. There was also no limitation on whether the animal had to be caged during the flight, except that it was noted that passengers could have the animals sit on their lap (and not be caged) for the entire trip provided the animal was no larger than a 2-year old child.

Since the old DOT rule was enacted, DOT received many complaints from consumers against the airlines. More than 60% of these complaints pertained to emotional support or psychiatric service animals where passengers argued that the airlines had not accepted their animals for transport.

The DOT reviewed the complaints and recognized that the use of unusual animals added to the confusion. According to the DOT, passengers have attempted to fly with iguanas, pigs, spiders, squirrels and peacocks. The airlines argued that the attention and resources that were being expended when a passenger seeks transport with an unusual service animal was taxing on the airlines and their employees. Even disability rights advocates argued that the use by some of such unusual animals erodes the public's trust which could, in turn, limit access of disabled individuals

⁷14 CFR 382.117(f)

⁸<https://www.bbc.com/news/world-us-canada-42880690>

⁹Id.

who use more traditional service animals.

Airlines argued that passengers were, at times, being disingenuous about their needs for emotional support animals and used the term “emotional support animal” in order to transport their pets for free in the cabin as opposed to needing to pay to have the animal transported in the dangerous cargo area. The airlines noted that it was easy for the public to simply purchase vests, tags and other equipment typically used by service animals as well as obtaining letters fraudulently setting forth an emotional support or psychiatric service animal designation.¹⁰ In furtherance of its complaints, airlines have noted a large increase in animal-related incidents in cabins due to untrained emotional support animals in the cabin.

It has been argued that the DOT’s old rule pertaining to service animals (which applies to airlines and their facilities and services) does not match up with the ADA definitions which apply to airports, airport facilities and services. This has created confusion for both the airlines and the public. Under the ADA, a service animal is, “any dog that is individually trained to do work or perform tasks for the benefit of an individual with a disability, including a physical, sensory, psychiatric, intellectual, or other mental disability. Other species of animals, whether wild or domestic, trained or untrained, are not service animals for the purposes of this definition. The work or tasks performed by a service animal must be directly related to the individual's disability. Examples of work or tasks include, but are not limited to, assisting individuals who are blind or have low vision with navigation and other tasks, alerting individuals who are deaf or hard of hearing to the presence of people or sounds, providing nonviolent protection or rescue work, pulling a wheelchair, assisting an individual during a seizure, alerting individuals to the presence of allergens, retrieving items such as medicine or the telephone, providing physical support and assistance with balance and stability to individuals with mobility disabilities, and helping persons with psychiatric and neurological disabilities by preventing or interrupting impulsive or destructive behaviors. The crime deterrent effects of an animal's presence and the provision of emotional support, well-being, comfort, or companionship do not constitute work or tasks for the purposes of this definition.”¹¹ Just using the ADA’s definition, you can see that psychiatric service animals would be considered a service animal, but untrained emotional support animals would not.

Not to further confuse us all, it should be noted that the ADA’s definition of acceptable service animals also includes a separate category for miniature horses, but only if the horse meets the assessment factors including whether the facility can accommodate the size of the animal, the handler can exercise sufficient control over the horse, whether the horse is housebroken and also whether the horse’s presence compromises the legitimate safety requirements necessary for the safe operation of the facility.¹²

¹⁰ For a fee of \$189, you can purchase an ESA travel letter signed by a licensed therapist and also receive ESA tags, leashes, vests, etc. <https://www.unitedsupportanimals.org/product/esa-letter-for-airlines-housing/>

¹¹ 28 CFR 36.104.

¹² 28 CFR § 35.136(i)

Under the new ACAA rule which will take effect later this year, the definition of service animal is more limiting in that it only pertains only to dogs (regardless of breed or type) that are trained to do work or perform tasks for the benefit of a qualified individual with disability, including a physical, sensory, psychiatric, intellectual, or other mental disability. This new definition is also more limiting in that it does not include emotional support animals. The benefit to those with psychiatric service dogs cannot go unnoticed. Those passengers, whose psychiatric support dogs were trained to assist with mental health issues as discussed above, are no longer required to provide documentation from a licensed health professional 48 hours before a flight.¹³ However, passengers who wish to fly with emotional support animals may now find that the airline's policy prohibits it altogether.

In addition, the new DOT rule provides airlines with a number of other discretionary powers including the following:

- whether or not to recognize emotional support animals as pets and not service animals;
- to limit the number of service animals to two per passenger;
- to require disabled passengers traveling with a service animal to complete a DOT-established form attesting to the animal's training, behavior and good health;
- for flights of 8 hours or more, require the disabled passenger to attest to the animal's ability to not relieve itself at all during the flight or of its ability to relieve itself in a sanitary manner;
- disabled passengers have the same ability as other passengers to elect not to physically check-in, but may opt to check in online or with curbside check-ins; and
- require service animals to be harnessed, leashed or otherwise tethered on the aircraft.

¹³<https://www.transportation.gov/sites/dot.gov/files/2020-12/Service%20Animal%20Final%20Rule.pdf>, at page 26.

Another change that has occurred as a result of the new DOT rule pertains to the use of miniature horses. As discussed above, miniature horses are, in some cases, qualified under the ADA as a service animal. However, under the new ACAA rule, service animals are limited to dogs only, thereby leaving such use and transportation of those trained service animals completely up to the discretion of the airlines.¹⁴ While certainly the majority of service animals are dogs, there is a population of disabled individuals that find miniature horses to be better suited to their needs. As a result of the new DOT rule, such disabled individuals may be refused travel with their service animal because the animal does not fall within the new definition of service animal. Once again, this can become confusing since the ACAA definition of service animal and the definition under the ADA are at odds with respect to miniature horses. The American Association of the Deaf-Blind argued in its comment to the DOT that miniature horses serve not only as seeing eye guides, but as support for balance problems. They argued that guide dogs are not strong enough in some instances to give the deaf-blind people something to hang on to when they stumble, wobble, or lose their balance. This could provide for interesting litigation in the coming months.

Why the DOT did not follow the same ADA definition is unknown. The DOT took over 1,100 comments related to the definition of service animal, but the DOT opted to limit the definition to dogs. I surmise that this position may have been taken by the DOT because the new Rule brings the domestic carrier rule in line with the international carriage rules which only require dogs as service animals.¹⁵

One thing is certain, however, this will not be the last we hear about the new DOT rule on service animals and emotional support animals. Already, in just a few short weeks, a number of airlines have put forth new policies regarding emotional support animals. As of the completion of this article, Alaskan Airlines and Delta Airlines have stated that, effective January 11, 2021, they will only accept service dogs and that emotional support animals will no longer be accepted. American, United and Hawaiian airlines have also revised their policies, effective February 1, 2021, prohibiting the ability to have emotional support animals in the cabins.

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¹⁴ Id. at pg. 30, 33

¹⁵ <https://beta.regulations.gov/comment/DOT-OST2018-0068-19041>.

NYSBA COMMITTEE ON ANIMALS AND THE LAW
MEMBER SPOTLIGHT: ASHLEE CARTWRIGHT, ESQ.,
NYSBA COMMITTEE ON ANIMALS AND THE LAW CHAIRPERSON

INTERVIEW BY MOLLY ARMUS, ESQ.

Why did you decide to become a lawyer? What type of law do you currently practice?

As much as I would like to say that I've always known I wanted to be a lawyer and advocate for the rights of the voiceless, it wasn't until college that I decided to attend law school. I love education, and figured a professional degree was the sensible next step after receiving my bachelor's degree. Since I tend to get weak and weary at the sight of blood, being a doctor or veterinarian was out of the question, so law school it was! I went to law school with the intention of becoming a sports lawyer, but during my second year, I attended a panel on animal law and knew that I wanted to pursue a career in animal law. Since it is very difficult to attain a full-time animal law position, I have always been involved with animal law "on the side." My full-time job is working as in-house counsel for The Salvation Army. I've been there for 10 years.

Has there been anyone in the past or anyone currently whose work inspires or influences you?

For me, having a mentor in this field is extremely important and helpful. Early on in my career, back when I lived in Massachusetts, Sarah Luick (former longtime member of the Animal Legal Defense Fund Board of Directors) was very encouraging as I was getting my feet wet in the field. Although I haven't been in touch with her for years, I fondly remember conversations we had and her assistance in helping me learn more about animal law.

The most important mentor over the past 10+ years has been fellow NYSBA COAL member, and former Chair, Jim Gesualdi. I most certainly would not be in the position I am in on the Committee today without his guidance and friendship. I remember thinking how effective of a leader he was when he served as Chair (the role he had when I first joined the Committee). The work that Jim does is inspiring and his kindness is heart-warming. We met at a NYSBA Annual Meeting program in 2009 and I remember feeling almost surprised at how much time he took to talk to me after the meeting ended. I lived in Massachusetts at the time and had come to New York City just for the meeting. We were in further contact the week after the meeting and that began my involvement on this Committee. Jim continues to serve as a mentor to this day.

What do you like most about being a part of the NYSBA COAL?

What I like most about being a part of this Committee is the relationships that are created and the dedication of the members in their efforts to make the world a better place for animals. While at times I wish that the Committee was larger so that we could tackle more projects, I love that the Committee is small. I have been on larger animal law committees and you sometimes get lost in the shuffle.

What do you think is the biggest benefit to attorneys who join the NYSBA COAL?

As mentioned above, my day job - besides a service animal/emotional support animal question here and there - has nothing to do with animal law, so this Committee is my connection to animal law. I think that is one of the biggest benefits to attorneys who join the Committee - you get real experience and gain extremely useful knowledge in the field of animal law while a member on this Committee, whether it be through drafting a memo for the Legislation Subcommittee, reading about different animal law topics for the Student Writing Subcommittee, attending one of the many great programs of the Education Subcommittee, writing an article for the Publications Subcommittee, or exploring something new as part of the Special Projects Subcommittee, there is something for everyone. And, of course, you have the opportunity to network and meet other attorneys who have a wealth of knowledge in particular areas of animal law.

I also think that the Committee is great for attorneys who don't necessarily have an interest in animal law because the Committee's work highlights how animal law is intertwined with so many other areas of the law.

What would you say is the biggest challenge in advocating for animals?

While I think it's improving, I think one of the biggest challenges is being taken seriously by others. I also think prioritizing animal issues in any level of government is very difficult. Because of that, there is more legwork in having animal issues heard.

Is there an issue or area within animal law that you feel the most passionate about?

Although my entry into animal advocacy began with companion animals, the area of animal law that I am most passionate about is farm animals. I remember someone telling me during an animal advocacy conference in 2012 that while you probably want to help all animals, you can better serve animals by focusing in on one area of animal advocacy. I've found that piece of advice to be useful over the years. I think one of the reasons why I chose farm animals is because in the world of animals, they are often treated as inferior to companion animals. I also was very moved to fight for the rights of farm animals after reading *Eating Animals*, by Jonathan Safran Foer. My passion for farm animals led me to become a vegan in 2010. As my life as a working mother becomes more and more hectic, and the time that I have to proactively advocate for farm animals and other animal issues becomes less and less, I find some comfort in knowing that my decision to not use or consume animals or animal by-products saves animals' lives.

What is one law or policy you'd like to see changed for animals?

I would love to see a shift in the use of animal products in the federal school lunch program. Lobbyists (with lots of money and resources) dictate what the federal government considers acceptable options, particularly the milk industry. I've encountered how this trickles down to individual schools as I have attempted to increase vegan and vegetarian options at my children's school.

What advice would you give to an attorney interested in getting more involved in animal law?

I think the best way for someone to get involved in animal law is to get involved in bar association animal law committees. As mentioned above, committees have been my connection to animal law - they are great for resources and networking. I would also advise attending an Animal Legal Defense Fund Conference. It's a great way to learn new things, expose yourself to different areas of animal law, and meet new people.

What do you enjoy doing when you are not working?

When I'm not working, I enjoy coaching/watching my children's sports teams, playing board games and cards with the kids, and going for family hikes. And, to be honest, I do enjoy decompressing with a good tv show at the end of the day...if I manage to stay awake.

Fall Term 2018

**Enhanced Zoological Gardens:
Untapped Potential and the New “Nature”**

Daniel Egel-Weiss
Harvard Law School
Class of 2020

December 2018

I. Introduction

Approximately 181 million people—more than half of America’s population—visit a zoo or aquarium each year.¹ As science continues to point towards more robust non-human animal (hereinafter, “animal”) sentience in many species, the role, purpose, and future of zoological gardens and aquariums (hereinafter, collectively referred to as “zoos”) has come into question. Moreover, the potential to create a safe, permanent home for various animal species creates myriad of largely unexplored opportunities for zoo organizations to play a vital role in the preservation and happy existence of individual animals *and* species, while still operating as an enjoyable commercial enterprise for humans.

This paper argues that a solution to ensure the survival of numerous animals and species may be to create expansive, humane enclosures, nearly identical to natural habitats for animals to live in, while simultaneously funding these areas by allowing human visitors. The reimagining of the purpose and structure of zoos may be the most practical, humane way to save animals in the face of unprecedented climate change. Interestingly, given the public’s enhanced understanding of animal feelings and the empathy that follows, these innovations may be the only way to keep zoos economically viable in the future. Financial, social, and political hurdles exist before this vision can become reality, but precedents for large-scale animal-centric territories do exist (as discussed in Section V, *infra*). Ever-increasing human compassion and understanding for animal needs and desires may one day create the political willpower to make these modern, large-scale humane enclosures a reality. The new conception of zoological gardens will be referred to in this paper as “animal territories.” Animal territories would be fundamentally different than wildlife reserves because they would house non-native species.

¹ See Association of Zoos & Aquariums, Visitor Demographics, <https://www.aza.org/partnerships-visitor-demographics> (last visited Nov. 24, 2018).

The Association of Zoos and Aquariums (“AZA”), the largest accreditation agency for American zoos, defines a zoo as:

“A permanent cultural institution which owns and maintains captive wild animals that represent more than a token collection and, under the direction of a professional staff, provides its collection with appropriate care and exhibits them in an aesthetic manner to the public on a regularly scheduled basis. They shall further be defined as having as their primary business the exhibition, conservation and preservation of the earth’s fauna in an educational and scientific manner.”²

This is the definition of zoos most relevant to this paper insofar as it provides a viable framework from which to analyze the current state of wildlife housed in human captivity, and how we should progress forward. From the AZA’s definition, and our own personal experiences, this paper begins with the proposition that current zoos are similar to museums (“cultural institutions”) with living residents. Those residents—animals—are considered “owned” by the zoo, and must be “provided appropriate care” by “professional staff.” Moreover, these residents must be “exhibit[ed] . . . in an aesthetic manner to the public on a regular[] basis.” One can take issue with, or applaud, this definition, but there is no doubt that zoos today have one *primary* purpose: human access to animals. After all, their “primary business” is the “exhibition, conservation and preservation of the earth’s fauna[.]” Today, zoos are businesses that sustain themselves by conserving and preserving animals. Even zoos that do not charge an entry fee, such as the Lincoln Park Zoo in Chicago, generate incredible revenues through merchandise and food sales.³ Any reform to legal regimes regarding zoos must take this incontrovertible fact into account; those who care about humane treatment of animals should seek, when possible, to align economic interests with those who can help animals. Zoo modernization should, therefore, take

² Association of Zoos & Aquariums, FAQs: What Is Accreditation?, <https://www.aza.org/accred-faq> (last visited Nov. 24, 2018).

³ In 2018, the Lincoln Park Zoological Society reported \$43,989,855 in revenue. *See* Lincoln Park Zoological Society, Financial Report, available at <https://www.lpzoo.org/sites/default/files/pdf/info/101286%20Lincoln%20Park%20Zoo%20-%20200318%20-%20AUD%20-%20Final.pdf> (last visited Nov. 24, 2018).

this financial aspect into account as it can benefit animal wellbeing if incorporated without subversive exploitation.

The AZA’s definition is but one significant insight into what a zoo is today. Animal enclosures have changed dramatically over time, as will be discussed in greater detail in Section II, *infra*. As the public’s understanding about what animals’ experiences are continues to change, and as science evolves, zoos seem to have more internal debates regarding what their purpose ought to be. Public debates about the role of zoos are also changing. Much of this uncertainty can, of course, be seen in the AZA’s current definition of zoos, *supra*. Ought zoos simply be habitats for animals? Are they conservation spaces? Are they science centers? Are they just spaces for commerce and entertainment? Indeed, if one “[a]sk[s] a dozen zoo directors why [zoos] should exist” one can get a “different answer every time. Education, conservation and science all come up. But the most common answer—fostering empathy for animals—is becoming more difficult to do while providing humane care to these animals.”⁴ For both human and animal well-being, then, the time has come to redefine the purpose, structure, and very core function of zoos. Public opinion, backed by science, now suggests that if we care about the wellbeing of living beings, animal mental and physical welfare must be at the forefront of a zoos’ mission. The current composition of zoos is inadequate, and at least somewhat concerning to *most* patrons.⁵

⁴Justin Worland, *The Future of Zoos: Challenges Force Zoos to Change in Big Ways*, TIME MAGAZINE, available at <http://time.com/4672990/the-future-of-zoos/> (last visited Nov. 24, 2018).

⁵ 57% of respondents said they were “somewhat” or “very” concerned about the welfare of animals in zoos. See Rebecca Riffkin, *In U.S., More Say Animals Should Have Same Rights as People*, GALLUP, INC., available at <https://news.gallup.com/poll/183275/say-animals-rights-people.aspx> (last visited Nov. 24, 2018).

