WHAT CAN ANIMAL LAW LEARN FROM ENVIRONMENTAL LAW?

Second Edition

Randall S. Abate, Editor

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For Alek, the "voracious vegan," whose commitment to environmental stewardship and uncompromising passion for animal welfare and rights propelled me to undertake this book project.

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Foreword

This book is about building bridges between two different movements to enhance the activities of both. While this is a noble and apparently useful goal, it is perhaps more difficult than might be first thought. On a fairly regular basis I have heard the sentiment expressed that "Gee, you animal people should be working with the environmentalists." I have never turned to the person and asked, "Why do you think this is the case?" I ask the reader to give a quick thought to the question.

Perhaps, it is because both groups seem to have a reverence for life and strive to protect it, but in very different contexts. This is a true statement, but the world is much more complex, both in law and in philosophy. The apple and pineapple are both fruits humans eat. But to talk about apple issues does not really deal with pineapple issues, except at the higher levels of abstraction. Likewise, the daily issues of environmental protection do not seem to overlap in any practical way with the daily issues of animal welfare and animal rights.

Who am I to introduce this book? Well, I have been an active member of both worlds, have friends in both worlds, and have taught and done scholarly writing with environmental law and animal law. I have been a member of the Animal Legal Defense Fund and the Sierra Club. I went to law school in the 1970s so I could become a defender of the environment. But after becoming a professor and publishing my first article on wildlife rights, I moved to the animal side of the street. I have straddled two streams, flowing in the same direction but distinct nevertheless.

It is important for the reader first to have an understanding of how different these two streams are to be able to judge this book's effort to facilitate cooperation between these two areas of law so they can be mutually supportive.

Differences in Origin

The environmental movement in the United States has specific origins in the late 1960s and early 1970s with the publication of *Silent Spring* by Rachel Carson, the first Earth Day, and the adoption of a breathtaking set of federal laws. The country was galvanized by the information showing high risk of harm to humans, and to the environment generally. Human health was the

driving force for the political power it had at the time. The Endangered Species Act and Marine Mammal Protection Act, which more directly impacted wildlife, were in a secondary wave following the big breakers of the Clean Water Act and Clean Air Act.

The animal movement began a century before with the adoption of New York anti-cruelty law under the direction of Henry Berg in 1867. He also founded the American Society for the Prevention of Cruelty to Animals (ASPCA) at that time. The impetus was not grounded in a threat to humans, but was instead derived from a Christian duty toward animals. This set of legal protections was a state-focused activity as animals are property and property is under the control of state law not federal law. The most tentative step at the federal level, the first version of the Animal Welfare Act (AWA), was not adopted until a century later, in 1967. While the animal welfare movement is much older, it has not attained significant political power or visibility at the national level.

Differences in Legal Structure

The legal tools available for those dealing with environmental issues are much more diverse and sharper than the tools available for those dealing with animal issues. The drafters of the major federal environmental laws of the 1970s understood well that the adoption of the legislation would not solve the environmental problems alone; the law had to be implemented by agencies and enforced by the courts. To keep the laws on track to solve the problems for which they were adopted, many of these federal environmental statutes contained citizen suit provisions that authorized citizens to file a lawsuit against agencies and private parties for violations of the statutes. Perhaps more importantly, the laws provided for the recovery of attorney fees for successful lawsuits. Thus, some of the best legal minds could take up the task of making sure the agencies implement the laws as adopted by Congress. Hundreds of thousands, perhaps over a million dollars, of taxpayer money has helped fund private organizations to sue the government.

As suggested, animal law is the product of over 150 years in 50 different states. There is only a weak national focus. This is hard to explain to individuals in other countries where animal law is a national issue. Our national government is of limited jurisdiction, in that it has only the responsibilities delegated to it by the states in our Constitution. Control over animals was

The Humane Slaughter Act was adopted a bit earlier, in 1958, but it is so short and limited in scope that it hardly counts as the arrival of a new vision at the federal level.

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not delegated to our federal government. In most other countries, the inherent power of the sovereign is at the national level, not the individual state level as in the United States. None of the hundreds of state laws provide for recovery of attorney fees for animal litigation. The few national laws we have, primarily the AWA, also lack citizen suit provisions allowing private lawsuits and provisions for payment of attorney fees.

