WILDLIFE LAW CALL

FALL / WINTER 2017-2018

Table of Contents

Discussions of the North American Model of Wildlife Con	nservation1
a. Can the North American Model Work in the Global South?	1
b. The Seven Sisters Across the Seven Seas?: An Inquiry Into Conservation Through the Case of Cecil the Lion	
I. The Public Trust Doctrine	8
a. Invasive Species in the United States	8
b. National Monuments and the Antiquities Act: Does the Pr National Monuments?	
c. Case briefs	12
1. Brakke v. Iowa Dep't of Natural Resources	12
2. U.S. v. Hinkson	13
3. WildEarth Guardians v. U.S. Dep't of Justice	14
II. Prohibition on Commerce in Dead Wildlife	
a. Chronic Wasting Disease	16
b. Commercial Aquarium Collection	18
1. Case brief: Umberger v. Dep't of Land & Natural Resou	rces18
2. The Impact of Commercial Aquarium Fishing on the Ha	waiian Coral Reef19
c. Operation Crash and the Illegal Trade of Rhinoceros Horn	
III. Allocation of Wildlife by Democratic Rule of Law	24
a. The Proposed Management Plan for Mountain Goats in Ol	ympic National Park24
b. Case briefs	26
1. Hill v. Missouri Dep't of Conservation	26
2. U.S. v. Saunders	
3. U.S. Ass'n of Reptile Keepers, Inc. v. Zinke	28
c. The Sandhill Crane Makes a Return	29

IV.	Non-Frivolous Use of Wildlife	30
a.		
V.	Wildlife as an International Resource	31
a.		
VI.	Opportunity to Hunt for All	34
a.	On the Public-Private Model as an Alternative to the Public Model of Conservation	34
b.	Case brief: PETPO v. U.S. Fish & Wildlife Service	35
c.	Hunting Opportunity for All: Decline of Hunters and Public Access Programs	36
VII	Scientific Management	3 7
a.	Promoting Coexistence Among Humans and Wildlife	37
b.	1 5	
c.	Managing and Delisting Gray Wolves	41
	1. Designation and Delisting of Distinct Population Segments Under the Endangered Species Act	41
	2. Contrasting the Scientific Management of Two Gray Wolf Populations: The Gray Wolves of Washington vs. t Mexican Gray Wolf of Arizona and New Mexico	42
	3. Case brief: Humane Soc'y of the United States v. Zinke	44
d.		
Abc	out the Wildlife Law Call	46



DISCUSSIONS OF THE NORTH AMERICAN MODEL OF WILDLIFE CONSERVATION

a. Can the North American Model Work in the Global South?

Ethan A. Shirley

Introduction

The wildlife management model prevailing in the United States and Canada sets North America apart from the rest of the world. One aspect of the North American model that is controversial in many other parts of the world is the idea that hunting can be a part of a sustainable conservation plan. In the Global South, which describes parts of the world currently exhibiting lower levels of economic development than North America and Europe, conservation efforts largely banned hunting altogether or sought to monetize the hunting of certain species of fauna to fund parks and police. I examine here the possibility of using a management system that includes sustainable hunting in the Brazilian Pantanal, an area where there is a blanket ban on hunting. I conclude that a system following the tenets of the North American model could be beneficial for environmental justice as well as management of endangered species in certain areas of the Global South.

History and theory

Fifteen-thousand years ago, mammoths, mastodons, and gomphotheres roamed the frontiers of the Americas. Today, paleontologists find remains of these American elephants, in many cases associated with human tools. A few thousand years later, the expansion of populations of European settlers in North America led to the extinction of passenger pigeons, which had previously been described as so abundant, that "[t]he air was literally filled with Pigeons; the light of noon-day was obscured as by an eclipse..." By the late 19th century, markets existed for

trade in wild animals, their meat, skins, and feathers; the technology for taking animals had also improved significantly since the times of spears and arrows that were used to hunt mammoths. The advancements in technology, massive rates of population expansion, and the realization that even the most abundant animals may go extinct, collectively led to the Lacey Act in 1900³ and the Migratory Bird Treaty Act (MBTA) in 1918⁴—the first conservation measures to control overhunting by eliminating markets and treating wildlife as an international resource, respectively. The permissibility of hunting along with the adoption of these and other controls collectively define the North American Model of wildlife management.

The North American Model (NAM) distinguishes itself from other conservation models because it promotes hunting as a tool for conservation, rather than simply a risk factor for the extinction of species. NAM is defined by seven central tenets.5 First, wildlife is not owned or ownable; it is kept in the public trust and managed by government. The public trust doctrine has developed through hundreds of years of common law in the United States,⁶ and in many states is now enshrined in statutes and constitutions. Second, wildlife is not marketed or marketable. The elimination of markets in the wildlife trade began with the Lacey Act and markets continue to be banned or heavily regulated today. Hunters, for example, can take deer, but cannot sell the meat. Third, wildlife is regulated by law, not by custom-there are criminal penalties for those who violate these rules, including hunting without a proper license. Fourth, taking of wildlife is restricted to legitimate purposes, including for food or furs. Fifth, wildlife is recognized as a moving resource that can cross international borders, and therefore must be protected across borders. The MBTA first recognized this reality in 1918. Sixth, scientific management regulates hunting, rather than political or special interests. Each

¹ See Gary Haynes, The catastrophic extinction of North American mammoths and mastodonts, 33 World Archaeology 391, (2002); Daniel C. Fisher, Mastodon butchery by North American Paleo-Indians, 308 Nature 271 (1984). But see, Ross DE MacPhee, et al. Radiocarbon chronologies and extinction dynamics of the Late Quaternary mammalian megafauna of the Taimyr Peninsula, Russian Federation, 29 Journal of archaeological science 1017 (2002).

² JOHN J. AUDUBON, *On The Passenger Pigeon, in* THE BIRDS OF AMERICA (1844).

³ The Lacey Act of 1900, 16 U.S.C. §§ 3371–3378 (proscribes the commercialization of wildlife).

⁴ The Migratory Bird Treaty Act of 1918 (MBTA), 16 U.S.C. §§ 703–712 (protects birds as a resource shared by the United States and Canada).

⁵ John F. Organ, V. Geist, S.P. Mahoney, S. Williams, P.R. Krausman, G.R. Batcheller, T.A. Decker, R. Carmichael, P. Nanjappa, R. Regan, R.A. Medellin, R. Cantu, R.E. McCabe, S. Craven, G.M. Vecellio, D.J. Decker. *The North American Model of Wildlife Conservation*, The Wildlife Society Technical Review, Dec. 2012.

⁶ Joseph L. Sax, *The Public Trust Doctrine in Natural Resource Law: Effective Judicial Intervention*, 68 Mich. L. Rev. 471 (1969).

state has an agency that works with researchers to establish hunting quotas to maintain healthy populations. Finally, there is a democracy of hunting—everyone has the right to hunt and fish, as long as they do so according to the management rules, which are set with stakeholder groups' input. Collectively, these tenets have protected hunting tradition and wildlife populations in North America.

In the Global South, on the other hand, two common approaches to wildlife management are (1) the hunting-ispoaching model, and (2) the monetized megafauna model.⁷ Using the hunting-is-poaching model, many countries regulate wildlife by banning all hunting, with a few exceptions. These exceptions include necessity, selfdefense, or, rarely, cultural rituals. The philosophy of banning hunting altogether contravenes the central tenets of NAM because it promotes the idea that the best management is no management whatsoever,8 and that hunting is not compatible with conservation. On the other hand, the monetized megafauna model creates a market for hunting certain species. This market also restricts access to hunting to the extremely wealthy, and arguably promotes the unethical taking of wildlife, because these large animals are shot for sport, and not necessarily for a



⁷ These two models do not constitute an exhaustive list of all wildlife management strategies in the Global South; they represent two common approaches.

legitimate purpose. This model therefore also contravenes the central tenets of NAM.

The approach on which I focus here is what I describe as a blanket ban, which proscribes the taking wildlife resources. One can deduce several potential issues with blanket bans on hunting, generally. First, such bans need not require research on animal populations. Rather, they rely on enforcement and voluntary compliance, assuming that populations are healthiest if taking of animals is prohibited altogether. This approach can be problematic because there is no attempt to understand animal populations' ability to cope with human interactions, and it is unrealistic because it is highly likely that there will be some level of noncompliance with rules.9 Furthermore, a ban on hunting by default can create stigma against hunters and place the burden on hunters to prove that any wildlife they take is necessary for their survival. Because those hunting often live in rural areas and lack access to education and legal services, defending their traditional and subsistence hunting as necessary for their survival is particularly difficult. I will address these issues through a case study of a transnational conservation priority region in South America, the Pantanal.

Case study: hunting wildlife in the Pantanal

The Pantanal supports abundant populations of wildlife, but hunting is banned

The Brazilian Pantanal is among the world's largest wetlands and a natural heritage site¹⁰ that sits on the border of Brazil, Paraguay, and Bolivia. It is home to a number of threatened and endangered species, and in spite of its recognition as an area of conservation importance, over ninety percent of its lands are privately owned.¹¹ Today, the primary purposes of hunting are for food and protecting livestock. In the past, most hunting

Michael C. Gavin, & Meredith L. Gore, *Detecting and understanding non-compliance with conservation rules*, 189 Biological Conservation 1 (2015).

⁸ Following the mindset of preservation of nature, rather than conservation of nature.

⁹ Noncompliance need not be intentional, but even accidental takings of endangered species can be hugely detrimental to small populations. *See*, *e.g.* Koch, Volker, et al. *Estimates of sea turtle mortality from poaching and bycatch in Bahia Magdalena*, *Baja California Sur*, *Mexico*, 128 Biological Conservation 327 (2006). *See generally*, Jennifer Solomon,

¹⁰ Declared both by UNESCO (in 2000) and the Brazilian Federal Government (in the 1988 Constitution, *infra*, at art. 225 § 4); also recognized by UNESCO as a Biosphere Reserve (since 2000) and as a Ramsar Site (since 1993).

¹¹ Wolfgang Junk, et al., *Biodiversity and its conservation in the Pantanal of Mato Grosso, Brazil*, 68 Aquatic Sciences-Research Across Boundaries 278 (2006).

was for trade (in the mid-20th century, the feather and pet trade decimated hyacinth macaws; the pelt trade decimated giant river otters, jaguars, and vacaré caiman). The criminalization of, and subsequent crackdown on, the trade in wild animals began in the 1960s and 1970s,12 and coincided with more comprehensive protection of the environment in general.¹³ Now the Pantanal and areas immediately around it host species in abundances not seen in other areas of South America.¹⁴ While the abundance of these animals is manifest, good estimates of how populations respond to ecological and anthropogenic pressures do not exist, as regional efforts to characterize populations of mammals and birds have not been undertaken.¹⁵ Immense potential to undertake such study exists, as there are numerous ecotourism groups, fishermen living on the rivers, and ranchers¹⁶ whose observations could be collected by scientists to better understand densities in order to properly manage the populations.

In the Brazilian Pantanal, the federal hunting code has banned all hunting since 1967.¹⁷ This outright ban contrasts with provisions of the Constitution and agencies, which have adopted measures to allow hunting to those in need of food¹⁸ and for certain rites of indigenous or traditional peoples.¹⁹ The outright ban should be easy to enforce—however, normally, the people engaged in hunting are far from cities and need to feed their families. These are the very people for whom the exceptions exist. However, if law enforcement catches these individuals hunting or transporting bushmeat, the burden is then on those indigent and often illiterate rural-dwelling people to prove that they fit the exceptions provided by statute. Placing the burden of proof on these people is an unjust

¹² This happened during Brazil's military dictatorship and a new militaristic view of enforcement—see generally, Alfred C. Stepan, THE MILITARY IN POLITICS: CHANGING PATTERNS IN BRAZIL (Princeton University Press) (2015). At the same time, there was a new push in the international community to preserve nature and protect endangered species, with the advent of CITES—see generally, Hunter, Salzman & Zaelke, INTERNATIONAL ENVIRONMENTAL LAW AND POLICY (New York: Thomson Reuters / Foundation Press) (2011).

consequence of the blanket ban on hunting in the Pantanal.

What the North American Model would look like in the Pantanal

In spite of the differences between the blanket ban approach in Brazil and NAM, there are several similarities to how both countries manage wildlife. First, according to NAM, wildlife is not ownable and is kept in the public trust, managed by government. In Brazil, the federal government, the state governments, and the local governments own wildlife collectively for the people.²⁰



Second, wildlife is regulated by law, not by custom. In Brazil, the laws governing wildlife are set by different branches of government in observance of policies set by the branch of government above them.²¹ Third, taking of wildlife is restricted to a legitimate purpose, including for food or furs, but excluding frivolous execution. In Brazil, this is in line with constitutional and statutory exceptions to the blanket ban on hunting. These three tenets of the

Petrere, Fishing resources in the rio Cuiabá basin, Pantanal do Mato Grosso, Brazil, 2 Neotropical Ichthyology 217 (2004).

 $^{^{13}}$ Among the laws created at this time in Brazil were the Hunting Code (*supra* at Note 17) and the Forestry Code (Lei No. 4.771 de 15 de setembro de 1965).

¹⁴ Junk 2006, supra.

¹⁵ Fish are explicitly considered in the Política Nacional de Desenvolvimento Sustentável da Aquicultura e da Pesca (Lei No. 11.959 de 29 de junho de 2009), and have well-researched populations—see, e.g., Lúcia Mateus, Jerry MF Penha, & Miguel

¹⁶ Wolfgang Junk & Catia Nunes de Cunha, *Pantanal: a large South American wetland at a crossroads*, 24 Ecological Engineering 391 (2005).

¹⁷ Código de Caça [The Hunting Code], Lei No. 5.197, de 3 de janeiro de 1967.

¹⁸ Constituição federal [C.F.][Constitution] Oct. 5, 1988, art. 6 (Braz.): (*A alimentação*, the right to have food).

¹⁹ The question of to whom, exactly, special rules apply, is not well resolved and is a source of conflict throughout the country. "Indigenous" in Brazil has a specific meaning, whereas "traditional" people are governed by a separate set of rules.

²⁰ CF at art. 23 § 6.

²¹ The Hunting Code at art. 7.

North American model are already met under the Brazilian system.

In order to apply NAM in the Pantanal, the first step is the removal of the blanket ban in favor of some sort of management system. This system would put into place some co-management structure in which identified stakeholder groups would decide whether and for what species hunting should be permitted.²² Research would then determine how many animals could be taken to maintain healthy populations. This sort of system is currently in place for the fishery, but not for hunting of other wildlife.²³

The fishery management structure in Brazil bears substantial similarity to wildlife management in North America, and could be a template for wildlife management in the Pantanal. In the Pantanal, the fishery is managed by stakeholder groups and government using scientific research;24 this follows the NAM tenet that scientific management regulates hunting. Fish may only be taken with a license, 25 which permits fishermen to catch a certain weight of fish. In the North American system, there is a democracy of hunting-everyone has the right to hunt and fish, as long as they do so according to the management rules, which are set with stakeholder groups' input. Finally, the Pantanal fishery is recognized as a moving resource that can cross international borders, and is managed not only by local, state, and federal law, but also by a bilateral accord with Paraguay.26 Taken altogether. the fishery management system fulfills fully six of the seven tenets of NAM. The fishery management system does not perfectly fit NAM because fish in Brazil are marketable.

A wildlife management system in the Pantanal should follow the fishery example closely, with the exception of removing the ability to market non-fish wildlife products. Individuals, in order to hunt, could obtain a license for a nominal fee. This license would permit hunting of certain smaller species up to a certain weight limit. Larger species of fauna like deer and tapirs would require individual permits for taking, following the approach of wildlife agencies in North America. Each species would be regulated individually, and weight limits would be stringently controlled. A number of species would be closed by default, including, perhaps, deer and tapirs, until research can determine whether their numbers are high enough to allow small volumes of hunting. Like the fishery, methods of taking would also be controlled, with guns being restricted to those with valid licenses to possess firearms. No wildlife products would be saleable for profit.

Costs and benefits of applying the North American Model in the Pantanal

Applying the North American Model to the Pantanal does not necessarily open hunting at all, nor does it open a market for bushmeat. It does, however, require a reworking of the current blanket ban into a management system that could provide direct benefits to the people and the ecosystem. The possibility for people in the region now considered poachers to become licensed hunters could greatly improve conditions for low-income people who hunt small quantities of bushmeat primarily to feed their families. While those people currently may fit scheduled exceptions to the blanket ban, the burden under the current system is on them to prove that they do so. With typically little education and little access to professional legal aid, this is an uphill battle. At the same time, actively managing species and understanding population fluctuations instead of maintaining a blanket ban that is frequently broken would help locals make better risk assessments when they decide to break the law. This could directly benefit the ecosystem by helping individuals better understand which species are actually threatened, protecting those species.²⁷

Conservação Da Fauna Aquática Nos Cursos Dos Rios Limítrofes]).

²⁷ People are bad at assessing the environmental risks caused by their individual actions. Individual actions, taken collectively, can be harmful. *See*, Garrett Hardin, *The Tragedy of the Commons*, 162 Science 1243 (1968). If there is research on population densities, people will better understand the collective consequences of taking individuals of certain species, and will tend to take fewer threatened species than if there were no data. An analogy to the fishing rules exists here: there is a minimum size limit for fish to be taken. Many people violate this size limit, but usually not egregiously. Even though there is

 $^{^{\}rm 22}$ This is not allowed by the Hunting Code, which bans hunting altogether.

²³ See, e.g., Lei No. 9.096, *infra*. The fishery is regulated differently than hunting of other animals in Brazil.

²⁴ Lei No. 9.096 de 16 de janeiro de 2009, DIÁRIO OFICIAL DO MATO GROSSO [DOMT] de 16.1.2009 (Braz.).

²⁵ Id

²⁶ Decreto No. 1.806, de 6 de fevereiro de 1996 (putting into effect a bilateral accord for the conservation of aquatic fauna in border rivers [Acordo Entre O Governo Da República Federativa Do Brasil E O Governo Da República Do Paraguai Para A

In addition to direct positive impacts of potentially reducing the number of bushmeat consumers needlessly prosecuted for feeding themselves, there are two potential add-on effects of introducing a management system into the region: (1) collaboration in enforcing statutes against more serious offenses (in terms of volume or in terms of targeting more endangered species);28 and (2) the possibility of utilizing rural-dwelling subsistence hunters to collect more comprehensive data sets on populations in the region. Relying too heavily on enforcement to promote compliance has created a rift between locals and environmental police,29 with police catching mainly subsistence hunters and not those hunters killing jaguars and other threatened species for sale on the black market. The potential to eliminate this rift by legalizing takings through a management agency could help in enforcing the laws against poachers that focus on more charismatic and threatened species. Likewise, the largely uneducated rural dwellers in the Pantanal are separated by social class and literacy from the elites conducting research at universities. There is minimal interaction between the two groups and minimal mutual understanding. Using licensed hunters to help collect data on animal movements and abundance potentially could benefit both researchers, by providing supplemental data, and locals, by helping them understand and build trust in scientific research.

Conclusions

Applying the North American Model to certain areas of the Global South is a low-risk proposal with numerous potential benefits. Implementing the model does not mean suddenly it will be open hunting season for all species—rather, species will be managed by scientific research, instead of people unknowingly shooting and killing opportunistically and in violation of existing blanket bans. The benefits of applying management, instead of blanket bans, far outweigh the only cost—the possibility that a change in model to a model wherein hunting could be

not perfect compliance with the size limits, people use the size limits as a recommendation, and generally do not take fish that are a lot smaller than that minimum (Shirley & Gore, *supra* at Note 29.).

permitted by science will increase noncompliance. The introduction of the model to the Global South could have significant positive impacts on environmental justice, providing indigent rural dwelling people with the ability to presumptively hunt legally, instead of having to prove that they fit into an exception of a blanket ban. Additionally, it would provide a better understanding of wildlife populations in conservation priority regions, permitting better management of those populations and thus reducing the risks of extinction into the future.

 b. The Seven Sisters Across the Seven Seas?: An Inquiry Into the Expansion of the North American Model of Wildlife Conservation Through the Case of Cecil the Lion

Christina Micakovic

"There can be no greater issue than that of conservation in this country[,]" declared President Theodore Roosevelt, spurring one of the greatest policy achievements of the United States of America to the world, and to Herself—the North American Model of Wildlife Conservation (Model).³⁰ This Model was designed with seven principles in mind to restore the dozens of near-extinct creatures such as bison, deer, elk, and moose that were commercially exploited by early settlers who believed these natural resources and wildlife to be inexhaustible, and did so by encouraging a strong "commitment that balances human needs with wildlife needs."³¹

This commitment to balance is founded on what many refer to as the Seven Sisters, which include:

- 1. Wildlife is held in the public trust by the State governments as our stewards.
- 2. A Prohibition on commerce in dead wildlife prohibits the commercial hunting and sale of wildlife or their parts.

time-rethink-north-american-model-wildlifeconservation#page-2. (last visited Oct. 25, 2017).; The North American Wildlife Conservation Model, ROCKY MOUNTAIN ELK FOUND.,

http://www.rmef.org/Conservation/HuntingIsConservation/NorthAmericanWildlifeConservationModel.aspx. (last visited Oct. 25, 2017).

³¹ History of the Boone and Crockett Club, BOONE AND CROCKETT CLUB, http://www.boone-crockett.org/about/about history.asp?area=about. (last visited Oct. 25, 2017).

²⁸ This is termed "guardianship" in the criminological literature.

²⁹ Ethan A. Shirley & Meredith L. Gore, Exploring Compliance with Fisheries Rules in the Brazilian Pantanal (2017) (unpublished poster presentation at International Conference of Conservation Biology in Cartagena, Colombia.)

³⁰ Steve Wagner, *Is it Time to Rethink the North American Model of Wildlife Conservation?* OUTDOOR LIFE (Jan. 28, 2016), https://www.outdoorlife.com/articles/hunting/2016/01/it-

- The allocation of wildlife is by democratic rule of law, whereby all citizens have the opportunity and responsibility to contribute to wildlife conservation laws and systems.
- Opportunity to hunt exists for every citizen. regardless of economic or social status.
- Non-frivolous use of wildlife allows the hunting and killing of wildlife only for legitimate purposes such as protection for self and property and sustenance.
- The commitment to wildlife as an international resources acknowledges that wildlife knows no boundaries as many creatures freely migrate across the borders of states, countries, and continents and thus, require management by international treaties, laws, and communication to maintain sustainably.
- Natural resources and wildlife are managed with valid science.32

Inquiries have arisen into the applicability and expansion of these Seven Sisters as in countries experiencing consequences from inadequate balancing of human and wildlife needs, such as Tanzania, Kenya, Zambia, Botswana, Namibia, and Zimbabwe most recently, with the death of Cecil the lion and his offspring Xanda.33

The consequences in the case of Cecil and Xanda, in comparison to the effects the Model would likely have produced, provide an accurate illustration of why inquiries into the Model have arisen as "[g]lobal outrage over the death of Cecil the lion has led to calls for a ban on trophy hunting" while in certain places like Namibia, Tanzania, and Kenya where those bans have occurred "more than half of the community-owned conservancies (covering 20 percent of the country) have collapsed because revenue from non-hunting sources [] is not enough to keep them viable" and "[h]ungry bellies are fed with illegal bushmeat

and the armed poaching gangs have moved in" thus, "[t]he bad old days have returned, and wildlife is worth more dead than alive."34

Xanda the Lion

The case of Cecil's death by crossbow on July 1, 2015 and his following angst for another eleven hours before dying by reportedly being shot again outside his home in Hwange National Park, and Xanda's death two years later in almost exactly the same spot and manner demonstrated the principle of wildlife as an international resource by sparking the global community's interest and a controversy among animal rights activists and conservationists about the ethics and impacts of hunting, and trophy hunting in particular.35 But Dr. Rosie Cooney of the Sustainable Use and Livelihoods Group of the International Union for Conservation of Nature (IUCN) illustrates why applying the Model internationally may be an efficient and integral solution in contemporary times:

³² The North American Model of Wildlife Conservation, Sportsmen, and the Boone and Crockett Club, BOONE AND CROCKETT CLUB, http://www.boone crockett.org/about/about boldstatements.asp?area=about. (last visited Oct. 25, 2017).; See The North American Wildlife Conservation Model, supra note 30.