A. An Overview of this Paper

This paper first explores the evolving human desire to have animals in enclosures. Much of this discussion will be aimed at affirming criticisms of the inadequacy of contemporary zoos. Next, an examination of laws relating to zoo animal welfare will occur. While zoos exist in all regions of the world, this paper focuses primarily on the regulatory framework for American zoos (although international protocols will be discussed). There are two additional reasons that this focus on the U.S. is advantageous: firstly, from a moral and ethical perspective, the United States and its corporations have likely caused disproportionate harm to worldwide wildlife as compared to most other nations; secondly, from a functional perspective, the uniquely diverse climate of the United States will allow it to provide adequate climates to many animals. It bears acknowledgement at this moment that zoos are ubiquitous around the world, but vary greatly in how they are managed; to explore zoos outside of the United States would require more detail than this paper's length or focus will allow. This paper next makes a moral and ethical argument about providing a safe, comfortable space for creatures as more of the natural environment is taken by humans, ultimately advancing a new theory of zoos' purpose: preparing them to be the new "natural" habitat for animal climate refugees by creating a more rigorous, updated framework from which animal wellbeing would be guaranteed. To be explicit: translocation and new conceptions of 'habitats' may *already* be necessary to conserve wild megafauna, and our regulatory schemes should reflect and embrace that reality. While reading this proposal, one ought to keep in mind the scientific estimate that 60% of wildlife has been killed (directly or indirectly) by human activity in the last 48 years (since 1970).⁶

II. Legitimate Criticism to Animal Enclosure: An Historical Framework

⁶ See Bob Picheta, *This is the 'last generation' that can save nature, WWF Says*, CNN, available at <https://www.cnn.com/2018/10/29/health/wwf-wildlife-population-report-intl/index.html> (last visited Nov. 24, 2018).

With history as a guide, it is critical to recognize that there are legitimate social and historical concerns when animals have been kept in man-made enclosures. This section explores the numerous reasons that humans have decided to keep animals captive, and will embrace the idea that, on the whole, nefarious, self-serving interests should make one wary of the animal territory proposal. Ultimately, however, this section discusses new economic incentives to treat animals held in animal territories with the requisite respect required to ensure a quality existence by nearly any humane standard.

A. Exploring the Human Desire to Have Animal Enclosures

Exploring the evolution of humans' sociocultural, economic, and emotional desire to keep animals captive aids in our understanding of how to humanely 'confine' animals in the future for their own benefit. To put it another way: understanding the misgivings of the past can help enhance the solutions of tomorrow.

Throughout recorded history, wild animals have intrigued and captivated human imagination. The first live animal displays for human enjoyment were recorded in Ancient Egypt, where the Pharaohs kept wild animals that had been gifted to them.⁷ As one may imagine, ancient zookeepers "had difficulty maintaining these animals" and often beat them into submission, while keeping them in small spaces.⁸ At that time, and for centuries thereafter, wild animals were displayed only for the elite. The Romans used animals as a means of entertainment, and the Greeks captured animals and studied them. The first "zoo," as contemporary humans would conceive of them, was founded in London's Regent's Park in 1828.⁹ At first, the facility was built to study and understand wild animals from foreign lands.

⁷ See Traci Watson, *In Ancient Egypt, Life Wasn't Easy for Elite Pets*, NATIONAL GEOGRAPHIC, available at <https://news.nationalgeographic.com/2015/05/150525-ancient-egypt-zoo-pets-hierakonpolis-baboons-archaeology/> (last visited Nov. 24, 2018).

⁸ *Id.*

⁹ See Justin Worland, *The Future of Zoos: Challenges Force Zoos to Change in Big Ways*, TIME MAGAZINE, available at <http://time.com/4672990/the-future-of-zoos/> (last visited Nov. 24, 2018).

Scientists, however, decided to open the park to the public on April 27, 1828. The public loved it, and zoos quickly spread across the globe.¹⁰ Until several decades ago, even the most progressive zoos in the world kept their animals in relatively small cages.

Human indifference towards animal wellbeing is well documented, and, perhaps, even more ancient than the first wild animal enclosure. Descartes, a 17th Century philosopher and scientist, posited, “[a]nimals are like robots; they cannot reason or feel pain.”¹¹ Rapid advances in technology, and socio-cultural shifts have developed new ways of thinking about animals. Nearly 140 years after Descartes’ passing, in 1789, Jeremy Bentham famously wrote, “The question is not, Can [animals] reason? nor Can they talk? but Can they suffer?”¹² A significant shift in the framework for questions related to animals. In recent decades, animals’ self-awareness is understood at an unprecedented level. Today, “[n]eurology research has shown that mammals possess the same brain chemicals that give humans self-awareness.”¹³

Now more than ever, humans are concerned with animal welfare. These concerns are only increasing. This is especially true in the United States, which, through economic and other powers, possesses outsized influence on global animal welfare (more on this later). A 2015 Gallup poll found that 32% of Americans believe animals “should have the same rights as people.”¹⁴ This reflects a 7% increase in 7 years. A 2014 Pew Research Center poll found a similar proportion totally opposed animal testing: 50% up from 43% in 2009.¹⁵ This rapid increase in concern for animal wellbeing has already manifested itself in commercial settings:

¹⁰ *Id.*

¹¹ Peter Harrison, *Descartes on Animals*, THE PHILOSOPHICAL QUARTERLY, Oxford Journals (Apr. 1992) at 219, available at <https://static1.squarespace.com/static/54694fa6e4b0eacc4530f99d/t/577a841dbe65944fd9c6d0d2/1467647007000/Descartes+on+Animals+1992.pdf> (last visited Nov. 24, 2018).

¹² See Jeremy Bentham, *An Introduction to the Principles of Morals and Legislation* (2007), p. 18.

¹³ See WORLAND, *supra* Note 9.

¹⁴ RIFFKIN, *supra* Note 5.

¹⁵ See Carrie Funk & Lee Rainie, *Opinion about the Use of Animals in Research*, PEW RESEARCH CENTER, available at <http://www.pewinternet.org/2015/07/01/chapter-7-opinion-about-the-use-of-animals-in-research/> (last visited Nov. 24, 2018).

over half of American consumers are concerned about animal welfare as it relates to the food supply.¹⁶ The result has been largely, if not entirely, beneficial to animals. Phrases such as “cage-free” and “free-range” now dot supermarket aisles across the country; beauty products are largely not tested on animals, either. While we must acknowledge that many of those phrases often ring hollow (due to continued animal cruelty on factory farms, and the like), these rapid shifts in public opinion and concern could be indicative of what the future of zoos should look like in order to keep them economically viable: they should become animal territories and humane centers for wildlife.

B. Legitimate Criticisms of Holding Animals Captive

While there have been many positive advances in the perception of animals, animals in contemporary zoos face nearly unparalleled hardships. While they are safe from many dangers that the natural world brings, their physical and emotional wellbeing leaves much to be desired. Well documented is the fact that animals in zoos are particularly prone to emotions like stress, resulting in abnormal behaviors known as “stereotypic behaviors.”¹⁷ These can include constant pacing, rocking, swimming in circles, self-mutilation (including feather picking and excessive grooming), biting cage bars, and numerous other activities which are detrimental to health.¹⁸ Much of this stress and resulting abnormal behaviors have been associated with insufficient environments, both in terms of size and stimulation.¹⁹ This stress manifests itself physically in other ways too, as there is nearly a 65% mortality rate of animals

¹⁶ See *Animal Welfare: Issues and Opportunities in the Meat, Poultry, and Egg Markets in the U.S.*, PACKAGED FACTS, https://www.packagedfacts.com/Animal-Welfare-Meat-10771767/?progid=89555&_hstc=183052025.bdfd7c8073751785112d0bded31a31d6.1540482372280.1540482372280.1&_hssc=183052025.1.1540482372281&__hsfp=1973963874 (last visited Nov. 24, 2018).

¹⁷ Ronald S. Swaisgood & David J. Shepherdson, *Scientific approaches to enrichment and stereotypes in zoo animals: what's been done and where should we go next?*, *ZOO BIOLOGY*, 24: 499 at 502, available at <https://onlinelibrary.wiley.com/doi/abs/10.1002/zoo.20066> (last visited Nov. 24, 2018).

¹⁸ See *id.*

¹⁹ See Joseph P. Gardner & Georgia J. Mason, *Evidence for a relationship between cage stereotypies and behavioral disinhibition in laboratory rodents*, ScienceDirect, available at <https://www.sciencedirect.com/science/article/pii/S0166432802001110?via%3Dihub> (last visited Nov. 24, 2018).

born into captivity worldwide.²⁰ “The direct relationship of home range size to abnormal behavior and high infant mortality existed independent of such factors as the size and design of the enclosure and feeding schedules.”²¹

Beyond the stress of zoo life, there is a basic belief in many human conservation and animal welfare circles that animals are inherently better off in the wild. The reasoning behind this belief is something like: animals are an intrinsic part of their environment, and that all efforts to eschew them from their own ecosystem is inhumane at worst and selfish at best. The goal of keeping as many animals as possible in their native lands is, indeed, admirable. The rate of deforestation, and climate destruction are, however, unprecedented in recorded history. If we are too reliant on saving animals through conservation of their habitats, it is surely legitimate to be concerned about the possibility of getting to a point where even the most ardent conservationist must admit we have lost too many animals. This paper presupposes that the ‘tipping point’ is closer than we care to imagine. To reiterate a jarring statistic from earlier, 60% of wildlife has already been killed by human activity since 1970.²² The next 48 years do not look more promising.

Given the original undesirable purposes and uses of animal enclosures, the newfound concern for animal wellbeing and rapid advance of climate change, and cutting-edge research into animal sentience, an incredible opportunity to save animals may be present. More than ever, there is an urgency with which we, as human beings, must decide what we want to do with wild animals if we are to keep them on this earth. Animal territories—appropriately large, regulated, humane, animal-centric ecosystems for non-human species to roam free—may be the best bet for animal preservation.

²⁰ See Mark Derr, *Zoos are too Small for Some Species, Biologists Report*, THE NEW YORK TIMES, available at <https://www.nytimes.com/2003/10/01/science/zoos-are-too-small-for-some-species-biologists-report.html> (last visited Nov. 24, 2018).

²¹ *Id.*

²² See WATSON, *supra* Note 7.

Having explored the history of animals in captivity, rapidly changing public opinions about animals, and the science regarding animal wellbeing, the next conversation must be a thorough analysis of the regulatory framework under which the modern zoo operates.

III. Current Deficiencies in Zoo Laws and Regulations

Human understanding, morality, and emotions guide policymaking; this is especially true in the sphere of wildlife law. As outlined in Section II, *infra*, there is an increasing desire amongst Americans to respect individual animals' quality of life. Human beings account for just .01% of all biomass on earth, but have caused, directly or indirectly, the loss of 83% of all wild mammals, 80% of marine mammals, 50% of plants, and 15% of fish.²³ Anyone who values the wonder and beauty of the natural world would be concerned to learn these figures. “[H]umans are extremely efficient in exploiting natural resources. Humans have culled, and in some cases eradicated, wild [animals] for food or pleasure in virtually all continents.”²⁴ Recognizing this fact, and the potential for greater human-caused destruction in the future, numerous laws have been enacted at all levels of government to conserve wildlife. In order to understand what a future framework for wild animals in captivity would look like, we must understand the current regulatory scheme. While this section could span dozens of pages, this section gives a broad overview of current laws, notes their deficiencies, and charts several possible ways to amend said laws to create a structure for more humane, animal-centric enclosures (animal territories).

A. U.S. Federal Statutes

1. The Animal Welfare Act of 1966

²³ Damien Carrington, *Humans just 0.01% of all life but have destroyed 83% of wild mammals – study*, THE GUARDIAN, available at <https://www.theguardian.com/environment/2018/may/21/human-race-just-001-of-all-life-but-has-destroyed-over-80-of-wild-mammals-study> (last visited Nov. 24, 2018).

²⁴ *Id.*

The Animal Welfare Act (“AWA”) is the only federal statute that addresses the welfare of animals in captivity (including in zoos), rather than simply addressing procedural or financial regulations concerning animals. The act asserts Congress’ intent to regulate animals under their Commerce powers.²⁵ Many provisions of the AWA are woefully outdated given the science, as explained above, and modern opinions about the proper treatment of animals. The scope of the AWA is limited by the statute’s definition. In order to be covered by the AWA, an animal must be a:

“ . . . live or dead dog, cat, nonhuman primate, guinea pig, hamster, rabbit, or such other warm-blooded animal, as the Secretary [of Agriculture] may determine is being used, or is intended for use, for research, testing, experimentation, or exhibition purposes, or as a pet[.]”²⁶

Note: the AWA only includes warm-blooded animals. This takes away the ability of the Secretary of Agriculture to set standards for the well-being of cold-blooded creatures, such as fish and reptiles. From the beginning of the AWA, then, one can see a significant deficiency: there is absolutely no federal regulation regarding the welfare of cold-blooded animals. Those animals make up a majority of the wildlife currently being held in aquariums.

The AWA gives authority to the Secretary of Agriculture to “promulgate standards to govern the humane handling, care, treatment, and transportation of animals [that fall within the scope of the Act].”²⁷ These standards include “minimum requirements for handling, housing, feeding, watering, sanitation, shelter from extremes of weather and temperatures, adequate veterinary care,”²⁸ and “for a physical environment adequate to promote the psychological well-

²⁵ While some may see the ‘commerce’ designation as problematic in this context, it is important to note that even many human activities (from labor laws to drug prohibitions) are governed under Congress’ understanding of Commerce Clause jurisprudence. Congress designating animals as part of “commerce,” therefore, should be of less concern here than in other contexts. *See* 7 USC §2131.

²⁶ 7 USC §2132 (g).

²⁷ 7 USC §2143(a)(1).

²⁸ 7 USC §2143(a)(2)(A).

being of *primates*.²⁹ This elucidates another limitation of the AWA: only minimum standards of welfare are established. These minimum standards, especially as they impact highly intelligent species, are insufficient to ensure the welfare of animals. Evidence of this exists in the studies suggesting animal anxiety and stereotypic behaviors.³⁰

A “bright spot” in the act, which enables it to carry forward the mission of animal territories proposed by this piece, is that it applies to an extremely broad set of “exhibitors.”³¹ That is to say that so long as human beings utilize wild animals to attract visitors to a particular location, these regulations should apply. Animal territories, thus, would not be introduced into the mainstream without any federal regulatory framework. So, while the AWA only has limited protections, those protections would exist from the moment of an animal territory’s inception.

In many ways, the AWA likely reflects the knowledge of well-intentioned individuals at the time of passage. For example, the AWA, enacted in 1966, provides incredibly broad protections for *all* dogs (which, in the 1960s, were the most common non-human human companion³²), while completely ignoring major components of wildlife, such as all cold-blooded creatures and the mental well-being of animals. This suggests a reason to be especially hopeful that this regulation can change to adapt to modern understandings: as humans empathize more with animal experiences, the public may demand more stringent, widespread protections for all animals under human care and control. The AWA shows us that precedent for broad protections of animals we relate to exists.

²⁹ 7 USC §2143(a)(2)(B) (*italics added*).

³⁰ *See* SWAISGOOD, *supra* Note 17.

³¹ Exhibitors are defined as: “[A]ny person, public or private, exhibiting any animals, which were purchased in commerce or the intended distribution of which affects commerce, or will affect commerce, to the public for compensation, as determined by the Secretary, and such term *includes carnivals, circuses, and zoos exhibiting such animals whether operated for profit or not*; but such term excludes retail pet stores, organizations sponsoring and all persons participating in State and country fairs, livestock shows, rodeos, purebred dog and cat shows, and any other fairs or exhibitions intended to advance agricultural arts and sciences, as may be determined by the Secretary.” 7 USCS §2132(h) (*italics added*).

³² *See* Top Ten Breeds of The 1960s, American Kennel Club (2015), available at <https://www.akc.org/expert-advice/lifestyle/top-ten-breeds-of-the-1960s/> (last visited December 12, 2018).

2. The Endangered Species Act of 1973

When “triaging” (for lack of a better term) which animals to save in animal territories, this may be the most important regulation to understand. The Endangered Species Act (“ESA”) was designed to protect wildlife and their habitats with the goal of advancing and sustaining biodiversity.³³ The ESA’s protections only extend to those species specifically listed in Section 4 of the Act. The Secretary of the Interior (with delegated authority to the U.S. Fish and Wildlife Service) and the Secretary of Commerce (delegated authority to National Marine Fisheries Service) are responsible for placing species on the list. 1,466 species are currently listed as “endangered” or “threatened.”³⁴ As we focus on zoos, the Act becomes woefully inadequate. The ESA only applies to listed species being exported, imported, sold or bought in interstate (or international) commerce. Unlike the AWA, the ESA does not concern itself with the welfare of the listed animals, only with the means of transportation or “taking” of these creatures.³⁵ Therefore, only some zoo animals will be regulated. Animal husbandry, breeding procedures, and veterinary care are not addressed in the ESA. It is critically important to note that “husbandry” is seen as including the zoological display and exhibition of listed wildlife, which greatly limits the Act’s bite insofar as it can protect animals.³⁶ Once taken out of the wild, ESA species are largely incapable of returning to their native habitat due to climate change, deforestation, their small population size, and related challenges. As a result, the ESA ought to be brought into the 21st Century with new provisions specifically outlining that these creatures

³³ See Sonia S. Waisman, Bruce A. Wagman & Pamela D. Frasch, *Animal Law Cases and Materials* (2014) at 556.

³⁴ See Listed Animals, U.S. Fish and Wildlife Service, available at <https://ecos.fws.gov/ecp0/reports/ad-hoc-species-report?kingdom=V&kingdom=I&status=E&status=T&status=EmE&status=EmT&status=EXPE&status=EXPN&status=SAE&status=SAT&frithab=on&fstatus=on&fspecrule=on&finvpop=on&fgroup=on&header=Listed+Animals> (last visited Nov. 24, 2018).

³⁵ The term “take” is defined in §3 of the Act, “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.” 16 USC §1532(19) (2004).

