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All Dogs Get Regulatory Protection—And This Means Wolves Too: Extending Species- Specific Animal Welfare Act Protections

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NOTE

**All Dogs Get Regulatory Protection—And
This Means Wolves Too: Extending Species-
Specific Animal Welfare Act Protections**

BY: MEGAN EDWARDS*

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I. INTRODUCTION

Lightning cracks. The moon, full and glowing, sits menacingly in the stormy sky. A spine-tingling howl pierces the night—wolves have inhabited the nightmares of peoples for centuries. In Icelandic lore, it was Fenrir the wolf who helped bring about the utter destruction of the world.¹ In Egypt, a wolf guarded the underworld and served as a God of Death.² Legends of wolves as evil, deceitful, and devil-like creatures have pervaded cultures for centuries from India to Russia to Eastern Europe and up even to Scandinavia.³ The word itself has a negative connotation found in languages spanning from Icelandic (*vargr*, meaning “a wicked person”) to Gothic languages (*vargs*, *warg* in Old High German, *warc* in Middle High German, *verag* in Anglo-Saxon, meaning “murderer,” “strangler,” “outlaw,” and “evil spirit”).⁴ Our collective fear and animosity towards wolves have rendered them the object of our most violent and murderous tendencies. In a time of unrestricted hunting, decreased prey populations, and habitat loss, gray wolf

¹ Astrid Wallner, *The Role of Fox, Lynx and Wolf in Mythology*, in *THE HUMAN DIMENSION IN LARGE CARNIVORE CONSERVATION* 31, 32 (Dora Strahm ed., 1998).

² *Id.*

³ *Id.*

⁴ *Id.*

populations plummeted in the lower forty-eight states in the United States (“U.S.”).⁵

The tumultuous relationship between humans and wolves, resulting in the wolves’ near eradication prior to their listing as an endangered species, has rendered wolves mostly visible only in zoos, conservation centers, and sanctuaries.⁶ Our fascination with wolves drives us to learn more about them and to seek them out in these captive settings—yet, the state of captivity in which many wolves are kept in the U.S. is wildly inadequate for the proper care and maintenance of these complex animals. The once mythic and mysterious wolf now suffers in cramped and unstimulating conditions provided by roadside zoos and other substandard facilities.⁷ The plight these animals endure in decrepit and filthy conditions⁸ is intolerable. Humans have not only actively sought the extermination of wolves in the wild, but have also vastly decreased the livable habitat for those that remain wild;⁹ it is therefore our duty to protect the population of wolves which exist in captivity.

Part II of this Note explores the history of animal captivity and how the conditions in these facilities have changed over time. Part III discusses environmental enrichment and its role in captive animal welfare. Part IV discusses the conditions that wolves endure in captivity. When these animals are placed in inadequate enclosures without the proper environmental stimulation, they behaviorally, emotionally, and physically suffer.¹⁰ Part V discusses the

⁵ *Gray Wolf Populations in the Conterminous U.S.*, THE WILDLIFE SOC’Y, <http://wildlife.org/wp-content/uploads/2014/05/Gray-Wolf-Populations-in-the-US.pdf> [<https://perma.cc/XGW8-7V3R>].

⁶ *See Wolf Safety*, WESTERN WILDLIFE OUTREACH, <http://westernwildlife.org/gray-wolf-outreach-project/wolf-safety/> [<https://perma.cc/HJQ2-WJSX>] (explaining how it is unlikely to see a wolf in the wild); *see generally A History of Wild Wolves in the United States*, GRAY WOLF CONSERVATION, https://www.graywolfconservation.com/Wild_Wolves/history.htm [<https://perma.cc/7L4P-C93B>] (describing the persecution and extermination of wolves in the lower 48 states).

⁷ *Roadside Zoos*, ANIMAL LEGAL DEF. FUND, <https://aldf.org/issue/roadside-zoos/> [<https://perma.cc/LF59-7YX3>].

⁸ *Id.*

⁹ *Gray Wolf*, HUMANE SOC’Y WILDLIFE LAND TR., <http://www.wildlifeland-trust.org/wildlife/close-ups/gray-wolf-close-up.html> [<https://perma.cc/7S54-AP2N>].

¹⁰ For example, consider the case of Bear the gray wolf, whose isolation caused him distress and impairment of normal and essential behavioral patterns because wolves are pack animals which require social companionship. Complaint at 2, *Prizniak v. Animaland Zoological Park, Inc.*, No. 1:16-cv-00420 (M.D. Pa. Mar. 9,

statutory scheme that governs the welfare of captive animals, such as the Animal Welfare Act (“AWA”), which is the only federal law in the U.S. that regulates the treatment of animals by researchers, exhibitionists, transporters, and dealers.¹¹ Part VI proposes that wolves should be considered “dogs” under the AWA and are thus entitled to species-specific regulations governing their psychological health and physical wellbeing. Finally, Part VII provides further suggestions for the regulations that should be implemented once wolves are embraced in the statutory scheme of the AWA provided for dogs to ensure that the conditions for wolves are sufficient for their needs. Such revisions are necessary because current regulations providing protections for dogs do not consider the needs of wild captive dogs, such as wolves, and do not include provisions to provide for their enrichment standards or social needs. Wolves have rich and complex social lives and have unique environmental needs¹² which should be considered and provided for in future regulations.

II. HISTORY OF ANIMAL CAPTIVITY

Although the specific history of wolves in captivity appears largely undocumented, it is critical to understand the history of animal captivity in general to gain a fuller perspective of the evolution of captive animal welfare.

Archeological evidence points to the existence of zoos or zoo-like facilities dating back to 2500 B.C.¹³ Historically, zoo facility enclosures have consisted of barren cages with little consideration for the physical and mental welfare of the animals housed within

2016); see also Jason Przybycien, *Where Did the Animals Go? Animaland Disperses Zoo Animals*, TIOPA PUB. (Aug. 10, 2016), http://www.tiogapublishing.com/the_wellsboro_mansfield_gazette/news/where-did-the-animals-go-animaland-disperses-zoo-animals/article_818d0e18-5efc-11e6-9304-efc4f883a7ec.html [<https://perma.cc/U9NS-AJQ2>] (explaining Bear’s bare, concrete-bottomed enclosure at Animaland Zoological Park).

¹¹ *Animal Welfare Act*, USDA NAT’L AGRIC. LIBR., <https://www.nal.usda.gov/awic/animal-welfare-act> [<https://perma.cc/2HFN-XQQV>].

¹² See generally Dan Thornhill, *Wolves Are Even More Socially Complex Than We Thought*, DEFENDERS OF WILDLIFE (July 22, 2014), <https://defenders.org/blog/2014/07/wolves-are-even-more-socially-complex-we-thought> [<https://perma.cc/H5GS-A8N6>].

¹³ *Zoo*, NAT’L GEOGRAPHIC RESOURCE LIBR., <https://www.nationalgeographic.org/encyclopedia/zoo/> [<https://perma.cc/7GS8-BLJD>].

them.¹⁴ The knowledge of adequate care and maintenance of captive wildlife was also sparse, and many animals died because the caretakers knew little regarding the animals' biology, diets, and social dynamics.¹⁵ A main concern of early zoo facilities was the spread of disease—smaller, more sterile cages were easier to clean, and therefore, were less likely to harbor and spread diseases.¹⁶ Typical animal enclosures were solely for displaying the animals from other parts of the world and exhibiting the owners' wealth and conquest—not to provide enriched environments in which the captive animals could thrive.¹⁷

Furthermore, many early modern zoos used their facilities for the purposes of exhibiting as many animals as possible, lacking a focus on animal welfare.¹⁸ The first zoo to incorporate naturalistic landscape into animal enclosures did not open until 1907 in Hamburg, Germany.¹⁹ Carl Hagenbeck designed this zoo to have barless exhibits, using moats to separate the public from the animals; his goal was to display the animals in a natural looking habitat, as one would find them in the wild.²⁰ This facility, Tierpark Hagenbeck, is still open to the public and is still run by the Hagenbeck family.²¹ Hagenbeck's designs were highly influential to the modern zoo design and led to the reinvention of the concept of captive housing for wild animals.²²

Facility designers have begun to incorporate principles of ethology into the design of animal enclosures. Ethology is the study of animal behavior in order to “ascertain mental attributes, compare those across individuals and species, and identify physical,

¹⁴ See Keri Phillips, *The Ethical Evolution of Zoos*, ABC (Oct. 21, 2015), <https://www.abc.net.au/radionational/programs/rearvision/the-ethical-history-of-zoos/6869776> [<https://perma.cc/6SMX-HUL9>].

¹⁵ *Id.*

¹⁶ *Id.*

¹⁷ *Zoos*, *supra* note 13.

¹⁸ For example, consider the Ménagerie du Jardin des Plantes in Paris, France. *Id.* This facility was characterized as a “museum of living animals.” *Id.* The animals were kept unusual spaces, described as “not-fit-for-purpose stables” and “old greenhouses.” *Paris, la Ménagerie du Jardin des Plantes*, ABOUT ZOOS, <https://aboutzoos.info/zoos/zoo-database/europe-zoo-database/170-paris-la-menagerie-du-jardin-des-plantes> [<https://perma.cc/YE5Z-QNU4>].

¹⁹ Phillips, *supra* note 14.