³³ Dr. Rosie Cooney, RIP Cecil the lion—what will be his legacy? And who should decide?, INT'L INST. FOR ENV'T AND DEV. (July 31, 2015), https://www.iied.org/rip-cecil-lion-what-will-be-hislegacy-who-should-decide. (last visited Oct. 27, 2017).

³⁴ *Id*.

³⁵ Rachel Bale, Cecil the Lion: Charges Dropped Against Professional Hunter, NAT'L GEOGRAPHIC (Nov. 11, 2016), https://news.nationalgeographic.com/2016/11/wildlife-watchcecil-lion-hunter-charges-dropped/. (last visited Oct. 25, 2017); Kara Fox & Briana Duggan, Two Years After Cecil the lion's death, son Xanda killed by game hunter, CNN WORLD+ (July 21, 2017, 11:05AM),

http://www.cnn.com/2017/07/21/africa/cecil-the-lion-cubxanda-killed-game-hunter/index.html. (last visited Oct. 25, 2017).

Communities are angry—they were never asked by the outraged what they thought about this. Few journalists or social media activists ever reflected their side of the story. Their right to make decisions for themselves has been expropriated by foreign people, who are not accountable or responsible for living with wildlife.³⁶

These sentiments are consequences of the extensive and devastating effects of an imbalance or neglect in weighing the needs of wildlife and humans on communities all over the continent of Africa who do not have the benefit of living in a country that operates on the Model or experiencing its ingenuity as it would have taken into account factors including that "[t]he Zimbabwe Parks and Wildlife Management Authority, responsible for managing this park, derived most of its income for wildlife conservation across the country from [legal] trophy hunting...now [it is] in in trouble...and the rangers are ill equipped to cope."37

Unfortunate effects such as these are results of many in the international community who do not know of the Seven Sisters and though they carried forward the principle of international resources and the corresponding notion that "intricate nature of ecosystems and biotic communities, of which all wildlife and man belong," is a world-wide phenomenon and all occurrences within it produce effects in all other parts, they neglected to balance needs as the Model encourages (e.g., allocation of wildlife by democratic rule, and opportunity to hunt for all.)38 the Model would account for the fact that funds from very limited, but legal, trophy hunting permitted by the government of Zimbabwe and other countries is "spent by communities on schools, healthcare, roads, training, and on employing 530 game guards to protect their wildlife" and that "communal conservancies have been responsible for dramatic increases in wildlife outside of national parks, including elephant, lion and black rhino over the last 20 vears...."39

Partly in response to consequences like these, many acknowledge that the United States is unique in its

conservation and natural resource management efforts and that its Model has "survived [] decades of evolution.... and still contains wisdom that transcends many issues of todav...." and may even transcend international boundaries.⁴⁰ Cecil is only one example where the Seven Sisters would likely have created a more balanced and efficient approach to solving the problem of illegal trophy hunting, as well as issues of hunger and crop management arising from the prohibition on trophy hunting. These effects would likely have come about through considering the voice of the communities and those within them that trophy-hunted themselves or acted as guides or professional hunters, creating enforcement mechanisms or strengthening enforcement of the country's current permit system, , allowing the citizens of the communities to have a voice in enforcing the laws that govern their country's wildlife when the government does not adequately respond; and ensuring that there is no commercial gain in selling the parts of a lion as a trophy if that is what scientific management and non-frivolous use determine would be best for conservation.

The Seven Sisters are not only applicable to wildlife, but also to management of the land and other natural resources.⁴¹ Considering the intricate nature of our ecosystem and our reliance on each component operating as it should, the Model's principle of scientific management would have provided that extinction by hunting, or prohibition of hunting, will have effects far broader than simply allowing more lions to die or live, with regard to hunger as well as wildlife crop damage.

Cecil's case provides an apt illustration of the capabilities and ingenuity of the North American Model by acknowledging its main purpose—balancing human and wildlife needs with a "common-sense, business-like approach to managing natural resources" and "a powerful love of wildlife" that encourages us to "mourn Cecil, but be careful what we wish for."

³⁶ Cooney, supra note 33.

³⁷ Id.

³⁸ See The North American Model of Wildlife Conservation, Sportsmen, and the Boone and Crockett Club, supra note 32.

³⁹ Cooney, supra note 33.

⁴⁰ Wagner, supra note 30.

⁴¹ See The North American Wildlife Conservation Model, supra note 30.

⁴² See History of the Boone and Crockett Club, supra note 31; Cooney, supra note 33.

I. THE PUBLIC TRUST DOCTRINE

a. Invasive Species in the United StatesMitchell Kavanagh

An invasive species is a species that, when introduced into an environment to which it is not native, causes or is likely to cause economic harm, environmental harm, or harm to

human health.43 Most nonnative species in the United States are not invasive and actually provide significant benefits to Americansthis includes the majority of the nation's food and fiber sources (e.g., apples, lettuce, wheat).44 While only a small percentage of nonnative species are considered invasive, the amount of damage these species can do is colossal; invasive species limit land use, cause over \$120 billion per year in economic losses (both from the costs of damage and the costs of managing the situation), and their presence endangers nearly half of the United States' native species.45

Some invasive species were brought into the United States intentionally, while some were brought in as pets or decorative displays, and others are descended from pets that escaped or were released into the wild by humans.⁴⁶ Whichever the

method, the consequences of these species entering the United States have been drastic and experienced by Americans in every area of the country. Many animals, like the Burmese python and Nile crocodile, have found their

way from their native homes in Asia and Africa to the Florida Everglades, where they disrupt the ecological order and threaten native predators who are forced to compete with them for food.⁴⁷ In the Atlantic and Midwest, the emerald ash borer, native to China, is decimating thousands of American trees by eating their matter until the trees perish.⁴⁸ A form of killer algae off the coast of California poses a threat to the natural vegetation by taking over as the dominant plant life wherever it establishes itself.⁴⁹

In response to the growing number of invasive species in the country, the U.S. federal government took legal measures to address the problem. The Lacey Act of 1900, the first federal law protecting wildlife, prohibited trade in fish, wildlife, and plants illegally trafficked under any federal, state, or foreign wildlife law.50 The Lacey Act was later amended with its shipment clause. which contained an "injurious species provision" prohibiting the importation into the United States of certain nonnative species that could cause harm to humans.⁵¹ Title 18 of the Lacey Act was intended to protect American wildlife and prevent dangerous and harmful species from entering the country, and as a deterrent, it imposed fines or prison time on those who violated

the law.⁵² However, even with the shipment clause, the Lacey Act is limited, as the U.S. Court of Appeals for the D.C. Circuit recently held that it does not prohibit the importation or trade of invasive species between the

⁴³ What Are Invasive Species, and Why Should We Be Concerned About Them?, Extension (Oct. 22, 2015), http://articles.extension.org/pages/62270/what-are-invasive-species-and-why-should-we-be-concerned-about-them.

⁴⁴ *Id*.

⁴⁵ *Id*.

⁴⁶ Invasive Species, National Geographic, https://www.nationalgeographic.org/encyclopedia/invasive-species/.

⁴⁷ Burmese Pythons, U.S. National Park Services (Feb. 7, 2017), https://www.nps.gov/ever/learn/nature/burmesepythonsintro. htm; Darryl Fears, Aggressive, Man-Eating Crocodiles Lived in the Everglades for Years, The Washington Post (May 20, 2016), https://www.washingtonpost.com/news/energy-environment/wp/2016/05/20/aggressive-man-eating-nile-

crocodiles-lived-in-the-everglades-foryears/?utm term=.8f4fa35a81ca.

⁴⁸ Julian Spector, *Local Governments Are Paying the Price for Global Trade's Effect on Trees*, CityLab (Apr. 25, 2016), https://www.citylab.com/equity/2016/04/emerald-ash-borer-midwest-china-trade-shipping-crates-ash-trees/478866/.

⁴⁹ Killer Algae Found in Southern California, California Environment Protective Agency (2017), https://www.waterboards.ca.gov/losangeles/water_issues/prog rams/water_quality_issues/killer_algae_article.shtml.

⁵⁰ 16 U.S.C.A. § 3372.

⁵¹ 18 U.S.C.A. § 42(a)(1) (West 2010).

⁵² 18 U.S.C.A. §42(b) (West 2010).

continental states and does not apply to species that are already within the country's borders.⁵³

To make up for what Title 18 of the Lacey Act lacks, a plethora of mechanisms have been proposed by individual states to combat invasive species. One of the ways that states are trying to rid themselves of invasive species is by introducing nonnative predators of those species into the wild in the hopes the predators kill them off.⁵⁴ The risk with this method is that there is no guarantee that the predators will only attack the invasive species and not become invasive themselves by attacking other plants or animals, making it a gamble for success or failure.⁵⁵

Another alternative, though indirect, is for state governments to educate the public on invasive species to prevent them from spreading. The Missouri Department of Conservation, for example, posts information on its website informing the public on how to prevent the importation of zebra mussels into its bodies of water from ones outside of the state.⁵⁶ Finally, some states have treated certain invasive species like an invading army and have made it legal for them to be hunted year-round.⁵⁷ In Maryland, for example, the nutria—an large rodent that destroys natural habitat and costs local governments millions of dollars each year—is permitted to be hunted year-round with the purpose of eradication.⁵⁸ This measure led to the species being removed in many areas of the state.⁵⁹

Different methods may work for different species, but as the government and public become aware, educated, and work together, they can address the problems for species who are already within their borders and find the appropriate tools necessary to eliminate them.

b. National Monuments and the Antiquities Act: Does the President Have the Authority to Reduce or Eliminate National Monuments?

Summer Moukalled

On December 4, 2017 President Donald Trump issued a proclamation modifying the Bears Ears and Grand Staircase-Escalante National Monuments.⁶⁰ These proclamations would reduce the boundaries of Bears Ears and Grand Staircase-Escalante, but the lands would remain under federal control.⁶¹ President Trump cited the power conferred by the Antiquities Act⁶², which quickly became a contentious topic of discussion.

A Brief History of the Antiquities Act

The Antiquities Act was passed in 1906 and authorizes the president to create national monuments from Federal lands to protect areas that are considered objects of historic or scientific interest. ⁶³ National monuments are protected areas carved out of land owned or controlled by the Federal government, and each has different authorized and prohibited uses listed in its proclamation. ⁶⁴ Congress has conferred the authority to designate monuments on Federal land to the Executive Branch pursuant to its authority under the Property Clause of the U.S. Constitution, which states that "Congress shall have the Power to dispose of and make all needful Rules and Regulations respecting the Territory or other Property belonging to the United States."

The plain language of the Act allows the President to exercise broad authority in declaring Federal lands as national monuments, requiring that the boundaries of the land be confined to the smallest area compatible with the proper management and care of the objects to be protected. 66 The Antiquities Act has been used to designate monuments on Federal lands over 150 times. 67 President

⁵³ See U.S. Ass'n of Reptile Keepers, Inc. v. Zinke, 852 F.3d 1131 (D.C. Cir. 2017).

⁵⁴ Gregory Hladky, *Biological Predators Being Used To Attack Invasive Species Across Connecticut*, Hartford Courant (July 13, 2015), http://www.courant.com/news/connecticut/hc-invasive-biowars-ct-20150712-story.html.

⁵⁵ Id

⁵⁶ Zebra Mussel Control, Missouri Department of Conservation, https://mdc.mo.gov/wildlife/nuisance-problem-species/invasive-species/zebra-mussel-control.

⁵⁷ Invasive Species, supra note 46.

⁵⁸ *Id*.

⁵⁹ *Id*.

⁶⁰ Proclamation No. 9681, 82 Fed. Reg. 58,087 (Dec. 4, 2017);Proclamation No. 9682, 82 Fed. Reg. 58,089 (Dec. 4, 2017).

⁶¹ *Id*.

⁶² *Id*.

⁶³ 54 U.S.C.A § 320301 (West 2014).

⁶⁴ Monument Designation, THE WILDERNESS SOCIETY, http://wilderness.org/monument-designation (last visited Dec. 7, 2017).

⁶⁵ U.S. Const. art IV, § 3, cl. 2.

⁶⁶ Mark Squillace, *The Monumental Legacy of the Antiquities Act of 1906*, 37 Ga. L. REV. 473, 486 (2003).

⁶⁷ John D. Leshy and Mark Squillace, *The Endangered Antiquities Act*, THE NEW YORK TIMES (Mar. 31, 2017),



Barack Obama invoked the Antiquities Act to protect over 550 million acres of land- more acreage than any other president.68 This use of the Antiquities Act stands in contrast to the Trump administration's perception of the Act. In early 2017, President Trump issued an Executive Order reviewing designations of monuments under the Antiquities Act.69 The Executive Order required the Secretary of the Interior to conduct a review of all designations made under the Act since January 1, 1996 covering more than 100,000 acres, expansions enlarging a monument to over 100,000 acres, or any that the Secretary determines were made without adequate public outreach and coordination with relevant stakeholders.70 The purpose of reviewing the designations was to ensure that designations that are not made in accordance with the objectives of the Act and result from lack of public outreach and coordination with the affected state(s) will be shrunk or eliminated.⁷¹ Following this executive order, Secretary of the Interior Ryan Zinke recommended

https://www.nytimes.com/2017/03/31/opinion/the-endangered-antiquities-act.html

making changes to ten national monuments, including Bears Ears and Grand Staircase-Escalante.⁷²

Background on Bears Ears National Monument

Bears Ears was designated as a national monument in December 2016 by President Obama. Months prior to this designation, Utah Wildlife Board members joined the statewide opposition to the proposed monument. The State was concerned that the designation, and the possibility of increased environmental regulations, would affect fishing, hunting, trapping, and would put the population of wildlife at risk.⁷³ Furthermore, those living in the region were worried about how the Federal government would find the resources to provide adequate staffing and maintain the land because they are so far removed from the region.⁷⁴ Locals are also concerned about so much of the state being public land, which severely reduces the amount of property taxes that the state can raise.⁷⁵

Ultimately, monument designations exemplify the feeling of many local residents and employees that the lands would be better protected and preserved by State officials. ⁷⁶ On one hand, Utah argued that Bears Ears was too intrusive on the local community and proposed that Bears Ears be reduced to a tenth of its current size. ⁷⁷ On the other hand, conservation groups and Native American tribes argued that the designation was integral to protecting the culturally important area of Bears Ears. A number of conservationists advocated for President Obama to designate the new monument, arguing that it would provide greater protection to the area and its cultural and historical sites. ⁷⁸ Those who advocated for the

https://sutherlandinstitute.org/hurst-family-opposes-bears-ears-national-monument/ (last visited Dec. 7, 2017)

⁶⁸ CAROL HARDY VINCENT, CONG. RESEARCH SERV., R41330, NATIONAL MONUMENTS AND THE ANTIQUITIES ACT 4 (2016).

⁶⁹ Exec. Order No. 13,792, 82 Fed. Reg. 20,429 (Apr. 26, 2017).⁷⁰ Id.

⁷¹ *Id*.

⁷² Juliet Trukewitz, Nadja Popovich and Matt McCann, *Here Are the 10 National Monuments the Interior Department Wants to Shrink or Modify*, The New York Times (Sept. 10, 2017),

https://www.nytimes.com/interactive/2017/09/18/climate/bears-ears-changes-monuments.html.

⁷³ Brady McCombs, *Utah wildlife board speaks out against Bears Ears Monument*, The Salt Lake City Tribune (Aug. 18, 2016).

 $[\]label{eq:http://archive.sltrib.com/article.php?id=4249750&itype=CMSI \underline{D}.}$

⁷⁴ The Hurst Family Opposes the Bears Ears National Monument, SUTHERLAND INSTITUTE,

⁷⁵ Josh Ewing, *Bears Ears: Why not?*, SNEWS, https://www.snewsnet.com/news/resistance-to-bears-ears-national-monument-outdoor-industry-response (May 26, 2017).

⁷⁷ Brian Maffly, *Utah Quietly tells feds: Trim Bears Ears monument by 90 percent*, The Salt Lake Tribune (Sept. 17, 2017).

http://www.sltrib.com/news/environment/2017/09/17/utahquietly-tells-feds-trim-bears-ears-monument-by-90-percent/.

⁷⁸ Robinson Meyer, *Obama's Environmental Legacy, in Two Buttes*, The Atlantic (Dec. 30, 2016),

https://www.theatlantic.com/science/archive/2016/12/obamas-environmental-legacy-in-two-buttes/511889/.

designation were worried about drilling, pipelines, and other sources of environmental degradation.⁷⁹ Despite succeeding on the designation with the Obama administration, Utah's vision was ultimately shared with Interior Secretary Ryan Zinke, as well as President Trump in 2017, and the monument was reduced from 1.35 million acres to 228,784.⁸⁰

Background on Grand Staircase- Escalante National Monument

Grand Staircase-Escalante was designated in 1996 by President Bill Clinton.⁸¹ Proclamation 6920 cites the area as rich with fossils, paleontological sites, unique geological formations and landscapes, historic objects, and a number of animal and plant species.⁸² Proponents of the designation state that it has allowed for various scientific discoveries to take place on the land and has led to an increase in economic growth.⁸³

President Trump amended Proclamation 6920 to reduce the boundaries of the monument to almost half of its original size⁸⁴, limiting them to the "smallest area compatible with the proper care and management of the objects to be protected."⁸⁵

Controversies Surrounding the Presidential Proclamations

Though the fact that the Antiquities Act does not explicitly empower the President to reduce the size of monuments, past presidents have done so 18 times.⁸⁶ The issue as to whether the President has the authority to reduce the size of monument lands has yet to be addressed by the courts, but a number of environmental groups have filed suit in

⁷⁹ BEARS EARS INTER-TRIBAL COALITION, A NATIVE PERSPECTIVE: ON AMERICA'S MOST SIGNIFICANT UNPROTECTED CULTURAL LANDSCAPE 10 http://www.bearsearscoalition.org/wp-content/uploads/2016/03/Bears-Ears-bro.sm .pdf (Mar. 2016).

⁸¹ Michelle Nijhuis, *After Bears Ears and Grand Staircase-Escalante, Where will Trump's War on Public Lands End?*, The New Yorker (Dec. 6, 2016),

https://www.newyorker.com/tech/elements/after-bears-ears-and-grand-staircase-escalante-where-will-trumps-war-on-public-lands-end.

82 Proclamation No. 9682, 82 Fed. Reg. 58,089 (Dec. 4, 2017).

⁸³ HEADWATERS ECONOMICS, GRAND STAIRCASE ESCALANTE NATIONAL MONUMENT: A SUMMARY OF ECONOMIC PERFORMANCE IN THE SURROUNDING COMMUNITIES 1(2017) https://headwaterseconomics.org/wp-

content/uploads/Escalante.pdf.

response to President Trump's decision⁸⁷, alleging that the President exceeded his power by reducing the size of the monument.⁸⁸



Those challenging the action state that the Antiquities Act empowers the President to designate new monuments, or expand existing ones, but that Congress retained the power to revoke designations. The limited language of the Antiquities Act differs from the language used to delegate power to the Executive Branch by other laws, such as the Pickett Act of 1910. The Pickett Act contained broader language that allows a President to withdraw and reserve public lands, "until revoked by him or an Act of Congress." Thus, because the Antiquities Act does not contain such explicit language giving the President the power to reduce the size of a national monument, those opposed to the decision argue that the president does not have the authority to do so. Proponents also cite the

https://www.nytimes.com/interactive/2017/12/08/climate/bears-ears-monument-trump.html.

⁸⁰ *Id*.

⁸⁴ *Id*.

⁸⁵ Id.

⁸⁶ *Id*.

⁸⁷ John Hudak, *President Trump has the power to shrink national monuments*, BROOKINGS (Dec. 7, 2017), https://www.brookings.edu/blog/fixgov/2017/12/07/president-trump-has-the-power-to-shrink-national-monuments/.

⁸⁸ President Trump's National Monument Cuts Draw 5th Lawsuit, U.S. News, https://www.usnews.com/news/best-states/utah/articles/2017-12-07/president-trumps-national-monument-cuts-draw-5th-lawsuit (Dec. 7, 2017).

⁸⁹ Mark Squillace, *Presidents Lack the Authority to Abolish or Diminish National Monuments*, 103 VA. L. REV. 55, 58. (2017).

⁹⁰ *Id*.

 $^{^{91}}$ Pickett Act, Pub. L. No. 303, 36 Stat. 847 (1910) (repealed 1976).

⁹² Nadja Popovich, Bears Ears National Monument Is Shrinking. Here's What Is Being Cut., THE NEW YORK TIMES (Dec. 8, 2017).