³⁶ See Kali S. Grech, *Overview of the Laws Affecting Zoos*, MICHIGAN STATE UNIVERSITY ANIMAL LEGAL & HISTORICAL CENTER, available at <https://www.animallaw.info/article/detailed-discussion-laws-affecting-zoos#s49> (last visited Nov. 24, 2018).

should be treated with the utmost care and respect. Moreover, the animal husbandry exemption should be retooled so as not to exclude animals in captivity.

Of all the designations of animals that most need to be translocated into animal territories in the near future, “endangered” animals should top the list. This is largely because, if created at the scale proposed in this paper, animal territories would be an admission that the ESA has failed to protect endangered species in their native habitats.

3. The Lacey Act of 1900

The Lacey Act was initially enacted to criminalize the import of certain species seen as potentially injurious to wildlife.³⁷ Today, the Lacey Act has been amended to prohibit dealing in wildlife taken, sold, or transported in any way that violates state, national, or foreign law. The amended Lacey Act, however, exempts zoo animals. The statute specifically states that it is not applicable to persons or corporations licensed or registered and inspected by the Animal and Plant Health Inspection Service or any other Federal agency or wildlife sanctuary (this includes all zoos housing animals regulated under the AWA). Once again, we see that current zoo regulations are inadequate and should be replaced with a national standard which accounts for animal wellbeing.

B. State Statutes

From an efficiency in lawmaking perspective, the federal government should be the one setting minimum standards for wildlife in captivity. The common law dictates that states can regulate their wildlife however they see fit, yet many (if not most) of the animals in modern American zoos are native wildlife to foreign lands. It is under this theory, which also allows for the United States to enter international treaties regarding wildlife, that activists and lobbyists

³⁷ Henry Cohen, *Federal Animal Protection Statutes*, 1 Animal L. 143, 154 (1994).

should bring and sustain the fight for enhanced federal regulation of zoo animal wellbeing, rather than leaving large swaths of rulemaking authority to the states.

C. International Protocols

The Convention on International Trade in Endangered Species (“CITES”) was adopted in 1963, agreed upon in 1971, and enacted in 1975.³⁸ The framework for CITES was to ensure that international trade in wild animal species did not threaten their collective survival. There are three appendices that list species and subspecies to which the binding Convention applies. Well-known endangered species (such as elephants and lions) are listed under Appendix I, and cannot be authorized for transport except under “exceptional circumstances.”³⁹ Appendix II animals are those which are not currently threatened with extinction, but may be threatened if stringent regulations regarding their trade do not exist. Appendix II animals require an export permit from their “home” country. The final appendix, Appendix III, lists species that are protected in at least one country that has asked other CITES parties for assistance in controlling their trade. These species require a certificate of origin in order to ensure that they are not being transported out of the concerned country.

Captive born animals, however, are treated very differently under the Convention—even if they are of the same species as those animals listed in the appendices. The Convention holds that “[s]pecimens of an animal species included in Appendix I bred in captivity for commercial purposes . . . shall be deemed to be specimens of species included in Appendix II.”⁴⁰ American zoos utilize this loophole to acquire otherwise unobtainable animal species. This treaty really loses its “teeth” regarding the transportation or utilization of zoo animals in American zoos because it states that a home country’s “Management Authority” may simply stamp approval that

³⁸ See Convention on International Trade in Endangered Species of Wild Fauna and Flora, Mar. 3, 1973, 993 U.T.T.S. 243.

³⁹ *Id.* at Article II.

⁴⁰ *Id.* at Article IV.

an animal was born in captivity, rendering it eligible to be transported elsewhere. Moreover, CITES does not apply to animal transfers within the United States, since it is only relevant to the international transport of animals.

D. Accreditation Organizations and Standards

1. American Zoological Association

With a basic understanding of the foregoing regulatory framework under which American zoos exist, we can now delve into the area where most contemporary American zoo regulation and standard-setting exists: the American Zoological Association (“AZA”). The AZA represents zoos and related facilities that meet internal accreditation and certification standards. The AZA states that it is “dedicated to excellence in animal care and welfare, conservation, education, and research that collectively inspire respect for animals and nature.”⁴¹ All AZA-accredited institutions are regulated by the aforementioned regulations, and are also bound by the AZA Code of Professional Ethics.

The AZA creates a somewhat heightened standard of care and welfare for zoo animals. The AZA’s accreditation minimum animal husbandry guidelines exceed those in the AWA, ensuring the welfare of *all* zoo animals. The AZA cites animal health and welfare as the “highest priority of the AZA accredited institutions.” To that end, each member institution is tasked with developing a Program Animal Policy. One of the most important aspects of the policy is ensuring animal welfare standards are met, including those for housing, husbandry, and human-animal interactions.

Like many major private entities, the AZA has a Government Affairs Department. This group works with government agencies and officials to develop legislation and regulations favorable to its members and their interests. While the AZA promulgates and imposes standards

⁴¹ *About the AZA*, THE AMERICAN ZOO AND AQUARIUM ASSOCIATION, available at <http://www.aza.org/AboutAZA/MissionVision/> (last visited Nov. 24, 2018).

with the goal of ensuring zoo animal welfare, there is an obvious bias that must be recognized, made public, and should be condemned by those worried about animals. Herein lies the bias: the AZA represents those in the business of zookeeping, so its main goal is to keep zoo animals in zoos. Thus, perverse incentives related to animal wellbeing may exist which lessens the internal regulations on zoos and zookeepers. Indeed, if the AZA's top concern were truly animal wellbeing, it would be difficult, if not impossible, to imagine them accrediting various zoos still in existence that use cages or similar means of housing animals.

For all of its current downfalls, radically revamping the AZA may be path of least resistance to positive change for animals. As economic incentives arise to treat animals very well, the Government Affairs Department could even lobby Congress for subsidies to create the first major animal territories. They may, indeed, be best-positioned to do so.

Today there are conflicts of interest between the AZA looking out for their members and the animals that their members are tasked with caring for. As American attitudes about zoos and animal welfare continue to rapidly change, it may one day soon be in the best interest of the AZA to dramatically raise the standards under which they accredit a zoo or animal territory.

Given the foregoing, this paper recommends to the AZA that they transition from accrediting zoos to accrediting animal territories, enhancing their members' size, function, and mission to include, first and foremost, animal wellbeing (in practice and not just words). The AZA would be wise to get ahead of the seemingly inevitable wave of concern about animal welfare that future generations will bring with them to zoos. Economic pressures from American consumers who are more worried today than ever about animal welfare should inspire the AZA to rapidly and significantly increase their required standards for animals.

From a moral perspective, the AZA is in a unique position to ensure the existence of wildlife into perpetuity.

IV. Moral and Ethical Reasons to Embrace Animal Territories

Animals are losing their habitats at an alarming rate. This is due, in large part, to human activity.⁴² To counteract this scourge, we should provide large swaths of land specifically tailored to animals' needs. This includes bringing native plants, bugs, and even bacteria with animals when they are translocated to American zoos. It also means supplementing existing zoo infrastructure with larger fields, full of more diverse (region-specific) fauna. It is difficult today to imagine the space necessary for these sorts of efforts, but there is a legitimate need today, more than ever, to get animals out of the areas where they are currently so endangered.

A. Animals as Climate Refugees

Animals are on the frontlines of climate change. As their habitats continue to dissipate, shelter and food become sparser. "Earth's climate is changing at a rate that has exceeded most scientific forecasts."⁴³ Human conceptions of animals evolve quickly, and the next step is to recognize wildlife as being climate refugees. Once we conceive of animals in this way, it will become apparent that something radical must be done to preserve life amongst *all* members of the world community who cannot currently communicate for help – including animals.

Using the word refugees when referring to animals may be problematic because comparing any class of humans to animals is, of course, just that: problematic. However, if one looks at the National Geographic's definition of climate refugees, a striking comparison must be recognized: "Climate refugees are people who must leave their homes and communities

⁴² See PICHETA *supra*, Note 6.

⁴³ Climate Change and Disasters, U.N. REFUGEE AGENCY, available at <https://www.unhcr.org/climate-change-and-disasters.html> (last visited Nov. 24, 2018).

because of the effects of climate change and global warming.”⁴⁴ If one substitutes “people” for “living beings,” we see that the unsavory, desperate position that non-human animals and homo sapiens find themselves in are not entirely dissimilar. To be explicitly clear: as a normative matter, human beings should also be transported, as needed and desired, so that they are not swallowed up by the ravages of climate change. This paper, however, addresses the secondary policy issue of non-human animal relocation and uses the word “refugee” loosely within that framework.

To close the circle on a topic from above, there is an ethical question, which is now compounded when animals are viewed as refugees: how much economic benefit should be derived from saving various species? While unpleasant and, many would argue, potentially distasteful, animal advocates must take a step back from the “moral high ground” and recognize reality: animals do not have sufficient rights, nor advocacy skills, to create territories for themselves. The vast majority of the world, and the entire United States, is either functionally under human control, or could easily be placed under human control. In that reality, there must be incentives for people, organizations, and corporations to protect animals. The way to create that incentive is economically. We already have economic incentives to keep ‘wild’ animals alive in captivity. This paper’s animal territory proposal would continue this uniquely human tradition while enhancing animal quality of life and building on well-established, highly successful economic and scientific models to ensure animal welfare.

B. America’s Unique Responsibility and Ability Regarding Wildlife Protection

As alluded to in the introduction of this paper, there are two primary reasons why the United States ought to be the leader in this space. First, since at least the industrial revolution, the United States and its corporations have had outsized influence in the destruction of wildlife

⁴⁴ Climate Refugee Definition, NATIONAL GEOGRAPHIC, available at <https://www.nationalgeographic.org/encyclopedia/climate-refugee/> (last visited Nov. 24, 2018).

internationally. Secondly, America is unique insofar as it has such diverse climates within its borders. The United States has no fewer than 8 rainforests,⁴⁵ 4 deserts,⁴⁶ and large swaths of prairie land. Housing animals from around the world in these locations, which would specifically be designated for each natural environment, would be a more efficient means of protecting wildlife than keeping them in housing enclosures. Of course, this is not a perfect solution as climate change will continue to change environments. Moving animal territory boundary lines throughout the coming centuries, however, may prove easier and less painful (even with fierce property rights disputes, concerns about contamination and animal welfare, etcetera) than completely losing the vast majority of biodiversity on earth. This is the lesser of two evils.

This paper advances a future vision of zoos led by the AZA, to secure that their members continue to thrive economically as science continues to point toward the similarities between human and animal cognition and needs. Indeed, the AZA may want to begin pooling money from its members to invest in larger swaths of land for animal territories. Unlike National Parks, American animal territories would be retrofitted to comfortably house animals from around the world. This may seem like a ‘pie in the sky’ idea today, but there is some precedent, as discussed in Section V, *infra*, such as Disney’s Animal Kingdom in Bay Lake, Florida.

V. Precedent for Future Animal Territories

Some animal enclosures today, in 2018, provide a blueprint for what the future of animal territories can look like. While imperfect (due to displacement of other animals and

⁴⁵ Elizabeth Nicholas, *The Most Beautiful Rainforests in the United States*, CULTURE TRIP, available at <https://theculturetrip.com/north-america/usa/articles/the-most-beautiful-rainforests-in-the-united-states/> (last visited Nov. 24, 2018).

⁴⁶ *The North American Deserts & Deserts of the World*, DesertUSA, available at <https://www.desertusa.com/north-american-deserts.html> (last visited Nov. 24, 2018).

size, respectively), the existence of these establishments should give us hope for even better territories and environments in the future. Two of these environments are discussed below.

A. Case Studies

1. Disney's Animal Kingdom

Disney's Animal Kingdom ("Animal Kingdom") opened in 1998. It attracts over 10 million visitors each year, and is the sixth most visited amusement park in the world.⁴⁷ While fully recognizing that certain animal welfare organizations are fundamentally opposed to even this sort of animal enclosure, there are elements of the park that are directly transferable into the concept of animal territories that this paper advances. Specifically, the environmentally accurate ecosystem within the Animal Kingdom's walls is far superior for animal mental and physical wellbeing than modern zoos. For example, the amount of space that most of the animals at Animal Kingdom can utilize is tremendous: 110 acres.⁴⁸ Animal Kingdom also transported more than 4 million trees, grasses and shrubs from the animals' native habitats (and from every continent except Antarctica) to make the space feel more like home for the animals. It is surely the case that this park is still primarily for entertainment purposes. It is also certainly not "natural." For example, the park's managers use climate-controlled, temperature-regulated rocks (heated in winter, and air-conditioned in summer) for lions to rest on. Nevertheless, this may be the closest to "real" environments that humans can provide animals in the future. Of course, Disney, unlike most current zoos, is nearly unconstrained by financial considerations. However, American zoos generate \$17.2 billion annually. This is sufficient, if pooled together by region, to create new territories mirroring Disney's Animal Kingdom.

⁴⁷ Global Attractions Attendance Report, THEME ENTERTAINMENT ASSOCIATION, available at http://www.teaconnect.org/images/files/TEA_268_653730_180517.pdf (last visited Nov. 24, 2018).

⁴⁸ Bruce Pecho, *20 Things You May Not Know About Disney's Animal Kingdom, Which Turns 20 on Earth Day*, CHICAGO TRIBUNE, available at <https://www.chicagotribune.com/lifestyles/travel/ct-trav-20-things-disney-animal-kingdom-0429-story.html> (last visited Nov. 24, 2018).

2. Seattle Zoo, Its Progeny, and More Immediate Solutions

The Seattle Zoo is a more conventional zoo than Disney's Animal Kingdom, but it takes animal welfare seriously. In 1975, Seattle implemented what is known as "immersive design," which is a means of allowing zoo visitors to feel as though they are actually in the animals' habitat. These environments also more accurately depict and mirror how animals live in the wild. This design is now the industry standard, and some zoos have taken it to new heights while recognizing their inherent limits given environment and space constraints.

In 2004, the Detroit Zoo recognized that its elephants were not able to live a high-quality life within its confines. As a result, they sent two of their most prized "attractions" to an elephant sanctuary in California.⁴⁹ The recognition that, say, animals from warm climates would not thrive in the northern most parts of the U.S. is a step in the right direction, and may allow for more humane treatment of animals today. For example, zoos in San Diego and Houston should consider not taking animals from cold environments, such as polar bears.

The Columbus Zoo, recognizing that the constant gaze of humans is frightening to its animals, has experimented with one-way glass, that allows visitors to see into a habitat, but does not allow the animal to see humans.⁵⁰ On the very extreme end of the spectrum, the Columbus Zoo is also experimenting with virtual reality so that visitors can "see" their animals from a new perspective.⁵¹ Certainly, these are fine short-term solutions to various problems that animals face in zoos. As environments around the world continue to collapse, however, these means alone are insufficient to provide most animals with the requisite space, environment, and wellbeing they deserve as creatures of this planet.

⁴⁹ Alexandra Ossolo, *The Future of Zoos is Being Nice to the Animals – Not Making it Easy to Watch Them*, FAST COMPANY, available at <https://www.fastcompany.com/3042458/the-future-of-zoos-is-being-nice-to-the-animals-not-making-it-easy-to-watch-them> (last visited Nov. 24, 2018).

⁵⁰ *See id.*

⁵¹ *See id.*

V. Conclusion and a New Conception of Conservation

Earth's 7.6 billion human beings are consuming resources at unprecedented rates, which results in fewer resources and less land for animals. The general public now understands this, and, concurrently, is more aware than ever of animal sentience. As a result, the idea of zoos (and, more generally, how we should treat animals) has evolved. Initially, humans saw animal enclosures as simply a means to be entertained or to study animals. Increasingly, these enclosures are seen as a necessary part of animal conservation efforts. The next step, then, is to ensure that these enclosures are increasingly humane and able to care for the innumerable animal species and individuals who will need to be translocated in order to survive.

Contemporary regulatory frameworks do not provide sufficient protections for animals given what we know about their mental and physical needs. There is a tremendous disconnect between what the science tells us animals experience, and what our government sets as a baseline expectation for how to treat these creatures. With ever-increasing scientific knowledge, and ever-expanding ability to be informed, the public may soon demand that wild animals in enclosures be treated with more humility and respect. Therefore, it would be wise for the AZA and their member organizations to combine resources, consolidate governing structures, and invest in large-scale animal territories. These territories would change the contemporary model of zoos in numerous ways: most critically, they would be *animal-centric* businesses. The "attraction" would be happy animals going about their daily existence in an environment mirroring their former natural experiences.

Concerns persist about the morality of taking animals out of their natural habitat. It is, however, the sad truth that conservation has been on the losing end of a battle with industry. New ideas about what we need to do in order to save animals is necessary. While there exist examples of wholesome, animal-centric areas that humans can also occupy for entertainment

(national parks, forest preserves, etcetera), the vast majority of human-wild animal interaction takes place in zoos. Zoos are structured so as to be concerned with one thing above all else: their bottom line. With changing attitudes, it is conceivable that money will stop flowing to corporations that house animals in small, non-native-based enclosures.

The American people can force zoological gardens into a race to the top. It is a moral imperative that they do so. There is never a good time to change the status quo, but with climate change breathing down our necks, humans must consider creating more spaces for animals to be well taken care of during the next chapter of our planet's history. We conceive of ourselves as "human" because there are other species of animals to compare ourselves to. By that logic, then, to sustain our humanity we must also keep other creatures wholesomely on this earth by whatever means necessary.