²⁰ *Id.*

²¹ *About us – this is how Tierpark works!*, TIERPARK HAGENBECK, <http://www.hagenbeck.de/en/tierpark/contact-information/history.html> [<https://perma.cc/9Q65-RQ9R>].

²² Phillips, *supra* note 14.

neurochemical, genetic, and evolutionary overlaps.”²³ As interest in ethology and social biology increased, facility designers began to incorporate this knowledge to help design appropriate exhibits for varying animal species.²⁴ This species-focused design allowed the animals to have the space and means to express a large percentage of their wild behaviors.²⁵ One such facility that incorporated these values into its design was the Woodland Park Zoo in Seattle, which was the first facility to implement “immersion design.”²⁶ Immersion designing transitioned design focus away from a homocentric view of zoos to a biocentric one, focusing on creating natural places for the animals and inspiring people to respect the Earth.²⁷

III. ENVIRONMENTAL ENRICHMENT AND ITS ROLE IN THE CAPTIVE ENVIRONMENT

Introducing environmental enrichment into wolf enclosures can greatly increase their welfare in captivity. To better understand how to improve the conditions of captive wolves, this Note will next discuss the various types of environmental enrichment strategies that can benefit these animals.

The main goal of environmental enrichment is to improve the biological functioning of captive animals through the modification of their environments.²⁸ Evidence of the improved biological functioning facilitated by environmental enrichment include increased lifetime reproductive success, increased inclusive fitness, and improved health.²⁹ Enrichment, therefore, can address and improve the welfare of animals in captivity. For animals in captivity, abnormal behavior is an indicator of reduced welfare.³⁰ Such

²³ Reed Elizabeth Loder, *Animal Dignity*, 23 ANIMAL L. 1, 14 (2016).

²⁴ Phillips, *supra* note 14.

²⁵ *Id.*

²⁶ *Id.*; *The Next Zoo Design Revolution?*, FELIS CONSULTING (July 15, 2008), <https://designingzoos.com/2008/07/15/the-next-zoo-design-revolution/> [<https://perma.cc/GW58-C9S8>].

²⁷ *The Next Zoo Design Revolution?*, *supra* note 26.

²⁸ Ruth C. Newberry, *Environmental Enrichment: Increasing the Biological Relevance of Captive Environments*, 44 APPLIED ANIMAL BEHAV. SCI. 229, 230 (1995).

²⁹ *Id.*

³⁰ *Id.* at 232; M. SALAS & X. MANTECA, ZOO ANIMAL WELFARE EDUC. CTR., ASSESSING WELFARE IN ZOO ANIMALS: ANIMAL-BASED INDICATORS 1 (2016), https://www.zawec.org/media/com_lazypdf/pdf/Sheet%20ZAWEC%204.pdf [<https://perma.cc/75QZ-Q67J>].

abnormal behaviors, also known as “stereotypic behaviors” or “stereotypies,” are functionless, repetitive behaviors that can be caused by deficits in captive housing that cause animals to become frustrated.³¹ Stereotypic behaviors are generally caused by one of two mechanisms. In one circumstance, an animals’ captive surroundings alter and negatively affect their mental state, resulting in abnormal, stereotypic behavior.³² Additionally, an element of the animals’ captive environment can physically trigger a stereotypic behavior.³³ A captive enclosure lacking in environmental enrichment creates a stressful and unstimulating life experience for animals altering their behavior—even negative living experiences from an animals’ past can affect them throughout their lifetime.³⁴ Some stereotypic behavior can also appear to be “coping” behaviors or the development of “habit-like” behaviors.³⁵ These stereotypies are important to understand and identify because they indicate which kinds of environments cause poor welfare and poor emotional states in animals.³⁶ These abnormal behaviors raise ethical concerns, as the existence of stereotypic behavior represents a divergence from “behavioral phenotypes”³⁷ of free living wild animals and could also indicate central nervous system dysfunction in the captive animals.³⁸

A. Enrichment improving emotional health

Enrichment activities and programs reduce negative emotional states, such as fear and stress,³⁹ that can arise from an unstimulating captive environment. Enrichment can also reduce boredom and apathy from sterile or unstimulating environments,

³¹ G. Mason et al., *Why and How Should We Use Environmental Enrichment to Tackle Stereotypic Behavior?*, 102 APPLIED ANIMAL BEHAV. SCI., 163, 164 (2007).

³² *Id.* at 165.

³³ *Id.*

³⁴ *Id.*; SALAS & MANTECA, *supra* note 30.

³⁵ Mason, *supra* note 31, at 165.

³⁶ *Id.* at 166.

³⁷ Behavioral phenotypes are, broadly, patterns or sets of behaviors that depend on an individual’s genotype. G. O’Brien, *Behavioural Phenotypes*, 93 J. ROYAL SOC’Y MED. 618, 618 (2000). Behaviors that an individual exhibits are biologically based on an individual’s genes. *See id.*

³⁸ Mason et al., *supra* note 31, at 166.

³⁹ For example, animals that are exposed to new experiences are often fearful, and this can negatively affect their behavior and welfare. Newberry, *supra* note 28, at 232.

as well as frustrations arising when animals cannot express their natural behaviors that they are motivated to exhibit but cannot perform due to the limitations of captivity.⁴⁰ One challenge to the study and documentation of environmental enrichment is the fact that emotional states cannot be measured *directly*, and so it is hard to obtain concrete evidence that an environmental change has resulted in enrichment by creating a positive emotional state in an animal.⁴¹ However, more recent scholarship on animal emotions embraces the complexity of this area of study and explores the different constructions of what an “emotion” is to identify them in animals.⁴²

B. Enrichment improving physical health

Enrichment also improves an animal’s physical health.⁴³ These methods include providing activities for animals to engage in that would keep them from exhibiting negative or harmful behavior.⁴⁴ The goal of enrichment in the context of improved physical welfare is a more realistic objective, as the benefits can be directly measured and quantified.⁴⁵

C. Kinds of enrichment

Part VII of this Note discusses enrichment specifically in the context of how enrichment can increase welfare in captivity for wolves. This subsection, however, will introduce the kinds of enrichment that are implemented into captive animal care programs to increase welfare to explore how these strategies can benefit the captive wolf.

Feeding programs are one area of captive management in which enrichment enhance captive animal welfare. Through

⁴⁰ *Id.*

⁴¹ *Id.*

⁴² See generally Elizabeth S. Paul & Michael T. Mendi, *Animal Emotion: Descriptive and Prescriptive Definitions and Their Implications for a Comparative Perspective*, 205 APPLIED ANIMAL BEHAV. SCI. 202–09 (2018).

⁴³ Newberry, *supra* note 28, at 232.

⁴⁴ *Id.* Such negative behaviors include “biting, chewing and pecking at pen mates... providing opportunities to avoid harmful aggression...reducing escape responses during handling to decrease the risk of injury... and promoting a wide range of movement to improve muscular, skeletal and cardiovascular fitness.” *Id.*

⁴⁵ *Id.*

feeding, a wider selection of food types keep the animals consistently interested and engaged in their feeding schedule.⁴⁶ Providing several options for animals in their feeding provides them with choices which help them feel more comfortable in their environment.⁴⁷

Restructuring an animal's environment, such as adding complexity and allowing more structures for the animals to engage with, improves the enrichment of that animals habitat.⁴⁸ This is accomplished, for example, by adding additional levels to the enclosure, thereby allowing the animals to climb up and have more diverse living spaces.⁴⁹ Structures such as multi-leveled platforms have been shown to encourage exploratory behavior in animals such as bears.⁵⁰ Access to additional enclosure space similarly encourages an animal's exploratory behavior by increasing the opportunities available to the animal to experience and engage with a larger habitat space.⁵¹ Adding biologically relevant features can aid in an animal engaging in species-typical behavior, such as elements like perches, dust bathing sites, ledges and climbing holds in walls, and elements allowing for animals to camouflage themselves or hide, which can provide them with a sense of security.⁵²

Lastly, sensory experiences, such as introducing novel scents or sounds, may provide a stimulating environment which encourages exploratory and curious behavior.⁵³

IV. WOLF CONDITIONS IN CAPTIVITY

The current conditions provided for many captive wolves, as depicted in the three examples discussed below, are insufficient to protect the physical and emotional well-being of these animals, demonstrating the need for increased legal protections. Wolves in the U.S. are typically viewed as enemies to human survival by

⁴⁶ *Id.* at 233.

⁴⁷ *Enrichment & Animal Welfare*, WILD WELFARE, <https://wildwelfare.org/enrichment-animal-welfare/> [<https://perma.cc/7JQY-9459>].

⁴⁸ Newberry, *supra* note 28, at 234 (explaining that environmental complexity could increase natural behaviors, such as exploration, and also indicating more information about the net benefits to animals from environmental modification).

⁴⁹ *Id.*

⁵⁰ *Enrichment & Animal Welfare*, *supra* note 47.

⁵¹ See Newberry, *supra* note 28, at 235.

⁵² *Id.* at 234–35.