Federal Land Policy and Management Act's (FLPMA) removal of a number of executive authorities that gave the president the power to withdraw lands. Those who argue that the President does not have the authority to withdraw lands cite to the legislative history of the act, claiming that it reserves to Congress the exclusive right to modify or revoke national monuments.⁹³

However, many argue that the president has the implicit authority to revoke or reduce monuments. Proponents of that view argue that a general reliance on trust law would suggest that a president has an interest in the designations that a predecessor creates. Therefore, he has a duty to manage lands, issue and enforce regulations, protect, and adjust the borders of these monuments with subsequent proclamations. ⁹⁴ Furthermore, since the Antiquities Act states that the limits of the monuments "shall be confined to the smallest area", some argue that the president is required by law to reduce monuments to reasonable perimeters by reviewing predecessor's decisions and mistakes they may have made. ⁹⁵

While there are disagreements regarding monument designations, the diminishments of these lands, and presidential authority to modify or revoke such designations, it is likely that the courts will have an answer to this question soon given the increasing number of lawsuits filed in response to the proclamations.

c. Case briefs

Jessica Rundle

1. Brakke v. Iowa Dep't of Natural Resources

Since the 1990s, plaintiffs have owned a white-tailed deerbreeding farm in Clear Lake, Iowa⁹⁶, as well as the Pine Ridge Hunting Lodge, which provides an "end market" for

the deer raised on their farm.97 The lodge was licensed as a white-tailed deer-hunting preserve, and most of the deer came from the Brakkes' farm.98 The Brakkes submitted samples from all deer harvested from their hunting lodge, as required by Iowa law, and in 2012 were informed a deer tested positive for CWD, the first in Iowa.99 The Iowa Department of Agriculture and Land Stewardship (IDALS) tested several of the farm's deer with the Brakkes' permission.¹⁰⁰ After one deer tested positive for CWD, IDLAS gave the Brakkes a quarantine notice.101 In September 2012, the Brakkes and the Iowa Department of Natural Resources (DNR) signed an agreement whereby the Brakkes could still "carry out planned hunts" until December 25th of that year, but were required to, jointly with the DNR, construct an electric fence on the property of the lodge. 102 DNR agreed to conduct inspections weekly, then submit repairs to the Brakkes, who would fix defects within 24 hours. 103 All deer and elk at the lodge would be depopulated and disposed of at the Brakkes' expense. 104 The facility was then to be cleaned and disinfected, and a future operational plan was to be developed cooperatively.105 The agreement was carried out except for the planning portion.¹⁰⁶

In April 2013, the Brakkes sent DNR a letter stating compliance with the requirements of the agreement, and announced that the lodge would no longer operate as a white-tailed deer-hunting preserve.¹⁰⁷ In June DNR noticed that the lodge's gates were open and the fence was damaged.¹⁰⁸ DNR issued an emergency order to prevent further damage and compel repair.¹⁰⁹ Within days, the Brakkes closed the gates and made repairs, though a wild deer was soon spotted within the property.¹¹⁰ The Brakkes appealed the order, asserting it violated both their Iowa and U.S. constitutional rights because DNR did not have jurisdiction over the lodge after it ceased to be a hunting

⁹³ Squillace, supra note 89, at 59-60.

⁹⁴ John Yoo and Todd Gaziano, Presidential Authority to Revoke or Reduce National Monument Designations, American Enterprise Institute (Mar. 2017).

⁹⁵ John Hudak, *President Trump has the power to shrink national monuments*, BROOKINGS (Dec. 7, 2017), https://www.brookings.edu/blog/fixgov/2017/12/07/president-trump-has-the-power-to-shrink-national-monuments/.

⁹⁶ Brakke v. Iowa Dep't of Nat. Res., 897 N.W.2d 522, 526 (Iowa 2017).

⁹⁷ *Id*.

⁹⁸ *Id.* at 526-27.

⁹⁹ Id. at 527.

¹⁰⁰ Id.

¹⁰¹ *Id*.

¹⁰² *Id*.

¹⁰³ *Id*.

¹⁰⁴ *Id*.

¹⁰⁵ *Id*.

¹⁰⁶ Id. at 527-28.

¹⁰⁷ Id. at 528.

¹⁰⁸ *Id*.

¹⁰⁹ *Id*.

¹¹⁰ *Id*.

preserve, the quarantine and order constituted an unconstitutional taking without compensation, and DNR's actions were "an abuse of discretion." ¹¹¹

In February 2014, an administrative law judge issued a decision saying that DNR did not have jurisdiction for the emergency order, and could quarantine diseased deer but not land.¹¹² DNR appealed, and the Iowa Natural Resources Commission (NRC) found that statutory law gave DNR the duty to prevent CWD from spreading and a quarantine of the Brakke's land would be required to prevent CWD's spread.¹¹³ The Brakkes appealed and the district court found that DNR did not have statutory authority to quarantine the lodge (only the deer), legislative intent did not demonstrate that DNR had authority to quarantine land potentially infected with CWD, and the Brakkes did not suffer a taking.¹¹⁴ DNR appealed and the Brakkes cross-appealed.¹¹⁵

The court interpreted "'quarantine" in Iowa Code § 484C.12-followed by "diseased preserve whitetail"-to signify that DNR has authority to quarantine diseased white-tailed deer on a preserve, not healthy deer, though DNR argued this reading would produce "absurd" results.116 Examining the absurdity doctrine, the court ruled that reading the statute with ordinary meaning would not produce absurd results, and that DNR did not have statutory authority to expand "quarantine" to include the fencing requirement and did not have the authority to issue the emergency order.117 The court ruled that the quarantine was not a taking. The value of the land decreased by 16.4%, but the court held that the percentage did not fall under a taking because the land has other valuable uses.118 The court also concluded that investors for a hunting preserve would understand that CWD in a hunting preserve could lead to government intervention to stop CWD's spread, and "investment-backed expectations" were not "dramatically upset."119 The court affirmed the

judgment of the district court that DNR did not have statutory authority to impose a quarantine with an emergency order, and DNR's actions did not constitute a taking under the U.S. or Iowa constitutions.¹²⁰



2. U.S. v. Hinkson

Roy P. Hinkson was nearly 70, a veteran, and never before faced criminal charges. Hinkson owns a camp 200 feet from his property on Hiawatha National Forest Land. Land. Parety a family friend of the Hinksons, owned a 40-acre piece of land surrounded by Hiawatha National Forest, where Repp built a hunting cabin mistakenly reaching into Hiawatha National Forest. At this time, Hinkson had no ownership interest in the property, though he often used it during deer season. Land Hinkson, a fire destroyed the original cabin. During cleanup, members of the U.S. Forest Service (USFS) assisted in clearing the damage. USFS members asked Repp to rebuild the cabin twenty-five feet east of the former site to avoid entering National Forest land. In 1978, the cabin was rebuilt following those directions.

¹¹¹ *Id*.

¹¹² *Id*. at 529.

¹¹³ *Id*.

¹¹⁴ *Id*.

¹¹⁵ *Id*.

¹¹⁶ *Id.* at 534 (citing Iowa Code section 484C.12(1)(2013)).

¹¹⁷ *Id*. at 541.

¹¹⁸ Id. at 549.

¹¹⁹ *Id*.

¹²⁰ Id. at 526, 551.

 $^{^{121}}$ United States v. Hinkson, 2017 U.S. Dist. LEXIS 90409, 1, (W.D. Mich. June 13, 2017).

¹²² *Id*. at 1-2.

¹²³ *Id*. at 2.

¹²⁴ *Id*.

 $^{^{125}}$ Id.

¹²⁶ *Id*.

¹²⁷ Id. at 3.

¹²⁸ *Id*.

In June 2014, a National Forest officer noticed on Google Earth that the cabin was seemingly on National Forest System land.¹²⁹ Through the use of GPS trackers and a survey, the officer was able to confirm that the cabin was in the Hiawatha National Forest.¹³⁰ On November 15, 2014, the opening day of deer hunting season, USFS and Michigan Department of Natural Resources (DNR) officers conducted a "sting-like operation" to bring hunters back to the camp and informed them the camp's location was part of the National Forest System.¹³¹ Hinkson was issued two CVB tickets; one ticket charged him with a "Camp Constructed on NFSL".¹³² The hunting party removed most temporary structures on the land but left the cabin.¹³³

In order for Hinkson to have violated 36 C.F.R. §261.10(a), he must have "constructed, placed, or maintained the camp," the camp needed to be located on National Forest System lands, and the use must have been unauthorized. 134 The issue with the violation is whether the need to prove a mens rea is implied. Hinkson argued that the mental portion is required to prevent "criminaliz[ing]...apparently innocent conduct," while the government asserted that a mens rea is not necessary for the offense. 135 In the Sixth Circuit strict liability crimes, or crimes without a mens rea requirement, are disfavored, but an offense does not require a mens rea requirement if it is a public welfare offense. 136 The U.S. District Court for the Western District of Michigan noted that, in the Sixth Circuit, whether § 261.10(a) requires a mens rea remains unanswered. 137 Other courts have addressed the issue and ruled that a violation of § 261.10(a) is a public welfare offense, which makes the offense a strict liability offense. 138 The court states that the statute does not specify a *mens rea* portion, and 36 C.F.R. § 261.1(c), which governs § 261.10(a), specifies that if intent is not mentioned as a requirement in an offense, it is not an element of the offense. 139

The court refused to convict Hinkson because Hinkson was unaware he was violating the regulation, and the cabin was placed in that location because of the USFS members' suggestion.140 The court concluded that Hinkson's offense was not a "public welfare offense," and the government failed to prove beyond a reasonable doubt that Hinkson violated §261.10(a)'s first requirement, that Hinkson must have "constructed, placed, or maintained the camp," 141 The court points out Hinkson did not build the camp, and part of the ticket—"possessing a permanent camp/structure on NFSL, without a permit"-does not violate 36 C.F.R. 261.10(a), which only prohibits "constructing, placing, or maintaining."142 The government attempted to show that Hinkson "maintained" the structure, though the court rejected the argument, saying that Hinkson was found in a deer hunting blind, not the cabin, he was not "given the chance to leave," and he cooperated when the ticket was written.143 Hinkson acquired a property interest in the cabin in 2013, though no evidence was presented that he paid taxes on the property, the evidence the property was maintained was discredited, and the court held that "maintaining" and "occupying or using" do not hold the same meaning.144 The court found that the government did not prove its case beyond a reasonable doubt, and found Hinkson not guilty.145

3. WildEarth Guardians v. U.S. Dep't of Justice

Endangered Species Act (ESA) section 11, 16 U.S.C. § 1540, provides penalties for "any person who knowingly violates any provision, and any provision of any regulation, issued under the [ESA]," including ESA section 9's prohibitions against "taking" an ESA-listed species, 16 U.S.C. § 1538, defined as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct."¹⁴⁶

¹²⁹ Id. at 3-4.

¹³⁰ *Id*. at 4.

¹³¹ *Id*.

¹³² *Id*. at 5.

¹³³ *Id*.

¹³⁴ *Id.* at 5-6.

¹³⁵ *Id*. at 6.

¹³⁶ *Id*.

¹³⁷ Id. at 8.

¹³⁸ Id. at 9.

¹³⁹ *Id.* (citing 36 C.F.R. § 261.1(c)).

¹⁴⁰ *Id*. at 11.

¹⁴¹ *Id*. at 12.

¹⁴² *Id*. at 13.

¹⁴³ *Id.* at 13, 16.

¹⁴⁴ *Id*. at 16-17.

¹⁴⁵ *Id*. at 19.

¹⁴⁶ WildEarth Guardians v. United States DOJ, 2017 U.S. Dist. Lexis 128442 (D. Ariz. 2017), 4 (citing 16 U.S.C. § 1532(19)).

In WildEarth Guardians v. U.S. Dep't of Justice, plaintiffs sought to overturn the U.S. Department of Justice's (DOJ) application of the rule developed in United States v McKittrick, 142 F.3d 1170 (9th Cir. 1998), in which the Ninth Circuit determined that the knowledge portion of a "taking" of an endangered species was general instead of specific and that the intent to shoot an animal, regardless of whether the animal shot is known to be endangered, satisfies the requirement for mens rea (criminal intent). 147 The Ninth Circuit goes on to clarify the instruction, saying that it "requires proof that the defendant knew the biological species taken . . . but need not know shooting [it] is illegal." 148

In *McKittrick*, the defendant encountered a grey wolf in Red Lodge, Montana. He shot, skinned, and decapitated the wolf, and transported its hide back to his home. He was then charged in part with "taking the wolf in violation of 16 U.S.C. §§ 1538(a)(1)(G), 1540 (b)(1). Login McKittrick asserted in his defense that his actions did not fulfill the "knowing" aspect of the crime because he was unaware that he was shooting a grey wolf. The Ninth Circuit affirmed McKittrick's sentence, so pointing out that with regard to intent that in the Endangered Species Act, section 11 requires only that McKittrick knew he was shooting an animal, and that the animal turned out to be a protected gray wolf." 154

The issue in this case is whether DOJ's implementation of the *McKittrick* rule, requiring the government to prove that defendant knew the biological identity of the species taken despite the Ninth Circuit's holding that the *mens rea* for a taking of an endangered animal under the ESA is general instead of specific—is valid.¹⁵⁵ Plaintiffs argued that this version of the *McKittrick* policy was an *ultra vires* abuse of discretion and that DOJ was outside its statutory authority when it redefined the *mens rea* "knowingly" portion of the offense to include specific intent.¹⁵⁶

Here the court ruled that DOJ's implementation of *McKittrick* was "arbitrary and capricious, an abuse of discretion and otherwise not in accordance with law in violation of the APA," and granted summary judgment for plaintiffs. ¹⁵⁷ However, the court found that, solely for the purpose of ESA section 7, the Mexican gray wolf is treated as proposed to be listed, ¹⁵⁸ rather than a threatened species. ¹⁵⁹

Therefore the court denied summary judgment for plaintiffs to proceed under Section 7 as DOJ did not have a duty to consult with the U.S. Fish and Wildlife Service "to insure that the McKittrick policy was not likely to jeopardize the continued existence of the Mexican wolf." ¹⁶⁰

¹⁴⁷ Id. at 2.

¹⁴⁸ Id. at 52-53.

¹⁴⁹ United States v McKittrick, 142 F.3d 1170, 1172 (9th Cir. 1998).

¹⁵⁰ *Id.* at 1172.

¹⁵¹ *Id*.

¹⁵² Id. at 1173.

¹⁵³ Id. at 1179.

¹⁵⁴ *Id*. at 1177.

¹⁵⁵ *Id*. at 4.

¹⁵⁶ *Id.* at 4-5.

¹⁵⁷ WildEarth Guardians v. United States DOJ, at 1.

¹⁵⁸ The Mexican gray wolf is protected under the ESA. *Id.* at 4-5.

¹⁵⁹ Id. at 1-2.

¹⁶⁰ Id. at 2, 72-73.

II. PROHIBITION ON COMMERCE IN DEAD WILDLIFE

a. Chronic Wasting Disease

Christine Pattison

There is an epidemic sweeping the nation, but most people are unaware because the disease is not yet transferable to humans. Only cervids are susceptible to chronic wasting disease (CWD). The first case of CWD was documented in Colorado in 1967. Since then, CWD has been documented in 23 states and two Canadian provinces. To date, there is no known cure, and research has revealed little about the disease. This lack of knowledge has forced many states to implement emergency preventative measures, much to the discontent of hunters and breeders. The implementation of new regulations has caused an uproar in many hunting communities, and a few people have brought this issue to court.

What is Chronic Wasting Disease?

CWD is a contagious neurological disease affecting deer, elk, and moose. It causes degeneration of the brains of infected animals, resulting in emaciation, abnormal behavior, loss of bodily functions, and death. The disease is a transmissible spongiform encephalopathy (TSE) of mule deer, white-tailed deer, elk, moose and reindeer. Several variants of TSE diseases have affected domestic goats, sheep, and bovine for over 200 years.

The cause of CWD, and other TSE diseases in animals, is an abnormally folded prion protein, most commonly found in the central nervous system, which spreads to the peripheral nervous system, infecting meat, or muscle, of deer and elk. 166 Cases of CWD most commonly occur in adult animals, and the disease is progressive and fatality is

It is not known exactly how CWD is transmitted, but the infectious prion protein may be passed in feces, urine, or saliva. The infectious agents are extremely resistant in the environment, which means that transmission of the infectious agents may be through both direct and indirect contact.¹⁷⁰ Horizontal transmission of the agent causing CWD is a major mechanism of natural transmission. Nasal and oral inoculation are effective routes of transmission. Furthermore, the death of the infected host is not the death of the infectious tissue, and the CWD prions will enter the environment through shedding from diseased carcasses.¹⁷¹ Indirect environmental routes of CWD play a role in the transmission of the disease as well. The environment serves as a reservoir of CWD infectivity, and areas of concentrated prion infectivity form at areas of communal activity where shedding occurs.172 Furthermore, every animal that is part of the infected environment aids the spread of CWD, and so does the natural migration and dispersion of infected cervids. Given that deer ingest considerable amounts of soil, soil has also been hypothesized to pay a key role in the transmission. Inhalation of dust bound CWD prions may also represent a route of transmission.173

Death is necessary to definitively diagnose a diseased deer. To diagnose, a carcass undergoes a technique called immunohistochemistry, which is an examination of the brain for the characteristic microscopic spongiform lesions and/or accumulation of the CWD associated prion protein. There has been some research conducted for live-animal diagnostic tests, but most have been largely

definite.¹⁶⁷ Symptoms include rapid weight loss, excessive drinking and urination, drooling, and grinding of the teeth.¹⁶⁸ There are also distinct behavioral changes including decreased social interactions, lowering of the head, blank facial expressions, and repetitive walking in set patterns.¹⁶⁹

¹⁶¹ Saunders, Bartlet-Hunt, & Bartz, Occurrence, Transmission, and Zoonotic Potential of Chronic Wasting Disease, (March 2012),

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3309570/.

¹⁶² *Id*.

¹⁶³ CWD Alliance, *Chronic Wasting Disease*, http://cwd-info.org/faq/ (last visited Dec. 7, 2017).

¹⁶⁴ Deadly Animal Prion Disease Appears in Europe, Rachel Becker, http://www.nature.com/news/deadly-animal-prion-disease-appears-in-europe-1.19759 (April 18,2016).

¹⁶⁵ CWD Alliance, *Chronic Wasting Disease*, http://cwd-info.org/faq/ (last visited Dec. 7, 2017).

¹⁶⁶ *Id*.

¹⁶⁷ CWD Alliance, *Chronic Wasting Disease*, http://cwd-info.org/faq/ (last visited Dec. 7, 2017).

¹⁶⁸ *Id*.

¹⁶⁹ *Id*.

¹⁷⁰ Id.

¹⁷¹ Saunders, Bartlet-Hunt, & Bartz, Occurrence, Transmission, and Zoonotic Potential of Chronic Wasting Disease, (March 2012).

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3309570/.

¹⁷² *Id*.

¹⁷³ *Id*.

¹⁷⁴ CWD Alliance, *Chronic Wasting Disease*, http://cwd-info.org/faq/ (last visited Dec. 7, 2017).

unsuccessful. Some tests have been developed that utilize tissues from an animals' tonsils, but that may only be viable in deer. In sum, the only way to diagnose a cervid, is to kill it and examine it, which causes many issues in preventing the spread of this epidemic.

Preventative Measures

It is difficult to create preventative measures when much about the disease remains unknown. And given the current extent of CWD, and the lack of a cure, complete eradication is not feasible. However, management tactics have been researched and implemented. Controlling the spread of CWD by human action is a more attainable goal than complete eradication. Specifically, hunting regulations have been put in place to prevent the spread of the disease. Many states have implemented polices such as banning baiting and enforcing appropriate disposal of the carcasses of animals with suspected CWD. Two states in particular, Michigan and Texas, have some of the strongest regulations.

In Michigan, the Michigan Department of Agriculture and Rural Development developed steps in the *Michigan Surveillance and Response Plan for Chronic Wasting Disease in free-ranging deer and privately owned cervine facilities*, which was developed in 2002 and revised in 2012.¹⁷⁵ \Some of its measures include completing a population survey in the areas where CWD-positive deer have been found, mandatory checking of deer is required in areas during hunting seasons, and restrictions apply to the movement of carcasses, and implementation of a deer and elk feeding and baiting ban.¹⁷⁶

Texas, another state stricken with the disease, has some of the strictest hunting regulations in the country. With the discovery of CWD in a captive deer breeding facility, the Texas Parks and Wildlife Commission (TPWC) implemented new regulations for the 2017-18 hunting season, including the establishment of CWD management zones¹⁷⁷ and a requirement for hunters who harvest CWD susceptible species to bring their animals to a check station within 48 hours of harvest.¹⁷⁸ The Texas Animal Health

Commission has statewide mandatory testing requirements for exotic CWD-susceptible species such as elk, red deer, sika, moose, reindeer, and any associate subspecies and hybrids. As new cases of CWD are discovered in additional captive deer breeding facilities, as well as free-range deer and elk, TPWC has adopted further modifications to the rules pertaining to live-deer movements into, within, and out of CWD Containment and Surveillance Zones.¹⁷⁹

As more states implement regulations in an attempt to stop the spread of CWD, it is unsurprising that many hunters and breeders are upset about the new regulations and are taking legal action.

Legal Ramifications

In all states, according to common law, wild animals are the property of the state. And possession only transfers when the animals are removed from their natural liberty and made subject to man's dominion. Control of wildlife gives states the authority to dictate the use of animals and regulate hunting practices. However, CWD does not discriminate which deer it infects and kills. Both wildlife and captive-bred deer are susceptible to the disease. A district court in Texas recently upheld rules that regulate deer breeders in Texas, relating to CWD in white-tailed deer.

In 2015 Ken Bailey and Bradly Peterson, two individual breeders, brought suit against the Texas Parks and Wildlife Department (TPWD). 180 Their suit challenged the scope of TPWD's authority to 1) regulate privately owned, captive-bred deer; 2) suspend its own rules regarding captive-bred deer; and 3) pass emergency rules with no real emergency that improperly target the captive-bred deer industry. 181

In June 2015 Texas found its first CWD-positive deer in a breeder's facility and since then, TPWD conducted an emergency shutdown of the entire industry for that year, across the state, on the eve of the marketing, sale, and transport of captive-bred deer for the opening of the Texas deer-hunting season.¹⁸² One of these emergency rules was

¹⁷⁵ State of Michigan, *Michigan Emerging Disease Issues*, http://www.michigan.gov/emergingdiseases/0,4579,7-186-76711_78204-355584--,00.html#5 (last visited Dec. 7, 2017).

¹⁷⁷ Texas Parks and Wildlife Department, *Chronic Wasting Disease*, https://tpwd.texas.gov/huntwild/wild/diseases/cwd/ (last visited Dec. 7, 2017).

¹⁷⁸ *Id*.

¹⁷⁹ Texas Parks and Wildlife Department, *New Chronic Wasting Diseases Management Response Rules Adopted*, https://tpwd.texas.gov/newsmedia/releases/?req=20170526a (last visited Jan. 2, 2018).

¹⁸⁰ Petition and Brief for Plaintiff, *Bailey v. Smith*, No. D-1-GN-15-004391, 2015 WL 5783359 (98th Tex. Dist. Oct. 1, 2015).

¹⁸¹ *Id*.

¹⁸² *Id*.

a statewide ban on the transfer of captive-bred deer by means of shutting down the computer application process by which licensed breeders could obtain permits to transport their deer.¹⁸³ Another required the destruction of hundreds of deer to obtain samples for CWD testing, even though the deer showed no signs of CWD.¹⁸⁴ No compensation was provided for the breeders' deer, in fact, the deer breeders and property owners had to pay for the cost of the destruction of their own animals. Many of these new emergency regulations violated TPWD's own rules and raised some constitutional issues for the court to address. In September 2017, a district judge in Austin upheld the TPWD's regulations. The judge's opinion has not yet been released, but it will be interesting to read how he navigated through the property issue and case precedent. As more cervids fall prey to CWD, this case will likely become a reference point for other states to use in their decisionmaking processes.