Another difference is that there is a fair match in the environmental field between the problems that needed to be addressed and the scope of federal law and agency power. From the pollution perspective, great strides were realized by seeking to limit what comes out the end of commercial pipes from sources such as energy generation, industrial manufacturing, and transportation vehicles. The federal environmental protection efforts could deal with several hundred point sources and realize very positive consequences at the national level. But animals are everywhere; millions of them in homes, in backyards, on the farm. It is not really possible to conceive of a federal agency that would reach into the homes of millions of citizens to deal with animal-human relationships. To the extent that the federal AWA has permits and inspection obligations, the U.S. Department of Agriculture has only about 105 inspectors for the entire nation for implementation of the law. This is evidence of the lack of political priority that animal welfare advocates face at the national level.

In one area of broadly created pollution, on the farms of industrial agriculture, there is soil erosion, fertilizer and pesticide pollution, and concentrated animal feeding operations (CAFOs), all of which are creating places of environmental harm. Even after decades of thought, a solution to this type of dispersed pollution has not been found. If the problem has a million actors, it is too dispersed for agencies in Washington to address, and perhaps we would rather they did not.

A final important legal difference is in how the political process has exempted certain activities from the laws adopted to deal with environmental and animal issues. An impressive feature of the federal environmental laws is that they confront the primary causes of the harms. All major polluters were within the regulatory power of the U.S. Environmental Protection Agency. All producers of power and all manufacturing activities were at risk of regulation. Endangered species and their habitat were protected against all actors, public and private, large or small, with no real exemptions.²

On the other hand, the federal AWA specifically exempts from its control the most important of the animal issues, the commercial animal industry.

^{2.} It is doubtful that such laws could be adopted in today's gridlocked and partisan Congress.

While the regulatory hand under the AWA does lightly sit upon commercial breeders of pet animals, and exhibitors of animals, it is only mammals that are regulated under the law. The Humane Slaughter Act does not cover the animal most often killed for human food, the chicken. So, while the major federal environmental laws specifically focus on those causing the greatest difficulties, and allow private suits with attorney fees, the federal animal laws do no such thing.³

International Visibility

The tracks that animal welfare and environmental issues have taken at the international legal level are very different. Environmental concerns have had an international presence for many decades. Some treaties existed even before the environmental movement of the late 1960s, including those protecting migratory birds and whales. Beginning in the 1970s, with the increased concern for the environmental issues arising out of human population growth and pollution issues, several major treaties were drafted and adopted, including the Convention for the Protection of Endangered Species in 1975.

The Earth Summit of 1992 in Brazil marked the high point of global public awareness and concern for international environmental issues with 116 heads of state attending the two-week conference. This meeting adopted the language for the Rio Declaration, the Convention on Biological Diversity, and the U.N. Framework Convention on Climate Change. The two treaties continue to be in the forefront of global environmental activities as humans seek to deal with global warming and the global economic pressures that cause unsustainable use of resources such as trees and tuna. Thousands of people and millions of dollars are focused annually in gathering information, drafting plans, adopting laws, and attending international conferences. Local environmental issues are seen as part of the "big picture." As at the domestic law level, the animal focus is almost entirely on species of wildlife and protection of ecosystems.

Animal welfare issues have almost no presence internationally. There is no treaty adopted or being considered concerning animal welfare.⁴ It is true that most domestic animal issues are contained within a country's sovereign territory, but the same issues exist in most countries. Animals are used as

At a level deeper in the law, the legal concept of standing is also different for environmental issues
and animal issues, but that is too complex to explore in this foreword. It is addressed in detail in
Chapter 1.

I have proposed such a treaty, but the issue has yet to be taken up by any country. See David Favre, An International Treaty for Animal Welfare, 18 Animal L. 237 (2012).