⁵³ *Id.* at 235.

threatening livestock populations; many were killed in the name of manifest destiny. Despite their destruction in the wild, wolves remain in the public mind as symbols of mystery, strength, and perseverance. It is likely that the only time that a human will have the opportunity to experience a wolf in person is by seeing one in a local zoo or captive wildlife facility, as wolves are generally fearful of people and keep a far distance in the wild.⁵⁴ Wolves exist in captivity for public viewing, and oftentimes, the conditions in which they live are highly inadequate. One such kind of captive facility includes roadside zoos, which are generally neglected facilities that impose cruel conditions on the animals housed within.⁵⁵ Exotic animals are dangerous and require a high level of care, which is typically very expensive to accomplish adequately,⁵⁶ and so many animals owned by private persons and facilities like roadside zoos exist in inhumane conditions.⁵⁷

For example, the notorious roadside zoo facility in Minnesota, Fur-Ever Wild, displays wolves and other wildlife.⁵⁸ This facility breeds wolf puppies for the public to interact with in a petting zoo setting.⁵⁹ These same wolves are later killed and skinned for their fur, which is sold for profit.⁶⁰ The Animal Legal Defense Fund (“ALDF”) filed suit against this facility in 2017, arguing that killing the federally protected wolves, in addition to the inadequate care of the animals living in the facility, violates the Endangered Species Act (“ESA”).⁶¹ Pursuant to this filing, Fur-Ever Wild

⁵⁴ Wolves have a flight distance (distance at which they will detect a person and move away) of around a quarter-mile. *Wolves*, WOLFPARK.ORG, <http://wolf-park.org/animals/info/wolves/> [<https://perma.cc/UHA2-96VL>].

⁵⁵ Jennifer Jacquet, *America, Stop Visiting Roadside Zoos—They Make Money from the Inhumane Treatment of Animals*, THE GUARDIAN (Nov. 27, 2016), <https://www.theguardian.com/sustainable-business/2016/nov/27/roadside-zoos-america-animal-cruelty-welfare> [<https://perma.cc/3LR6-RS24>]. Many times, animals in roadside zoos spend their entire lives behind bars and on concrete. *Id.* Although government inspections of these roadside zoos are rare, evidence shows that these facilities are operated with negligence and cruelty. *Id.*

⁵⁶ See *Captive Animals*, ANIMAL LEGAL DEF. FUND, https://aldf.org/focus_area/captive-animals/ [<https://perma.cc/4AHD-3K9Y>].

⁵⁷ *Id.*

⁵⁸ *Challenging Fur-Ever Wild’s Treatment of Wolves*, ANIMAL LEGAL DEF. FUND (updated Sept. 26, 2019), <https://aldf.org/case/challenging-fur-ever-wilds-treatment-of-wolves/> [<https://perma.cc/5DD2-C4LM>].

⁵⁹ *Id.*

⁶⁰ *Id.*

⁶¹ *Id.*; see also Complaint, Animal Legal Def. Fund v. Fur-Ever Wild, No. 17-CV-4496, U.S. Dist. LEXIS 191348 (D. Minn. Nov. 8, 2018).

agreed to a temporary restraining order to refrain from killing wolves with gray wolf lineage while the suit proceeds, as gray wolves are protected as an endangered species under the ESA, and a subsequent state court order required the facility to get rid of all but one wolf.⁶² This suit has since settled; Fur-Ever Wild has agreed to no longer kill wolves or to sell their pelts.⁶³

ALDF brought another facility, Animaland Zoological Park, to court over its inadequate housing and care for a wolf named Bear.⁶⁴ Bear lived “alone in a tiny concrete cage, devoid of companionship and proper enrichment.”⁶⁵ In the wild, wolves live in social groups, called packs, and their territories range in size from fifty to 1,000 square miles.⁶⁶ These animals can travel “as far as thirty miles in one day to hunt.”⁶⁷ Bear’s enclosure was ten feet by twelve feet, and the floor was almost entirely concrete, which did not allow Bear to dig, scratch, hunt, or run.⁶⁸ The ALDF filed suit against this facility for violating the ESA and state wildlife laws.⁶⁹ The facility shut down not long after the suit was filed, and sanctuaries took in the animals from the facility.⁷⁰ Bear now lives at the Wolf Sanctuary of Pennsylvania.⁷¹

A third facility is Cricket Hollow Animal Park in Iowa, whose U.S. Department of Agriculture (“USDA”) license was recently revoked.⁷² Cricket Hollow Animal Park housed three wolves; the

⁶² *Challenging Fur-Ever Wild’s Treatment of Wolves*, *supra* note 58; *Fur-Ever Wild*, No. 17-CV-4496, U.S. Dist. LEXIS 191348, at *3.

⁶³ Press Release, Animal Legal Def. Fund, *Fur-Ever Wild Agrees to Not Kill Gray Wolves as Lawsuit Settles*, (Dec. 17, 2019), <https://aldf.org/article/fur-ever-wild-agrees-to-not-kill-endangered-wolves-as-lawsuit-settles/> [<https://perma.cc/97NF-JXPG>].

⁶⁴ Complaint at 2, *Prizniak v. Animaland Zoological Park, Inc.*, 1:16-cv-00420 (M.D. Pa. Mar. 9, 2016).

⁶⁵ *Id.*

⁶⁶ *Id.* at 28.

⁶⁷ *Id.*

⁶⁸ *Id.* at 28–29.

⁶⁹ *Id.* at 3–4; *Animaland Zoological Park*, ANIMAL LEGAL DEF. FUND, <https://aldf.org/case/animaland-zoological-park/> [<https://perma.cc/T368-XTEE>].

⁷⁰ *Id.*

⁷¹ *Id.*

⁷² *USDA Revokes Iowa Roadside Zoo’s Exhibitor License and Issues \$10,000 Penalty*, ANIMAL LEGAL DEF. FUND (Dec. 5, 2017), <https://aldf.org/article/usda-revokes-iowa-roadside-zoos-exhibitor-license-issues-10000-penalty/> [<https://perma.cc/X4QJ-YAU3>]. The USDA is the agency responsible for enforcing the AWA. See *infra* Part (V)(A).

animals in this facility lived in cramped and feces-filled cages.⁷³ Many of the animals had no access to water, and if they did have water, it was visibly dirty.⁷⁴ Animal deaths occurred on the property under dubious conditions, yet the bodies were not tested by a laboratory to officially determine their causes of death.⁷⁵ The ALDF successfully sued both Cricket Hollow Animal Park and the USDA, “expos[ing] chronic . . . (AWA) violations and the USDA’s failure to properly enforce the law until now.”⁷⁶ The USDA rarely exercised its authority to revoke a license, and oftentimes the agency “rubberstamps” AWA license renewals without adequately assessing and reconsidering each facility.⁷⁷ The U.S. Court of Appeals for the District of Columbia ruled that an agency cannot “arbitrarily and capriciously” renew a facility’s license if the facility is known to be in violation of the AWA, and so the agency has begun to update its policy and procedure for granting licenses for exhibitors.⁷⁸ The revocation of the license demonstrates the severity of the violations, and additionally, the USDA issued the owners of the facility a \$10,000 fine.⁷⁹

The history of abuse that has existed in roadside zoos and other inadequate facilities, which are ill equipped to provide proper environments and enriched lives for wolves, indicate a need for adequate regulation to protect these canids. In light of the critical need for reform, this Note will next explore how the existing statutory regime can be applied to wolves and improved by further species-specific regulation.

⁷³ Barbara Rodriguez, *Iowa Lawsuit Takes Aim at Conditions at ‘Roadside Zoos*, BUS. INSIDER (Oct. 8, 2015), <https://www.businessinsider.com/ap-iowa-lawsuit-takes-aim-at-conditions-at-roadside-zoos-2015-10> [<https://perma.cc/E2UZ-L68F>].

⁷⁴ *Id.*

⁷⁵ *Id.*

⁷⁶ *USDA Revokes Iowa Roadside Zoo’s Exhibitor License and Issues \$10,000 Penalty*, *supra* note 72.

⁷⁷ *Id.*

⁷⁸ *Id.*

⁷⁹ *Id.*

V. THE ANIMAL WELFARE ACT AND OTHER LAWS PROTECTING CAPTIVE ANIMALS

A. Animal Welfare Act

The AWA, first enacted in 1966, set minimum standards for the “handling, sale, and transport of cats, dogs, nonhuman primates, rabbits, hamsters, and guinea pigs held by animal dealers or pre-research in laboratories.”⁸⁰ The statute was amended in 1970 as time made clear that it was not comprehensive enough and has since been amended several times, expanding the protections afforded to many species of animals.⁸¹

The AWA grants the Secretary of Agriculture the authority to “promulgate standards to govern the humane handling, care, treatment, and transportation of animals by dealers, research facilities, and exhibitors.”⁸² Such standards include minimum requirements “for handling, housing, feeding, watering, sanitation, . . . shelter from extremes of weather and temperature, adequate veterinary care . . . ,” and also some requirements for specific species or types of animals, such as a “physical environment adequate to promote the psychological well-being” for nonhuman primates, and “exercise . . . as determined by an attending veterinarian” for dogs.⁸³ These standards apply to only those animals that are included under the Act, which are “any live or dead dog, cat, monkey (nonhuman primate mammal), guinea pig, hamster, rabbit, or such other warm-blooded animal, as the Secretary may determine is being used, or is intended for use, for research, testing, experimentation, or exhibition purposes, or as a pet. . . .”⁸⁴ This definition excludes “(1) birds, rats of the genus *Rattus*, and mice of the genus *Mus*, bred for use in research, (2) horses not used for research purposes, and (3) other farm animals, such as, but not limited to livestock or poultry, used or intended for use as food or fiber. . . .”⁸⁵ In

⁸⁰ Benjamin Adams & Jean Larson, *Legislative History of the Animal Welfare Act: Introduction*, USDA NAT'L AGRIC. LIBR., <https://www.nal.usda.gov/awic/legislative-history-animal-welfare-act-introduction> [<https://perma.cc/8Q6C-BAM4>].