**The Taking of Tokitae:
How One Endangered Orca was Stolen from Her Family Twice**

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On August 8, 1970 a family of orcas was swimming in their home, the Puget Sound, when men with boats, harpoons, bombs, and nets came barreling through their territory, fixed on stealing the babies from their mothers.¹ The mammals understood what was happening and tried to separate themselves: one group of adults as a decoy for the hunters and one group of mothers and babies in an attempt to get them safely to open waters.² Ted Griffin, an up and coming whale capturing paragon, caught on and eventually rounded the babies up in Penn Cove, Whidbey Island.³ In this catastrophic event, four babies died. Ted Griffin and his group of thugs sliced the bodies of the victims open, filled them with rocks, and weighted their tails with “chains and anchors to keep their deaths from coming to the attention of the public.”⁴ One of the babies that survived the capture was Tokitae. She is now known as “Lolita” and has been performing two shows daily at the Miami Seaquarium for the past forty-nine years.⁵ One of the Miami Seaquarium’s vets was sent to select one of the babies to be a companion for their other orca, Hugo—he was captured from the same clan of whales, the Southern Residents, a year before Tokitae.⁶ This man, Dr. White, picked Tokitae and chose that name for her because it represented the Pacific Northwest, where she was stolen from. Tokitae is Salish for “nice day, pretty colors.”⁷ Even though this more respectful name comes from one of the men that stole her, this paper will refer to her as Tokitae or Toki, not by her stage name Lolita—a name given to her

¹ *Lolita’s Capture*, ORCA NETWORK,

http://www.orcanetwork.org/Main/index.php?categories_file=Lolitas%20Capture (accessed April 6, 2019).

² Victoria Blaine, *Lolita and Friends: An Ethical Examination of the Life Histories of Captive Orcas*, AQUILA 21, 22 (2016), <https://perma.cc/RL49-8LGJ> (accessed April 6, 2019).

³ *Id.*

⁴ *Lolita’s Capture*, *supra* note 1.

⁵ Blaine, *supra* note 2, at 23.

⁶ *Id.*

⁷ *Id.*

by her owners to rip her Pacific Northwest origins from her so that people could connect with her as an object of entertainment, not a sentient, once wild being.⁸

The Southern Residents were decimated after these hunts. Although their population eventually rebounded to ninety-eight individuals in 1995, there are currently seventy-five whales, “the lowest [the population] has been in thirty-four years.”⁹ The Residents were eventually listed as an endangered species as a distinct population segment in 2005.¹⁰ In 2013, People for the Ethical Treatment of Animals (PETA) petitioned the National Marine Fisheries Service (NMFS) to remove the captive member exclusion on their listing and recognize Tokitae as a member of the endangered species.¹¹ This was a success and NMFS listed her in 2015.¹² To animal advocates doing everything they could to find a way to return Tokitae to her home waters, this listing was monumental. Two months after her listing, PETA commenced an action against the Miami Seaquarium under the “take” prohibition of the Endangered Species Act (ESA).¹³ Unfortunately, the Southern District Court of Florida held that the harms PETA alleged the Miami Seaquarium was causing Tokitae were not “gravely threatening” and therefore were not ‘harms’ or ‘harassment’ under the take prohibition in the ESA, section 9(a)(1).¹⁴ PETA appealed, and although the Eleventh Circuit corrected the district court’s erroneous new standard for harm and harass, the court of appeals held that the harms PETA alleged also do not meet their standard of “threat of serious harm” for harm under section 9(a)(1).¹⁵

⁸ *Id.*

⁹ *Southern Resident Killer Whale*, MARINE MAMMAL COMM., <https://www.mmc.gov/priority-topics/species-of-concern/southern-resident-killer-whale/>.

¹⁰ Sea Shepherd Legal, *The Endangered Species Act as Applied to Captive Animals: Sea Shepherd Legal’s Amicus Brief in PETA v. Miami Seaquarium*, 24 ANIMAL L. 277, 280–81 (2018).

¹¹ *PETA v. Miami Seaquarium*, 189 F. Supp. 3d 1327, 1333 (S.D. Fla. 2016).

¹² *Id.*

¹³ *PETA v. Miami Seaquarium*, 879 F.3d 1142, 1145 (11th Cir. 2018).

¹⁴ *PETA*, 189 F. Supp. 3d at 1347.

¹⁵ *PETA*, 879 F.3d at 1147.

Both courts applied the ESA to the captive endangered orca Tokitae under erroneous and convoluted logic stemming from the idea that the courts had to apply the ESA in conjunction with the Animal Welfare Act (AWA). This blend of statutes created new standards that do not actually exist in the language of the ESA. This miscalculation has cost Tokitae her freedom once again. This paper argues that the district court and the court of appeals were wrong in their decisions and seeks to clarify a proper analysis for the take of Tokitae by the Miami Seaquarium. Part I will discuss how the balance struck by the courts between the ESA and the AWA is erroneous. It will defend the opposite position taken by the courts, namely that the ESA is the more specific statute; meeting minimum requirements under the AWA does not preclude the possibility of a take; and that the ESA is not precluded by the AWA, nor does it preclude captive animals. Part II will discuss the erroneous standard of “serious threat” set by the court of appeals and how even if that standard was proper, Tokitae’s conditions meet that standard and therefore she should have been considered harmed.

Part I: Applying the ESA to a Captive Species regulated by the AWA

A. The ESA is More Specific and Should be Applied in Conjunction with the AWA

The district court faltered in its initial analysis of using both statutes to determine what harm meant under the ESA when it was being applied to a captive endangered species. The court concluded that the two acts are conflicting and therefore the more specific statute controls.¹⁶ The court determined the AWA to be controlling because Tokitae is a captive animal and the AWA was specifically established to regulate the conditions of captive animals.¹⁷ “The standards contained therein govern [Tokitae’s] captive care requirements at the Seaquarium, and,

¹⁶ See *PETA*, 189 F. Supp. 3d at 1373 (citing *Southern Nat. Gas Co. v. Land, Cullman Cty.*, 197 F.3d 1368, 1373 (11th Cir. 1999)).

¹⁷ *Id.* at 1352.

fundamentally, address many of the types of injuries identified by Plaintiffs in this case.” Since the act specifically addresses the harms alleged, and it is authorized to manage those conditions in the first place, the court gave weight to the AWA without discussing the weight of the ESA on an endangered species. The court oversimplified the analysis by concluding that the fact that “the same Congress addressed the humane treatment of animals by exhibitors and researchers while contemporaneously addressing shortcomings in the ESA's predecessor statute [without implementing care requirements for captive endangered species was] strong evidence that the ESA was not intended to serve as a surrogate for the AWA.”¹⁸

As will be discussed later, the ESA should have been given more weight because it does not preclude captive endangered animals from the take prohibition and also because NMFS specifically wrote Tokitae into the listing—this listing provides no protection for her if the AWA controls, making the district court’s conclusion incompatible with the NMFS’s listing decision. It can also be argued that the ESA and AWA are not conflicting, which makes the district court’s analysis falter in a way that leads to a similar conclusion: that the ESA should apply to Tokitae under its own authority, despite the AWA’s jurisdiction. “The district court in fact assumed a conflict between the ESA and the AWA. This assumption was neither necessary nor proper. The two statutes relate to similar subject matter, but they operate in distinct ways.”¹⁹ “The AWA governs all animals that are used as pets, for research, and in exhibition. The ESA's ‘take’ prohibition governs only animals that are listed as ‘endangered’ Thus, it is hardly clear that the court was correct that the AWA is ‘the more specific statute,’ and should therefore prevail over the ESA in the event of conflict.”²⁰ The court of appeals argued the opposite, stating that because the “AWA addresses many of the “aspects of [Tokitae’s] activity PETA puts forward in

¹⁸ *Id.* at 1353.

¹⁹ Sea Shepherd Legal, *supra* note 10, at 286–87.

²⁰ *Id.* at 293.

this case as ‘harm[ing]’ or ‘harass[ing]’ [Tokitae] in violation of the ESA” that means the AWA has already factored in criteria related to the ESA.²¹ However, the AWA cannot be controlling because it covers activities that could cause harm at a certain level. The AWA does not consider criteria for an endangered species analysis because captive animals are generally not listed with their wild counter parts. In other words, there is no history there for them to have ever been factoring in captivity standards for endangered species because the ESA did not list captive endangered species. This goes against what the district court said as well, because that court claimed that the AWA controls captivity conditions that apply to all captive animals, regardless of endangered status, because Congress did not include provisions for captive endangered species.²²

Sea Shepherd Legal discussed the proper application of the ESA and AWA on a captive endangered species in a very concise way. Comparing the use of two food labeling statutes, the Supreme Court held that when two laws overlap, “compliance with the one [does not] render[] the other irrelevant.”²³ In that case, the Coca-Cola company was sued by POM Wonderful under the Lanham act for unfair competition because the soda company labeled their juice percentages “in a misleading fashion.”²⁴ “Like Miami Seaquarium, Coca-Cola invoked its apparent compliance with another, arguably more specific statute—the Federal Food, Drug, and Cosmetic Act (FDCA)—to support its contention that it could not be sued for misleading labeling under the Lanham Act.”²⁵ Since “the statutes sought to vindicate different interests and supplied distinct remedies,” the Supreme Court found that both statutes applied.²⁶ The court of appeals

²¹ *PETA*, 879 F.3d at 1149–50.

²² *PETA*, 189 F. Supp. 3d at 1353.

²³ *POM Wonderful LLC v. Coca-Cola Co.*, 134 S. Ct. 2228, 2238 (2014).

²⁴ *Id.* at 2233.

²⁵ Sea Shepherd Legal, *supra* note 10, at 283.

²⁶ *POM Wonderful*, 134 S. Ct at 2238.

ignored this case entirely, even though PETA and Sea Shepherd Legal cited it heavily in their briefs.²⁷ The Supreme Court held “[w]hen two statutes complement each other, it would show disregard for the congressional design to hold that Congress nonetheless intended one federal statute to preclude the operation of the other.”²⁸ To disregard such precedence in such a comparable case is egregious. It is clear that because the ESA and the AWA govern similar topics in different scopes, each statute should apply to the situation within its own range. The AWA governs the requirements for husbandry and space for Tokitae, but the ESA governs treatment of Tokitae as an endangered species. Therefore, even though “the AWA aims to ensure the humane treatment of captive animals used for exhibition,”²⁹ the ESA still applies if that care amounts to a harm or harassment as defined by the ESA and its jurisprudence.

B. Meeting Minimum AWA Standards Does Not Preclude a Take

By holding that the AWA is the controlling statute, and twisting precedent in *Babbitt v. Sweet Home*,³⁰ the district court created a “gravely threatens” standard for harm and harassment under the ESA that compliance with AWA requirements excludes one from.³¹ “The district court held that the AWA provides the legal framework for claims sounding in ‘harm’ or ‘harassment’ of a captive animal, even if that animal is listed under the ESA. If APHIS has determined that the animal's captivity complies with the AWA, then . . . there can be no claim for ‘harm’ or ‘harassment’ under the ESA unless the plaintiff clears the court-invented hurdle of a ‘grave[] threat[] [to] the animal's survival.’”³² However, compliance with the AWA requirements does

²⁷ Sea Shepherd Legal, *supra* note 10, at 284.

²⁸ *POM Wonderful*, 134 S. Ct at 2238.

²⁹ *PETA*, 879 F.3d at 1149-50.

³⁰ *Babbitt v. Sweet Home Chapter Cmty. Great Or.*, 515 U.S. 687 (1995).

³¹ *See PETA*, 189 F. Supp. 3d at 1346 (concluding that the “common denominator” of the terms under ‘take’ is conduct that is “gravely threatening”).

³² Sea Shepherd Legal, *supra* note 10, at 292–93.

not mean that an exhibitor could not have harmed or harassed an endangered species, and without the high standard of grave threat as well. The exemption for harassment under the AWA for compliance is twofold. To be exempt, the conduct must be in line with 1. generally accepted animal husbandry practices that 2. meet or exceed the minimum standards for facilities and care under the AWA.³³ An exhibitor can meet the standards laid out for the animal in the AWA, but if the husbandry practices are not generally accepted, that is a violation which amounts to harassment.

The danger of ignoring the first part of the exemption is seen in the case against the Cherokee Bear Zoo. This zoo held listed bears in “archaic” pits in a roadside zoo, but because the USDA tolerated the conditions by not citing the zoo under the AWA, the court held that their compliance exempted them from violating the ESA.³⁴ “The court completely disregarded the requirement that, to be exempt from the harassment prohibition, an activity needs to be ‘generally accepted.’”³⁵ The court even went so far to say that the generally accepted requirement was irrelevant.³⁶ Fortunately, on appeal this case was remanded due to the impropriety of reading out the ‘generally accepted’ prong of the analysis for a violation.³⁷ The Fourth Circuit made clear that this interpretation causes a narrowing of the protections proscribed by the ESA and is exactly what Congress was trying to avoid by emphasizing that the ESA’s purpose was broad to protect endangered wildlife and could only be advanced through broad “administrative and interpretive power” given to the Secretary of the Interior.³⁸ Compliance without general accepted husbandry does not protect an exhibitor from violating the

³³ 50 C.F.R. § 17.3.

³⁴ *Hill v. Coggins*, No. 2:13-cv-47, 2016 U.S. Dist. LEXIS 42374 (W.D.N.C. Mar. 30, 2016)

³⁵ Delcianna Winders, *Animal Welfare Act: Interaction with Other Laws*, 25 ANIMAL L. 185, 194 (2019).

³⁶ 2016 U.S. Dist. LEXIS 42374, 2016 WL 1251190, at *13.

³⁷ *Hill v. Coggins*, 867 F.3d 499, 510 (4th Cir. 2017).

³⁸ *See Id.* at 520 (citing *Babbitt v. Sweet Home Chapter Cmty. Great Or.*, 515 U.S. at 700, 708).

ESA. Previous compliance also does not protect an exhibitor from violating the ESA. A Texas district court held that to not be liable for harassment, one's husbandry practices must satisfy the AWA. "APHIS determinations of past and present violations (or a lack thereof) . . . 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 AWA, does not permit a finding of no liability simply because of a previous determination of no AWA violation."³⁹ An Eighth Circuit case found the same, holding that evidence showing a roadside zoo had "undergone some violation-free inspections [did] not render" the lower court's findings erroneous.⁴⁰

If this reading of the blended AWA and ESA stands, previous compliance and following the requirements of the AWA cannot and should not protect the Miami Seaquarium from liability under the take prohibition. APHIS has found Miami Seaquarium to be in compliance with their outdated standards.⁴¹ However, there is a strong argument that the Seaquarium fails the first prong of the exception. The Seaquarium should have been held to be violating the ESA for harassing Tokitae because their animal husbandry is not generally accepted. The court of appeals held that harass needs to meet the serious threat standard to be actionable, but otherwise seems to concur with Fish and Wildlife Service's definition defining harass 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."⁴² In a case against a zoo holding endangered species in isolation, such as a lemur—a very social animal—an expert testified to show that the conditions

³⁹ *Graham v. San Antonio Zoological Soc'y*, 261 F. Supp. 3d 711, 716 (W.D. Tex. 2017).

⁴⁰ *Kuehl v. Sellner*, 887 F.3d 845, 853 (8th Cir. 2018).

⁴¹ *PETA*, 189 F. Supp. 3d at 1334.

⁴² *PETA*, 879 F.3d at 1149.

of the zoo were not generally acceptable practices. These conditions included keeping the animal in isolation and not providing it with toys or ropes to keep him stimulated.⁴³ An expert could be brought before the court in Tokitae’s case to show that her isolation and lack of enrichment is similarly not in line with accepted standards in this country. Orcas are also very social animals. The Southern Residents are an ecotype of pods that stay with their families for life, rather than leaving to find mates.⁴⁴ “Killer whales are social animals that rely on relationships within and among family groups for survival.”⁴⁵ They are also incredibly intelligent and without being able to behave as they would in the wild and access everything they normally would in the ocean, “toys” like a ball, ice, and a wetsuit do nothing to stimulate Tokitae’s incredible brain.⁴⁶ Generally accepted husbandry standards should be used to show Tokitae’s environment are not up to an acceptable standard.

SeaWorld should be the standard to compare Miami Seaquarium’s animal husbandry practices to for what is “generally acceptable” because they are the only other keepers of orcas in the United States and have been at the forefront of marine mammal care since the advent of the whale captures in the 1960s. Although they are in this position, the orcas in their care still experience stereotypic behaviors from a lackluster and unacceptable life in a tank on land. However, their whales experience enriched feeding schedules, more rigorous operant condition that relies on communication, and most importantly, companionship with other orcas.⁴⁷

SeaWorld may still struggle to understand how intricate the bonds are between killer whales of

⁴³ *Kuehl*, 887 F.3d at 849.

⁴⁴ See R. Williams & D. Lusseau, *A Killer Whale Social Network is Vulnerable to Targeted Removals*, 2 *Biology Letters* (2006), <https://www.ncbi.nlm.nih.gov/pubmed/17148272> (accessed April 7, 2019) (analyzing “the influence of various individuals’ age, sex and matrilineal affiliation on their position in a social network”).

⁴⁵ *Id.*

⁴⁶ *12 Things Lolita Would Want Miami Seaquarium Visitors to Know*, PETA, <https://www.peta.org/features/lolita-miami-seaquarium-know/> (accessed April 7, 2019).