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pets, food, fiber, and entertainment in every country, but there is no political interest in creating international standards of care.⁵ An international perspective is necessary to optimize the protection of animal welfare. For example, meat production is now global in reach, with both live animals and frozen meat being shipped around the world. If one country enhances its animal welfare laws, there is the risk that production will shift to lower cost states where the welfare of agricultural animals is lower. A dog is the same regardless of the country in which it is located, but the laws and local cultures differ dramatically. With the release of the movie Blackfish in 2013, the use of killer whales in commercial shows is no longer just a U.S. domestic issue. It is perhaps in the international arena that animal welfare supporters have the most to learn from the environmentalists.

Differences in Ethical Perspective

Beyond the legal differences, the world views and priorities of the two groups are very different and sometimes actually at odds. The environmentalist sees the world as interacting ecosystems, complicated, and with many species and large numbers of unseen individual animals. The focus is on keeping the systems functional and robust. Pollution, human population, and consumption of resources are the primary topics of concern. Wildlife and wild places are just a subset of the bigger issues. Death of individual animals is accepted as part of the natural order of things, driving the engine of evolution. Preservation of species is a priority as species are critical to protecting the sustainability of complex and healthy ecosystems. Very few environmentalists see farm land ecosystems, and there is no room in their world to focus energy on issues of pets.⁶

The animalist does not see ecosystems and their functionality as of particular concern. They love their companion animals and are repulsed by the blood and death of any animal. They seek the best possible life for the individual animal. They don't give much priority to protection of endangered species when it conflicts with other life. Their primary focus is on domestic animals.

The human-created park with deer is a common place of conflicting values. The animalist will oppose the intentional killing (culling) of deer even if the deer are destroying the vegetation of the local ecosystem of the

^{5.} The World Organization for Animal Health (OIE) has developed materials for thinking about individual animal welfare issues, but they are not considered as binding, which would be the case if a treaty were adopted on the issue.

^{6.} One exception is the topic of feral cats being a nuisance, as the killer of wild birds and small animals.

park. Deer are beautiful creatures who do no harm to others, and it is wrong for them to be shot and killed. Protecting the individual life is important to the animalist. The environmentalist will believe it is essential to reduce the number of deer in order to preserve the health of the ecosystem. So long as the control method is lethal to the deer, heated conflict can arise that divides these two camps.

When either animalists or environmentalists get together and talk about "issues" that are important to them, there is almost no overlap in the topics. There is always the common point, that some humans or corporations are causing the harms they are concerned about, but that is not particularly helpful to solving problems. So, the groups go about their good work without reaching out to others, as they seldom share priorities in a world of limited resources.

Both groups care about life on this Earth. Each group needs to intentionally understand the views of the other and accept the perspective of the other as a positive world view. Perhaps then they can weave together threads of action to promote the protection of life and recognize animals both as deserving of respect and as essential parts of the ecosystems in which we live. This book is the opportunity to see this effort in full display.

David S. Favre
Professor of Law & The Nancy Heathcote
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Introduction

The United States has a long history of exploiting animals for human advancement and comfort in much the same way that natural resources have been exploited since the industrial revolution. The environmental movement in the United States in the 1960s and 1970s demanded that the use of natural resources be carefully managed to ensure a sustainable future for our nation and our planet. In the five decades during which it has been recognized as a specialty area in U.S. law, environmental law in the United States has been highly successful in fulfilling this sustainable management objective. Drawing support from both legal and social developments in the late 1960s and early 1970s, environmental law quickly moved within its first decade from a marginal niche to a fully institutionalized field in the American legal system.

There are many reasons for this success. First, there was an urgent and visible pollution crisis in our air, water, and land. Second, economic stability in the 1960s and 1970s enabled the United States to regulate the environment in a manner that would have been economically challenging in previous decades. Third, scientific evidence had been collected to establish direct links between environmental contamination and human health. Fourth, growing awareness of the importance of ecosystem integrity and biodiversity led to protection of the "unseen" and "overlooked" in our natural world, which gained national attention in the *Tennessee Valley Authority v. Hill* case in 1973 involving protection of the snail darter under the Endangered Species Act.