⁸¹ *Id.*

⁸² 7 U.S.C. § 2143(a)(1) (2018).

⁸³ *Id.* §§ 2143(a)(2)(A)–(B).

⁸⁴ *Id.* § 2132(g).

⁸⁵ *Id.*

promulgating these standards, the Secretary is both “authorized” and “directed” to consult experts.⁸⁶

This section of the AWA exemplifies its limitations—it merely sets *minimum* standards, and only for the animals that are included under the definition provided by the Act. The minimum standards provided in regulations, enacted pursuant to the mandate of the AWA, are exceedingly low standards, especially considering the range of animals they “protect,” some being highly intelligent and complex animals. Additionally, the Act excludes hundreds of species. All cold-blooded animals, such as insects, fish, reptiles, and amphibians, are excluded from AWA protection.⁸⁷ Farm animals are similarly excluded,⁸⁸ resulting in a lack of protection for animals suffering in often horrific factory farm conditions.⁸⁹ The USDA, the agency responsible for enforcing the AWA, has limited resources and does not often bring enforcement actions pursuant to the AWA.⁹⁰ The AWA lacks a citizen suit provision, which limits the AWA’s reach, as citizens cannot utilize the minimal protections that the AWA offers to sue in court for violations of the Act.⁹¹ Although the Act’s purpose is “to insure that animals intended for use in research facilities or for exhibition purposes . . . are provided humane care and treatment,”⁹² its meager coverage does far from offer adequate protections for all animals living in captivity.

⁸⁶ 7 U.S.C. § 2143(a)(5).

⁸⁷ See *id.* § 2132(g) (defining “animal” to mean “warm-blooded animal[s]”); Kali S. Grech, *Detailed Discussion of the Laws Affecting Zoos*, MICH. ST. U. ANIMAL LEGAL & HIST. CTR. (2004), <https://www.animallaw.info/article/detailed-discussion-laws-affecting-zoos#id-3> [<https://perma.cc/CND6-5YYZ>].

⁸⁸ 7 U.S.C. § 2132(g).

⁸⁹ See generally *Inhumane Practices on Factory Farms*, ANIMAL WELFARE INST., <https://awionline.org/content/inhumane-practices-factory-farms> [<https://perma.cc/E9BT-L4HW>].

⁹⁰ *Exposing Animal Abusers: Update on the Animal Welfare Blackout*, ANIMAL LEGAL DEF. FUND (Sept. 18, 2019), <https://aldf.org/article/exposing-animal-abusers-update-on-the-animal-welfare-blackout/> [<https://perma.cc/8J47-85TZ>] (“The AWA is limited – it sets only minimal standards for animal care and is laxly enforced.”).

⁹¹ Grech, *supra* note 87.

⁹² 7 U.S.C. § 2131(1).

B. The Endangered Species Act

The ESA was passed by both houses of Congress and signed by President Nixon in 1973 with the goal of “provid[ing] a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved” and of “provid[ing] a program for the conservation of such endangered species and threatened species.”⁹³ Protections afforded by the ESA extend only to those animals listed in section 4 of the Act designated as “threatened” or “endangered.”⁹⁴ The Secretary of the Interior and the Secretary of Commerce are responsible for listing species, and they delegate this authority to the U.S. Fish and Wildlife Service and the National Marine Fisheries Service, respectively.⁹⁵ There is also an option for citizens to petition for a particular species to be listed.⁹⁶ This Act regulates the movement of endangered species within the US where interstate commerce or a “take” is involved.⁹⁷ The term “take,” under section 3 of the Act means “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct.”⁹⁸ Regulations promulgated under the ESA define “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.”⁹⁹ Although at first it seems like the ESA could provide thorough protection to endangered species kept in captivity in conditions that “harass” these animals, facilities whose “animal husbandry practices . . . meet or exceed the minimum standards for facilities and care under the [AWA]” are exempt from these protections, limiting its applicability to captive animals.¹⁰⁰ There is a citizen suit provision in the ESA;¹⁰¹ however,

⁹³ ESA, 16 U.S.C. § 1531(b) (2020); Grech, *supra* note 87.

⁹⁴ See 16 U.S.C. § 1533; Grech, *supra* note 87.

⁹⁵ 16 U.S.C. § 1533(1)–(2) (providing criteria for the Secretary of Interior and Secretary of Commerce to list species); Grech, *supra* note 87.

⁹⁶ 16 U.S.C. § 1533(b)(3); Grech, *supra* note 87.

⁹⁷ 16 U.S.C. § 1538(a)(1)(B)–(C); Grech, *supra* note 87.

⁹⁸ 16 U.S.C. § 1532(19).

⁹⁹ 50 C.F.R. § 17.3 (2019).

¹⁰⁰ *Id.*

¹⁰¹ 16 U.S.C. § 1540(g).

its applicability is limited due to obstacles posed by establishing standing.¹⁰²

As previously mentioned, the ALDF successfully utilized the protections afforded by the ESA to bring action against Animaland Zoological Park. This unaccredited facility was allegedly notorious with visitors for its poor sanitation and for concern over the well-being of the animals who resided there.¹⁰³ The USDA had allegedly issued citations and multiple official warnings to Animaland for violations of the AWA.¹⁰⁴ The complaint against Animaland alleged that the wolf Bear's confinement conditions negatively affected his behavior, altering it from normal wolf behavioral patterns and argued that this constituted "harassment" under the ESA, citing to 50 C.F.R. section 17.3.¹⁰⁵ The complaint also alleged that his physical and psychological injuries constituted "harm" under the ESA.¹⁰⁶ The defendants were alleged to have violated the ESA and its implementing regulations by "taking" a gray wolf within the meaning of 16 U.S.C. section 1538(a)(1)(B) without a permit.¹⁰⁷ This case demonstrated the potential for the ESA to be utilized to protect wolves being held in captivity.

However, the potential to utilize the ESA to protect captive wolves only exists when wolves are listed as an endangered species on the list promulgated by the US Fish and Wildlife Service. On March 14, 2019, the Acting Secretary of the US Fish and Wildlife Service under the Trump Administration announced that it will propose a rule to remove gray wolves from the endangered species list and "turn management of all gray wolves back to the states and tribes."¹⁰⁸ This action will give states the ability to make their

¹⁰² Grech, *supra* note 87.

¹⁰³ Complaint at 26, *Prizniak v. Animaland Zoological Park, Inc.*, No. 1:16-cv-00420 (M.D. Pa. Mar. 9, 2016).

¹⁰⁴ *Id.*

¹⁰⁵ *Id.* at 30.

¹⁰⁶ *Id.*

¹⁰⁷ *Id.* at 39.

¹⁰⁸ Press Release, U.S. Fish and Wildlife Service, Department of the Interior Celebrates Recovery of the Gray Wolf With Proposal to Return Management Back to States, Tribes (Mar. 14, 2019), https://www.fws.gov/news/ShowNews.cfm?ref=department-of-the-interior-celebrates-recovery-of-the-gray-wolf-with-&_ID=36378 [<https://perma.cc/AYC9-LZJ9>]; Endangered and Threatened Wildlife and Plants; Removing the Gray Wolf (*Canis lupus*), 50 C.F.R. § 17 (proposed Mar. 15, 2019).

own rules regarding the hunting of gray wolves.¹⁰⁹ In addition to affecting the ability of gray wolf populations in the wild to recover, the delisting of wolves from the endangered species list would bar citizens from using the ESA to sue facilities whose conditions for wolves are so bad that they would constitute a “take” or “harassment.” If this rule goes forward and wolves are delisted, the bolstering of protections for wolves in other areas of the federal law will be necessary to ensure that captive wolves are cared for adequately.

C. State laws

Although states are subject to the AWA, every state in the nation has enacted their own laws specifically to protect animals against cruelty.¹¹⁰ Many states broadly interpret what is considered an “animal” and accordingly protect a vast array of species.¹¹¹ However, most states include exemptions to their statutes, including exemptions for entire categories of animals.¹¹² Additionally, the strength of the state animal cruelty laws varies state to state, some having strong protections, and others that “significantly underrepresents animals’ interests.”¹¹³ According to the US Animal Protection Laws State Rankings, Illinois, Oregon, Maine, Colorado, and Massachusetts are among the states with the strongest animal cruelty laws, where Kentucky, Mississippi, Iowa, Wyoming, and New Mexico are among the states with the least protective animal cruelty laws.¹¹⁴

D. Private-Sector Mechanisms – the Association of Zoos and Aquariums Standards

In 1971, the Association of Zoos and Aquariums (“AZA”), a non-governmental organization, established a system of best

¹⁰⁹ Laurel Wamsley, *Trump Administration Seeks to Take Gray Wolf Off Endangered Species List*, NPR (Mar. 6, 2019), <https://www.npr.org/2019/03/06/700890055/trump-administration-seeks-to-take-gray-wolf-off-endangered-species-list> [https://perma.cc/CW9H-JAKH].

¹¹⁰ Grech, *supra* note 87.