Conclusion

CWD is an emerging problem with no immediate solution. The disease is rapidly spreading and state governments are scrambling to protect their wildlife and their citizens. However, as with all government regulations, there has been pushback. It will be interesting to see how the legal ramifications unfold. In the meantime, follow state regulations, get your animals tested, and try not to cross state lines with an untested cervid.

b. Commercial Aquarium Collection

Jaclyn Ignatowitz

1. Case brief: Umberger v. Dep't of Land & Natural Resources

In 2012, Conservation Council for Hawai'i, the Human Society of the United States (HSUS), the Center for Biological Diversity (CBD), and individual plaintiffs suit the Hawaii's Department of Land and Natural Resources (DLNR) seeking a declaration that DLNR is violating the Hawai'i Environmental Policy Act (HEPA) and injunctions on aquarium collection and approval of collection permits

until DLNR is in compliance with HEPA. ¹⁸⁵ The issue in this case was whether DLNR's issuance of aquarium collection permits is subject to HEPA review. ¹⁸⁶ Permits are issued under Haw. Rev. Stat. § 188-31 and DLNR's administrative procedures. ¹⁸⁷ The case made its way to the Hawaii Supreme Court, which held on September 6, 2017 that the collecting of commercial aquarium fish is subject to HEPA, while the administrative record was not sufficient for the court to make a determination on recreational collection of aquarium fish. ¹⁸⁸ The case was remanded to resolve that issue. ¹⁸⁹

Petitioners' concern stems from the loss of niche species along the unprotected coasts and surrounding area of the Main Hawaiian Islands and the Hawaiian coral reefs.¹⁹⁰ The loss comes from the largely unregulated practice of collecting aquarium fish for commercial use.¹⁹¹ Once a permit is issued to a collector, the collector is not subject to any limits regarding the amount of fish that he or she can collect; even species that are listed on the DLNR's "Species of Greatest Conservation Need" can be collected without limitation.¹⁹² Petitioners argue that the loss of diversity amongst the coral reef species, as well as species that serve a niche purpose, is causing ecological harm, and that DLNR's permit issuing procedures have "irreversible, negative consequences for Hawai'i's reef ecosystems and [their interests in these areas]," threaten "fishing and practicing...Native Hawaiian traditions," and negatively affect their aesthetic, recreational, and educational interests in their aesthetic, subsistence, and recreational interests in using, enjoying, protecting, and studying Hawai'i's fish and invertebrates within the coral reef environment.193

DLNR first requested dismissal, then moved for summary judgment, asserting that their decision to not require an environmental review is entitled to deference and that because there is not an applicant action that requires agency approval, environmental review is not required. DLNR maintained its position that the environment was

¹⁸³ *Id*.

¹⁸⁴ Petition and Brief for Plaintiff, *Bailey v. Smith*, No. D-1-GN-15-004391, 2015 WL 5783359 (98th Tex. Dist. Oct. 1, 2015).

¹⁸⁵ *Umberger v. Dep't of Land & Natural Res.*, 2017 Haw. LEXIS 201, 1, 3 (Haw. 2017).

¹⁸⁶ *Id*. at 2.

¹⁸⁷ *Id*.

¹⁸⁸ *Id*.

¹⁸⁹ *Id*.

¹⁹⁰ *Id*. at 9.

¹⁹¹ *Id*.

¹⁹² *Id*. at 8.

¹⁹³ Id. at 9-13.

¹⁹⁴ Id. at 4

not harmed by its current practices.¹⁹⁵ The circuit court granted DLNR's motion, and petitioners appealed to the Intermediate Court of Appeals (ICA). ¹⁹⁶

For an action to be subject to HEPA, "a program or project [must be] initiated by an agency or applicant," and the action at issue in this case was the taking of fish and aquatic species for aquariums, which originates from a collector applying for a permit.197 The ICA equated the aquarium collection permits with other permits for similar activities that are issued by DLNR, and concluded that the aquarium collection is not an action under HEPA that should be subject to environmental review.¹⁹⁸ Petitioners appealed and certiorari was granted. 199 To determine if the aquarium collection permits were subject to HEPA, the Supreme Court looked to see if three conditions were satisfied: (1) the activity is an action according to HRS § 343-2; (2) "the action proposes one or more of the nine categories of land uses or 'action' under HRS § 343-5(a);" and (3) the action is not exempt under HRS § 343-6(a)(2).200 Actions that may be exempt under HRS § 343-"repair[ing] existing 6(a)(2)include structures: construction and modification of...small structures; minor alterations in the conditions of land, water, or vegetation; basic data collection and research activities:...interior alterations; demolition of certain structures; certain zoning variances; continuing administrative activities; and acquisition of land and structures for the purpose of affordable housing."201

The Supreme Court determined that the taking of aquatic species from its habitat and bringing it to captivity for commercial aquarium use (or recreational use) under the DLNR permit, and the method used to extract the fish, constitutes a program or project that qualifies as a HEPA action, satisfying the first condition.²⁰² DLNR conceded that it is a use of state land, therefore the second condition

has been met.²⁰³ (Marine waters, which qualify as state land, where collection of aquarium fish occurs, is within a conservation district, which is land use subject to HEPA.²⁰⁴ Aquarium collection is a use under § 343-5 because the permit allows for the unlimited commercial collection of aquarium fish that inhabit state land and serve as an essential piece of the reef ecosystem.²⁰⁵ Finally, the third condition is met because commercial aquarium collection does not qualify under a HEPA exemption.²⁰⁶

Ultimately, the Supreme Court ruled that existing permits are illegal and disallowed the issuance of new permits pending review of the environmental impact.²⁰⁷

2. The Impact of Commercial Aquarium Fishing on the Hawaiian Coral Reef

The collection of aquarium fish for commercial purposes is having substantial effects on the coral reefs surrounding the Main Hawaiian Islands. Because coral reef ecosystems are struggling to begin with, and, because of issues such as pollution, boat groundings, disease, climate change, and coral bleaching, the unlimited removal of fish and aquatic species from the coral reef for commercial purposes is further exacerbating the decline in reef health.²⁰⁸ When species are removed from the environment, the reefs ability to respond and recover to harm is diminished, and an already fragile ecosystem is further harmed.²⁰⁹

Hawaii is the third largest source of commercial fish in the world, with the Hawaiian yellow tang being particularly popular.²¹⁰ Before *Umberger v. Dep't of Natural Res.*, when commercial collection permits were issued, the collector was authorized to take an unlimited amount of fish and other aquatic species.²¹¹ There were no restrictions on the species of fish that could be removed nor were there limitations on the number of permits that could be

¹⁹⁵ *Id*. at 16.

¹⁹⁶ *Id*. at 20.

¹⁹⁷ *Id*.

¹⁹⁸ Id. at 22-23.

¹⁹⁹ Id. at 23.

²⁰⁰ *Id.* at 25.

²⁰¹ *Id*. at 58.

²⁰² *Id.* at 32.

²⁰³ *Id*. at 46.

²⁰⁴ *Id.* at 53.

²⁰⁵ *Id*. at 56.

²⁰⁶ *Id*. at 60.

²⁰⁷ *Id.* at 72.

²⁰⁸ Threats to Coral Reefs, THE DEFENDERS OF WILDLIFE (2017), https://defenders.org/coral-reef/threats.

²⁰⁹ Jennifer Sinco Kelleher, *Ruling Halts Commercial Scooping of Hawaii Aquarium Fish*, U.S. NEWS (Sept. 6, 2017),

https://www.usnews.com/news/best-

states/hawaii/articles/2017-09-06/ruling-halts-commercial-scooping-of-hawaii-aquarium-fish.

²¹⁰ *Id*.

²¹¹ Umberger, 2017 LEXIS 201, at 2 (Haw. 2017).

issued.²¹² According to Rene Umberger, a professional diver and petitioner in the case, a distinct difference exists between reefs open to collection and those that are closed.²¹³ On open reefs, there is less diversity and colorful fish and invertebrates, which takes away from the enjoyment of professional and recreational divers.²¹⁴ In addition to affecting the diving industry, the collecting of aquarium fish also has an effect on Native Hawaiian fishing practices. Ka'imi Kaupiko, another plaintiff in *Umberger*, explained that the fish that he and other Hawaiians catch and eat are disappearing due to the disruption in the ecosystem.²¹⁵

HAWAII IS THE THIRD LARGEST SOURCE OF COMMERCIAL FISH IN THE WORLD. BEFORE *UMBERGER*, THE COLLECTOR WAS AUTHORIZED TO TAKE AN UNLIMITED AMOUNT OF FISH AND OTHER AQUATIC SPECIES.

There are many issues surrounding the practice of commercial aquarium fish collecting. Gail Grabowsky, the Director of the Chaminade University Environmental Studies Program, explained some of them in a declaration for the *Umberger* case.²¹⁶ Through this practice, niche species that play important ecological roles in the coral reef environment are being removed, and there are vulnerable species at risk due to "intense collection pressure."²¹⁷ The fish species that are fished the most are the herbivorous algae eaters.²¹⁸ When these species are removed from the coral reef, algae takes over, dominates the environment, smothers the coral reef, and leads to the death of coral and other aquatic species in the

ecosystem.²¹⁹ The Hawaii Department of Land and Natural Resources (DLNR) has, in its Coral Bleaching Recovery Plan, identified herbivore management as being a critical part of the recovery of the reefs post-bleaching.²²⁰ Also problematic is the focus of collectors on juvenile fish²²¹, which removes the fish that will reproduce to keep population numbers up (younger fish tend to be more aesthetically pleasing to consumers).²²²

Igna Gibson and Dane Enos also voiced concerns over the collection trade. Gibson, the Hawai'i State Director of the Humane Society of the United States (HSUS), stated that HSUS views "aquarium collection as a harmful, disposable trade, because up to forty percent of fish may die before reaching their final destination and many of the collected fish are not suitable for living in captivity, surviving only a fraction of their natural lives." 223 Enos, a former commercial aquarium fish collector, explained that he left the trade after seeing the damage being caused by other fishers. 224 He saw fishers break corals in order to have a "uniform surface for nets," over-harvest fish, and cause other damage to the reefs. 225

This past summer, a bill, SB 1240, was passed by the Hawaiian state legislature, and would have "regulate[d] the aquarium trade by implementing sustainability measures" and imposing limits on collection permits. ²²⁶ It was widely supported according to an HSUS poll conducted through QMark Research, with 90% of local residents favoring the bill. ²²⁷ The study also showed strong support for ending the practice of collecting coral reef fish—support has increased 17% over the past five years to 83%. ²²⁸ Governor David Ige vetoed the bill to the

²¹² *Id*.

²¹³ *Id*. at 9.

²¹⁴ *Id*. at 10.

²¹⁵ Id. at 13.

²¹⁶ *Id*. at 6-9.

²¹⁷ *Id*. at 8.

²¹⁸ *Id*. at 7.

²¹⁹ *Id*. at 8.

²²⁰ Big Island Now Staff, 90 Percent of Residents Favor Reef Protections from Aquarium Trade, Big Island Now (June 6, 2017), http://bigislandnow.com/2017/06/06/90-percent-of-residents-favor-reef-protections-from-aquarium-trade/.

²²¹ Umberger, 2017 LEXIS 201, at 8 (Haw. 2017).

²²² *Id*.

²²³ *Id*. at 15.

²²⁴ *Id*. at 16.

²²⁵ *Id*.

²²⁶ Groups Vow to Continue Efforts to Protect Hawaii's Coral Reefs Despite SB 1240 Veto, The Humane Society of the United States, (July 11, 2017),

http://www.humanesociety.org/news/press_releases/2017/07/hawaii-sb1240-veto-071117.html.

²²⁷ Big Island Now Staff, 90 Percent of Residents Favor Reef Protections from Aquarium Trade, BIG ISLAND Now (June 6, 2017), http://bigislandnow.com/2017/06/06/90-percent-of-residents-favor-reef-protections-from-aquarium-trade/

²²⁸ Id.

disappointment of the Hawaiian residents and wildlife protection groups, including HSUS and For the Fishes.²²⁹

Despite the disappointment over SB 1240, it is the hope of the Wildlife Department at Humane Society International that the *Umberger* decision will save millions of coral reef animals from the international aquarium trade.²³⁰ Additionally, the Conservation Council for Hawai'i is optimistic that the requirement of environmental impact reviews will enable the coral reef a chance to heal and recover.²³¹

Operation Crash and the Illegal Trade of Rhinoceros Horn and Elephant Ivory

Sarah Jenkins

Operation Crash is "an ongoing nationwide investigation" focusing "on the illegal trade in rhinoceros horn and elephant ivory in response to international poaching and smuggling."²³² Operation Crash has played an essential role in the increased prosecution of wildlife traffickers in the United States and in the decreased number of poached rhinoceros and elephants around the world.²³³ The recent criminal convictions of Edward Levine, Fengyi Zhou, and Michael Hegarty are just a few of the nearly 40 convictions that Operation Crash has been instrumental in bringing since starting in 2011.²³⁴ Building on their successes, Operation Crash continues to investigate wildlife trafficking, although the future of Operation Crash remains uncertain.²³⁵

Wildlife trafficking generates numerous issues and concerns. "The poaching of protected species and the illegal trade in wildlife and their derivative parts and products represent an international crisis that continues to escalate." 236 Wildlife trafficking contributes to the illegal economy, fuels political instability, undermines security, and contributes to the spread of infectious disease. 237 Furthermore, wildlife trafficking poses an extreme threat to threatened or endangered species, such as elephants and rhinoceros. 238

Approximately 100,000 elephants were killed for their ivory between 2010-2012.239 Studies find that Africa's forest elephant population has decreased by 62% in the last nine years, while Africa's wild elephant population has steadily declined by 2-3% each year.²⁴⁰ Consequently, the African elephant is listed as threatened under the Endangered Species Act (ESA),241 while other types of elephants, such as the Asian elephant, are listed as endangered under the ESA.²⁴² Along with the elephant, the rhinoceros also faces risks from wildlife trafficking. In 1970 there were 65,000 black rhinoceros in the wild; today, there are only 5000 .243 Africa's northern white rhinoceros is almost completely extinct, with only four remaining in the world.244 Additionally, fewer than 100 Javan and Sumatran rhinoceros remain²⁴⁵ Consequently, all species of rhinoceros are listed as endangered²⁴⁶ Nevertheless, because of programs like Operation Crash, the numbers of poached rhinoceros and elephants are slowly starting to decrease.247

In 2011, the U.S. Fish and Wildlife Service (FWS) formed Operation Crash, naming it after a group, or a "crash," of

²³⁰ Big Island Now Staff, *Hawai'I Supreme Court Orders Halt of Commercial Aquarium Fishery*, Big Island Now, (Sept. 8, 2017), http://bigislandnow.com/2017/09/08/hawaii-supreme-court-orders-halt-of-commercial-aquarium-fishery/

²³¹ *Id*.

²³² Office of Law Enf't., U.S. Fish & Wildlife Serv., Operation Crash (2017).

²³³ Id.

²³⁴ *Id*.

²³⁵ Tawheeda Wahabzada, *The Future of Operation Crash*, Glob. Wildlife Conservation Grp. (April 17, 2015), https://sites.utexas.edu/wildlife/2015/04/17/the-future-of-operation-crash/.

²³⁶ Exec. Order No. 13648, 78 Fed. Reg. 40,621 (July 5, 2013).

²³⁷ Id.

 $^{^{238}}$ Id.

²³⁹ John C. Cruden & David S. Gualtieri, *Toward a More Coordinated, Integrated Response to Wildlife Trafficking and Other Natural Resource Crime*, 12 U. Penn. Asian L. Rev. 23, 26-27 (2016).

²⁴⁰ *Id*.

²⁴¹ U.S. Fish & Wildlife Serv., Environmental Conservation Online System: Listed Animals, https://ecos.fws.gov/ecp/.

²⁴² *Id*.

²⁴³ Cruden, at 28.

²⁴⁴ *Id*.

²⁴⁵ *Id*.

²⁴⁶ Environmental Conservation Online System: Listed Animals.

²⁴⁷ Tim Eisele, *Operation Crash: Stopping a Network of Illegal Wildlife Traffickers in United States*, Nat'l Ass'n of Conservation Law Enf't Chiefs (Oct. 11, 2017), https://www.naclec.org/press-pages/2017/10/11/operation-crash-stopping-a-network-of-illegal-wildlife-traffickers-in-united-states.

rhinoceros.²⁴⁸ Operation Crash was developed to help address the effects of wildlife trafficking, with particular focus on detecting, deterring, and prosecuting individuals supplying rhinoceros horns and elephant ivory to buyers who want them for hunting trophies, for good luck, or for traditional Asian medicines.²⁴⁹ To do this, Operation Crash focuses on four areas of investigation: trade in raw horns; trade in carved horns; illegal hunting; and unlawful exportation.²⁵⁰ To perform these investigations, Operation Crash agents work with intelligence analysts, informants, forensic scientists, foreign partners, federal authorities, and wildlife inspectors at ports of entry to investigate, arrest, and prosecute individuals who they believe are illegally smuggling or trafficking rhinoceros horns or elephant ivory.²⁵¹

After successful investigation and arrest, a variety of charges may be filed against defendants in Operation Crash cases. Charges to date include: conspiracy, smuggling, laundering, money international money laundering, mail fraud, tax fraud, bribery, falsification of documents, violations of the ESA, and/or violations Lacev Act.252 the Sentences to date include: prison, fines, forfeiture, and/or restitution.253 Since

its first takedown in 2012, Operation Crash investigations have resulted in 36.5 years in prison sentences, \$2.1 million in fines, and \$5.7 million in forfeiture and restitution.²⁵⁴ Funds received from fines may go to the Lacey Act Reward Account, which offers rewards for

information on wildlife crimes.²⁵⁵ Funds received from forfeited assets have been used to purchase land in Africa where rhinoceros and elephants will be protected from wildlife trafficking.²⁵⁶ Other funds have gone to a variety of different conservation groups, including the Rhino Tiger Conservation Fund, which supports local conservation projects in Africa.²⁵⁷

Operation Crash is led by the FWS Office of Law Enforcement and prosecuted by the U.S. Department of Justice (DOJ).²⁵⁸ Along with their work investigating and prosecuting wildlife trafficking, Operation Crash also worked with former President Barack Obama's Presidential Task Force on Wildlife Trafficking (Task Force).²⁵⁹ President Obama established the Task Force in

2013 with the purpose of developing and implementing a National Strategy for Combating Wildlife Trafficking (National Strategy).260 In February 2014, the Task Force released the National Strategy, which established priorities for three combating wildlife trafficking: (1) strengthen enforcement; (2) reduce demand for illegally traded wildlife; and (3) expand international cooperation commitment.261 and Operation Crash

played a crucial role in the National Strategy's first priority - strengthening enforcement.²⁶² However, the Task Force has not been active since President Trump took office, and

²⁴⁸ Wahabzada, at 1.

²⁴⁹ Eisele, at 1; Office of Law Enf't. at 1.

²⁵⁰ Office of Law Enf't. at 1.

²⁵¹ *Id*.

²⁵² Id.

²⁵³ *Id*.

²⁵⁴ *Id*.

²⁵⁵ Pervaze A. Sheikh, Cong. Research Serv., R42119, The Lacey Act: Compliance Issues Related to Importing Plants and Plant Products (2012).

²⁵⁶ *Id*.

²⁵⁷ Operation Crash Nabs Traffickers, Brings Money to Rhino Conservation Projects, U.S. Fish & Wildlife Serv. (Aug. 26, 2016),

 $[\]frac{\text{https://www.fws.gov/news/blog/index.cfm/2016/8/26/Operation-Crash-Nabs-Traffickers-Brings-Money-to-Rhino-Conservation-Projects}.$

²⁵⁸ FACT SHEET: U.S. Support for Combating Wildlife Trafficking, 2014 WL 3811675.

²⁵⁹ Exec. Order No. 13648.

²⁶⁰ *Id*.

 $^{^{261}}$ *Id*.

 $^{^{\}rm 262}$ FACT SHEET: U.S. Support for Combating Wildlife Trafficking.

the status of parts of the National Strategy remains uncertain.²⁶³

In 2012, the first investigation done by Operation Crash resulted in a nationwide takedown of many large-scale rhinoceros horn and elephant ivory smuggling networks.²⁶⁴ The investigation, involving more than 140 law enforcement officers and federal agents, resulted in 17 arrests and nine convictions.²⁶⁵ Additionally, the investigation seized 37 rhinoceros horns, more than \$1 million in cash, \$1 million in gold bars, and numerous diamonds and Rolex watches.²⁶⁶

The most recent arrest by Operation Crash was the arrest of Michael Hegarty, a 40-year-old Irish gang member.²⁶⁷ On September 29, 2017, Hegarty, who was charged with conspiracy, smuggling, and obstruction of justice, pled guilty to "fraudulently facilitating the transportation and concealment of a libation cup carved from an endangered rhinoceros horn, that was illegally smuggled from the United States to Great Britain."268 Hegarty, with a coconspirator, bought the libation cup in Miami for almost \$60,000 and then smuggled it from the United States to London without declaring it or obtaining the required permits.²⁶⁹ Hegarty was later arrested in Belgium, when he attempted to sell the libation cup, and then extradited to the United States.²⁷⁰ On November 14, 2017, Hegarty was sentenced to 18 months in prison, followed by three years of supervised release.271

²⁶³ Juliet Eilperin & Darryl Fears, *Trump puts hold on this week's decision to again allow trophies from elephant hunts in Zimbabwe*, Washington Post (Nov. 17, 2017), <a href="https://www.washingtonpost.com/news/animalia/wp/2017/11/15/trophies-from-elephant-hunts-in-zimbabwe-were-banned-phant-hunts-in-zimbabwe-were-banded-phant-hunts-in-zimbabwe-were-banded-phant-hunts-in-zimbabwe-were-banded-phant-hunts-in-zimbabwe-were-banded-phant-hunts-in-zimbabwe-were-banded-phant-hunts-in-zimbabwe-were-banded-phant-hunts-hun

in-the-u-s-trump-just-reversed-that/?utm_term=.0c1b2c068c4b.

In another recent case, Operation Crash arrested Fengyi Zhou, a 49-year-old Asian artwork dealer.²⁷² On November 29, 2016, Zhou, who was charged with wildlife trafficking in violation of the Lacey Act, pled guilty to "illegally trafficking horns from endangered black rhinoceros."²⁷³ Zhou bought five rhinoceros horns from other Asian artwork dealers in New York.²⁷⁴ He was given an Endangered Species Bill of Sale for four of the horns, making him fully aware that four horns were unlawfully transported to New York.²⁷⁵ Zhou later sold the rhinoceros horns to an associate in China for more than \$130,000.²⁷⁶ On September 18, 2017, Zhou was sentenced to two years in prison.²⁷⁷

Finally, in another 2017 case, Operation Crash arrested Edward Levine, a 64-year-old organic product salesman.²⁷⁸ On September 15, 2017, Levine was convicted of "conspiracy to violate the Lacey and Endangered Species Acts" and "violation of the Lacey Act by knowingly selling black rhinoceros horns to an undercover agent."279 Levine, along with Lumsden Quan, transported two black rhinoceros horns from California to Nevada.²⁸⁰ Levine and Quan then sold the horns to an undercover agent for \$55,000.281 Levine will be sentenced on December 15, 2017.282 However, Quan was already sentenced for the same charges.²⁸³ Ouan was sentenced to one year and two days in prison with three years of supervised release after prison.²⁸⁴ Additionally, Quan was ordered to pay a \$10,000 fine and was banned from working in the art and antiquities business for three years.285

```
<sup>272</sup> Long Island Man Pleads Guilty to Trafficking in Rhinoceros Horns, D.O.J. 16-1395 (Nov. 29, 2016).
```

²⁶⁴ Office of Law Enf't, at 1.