⁴⁷ See Eve Copeland, *Cognitive Enrichment Intervention for Captive Orcas*, BARD UNDERGRADUATE SENIOR PROJECTS (2015), <https://pdfs.semanticscholar.org/13e1/41c4e872c295f7dc005537e85fb0082afb4e.pdf> (accessed April 7, 2019) (studying how to mitigate stereotypic behaviors in orcas, with a focus on SeaWorld’s orcas).

the same pod, or the mother–baby bond,⁴⁸ but they try to fulfill that need by grouping orcas together that get along with each other. This is unlike Miami Seaquarium in many ways. The Seaquarium harasses Tokitae by chronically disrupting her normal behavior patterns by forcing her to live in an abhorrently small tank without proper stimulation or companionship.⁴⁹ By not meeting industry standard for killer whale captivity, Miami Seaquarium does not meet this AWA exception and therefore they are harassing her under the ESA. The district court never discussed Miami Seaquarium’s AWA compliance with generally accepted animal husbandry practices. They quoted APHIS stating that the Miami Seaquarium is in compliance—immediately after they say that PETA acknowledges the compliance exception in the AWA, but brings this claim nonetheless.⁵⁰ Clearly, the district court thought that meeting the standards meant one was exempted from the ESA harassment liability, despite quoting the language “generally accepted husbandry practices *that meet* AWA requirements.”⁵¹ The court of appeals similarly ignores this part of the exception. Instead, they create their standard of “serious harm” by setting a baseline of noncompliance with AWA standards as serious harm. It essentially argues that if any “de minimis” action counted as harm or harassment then the AWA would be unable to function in its purpose, meaning the level of harm has to be measured through the AWA standards—if there is no compliance with these requirements for “humane” standards, only then can there be serious

⁴⁸ Candace Calloway Whiting, *SeaWorld Separates Mother Orcas from Their Calves*, SEATTLEPI (July 29, 2018 12:32 PM), <https://blog.seattlepi.com/candacewhiting/2018/07/29/seaworld-separates-mother-orcas-from-their-calves-and-the-mothers-grieve-videos/> (accessed April 6, 2019).

⁴⁹ See *12 Things Lolita Would Want Miami Seaquarium Visitors to Know*, *supra* note 46; Natasha Daly, *Orcas Don’t Do Well in Captivity. Here’s Why.*, NAT’L GEOGRAPHIC (March 25, 2019), <https://www.nationalgeographic.com/animals/2019/03/orcas-captivity-welfare/> (accessed April 7, 2019); *Myths and Facts About Orcas in Captivity*, ANIMAL WELFARE INST., <https://awionline.org/sites/default/files/uploads/documents/AWI-OrcaCaptivity-FactSheet-02192014.pdf> (accessed April 7, 2019) (discussing the effects of captivity on orcas and mentioning Tokitae’s isolated existence).

⁵⁰ *PETA*, 189 F. Supp. 3d at 1335.

⁵¹ *Id.* (emphasis added).

harm.⁵² This new standard will be discussed later on, but it is important to note that it also ignores the generally accepted prong of the exception. If either court acknowledge this prong in the exception, they would have found that Tokitae’s conditions should not have been excused and amounted to harassment despite their new standards of harm and harassment.

C. The AWA Does Not Preclude the ESA and the ESA Does Not Preclude Captive Animals

The courts analyzed how the ESA and AWA work together and essentially precluded any possibility of the ESA take provision from applying in cases of exhibitors meeting AWA requirements.⁵³ As discussed above, however, even under this erroneous standard, the Miami Seaquarium should have been found to be harassing Tokitae under the ESA. Ultimately, the courts’ interpretation of the two acts working together is incorrect. First, the ESA does not preclude captive animals from the take provision. It only precludes captive animals from Section 9(a)(1)(A) and (a)(1)(G)—imports and exports and regulations pertaining the listed species.⁵⁴ Second, the AWA and the ESA should apply separately and in their own scope to the situation, because despite the courts reading the AWA to preclude ESA takes, it does not. “[T]he ESA and AWA do not pursue conflicting objectives. Rather, the ESA provides for separate and heightened protections for the subset of captive animals that are threatened or endangered.”⁵⁵ “The idea that the ESA retains independent force—building additional protections upon the AWA’s floor—is reinforced by the fact that both NMFS and FWS have engaged in rulemaking

⁵² *PETA*, 879 F.3d at 1149-50.

⁵³ *Infra* Part I(B).

⁵⁴ *See* 16 U.S.C.S. § 1538(b)(1) (the AWA requirement exception spoken about at length is only a FWS regulation).

⁵⁵ *PETA v. Tri-State Zoological Park of W. Md., Inc.*, No. MJG-17-2148, 2018 U.S. Dist. LEXIS 6638, at *14 (D. Md. Jan. 16, 2018)

to provide ESA protection to captive animals.”⁵⁶ Especially significant here, is NMFS’s decision to remove the captivity exclusion for the Southern Residents’ listing.⁵⁷ If the AWA took care of the protections afforded under the ESA for captive endangered species, there would be no reason for NMFS to enact these protections for captive animals. NMFS emphasized this point by stating “the ESA does not allow for captive held animals to be assigned separate legal status from their wild counterparts on the basis of their captive status.”⁵⁸ Clearly, NMFS fully intended on protecting Tokitae from the appropriate provisions under the ESA.

With the AWA acting as a floor, an exhibitor can satisfy the floor without an enforcement action against them under the AWA.⁵⁹ “If the animal is not listed under the ESA, then the exhibitor has nothing more to worry about. If the animal is listed under the ESA, however, satisfying the AWA may not be enough.”⁶⁰ Following this more sound logic, some courts have held the need to “independently assess” a zoo’s compliance with husbandry practices under the AWA in an ESA case;⁶¹ others assessed a take of endangered captive lemurs under the ESA “without specifically addressing whether the ESA was in any way preempted or superseded by the AWA.”⁶² Either way is appropriate as long as the ESA is given its proper weight, even after finding that the exhibitor is AWA compliant. One major correction needed in the courts of Tokitae’s case is not only the need to give the ESA its independent force, but to then apply the ESA’s standard of harm and harass. Because the AWA and ESA are separate statutes that do not

⁵⁶ Sea Shepherd Legal, *supra* note 10, at 294.

⁵⁷ See PETA, 189 F. Supp. 3d at 1333; *Listing Endangered or Threatened Species: Amendment to the Endangered Species Act Listing of the Southern Resident Killer Whale Distinct Population Segment*, 80 Fed. Reg. 7380 (Feb. 10, 2015) (codified at 50 C.F.R. pt 224) (PETA’s petition to NMFS to remove the exception for captive Southern Residents was successful in 2015).

⁵⁸ See Sea Shepherd Legal, *supra* note 10, at 294 (quoting the amendment to the Southern Residents’ listing).

⁵⁹ *Id.* at 293-94.

⁶⁰ *Id.*

⁶¹ See *Mo. Primate Found. v. People for the Ethical Treatment of Animals, Inc.*, No. 4:16 CV 2163 CDP, 2018 U.S. Dist. LEXIS 46841, at *8 (E.D. Mo. Mar. 22, 2018) (quoting the court in *Graham v. San Antonio Zoological Soc’y*, 261 F. Supp. 3d 711, 743-44 (W.D. Tex. 2017)).

⁶² See *Id.* (discussing *Kuehl*, 161 F. Supp. 3d at 718).

preempt the other, it is improper for the court to establish a new standard or level of harm by measuring an ESA take against the expectations of humaneness set by the AWA.⁶³ Following Supreme Court precedent, the analysis for a take for a captive endangered species should follow *Babbitt v. Sweet Home*.⁶⁴

The *Sweet Home* court clarified that “Congress intended ‘take’ to apply broadly to cover indirect as well as purposeful actions.”⁶⁵ *Tennessee Valley Authority* also held the extreme importance of the ESA: “The plain intent of Congress in enacting this statute was to halt and reverse the trend toward species extinction, *whatever the cost*.”⁶⁶ Applying the ESA to a captive animal should include this broad application of the take provision. Instead of giving harm and harass individual meaning, the district court applied Scalia’s dissent in *Sweet Home* and created their “gravely threatening” standard by putting the two terms under the canopy of the other “grave” terms of kill, wound, and injure.⁶⁷ This is the opposite analysis held in the *Sweet Home* majority. Instead, harm and harass have their own independent meaning from “grave” terms like kill and wound and allow for indirect actions like habitat modifications. With this lower standard, it is clear that the Miami Seaquarium is harming and harassing Tokitae. Her impossibly small tank, lack of companionship, and nonexistent enrichment affect a sentient and intelligent animal like Tokitae in negative and deteriorating ways.⁶⁸ Interior Department regulations define harm as acts that “actually kill or injure wildlife.”⁶⁹ A successful captive ESA case applied this appropriate standard and found that the tigers and lemurs in the care of a zoo

⁶³ *PETA*, 879 F.3d at 1149-50.

⁶⁴ *Babbitt v. Sweet Home Chapter Cmty. Great Or.*, 515 U.S. 687 (1995).

⁶⁵ *Id.* at 704.

⁶⁶ *Tenn. Valley Auth. v. Hill*, 437 U.S. 153, 184 (1978) (emphasis added).

⁶⁷ Sea Shepherd Legal, *supra* note 10, at 288.

⁶⁸ *See all, supra* note 49 (discussing the harmful effects of captivity).

⁶⁹ 50 CFR § 17.3 (1994).

were actually injured by their destitute conditions.⁷⁰ The court accepted testimony from an expert who testified that the zoo's inability to provide the lemur and tigers with companionship, enrichment, and clean cages was harmful because the deprivation of these elements they would have in the wild actually inflicted emotional and physical harm on the animals.⁷¹ As discussed above, there are several biologists and neuroscientists that can attest to the fact that the conditions of Tokitae's tank and care amount to similar actual psychological and physical injury.⁷² Using a proper analysis of harm and harass, under the ESA's own jurisprudence, and without impediment by the AWA, the courts should have found harm done to Tokitae by the Miami Seaquarium.

Part II: The "Serious Threat" Standard is Not in Line with the Purpose of the ESA

Following the discussion of *Babbitt v. Sweet Home*, the court of appeals erred by not applying the ESA's standard of harm and harass that amounts to an actual kill or injury, including indirect and direct takes.⁷³ A higher standard of "serious threat" does not comport with Congress's intent for take to apply broadly so as to serve the ESA in ensuring protections for endangered and threatened animals.⁷⁴ The court of appeals felt the need to heighten the level of harm, saying the court's statements in *Babbitt* "about the breadth of the ESA's purpose do not compel the reading PETA urges." That is, to lower the standard to actual harm, injury, or harassment in line with standard dictionary definitions of harm and harass. The court says *Babbitt* cannot apply to all actions because that would mean even "de minimis" actions would amount to a take. It stated that *Babbitt* was in a different context because the court was analyzing

⁷⁰ *Kuehl*, 887 F.3d at 852–53.

⁷¹ *Id.* at 849.

⁷² Lori Marino, et al., Brief for PETA as Amicus Curiae, *PETA v. Miami Seaquarium*, 905 F.3d 1307 (11th Cir. 2018).

⁷³ *Babbitt v. Sweet Home Chapter Cmtys. Great Or.*, 515 U.S. 687 (1995).

⁷⁴ *Babbitt*, 515 U.S. 687 at 704.

the term in a regulation and if they had not interpreted harm to apply to indirect takes, then “no indirect action affecting an endangered animal could have been deemed covered ‘harm’—even habitat destruction that an actor knew would cause a particular endangered species to go extinct.”⁷⁵ However, there is no reason this interpretation should not apply to a harm analysis in general, for any endangered species taking analysis. The court spoke extensively about the purpose of the ESA and the clarification of harm and harassment should apply as Supreme Court precedent to any take violation.

The court of appeals set the bar of harm to “serious” because of their analysis involving the jurisdiction of the AWA over captive animals and a fear that “de minimis” harms would make the AWA defunct.⁷⁶ In doing this, the court of appeals made the same kind of error that the district court did. The review panel court said, “the ultimate holding that either sort of conduct must ‘pose a threat of serious harm’ does not collapse ‘harm’ and ‘harass[ment]’ into one another,”⁷⁷ but this analysis does just that. This level was calculated by the inclusion of the AWA requirements, but also by the court’s understanding of the term “actually kill.”⁷⁸ In combination with NMFS’s definition of harm using “significant habitat modification” and actually killing or injuring wildlife “by *significantly* impairing essential behavioral patterns,”⁷⁹ the court put harm and harass under this higher stakes umbrella of significant, actual harm or injury. The effect of setting harm and harass to a serious threat level, is ultimately taking away the middle ground that *Babbitt* established. Instead of an act being one that actually harms an animal, it now must cause a serious threat to their existence. This is not as high of a bar as the district courts “grave” threat, but it leaves no room for a *Babbitt* analysis that enforced the proper

⁷⁵ *PETA*, 879 F.3d at 1148 (quoting *Babbitt*, 515 U.S. at 699).

⁷⁶ *PETA*, 879 F.3d at 1149-50.

⁷⁷ *PETA v. Miami Seaquarium*, 905 F.3d 1307, 1310 (11th Cir. 2018).

⁷⁸ *PETA*, 879 F.3d at 1149.

⁷⁹ *Id.*

scope of the ESA. The *Babbitt* bar for harm exists because endangered and threatened species are *already* vulnerable. Thus, a harm or harassment is already a serious action against them. Injuring a pigeon in New York City will not jeopardize the species or have much, if any, effect on their population. The same injury done to a bald eagle or a California condor is a serious threat to their population and existence. The courts toss *Babbitt* aside for their own agenda to push these harsher standards without recognizing that *Babbitt* never stood for allowing “de minimis” harms—it allowed for actual harm and harassment because to an endangered species, that action is significant and dangerous.

The court says “PETA's expansive reading of ‘harm’ and ‘harass’ would effectively nullify the AWA in the context of captive endangered animals,”⁸⁰ because “[t]aken to its outer limits, this definition could be construed as covering [Tokitae’s] regular veterinary care which, despite being chronically annoying from her perspective, is life-prolonging.”⁸¹ It goes without saying that the ESA never intended to include such acts under the take provision as applied to captive wildlife. If the acts are life-prolonging (because they need to be, otherwise she would have died from captivity a long time ago like her pod-mates did)⁸² they certainly would not be considered a harm in the first place. However, the ESA level of harm does include injury or harassment on a common level because the species are already vulnerable. With that, Tokitae’s conditions should be considered a harm under the proper analysis. However, the court still erred in finding that her conditions and treatment do not amount to serious harm.

The court passed through the injuries alleged by PETA without much analysis, mainly because the harms alleged were “attributable to the configuration of [Tokitae’s] tank, the PWSDs

⁸⁰ *Id.* at 1150.

⁸¹ *PETA*, 905 F.3d at 1310.

⁸² See *Lolita’s Capture*, *supra* note 1 (“Of the six other young whales [caught that day], two were shipped to marine parks in Japan, and one each went to parks in Texas, the United Kingdom, France and Australia. They were all very young calves, but, except for Lolita, they all died within five years).

with which [Tokitae] shares her tank, sun exposure, or some combination thereof”⁸³—all aspects that are covered by the AWA.⁸⁴ These harms of too small of a tank, no recourse from the Miami sun, and the forcing of her to share her tank with Pacific White-Sided Dolphins are not, to the court, harms, because they meet the AWA requirements. However, PETA does not raise these harms just for the direct harm each action causes, but the ultimate mental and physical harm they all cause her. This cumulative harm is a serious threat to her existence. For example, PETA cites the dolphins’ aggressive rakes on Tokitae.⁸⁵ This is when the animals drag their teeth on the backs and sides of another cetacean, sometimes causing deep scars and puncture wounds.⁸⁶ The court is right, whales do rake each other in the wild.⁸⁷ However, the conclusion that this does not amount to a serious harm is an incorrect, and to be blunt, an apathetic analysis. The court states, “Appellants’ own expert rated [Tokitae’s] rakes as a three to four on a scale from one to ten, with ten being the most raked orca observed in the wild,” but the uneducated assumption that less rakes equals no harm is egregious. Tokitae has less rakes than her wild counter parts because she is being raked by a Pacific White-Sided Dolphin, not another orca. These dolphins are a third of her length and weigh 230 pounds⁸⁸—Tokitae weighs 8,000 pounds.⁸⁹ The court also wrongly concludes that because “she is receiving care to make sure her rakes heal,”⁹⁰ they cannot amount to a serious harm. Mitigation of a harm should not preclude a violator from being penalized for causing the harm in the first place.

⁸³ *PETA*, 879 F.3d at 1145.

⁸⁴ See 9 CFR 3.100-3.118 (setting minimum standards for space, compatible companionship, and shade).

⁸⁵ *PETA*, 905 F.3d at 1309.

⁸⁶ See generally Dr. Ingrid N. Visser, *Report on the Physical & Behavioural Status of Morgan*, Free Morgan Foundation (2012), <http://www.freemorgan.org/wp-content/uploads/2012/11/Visser-2012-Report-on-the-Physical-Status-of-Morgan-V1.2.pdf> (accessed April 6, 2019) (studying the abuse and aggression suffered by a wild orca that was ‘rescued’ and now remains at Loro Parque with incompatible companions).

⁸⁷ *Id.*

⁸⁸ *Pacific White-Sided Dolphin*, WIKIPEDIA, https://en.wikipedia.org/wiki/Pacific_white-sided_dolphin.

⁸⁹ *PETA*, 879 F.3d at 1144.

⁹⁰ *PETA*, 905 F.3d at 1309.

Her tank size and lack of enrichment also amount to serious harm, as discussed in previous sections, but the raking discussion is a prime example of the court’s misguided analysis. The most essential part that the court missed in its analysis of serious harm from PETA’s allegations, is that these harms are not only injurious in their own right, but they amount to much deeper and psychological harms that are beyond serious. For example, the raking is an injury, but the reason Tokitae is being raked is the ultimate injury. The AWA section for marine mammals does not define “compatible” in its requirement for a marine mammal to have “one compatible animal of the same or biologically related species.”⁹¹ However, the court concludes that because the dolphins are also cetaceans, they must be compatible.⁹² There is no discussion on the actual compatibility of these animals. As is the case with Morgan, despite her tank mates being other orcas, rake marks are a sign of a much more troubling situation than what seems like a normal behavior.⁹³ It is this kind of uncaring and nonchalant look at the alleged harms that is costing Tokitae recourse under the ESA. The perfect example of how her conditions, which are largely unchanged since she arrived in 1970, are a harm—serious threat or not—is seen in her prior tank mate, Hugo. Hugo was another Southern Resident caught a year before Tokitae and resided at the Miami Seaquarium in an even smaller pool—one currently used for manatees—before the “whale bowl” was completed.⁹⁴ Hugo and Tokitae were very compatible and even mated during their ten years together, but Hugo suffered immensely in captivity.⁹⁵ Unable to handle the psychological trauma of living in a too small concrete tank, Hugo chronically rammed his head into the walls; at one point he sliced off a large portion of his rostrum and it had to be

⁹¹ 9 CFR 3.109.