In addition to these reasons for the environmental law movement's success, the most important reason that environmental law became mainstreamed as a legal specialty is because it worked within the system rather than against it. While there were, and still are, many radical environmental groups and objectives that challenge the status quo of the legal system, the vast majority of environmental law issues acquired legitimacy through victories in the courts and in Congress. Ultimately, environmental law succeeded because its message was understood that protecting the environment ensures a sustainable future for humans. Many environmental law regulations are premised on enforcing standards that seek to protect human health.

While animal law has enjoyed some important victories within the past three decades in the courts and in federal and state legislative initiatives, it has remained largely marginalized in the American legal system and has struggled for legitimacy. Much of this struggle is rooted in a false perception in the legal system and in society regarding what animal law represents—that enhancing legal protections for animals somehow requires a corresponding diminution of legal protections for humans.

To secure enhanced legitimacy and success, the animal law field needs to capitalize on the successful strategies of the environmental law field. In much the same way that the American public has accepted that economic growth does not require unsustainable depletion of natural resources, our increased demand for food, scientific research, and entertainment likewise should not require animal suffering. Moreover, animal law can work directly with environmental law on some issues for mutual benefit.

This book seeks to address several dimensions of this inquiry. It raises important parallels between animal law and environmental law and proposes strategies for how animal law can benefit from the well-worn trail that environmental law has blazed in the legal system. Some key similarities include:

- Both fields involve defending those unable to defend themselves in the legal system (e.g., mountains, rivers, trees, and animals).
- Both fields involve the need for creative lawyering (e.g., drawing on a mix of statutory and common law theories) to develop new theories of protection under the law.
- Both fields must confront issues of federalism and avoid the pitfall of preemption as a limitation on the scope of available protections.
- Both fields benefit from cross-disciplinary engagement with other doctrinal areas (e.g., human rights) and with foreign domestic and international law principles to advance new theories of protection.
- Both fields must confront how best to define their focus and may benefit by defining goals for mutual gain. For example, environmental law is routinely paired with natural resources law, energy law, and land use law. Animal law is as related to environmental law as these fields; however, it is rarely paired with environmental law as a joint enterprise.
- "Think globally, act locally" is an appropriate mantra for both fields, yet it has galvanized environmental law's success much more so than it has for animal law. Environmental law issues are inherently international because of their transboundary nature, whereas animal law

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issues are intertwined with cultural and religious traditions that tend to make them more national and local in character.

Animal law consists of "animal welfare" and "animal rights" dimensions. Animal welfare is the more mainstreamed part of the movement and it has enjoyed much more success because it poses less of a threat to the cultural and legal status quo in the United States that regards animals as property. For example, it is easier for the U.S. public to agree that animals should not be subject to cruelty than it is to agree that animals should enjoy "rights" in a manner similar to humans. The animal rights dimension of the field is an indispensable component of the movement and it should continue to grow and gain legitimacy. But the animal welfare movement perhaps needs to become more enshrined before animal "rights" can realize greater recognition. This progression of recognition would follow a path similar to the history of the environmental law field. The notion of environmental "rights" has been increasingly taking hold in the past decade¹ now that the environmental movement has become mainstreamed on many levels for the past four decades. The animal law field can gain valuable patience and wisdom by observing the evolutionary path of environmental law in this regard.

This book assembles the insights of experts in the animal law and environmental law fields to promote legal protections for animals by drawing on U.S., foreign domestic, and international environmental law regulatory strategies and perspectives. The book is divided into four units. Unit I provides introductory context with seven chapters that thoroughly examine the historical, political, and legal foundations of environmental law as possible building blocks (and pitfalls to avoid) in seeking to advance the animal law field. Sub-topics within this unit address both procedural mechanisms (standing, enforcement, damages, and impact assessments) and concepts and themes (politics of the environmental law movement, regulatory avoidance, and animal socioequality) to set the stage for the book's coverage in the ensuing three units.

Unit II addresses several U.S. law contexts to illustrate these lessons from environmental law and possible opportunities for collaboration between the two movements. These contexts include chapters on animal agriculture, consumer protection and labeling, emerging issues in food law and policy, climate change, lead pollution, fisheries management, and animal testing.