²⁶⁵ Lee Rondganger, *Rhino Horn Breakthrough*, IOL (Feb. 24, 2012), https://www.iol.co.za/dailynews/news/rhino-horn-breakthrough-1242087#.UUyCWIVpeoc.

²⁶⁶ *Id*.

²⁶⁷ Foreign National Pleads Guilty to Smuggling Rhinoceros Horn, D.O.J. 17-1084 (Sept. 29, 2017).

²⁶⁸ *Id*.

²⁶⁹ *Id*.

²⁷⁰ *Id*.

²⁷¹ Irish National Sentenced to 18 Months in Prison for Trafficking of Endangered Rhinoceros Horn Libation Cup, D.O.J 17-1290 (Nov. 14, 2017).

²⁷³ *Id*.

²⁷⁴ Id.

²⁷⁵ *Id*.

²⁷⁶ Id.

²⁷⁷ Long Island Man Sentenced to Two Years for Trafficking Rhinoceros Horns, D.O.J. 17-1022 (Sept. 18, 2017).

²⁷⁸ California Man Convicted for Role in the Illegal Sale of Black Rhinoceros Horns, D.O.J. 17-1006 (Sept. 15, 2017).

²⁷⁹ *Id*.

²⁸⁰ *Id*.

²⁸¹ *Id*.

²⁸² *Id*.

 $^{^{283}}$ California Man Sentenced to One Year in Prison for Illegal Sale of Black Rhinoceros Horns, D.O.J. 15-1542 (Dec. 16, 2015).

²⁸⁴ *Id*.

 $^{^{285}}$ *Id*.

Overall, Operation Crash has been commended for its success. It has been instrumental in the arrests and convictions of members of large international smuggling and trafficking rings.286 It has also been successful in deterring people from entering into the world of smuggling or trafficking in rhinoceros horns or elephant ivorv. 287 Those that view smuggling or trafficking of these products as relatively low risk crimes are now able to see that those arrested for these crimes face serious prison time or fines.²⁸⁸ Along with increasing deterrence, Operation Crash plays a role in the conservation of rhinoceros and elephants.²⁸⁹ By donating the funds received from fines and forfeited assets to conservation groups, Operation Crash has greatly contributed to the protection of rhinoceros and elephants.²⁹⁰ Therefore, Operation Crash is essential to the fight against wildlife trafficking and to the protection of elephants and rhinoceros.

III. ALLOCATION OF WILDLIFE BY DEMOCRATIC RULE OF LAW

 The Proposed Management Plan for Mountain Goats in Olympic National Park

Kayla Pederson

Mountain goats were introduced to Washington's Olympic Mountains in the 1920s²⁹¹, brought from Canada and Alaska.²⁹² While originally a total of twelve mountain goats were introduced, by the 1980s there were over 1,000.²⁹³ "Between 1981 and 1989, humans removed 509 animals from the population."²⁹⁴ As of 2004, the mountain goat population is growing at a rate of 9 percent per year.²⁹⁵ To address the growing population of non-native mountain

goats in the Olympic Mountains, the National Park Service (NPS), has drafted a Mountain Goat Management Plan and an Environmental Impact Statement (EIS) with the assistance of U.S. Forest Service (USFS) and Washington Department of Fish and Wildlife (WDFW).²⁹⁶ In the plan NPS proposed four alternatives to address the issues. The comment period for the plan concluded on October 10, 2017.²⁹⁷

Concerns arising from the mountain goat population on the Olympic Peninsula are "related to visitor safety and the unique vegetation of the Olympic Mountains."298 Mountain goats inhabit many popular park areas, which increases the chances of mountain goat-human interactions.²⁹⁹ These interactions are also likely because mountain goats seek out salt.300 Salt is not a natural resource in the Olympic Mountains so the mountain goats have to seek it from other resources. Salt can be found from packs, sweat, and urine left by humans.³⁰¹ In the most extreme cases the interactions between humans and mountain goat have led to injury and death. 302 In 1999 a man was gored in the thigh and in 2010 a hiker died after being gored.³⁰³ While these cases are rare, the growing population of mountain goats could increase the number of interactions between humans and goats, and injuries suffered by humans.

Olympic National Park was established in 1938 after the mountain goats were brought into the Olympic Mountains³⁰⁴ with the "purpose to preserve for the benefit, use, and enjoyment of the people...."³⁰⁵ The Park is 922,651 acres and has three different ecosystems, "including rugged glacier-capped mountains, wild Pacific coast, and vast stands of old-growth and temperate rain forests."³⁰⁶ There are "more than 1,100 species of native plants, 300

²⁸⁶ Office of Law Enf't. at 1.

²⁸⁷ *Id*.

²⁸⁸ Id.

²⁸⁹ Operation Crash Nabs Traffickers.

²⁹⁰ Id.

²⁹¹ Draft Mountain Goat Mgmt. Plan/ Envtl. Impact Statement, 11 (U.S. Dep't of the Interior)

²⁹² Victor B. Scheffer, *The Olympic Goat Controversy: A Perspective*, 7 Conservation Biology, no. 4, Dec. 1993, at 916.

²⁹³ Draft Mountain Goat Mgmt. Plan/ Envtl. Impact Statement, 11 (U.S. Dep't of the Interior)

²⁹⁴ Scheffer, *supra* note 2, at 916.

²⁹⁵ *Id*.

²⁹⁶ Mountain Goat Mgmt. Plan/EIS, Nat'l Park Serv., https://parkplanning.nps.gov/projectHome.cfm?projectID=49 246. (last visited Dec. 8, 2017).

²⁹⁷ Id.

²⁹⁸ Draft Mountain Goat Mgmt. Plan/ Envtl. Impact Statement, ii (U.S. Dep't of the Interior)

²⁹⁹ *Id.* at 14.

³⁰⁰ *Id*. at 4.

³⁰¹ *Id*.

³⁰² *Id.* at 14.

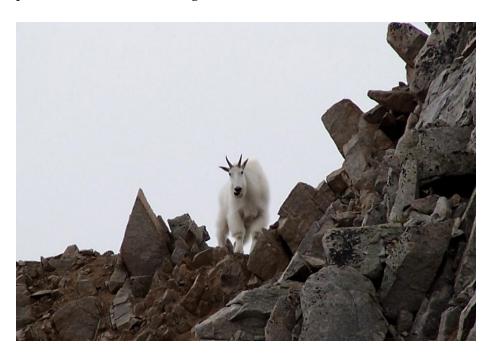
³⁰³ *Id*.

³⁰⁴ *Id*. at 5.

³⁰⁵ *Id*.

³⁰⁶ *Id*.

species of birds, and 65 species of mammals...and the isolated peninsula has at least 24 endemic taxa that are not found anywhere else."³⁰⁷ Mountain goats have an adverse impact on these ecosystems. In the "sensitive alpine and subalpine communities," mountain goats damage and kill vegetation by trampling, herbivory, and wallowing.³⁰⁸ Wallowing, trailing, and trampling by mountain goats impact the soil.³⁰⁹ These behaviors remove "soil surface layers resulting in reduced water-holding capacity, reduced nutrients available for vegetation, increased soil aeration, and increased surface temperature."³¹⁰ The concerns for visitor safety and the sensitive environment of the Olympic Mountains have driven NPS to develop a plan to address the mountain goat issue.



The NPS plan considered four alternatives. In Alternative A, NPS addresses the "options for management."³¹¹ The two goals of management under Alternative A are to have mountain goats not "become habituated or conditioned" by humans and to "minimize the potential for hazardous

mountain goat human encounters."³¹² One plan would be for patrols in areas where mountain goats had historically been encountered.³¹³ If the mountain goats do not maintain distances greater than 150 feet away from humans, they would be hazed.³¹⁴ NPS would also collaborate with Olympic National Forest and WDFW to protect park resources and educate visitors on mountain goat issues.³¹⁵

Alternative B is a plan to capture the mountain goats and translocate them using helicopters and ground-based capture methods.³¹⁶ The initial goal would be to capture "approximately 50% of the projected 2018 mountain goat population"³¹⁷— about 325-375 animals.³¹⁸ After capture,

the goats would be transported by helicopter to twelve different release sites in the Cascade Mountains, where they are a native species.³¹⁹ After translocating them, the mountain goats "would join existing herds in the selected locations or would be used to start new herds in areas where mountain goats have been extirpated, and would be managed according to Washington State law."³²⁰ Maintenance activities would have to be conducted periodically after the initial capture. "Translocation activities would be conducted in accordance with WDFW translocation protocols."³²¹

The third option, Alternative C, is lethal removal by firearm.³²² Both helicopterand ground-based methods would be used.³²³ The goal would be to remove 90

percent of the 2018 projected population—approximately 625 to 675 mountain goats—in the initial removal³²⁴, with "consideration given to the choice of firearm and shot placement to ensure humaneness of the action."³²⁵

³⁰⁷ *Id*.

³⁰⁸ *Id.* at 12.

³⁰⁹ *Id*. at 13.

³¹⁰ *Id*.

³¹¹ *Id*.

³¹² *Id*.

³¹³ *Id.* at 33.

³¹⁴ *Id*.

³¹⁵ *Id*.

³¹⁶ *Id*.

³¹⁷ Id. at 45.

³¹⁸ *Id*.

³¹⁹ *Id*.

³²⁰ Id.

³²¹ Id. at 42.

³²² *Id*. at 51.

³²³ *Id*.

³²⁴ *Id.* at 52.

³²⁵ Id. at 42.

Mountain goat carcasses would generally be left in the field unless 325 or fewer feet from areas with high visitor use.³²⁶ If the carcasses must be removed, consideration will be given to donation for human consumption or to the Skokomish Tribe for hides or horns.³²⁷ NPS projects that the initial removal would take between three and five years, with most activity occurring in the first three years.³²⁸

Alternative D, the preferred alternative, would combine capture-and-translocation and lethal removal.³²⁹ "Capture and translocation would take place prior to lethal removal."³³⁰ The goal would be to remove 90 percent of the projected 2018 mountain goat population.³³¹ It is projected that 50 percent would be captured and translocated to the Cascade Mountains and 40 percent would be lethally removed.³³² The remaining 10 percent would be managed after the initial removal.³³³ This alternative would provide a balance between Alternatives B and C.

Several alternatives were raised and dismissed. "These alternatives were not carried forward for detailed analysis because they would not meet the purpose, need, or objectives of the plan/EIS; would be inconsistent with NPS mandates; would be legally or technically infeasible; or would require a major change to law regulation, or policy."334 Two of these alternatives would be public hunting and tribal hunting in the Park. Public hunting "would be inconsistent with existing law and regulatory authority regarding public hunts in the park."335 Congress would have to specifically act for public hunting to be allowed within the Park and NPS would also have to create further regulations to implement.336 Tribal hunting would face the same issues as public hunting because under the Stevens Treaties, tribes reserved hunting only on open and unclaimed lands and Olympic National Park is considered claimed.337

After detailing the alternatives, the plan addresses the environmental impacts of each alternative. One of these areas is herbivory's impact on "vegetation, including special-status plant species."338 By not implementing a plan to manage the population of the mountain goats, such as under Alternative A, the population would continue to grow and could result in "continued deterioration in the condition of native alpine and subalpine communities."339 In comparison, under Alternatives B, C, and D, "[d]isturbance to sensitive plant communities, including special-status plant species, from mountain goat grazing, would trampling. and wallowing likewise eliminated."340 This would be specifically seen under Alternatives C and D because of the 90% removal.

Due to their non-native status, mountain goats have an adverse impact on the Olympic Mountains. They have also proven to have potential to be harmful to visitor safety. The continued growth of the mountain goat population would have impacts on the environment, such as soil and vegetation. More mountain goats could lead to more goathuman interactions because of the mountain goats' desire for salt. NPS's preferred plan of capturing and translocating and only using lethal removal when capturing is not viable would remove the majority of mountain goats from the Olympic National Park. The plan/EIS will undergo analysis of public comments before preparation and release of the final plan.³⁴¹

b. Case briefs

Erik Smith

1. Hill v. Missouri Dep't of Conservation

The Missouri Conservation Commission ("Commission") was created by ballot initiative in 1936 and endowed with authority over the "control, management, restoration, conservation and regulation of the bird, fish, game,

³²⁶ *Id*.

³²⁷ *Id*.

³²⁸ *Id.* at 52.

³²⁹ *Id*. at 53.

³³⁰ *Id*.

³³¹ Id.

³³² Id.

³³³ Id.

³³⁴ Id. at 55.

³³⁵ Id. at 56.

³³⁶ *Id*.

³³⁷ *Id*. at 59.

³³⁸ Id. at 157-58.

³³⁹ Id. at 159.

³⁴⁰ *Id*. at 162.

³⁴¹ Mountain Goat Management Plan/EIS, National Park Service.

https://parkplanning.nps.gov/projectHome.cfm?projectID=49 246. (last visited Dec. 8, 2017).

forestry and all wildlife resources of the state, including hatcheries, sanctuaries, refuges, reservations and all other property owned, acquired or used for such purposes and the acquisition and establishment thereof, and the administration of all laws pertaining thereto."342 In an effort to manage the threat of chronic wasting disease (CWD) among the cervid population, the Commission proposed a series of regulations directed at the captive cervid industry. The regulations would have changed fencing requirements for captive cervid farms, classified all forms of deer within the state as wildlife regardless of captive status, veterinary requirements, and shipping restrictions. Donald Hill, owner of a white-tailed deer hunting preserve and breeding operation, challenged these regulations as beyond the powers of the Commission and prevailed at trial because the court held that captive cervids were not game or wildlife resources of the state because they were privately owned.

On appeal the Commission argues that the trial court erred in three ways (of which the appellate court only addresses two): First, that captive cervids are game or wildlife resources of the state—or at the very least affect the game or wildlife resources of the state—because they can still pass CWD onto non-captive deer. Second, that the right to farm was not designed to entail this activity and, even if it was, the actions of the Commission are rationally related to a legitimate state interest such that there is not a constitutional violation.

To address the Commission's first argument, the court used the rules of statutory interpretation to determine what is meant by "the bird, fish, game, forestry and all wildlife resources of the state". The court determined that each word—"bird, fish, and game"—was modified by wildlife "resources of the state" such that reading it singularly did not make grammatical sense. So the court needed to determine whether captive cervids were resources of the state because of this modifier. By using Webster's dictionary, the court found that captive or free-range cervids are resources of the state because they are "available means" of the state.

The right-to-farm argument also failed on appeal. The court found that there was no suspect class being implicated and that the right of farming did not apply to captive-cervid farming so strict scrutiny did not apply. The language of the Missouri's constitutional right to farm provides "That agriculture which provides food, energy,

health benefits, and security is the foundation and stabilizing force of Missouri's economy. To protect this vital sector of Missouri's economy, the right of farmers and ranchers to engage in farming and ranching practices shall be forever guaranteed in this state..." However, the court found that this type of farming did not include captive cervids because the goal of such activity is selective breeding for desirable genetic traits or the operation of a private hunting preserve. The court applied a rational basis test and concluded that, because captive cervids are capable of transmitting CWD, a legitimate government interest existed, rationally connected to all measures.

The court would have granted the appeal on both bases. However, because of the importance of the issue, the court transferred the case to the Missouri Supreme Court for final determination.

2. U.S. v. Saunders

Saunders and his codefendants, commercial boat captains, were charged with violations of the Lacey Act after catching and selling Atlantic striped bass in Federal waters.343 Defendants' motion to dismiss the charges was granted by the U.S. District Court for the Eastern District of North Carolina, and the government appealed this decision to the U.S. Court of Appeals for the Fourth Circuit. The indictments against the captains stemmed from both the Lacey Act and the Bass Act; the Lacey Act makes it illegal to transport, acquire or sell any fish "taken possessed, transported, or sold in violation of any law, treaty, or regulation of the United States", 16 U.S.C. § 3373(d)(1)(B), and the Bass Act forbids anyone from harvesting, retaining, possessing, or fishing for bass in the exclusive economic zone, which are federal waters. 16 U.S.C. § 5158. So, by violating the Bass Act. they also would have violated the Lacey Act.

The Court began by looking at the Bass Act and its distinct regulations of Federal waters and state coastal waters, noting that while Congress outlined the regulation of bass in Federal waters, bass in state coastal waters are regulated under a management plan created by the Atlantic States Marine Fisheries Commission (Commission), which defendants argued granted them an exemption from prosecution under the Lacey Act for conduct regulated by a fishery management under the Magnuson-Stevens Act. However, the court found that the Commission's management plan was not a plan in effect under the Magnuson-Stevens Act and therefore provided no such

³⁴² --- S.W.3d --- (Mo. Ct. App. Oct. 10, 2017).

^{343 828} F.3d 198 (4th Cir. 2016).

exemption. The Court noted that Magnuson-Stevens plans are created by one of eight regional councils or the Secretary of Commerce—not interstate compact organizations like the Commission. Because the Commission's rules were not created under the Magnuson-Stevens Act they do not allow for prosecutorial exemption under the Lacey Act.

In the alternative defendants argued that the statutory scheme is void for vagueness. The captains argued that the statute fails to provide people of ordinary intelligence a reasonable opportunity to understand what conduct it prohibits. The Court concluded that this argument must likewise fail, looking to *United States v. Zhi Yong Guo*, 634 F.3d 1119, 1122 (9th Cir. 2011) which held that "a statute does not fail the vagueness test simply because it involves a complex regulatory scheme, or requires that several sources be read together." The Court reversed the lower court's grant of dismissal and remanded the case for trial.

3. U.S. Ass'n of Reptile Keepers, Inc. v. Zinke

This case revolves around the interpretation of the Lacey Act provision regarding shipment of species injurious to humans, wildlife, agriculture, horticulture, or forestry. The disputed text of the Act prohibits "any shipment [of injurious species] between the continental United States, the District of Columbia, Hawaii, the Commonwealth of Puerto Rico, or any possession of the United States." 18 U.S.C. § 42(a)(1). Giving rise to this litigation is the shipment of two species of snakes labeled as injurious by the U.S. Fish and Wildlife Service (FWS): the reticulated python and the green anaconda. The U.S. Association of Reptile Keepers (Association) argued that the shipment clause only applies to shipments out of and into the continental United States, and not shipments within the continental United States. FWS argued that the shipment provision bars shipment out of, into and within the continental United States. The U.S. District Court for the District of Columbia found that the shipment clause did not extend to shipment within the continental United States and therefore FWS's regulation was outside its authority. FWS appealed.

The U.S. Court of Appeals for the D.C. Circuit began by looking at the language of the statute itself. The Court noted that the parties agreed that the language of the statute clearly prohibits shipment between any listed jurisdiction (the continental United States, the District of Columbia, Hawaii, Puerto Rico, or any possession of the United States) but it is unclear or unspecified as to

shipments within the continental United States. Because of this ambiguity the Court focused on the word "between" and the manner in which it introduces multiple items, creating a connected relationship with each entity but not within the entities themselves. The court used the analogy of flights, noting that an announcement that flights between California cities and New York are canceled due to weather is different from an announcement that flights between cities in California are cancelled due to weather. One depicts an inability to operate to New York while the other depicts an inability to operate within California, but both show the relationship through the use of the word between. The government argued that the use of the word "or" prohibits an entity within a state in the continental United States from shipping to another state, but the Court rejected this argument as an improper use of the word "or".

The Court also noted that its interpretation falls in line with the legislative history of the Lacey Act and its



amendments because this provision came into effect in 1960 shortly after Hawaii became a state, and was designed to protect the continental United States from Hawaiian shipments, not those of species already within the continental United States. FWS argued that the inclusion of the District of Columbia showed that Congress intended to bar shipment within the continental United States, but the Court rejected this argument because at the time only Congress had the ability to establish an import ban for the District, whereas states were able to regulate shipments within themselves.

For these reasons, the Court found that the regulations on interstate shipments of injurious species were beyond the authority of the Service and held for the Association.

c. The Sandhill Crane Makes a Return Blake Riemer

Recently, there have been numerous debates over opening a hunting season for sandhill cranes. The tall, migratory, birds were once almost extinct in Michigan. Recently, the sandhill crane has experienced a strong population rebound. Although, with an increase in the crane population comes their increased demand for food.

The sandhill crane is notorious for feeding on farmers' crops, causing a loss of profit. The recent increase in population and crop damage caused the Michigan House of Representatives to focus on a resolution to this new issue. On October 18, 2017, the House proposed to open a hunting season for the sandhill crane.³⁴⁴ As of now, these birds can only be taken by farmers if they prove the cranes are damaging their crops. In addition, the farmers are not allowed to collect the birds or harvest the meat. This new proposed solution has brought backlash from certain groups.

The sandhill crane is one of the Migratory Bird Treaty Act's success stories. In the late 19th century, sandhill cranes were on the brink of extinction due to over hunting and habitat destruction. The crane's population has taken such a long time to recover because of their low reproduction rates (Female birds only lay two eggs and are monogamous). Since then, "the Sandhill crane population has increased at a remarkable rate in Michigan and the surrounding region. Cranes counted on the Breeding Bird Survey routes for 1966-2007 increased 13.9% per year in Michigan, 30.3% in Ontario, and 7.8% in Wisconsin."345 In 1996, the U.S. Fish and Wildlife Service (FWS) conducted a fall survey of sandhill cranes and counted more than 30,000 cranes.346 Then, in 2015, another fall survey was conducted and the count was over 90,000 cranes.347 The great success of bringing the sandhill crane back from the brink of extinction has led to Michigan farmers' troubles. Sandhill cranes are now showing up in larger numbers in farmers' fields and eating large portions of their crops.

This is why Representative Lower has brought the proposal to hunt these cranes.

Currently, hunters are allowed to hunt sandhill cranes in sixteen states, mostly to the west, such as Colorado, Wyoming, Montana, and Alaska.³⁴⁸ The cranes that migrate over those states are members of a different subpopulation, but were also borderline extinct until conservation efforts were put in place. The population of these similar sandhill cranes has rebounded and there is no evidence of hunters threatening their population.

There has been a large pushback from groups such as Audubon Society and the Green Party, which have started an opposition campaign. These groups argue that there is not enough information and data on sandhill cranes in Michigan to come to a correct solution. These groups claim there are multiple variations that can skew the population results. This is why they are asking for further research to understand the sandhill crane's population.

Hunt parameters still need to be worked out with FWS if this proposal does pass. Legislators will have to come up with restrictions on the amount of cranes that can be taken and the length of the season. By working with Fish and Wildlife Services it allows the legislators to get a more experienced outlook on establishing an efficient hunting season. The length of season can be extended or shortened



³⁴⁴ Trevor Bach, As Sandhill Cranes return, hunters eye the ribeye of the sky, CS monitor (2017),

https://www.csmonitor.com/Environment/2017/1109/As-bird-lovers-rejoice-the-sandhill-crane-s-return-hunters-eye-the-ribeye-of-the-sky.