¹¹¹ *Id.*

¹¹² *Id.*

¹¹³ 2019 U.S. Animal Protection Laws State Rankings, ANIMAL LEGAL DEF. FUND, (2019), <https://aldf.org/project/us-state-rankings/> [https://perma.cc/85Y2-H55H].

¹¹⁴ *Id.*

practices to improve the operation of zoos and aquariums.¹¹⁵ In 1985, the AZA mandated accreditation for AZA membership.¹¹⁶ Accreditation is a “process by which a program, organization, or institution is evaluated by recognized experts in the profession, and is measured against the established standards and best practices of that profession.”¹¹⁷ The accreditation mandates the evaluation of the daily operations of a captive institution, such as animal welfare, the conditions of the facilities, medical care provided, and safety procedures.¹¹⁸ The accreditation process is repeated every five years to ensure that AZA institutions maintain the applicable standards.¹¹⁹ AZA institutions which exhibit mammals are regulated by the AWA or Marine Mammal Act in addition to being bound by the AZA code of Professional Ethics, which is a heightened standard for the care and welfare of zoo animals.¹²⁰ The AZA standards and minimum guidelines generally exceed those required by the AWA.¹²¹ To abide by AZA requirements, each member is required to develop a Program Animal Policy, which ensures that animal welfare standards are met across all areas of facility management.¹²² Because AZA accreditation is voluntary, these standards apply only to those facilities who apply for accreditation.¹²³

It is important to recognize that AZA standards can be extremely expensive to implement. Some facilities, in good faith looking to provide a high standard of care to captive animals, cannot feasibly make implementations required by the AZA, which could potentially cost thousands of dollars.¹²⁴ The quality of life elicited

¹¹⁵ *About AZA Accreditation*, ASS’N OF ZOOS & AQUARIUMS, <https://www.aza.org/what-is-accreditation> [<https://perma.cc/465S-X5CW>].

¹¹⁶ *Id.*

¹¹⁷ *Id.*

¹¹⁸ *Id.*

¹¹⁹ *Id.*

¹²⁰ Grech, *supra* note 87.

¹²¹ *Id.*

¹²² *Id.*

¹²³ Fewer than 10% of the 2,800 animal exhibitors licensed by the USDA are AZA accredited. *About AZA Accreditation*, *supra* note 115. As of September 2019, there were 238 accredited facilities in the US. *Currently Accredited Zoos and Aquariums*, ASS’N OF ZOOS & AQUARIUMS, <https://www.aza.org/current-accreditation-list> [<https://perma.cc/9VUD-C5G3>].

¹²⁴ *How to Understand Zoo Accreditation*, WHY ANIMALS DO THE THING, <https://www.whyanimalsdothething.com/how-to-understand-zoos-accrediation> [<https://perma.cc/F5A5-UVPM>].

by these standards cannot be reduced; however, for facility's looking to implement AZA-like care standards, there can be some flexibility in the mechanism by which facilities of different means create enriched habitats. This is somewhat inherent in the idea of the enrichment program itself because most enrichment tools and materials are low cost and easy to come by.

VI. WOLVES SHOULD BE CONSIDERED DOGS IN THE SCOPE OF THE AWA

Under the current regulatory scheme, wolves lack adequate protection. Because wolves are not specifically granted individualized regulatory protection under the AWA, the only protections they are afforded are the minimum animal care and treatment requirements extended to all "animals" under the AWA.¹²⁵ These minimal standards do not take into account the specialized needs of wolves to allow them to live healthy lives in captivity. The AWA mandates that the Secretary of Agriculture "promulgate standards to govern the humane handling, care, treatment, and transportation of animals by . . . exhibitors."¹²⁶ These standards include the minimum requirements for "handling, housing, feeding, watering, sanitation, ventilation, shelter from extremes of weather and temperatures, adequate veterinary care, and separation of species."¹²⁷ The AWA also calls for specific regulations for the "exercise of dogs" and the "physical environment adequate to promote the psychological well-being of primates."¹²⁸ In addition, the AWA provides that the Secretary is authorized and *directed* to consult outside experts when establishing new standards.¹²⁹

Under this scheme, wolves receive only the minimum protection granted to all warm-blooded animals other than dogs, cats, rabbits, hamsters, guinea pigs, nonhuman primates, and marine mammals.¹³⁰ Regarding animal health and care standards, these regulations mandate minimum requirements for feeding, watering, sanitation, employees, and separation.¹³¹ The regulations,

¹²⁵ See generally 7 U.S.C. § 2143 (2020).

¹²⁶ *Id.* § 2143(a)(1).

¹²⁷ *Id.* §§ 2143(a)(1), 2143(a)(2)(A).

¹²⁸ *Id.* § 2143(a)(2)(B).

¹²⁹ *Id.* § 2143(a)(5).

¹³⁰ See generally 9 C.F.R. §§ 3.125–.142 (2020).

¹³¹ See *id.* §§ 3.129–.133.

which provide minimum standards for the facilities used to house the animals, focus on issues such as: (1) the materials the facilities are made of;¹³² (2) waste disposal;¹³³ (3) temperatures;¹³⁴ (4) ventilation;¹³⁵ (5) lighting;¹³⁶ and, (6) regarding outdoor facilities, shelter from the sun,¹³⁷ shelter from inclement weather,¹³⁸ and adequate perimeter fencing.¹³⁹ There is no regard for the psychological well-being of the animals kept in captivity under these regulations, nor is there regard for the animal's behavioral health. The capability of wolves to interact with their environment in naturalistic ways, as they would in the wild, is crucial for the well-being of these animals. Without regulation to provide for the adequate housing and care of wolves, they are left unprotected and at risk of substandard living conditions. These standards hardly ensure a high quality of life for those animals living in captivity.

Wolves have unique social and physical needs that are left unaddressed by the generic regulations. This Note argues that, because of the evolutionary history between domestic dogs and wolves, and because of the existing statutory framework granting specific protections for a particular category of animal, a broader reading of the AWA including wolves under species-specific regulations for dogs is both feasible and supported.

A. Evolutionary history of wolves and domestic dogs supporting the argument that wolves should be considered “dogs” with respect to the AWA

Due to the evolutionary history between wolves and domestic dogs, wolves should be considered “dogs” within the scope of the AWA. Under the AWA scheme, dogs are provided specific coverage to ensure that these animals receive adequate exercise. Currently, the term “dog” means “*all dogs including those used for hunting, security, or breeding purposes.*”¹⁴⁰ As enacted, wolves are not

¹³² *Id.* § 3.125(a).

¹³³ *Id.* § 3.125(d).

¹³⁴ *Id.* § 3.126(a).

¹³⁵ *Id.* § 3.126(b).

¹³⁶ *Id.* § 3.126(c).

¹³⁷ *Id.* § 3.127(a).

¹³⁸ *Id.* § 3.127(b).

¹³⁹ *Id.* § 3.127(d).

¹⁴⁰ 7 U.S.C. § 2132(g) (2020) (emphasis added).

explicitly considered dogs within the scope of the AWA and are not allotted these particular protections. This reading of the AWA is under-inclusive and should be construed more broadly to include the protection of captive wolves. The definition states that the term “dog” encompasses “all dogs,” which this Note argues should include wolves. To support this, one can look to the evolutionary history between wolves and domestic dogs. Domestic dogs are the direct descendants of gray wolves,¹⁴¹ having been domesticated somewhere between 20,000 and 40,000 years ago.¹⁴² Some researchers believe wolves to have been domesticated much sooner — only around 15,000 years ago.¹⁴³ Studying the genomes of domestic dogs and wolves helps scientists uncover the close evolutionary relationship between the two species and can help scientists understand when in history domestic dogs and wolves diverged.¹⁴⁴ Wolves and dogs share 99.96% of the same chromosomal DNA, differing by only 0.04% in their nuclear coding DNA sequence.¹⁴⁵ A phylogenetic analysis¹⁴⁶ of a specific gene, the

¹⁴¹ *Evolution of the Dog*, PBS, https://www.pbs.org/wgbh/evolution/library/01/5/1_015_02.html [<https://perma.cc/Y2JA-LY8N>].

¹⁴² Rachael Lallensack, *Ancient Genomes Heat Up Dog Domestication Debate*, NATURE (July 18, 2017), <https://www.nature.com/news/ancient-genomes-heat-up-dog-domestication-debate-1.22320> [<https://perma.cc/H8PM-JW6P>]. “Domestication is the process by which a wild animal adapts to living with humans by being selectively bred by humans over thousands of years.” *Wolf-Dog Hybrids*, INT’L WOLF CTR., <https://www.wolf.org/wolf-info/basic-wolf-info/wolves-and-humans/wolf-dog-hybrids/> [<https://perma.cc/A2TK-L6LB>].

¹⁴³ Nicholas Wade, *From Wolf to Dog, Yes, but When?*, N.Y. TIMES (Nov. 22, 2002), https://learn.uncg.edu/courses/bio105-labs/assets/docs/lab2/From_Wolf_to_Dog.pdf [<https://perma.cc/4MBD-PWTX>].

¹⁴⁴ Phylogenetic analysis of dog and gray wolf mitochondrial DNA sequences imply a single origination event and at least three other origination or interbreeding events. Elaine A. Ostrander & Robert K. Wayne, *The Canine Genome*, 15 GENOME RES. 1706, 1708 (2005). The genome data implies that dogs may have had a long prehistory when they were not phenotypically (physically) distinct from wolves. *Id.*

¹⁴⁵ Robert K. Wayne & Elaine A. Ostrander, *Lessons Learned from the Dog Genome*, 23 TRENDS GENETICS 557, 560 (2007).