Perhaps the most palpable evidence of this evolution is the burgeoning number of climate justice
cases in courts worldwide. Many of these lawsuits have been filed by youth plaintiffs asserting rightsbased theories to a stable climate. For a discussion of many of these lawsuits, see Randall S. Abate,
CLIMATE CHANGE AND THE VOICELESS: PROTECTING FUTURE GENERATIONS, WILDLIFE, AND NATURAL
RESOURCES 65-96 (2019).

Unit III considers these issues from international and comparative law perspectives. It reviews international trade and environment treaties and jurisprudence, environmental and animal welfare regulation in Australia and the European Union, and the need for regional and global animal welfare and rights laws to emerge to capitalize on the success and avoid the failures of the international regulation of species under environmental law regimes. Unit IV offers reflections in four chapters on how animal law and environmental law can enhance their collaborative efforts for mutual gain.

Preface for the Second Edition

Since the publication of the first edition in 2015, animal law advocates have secured landmark victories in three high-profile contexts. Longstanding traditions of captive breeding of orcas at SeaWorld¹ and training of elephants for performance in Ringling Bros. and Barnum and Bailey circus² came to an end within the same year in 2016, thanks to persistent and creative litigation, legislative, and public information campaigns. While these developments did not intersect directly with environmental law on the surface, they built on a legacy of advocacy strategies that were successful in environmental law in previous decades: (1) the power of advocacy based on science and public information campaigns in the case of SeaWorld, and (2) the power of grassroots advocacy at the local level to secure a nationwide outcome in the case of the circus, which relied on a patchwork of local bans in multiple states on the use of the bullhooks used to train elephants.³ In the companion animal context, California enacted a groundbreaking pet custody law in 2018 that authorizes judges to consider what is in the best interests of companion animals in custody disputes, which elevates animals' status above their traditional recognition as property.4

In other animal law contexts since the release of the first edition, animal rights advocates continued the ambitious and important quest for recognition of legal personhood protections for animals. High-profile cases filed by three of the leading animal protection organizations in the nation used creative strategies to seek a common goal in the animal law and environmental law movements: legal personhood for these "voiceless" entities (i.e., animals and natural resources) to be recognized as rights holders to some degree under the law. One of these cases, *Naruto v. Slater*, 5 also known as the "monkey selfie" case, involved People for the Ethical Treatment of Animals' (PETA's)

Jennifer Hackett, SeaWorld Ends Controversial Captive Breeding of Killer Whales, Sci. Am., Mar. 17, 2016, https://www.scientificamerican.com/article/seaworld-ends-controversial-captive-breeding-of-killer-whales/.

Faith Karimi, Ringling Bros. Elephants Perform Last Show, CNN.com, May 2, 2016, https://www.cnn.com/2016/05/01/us/ringling-bros-elephants-last-show/index.html.

^{3.} For a discussion of some compelling parallels between the enactment history of the Clean Air Act and the use of local bans on bullhooks to secure the victory against Ringling Bros. circus, see Chapter 13.

Dareh Gregorian, New California Divorce Law: Treats Pets Like People—Not Property to Be Divided Up, NBC News.com, https://www.nbcnews.com/politics/politics-news/new-california-divorce-law-treat-pets-people-not-property-be-n952096.

⁸⁸⁸ F.3d 418 (9th Cir. 2018).

suit on behalf of a crested macaque monkey in Indonesia, Naruto, to secure intellectual property rights to selfie photos that the monkey had taken with a photographer's camera that was set up on a tripod in an Indonesian rainforest. The Copyright Act extends protections to any "person," which is not limited by its terms to humans under the statute. The Court concluded that "person" should not be interpreted to include non-humans and that Naruto therefore lacked statutory standing under the Copyright Act.⁶

Second, the Nonhuman Rights Project (NhRP) also proceeded undaunted with its line of habeas corpus cases that began prior to the first edition and continued through to the publication of the second edition. These cases have sought to have chimpanzees and elephants released from captivity and placed in sanctuaries. The most recent of these cases involved Happy, a 49-year-old Asian elephant in captivity at the Bronx Zoo. Happy's case is the first in the world for a court to issue a habeas corpus order on behalf of an elephant. The "show cause" order required the Bronx Zoo to justify its ongoing confinement of Happy. In February 2020, the NhRP's case was dismissed, but NhRP continues to pursue litigation and legislative initiatives in the United States and abroad that seek to secure legal personhood protections to recognize these animals' rights to be free from confinement.