³⁴⁵ Ronald Hoffman, Sandhill Crane (2003), http://www.michigan.gov/dnr/0,4570,7-153-10370 12145 12202-60858--,00.html.

³⁴⁶ Bach,

https://www.csmonitor.com/Environment/2017/1109/As-bird-lovers-rejoice-the-sandhill-crane-s-return-hunters-eye-the-ribeye-of-the-sky.

³⁴⁷ *Id*.

³⁴⁸ Brian Lovett, How to Hunt Sandhill Cranes Waterfowl Hunting (2016), https://www.realtree.com/waterfowl-hunting/articles/how-to-hunt-sandhill-cranes.

depending on the amount of cranes taken that previous year. Michigan has recently taken a similar action when dealing with coyotes. Coyotes have seen a large population growth throughout Michigan and have started to become pests and dangers for farmers. To resolve this issue, Michigan has extended the hunting season for coyotes from a restricted season, to year round, night or day.³⁴⁹ This is done in efforts to control the population and to protect farmer's livestock and income.

This recent proposal for hunting the once-endangered sandhill crane has brought up a lot of debate and attention. It is exciting to see that this situation is even possible, because without the conservation efforts that were put in place, hunting the sandhill crane would not even be in discussion. Whether you agree or disagree with the outcome, it is pleasing to see citizens actively participating in debate to conserve our wildlife.

IV. NON-FRIVOLOUS USE OF WILDLIFE

 New Jersey Joins the Interstate Wildlife Violator Compact

Blake Riemer

On December 1, 2017, New Jersey was the 48th state to join the Interstate Wildlife Violator Compact (IWVC).³⁵⁰ This was done in an effort to reduce the amount of poachers and citizens who are violating hunting and fishing laws. The Interstate Wildlife Violator Compact allows states, that are members, share information regarding citizens who have committed violations in connection with hunting, poaching, or other wildlife harms. Any state that is a member of IWVC shares information, which aids Fish and Wildlife divisions, prevent poachers from breaking laws in states where they have not been caught. "Any person who has their license privileges suspended in one member state may now also have them suspended in all other member states. In addition, the compact prevents convicted poachers who

are under revocation in one state from hunting, fishing or trapping in other states."351

The language of IWVC states, "any person whose license privileges have been suspended".352 The term "license" is defined as "any license, permit, or other public document that conveys to the person to whom it was issued the privilege of pursuing, possessing, or taking any wildlife regulated by law, rule, or regulation; including any privilege to obtain such license, permit, or other public document, or any statutory exemption from the requirement to obtain such license, permit, or other public document."353 A violator will not have access to taking any wildlife even if that violation does not exist in another IWVC member state. With New Jersey being located on the Atlantic Ocean, several other activities require a license that you would not have access to in western states. Crab pots, shellfish, and saltwater registry certificates all require their own license that can now be restricted if a person has a violation in a state that is a member of IWVC. For example, if a New Jersey resident violates a law regarding the amount of shellfish he has trapped, he or she will still not be able to purchase a hunting license in Wyoming even though they do not have violations dealing with shellfish or saltwater.

New Jersey residents who violate other member state's wildlife regulations could face a fifty-dollar fine and a suspension of all privileges regarding the taking or possession of wildlife in New Jersey.³⁵⁴ For example, a New Jersey resident caught hunting without a license in Michigan will now have any New Jersey license or permit dealing with wildlife suspended. This suspension is lifted if all fines and conditions are met for the out-of-state violation. Failure to answer a ticket, summons, or appearance in court for a violation will also lead to license or permit suspension.

New Jersey also added other violations that will be reported to other IWVC member states. Some of these further violations include, causing damage to property while taking wildlife, illegal dumping, negligent use of a firearm, or operating a motorized vehicle in a prohibited

³⁴⁹ Angie Jackson, Coyote hunting season now year-round in Michigan Mlive (2016),

http://www.mlive.com/news/index.ssf/2016/04/coyote hunting season expanded.html.

³⁵⁰ Michelle Brunetti, New Jersey now member of Interstate Wildlife Violator Compact, Press of Atlantic City (2017), http://www.pressofatlanticcity.com/news/press/science_nature/new-jersey-now-member-of-interstate-wildlife-violator-

<u>compact/article</u> <u>268bad35-8332-5bc6-867c-0d1945a1a207.html</u>.

³⁵¹ **I**d

³⁵² N.J. Stat. Ann. § 23:13-1

³⁵³ N.J. Stat. Ann. § 23:13-1

³⁵⁴ N.J. Stat. Ann. § 23:13-4

area.³⁵⁵ Most of these violations will prove to be useful while others could lead to unreasonable restrictions on citizens hunting rights. One of the more odd violations that could lead to an unreasonable restriction is exercising a dog on a wildlife management area during closed dates. It is a violation, but restricting a person's right to hunt, fish, or trap because of a minor violation could lead to bigger issues.

With New Jersey recently joining the Interstate Wildlife Violator Compact, only Hawaii and Massachusetts remain as non-member states. Nebraska and Delaware joined earlier this year. The IWVC started to gain some attention around the early to mid-1980 when several states wanted to prevent poachers from hopping state lines and buying

hunting license. The compact was formatted and based off the existing driver license compact and non-resident violator compact that were in use by law enforcement. The International Wildlife Violators Compact was finally enacted in three states, Colorado, Utah, and Oregon in 1989.³⁵⁶ Since then almost all states have joined the IWVC in hopes to deter poachers and wildlife violators. The remaining states have proposed IWVC legislature in hopes to join the majority and disallow any "loopholes" for poachers or violators.



355 Bruce Scruton, New Jersey joins interstate wildlife violator compact today, New Jersey Herald (2017), http://www.njherald.com/20171201/new-jersey-joins-interstate-wildlife-violator-compact-today#//.

 $\underline{\text{http://congressionalsportsmen.org/policies/state/wildlife-violators-compact.}}$

V. WILDLIFE AS AN INTERNATIONAL RESOURCE

a. Funding Is Not "For the Birds"

Nicholas Castro

The phrase "for the birds" is akin to saying that something is worthless, trivial, or pointless. According to Robert Claiborne in *Loose Cannons, Red Herrings, and Other Lost Metaphors*, it originally referred to city streets as they were before cars.

When I was a youngster on the streets of New York, one could both see and smell the emissions of horse-drawn wagons. Since there was no way of controlling these emissions, they, or the undigested oats in them, served to nourish a large population of English sparrows. If you say something's for the birds, you're politely saying it's horseshit.³⁵⁷

Funding migratory bird conservation efforts is most certainly not "for the birds." The historical and social significance of migratory birds in North America should be highlighted and considered as state and federal

governments are faced with the ever-present issue of funding and appropriation.

The Migratory Bird Treaty Act of 1918 implemented the 1916 Convention between the U.S. and Great Britain (acting on behalf of Canada) for the protection of migratory birds. The Act "makes it illegal for anyone to take, possess, import, export, transport, sell, purchase, barter, or offer for sale, purchase, or barter, any migratory bird, or the parts, nests, or eggs of such a bird except under the terms of a valid permit issued pursuant to Federal regulations." The U.S. Fish and Wildlife Service (FWS) and state fish and wildlife agencies share jurisdiction over migratory birds. Migratory bird conservation represents an illustrative, collaborative effort between FWS, the states, and other affected partners. However, migratory bird conservation efforts lack adequate funding to fully

³⁵⁶ Interstate Wildlife Violators Compact

³⁵⁷ ROBERT CLAIBORNE, LOOSE CANNONS, RED HERRINGS, AND OTHER LOST METAPHORS (W. W. Norton & Company, Inc. ed.) (1988).

³⁵⁸ Migratory Bird Treaty Act, Birds Protected. U.S. Fish and Wildlife Service. https://www.fws.gov/birds/policies-and-regulations/laws-legislations/migratory-bird-treaty-act.php. (last visited Nov. 21, 2017).

support the state-federal partnership and fulfillment of the federal public trust responsibility for migratory birds.

The Migratory Bird Conservation Commission was established on February 18, 1929, by the passage of the Migratory Bird Conservation Act.³⁵⁹ The Commission was created and authorized to consider and approve any areas of land and/or water recommended by the Secretary of the Interior (the Secretary) for purchase or rental by the USFWS, and to fix the price(s) at which such areas may be purchased or rented.³⁶⁰ In addition to approving purchase and rental prices, the Commission considers the establishment of new waterfowl refuges.361 Since the Commission's establishment, over 5.6 million acres have been acquired by FWS through fee purchase, easement, or lease with money from the Migratory Bird Conservation Fund (the Fund). These funds are allocated at the Secretary's discretion as delegated to the Director of FWS. It is this Fund that would significantly benefit from a more robust budget.

THE DIRECT ECONOMIC IMPACT OF MIGRATORY BIRD HUNTING IS ALMOST \$3.5 BILLION ANNUALLY, WITH 2.6 MILLION ANNUAL PARTICIPANTS.

Currently there are four major sources of money for the Fund.³⁶² "The most well-known source is the revenue received from the sale of Migratory Bird Hunting and Conservation Stamps, commonly known as Duck Stamps."³⁶³ The other three major sources include appropriations authorized by the Wetlands Loan Act of

³⁵⁹ Migratory Bird Conservation Commission. U.S. Fish and Wildlife Service, National Wildlife Refuge System. https://www.fws.gov/refuges/realty/mbcc.html (last visited Nov. 21, 2017).

October 4, 1961, as amended; import duties collected on arms and ammunition; and receipts from the sale of refuge admission permits as provided for by the Emergency Wetlands Resources Act of 1986.³⁶⁴ The Fund is further supplemented by receipts from the sale of products from rights-of-way across national wildlife refuges, disposals of refuge land, and reverted Federal Aid funds.³⁶⁵ While it may seem like the Fund has enough sources of revenue to conserve and protect migratory birds, additional funds can be utilized contribute to migratory bird conservation efforts.

The direct economic impact of migratory bird hunting is almost \$3.5 billion annually, with approximately 2.6 million annual participants.366 86 million Americans participated in wildlife watching in 2016, spending around \$75.9 billion on these activities, with bird-watchers comprising over half (45.1 million) of these wildlife watchers.³⁶⁷ These hunters, birdwatchers, and the states depend on federal cooperation to support state-based migratory bird management. The financial resources dedicated to migratory bird conservation provide important funding and support collection of necessary data that allows states to make sound, scientifically-based management decisions, monitor migratory birds, and fulfill their shared jurisdictional responsibility over migratory birds. Federal funding for migratory bird conservation is influenced by partnership efforts with other conservation groups, which allows the limited federal budget to affect broader efforts.

For example, the North American Wetlands Conservation Act (NAWCA) provides funding for wetland conservation projects that support clean water for birds and humans. NAWCA has provided \$1.4 billion in federal grants since 1991, with a non-federal partner match of \$2.9 billion.³⁶⁸ Additionally, the Neotropical Migratory Bird Conservation Act (NMBCA) supports conservation of the U.S. breeding

³⁶⁰ *Id*.

 $^{^{361}}$ *Id*.

³⁶² Id.

³⁶³ *Id*.

 $^{^{364}\,}Id.;$ Migratory Bird Conservation Fund. LandScope America.

http://www.landscope.org/action/conserve/federal_programs/migratory_birds/. (last visited Nov. 21, 2017).

³⁶⁵ *Id*, supra note 359.

³⁶⁶ Hunting in America: An Economic Force for Conservation. National Shooting Sports Foundation. January 2013. https://www.fs.fed.us/biology/resources/pubs/wildlife/HuntingEconomicImpacts-NSSF-Southwick.pdf (last visited Nov. 21, 2017).

³⁶⁷ 2016 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation, National Overview. U.S. Fish and Wildlife Service. August 2017.

https://wsfrprograms.fws.gov/subpages/nationalsurvey/nat_survey2016.pdf. (last visited Nov. 21, 2017).

³⁶⁸ North American Wetlands Conservation Act. U.S. Fish and Wildlife Agency. https://www.fws.gov/birds/grants/north-american-wetland-conservation-act.php. (last visited Nov. 21, 2017).

birds on their wintering grounds located south of the U.S. border. This Act protects the shared migratory bird resources when they travel outside of the U.S.'s jurisdictional boundaries. Since 2002, the NMBCA "has provided more than \$62.2 million in grants to support 541 projects in 36 countries. Partners have contributed an additional \$235.9 million, affecting 4.2 million acres of habitat. The networks that have developed as a result of NMBCA funding have evolved into powerful conservation alliances." 369

Despite the reliance of states and other partners on the Fund's resources, migratory bird conservation efforts currently suffer from chronic under-funding of core functions and activities, including severe understaffing.370 This lack of resources has created hardships, not only within migratory bird conservation, but also among its broad range of partners, including state fish and wildlife agencies, industry, and migratory bird enthusiasts. What's more, the lack of resources is occurring at a less-than-ideal time-more than one-third of North America's birds are at risk of extinction without urgent conservation action.³⁷¹ States rely on federally collected or federally funded information from bird monitoring to set harvest regulations, including season length and bag limits. In many instances, state dollars are used to match these federal investments, which represents another powerful example of state and federal agencies working collaboratively toward a common goal.372 "Decreased funding for bird monitoring and decreased staffing of harvest-focused federal positions have severely hindered the states' ability to adequately serve the interests of those who hunt waterfowl, dove, and other migratory birds and simultaneously protect populations and habitats of migratory birds."373

Because of the impact of migratory birds on the states, their agencies, and citizens, many migratory bird conservation partners encourage FWS to seek a more

 369 Neotropical Migratory Bird Conservation Act. U.S. Fish and Wildlife Agency.

https://www.fws.gov/birds/grants/neotropical-migratory-bird-conservation-act.php. (last visited Nov. 21, 2017).

³⁷⁰ Letter from Virgil Moore, President, Ass'n. of Fish and Wildlife Agencies, to Gregory Sheehan, Acting Director, U.S. Fish and Wildlife Services (October 11, 2017).

³⁷¹ State of North America's Birds 2016 Report. North American Bird Conservation Initiative. 2016. http://www.stateofthebirds.org/2016/wp-content/uploads/2016/05/SoNAB-ENGLISH-web.pdf. (last visited Nov. 21, 2017).

robust budget that can support an effective state-federal partnership to conserve and manage migratory birds. Such a budget was enacted in Fiscal Year 2010, totaling \$54,483,000.374 Top priorities of conservation and monitoring (\$31,010,000) and North American Water Fowl Management Plan (\$14,054,000) were adequately funded, which allowed these programs to accomplish shared state and federal mandates while keeping in mind the needs of millions of hunters and birdwatchers. However, the proposed and enacted budgets have been decreasing since then, and the FY2018 proposed budget of \$44 million³⁷⁵ significantly weakens the ability of the migratory bird conservation program to accomplish its mandate. If this trend continues and further budget-cuts are proposed for FY2019, the effectiveness of this historic program would be further undermined.

While the reality of a tight financial environment forces difficult decisionmaking, it is again important to highlight the collaborative management of North America's migratory bird programs. This approach is crucial for strengthening the state-federal relationships and bolstering a strong economy for hunters and birdwatchers. The money that is spent on migratory bird conservation is definitely not "for the birds", and FWS should seek to increase its annual budget for the sake of migratory bird conservation.



³⁷² *Id.*, *supra* note 369.

373 *Id*

³⁷⁴ Budget Justifications and Performance Information, Fiscal Year 2012, Fish and Wildlife Service. The United States Department of the Interior.

https://www.doi.gov/sites/doi.gov/files/migrated/budget/appr opriations/2012/upload/FY2012_FWS_Greenbook.pdf. (last visited Nov. 21, 2017).

³⁷⁵ Budget Justifications and Performance Information, Fiscal Year 2018, Fish and Wildlife Service. The United States Department of the Interior.

https://www.fws.gov/budget/2018/FY2018-FWS-Greenbook.pdf. (last visited Nov. 21, 2017).

VI. OPPORTUNITY TO HUNT FOR ALL

a. On the Public-Private Model as an Alternative to the Public Model of Conservation

Matthew Collom

Beginning with the preservation of land that would comprise Yellowstone National Park in 1872, and continuing into today, the centerpiece of much of America's conservation efforts has been land conservation. In today's era of smaller federal budgets and larger costs the public land conservation model can be supplemented by a public-private model.³⁷⁶ This public-private concept is not exclusive to the United States, but has been implemented to great success overseas as well. Furthermore, in parts of the world where conservation is not adequately funded, the public-private model can grow the amount of protected habitat.

Historically, large scale conservation efforts in the United States have relied upon a public model. Enacted in 1916, the National Park Service Organic Act created the National Park Service (NPS) as a federal bureau within the Department of the Interior (DOI) to "promote and regulate the use of the Federal areas known as national parks, monuments, and reservations . . . [and] to conserve the scenery and the natural and historic objects and the wild life therein . . . for the enjoyment of future generations." Today this system has expanded to more than 400 properties in the NPS portfolio in all 50 states, and employs approximately 20,000 employees. 378

³⁷⁶ Timothy Egan, *National Parks for the 1 Percent*, N.Y. Times, (Nov. 3, 2017)

https://www.nytimes.com/2017/11/03/opinion/national-parks-entrance-cost.html (last visited Nov. 7, 2017).

³⁷⁷ America's National Park System: The Critical Documents, NPS.gov,

https://www.nps.gov/parkhistory/online_books/anps/anps_1i.htm (last accessed Nov. 7, 2017).

³⁷⁸ *About Us*, https://www.nps.gov/aboutus/history.htm (last accessed Nov. 7, 2017).

³⁷⁹ NATIONAL PARK SERVICE: BUDGET JUSTIFICATIONS AND PERFORMANCE INFORMATION FISCAL YEAR 2018 OVERVIEW-19, https://www.nps.gov/aboutus/upload/FY-2018-NPS-Greenbook.pdf (Overview-19).

380 Id., at Overview-22.

 381 National Park Service: About Us, https://www.nps.gov/aboutus/faqs.htm (last visited Nov/ 7, 2017).

³⁸² Nathan Rott, *National Parks Have A Long To-Do List But Can't Cover The Repair Costs*, (Mar. 8, 2016)

This system of land management and conservation comes with a cost. According to the 2018 Budget Justifications and Performance Information report, NPS's 2016 budget was approximately \$2.8 billion.³⁷⁹ In 2018, that budget is projected to be less, at \$2.6 billion.³⁸⁰ In addition to the fixed costs of operating over 400 properties in the National Park System,³⁸¹ NPS has a \$12 billion backlog on maintenance and is trying to reduce its expenditures.³⁸² By necessity, these budgetary reductions will reduce the positive effects of NPS conservation efforts.³⁸³ However, there is a solution to this reduction in conservation efficacy that does not depend entirely upon the federal government and in fact grows the number of partners involved in conservation efforts.

The American Prairie Reserve (APR) is a nonprofit organization that links "existing public lands using private lands purchased from willing sellers" in order to enlarge the areas protected for wildlife.³⁸⁴ Founded in 2004, and based in Bozeman, Montana, APR has built a "habitat base of 399,379 acres" of land along the banks of the Missouri River.³⁸⁵ As of this writing this total is composed of "91,588 acres" of private lands owned by APR, and "307,791 acres" [of] public land leased by the Reserve. "386 The size of the reserve is indicative of its success; the larger the reserve the more land and species it can offer refuge. Activities offered in the park include wildlife watching, hiking, driving tours, and hunting.³⁸⁷

This model offers an alternative to sole reliance on the federal government for large scale conservation efforts. Using public lands as anchors for an emerging and expanding network of conserved lands, groups and

https://www.npr.org/2016/03/08/466461595/national-parks-have-a-long-to-do-list-but-cant-cover-the-repair-costs

³⁸³ NATIONAL PARK CONSERVATION ASSOCIATION, *Budget Proposal Threatens National Parks*, (Mar. 16, 2017)
https://www.npca.org/articles/1500-budget-proposal-threatens-national-parks. The NPS' FY 2018 proposed budget will end funding for major initiatives like the Great Lakes Restoration Initiative, the Chesapeake Bay Program, and the South Florida geographic program, among others.

384 AMERICAN PRAIRIE RESERVE,

https://www.americanprairie.org/building-the-reserve (last visited Dec. 01, 2017).

 385 *Id*.

 386 *Id*.

387 AMERICAN PRAIRIE RESERVE,

https://www.americanprairie.org/things-to-do (last visited Dec. 02, 2017).

individuals inclined toward conservation can contribute privately owned lands to increase the effectiveness of publicly conserved lands. It also increases the effectiveness of the National Park System without increasing costs to it, public awareness, and can allow experimentation in conservation methods. In this context. 'effectiveness' means increasing the amount of land and wildlife conserved. If the actions of APR from its founding until today are any indicator, its linking of almost 100,000 acres of private land to over 300,000 acres of public lands, is indicative of the success of the public-private land conservation model.

The public-private model exists outside the United States as well. Gorongosa National Park in Mozambique is one of the more notable examples, particularly as an example of what can be done in locations where conservation is not a high priority for the government.³⁸⁸ The land comprising the park was originally a hunting preserve set aside during Mozambique's colonial period in 1920.³⁸⁹ In 1960 Portugal declared the preserve a national park; however, the Mozambique Civil War led to massive ecological damage in the park.³⁹⁰ In 1994, the "first wildlife survey since the [civil war's conclusion] counted 100 elephants, 300 reedbuck, 100 waterbuck, and only a handful of zebra and small antelope."³⁹¹

Restoration efforts led by the local government were slow to show positive results. In 2004, Mozambique and the Gorongosa Restoration Project agreed to partner using the public-private model to accelerate restoration efforts.³⁹² The Gorongosa Project was "a U.S. based non-profit organization" founded by Greg Carr, an American philanthropist.³⁹³ By 2007, an aerial survey showed that the numbers of "species in the park had risen dramatically" since the 1994 survey, showing the effectiveness of the public-private model. It is important to note that the efforts to restore Gorongosa National Park were a joint effort involving Mozambique government employees in addition to the experts of the Carr Foundation; this was a true public-private partnership.

In a political era affected by shrinking budgets, the public-private model of conservation offers a solution to the restraints these conditions impose. APR is the best example in the Unites States of this model, and its efficacy has been demonstrated at Gorongosa National Park overseas as well. If embraced in the United States, this model has the potential to combine the legal authority of federal and state governments with the sanctity of private property rights to massively increase the amounts of protected land in the United States.

b. Case brief: PETPO v. U.S. Fish & Wildlife Service

Matthew Collom

People for the Ethical Treatment of Property Owners (PETPO), an association formed to represent over 200 Utah property owners, sued the U.S. Fish and Wildlife Service (FWS) over a rule promulgated for the Utah prairie dog, listed as threatened under the Endangered Species Act (ESA).394 Friends of Animals (FoA), a non-profit group, intervened in support of FWS.³⁹⁵ The rule at issue prohibits the taking of the Utah prairie dog pursuant to its ESA protections.396 PETPO alleged that this rule has hindered the economic development of its members' properties, and sought to have the rule vacated and enforcement enjoined. PETPO asserted that FWS does not have the constitutional authority to regulate a purely intrastate species. FWS asserted that it has the authority to regulate this species regardless of its intrastate status. The U.S. District Court for the District of Utah granted summary judgment in PETPO's favor, holding that neither the Commerce Clause nor the Necessary and Proper Clause granted Congress the authority to regulate the take of the prairie dog on nonfederal land.397

The Tenth Circuit affirmed the District Court's holding that PETPO had standing to challenge the rule promulgated by FWS, but reversed its holding "that Congress lacked authority under the Commerce Clause to regulate (and authorize the Service to regulate) the take of the Utah prairie dog." PETPO's central argument was that the Constitution does not allow Congress, and

³⁸⁸ GORONGOSA NATIONAL PARK, http://www.gorongosa.org/ourstory (last visited Nov. 15, 2017).