¹⁴⁶ Phylogenies are diagrams that depict the lines of evolutionary descent of different species, organisms, or genes from a common ancestor. David Baum, *Reading a Phylogenetic Tree: The Meaning of Monophyletic Groups*, in EVOLUTIONARY GENETICS 1 (Bob Sheehy & Norman Johnson ed.) (2008), <https://www.nature.com/scitable/topicpage/reading-a-phylogenetic-tree-the-meaning-of-41956> [<https://perma.cc/FA23-RUU9>]. Phylogenies help organize knowledge of biological diversity and provide insight into events that occurred during evolution, including showing descent from a common ancestor. *Id.*

cytochrome b gene (a gene that codes protein),¹⁴⁷ indicates that only gray wolves, of all canids, are directly ancestral to domestic dogs.¹⁴⁸ Wolves and dogs have a shorter allozyme genetic distance than dogs and all other canids.¹⁴⁹ This genetic data thus concludes that dogs are more genetically similar to wolves than to any other canid species. In fact, wolves and domestic dogs can breed and produce fertile offspring, meaning that they are interfertile.¹⁵⁰

Because of the close evolutionary history between domestic dogs and wolves, the two are almost genetically indistinct. It follows that the two species share behavioral similarities and needs. A study in the *Journal of Animal Behavior* examined the communicative abilities of both wolves and dogs.¹⁵¹ When kept under the same conditions, wolves were able to communicate and use humans as “cooperative partners” to solve problems just as well as dogs (in this experiment, the canids were prompted to indicate to humans where food was hidden to get their help in obtaining the food).¹⁵² The scientists theorized that this finding related to skills involving social coordination within wolf packs, and that these skills were shared between both dogs and wolves.¹⁵³ Another study compared the behavior of dogs to that of wolves and found that wolves exhibited all of the same behavioral patterns as dogs with the exception of nineteen behaviors; however, it was theorized that the nineteen behaviors actually do occur in wolves but had “simply escaped observation under field and zoo conditions.”¹⁵⁴ Domestic dogs have physical needs that were explicitly accounted for by the AWA. Wolves have similar, if not more complex, social needs and physical, exercise-related needs that are crucial for their well-

¹⁴⁷ *CYTB Cytochrome b [Canis lupus familiaris (dog)]*, NAT'L CTR. BIOLOGICAL INFO., <https://www.ncbi.nlm.nih.gov/gene?Db=gene&Cmd=Details-Search&Term=804486> [https://perma.cc/4LUA-PFYG].

¹⁴⁸ C. Vilà et al., *Phylogenetic Relationships, Evolution, and Genetic Diversity of the Domestic Dog*, 90 J. HEREDITY 71, 73 (1999).

¹⁴⁹ *Id.*

¹⁵⁰ *Wolf-Dog Hybrids*, *supra* note 142.

¹⁵¹ See generally Marianne T.E. Heberlein, et al., *A Comparison Between Wolves, Canis Lupus, and Dogs, Canis Familiaris*, in *Showing Behavior Towards Humans*, 122 ANIMAL BEHAV. 59 (2016).

¹⁵² *Id.* at 64.

¹⁵³ *Id.*

¹⁵⁴ J.P. Scott, *The Evolution of Social Behavior in Dogs and Wolves*, 7 AM. ZOOLOGIST 373, 373 (1967).

being in captivity. It is senseless to simultaneously consider both of these animals and provide regulatory protections for only one.

Furthermore, wolves, *Canis lupus*, share the same genus as domestic dogs, *Canis familiaris*. Indeed, the scientific community also refers to domestic dogs as *Canis lupis familiaris*, a subspecies of the gray wolf.¹⁵⁵ One could argue that the identity of “dog” in the public mind is more linked with the genus “*Canis*” than the species “*familiaris*” as dogs are oftentimes called “canines” themselves. It is illogical then that one canine would be protected and the other left without this crucial individualized protection. In the context of regulatory protections, legal constructions of differences between wolves and dogs are both unnecessary and arbitrary. Captive wolves, just as domestic dogs, should be entitled to specific regulatory protections under the AWA.

B. Statutory protections granted to several species of primates, which are all considered “nonhuman primates,” provides precedent supporting the idea that wolves should be considered “dogs”

Wolves should be considered “dogs” under the scope of the AWA because of the existing statutory framework granting specific protections to a category of animals. The AWA specifically provides regulatory protection for “nonhuman primates.”¹⁵⁶ The regulation of nonhuman primates establishes a categorical framework of regulation, which provides specific protection for hundreds of animals classified under a specific category of animal. Nonhuman primates include a variety and diversity of animal species—over 240 primates are included in this classification, ranging from the marmoset, which weighs only a few ounces, to the adult gorilla, which weighs hundreds of pounds.¹⁵⁷ The protected primates inhabit all kinds of ecosystems across the world, including Asia, Africa, and Central and South America.¹⁵⁸ Regulations promulgated for nonhuman primates provide that:

¹⁵⁵ *Proteomes – Canis lupis familiaris (Dog) (Canis familiaris)*, UNIPROT, <https://www.uniprot.org/proteomes/UP000002254> [<https://perma.cc/NR3W-G647>].

¹⁵⁶ See generally 9 C.F.R. § 3.81 (2020).

¹⁵⁷ *Id.* §§ 3.75–.92 n.2.

¹⁵⁸ *Id.*

The physical environment in the primary enclosures must be enriched by providing means of expressing noninjurious species-typical activities. Species differences should be considered when determining the type or methods of enrichment. Examples of environmental enrichments include providing perches, swings, mirrors, and other increased cage complexities; providing objects to manipulate; varied food items; using foraging or task-oriented feeding methods; and providing interaction with the care giver or other familiar and knowledgeable person consistent with personnel safety precautions.¹⁵⁹

These regulations provide for a stimulating environment for a wide range of animals considered “nonhuman primates.” The regulations pertaining to the care and treatment of nonhuman primates also specifically identifies that the nutritional, social, environmental, and activity requirements differ, and “[a]s a result, the conditions appropriate for one species do not necessarily apply to another.”¹⁶⁰ The regulations mandate that “these minimum specifications must be applied in accordance with the customary and generally accepted professional and husbandry practices considered appropriate for each species, and necessary to promote their psychological well-being.”¹⁶¹

This Note argues that similarly to the term “non-human primate,” the term “dog” can, and should, be interpreted as a category including several species of animal, both domestic dogs and wild dogs. The classification of “non-human primates” provides protection for many species of primate; this precedent of affording protection to many animal species classified under a category, which was established by regulation itself, supports the argument for extending wolves protection by categorizing them as “dogs.” This species-inclusive framework already exists under the AWA regulatory scheme, so it follows that this inclusive framework can be translated to the regulation of other groups of animals, including the regulation of dogs. Expanding statutory interpretation of the term “dog” and the regulation of dogs to include captive wolves is a reasonable statutory and regulatory choice based on the precedent established by the regulatory framework regarding primates. As the AWA provides that protections should be established for “all dogs,”

¹⁵⁹ *Id.* § 3.81(b).

¹⁶⁰ *Id.* §§ 3.75–.92 n.2.

¹⁶¹ *Id.*

a categorical interpretation of this term supports the inclusion of wolves under these protections.

C. Alternative, petition method to obtain species-specific regulations

This Note argues that wolves should be considered “dogs” within the AWA framework, and therefore are entitled to species-specific regulation. However, even if this argument fails, there are mechanisms to advocate that wolves get the individualized protections that they need. The proposition to extend AWA protections to species beyond those explicitly referred to in the statute is not novel. For example, the People for the Ethical Treatment of Animals organization (“PETA”) submitted a petition to the U.S. Department of Agriculture’s Animal and Plant Health Inspection Service (“APHIS”) to request a rulemaking that would establish species-specific regulations for captive bears under the AWA.¹⁶² This petition argues that the “generic regulations” are not always sufficient to ensure that captive animals are provided humane care and treatment and that new regulations must be promulgated to keep up with progressed animal welfare standards for particular types of animals with specific needs.¹⁶³ Specifically, this petition argues that bears have unique needs that are left unaddressed, and requests that APHIS initiate a rulemaking process to establish regulations that address these needs.¹⁶⁴

Similarly, wolves have unique social and physical needs that are left unaddressed by the generic regulations. This Note argues that wolves should be considered “dogs” under the AWA scheme and should be provided species-specific regulations. However, even if it is found that wolves cannot be considered “dogs” under this statutory and regulatory scheme, the bear petition provides an example of an alternative method by which wolves could still be granted individualized protection—a petition can be submitted to APHIS arguing that there are compelling scientific reasons, which

¹⁶² See generally People for the Equitable Treatment of Animals, Petition Requesting Rulemaking to Ensure the Humane Handling, Treatment, and Care of Captive Bears Under the Animal Welfare Act (Sept. 25, 2012), <https://secure.media-peta.com/peta/PDF/petition-to-the-usda-captive-bears.pdf> [<https://perma.cc/E83B-8KTR>].

¹⁶³ *Id.* at 3.

¹⁶⁴ *Id.* at 4.

have been previously discussed, that demand species specific regulations for wolves.