In the last context of this trio of legal personhood cases on behalf of animals, the Animal Legal Defense Fund (ALDF) filed a high-profile case on behalf of Justice, a horse, in a suit against the horse's owner for abuse under Oregon's animal cruelty statute. The suit seeks to establish that animals have a legal right to sue their abusers in court. The case was dismissed in 2018 on the ground that non-human animals lack standing to sue on their own

- 6. Id. at 426. Despite the loss in court, there was some good news for Naruto and the animal protection advocates in the wake of the litigation. After oral arguments before the Ninth Circuit, the parties agreed to a settlement that provided that 25 percent of the proceeds from the photographer's sales of the monkey selfies would be donated to charities that seek to protect the habitat of the crested macaques in Indonesia. See Nicole Pallotta, En Banc Review Requested in "Monkey Selfie" Copyright Case, ANIMAL LEGAL DEFENSE FUND ANIMAL L. UPDATE, Aug. 7, 2018, https://aldf.org/article/enbanc-review-requested-in-monkey-selfie-copyright-case/ (last accessed Apr. 11, 2020).
- 7. For a summary of the chimpanzee cases, see Courtney Fern, *The Need for Chimpanzee Rights*, Nonhuman Rights Blog, July 13, 2019, https://www.nonhumanrights.org/blog/the-need-for-chimpanzee-rights/ (last accessed Apr. 11, 2020).
- 8. For a helpful discussion of the context and controversy surrounding this case, see Brandon Keim, *An Elephant's Personhood on Trial*, The Atlantic, Dec. 28, 2018, https://www.theatlantic.com/science/archive/2018/12/happy-elephant-personhood/578818/.
- Laura Choplin, World's First Habeas Corpus Order Issued on Behalf of an Elephant, Nonhuman Rights Blog, Nov. 19, 2018, https://www.nonhumanrights.org/blog/first-habeas-corpus-order-happy/ (last accessed Apr. 11, 2020).
- Sophia Chang, Judge Rules That Bronx Zoo's Happy the Elephant Is Not "Unlawfully Imprisoned," GOTHAMIST, Feb. 20, 2020, https://gothamist.com/news/judge-rules-bronx-zoos-happy-elephant-not-unlawfully-imprisoned.

behalf. 11 ALDF's appeal of the dismissal was pending at the time that the second edition was published. 12

Building on the momentum from these landmark victories and creative and ambitious litigation strategies in the animal law field since 2015, animal protection initiatives can be enhanced by learning valuable lessons from environmental law in certain contexts, and by seeking collaboration with environmental law on certain issues for mutual gain. New chapters in the second edition address how two contexts from the environmental law field—rights of nature and environmental justice—serve as foundations for potential future gains for animal law. One chapter presents an Australian perspective on how recent successes in rights of nature initiatives can provide an opportunity for animal law and environmental law to secure mutual gains through a "comprehensive ecosystem personhood" approach. Another chapter coins a new term, "animal socioequality," as an innovative approach to enhance protection for animals through an environmental justice lens.

Developments at the intersection of animal law and environmental law have exploded since the publication of the first edition in 2015. The second edition addresses some of these developments to build on some of the existing content from the first edition and extend the book's coverage into new directions. One of these developments is food law and policy as a rapidly growing area of convergence between these two fields. In adding new chapters addressing how food law and policy can enhance protection of animals, the second edition builds on the first edition's coverage of one dimension of this topic addressed in the meat labeling chapter. New chapters in the second edition extend the coverage of food law and policy issues to include consumer protection litigation involving false advertising claims, potential synergies between greenwashing and humane washing contexts, and animal and environmental law and policy considerations concerning lab-grown meat.