³⁸⁹ GORONGOSA NATIONAL PARK, http://www.gorongosa.org/ourstory/timeline (last visited Nov. 15, 2017).

³⁹⁰ *Id*.

³⁹¹ *Id*.

³⁹² *Id*.

³⁹³ *Id*.

³⁹⁴ People for the Ethical Treatment of Property Owners v. U.S. Fish and Wildlife Serv., 852 F.3d 990, at 996 (10th Cir. 2017).

³⁹⁵ *Id.* at 994.

³⁹⁶ Id. at 995.

³⁹⁷ Id. at 996.

³⁹⁸ Id. at 994.



therefore FWS, to regulate intrastate species as intrastate species cannot trigger the Commerce Clause. However, the Tenth Circuit held that "the Commerce Clause authorizes regulation of noncommercial, purely intrastate activity that is an essential part of a broader regulatory scheme" if Congress has a rational basis to believe that regulation "is an essential part of ESA's broader regulatory scheme which...substantially affects interstate commerce."³⁹⁹ Subsequently, the court concluded that Congress had the requisite "rational basis."⁴⁰⁰

³⁹⁹ Id. at 1001.

The Tenth Circuit reversed and remanded the case, instructing the District Court to enter summary judgment for FWS and FoA. 401

c. Hunting Opportunity for All: Decline of Hunters and Public Access Programs

McKaylyn Mitrzyk

The North American Model of Wildlife Conservation is guided by the Seven Sisters for Conservation, among them hunting opportunity for all. In short, "[e]very citizen has an opportunity, under the law, to hunt and fish in the United States and Canada." However, according to the 2016 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation, there were 11.5 million hunters in 2016, comprising only "5% of the U.S. population 16 years old and older." Furthermore, the survey found that "overall hunting participation decreased 16% from 2011 to 2016." 403

In response to the decline in hunters, federal and state governments and non-governmental organizations have implemented programs and initiatives. For example, the Voluntary Public Access and Habitat Incentive Program (VPA-HIP), authorized in the Agricultural Act of 2014 (2014 Farm Bill), provides funding to State and tribal governments "to expand or improve habitat in existing public access programs or provide incentives to improve habitat on land enrolled in their public access programs."⁴⁰⁴ The purpose of the VPA-HIP funding is "to encourage owners and operators of privately-held farm, ranch, and forest land to voluntarily make that land available for access by the public for wildlife-dependent recreation, including hunting and fishing under programs administered by State and tribal governments."⁴⁰⁵

In 2014, the U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) invested \$20 million in nine states and one federally recognized tribe, and in 2015, the number of states receiving funding through VPA-HIP increased to fifteen states.⁴⁰⁶ With these

https://www.nrcs.usda.gov/wps/PA NRCSConsumption/download?cid=stelprdb1252537&ext=pdf.

⁴⁰⁰ Id. at 1006.

⁴⁰¹ Id. at 1008.

⁴⁰²U.S. Fish & Wildlife Serv., 2016 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation: National Overview (Aug. 2017).

⁴⁰³ Id.

⁴⁰⁴ U.S. Dep't of Agric., Natural Res. Conserv. Serv., VPA-HIP Factsheet (March 2014),

⁴⁰⁵ Program Regulation and Authority: 7 CFR 1455- Voluntary Public Access and Habitat Incentive; 15 U.S.C. 714b and 714(b); 16 U.S.C. 3839bb-5 https://www.gpo.gov/fdsys/pkg/CFR-2017-title7-vol10-part1455.xml.

 $^{^{\}rm 406}$ 2015 Grantees: CO, CT, IL, KS, MA, MI, MN, MO, MT, NE, OK, OR, WA, WI, WY

 $[\]frac{https://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/programs/farmbill/?cid=stelprdb1242739.$

grants, states have implemented programs to make hunting opportunity more accessible, targeting youth, elderly, and veteran populations. More importantly, the states receiving Federal funding have created programs providing financial incentives to private landowners who voluntarily lease land to the state, and in turn provide an opportunity for hunters to again access to private lands.

In 2015, the VPA-HIP awarded Michigan a grant of \$951,400 to expand existing access program into the Northern Lower Peninsula to provide increased hunting opportunities and wildlife conservation.⁴⁰⁷ Michigan's Hunting Access Program (HAP) was created in 1977, and provides incentives to landowners who are willing to lease their land to the state, allowing hunters without their own land to hunt for free during hunting season.⁴⁰⁸ Eligible landowners must own 40 or more acres, and a minimum of 5 percent must be wildlife habitat.⁴⁰⁹ Participating landowners, depending on land cover type and hunting rights on their property, would receive annual payments of up to \$25 per acre.⁴¹⁰

The 2016 Michigan Hunting Access Program Survey, conducted by the Michigan Department of Natural Resources (DNR), sent questionnaires to 3,977 hunters who hunted on the 20,089 acres of HAP land. The questionnaires received indicated that:

The primary reasons hunters selected HAP lands were: (1) they did not have access to private lands [65%], (2) the HAP lands were located near their residence [63%], (3) they had previously experienced good hunting on HAP lands [58%], and (4) they had limited time to locate alternative hunting sites [53%].⁴¹¹

As of September 2017, 79% of land in Michigan is privately owned, and 83% of Michigan hunters hunt on private land. 412 When considering the amount of private land, it should not be surprising that lack of access to private land was a primary reason hunters selected HAP land. Not only

is lack of access contributing to HAP participants, but a reason why the number of people hunting decreased by nearly 4 percent between 2015 and 2016.⁴¹³

Although various factors contribute to the decline number of hunters, access to land is a constant barrier for many hunters and people interested in hunting. Whether it is the price of owning land, leasing land, and other difficulties that prevent an individual from owning land to hunt, hunting opportunity for all is a major component in the North American Model of Wildlife Conservation. Therefore, the importance of hunter access programs like Michigan's in combating the decline in the number of hunters is obvious.

VII. SCIENTIFIC MANAGEMENT

a. Promoting Coexistence Among Humans and Wildlife

Shannon LaGassa

As human population continues to grow, and modern development diminishes more wild lands, conflicts arise between people and the surrounding wildlife. In response to this conflict, many organizations are taking steps to promote coexistence of the land between humans and wildlife. Some of these organizations include: Born Free USA, African Wildlife Foundation, Animal Protection of New Mexico, and Defenders of Wildlife (Defenders). When coexistence conflicts arise, the animals are typically killed, a response that threatens the survival of wildlife, but also creates a continuous cycle, since the killing of wildlife does not deter other wildlife from also entering the same land.414 Many organizations are trying to prevent this response, by encouraging coexistence policies and educating the public.415 To adequately establish a solution to the coexistence conflict among humans and wildlife, the organizations reach out to communities that have increased numbers of wildlife interactions, and provide

^{407 2014} Farm Bill: VPA-HIP Grantees, Aug. 2015 https://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/programs/farmbill/?cid=nrcseprd388655.

⁴⁰⁸ Mich. Dep't of Natural Res., Hunting Access Program Digest (2017).

⁴⁰⁹ Supra note 402.

⁴¹⁰ Hunting Access Program in Northern Michigan, Michigan Department of Natural Resources

⁴¹¹ Supra note 408.

⁴¹² MIScorecard Performance Summary, Natural Resources (Sep. 2017)

http://www.michigan.gov/documents/openmichigan/dnr sept ember 607796 7.pdf.

⁴¹³ Brain J. Frawley, *Michigan Deer Harvest Report 2016 Seasons*, Michigan Department of Natural Resources Wildlife Report No. 3639 (June 2017)

⁴¹⁴ Def. of Wildlife, *Promoting Coexistence* (2017), https://defenders.org/promoting-coexistence/overview. <a href="https://defenders.org/promoting-coexistence/overview-ove

them with tools and resources that prevent coexistence conflicts.

Coexistence conflicts typically arise in response to wildlife damage. Humans often kill wildlife when the animals begin damaging, or posing a risk of damaging property.⁴¹⁶ Examples of property that humans typically protect from wildlife include; birdfeeders, structures such as chimneys and decks, crops and gardens, pets, windows, livestock, fish ponds, and vehicles.⁴¹⁷ Wildlife can also pose other risks and damages to humans. Birds and deer can collide with moving vehicles, causing substantial and costly

damage to the vehicle, and possibly injury, or even death to the occupants.⁴¹⁸ Wildlife can also transmit diseases to humans, such as ticks transmitting Lyme Disease, mosquitos transmitting West Nile virus and Ebola, and wolves and bats transmitting rabies.⁴¹⁹

To maintain a proper balance among humans and wildlife, and to help promote coexistence, the law often intervenes. In the U.S. legal system, wildlife is protected through an assortment of legal rules.⁴²⁰ This hierarchy begins with federal law, then moves down to state law, then local ordinances, and ends with landowner preference.⁴²¹

Federal law often utilizes three methods to protect wildlife.⁴²² The first method is "restricting or directing the taking, transport or sale of wildlife resources, and requiring the government to conserve and even restore wildlife."⁴²³ The second is "federal acquisition, protection and/or management of wildlife habitat."⁴²⁴ The last method is "[r]equiring federal agencies to consider the impact of their activities on the environment, or to consider alternatives to planned action,"⁴²⁵ Examples of wildlife protection from federal laws include the Migratory

Bird Act, which makes it "unlawful to take, import, export, possess, buy, sell, purchase, or barter any migratory bird" and the Endangered Species Act (ESA), which, "regulates a wide range of activities affecting plants and animals designated as endangered or threatened." 426

There are many pending cases that illustrate the struggle between humans and wildlife to coexist in today's modern developing society. These cases often accompany the work of wildlife conservation organizations to promote coexistence among specific species, such as wolves and grizzly bears.



Wolves

Ranchers from a variety of areas are continuously confronted with wolves attacking and killing livestock. The best nonlethal tactic for preventing wolves from attacking livestock is to increase the wolf's perception of risk, and prevent any attraction to livestock.⁴²⁷ For example, research has shown that wolves can be attracted to animal carcasses.⁴²⁸ To prevent this attraction, ranchers can create a deeply fenced pit in which to bury or burn any carcass.⁴²⁹ Ranchers can also prevent wolves from killing

 $\frac{https://www.animallaw.info/article/federal-wildlife-law-20th-century.}{\\$

⁴¹⁶ Internet Center for Wildlife Damage Mgmt., *Prevention of Wildlife Damage*, http://icwdm.com/management/prevention/

⁴¹⁷ *Id*.

⁴¹⁸ *Id.* at *Animal and Wildlife Threats*, http://icwdm.org/Humaninteractions/Default.aspx.

⁴¹⁹ Id.

⁴²⁰ *Id.* at *Legal Issues*, http://icwdm.com/management/legalissues/

⁴²¹ *Id*.

⁴²² Ruth Musgrave, Animal Legal & Historical Center, *Federal Wildlife Law of the 20th Century* (1998),

 $^{^{423}}$ Id.

⁴²⁴ *Id*.

⁴²⁵ *Id*.

⁴²⁶ The Wildlife Rehab. Info. Directory, *Laws Regarding Wildlife* (November 27, 2012),

http://wildliferehabinfo.org/LawsAbtWL MnPg.htm.

⁴²⁷ *Id*.

⁴²⁸ *Id*.

⁴²⁹ *Id*.

livestock by using livestock guardian dogs, or by increasing the presence of riders or herders among the livestock. 430 Ranchers can even use scare tactics, like sound or light alarms, to scare the wolves away. 431 Even attaching bells on the livestock decreases the chance that they will be attacked by a wolf. 432

One of the issues that coexistence policies combat is human misconceptions of wolves. For example, wolves only account for one percent of sheep deaths. 433 To put this misconception into perspective, other causes of sheep deaths include; 25.3 percent from coyotes, 22.6 percent from weather, 11 percent from disease, and 5.8 percent from old age. 434

Organizations have also been working to prevent the extinction of the Mexican gray wolf. Once having an ample population, there are now currently only 58 of these wolves in the wild within Arizona and New Mexico.⁴³⁵ In 1976, the Mexican gray wolf was listed as an endangered species under the ESA.⁴³⁶ During the 1800s, wolves began killing livestock due to a decline in their native prey.⁴³⁷ Western settlers began killing the wolves in response to livestock deaths, and would poison, trap, and shoot them, exterminating a majority of the Mexican gray wolf population by the 1930s.⁴³⁸

In 1995, gray wolves were re-introduced in the Yellowstone National Park.⁴³⁹ Since then, the gray wolf population has increased and the wolves have migrated to nearby states, including Oregon.⁴⁴⁰ In 2005, the Oregon issued its Wolf Conservation and Management Plan.⁴⁴¹ This Plan is composed of three phrases determined by the number of wolves and breeding pairs in the state.⁴⁴² Plaintiffs filed suit, alleging that wolf removals in Phase II of the Plan

"decrease[] the likelihood of being able to see or hear wolves, negatively affecting the aesthetic and recreational value of the area."443 The district court held that the USDA-APHIS Wildlife Services correctly concluded that removal of some of the wolves "would not diminish wilderness value," and "wolf populations can sustain heavy losses...without experiencing a decline in abundance."444

Grizzly Bears

Human-related deaths and habitat loss are significant threats to grizzly bear populations.⁴⁴⁵ As grizzly bears' range has decreased, the bears have ventured onto lands inhabited by humans to search for food.⁴⁴⁶ The bears are often then viewed as a threat to humans and killed.⁴⁴⁷

In Alliance for the Wild Rockies v. Ashe, the issue was whether the Young Logging Dodge Project violated the ESA and National Environmental Policy Act (NEPA) by "partially tak[ing] place on protected habitat of the grizzly bear, a threatened species."448 The court found that U.S. Fish and Wildlife Service (FWS) and U.S. Forest Service (USFS) fulfilled the obligations set out by the ESA and affirmed summary judgment.449 The court stated that the ESA requires agencies to consult expert wildlife agencies to determine that actions are "not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of [critical] habitat of such species."450 The court held that the two agencies appropriately considered and concluded that post-and-pole logging would only occur in a small portion of the recovery land, the secured habitat would allow "grizzlies to 'sustain disturbance within their home range without injury or death," and, "prescribed burning would not be scheduled during

⁴³⁰ *Id*.

⁴³¹ *Id*.

⁴³² Id.

⁴³³ U.S. Dep't of Agric., *Sheep and Lamb Predator and Nonpredator Death Loss in the United States* (2015), https://www.aphis.usda.gov/animal-health/nahms/sheep/downloads/sheepdeath/SheepDeathLoss2015.pdf.

⁴³⁴ *Id*.

⁴³⁵ *Id*.

⁴³⁶U.S. Fish & Wildlife Serv., *Mexican Wolf Recovery Timeline* (Dec. 31, 2015),

 $[\]frac{https://www.fws.gov/southwest/es/mexicanwolf/chronology.cf}{m.}$

⁴³⁷ U.S. Fish & Wildlife Serv., *What is a Mexican Wolf?* (April 28, 2014),

https://www.fws.gov/southwest/es/mexicanwolf/natural history.cfm.

⁴³⁸ Def. of Wildlife v Zinke, 849 F.3d 1077, 1079 (D.C. 2017).

⁴³⁹ Cascadia Wildlands v. Williams, 251 F.Supp.3d 1349, 1352 (D. Or. 2017).

⁴⁴⁰ Id.

⁴⁴¹ *Id*.

⁴⁴² *Id.* at 1353.

⁴⁴³ *Id.* at 1354 (internal citations omitted).

⁴⁴⁴ *Id.* at 1361. (internal citations and quotations omitted).

⁴⁴⁵ Def. of Wildlife, Grizzly Bear (2017),

https://defenders.org/grizzly-bear/threats.

⁴⁴⁶ *Id*.

⁴⁴⁷ *Id*.

⁴⁴⁸ 687 Fed.Appx 657, 658 (9th Cir. 2017).

⁴⁴⁹ *Id.* at 659.

⁴⁵⁰ *Id.* (quoting 16 U.S.C. §1536(a)(2)).

'important biological periods for grizzly bear survival," thereby complying with ESA obligations.⁴⁵¹

Other cases recently heard in the court that involve coexistence with grizzly bears include; *U.S. v. Wallen* (holding that the alleged killing of three bears in violation of the ESA was a petty offense not entitling defendant to trial by jury)⁴⁵² and *Hill v. Coggins* (involving an allegation of taking under the ESA arising from a zoo's poor handling of grizzly bears).⁴⁵³

These species and cases are only a small portion of what encompasses the coexistence campaign, and the cases currently being reviewed in the court system. As modern development causes the habitat for wildlife to diminish, humans must learn to coexist with animals. With many key species being on the verge of extinction, cases involving coexistence among endangered animals and humans will most likely continue to be a prominent presence in the legal system.

b. Case brief: American Wild Horse Preservation Campaign v. Perdue

Shannon LaGassa

In the Modoc National Forest in Northern California, there are two separate tracts of land, about 236,000 acres, where wild horses have been protected and managed by the U.S. Forest Service since 1975.454 During the 1980s, a Forest Service map indicated that the two tracts of land were connected, adding a 23,000 acre tract of land (the Middle Section) to the wild horse territory, adding up to 258,000 acres of wild horse territory in the National Forest.455 For over two decades, the area was called a single territory and the Service managed wild horses within the Middle Section.456 In 2013, the Forest Service declared the addition of the Middle Section in the 1980s map to be an administrative error, and redrew the wild horse territory lines to exclude the Middle Section. 457 The American Wild Horse Preservation Campaign, among others, filed suit against the Service, alleging the redrawing of the wild

horse territory to exclude the Middle Section violated multiple federal laws. 458

The court analyzed four factors in making their decision: First, the Wild and Free-Roaming Horses and Burros Act of 1971, 16 U.S.C §1331 *et seq.*, the federal law that "charges the Secretaries of Interior and Agriculture with 'protect[ing] and manag[ing] wild free-roaming horses and burros' on federal land."⁴⁵⁹ The Secretaries may also designate territory of public land as a sanctuary, and must manage wild horses, "in a manner that is designated to achieve and maintain a thriving natural ecological



balance."⁴⁶⁰ In 1980, the Service set regulations to "[e]stablish wild horse and burro territories . . . and then [a]nalyze, develop[,] and implement a management plan for each Wild Horse Territory."⁴⁶¹ The Service also went on to define wild horses as, "all unbranded and unclaimed horses . . . and their progeny," that have used National Forest System land since 1971, or will use the land in the future as their habitat. ⁴⁶² Second, the court considered the regulatory process called for in the Forest Management Act, and set out in 16 U.S.C. §1604(f). ⁴⁶³ These conditions include public participation and the plan must be written, "in appropriate material," including maps and descriptive documents, and entail stricter procedural requirements if

⁴⁵¹ *Id*.

^{452 874} F.3d 620 (9th Cir. 2017).

^{453 867} F.3d 499 (4th Cir. 2017).

⁴⁵⁴ *Am. Wild Horse Pres. Campaign v. Perdue*, No. 15-5332, 2017 WL 4385259, at *1 (September 29, 2017).

⁴⁵⁵ *Id*.

⁴⁵⁶ *Id*.

⁴⁵⁷ *Id*.

⁴⁵⁸ *Id*.

⁴⁵⁹ *Id.* (See also 16 U.S.C. §1333(a)).

⁴⁶⁰ *Id*.

 $^{^{461}}$ *Id.* (internal quotations omitted)(See also 36 C.F.R. $\S 222.60(a)$).

 $^{^{462}}$ Am. Wild Horse Pres. Campaign, 2017 WL 4385259, at *2.

⁴⁶³ *Id.* (See also 16 U.S.C. §1604(f)).

a Forest Plan amendment causes, "a significant change."⁴⁶⁴ Third, under the National Environmental Policy Act (NEPA), 42 U.S.C. §4321 *et seq.*, there must be an Environmental Assessment (EA) to determine if there will be a significant effect.⁴⁶⁵ If there is, an Environmental Impact Statement (EIS) must be released.⁴⁶⁶ Lastly, the Administrative Procedure Act (APA), 5 U.S.C. §551 *et seq.*, requires, "reasoned explanation" to prevent arbitrary and capricious decisions.⁴⁶⁷

The court held that the Forest Service's re-drawing of the territory to exclude the Middle Section must be reversed.468 To reach this decision, the Court first looked to the fact that in the two decades following the Territory Plan's inclusion of the Middle Section, "the Service actively managed and recorded wild horses in the Middle Section."469 The court then determined that the Service's decision to exclude the Middle Section territory was arbitrary and capricious for two reasons.470 First, the Service did not, "adequately explain its change in policy regarding the management of wild horses in the Middle Section . . . "471 Second, the Service did not adequately consider the necessity of an EIS.472 The Court determined that the Service failed to identify the environmental concern for the effect on the wild horse population caused by modification of the boundary, and even denied the existence of this concern.473

The court therefore held that the Service could not be permitted to claim the addition of the Middle Section territory was an "administrative error," and could not allow the Service to redraw the map to exclude such territory in response to the alleged error.⁴⁷⁴

c. Managing and Delisting Gray Wolves

Designation and Delisting of Distinct Population Segments Under the Endangered Species Act Michael Ricchi

Delisting grav wolves under the Endangered Species Act (ESA) has proved difficult for the U.S. Fish and Wildlife Service (FWS).475 The Wyoming and more recently the Western Great Lakes wolf decisions will affect the regulation and classification not only of wolves but also of grizzly bears, whales and possibly other species divided into distinct population segments (DPSs) under the ESA476 Additionally, the holdings in both cases have shown the difficulties of delisting and downlisting, not only for gray wolves within the eleven states of concern in these cases but also for FWS's ability to delist wolves throughout the United States upon a designation as a DPS.477 In both cases the courts held that, even if wolves have met or even exceeded their recovery goals in certain portions of their range, failure to consider loss of their historic range may invalidate a delisting or downlisting.478

In *Humane Society of the United States v. Jewell*, the U.S. District Court for the District of Columbia reasoned that FWS did not adequately consider "core population areas" as "significant portion[s] of range," disease, human-caused mortality, management plans, other regulatory schemes, or state management plans that permit killing of wolves in certain areas.⁴⁷⁹ The court held that all of these factors threaten the wolves' existence; therefore, FWS acted arbitrarily and capriciously without substantial scientific evidence that the Western Great Lakes wolf DPS could be delisted.⁴⁸⁰ Contrariwise, the U.S. Court of Appeals for the D.C. Circuit determined that FWS adequately considered these factors and, using the best

⁴⁶⁴ *Am. Wild Horse Pres. Campaign*, 2017 WL 4385259, at *2 (citations omitted)(See also 16 U.S.C. §1604(f)(2)(4)).