VII. A SUGGESTION FOR THE BEHAVIORAL AND COGNITIVE ENRICHMENT TO BE PROVIDED BY REGULATION

Having established that wolves are entitled to individualized protection under the AWA, the regulations promulgated for “dogs,” while more protective than the minimum welfare standards currently provided for wolves, are still insufficient to fully protect the needs of captive wolves. Currently, the regulations define “dog” as “any live or dead dog (*Canis familiaris*) or any dog-hybrid cross.”¹⁶⁵ This understanding of “dog” limits the scope of the animals protected by the regulations even further than the scope defined by the AWA. This Note argues that under the AWA definition of “dog,” *all* dogs are protected, and that this can encompass both domestic dogs and wolves. The regulatory definition of dog should be updated to reflect this more inclusive reading.

Having established the need for a more inclusive regulatory definition for “dog,” next, the regulations protecting dogs must be examined for their applicability to wolves. The regulations putting forth the requirements for the exercise for dogs can be found in 9 C.F.R. section 3.8. These requirements hold that “exhibitors . . . must develop, document, and follow an appropriate plan to provide dogs with the opportunity for exercise.”¹⁶⁶ The plan, at a minimum, must include provisions for dogs housed both individually and in groups, and for methods and period of providing exercise opportunity.¹⁶⁷ Although mandated requirements for exercise are non-existent, the regulations suggest considering “providing positive physical contact with humans that encourages exercise through play” and “[p]roviding access to a run or open area.”¹⁶⁸ These regulations, frankly, do not anticipate the needs of captive wolves, as they are focused on domestic dogs kept in captivity, for research facilities, and for sale/dealing.¹⁶⁹ Applying these regulations to

¹⁶⁵ 9 C.F.R. § 1.1.

¹⁶⁶ *Id.* § 3.8.

¹⁶⁷ *Id.* §§ 3.8(a)–(c).

¹⁶⁸ *Id.* §§ 3.8(c)(2), (c)(3)(iii).

¹⁶⁹ *Id.* § 3.8.

wolves results in captive care that falls short of wolves' needs. Therefore, new regulations must be promulgated to properly address the "exercise" needs of captive wolves, which should be interpreted liberally to include the physical, social, behavioral, and environmental health of wolves kept in captivity.

A. Enclosure needs

Wolves have greater enclosure needs than those required by dogs because, in the wild, they inhabit large areas of contiguous habitats, including forests and mountainous terrain.¹⁷⁰ These habitats, to be suitable, must have sufficient access to prey and areas for denning and taking shelter.¹⁷¹ To meet minimum acceptable wolf captive care standards, captive wolves must be afforded sufficient space to meet their physical, social, and behavioral needs.¹⁷² This includes ample opportunities to walk, run, trot, dig, potentially den, cache food, play with other wolves, and play with enrichment equipment.¹⁷³ Without minimum standards for ample habitat space, wolves in captive facilities may be forced to suffer in wildly inadequate enclosures, just as Bear did, living in a ten-foot by twelve-foot enclosure with a concrete floor.¹⁷⁴

In addition to adequate space in an enclosure, wolves require adequate and appropriate naturalistic habitat furnishings. In the wild, wolves live in vegetative rich, stimulating environments. In captivity, wolves can be confined in unstimulating or sterile environments, which do not maintain the physical and psychological well-being of these animals. Enclosures for wolves in captivity should be furnished with ample vegetation such as trees, shrubs, bushes, and grasses, as well as with suitable ground substrates

¹⁷⁰ *Gray Wolf*, DEFENDERS OF WILDLIFE, <https://defenders.org/wildlife/gray-wolf> [<https://perma.cc/4CJU-GGNM>].

¹⁷¹ *Id.*

¹⁷² The AZA provides a manual for the care of large canids which meticulously details the recommendations for facilities housing large canids such as wolves. Adequate enclosure size may vary depending on the number of individuals living in a single enclosure. *See generally* ASS'N OF ZOOS & AQUARIUMS, LARGE CANID CARE MANUAL (2012), https://assets.speakcdn.com/assets/2332/large_canid_care_manual_2012r.pdf [<https://perma.cc/N53J-3E87>] [hereinafter LARGE CANID CARE MANUAL].

¹⁷³ Jane M. Packard, *Wolf Behavior: Reproductive, Social, and Intelligent*, in WOLVES: BEHAVIOR, ECOLOGY, AND CONSERVATION 41 (L. David Mech & Luigi Boitani, eds., 2003).

¹⁷⁴ Complaint at 28–9, *Prizniak v. Animaland Zoological Park*, No. 1:16-cv-00420 (M.D. Pa. Mar. 9, 2016).

such as soil, leaves, straw, and pebbles. Providing this kind of habitat will allow wolves to fulfill naturalistic behaviors, such as caching food, scratching on trees, climbing, running, etc.¹⁷⁵

B. Social Needs

Wolves have different social needs than dogs, generally living in packs between five and ten individual wolves; however, in areas where there are plenty of resources, wolves can live in packs up to twenty or more members.¹⁷⁶ “A pack is an extended family group comprised of a [] breeding, or ‘alpha’ male and female pair and some of their subordinate offspring and current pups from one or more years.”¹⁷⁷ Wolf packs function as a family unit in the wild.¹⁷⁸ Living in a pack, especially as a young wolf, is very important for these wolves to learn social behavior.¹⁷⁹ Wolves kept in isolation, like Bear in Animaland, can suffer psychological trauma which can alter their natural behavior. The District Court of Northern Iowa found that when an endangered species is kept in isolation and this isolation would “disrupt the ... normal behavioral patterns,” this can constitute “harassment” cognizable under the ESA.¹⁸⁰ In this case, lemurs were kept in a small cage without an opportunity to socialize with other lemurs, causing them to suffer.¹⁸¹ The Court recognized that lemurs are social animals, known to exist in social groups in nature.¹⁸² Wolves, similarly, exist in social groups in nature, groups that they depend upon for physical and psychological

¹⁷⁵ See Packard, *supra* note 180, at 41.

¹⁷⁶ *Wolf Ecology and Behavior*, W. WILDLIFE OUTREACH, <http://westernwildlife.org/gray-wolf-outreach-project/biology-behavior-4/> [https://perma.cc/XE3W-2C7P].

¹⁷⁷ *Id.*

¹⁷⁸ L. David Mech, *Alpha Status, Dominance, and Division of Labor in Wolf Packs*, 77 CANADIAN J. OF ZOOLOGY 1196, 1202 (1999).

¹⁷⁹ *Id.* at 1197.

¹⁸⁰ *Kuehl v. Sellner*, 161 F. Supp. 3d 678, 710–11 (N.D. Iowa 2016). This decision was affirmed by the 8th Circuit. *Kuehl v. Sellner*, 887 F.3d 845, 852–53 (8th Cir. 2018). Most recently, the Animal Legal Defense Fund filed a contempt motion against Cricket Hollow, concerned for the whereabouts of more than 100 animals that remain unaccounted for after a court-ordered rescue. *Court Filing Seeks Whereabouts of Nearly 100 Animals Missing from Iowa Roadside Zoo*, ANIMAL LEGAL DEF. FUND (Jan. 9, 2020), <https://aldf.org/article/court-filing-seeks-whereabouts-of-nearly-100-animals-missing-from-iowa-roadside-zoo/> [https://perma.cc/NG5N-LWQ4].

¹⁸¹ *Kuehl*, 161 F. Supp. 3d at 711.

¹⁸² *Id.*

well-being in the wild, and therefore, it is reasonable to predict that a court would consider keeping a captive wolf in isolation to be “harassment” cognizable under the ESA if regulations provided for wolves’ social welfare in captivity.

To address social well-being, regulations should be promulgated to ensure that wolves kept in captivity should be kept with other wolves to the extent that the animals coexist safely. Wolves should be kept in isolation only in situations when this is necessary for their health or if keeping a particular wolf in a group with other wolves would pose a significant risk to that wolf. Breeding pairs with their young do not generally have incompatibility issues until the pups are around eighteen months old.¹⁸³ At this point, the removal of aging pups from the pack to avoid frustrations, as this is the general age in the wild when wolf pups leave their parents.¹⁸⁴ Groups of wolves who are composed of the same sex work best when those individuals are siblings.¹⁸⁵ Post-reproductive pairs generally do well together.¹⁸⁶ In the wild, it is common for wolves to disperse from their pack and join a new pack.¹⁸⁷ As this is an impossibility for wolves living in captivity, the social well-being of the wolves in captivity should be monitored daily to ensure the safety of each wolf. If living in the pack poses a significant risk of bodily injury or death to a wolf, that wolf should be removed from the pack to live in a safer environment. Wolves can do well by themselves, but the inclination of such animals is to be with other wolves. Wolves should not be deprived of the opportunity to live with other wolves in captivity, and social well-being and opportunity should be a priority at a captive facility.

C. Environmental Enrichment

To improve welfare for wolves in captivity, regulations should provide for enrichment programs for these animals. The goal of enrichment is to reduce negative emotional states, boredom from sterile or unstimulating environments, and frustrations when animals cannot express behaviors that they would usually exhibit in

¹⁸³ LARGE CANID CARE MANUAL, *supra* note 172, at 23.

¹⁸⁴ *Id.*

¹⁸⁵ *Id.*

¹⁸⁶ *Id.* at 24.