⁹² See *PETA* 879 F.3d at 1145 (“Lolita now lives with Pacific white-sided dolphins (PWSDs). Like Lolita, the PWSDs are cetacean mammals.”).

⁹³ Dr. Ingrid N. Visser, *supra* note 86.

⁹⁴ Blaine, *supra* note 2, at 23.

⁹⁵ See *Lolita’s Capture*, *supra* note 1.

sewn back on.⁹⁶ At only fifteen years old, Hugo could no longer withstand the harm and harassment. He rammed his head into the wall one last time, dying from the impact.⁹⁷

Conclusion

It should not take an animal committing suicide to escape their captivity in order for a court to hold that the human owners were committing a take. As the current precedent stands in the Eleventh Circuit, it seems that anything less will never amount to a viable violation by the Miami Seaquarium to remedy Tokitae's situation. The erroneous and careless analysis of the courts melded the AWA and ESA into an unattainable standard that does not comport with precedent or common sense. Tokitae has and continues to suffer immensely in her pool at the Miami Seaquarium. Just because certain harms can be mitigated and just because she somehow, astonishingly, survives without the outward debilitating psychosis that Hugo endured, does not mean she is not being harmed. As a listed species, Tokitae deserves for the court to properly and empathetically look at her situation under the appropriate ESA standards of harm and give her the chance to reunite with the family she was stolen from almost half a century ago.

⁹⁶*Id.*

⁹⁷*Id.*

Wildlife-Vehicle Collisions

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Wildlife-Vehicle Collisions

In the United States and abroad, wildlife-vehicle collisions (WVCs) signify the intersection of two opposing phenomena: human development and wildlife subsistence. The growing network of public roadways induces wildlife populations to navigate through its maze in seemingly haphazard motion, creating pockets increasingly susceptible to fatalities and injuries, both human and wildlife. While federal and state governments are pursuing different avenues to address the growing problems associated with wildlife-vehicle collisions, those efforts cannot compete with the accelerated rate at which our road systems confine and weaken wildlife populations and their habitats. A regulatory scheme is needed to implement and enforce mitigation strategies to effectively reduce wildlife-vehicle collisions.

Fragmentation of Land in the United States

Habitat loss and fragmentation are the leading causes of species decline and biodiversity loss in the United States and world-wide and pose the greatest risk to survival of 85 percent of all threatened or endangered species.¹ Habitat loss is attributed to a myriad of human activities that include commercial development, public transportation, and deforestation. It is in essence the result of habitat fragmentation, a process that divides large areas of land are divided into smaller patches.²

Habitat fragmentation, in its appropriation of natural ecosystems for urban, residential, commercial and industrial development, disrupts species and ecological wherewithal. Of the 96,500 threatened or endangered species, more than 26,500 face extinction.³ This means that a

¹ WORLD WIDE FUND FOR NATURE, http://wwf.panda.org/our_work/wildlife/problems/habitat_loss_degradation/.

² RAPHAEL K DIDHAM, ECOLOGICAL CONSEQUENCES OF HABITAT FRAGMENTATION abstract (2010), ELS, <http://www.els.net/WileyCDA/ElsArticle/refId-a0021904.html>.

³ *Background and History*, INTERNATIONAL UNION FOR CONSERVATION OF NATURE'S RED LIST OF THREATENED SPECIES, <https://www.iucnredlist.org/about/background-history> [hereinafter IUCN REDLIST].

third of all conifers, a third of all corals, a quarter of all mammals, 40 percent of all amphibians and 14 percent of all birds are on the brink of extinction.⁴ In the United States, more than 8,500 plant and animal species, about a third of all U.S. species, are estimated to be at risk of extinction.⁵ To frame it differently, the earth's wildlife population is half of what it was 40 years ago,⁶ and it is expected to fall another 17 percent by 2020.⁷

The Growing Network of Public Roads

Embedded in the obstruction of wildlife functioning are our extensive road systems. While they comprise of only 1 percent of total land use in the United States, the estimated 7 million miles of roads and the developed land which vehicles access impact over 60 percent of the country's land surface.⁸ Similar in size with a country like Australia, which had about 560,000 miles of roads for 18 million people in 2006, the United States (excluding Alaska and Hawaii) had 3.7 million miles of public roads for 200 million vehicles during the same period.⁹

As private land development, urban sprawl, and industry continue to rise, the need for mobility within those lands has resulted in an encroaching demand for transportation infrastructure.¹⁰ 31,000 lane miles are added annually to the existing million miles of public roads in the United States.¹¹ On a global scale, the length of roads is projected to increase by

⁴ *Id.*

⁵ NWF, <https://www.nwf.org/Magazines/National-Wildlife/2017/Feb-March/Conservation/Biodiversity>.

⁶ Damian Carrington, *Earth Has Lost Half of Its Wildlife in the Past 40 Years, Says WWF*, GUARDIAN (Sep. 30, 2014), <https://www.theguardian.com/environment/2014/sep/29/earth-lost-50-wildlife-in-40-years-wwf>.

⁷ Damian Carrington, *World on Track to Lose Two-Thirds of Wild Animals by 2020, Major Report Warns*, GUARDIAN (Oct. 25, 2016), <https://www.theguardian.com/environment/2016/oct/27/world-on-track-to-lose-two-thirds-of-wild-animals-by-2020-major-report-warns>.

⁸ son Karl et al., *Wildlands of the United States*, PACIFIC BIODIVERSITY INSTITUTE 5 (2001), http://pacificbio.org/publications/wildlands_roadless/WildlandsOfTheUnitedStates103001.pdf [hereinafter PBI].

⁹ RICHARD T. T. FORMAN & LAUREN E. ALEXANDER, ANNUAL REVIEW OF ECOLOGY AND SYSTEMATICS, ROADS AND THEIR MAJOR ECOLOGICAL EFFECTS 208 (1998), https://www.edc.uri.edu/nrs/classes/nrs534/NRS_534_readings/FormanRoads.pdf.

¹⁰ THE NAT'L ACADEMIES TRANSP. RESEARCH BOARD, INTERACTION BETWEEN ROADWAYS AND WILDLIFE ECOLOGY 5 (2000), <https://www.americantrails.org/files/pdf/roadwaywildlifeinteract.pdf> [hereinafter NATRB].

¹¹ FAQs, AMERICAN ROAD & TRANSPORTATION BUILDERS ASSOCIATION, <https://www.artba.org/about/faq/> (last visited Nov. 30, 2018).

more than 60 percent by 2050, with only 5 percent of roadless areas protected from development.¹² Wildlands make up 29 percent of all land area in the U.S. (657 million acres out of the 1.9 billion acres of land comprising the lower 48 states), but only 16 percent of these roadless lands are protected. The rest exist without any safeguards from road building and other development.¹³

With one-fifth of the land in the U.S. impacted ecologically by transportation infrastructure,¹⁴ roadways threaten the viability of land and water ecosystems. They also compromise and weaken reproductive behavior, population capabilities, and psychological well-being (often weakened by persistent traffic noise) of wildlife populations. Most noticeably, a wildlife is killed or injured as a result of collisions with vehicles.

The Scale of Wildlife-Vehicle Collisions

Wildlife need to cross roadways not only to find critical resources (made unavailable or significantly diminished as a result of habitat loss and fragmentation), but also to maintain genetic diversity within its population. Species that are trapped inside an area expose themselves to the danger of inbreeding, which threatens their viability as a population. To cross a roadway runs the risk of mortality, but to avoid them can also cause the decline of a population. While the effect of road mortality can be gauged within one or two animal generations, the effects of complete road avoidance can take several generations to manifest for a population.¹⁵

¹² Damian Carrington, *New Map Reveals Shattering Effect of Roads on Nature*, GUARDIAN (Dec. 15, 2016), <https://www.theguardian.com/environment/2016/dec/15/new-map-reveals-shattering-effect-of-roads-on-nature>.

¹³ PBI at 4, http://pacificbio.org/publications/wildlands_roadless/WildlandsOfTheUnitedStates103001.pdf.

¹⁴ RICHARD T. T. FORMAN, ESTIMATE OF THE AREA AFFECTED ECOLOGICALLY BY THE ROAD SYSTEM IN THE UNITED STATES 18, CONSERVATION BIOLOGY (2000), <https://onlinelibrary.wiley.com/doi/epdf/10.1046/j.1523-1739.2000.99084.x>.

¹⁵ *Banff National Park FAQs*, PARKS CANADA (Jan. 4, 2017), <https://www.pc.gc.ca/en/pn-np/ab/banff/info/gestion-management/enviro/transport/tch-rtc/passages-crossings/faq> [hereinafter BANFF FAQs].

From July 2017 to June 2018, an estimated 1.34 million¹⁶ of the 6.3 million¹⁷ automobile accidents in the U.S involved wildlife-vehicle collisions, the vast majority of which (as high as 90 percent in some states) involved deer.¹⁸ The actual number of all WVCs in the U.S. is unknown because no reliable database exists, and figures only reflect *reported* collisions with large animals.¹⁹ The FHA estimated in 2008 that between one and two million WVCs take place in the United States every year.²⁰ However, the Humane Society estimated that a million animals die from vehicle collisions a day.²¹ As the Federal Highway Administration (FHA) asserts, “there are no standards or guidelines for the collection of data on WVCs. Data are collected inconsistently and often haphazardly, and methods vary between states and agencies. Some transportation agencies do not collect this type of data at all.”²²

Despite the difficulty in ascertaining an exact toll of annual WVCs, it is clear that the growing infrastructure of public roads correlates with the growing rate of human and animal injuries and fatalities. While the number of all reported motor vehicle crashes stayed slightly above six million per year for a 15-year period (from 1990 to 2004), the number of reported WVCs increased by about 50 percent over the same period.²³ WVCs in particular pose the biggest threat to the survival of 21 threatened or endangered animal species in the U.S..²⁴ For instance, half of the endangered Florida panther population died from collisions with vehicles

¹⁶Vicki Harper & Benjamin Palmer, *Deer Crashes Down*, STATE FARM (Oct. 1, 2018), <https://newsroom.statefarm.com/2018-deer-crashes-down/>.

¹⁷*Traffic Safety Facts*, NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION 1 (Aug. 2016), <https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812318>.

¹⁸M.P. HUIJSER ET AL., FHWA-HRT-08-034, WILDLIFE-VEHICLE COLLISION REDUCTION STUDY: REPORT TO CONGRESS 7 (2008), <https://www.fhwa.dot.gov/publications/research/safety/08034/08034.pdf> [hereinafter FHWA REPORT].

¹⁹*Id.* at 4.

²⁰*Id.* at 5.

²¹Malia Wollan, *Mapping Traffic's Toll on Wildlife*, NYTIMES (Sep. 12, 2010), https://www.nytimes.com/2010/09/13/technology/13roadkill.html?_r=0.

²²*Id.* at 18.

²³FHWA REPORT AT 5.

²⁴*Id.* at 9.

during the early 1980s.²⁵ Deer-vehicle collisions alone cause 200 human deaths and 26,000 injuries per year,²⁶ and the total cost associated with WVCs is nearly \$8.4 billion a year.²⁷

Mitigation Efforts to Reduce Wildlife-Vehicle Collisions

The Federal Highway Administration assessed the effectiveness of four categories of mitigation methods: 1) methods that aim to influence driver behavior (such as wildlife warning signs, animal detection systems, roadway lighting, reduced speed limits, and reflective collars for animals);²⁸ 2) methods aimed to influence animal behavior (such as deer reflectors and mirrors, audio signals, olfactory repellents and increased median width);²⁹ 3) methods that seek to reduce wildlife population size (such as wildlife culling, anti-fertility treatment, and wildlife relocation);³⁰ and 4) methods that seek to physically separate animals from the roadway (such as wildlife fencing, escape opportunities through gates or ramps, and wildlife underpasses and overpasses).³¹

The report found that efforts to influence driver and animal behavior have had minimal effect in reducing WVCs. Wildlife culling, on the other hand, can reduce deer-vehicle collisions by up to 50 percent,³² but the report added that the reduction is difficult to obtain, illegal in some areas and opposed by the public in others.³³ By far the most successful mitigation methods are wildlife fencing and crossing structures.

²⁵Mark Matthew Braunstein, *Driving Animals to Their Graves*, CULTURE CHANGE (Mar. 5, 2018, 11:37 PM), <http://www.culturechange.org/issue8/roadkill.htm>.

²⁶FHWA REPORT AT 7,8.

²⁷*Id.* at 9.

²⁸FHWA REPORT at 71-108.

²⁹*Id.* at 109-123.

³⁰*Id.* at 125-132.

³¹*Id.* at 133-163.

³²*Id.* at 126.

³³*Id.* at 127.

Wildlife fencing, combined with wildlife overpasses and/or wildlife underpasses, reduced WVCs consistently from between 80 to 90 percent.³⁴ When properly used, they have been successful at not only connecting habitats and allowing wildlife to migrate through them, but also significantly reducing WVCs. Wildlife crossings by way of Alligator Alley in south Florida allowed the endangered Florida panther and other species to access other habitats.³⁵ Their success initiated six more crossings on a highway running perpendicular to Alligator Alley that created a corridor connecting three viable habitats: the Florida Panther National Wildlife Refuge, Fakahatchee Strand State Preserve, and Big Cypress National Park.³⁶ Similarly, the Banff National Park in Canada built six wildlife overpasses and 38 underpasses along the Trans-Canada Highway that reduced wildlife-vehicle collisions by more than 80 percent.³⁷ Elk and deer collisions dropped by more than 96 percent, and over 200,000 wildlife, including coyotes, grizzly bears, wolves, cougars, and moose, used these crossings.³⁸ The construction of seven culvert underpasses, in combination with continuous fencing, reduced deer-vehicle collisions by 81 percent in Southwest, Wyoming.³⁹

Without safe crossing opportunities, wildlife fences are less effective because animals are more likely to open and break through gaps within the fencing.⁴⁰ Even without gaps, fencing that does not include wildlife crossings end up as another kind of barrier that confines wildlife to a certain area.⁴¹

³⁴ *Id.* at 135.

³⁵ NATRB 49, <https://www.americantrails.org/files/pdf/roadwaywildlifeinteract.pdf>.

³⁶ *Id.*

³⁷ BANFF FAQs, <https://www.pc.gc.ca/en/pn-np/ab/banff/info/gestion-management/enviro/transport/tch-rtc/passages-crossings/faq>.

³⁸ *Id.*

³⁹ Alexandra Christy, *Wildlife Crossings Are Win Win. The Question is When When?*, MEDIUM (Nov. 22, 2014), <https://medium.com/@grantstories/wildlife-crossings-are-win-win-the-question-is-when-when-4a8165168da9> [hereinafter MEDIUM].

⁴⁰ *Id.* at 136.

⁴¹ *Id.*

Ecological Benefits of Wildlife Crossings

Biodiversity is an evolutionary phenomenon resulting from over 200 million years of ecological interactions and processes. The immensity of species diversity is hard to fathom. It has created over 13 million species, of which only 1.75 million have been discovered.⁴² Species drive an ecosystem to be productive in part because “different species utilize different resources in a particular environment . . . to affect function.”⁴³

As human development continues to affect the processes of biodiversity to the current state of mass species extinction, formulating a transportation plan that will alleviate the inevitable constrictions placed on ecosystems will provide wildlife populations the necessary entries to useable habitats:

Mitigation strategies to deal with wildlife need to take into account that what is out there now is not what will be out there forever. The connectivity attributes of a habitat feature may change with successive changes in land use. *Therefore, a mitigation design that accounts for these changes will stand the test of time* (emphasis added).⁴⁴

The number of wildlife crossings in the United States is estimated to be in the low hundreds, and the vast majority of them are underpasses—culverts, viaducts, and tunnels. There are about 10 overpasses in the United States.⁴⁵ For highways, which pose complete barrier effects to a population, overpasses can allow safe passage for wildlife. But they are costly. The New Jersey overpasses costed 12 million dollars in 1985.⁴⁶ The wildlife overpass on I-90 near

⁴²ROBERT PERCIVAL ET AL., ENVIRONMENTAL REGULATION, LAW, SCIENCE AND POLICY 1003 (8 ed. 2018).

⁴³*Consequences of Biodiversity Loss*, RAINFOREST CONSERVATION FUND, <http://www.rainforestconservation.org/rainforest-primer/2-biodiversity/g-recent-losses-in-biodiversity/4-consequences-of-biodiversity-loss/>.

⁴⁴NATRB at 29, <https://www.americantrails.org/files/pdf/roadwaywildlifeinteract.pdf>.

⁴⁵MEDIUM, <https://medium.com/@grantstories/wildlife-crossings-are-win-win-the-question-is-when-when-4a8165168da9>.

⁴⁶NATRB at 40, <https://www.americantrails.org/files/pdf/roadwaywildlifeinteract.pdf>.