⁴⁶⁵ *Id.* (See also 40 C.F.R. §§1508.9(a), 1508.13).

 $^{^{466}}$ Am. Wild Horse Pres. Campaign, 2017 WL 4385259, at *2 (citations omitted).

⁴⁶⁷ *Id.* (See also 5 U.S.C. §551 *et seq.*)(citations omitted).

⁴⁶⁸ Am. Wild Horse Pres. Campaign, 2017 WL 4385259, at *5.

⁴⁶⁹ *Id.* at *3.

⁴⁷⁰ *Id*. at *5.

⁴⁷¹ *Id*.

⁴⁷² *Id*.

⁴⁷³ *Id*. at *12.

⁴⁷⁴ *Id*.

⁴⁷⁵ Martha C. Williams, Lessons from the Wolf Wars: Recovery v. Delisting Under the Endangered Species Act, 27 Fordham Envtl. L. Rev. 106, 132 (2016).

⁴⁷⁶*Id*. at 155.

 $^{^{477}}$ Id; see generally Timeline: The Fight for Northern Rocky Gray Wolves, <code>EarthJustice</code> (Dec. 4),

https://earthjustice.org/features/campaigns/wolves-in-danger-timeline-milestones (Historical timeline of ESA and Gray Wolves as an endangered species).

⁴⁷⁸ Williams, supra note 475, at 155.

⁴⁷⁹Humane Soc'y of the United States v. Jewell, 76 F. Supp. 3d 69, 128 (D.D.C. 2014), aff'd sub nom. Humane Soc'y of United States v. Zinke, 865 F.3d 585 (D.C. Cir. 2017).

⁴⁸⁰ Williams, supra note 475, at 135.

scientific data available, determined the populations to be continuously growing.⁴⁸¹ Additionally, the D.C. Circuit rejected the District Court's interpretation of the DPS mechanism as a one-way ratchet, holding that it is a twoway mechanism⁴⁸², and upheld FWS's interpretation of "range" to be the "current range" of the population.483 However, the court also held that the FWS unreasonably failed to consider the wolves' loss of historic range in its analysis for delisting.484 Within this analysis the D.C. Circuit proceeded to apply the ESA listing and delisting factors: "(A) the present or threatened destruction, modification, or curtailment of [the species'] habitat or range; (B) overutilization for commercial, recreational, scientific, or educational purposes; (C) disease or predation; (D) the inadequacy of existing regulatory mechanisms; or (E) other natural or manmade factors affecting its continued existence".485

The outcome of this case, as well as the litigation in the Wyoming cases, illustrates the difficulties that FWS and the National Marine Fisheries Service (NMFS) face when delisting or downlisting a DPS.486 Specifically, the outcomes show that the DPS mechanism has little applicable value when analyzing animals with "vast historic range and complex taxonomy."487 However, some progress has occurred with "states, tribes, conservation organizations, and private parties encourag[ing] the process of a species' recovery."488 Consequentially, representatives from both parties in both houses of Congress are working toward bills that would delist gray wolves.⁴⁸⁹ Gray wolf delisting could be provided for in the Senate's Hunting Heritage and Environmental Legacy Preservation for Wildlife Act, S. 1514, 115th Cong. § 7-8 (2017), and the House appropriations bill for the Department of the Interior (H.R. 3354, 115th Cong. § 117 (2017)) has a similar provision, along with a separate bill

from Rep. Collin Peterson (D-Minn.) (H.R. 424, 115th Cong. § 2-3 (2017).⁴⁹⁰

2. Contrasting the Scientific
Management of Two Gray Wolf
Populations: The Gray Wolves of
Washington vs. the Mexican Gray
Wolf of Arizona and New Mexico

With gray wolves in a precarious condition in certain areas across the nation, federal and state agencies are tasked with the heavy burden of ensuring their conservation and survival. To be balanced against the governments' interests in protecting wolves, however, is the threat that wolf packs may pose to people, other wildlife, or livestock. This article contrasts the efforts of one state to utilize the best available science in protecting commercial cattle from a territorial wolf pack with the publicly-perceived failures of the federal government to consider the best available science in protecting a subset of the American gray wolf population.

Washington

Dan Cercone

In 2016, the Washington Department of Fish and Wildlife made a \$135,000 decision to kill seven of eleven gray wolves of a pack responsible for attacking or killing roughly fifteen cattle on National Forest grazing allotments.⁴⁹¹ The pack, known as the Profanity Peak Pack, resides in northeastern Washington state and is one of nineteen wolf packs confirmed living in Washington.⁴⁹² The State employed aerial gunning via helicopter to exterminate the wolves, while a trapper secured the area.⁴⁹³ The remaining four wolves were spared due in part

 $^{^{481}}$ Humane Soc'y of United States v. Zinke, 865 F.3d 585, 607-13 (D.C. Cir. 2017).

⁴⁸² *Id.* at 602.

⁴⁸³ *Id*.

⁴⁸⁴ *Id*. at 614.

⁴⁸⁵Jewell, supra note 5, at 77; See also 16 U.S.C.A. § 1533(a)(1), (b)(1)(A) (West).

⁴⁸⁶ Williams, *Supra* note 475, at 142, 155; *see also* 59 C.F.R. 60252.01 (1994); *see also Defs. of Wildlife v. Hall*, 565 F. Supp. 2d 1160 (D. Mont. 2008).

⁴⁸⁷ Williams, *supra* note 475, at 155.

⁴⁸⁸ *Id*.

⁴⁸⁹ Devin Henry, *Court rules against gray wolf Endangered Species Act delisting*, The Hill (Nov. 7, 2017), http://thehill.com/policy/energy-environment/344749-court-rules-against-gray-wolf-endangered-species-act-delisting.

⁴⁹¹ Landers, Rich. *Profanity Peak Wolf Pack Removal Cost State* \$135k, The Spokesman-Review (Jan. 13, 2017), http://www.spokesman.com/blogs/outdoors/2017/jan/13/profanity-peak-wolf-pack-removal-cost-state-135k/.

⁴⁹² Landers, Rich. *Cattle-Killing Wolves to be Shot in Ferry County*, The Spokesman-Review (Aug. 3, 2016), http://www.spokesman.com/blogs/outdoors/2016/aug/03/cattle-killing-wolves-be-shot-ferry-county/.

⁴⁹³ Landers, *supra* note 491.

to rugged terrain, but the State reserves its obligation to take action if the surviving wolves assault cattle again.⁴⁹⁴

The State utilized its standard protocol for managing its wolf population. In 2011, the State issued the Washington Wolf Conservation and Management Plan, which "reflects endangered species laws as well as public comments received from thousands of people around the state."495 The Plan utilizes non-lethal deterrence, compensation, and lethal deterrence. The latter, utilized by the State in the Profanity Peak incident, is used "if it is documented that livestock have clearly been killed by wolves, non-lethal methods have been tried but failed to resolve the conflict, depredations are likely to continue, and there is no evidence of intentional feeding or unnatural attraction of wolves by the livestock owner."496 The Plan states that lethal removal tends to be used incrementally, "with one or two offending animals removed initially. If depredations continue, additional animals may be removed."497 This comports with the State's act of killing seven of eleven members of the pack initially. The State claims its decision was adopted with unanimous support of the Department's 18-member Wolf Advisory Group and considered public values and participation from wolf advocates, hunters, and livestock producers.498

Not all members of the public, however, were pleased with the State's decision. George Wuerthner of the Earth Island Journal argued that the rancher's cattle invaded the wolf pack's territory, a violation of the livestock industry's obligation to not "damage, degrade and impoverish our public lands heritage." Wuerthner believed the conflict and cattle depredation would have been prevented had the rancher been required to use other public lands or a

private pasture, rather than permitting the cattle to graze on public lands occupied by the wolf pack.⁵⁰⁰ Wuerthner analogizes the Profanity Peak incident to killing a bear because a human left out picnic food in a national park—something that humans would be fined for and the bear not killed for—and reflects a backwards prioritization of the State's obligation to protect both commercial cattle and wildlife.⁵⁰¹ This sentiment was echoed by Predator Defense, a nonprofit wildlife advocacy organization, in its short film on the Profanity Peak incident.⁵⁰²

Arizona and New Mexico

In 2016, the U.S. Fish and Wildlife Service (FWS) announced a draft plan for Mexican wolf conservation in the Blue Range Wolf Recovery Area, which is located across parts of Arizona and New Mexico. ⁵⁰³ FWS estimated a Mexican wolf population of 113 living in the Recovery Area as of December 31, 2016. ⁵⁰⁴ The Mexican Wolf Recovery Program consists of a joint effort by several federal government entities, the Arizona Game and Fish Department (AGFD), and the White Mountain Apache Tribe, which collectively devise a system to conserve and reintroduce Mexican wolves in Arizona and New Mexico that is "based in sound science." ⁵⁰⁵

Both FWS' and AGFD's⁵⁰⁶ online overviews are scant on details regarding the scientific management utilized in the recovery program. FWS mentions presentations, status reports, contacts with cooperating agencies and stakeholders, and reliance on reports of wolf sightings by the public.⁵⁰⁷ The Project's critics argue that FWS discarded two potential recovery areas due to "geopolitical reasons" rather than scientific reasons.⁵⁰⁸ Mike Phillips,

⁴⁹⁴ *Id*.

⁴⁹⁵ Gray Wolf Conservation and Management: WDFW Action Criteria, Washington Department of Fish and Wildlife, http://wdfw.wa.gov/conservation/gray wolf/livestock/action criteria.html.

⁴⁹⁶ Wolf Conservation and Management Plan (Dec. 2011), http://wdfw.wa.gov/publications/00001/wdfw00001.pdf p. 88 in the Plan, p. 92 of the PDF.

⁴⁹⁷ *Id*.

⁴⁹⁸ Profanity Peak Wolf Pack: 2016 Lethal Removal Action, Washington Department of Fish and Wildlife (Jan. 12, 2017), http://wdfw.wa.gov/conservation/gray_wolf/packs/files/ProfanityPeakPostAction_2016.pdf at p. 3.

⁴⁹⁹ Wuerthner, George. *The Profanity of the Profanity Peak Wolf Pack Massacre*, Earth Island Journal (Sept. 8, 2016), http://www.earthisland.org/journal/index.php/elist/eListRead/the-profanity-peak-wolf-pack-massacre/. ⁵⁰⁰ *Id*.

⁵⁰¹ *Id*.

⁵⁰² Predator Defense (2017).

https://predatordefense.org/profanity/index.htm.

⁵⁰³ Mexican Wolves in the Wild: The Mexican Wolf Reintroduction Project, United States Fish & Wildlife Service (2016),

 $[\]underline{https://www.fws.gov/southwest/es/mexicanwolf/BRWRP\ \ ho\ }\underline{me.cfm}.$

⁵⁰⁴ *Id*.

⁵⁰⁵ *Id*.

 $^{^{506}\,}Mexican$ Wolf Reintroduction & Management, Arizona Game & Fish Department,

https://www.azgfd.com/wildlife/speciesofgreatestconservneed/mexicanwolves/.

⁵⁰⁷ U.S. Fish & Wildlife Serv., *supra* note 503.

⁵⁰⁸ Crumbo, Kim and Sandy Bahr. *Coconino Voices: State Management of Mexican Gray Wolves not Based on Science*, Arizona Daily Sun (Aug. 19, 2017),

director of the Turner Endangered Species Fund in Bozeman, Montana, argued that the Project was meant to appease the states, thus putting politics ahead of the best available science.⁵⁰⁹ As the Recovery Project is still in its infancy, time will tell whether FWS' decisions truly have taken the Mexican wolf population's best interests into consideration, as numbers appear to be increasing for the subset of gray wolves.⁵¹⁰

Conclusion

It appears as though the State of Washington stuck to its scientific and public policy-oriented protocol in handling the threat the Profanity Peak gray wolf pack presented, while critics argue that questions remain unanswered regarding joint efforts between FWS and Arizona to conserve Mexican gray wolves.

3. Case brief: Humane Soc'y of the United States v. Zinke Dan Cercone

This case involved the Humane Society of the United States (HSUS), an animal rights organization, challenge to the U.S. Fish and Wildlife Service's (FWS) 2011 Rule simultaneously creating and delisting the Western Great Lakes distinct population segment (DPS) of gray wolves from Endangered Species Act (ESA) protections. The U.S. District Court for the District of Columbia vacated the rule as an arbitrary and capricious exercise of agency power. FWS appealed on the issue of whether the ESA permits FWS to carve out of an already-listed species a DPS for the sole purpose of delisting that segment. The U.S. Court of Appeals for the D.C. Circuit held that the ESA does permit such a designation, but only when FWS first makes the proper findings. The court found that FWS did not do so and affirmed the lower court's vacatur of the 2011 rule.

Summary

http://azdailysun.com/news/local/coconino-voices-state-management-of-mexican-gray-wolves-not-based/article c3ef3eof-c21b-504c-aoc5-f12da3c8f6cb.html.

FWS' fatal flaw was failing to consider the impact that creating the new DPS would have on remaining, already-listed wolves. The ESA requires FWS to look at the whole picture of the listed species, not just a segment of it. The D.C. Circuit stated that when a species is already listed, FWS cannot review a single segment "with blinders on, ignoring the continuing status of the species' remnant." The court found when FWS designated the DPS, it only looked at the DPS's characteristics in a vacuum, failing to determine whether both the DPS and remnant wolves would have mutually independent statuses as species. The court labeled this failure "the essence of arbitrary and capricious and ill-reasoned agency action." 513

Range

The court emphasized FWS's obligation to consider any threats the species faces "throughout all or a significant portion of its range" when attempting to delist a species. FWS merely interpreted the word "range" to mean the wolves' current range, focusing its analysis solely on the wolves' current habitat. The court found that interpreting the ESA to permit focusing on the current range was a reasonable interpretation of the Act, but that FWS's analysis was arbitrary and capricious because it omitted all consideration of the wolves' historical range. In short, FWS may focus on current range more than historical range, but must consider both. The court found that FWS failed to consider the immense losses of the wolves' historical range, and that failure to address such a key aspect of the wolves' plight constituted "unreasoned, arbitrary, and capricious decisionmaking."514

Best available science

HSUS's final challenge to the 2011 rule alleged that FWS failed to consider the best available science in its analysis. It argued that FWS failed to explain why the wolves' mortality from both disease and humans is not a continuing threat to the wolves' existence and failed to address the lack of protections from the states which make

⁵⁰⁹ Cally Carswell. *Endangered U.S. Wolf Denied New Habitat, as Critics Charge that Politics Trumped Science*, Science Magazine (Sept. 27, 2017),

http://www.sciencemag.org/news/2017/09/endangered-us-wolf-denied-new-habitat-critics-charge-politics-trumped-science.

⁵¹⁰ Mexican Wolf Recovery Timeline, US FWS, https://www.fws.gov/southwest/es/mexicanwolf/chronology.cf m. See also *supra* note 503.

⁵¹¹ See Humane Society of the United States v. Jewell, 76 F.Supp.3d 69 (D.D.C. 2014).

 $^{^{512}}$ Humane Society of United States v. Zinke, 865 F.3d 585, 601 (D.C. Cir. 2017).

⁵¹³ *Id*. at 603.

⁵¹⁴ *Id*. at 606.

up the Western Great Lakes area. The court held for FWS on these two arguments.

FWS's scientific analysis considered five diseases afflicting the DPS: canine parvovirus, sarcoptic mange, lyme, dog louse, and canine distemper virus. The court found that FWS adequately consulted scientific literature and studies in analyzing the effects of those diseases on DPS. FWS determined that Minnesota's, Michigan's, and Wisconsin's state plans would monitor dead wolves and test livecaptured wolves and wolf feces to detect any new or emerging diseases. FWS concluded that delisting the wolves from the ESA's protections would not significantly change the incidence or impacts of disease and parasites on the wolves, a conclusion corroborated by a peer review from an expert veterinary pathologist who specializes in wolf disease and mortality. Regarding human-caused mortality, the court found that FWS adequately considered fatal accidents, legal depredation killings, and intentional illegal killings in concluding that human-caused mortality has not materially threatened the DPS's continued existence. This conclusion was supported by in-depth scientific studies across several states. The court held that FWS' findings on disease and human-caused mortality were grounded in the best available scientific data and did not counsel against delisting the DPS.

Regarding the lack of state protections claim, the court held that he absence of state conservation plans in North Dakota, South Dakota, Illinois, Iowa, Ohio, and Indiana (contrast this with the extensive plans in Minnesota, Michigan, and Wisconsin) did not render FWS' decision to delist the DPS arbitrary and capricious.

Conclusion

FWS' interpretation of the ESA was reasonable but its failure to take into consideration all aspects of the wolves' range and populations rendered the 2011 rule arbitrary and capricious, despite FWS' utilization of the best available science in its management.

d. Case brief: Wilderness Watch v. Vilsack

Michael Ricchi

In 2014 the Idaho Department of Fish and Game (IDFG) set out to monitor elk population due to population decline.⁵¹⁵ IDFG believed that wolves within the Frank Church Wilderness caused this decline.⁵¹⁶ Consequently, to monitor the relationship between elks and wolves, IDFG proposed to land helicopters, tranquilize, and collar elk in the Frank Church Wilderness.⁵¹⁷ The first proposal to the U.S. Forest Service (USFS) set out to tranquilize and collar elk and wolves over ten years and 1,040 landings.⁵¹⁸ However, this plan was dropped until IDFG had further understanding of elk.⁵¹⁹ Additionally, two more proposals were submitted to USFS taking place over shorter periods and conducting fewer landings.⁵²⁰

Eventually, IDFG proposed a third one-year plan to conduct 120 landings, including tranquilizing and collaring of elk.⁵²¹ USFS knew IDFG's goals of the program's long-term elk coloring and monitoring use and approved the one-year plan.⁵²² After the approval, USFS published an Environmental Assessment (EA) of the program that acknowledged the extended negative impact of such an activity.⁵²³ However, USFS "essentially ignored" the (EA) and granted a temporary special use permit to allow immediate implementation of the program without time for challenge.⁵²⁴ The next day IDFG tranquilized and collared 57 elk and four wolves.⁵²⁵

Wilderness Watch filed an action claiming that IDFG and USFS violated the National Environmental Protection Act (NEPA) and the Wilderness Act of 1964.⁵²⁶ Wilderness Watch requested that the U.S. District Court for the District of Idaho enjoin IDFG from using the data collected, and that the data be destroyed.⁵²⁷ The Court held that, out of the ten factors to exam "the severity of the impact" under NEPA the IDFG had three factors present: cumulative impacts, precedent and, ecological critical

⁵¹⁵ Wilderness Watch v. Vilsack, 229 F. Supp. 3d 1170, 1174 (D. Idaho 2017).

⁵¹⁶ *Id.* at 1176.

⁵¹⁷ *Id*. at 1174.

⁵¹⁸ *Id.* at 1176.

⁵¹⁹ *Id.* at 1175.

⁵²⁰ *Id.* at 1176.

⁵²¹ Id.

⁵²² *Id.* at 1176-77.

⁵²³ *Id.* at 1177.

⁵²⁴ Id.

⁵²⁵ Id.

⁵²⁶ *Id.* at 1178.

⁵²⁷ *Id*.

area, thus USFS needed to prepare a Environmental Impact Statement (EIS) in addition to the EA.⁵²⁸

The cumulative impact standard examines the relation between a proposed project in conjunction with other projects and the impact it would have on the environment.529 USFS determined the extended negative impact; however, the Court held that government ignored the length of the one-year program and constructively failed to take a "hard look" and acknowledge the detrimental effect on the environment.530 Second, the government needed to set precedent.531 Through the negative extended impact on the environment it would not be a beneficial practice to allow "slicing long term projects into one year slivers."532 Finally, the ecological critical area makes an EIS necessary when there is a "unique characteristic of the geographic area such as proximity to...ecological critical areas"-in this case the Frank Church Wilderness. 533 Therefore, the Court held that, since USFS did not create an EIS, the program should not have been approved and violated NEPA.534 Additionally, the Court held that USFS did not make the "necessary" findings required to make an informed decision about the "... true nature of the impact[]" of helicopter landings on the environment, therefore violating the Wilderness Act of 1964.535 Furthermore, the Eleventh Amendment defense raised by IDFG Director Virgil Moore was rejected on the grounds that Wilderness Watch requested no monetary relief and the Supremacy Clause allows for state officials to be enjoined from violating federal statutes.⁵³⁶

The Court held: (1) USFS and IDFG caused plaintiffs irreparable injury; (2) monetary damages would not compensate that injury; (3) the balance of hardships warranted an equitable remedy; and (4) the public interest would not be harmed by a permanent injunction.⁵³⁷ Therefore, the Court prohibited IDFG from using the data collected, and ordered such data to be destroyed.⁵³⁸ Additionally, the Court determined that a 90-days "hold" rule for future helicopter projects was necessary to allow affected groups to file challenges to future projects.⁵³⁹

ABOUT THE WILDLIFE LAW CALL

These case briefs and articles were composed by students of Carol Frampton's Fall 2017 Wildlife Law course at Michigan State University College of Law. The students selected recent fish- and wildlife-related

decisions and emerging issues to summarize for this newsletter.

The Wildlife Law Call does not report every recent case or issue, but we hope you will find these briefs and articles interesting and informative.

Pictured here is a class discussion with two of the Michigan Department of Natural Resources' Conservation Officers, Chris Maher and Matthew Neterer. The class enjoyed a robust discussion with them on Michigan's regulations and some



of the closed wildlife law violations and prosecutions.

Carol is general counsel for the Association of Fish & Wildlife Agencies (AFWA). AFWA is a professional organization whose members are the fish and wildlife agencies of the 50 U.S. states as well as territories, several Canadian provinces and Mexican states, as well as some U.S. federal agencies.

1100 1st Street, Suite 825 Washington, D.C. 20002 (202) 838 3460

The Voice of Fish & Wildlife Agencies. Copyright © 2018. All rights reserved.

⁵²⁸ *Id.* at 1180.

 $^{^{529}}$ Id; see also 40 C.F.R. § 1508.7; see also Te-moak Tribe of Western Shoshone of Nevada v. U.S., 608 F.3d 592, 602 (9th Cir. 2010).

^{530 229} F.Supp. 3d at 1180.

⁵³¹ *Id*.

⁵³² *Id*.

⁵³³ Id. at 1180-81; see also 40 C.F.R. § 1508.27(b)(3).

^{534 229} F.Supp. 3d at 1181.

⁵³⁵ Id. at 1181-82.

⁵³⁶ *Id.* at 1182.

⁵³⁷ *Id.* at 1182-83; *See also Monsanto Co. v. Geertson Seed Farms*, 561 U.S. 139, 157 (2010).

^{538 229} F.Supp. 3d at 1183.

⁵³⁹ *Id*.