¹⁸⁷ Mech, *supra* note 178, at 1197.

the wild.¹⁸⁸ For the physical and psychological well-being of wolves in captivity, it is important to design and implement an enrichment program that can help wolves experience behaviors that wild wolves undergo in their natural habitats. Without adequate stimulation, animals in captivity can be plagued by boredom, and eventually exhibit stereotypic behaviors.¹⁸⁹ Courts have held that when the lack of environmental enrichment disrupts an animal's normal behavioral patterns, it can be considered "harassment" and thus "taking" within the meaning of the ESA.¹⁹⁰ In *Kuehl v. Sellner*, the Cricket Hollow facility had an enrichment plan that only generally referred to elements of the lemur enclosures, such as perches and branches, and notes that the lemurs enjoyed PVC tubes with peanut butter and nuts.¹⁹¹ The plan provided no details with regard to how often enrichment was provided.¹⁹² At trial, an expert in the behavior and care of lemurs testified that the environmental enrichment plan for the lemurs was inadequate, and even with the limited plan, there was no evidence that the facility routinely followed the plan or properly documented their implementation of the plan.¹⁹³ Evidence also suggested that the lemurs "received very little in the way of environmental enrichment."¹⁹⁴

Courts have considered the lack of environmental enrichment as evidence that would constitute acts or omissions "which create[] the likelihood of injury" to the subject animals by "significantly disrupt[ing] normal behavioral patterns. . . ."¹⁹⁵ In *People for the Ethical Treatment of Animals, Inc. v. Tri-State Zoological Park of Western Maryland, Inc.*, the plaintiffs, brought claims alleging that the lemurs kept at the facility in question were "not housed in the

¹⁸⁸ Newberry, *supra* note 28, at 232.

¹⁸⁹ Stereotypic behavior involves functionless, abnormal repetitive behavior that can be caused by "deficits in captive housing and that induce frustration." G. Mason, et al., *supra* note 31, at 164.

¹⁹⁰ *Kuehl v. Sellner*, 161 F. Supp. 3d 678, 712 (N.D. Iowa 2016). The Court noted that the facility, Cricket Hollow, did not properly document their implementation of an enrichment plan, and that the evidence showed that the animals in question, lemurs, received little to no enrichment. *Id.* at 711.

¹⁹¹ *Id.*

¹⁹² *Id.*

¹⁹³ *Id.*

¹⁹⁴ *Id.*

¹⁹⁵ *People for the Ethical Treatment of Animals, Inc. v. Tri State Zoological Park of W. Md., Inc.*, No. 17-2148, 2018 WL 434229, at *6-7 (D. Md. January 16, 2018) (alterations omitted) (quoting 50 C.F.R. § 17.3 (2019)).

proper social setting . . . [and] are not provided adequate environmental enrichment,” among other claims of inadequate care.¹⁹⁶ The court found that these claims were adequate to survive a motion to dismiss, as these allegations “presented a plausible claim that the animals have been harassed under the ESA regulations.”¹⁹⁷

Both of these cases are related to lemurs, which are considered nonhuman primates that are entitled to specific regulatory protections as granted by the AWA. However, this Note argues that wolves also should be considered “dogs” under the AWA and should be entitled to environmental enrichment to better welfare in captivity. These cases illustrate that once the duty to provide environmental enrichment is codified, the courts will recognize this duty and enforce it against violators.

There are several types of enrichment that should be implemented to address a variety of needs of captive wolves and to prevent a harmful level of boredom and frustration. The kinds of enrichment that would increase the welfare for captive wolves will be developed in the following subsections.

1. Olfactory enrichment

Olfactory enrichment occurs when novel scents are introduced into the habitat of a captive animal. This provides a new experience for the animal to interact with and explore. Specifically, wolves have been known to rub on olfactory stimuli introduced into their enclosures.¹⁹⁸ The Large Canid Manual provides examples of safe olfactory enrichments that can be introduced to wolf enclosures.¹⁹⁹ Such scents include common herbs and spices, perfumes that are cleared by a veterinarian, scents of other animals and lures, and feces or urine from other animal species that are cleared by a veterinarian.²⁰⁰ Scented items can be combined or sprayed on items for the wolves to interact with in their enclosure, such as cardboard boxes or tubes.²⁰¹

¹⁹⁶ *Id.* at *7.

¹⁹⁷ *Id.*

¹⁹⁸ This is based on personal experiences with captive wolves as an intern caretaker at an animal care facility.

¹⁹⁹ LARGE CANID CARE MANUAL, *supra* note 172, at 63.

²⁰⁰ *Id.*

²⁰¹ All items such as these should be cleaned from the enclosure within a reasonable time after they are placed in the enclosure. Once the animal has lost interest in a specific item, it should

2. Feeding enrichment

Food-based enrichment can be highly enjoyable for wolves held in captivity. This includes presenting food in novel ways. In the wild, wolves are in survival mode and have to hunt their own food. In captivity, this level of engagement with food and their environment is eliminated, as food is readily provided for the animals. By introducing food to the wolves in a way that encourages problem solving or in some way makes it difficult for the wolves to extract or reach the food, it allows the wolves to utilize muscles and strategies that are otherwise absent from daily feeding rituals.²⁰² Captive facilities should integrate food-based enrichment into their enrichment programs to encourage this muscle engagement and problem solving. One example of food enrichment includes making a structure out of cardboard or another species-appropriate material and hiding food inside. This encourages wolves to think about how to access food and allows them to engage cognitively with feeding.²⁰³ It also engages wolves physically, forcing them to access, and sometimes rip apart, a structure to get to the food. Another way to include enrichment into feeding is by hiding food around the enclosure. This allows wolves to engage their noses and to search for food. Wolves, as large carnivores, get a majority of their nutrition via meat.²⁰⁴ Meat can be given to wolves on bones and with hide, which makes feeding more challenging and time consuming for the wolves.²⁰⁵ This mimics how wolves eat in the wild and forces them to utilize muscles to get meat off of the bone.²⁰⁶ Additionally, hides are beneficial for wolves' oral health.²⁰⁷

be removed and discarded as to not contribute to build up of used enrichment cardboard and objects in the enclosure.

²⁰² GRETCHEN ZIEGLER, DAVID SHEPHERDSON & JILL MELLEN, SUGGESTED GUIDELINES FOR CARNIVORE ENRICHMENT 3, <https://www.aazk.org/wp-content/uploads/Suggested-Guidelines-for-Carnivore-Enrichment.pdf> [<https://perma.cc/W5S4-QVNC>].

²⁰³ *See id.*

²⁰⁴ *See Gray Wolf*, NAT'L WILDLIFE FED'N, <https://www.nwf.org/Educational-Resources/Wildlife-Guide/Mammals/Gray-Wolf> [<https://perma.cc/MZ2T-V4P3>].

²⁰⁵ ZIEGLER, SHEPHERDSON & MELLEN, *supra* note 202, at 3.

²⁰⁶ *Id.* This information was learned during the author's experience working at an animal care facility.

²⁰⁷ *Id.* This information was also learned during the author's experience at an animal care facility.

3. Play enrichment

Physical objects introduced to wolves' enclosures engage their curiosity. Built structures such as platforms and huts can be placed within wolf habitats, allowing them to climb and jump up on these structures and giving them a new vantage point. Other smaller objects can be introduced to wolf enclosures for them to engage with, such as tires (without steel), boomer balls, cardboard boxes, plastic drums, cloth items, ropes, paper mache, pine cones, hula hoops, crates, coconut shells, antlers, animal hides, logs or tree limbs, and wood shavings.²⁰⁸ The goal of introducing these items is to give the wolves something novel to interact with, something to engage them physically and mentally. Additionally, many of the items on this list can be combined with the olfactory enrichment or the feeding enrichment. Enrichment programs at captive facilities should ensure that wolves are provided with new and rotating physical objects with which to safely interact and explore. These objects can promote more diversity of muscle engagement, cognitive engagement, and enjoyment for the wolves.

VIII. CONCLUSION

Wolves are sophisticated and complex animals that can be seriously harmed in the absence of adequate care in captivity. As wolves are almost genetically indistinct from dogs, and following the precedent established by regulations promulgated by the USDA allowing protections for a variety of species considered a certain "type" of animal (the nonhuman primate example), wolves should be considered dogs under the AWA. Wolves are therefore entitled to individualized regulatory protections. The current regulations pertaining to dogs, however, do not take into account the specific needs of wild dogs, like wolves, and because of this, new standards of care should be promulgated to protect wolves in captivity. These standards must address the specific environmental, social, and behavioral needs of wolves to ensure they live happy and healthy lives in captivity. Even if wolves cannot be considered "dogs" under the AWA scheme, there is compelling behavioral and physical evidence supporting the need for captive wolves to be provided species-specific regulations, and these protections could be

²⁰⁸ *Approved Enrichment List*, MONTGOMERY ZOO, <http://www.montgomeryzoo.com/Enrichment.html> [<https://perma.cc/S8PG-MLW5>].

granted by the approval of a written petition to APHIS arguing for the necessity of individualized protection. Wolves are not the nightmares humans envisioned them to be, blowing down houses and eating grandmothers, but rather, they are much closer, both genetically and behaviorally, to the dogs we welcome into our homes than most people think. These complex animals deserve adequate care in captivity and should be granted protections as dogs – albeit wild ones – in accordance with the mandate of the AWA.