Spokane, Washington, expected to take effect in 2019, cost nearly 6.2 million dollars.⁴⁷ The Colorado Department of Transportation has a 46 million-dollar project in progress that includes five underpasses, two overpasses, and wildlife fencing along targeted roadways. The project was funded in part by private donors.⁴⁸

Increased funding for wildlife crossings proven to either substantially decrease or eliminate WVCs on public roads significantly enhances the prospects of both wildlife and society. Without such mitigation measures (consistently shown to reduce WVCs by at least 80 percent), the problems associated with WVCs will only continue to worsen. Though costly, wildlife crossings would eventually save on expenses because the cumulating benefits of such measures include not only saving lives, but also significantly reducing the costs of injuries and property damages resulting from WVCs.⁴⁹ As one article points out: “If we took that cost [of \$8.4 billion] and quartered it, we could build 200 animal crossings a year, and the problem of road kill would disappear within a generation.”⁵⁰

Funding Avenues

In a study of highway practices and their interaction with wildlife ecology, the National Academies Transportation Research Board stressed the need for identifying funding for wildlife protection measures during the preliminary stages of a transportation project. Without such funding, agencies have no means to plan and prioritize a program for wildlife mitigation measures (in the absence of a regulatory structure that would require such measures in the

⁴⁷ Ashli Blow, *Animal Overpasses on I-90 Will Grant Safe Passage to Washington Wildlife*, KIRO7 (Sep. 24 2018), <https://www.kiro7.com/news/local/animal-overpasses-on-i-90-will-grant-safe-passage-to-washington-wildlife/703210866>.

⁴⁸ MEDIUM, <https://medium.com/@grantstories/wildlife-crossings-are-win-win-the-question-is-when-when-4a8165168da9>.

⁴⁹ NATRB at 3, <https://www.americantrails.org/files/pdf/roadwaywildlifeinteract.pdf>.

⁵⁰ MEDIUM, <https://medium.com/@grantstories/wildlife-crossings-are-win-win-the-question-is-when-when-4a8165168da9>.

design and implementation of transportation projects).⁵¹ The study identified different sources of funding that states have come up with to incorporate mitigation measures in prospective and existing infrastructures. It also addressed the applicability of environmental analyses in formulating mitigation measures and brought to light the challenges transportation agencies face in implementing such measures without any “regulatory imperative” to do so.⁵²

The issues set forth by the study provides three avenues for implementing wildlife crossings on roadways: dedicated funding sources, environmental impact statements, and regulatory initiation.

Dedicated Funding Sources

Dedicated funding can come from a variety of sources including state toll funds, public/private partnerships, state safety funds, and enhancement funds from the Federal Highway Administration.⁵³ They ensure that wildlife mitigation measures are implemented alongside other competing transportation budget priorities.

One grant program by the U.S. Fish and Wildlife Service, the State Wildlife Grant Program, appropriates funds each year for state programs that address the conservation needs of species that are at risk but do not have the federally-protected status of being endangered.⁵⁴ It provides a dedicated funding stream to state fish and wildlife agencies to implement conservation measures proposed in each state’s State Wildlife Action Plan (SWAP).

SWAPs gather scientific data and initiate public-private partnerships to protect wildlife and their habitats. Ohio is one state that has proposed to work with its state and local

⁵¹ NATRB at 3, <https://www.americantrails.org/files/pdf/roadwaywildlifeinteract.pdf>.

⁵² *Id.*

⁵³ *Id.* at 47.

⁵⁴ ASS’N OF FISH & WILDLIFE AGENCIES, STATE AND TRIBAL WILDLIFE GRANTS PROGRAM-TEN YEARS OF SUCCESS 4 (2011), https://www.fishwildlife.org/application/files/9315/1856/3406/StateWildlifeGrants_10YearSuccess-Report.pdf.

transportation departments and other partners “to identify and address key areas of wildlife mortality on highways and consider animal movements when planning new roads.”⁵⁵ While the majority of state agencies do not specifically address the need for wildlife crossings in their SWAPs, they include important research on species and habitat data that can be culled by other agencies and organizations to inform solutions to wildlife passage and habitat connectivity issues.

States are required to revise their SWAPs every ten years, and funding averages about \$1 million annually to each state. In 2017, the Recovering America’s Wildlife Act⁵⁶ was introduced to the House to increase funding for this grant program from about \$60 million to \$1.3 billion. Such increase in funding would come from “revenue generated by energy and mineral extraction royalties currently collected by the federal government at about \$5 billion to \$12 billion annually.”⁵⁷

Environmental Impact Statements

Along with increased funding, state and federal transportation agencies can be induced by the public to incorporate mitigation measures as part of their required environmental impact analyses. In *Audubon Naturalist Society of The Central Atlantic States, Inc. v. U.S. Dept. of Transp.*, 524 F.Supp.2d 642 (2007), the court discussed three interrelated federal statutes, the Department of Transportation Act, The Federal-Aid Highways Act (FAHA), and the National Environmental Policy Act (NEPA), that require transportation projects to incorporate mitigation measures early on in the planning and design phases preceding road construction.

⁵⁵ THE OREGON CONSERVATION STRATEGY, STATE WILD ACTION PLAN FOR OREGON 3 (2016), <http://oregonconservationstrategy.org/media/0-Front-Matter-12.30.16.pdf>.

⁵⁶ H.R. 4647, 115th Cong. (2018), <https://www.congress.gov/bill/115th-congress/house-bill/4647/text>.

⁵⁷ *Recovering America’s Wildlife Act*, THE WILDLIFE SOCIETY, <http://wildlife.org/policy/recovering-americas-wildlife-act/>.

Under the Department of Transportation Act (DTA), the Secretary of Transportation must consult with other agencies “in developing transportation plans and programs that include measures to maintain or enhance the natural beauty of lands crossed by transportation activities or facilities.”⁵⁸ As such, the Secretary cannot approve a highway project that appropriates “wildlife . . . refuge” unless there is no “prudent and feasible alternative to using the land” and the project considers all possible options to “minimize harm to the . . . wildlife . . . refuge . . .”⁵⁹ To address these requirements, The Federal-Aid Highways Act (FAHA) establishes guidelines to ensure that full consideration of “possible adverse economic, social, and environmental effects” along with the costs of “eliminating or minimizing such adverse effects” inform the planning process of transportation projects.⁶⁰ Those guidelines are framed by a third statute, the National Environmental Policy Act (NEPA), which permit the Federal Highway Administration (FHWA) to comply with the requirements set forth by the FAHA.⁶¹

Under NEPA’s procedural scheme, agencies must consider all significant environmental impacts of any proposed federal action and disclose such relevant information in a detailed environmental impact statement (EIS).⁶² NEPA also requires agencies to consider viable alternatives that will minimize such adverse impacts.⁶³ Another major purpose of a NEPA-required EIS obligates an agency to publish that information and invite comments from the public and other government agencies as part of the decision-making process.⁶⁴

There is no independent cause of action in any of these three statutes, but an agency’s failure to comply with the respective requirements is subject to judicial review under the

⁵⁸ Department of Transportation Act 49 U.S.C.A. § 303 (West 2015).

⁵⁹ *Id.*

⁶⁰ Federal-Aid Highways Act 23 U.S.C. § 109(h) (West 2018).

⁶¹ *Audubon*, 524 F.Supp.2d at 706, 707.

⁶² National Environmental Policy Act 42 U.S.C. § 4332(C), (D) (West 2018).

⁶³ *Id.*

⁶⁴ *Id.*

Administrative Procedure Act (APA).⁶⁵ Under the deferential “arbitrary and capricious” standard, a court will uphold an agency’s action unless it was ‘arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law.’⁶⁶

In *Audubon*, Plaintiffs challenged the FHWA's approval of a proposed highway project, the Intercounty Connector (ICC), an eight-lane highway which extends for 18 miles between Prince George's County and Montgomery County in Maryland.⁶⁷ The ICC project had been proposed as early as 1953 but was rejected several times before redirecting its focus in 2002 by initiating “early and continuous coordination with twenty-one federal, state and local transportation, environmental, and planning agencies.”⁶⁸

The process of formulating an environmental impact statement included 3 public hearings attended by over 4,000 citizens from 2003 to 2005.⁶⁹ After the publication of the Draft Environmental Impact Statement, over 3,800 comment letters were submitted, followed by the publication of the Final Environmental Impact Statement, which was three volumes long.⁷⁰ The court described the NEPA process as a “thorough, transparent review by the federal, State, and local agencies of the project's issues, impacts and alternatives, and thoughtful consideration and response given to a vast amount of public comment.”⁷¹

Plaintiffs contended that the State failed to provide reasonable alternatives to the proposed project and to sufficiently research adverse environmental impacts.⁷² The court disagreed, finding that the State’s actions leading to the approval of the ICC project went well

⁶⁵ *Audubon*, 524 F.Supp.2d at 659.

⁶⁶ *Id.* at 660.

⁶⁷ *Id.* at 657.

⁶⁸ *Id.* at 658.

⁶⁹ *Id.* at 659.

⁷⁰ *Id.*

⁷¹ *Id.*

⁷² *Id.* at 661.

beyond the “arbitrary and capricious” standard of review.⁷³ It also noted that the State’s mitigation package, which included “20,700 linear feet of stream restorations, three fish blockage removal projects that restore 1,500 linear feet of streams, creation of 83 acres of wetlands, 25 wildlife passage improvements, 776.6 acres of new parkland, and seven reforestation sites”, adequately addressed and minimized the harmful impact that the project would have on surrounding communities.⁷⁴ The ICC project moved ahead and eventually incorporated 44 bridges and culverts, not only for deer and small mammals, but also for aquatic species.⁷⁵

Upon its completion, the ICC participated in a state-wide investigation into the use of culverts by wildlife.⁷⁶ The study discussed the seasonal variation in use of culverts by different wildlife. Spring and summer had the highest culvert use by the Northern raccoon; winter had significantly lower culvert use by Virginia possums; and white-tailed deer had much higher use of culverts in the summer.⁷⁷ Such variations in use suggest that wildlife are mapping and incorporating these structures into their migratory scheme. The study also confirmed that wildlife fencing without underpasses only served to concentrate deer-vehicle collisions into “unfenced or compromised areas.”⁷⁸

A mitigation effort that was not discussed in *Audubon* was the decision to relocate

⁷³ *Id.* at 717.

⁷⁴ *Id.* at 684.

⁷⁵ *Our Highways and Wildlife Protection*, MARYLAND STATE HIGHWAY ADMINISTRATION, <https://www.roads.maryland.gov/Index.aspx?PageId=334>.

⁷⁶ J. EDWARD GATES AND JAMES L. SPARKS, MARYLAND STATE HIGHWAY ADMIN, AN INVESTIGATION INTO THE USE OF ROAD DRAINAGE STRUCTURES BY WILDLIFE IN MARYLAND, (2011), https://www.roads.maryland.gov/OPPEN/MD-11-SP909B4M-Use%20of%20Drainage%20Structure%20by%20Wildlife_Final%20Report.pdf.

⁷⁷ *Id.* at 11.

⁷⁸ *Id.* at 16.

233 box turtles whose habitat was eliminated during the construction of the ICC.⁷⁹ While the relocation was deemed largely successful, the study found that 27 turtles died from the *Ranavirus* virus,⁸⁰ which struck the population around the same time construction of the ICC began. Three of the turtles died from construction activities.⁸¹ The study stressed the importance of wildlife fencing to deter turtles from accessing the highway (researchers were able to witness one turtle cross the same gap in fencing nine times).⁸² Furthermore, the study underscored the important effects of a required EIS, without which the ICC NEPA process would not have foreseen the needs of the box turtle population, whose existence would have been severely impaired by construction activities.

Audubon and the ICC studies on culvert usage and box turtles illustrate the immense scale at which an environmental analysis must be conducted for highway programs as large and as detailed as the ICC. Projects like it can easily disrupt numerous ecosystems during and after their construction. At minimum, public participation during the NEPA process is critical to assessing the innumerable interests and needs of wildlife and their habitats.

Audubon also demonstrated the lengths at which litigants will go to fully comply or challenge non-compliance with the NEPA process. The environmental review process can take many years to complete, but at intervals within this process, NEPA provides a forum where public and governmental entities can address how a massive project like the ICC will impact humans, wildlife, and surrounding ecosystems. Failure to do so exposes a project to the risks and delays of litigation under the Administrative Procedures Act.

⁷⁹SCOTT D. FARNSWORTH AND RICHARD A. SEIGEL, DEP'T OF BIOLOGICAL SCIENCES, TOWSON UNIVERSITY, RESPONSES, MOVEMENTS, AND SURVIVAL OF RELOCATED BOX TURTLES DURING CONSTRUCTION OF THE INTERCOUNTY CONNECTOR HIGHWAY IN MARYLAND (2013), <https://www.roads.maryland.gov/OPPEN/Farnsworth%2020131121%20TRB%20As%20PublishedResponses%20movements%20and%20survival%20of%20relocated%20box%20turtles%20ICC.pdf>.

⁸⁰*Id.* at 6.

⁸¹*Id.* at 5.

⁸²*Id.* at 7.

Unfortunately, in 2012, Congress passed The Moving Ahead for Progress in the 21st Century Act, which weakened the EIS requirement under NEPA by limiting the environmental review process for transportation projects to a four-year period, halving in length the average review process.⁸³ Failure to meet this deadline penalizes agencies by as much as 7 percent of their fiscal budgets.⁸⁴ The Act also expanded category exclusions (under which the EIS environmental review requirement is waived) for projects receiving less than \$5 million in federal funds.⁸⁵ As a result, the Act significantly undermines public participation in the decision-making process of all federal transportation projects.

A Regulatory Scheme

The third challenge in implementing mitigation measures involves the need to improve existing highways and public roads that never considered wildlife crossings in their original design and implementation. While dedicated funding and early EISs can help shape public perception around the need for wildlife mitigation measures, a regulatory system is needed to effectively tackle the growing problems associated with the country's vast network of public roadways.

The Wildlife Corridors Conservation Act is a bill that will be reintroduced to Congress this year that aims to “to provide for the protection and restoration of native . . . species and their habitat in the United States that have been diminished by habitat loss . . . [and] fragmentation.”⁸⁶

It includes, as part of its strategy for creating a national system of wildlife corridors, a plan to

⁸³ *Moving Ahead for Progress in the 21st Century Act*, WIKIPEDIA (2018), https://en.wikipedia.org/wiki/Moving_Ahead_for_Progress_in_the_21st_Century_Act.

⁸⁴ Christy Goldfuss, *Analysis: Cutting Red Tape In Transportation Bill Means Cutting You Out Of The Environmental Review Process*, THINK PROGRESS, (June 29, 2012), <https://thinkprogress.org/analysis-cutting-red-tape-in-transportation-bill-means-cutting-you-out-of-the-environmental-review-72e62c158e03/>.

⁸⁵ Anthony Adragna, *Final Transportation Bill Includes Provisions To Streamline Environmental Review Process*, B LOOMBERG BNA (June 29, 2012), <https://www.bna.com/final-transportation-bill-n12884910398/>.

⁸⁶ H.R. 6448, 114th Cong. (2016), <https://www.congress.gov/bill/114th-congress/house-bill/6448/text>.

implement wildlife overpasses and underpasses.⁸⁷ While there is no explicit provision for funding dedicated specifically for wildlife crossings, the bill seeks to coordinate actions between different agencies to mitigate the threats caused by roadways to wildlife and public safety. It also aims to create a rulemaking process that will designate lands and waters as National Wildlife Corridors in coordination with resource management planning authorities, including the Departments of Agriculture, Commerce, Defense, Interior, and Transportation.⁸⁸

Unlike other environmental statutes such as the Endangered Species Act, the Clean Air Act, and the Clean Water Act, the Wildlife Corridors Conservation Act lacks a citizen suit provision or other enforcement regulations (such as permit requirements) that can hold government entities liable for failure to execute its purposes and goals. Unless local, state, and federal agencies can be held responsible for its obligations to keep roadways safe, its executing agents will have little imperative or authority to solve wildlife-vehicle collisions.

Under the sovereign immunity doctrine, federal and state government agencies, officers, and employees cannot be held liable for tort and contract claims.⁸⁹ However, in 1946 Congress passed the Tort Claims Act, which authorized federal courts to hold agencies liable for tort actions as a way to compensate individuals injured by governmental misconduct.⁹⁰ Each state has also passed its own “Tort Claims Act” that waives limited immunity.

In *Tollenger v. State*, 119 Md. App. 586 (2011), Kenneth Connor and twelve-year old Ashley Paige Tollenger were riding across the Thomas J. Hatem Memorial Bridge in Cecil County, Maryland. Under heavy rain, Mr. Connor’s pickup truck veered out of control, crossed

⁸⁷ *Id.* § 5(c)(2).

⁸⁸ *Id.* § 4(a).

⁸⁹ *Sovereign Immunity in the United States*, WIKIPEDIA, https://en.wikipedia.org/wiki/Sovereign_immunity_in_the_United_States.

⁹⁰ *Federal Tort Claims Act*, WIKIPEDIA, https://en.wikipedia.org/wiki/Federal_Tort_Claims_Act.

the center line of the four-lane bridge, and struck an oncoming vehicle. Both Kenneth Connor and Ashley Tollenger were killed as a result of the collision.⁹¹

Ashley Tollenger's father, Garrett P. Tollenger, sued the State of Maryland and three of its agencies, the Maryland Department of Transportation, the Maryland Transportation Authority, and the Maryland State Highway Administration. His complaint, which included a wrongful death claim, alleged that the State failed to install barricades in the median of the bridge to ensure the safe transit of motor vehicles. The State breached its duty to design and implement such barriers, and Ashley Tollenger died as a result of that breach.⁹²

The bridge, throughout its 61 years of operation, had a painted double line to divide the east and westbound lanes of traffic.⁹³ The court noted that in the ten years prior to the accident, there had been 12 other cross-over accidents on the bridge, two of which resulted in fatalities and another that caused serious injuries.⁹⁴ Although the Maryland Transportation Authority had internally discussed the option of installing a permanent concrete barrier on the bridge, it voted not to reach any decision, in part out of concern that such a barrier would narrow the passageway of the bridge at the risk of more vehicle accidents.⁹⁵ Eleven days after Ashley Tollenger's accident, however, the Chief Engineer for the Maryland Transportation Authority requested to implement a barrier on the bridge, and about five months later, a jersey barrier was erected.⁹⁶

In response to Mr. Tollenger's complaint, the Maryland Department of Transportation filed a motion for summary judgment arguing that the suit was barred under the doctrine of sovereign immunity.⁹⁷ The trial judge granted the motion, finding that even if the failure to erect

⁹¹ *Id.* at 588.