Another area of convergence between animal law and environmental law is climate change regulation. The first edition addressed this topic with two chapters: one proposed strategies to regulate greenhouse gas emissions from concentrated animal feeding operations (CAFOs), whereas the other addressed how the listing of the polar bear as threatened under the Endan-

Aimee Green, Oregon Judge Refuses to Be First in the Nation to Let Animals Sue, THE OREGONIAN, Jan. 29, 2019, https://www.oregonlive.com/washingtoncounty/2018/09/oregon_judge_refuses_to_be_fir. html.

Press Release, Animal Legal Defense Fund Appeals Dismissal of Groundbreaking Lawsuit for Abused Horse, Jan. 22, 2019, https://aldf.org/article/animal-legal-defense-fund-appeals-dismissalof-groundbreaking-lawsuit-for-abused-horse/ (last accessed Apr. 11, 2020).

gered Species Act can offer lessons for enhanced protection of wildlife. The second edition adds two new chapters that address climate change as common ground between these two movements. One of these chapters considers synergies between climate change mitigation and wildlife conservation and the other seeks to build on the environmental law movement's ambitious use of the public trust doctrine to leverage enhanced protections for wildlife.

The first edition's core theme regarding lessons that environmental law can offer animal law extends in new directions in the second edition. The second edition adds new chapters addressing procedural contexts in which environmental law has enjoyed enduring success in enforcement of law generally, impact assessments, and accountability for regulatory avoidance. It also includes a chapter on what animal law can learn from environmental law to promote animal protection in the context of animal testing.

Successful demand reduction strategies are perhaps the most effective and most promising of all of the developments since the publication of the first edition. Demand reduction strategies can enhance animal protection more readily than litigation or legislative initiatives. Animal law and environmental law embrace demand reduction efforts through public information campaigns and science. In environmental law, this approach is reflected in efforts such as fossil fuel divestment, anti-fracking campaigns, and renewable energy initiatives to facilitate the public away from its addiction to fossil fuels. In animal law, demand reduction strategies take many forms because animals are considered property under the law and are abused in multiple contexts such as animals in agriculture and animals in entertainment. As noted in this preface, one example of effective demand reduction advocacy occurred in the animals in entertainment context with recent victories against circuses and marine parks, in addition to previous victories against the dog fighting and dog racing industries.

The rapid expansion of the plant-based meat and dairy industries since 2015 promises significant gains in animal protection by threatening the stronghold of the meat and dairy industries. The walls of this fortress of secrecy and abuse in the meat and dairy industries have continued to crumble in the years since the first edition, and at a much faster rate. Plant-based meat and milk have caused massive economic impacts to the meat and dairy industries such that some major dairy producers have filed for bankruptcy. Feeling this pressure, the meat industry has fought back by transitioning from one unsuccessful form of bullying tactics ("ag-gag" laws¹³ seeking to

ALDF has been remarkably successful in challenging and defeating several ag-gag laws. See generally Issue: Ag-Gag Laws, Animal Legal Defense Fund, https://aldf.org/issue/ag-gag/?gclid=EAIaIQobChMI_

stifle public information access and dissemination) to a new form of bullying with a recent wave of new "tag-gag" laws. ¹⁴ One example of these state taggag laws is the attempt to declare that the meat industry has exclusive right to the use of the term "meat" in an effort to exclude the competitive threat from the plant-based meat industry's use of that term. These tag-gag laws have been challenged by animal protection advocates in a wave of pending litigation that offers a sense of déjà vu when one compares it to the ag-gag litigation that preceded it.

A famous quote from Gandhi on the progression of social movements is particularly apt in reflecting on the future of animal law: "First they ignore you, then they laugh at you, then they fight you, then you win." With the help of lessons from environmental law, and drawing on opportunities for increased collaboration between animal law and environmental law, animal law can close in on a "win" that will hopefully be a "win-win" for these two fields.

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^{14.} Tag-gag laws seek to prevent plant based products from using terms such as "meat" and "milk." For a detailed discussion of laws and pending litigation in this context, see Chapter 11.

^{15.} For a helpful reference to this quote and its relationship to the plant-based meat revolution, see Rowan Jacobsen, This Is the Beginning of the End of the Beef Industry, Outside, July 31, 2019, https://www.outsideonline.com/2399736/impossible-foods-beyond-meat-alt-meat.