⁹² *Id.* at 590.

⁹³ *Id.* at 588.

⁹⁴ *Id.* at 589.

⁹⁵ *Id.*

⁹⁶ *Id.* at 590.

⁹⁷ *Id.* at 591.

a permanent barrier on the bridge was the proximate cause of Ashley Tollenger’s death, it came at the hands of public officials who, because they were performing “discretionary duties,” were immune under the Maryland Tort Claims Act.⁹⁸ Accordingly, that immunity also transferred to the state and its agencies.

The Court of Special Appeals disagreed. It held that, even though no specific exclusion is mentioned in the statute, the State is liable for the discretionary acts of its public officials if they relate to decisions allowing for defective or dangerous highway conditions.⁹⁹

The court analyzed at length the provisions set forth by the Maryland Tort Claims Act, which, when enacted in 1981, made effective six types of claims which waived the State’s sovereign immunity.¹⁰⁰ Three of those six claims of waiver were related to Mr. Tollenger’s suit:

- . . . (3) an action to recover damages caused by the patently dangerous condition of a building, structure, or other public improvement owned and controlled by the State;
- (4) an action to recover damages caused by the negligent use or maintenance of State property by a State employee; and
- (5) an action to recover damages caused by a defective, unsafe, or dangerous condition of any street, alley, sidewalk, or highway owned and controlled by the State if constructive or actual notice of the condition existed.¹⁰¹

It was the last provision, section 5-403 (a)(5), that the court determined “clearly indicated that a duty was owed to the individual injured [by the State].”¹⁰² This determination resulted in a reversal of the summary judgment grant and the case was remanded.

As it applies to injuries and deaths caused by wildlife-vehicle collisions, *Tollenger* posits that individuals can file wrongful death suits against the state for its failure to abate a dangerous condition of any road it owns and controls if the state had constructive or actual notice of the

⁹⁸ *Id.*

⁹⁹ *Id.* at 650.

¹⁰⁰ *Id.* at 592.

¹⁰¹ *Id.* at 593.

¹⁰² *Id.* at n.3.

condition. As it relates to WVCs, such notice is readily established by data collected in local and state jurisdictions of “hotspots” —segments of roadways prone to wildlife-vehicle collisions. Studies have shown that mitigation efforts implemented by an agency (signs, reduced speed zones, reflector lights, etc.) to alleviate hotspots have proven inadequate in reducing WVCs. A claimant could argue that those measures are equivalent in function to the double line divider in *Tollenger* in that while they alert the driver to a facet of the road, they do not effectively prevent collisions from reoccurring.

Since *Tollenger*, limits to compensatory damages for tort claims under the Maryland Tort Claims Act (MTCA) doubled from \$200,000 to \$400,000 in 2015.¹⁰³ The amount is awarded to one claimant for all injuries arising from a single incident.¹⁰⁴ While it may be insufficient to compensate for the physical and emotional pain caused from a fatal accident, recovery can compensate a driver whose injuries resulting from a WVC are not adequately covered (or not at all) by his or her insurance. Moreover, a tort action against an agency for its failure to eliminate WVCs, when the agency knew or should have known that mitigation measures existed that would have significantly curtailed the frequency of collisions, may induce the government to implement those measures more readily than alternative funding sources might. If an agency can be held liable for the wrongful death of one driver, it can potentially be held for many more, as the number of injuries and fatalities resulting from wildlife-vehicle collisions is only expected to rise.

To make a negligence claim against a government agency for unsafe road conditions requires identifying which agency has local, state, or federal jurisdiction over a particular roadway. For example, four agencies or organizations are responsible for maintaining the roads

¹⁰³ Md. Code Ann. State Gov't § 12-104(a) (1)-(2) (West 2015).

¹⁰⁴ *Id.*

in Montgomery County, Maryland: (1) the Maryland State Highway Administration, for roads with route numbers; (2) municipalities such as Chevy Chase and Gaithersburg, for roads inside its boundaries; (3) Private Home Owners Associations, for roads within its borders; and (4) Montgomery County Division of Highway Services, for all other roads within the County.¹⁰⁵ In Maryland, unless the state consents (as it did in *Tollenger*, by waiving immunity if constructive or actual notice of a damaged roadway exists), it is generally not liable for any governmental functions;¹⁰⁶ i.e., functions

which [are] so intimately related to the public interest as to mandate performance by Government employees [and] include those activities which require either the exercise of discretion in applying Government authority or the use of value judgments in making decisions for the Government.¹⁰⁷

Because the construction and repair of highways falls under the category of governmental functions, state transportation agencies have immunity in the failure to keep those roads safe.¹⁰⁸

Municipalities have a more limited governmental immunity. Under Maryland common law, counties and municipalities have immunity in tort actions involving governmental functions,¹⁰⁹ but they are subject to liability with regard to proprietary functions, which courts have deemed to include the safe maintenance and operation of municipal streets and highways.¹¹⁰

A function is governmental or proprietary depending on “whether the act performed is for the common good of all or for the special benefit or profit of the corporate entity.”¹¹¹ This

¹⁰⁵ *Who Repairs What Road?*, MONTGOMERY COUNTY DEP’T OF TRANSP.,

<https://www.montgomerycountymd.gov/dot-highway/roadmaint/countyroadmain.html>.

¹⁰⁶ 11 M.L.E. Highways § 29 *State Liability* (2018) .

¹⁰⁷ *Martin v. Haliburton*, 618 F.3d 476, 480 (2010).

¹⁰⁸ *Id.*

¹⁰⁹ Karen J. Kruger, *Governmental Immunity in Maryland: A Practitioner’s Guide to Making and Defending Tort Claims*, 36 U. B. L.J. 37, 65 (2006).

¹¹⁰ *Id.* at 65-66 (citing *Higgins v. City of Rockville*, 86 Md. App 670, 678, 587 (1991)).

¹¹¹ *Id.* at 65 n. 241.

distinction, however, is not so straightforward when applied to a municipality: “What is bizarre is the placement of the maintenance of streets, highways, and walkways in the proprietary column rather than in the governmental column. Bizarre or not, it is nonetheless the indisputable and long-settled law of this state.”¹¹²

In Maryland, as in most states, a governmental agency is not liable for injuries caused by a design defect in a highway. However, in *Jennings v. U.S.*, 291 F.2d 880 (1961), the court ruled that if the defect,

whether of design or not, creates a condition which would itself constitute a nuisance, reasonable care to abate it is not exercised and the condition is the effective cause of the injury, no reason presently appears why the agency charged with maintenance of the highway should not be responsible as for any other nuisance it unreasonably permitted to exist.¹¹³

Jennings involved an accident that occurred in Maryland on a highway constructed and maintained by the Department of the Interior. While driving on Suitland Parkway around 7:30 a.m., Stewart Jennings’s vehicle crossed a patch of ice on the road, veered into the opposite lane of traffic, and collided with another vehicle. Both Stewart Jennings and his brother, Donald, were killed in the accident.¹¹⁴

The court describes the observations of the patch of ice by numerous drivers prior to the morning of accident. One patrolling officer thought he had driven over a patch of ice on his way to work, but when he returned to look for it, he was not able to locate it. This same officer made six or seven round trips over the entire length of the highway during the night before the accident but was unable to locate any patches of ice.¹¹⁵ Nonetheless, it was established that a patch of ice

¹¹² *Higgins v. City of Rockville*, 86 Md. App 670, 680 (1991).

¹¹³ *Id.* at 887.

¹¹⁴ *Id.* at 881.

¹¹⁵ *Id.* at 883.

had formed at or near the point where Stewart Jennings lost control of his vehicle the following morning.¹¹⁶

The issue was whether the government was liable for injuries caused by icy conditions on roads under its jurisdiction. Because the accident took place in Maryland, the court determined that its law controlled.¹¹⁷

The court looked to other Maryland cases to conclude that “[a] municipality is not required to do the impossibility, to prevent snow from falling in the streets . . . or even the very onerous. It is required to do what is reasonable and not burdensome to it.”¹¹⁸ The court stressed that a municipality’s obligation to remove snow or ice “depends, in each instance, upon reasonableness.”¹¹⁹ Because the patrolling officers drove along the parkway at frequent intervals the night before the accident and had a truck ready to disperse sand, the court concluded that the government exercised due care.¹²⁰ Furthermore, unlike other cases that involved the presence of ice for days at a stretch, the court found that the patch of ice causing Mr. Jenner’s accident had appeared only a few hours before. Not only did it not constitute a nuisance, the sporadic appearance of the ice patch did not obligate a municipality to remove it.¹²¹

The court stipulated, however, that if the ice was formed as a result of a faulty drainage ditch located 1500 feet from the site of the accident and not from the pile of snow bordering the roadway, then the government had a duty to abate the nuisance created by the defective design of the roadway (i.e., the drainage ditch).¹²² The court pointed out the District judge’s characterization of that segment of the road as a “danger spot” because the closest curb drain was

¹¹⁶ *Id.* at 882.

¹¹⁷ *Id.*

¹¹⁸ *Id.* at 887.

¹¹⁹ *Id.* at 885.

¹²⁰ *Id.* at 886.

¹²¹ *Id.*

¹²² *Id.* at 887.

1500 feet away, whereas on the other side of the road curb drains were placed every 300 feet.¹²³ That this lone curb drain was also defective could have explained the sporadic appearance of the patch of ice prior to and after the accident.¹²⁴

The concurring opinion emphasized that a municipality is not liable for the failure to remove ice and snow formed from natural causes.¹²⁵ To hold it otherwise would

place an extremely heavy burden on persons and governmental bodies today, with the great number of streets and highway, the size of municipalities, the ever-increasing volume of automobile travel, and the problems connected with snow and ice removal. *But if the ice was formed as a result of a condition under its control, then the municipality would be liable* (emphasis added).¹²⁶

Because a defective design of the roadway was within the control of the municipality, as opposed to heavy rain or snow or patches of ice, which are natural causes and outside the scope of duty, the court in *Jennings* remanded the case to determine what actually caused the ice to form. The court stressed reasonableness as the determining factor of liability. While natural causes such as snow or ice do not attach liability, the failure to ignore problems resulting from such causes for an unreasonable length of time does. Furthermore, if the ice was there “partly as a result of some other condition or circumstances under [its] control,” then an agency is responsible for the nuisance “it unreasonably permitted to exist.”¹²⁷

On remand, the District Court held that the drainage system was “totally inadequate”:¹²⁸

Such inadequacies contributed to and were a cause of the formation of the ice patch which caused Jennings' car to skid. The inadequacy of the drainage system . . . constituted a nuisance, which the Government could have abated in the exercise of

¹²³ *Id.* at 891.

¹²⁴ *Id.*

¹²⁵ *Id.* at 890.

¹²⁶ *Id.* at 892.

¹²⁷ *Id.* at 887.

¹²⁸ *Jennings v. United States*, 207 F.Supp. 143, 152 (1962).

reasonable care. The inadequacy of the drainage system . . .
had existed for a number of years prior to 1956.¹²⁹

The United States appealed, but the Fourth Circuit affirmed the District Court's judgment, adding that the government had "knowingly allow[ed] a hazardous condition to continue unabated."¹³⁰

In light of the effect of roadways to fragment wildlife habitats and impose increasingly smaller, unsustainable areas for wildlife to reside, it is unreasonable for governmental agencies to ignore the pressing needs of wildlife to escape those confinements that threaten their survival. Furthermore, the costs of ignoring those areas where wildlife-vehicle collisions occur on a regular basis are mounting. Federal, state and local agencies have made efforts to mitigate the frequency of WVCs, but those efforts are not working to the extent they need to be, and agencies have under their control other measures that have been proven to substantially reduce WVCs. Nevertheless, those measures are being shelved.

Jennings elicits the point that when it concerns wildlife, roadways are by design defective because they were placed in areas with preexisting ecological and species activity. Wildlife may be a natural cause of vehicle accidents, but as *Jennings* warns, liability shifts to the government when the nuisance created by a natural cause is "unreasonably permitted to exist."¹³¹ Transportation agencies have under their control to significantly reduce, if not eliminate, the fatalities and injuries caused by wildlife-vehicle collisions. As such, they should be held liable for their failure to keep roadways safe from dangers that they could have reasonably foreseen and prevented.

¹²⁹*Id.*

¹³⁰ *Jennings v. U.S.*, 318 F.2d 718 (1963).

¹³¹ *Jennings*, 291 F.2d at 887.


Conclusion


Wildlife crossings have proven to be the sole solution to road mortality and animal-vehicle collisions. As injuries and human fatalities associated with WVCs continue to rise, wildlife crossings are critical in stemming the damaging effects that road systems impose on society as well as countless ecosystems. Wildlife habitat connectivity is gaining some attention, but it is low on the priority list of funding initiatives and state conservation plans. While targeted funding and public awareness can advance the implementation of mitigation measures necessary for the survival of many species and their habitats, the process is slow-going. Holding governmental agencies liable for the deaths and injuries resulting from animal-vehicle collisions can be a way to further discussion and public awareness around the need for creating a regulatory structure to induce wildlife mitigation measures.


UNDERSTANDING “CRUELTY-FREE” LABELING IN CONSUMER PRODUCTS

Choosing cruelty-free products is one important way consumers can help protect and promote animal rights and welfare. However, not all cruelty-free labels mean the same thing, and some reflect significant limitations. This chart explains what the most common cruelty-free labels mean and the limitations of those labels. The labels in this chart are listed from most to least protective.

KEEP IN MIND: The use of the cruelty-free labels is currently unregulated in the United States. Any company can claim to be cruelty-free. Beware of imitation or fake cruelty-free logos. Conversely, there are many cruelty-free brands (particularly small, locally owned brands) that are not certified under one of the follow standards due to financial or operational limitations. The best way to make cruelty-free choices is by carefully researching the products you purchase. Also note that this chart does not address labeling in relation to sales in China. China has certain animal testing requirements and some of these logos won't certify brands that sell in mainland China (while others do).

LOGO/LABEL	CERTIFYING BODY	DESCRIPTION	LIMITATIONS
	<p>Choose Cruelty Free (CCF)</p>	<p>All products and ingredients must be free of animal testing by the applying brand, owning company, contract manufacturers, ingredient suppliers, and anyone acting on their behalf for a period of five years immediately preceding the date of application for accreditation. Applying brands must sign a legally binding contract guaranteeing the truth of their statements and must supply written attestations from raw ingredient suppliers</p> <p>Product does not contain any ingredients:</p> <ul style="list-style-type: none"> • Derived from an animal killed specifically for the extraction of that ingredient; • Forcibly extracted from a live animal in a manner that caused pain or discomfort; • Derived from any wildlife; • That are by-products of the fur industry; • Are slaughterhouse by-products (meaning the animal was not killed specifically for the ingredient, but that the 	<p>Only available for products sold to Australian consumers</p> <p>CCF does not perform independent audits</p>

LOGO/LABEL	CERTIFYING BODY	DESCRIPTION	LIMITATIONS
		<p>ingredient was available due to the animal being killed for other purposes);</p> <ul style="list-style-type: none"> • Derived in a way that results in the death of that animal or insect either directly or indirectly; • Derived from fish or crustaceans <p>Products may contain honey; beeswax; lanolin; milk products (but are labeled as such)</p>	
	<p>Leaping Bunny (Coalition for Consumer Information on Cosmetics and its international arm, Cruelty Free International)</p>	<p>The company does not conduct or commission animal testing, nor purchase any ingredient, formulation or product from any third-party manufacturer or supplier that conducts, commissions, or has been a party to animal testing after a fixed cutoff date</p> <p>Companies must implement a supplier monitoring system and are required to show and submit proof that each of their suppliers complies with Leaping Bunny Standards</p> <p>Leaping Bunny certified companies:</p> <ul style="list-style-type: none"> • Must implement a supplier monitoring system; • Show and submit proof that each of their suppliers meet the Leaping Bunny Standards • Are subject to independent compliance audits • Must recommit and re-certify annually 	<p>Leaping Bunny will certify companies that are owned by a parent company that conducts animal testing; provided, however, that the brand promises to operate as a stand-alone subsidiary with its own supply chain</p>

LOGO/LABEL	CERTIFYING BODY	DESCRIPTION	LIMITATIONS
	<p>People for the Ethical Treatment of Animals (PETA)</p>	<p>The company or brand verifies that neither they, nor their suppliers, conduct, commission, pay for, or allow any testing on animals for their ingredients, formulations, or finished products anywhere in the world and that they will never do so in the future.</p> <p>Companies are required to have agreements in place with their suppliers guaranteeing that the supplier meets the PETA standards</p>	<p>PETA certified companies are only required to self-certify, meaning there is no independent verification or auditing requirement</p> <p>PETA certified companies may be owned by parent companies that test on animals</p> <p>One-time certification; does not require recertification or recommitment</p>
<p>Sources:</p> <ul style="list-style-type: none"> Choose Cruelty Free Accreditation Standards https://www.choosecrueltyfree.org.au/cruelty-free-accreditation Leaping Bunny Corporate Standard of Compassion for Animals https://www.leapingbunny.org/about/corporate-standard-compassion-animals-standard PETA “Global Beauty without Bunnies” https://www.peta.org/living/personal-care-fashion/beauty-without-bunnies/ “Which Cruelty Free Logos Can We Trust in 2021?” https://ethicalelephant.com/cruelty-free-logos/ “Cruelty-Free and Vegan Labels & Logos Explained” https://ethicalelephant.com/cruelty-free-vegan-labels-logos/ 			



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