

HUNTERS AND ENDANGERED SPECIES: BEDFELLOWS FOR HEALTHY  
ECOSYSTEMS

by  
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## **Abstract**

This paper explores American hunting culture and how American politics shaped it. Highlighting the need for legislation like the Endangered Species Act (ESA) is showcased through a focusing event based on America's historical interaction with the American buffalo. In addition to developing legislation to sustain and preserve wildlife, America developed the North American Model of Conservation (NAMC), one of the best wildlife management systems ever seen. NAMC indicates that hunters have pivoted towards recovery and sustainment versus annihilation. This new model-built structure and funding with science-based approaches towards the decision to conserve wildlife. Using five case studies that involve the ESA in practice, it is clear that the problem is not the ESA itself. The problem surrounding protecting endangered species is the polarization among individuals and organizations. The quarrel centers over the science and recovery process used to recover endangered species. These various groups use litigation to slow the recovery of endangered species, ultimately slowing the species' return to state control. Once a species returns to state management, the state can determine wildlife population management practices. Often the state will use hunting for wildlife management. Selling hunting and fishing licenses generates means to fund conservation efforts as well as manage wildlife populations. These funds are earmarked only for conservation efforts and are not allowed into general funds. The next threats to hunters and endangered species will be the continued cultural shifts within American society and not state management of endangered species. Plant-based diets, the anti-gun movement, and the prolonged polarization across American society are a more significant threat to endangered species. Many organizations that seek to keep wild places wild have the same end goals. The disagreement is on which path to take. Saving endangered species saves hunting, and it will take strange bedfellows to recover endangered species.

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## Introduction

Preventing species' extinction involves more than limiting or banning hunting, ceasing the extraction industry, or denying public access into an area. Extinction prevention requires a wildlife conservation plan which links the spectrum of government, civil society, organizations and private industry.<sup>1</sup> Species survivability is only a single aspect of wildlife conservation in its holistic approach. Conservation itself takes many forms—from the individual private landowner, the community, and even at the federal government signing international treaties.<sup>2</sup> At its simplest, conservation maintains habitats and ensures the cleanliness of air and water within an ecosystem.<sup>3</sup> Wildlife management and conservation take dedicated professionals such as biologists, game and fish officers, and policymakers. More important than people doing conservation work, is the funding for conservation. A reliable method for dedicated funding is as an exercise tax or sales tax. These can be earmarked solely towards conservation efforts.<sup>4</sup>

America has a long history of regulating humanity's interaction with the natural world. One famous demonstration of conservation and preservation was Yellowstone's establishment as the first national park on March 1, 1872.<sup>5</sup> Yellowstone was one of the United States' first acts toward conservation. Since then, the Federal government has passed several influential laws affecting the natural world and humanity's interaction. Concurrent to the federal legislation,

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<sup>1</sup> U.S. Fish & Wildlife Service. "ESA Basic Facts." Accessed November 20, 2019 URL: [https://www.fws.gov/endangered/esa-library/pdf/ESA\\_basics.pdf](https://www.fws.gov/endangered/esa-library/pdf/ESA_basics.pdf).

<sup>2</sup> National Audubon Society. "Migratory Bird Treaty Act." Accessed April 25, 2019 URL: <https://www.audubon.org/news/migratory-bird-treaty-act> and Thornton Robert, Liz Klebaner. "The Critical Habitat Exclusion Policy: Implications for Conservation Partnerships on Private Land." *Natural Resources & Environment* 30, no. 1 (Summer 2015): 13–17. Accessed November 12, 2019.

<sup>3</sup> Wing, Leonard William, *Practice of Wildlife Conservation*. New York: Wiley, 1951. Accessed November 10 2019 URL: <https://babel.hathitrust.org/cgi/pt?id=mdp.39015006158045>.

<sup>4</sup> Bureau of Biological Survey. "Planning for Wildlife Management-An Outline." *Department of Agriculture. Wildlife Research and Management Leaflet* BS-107. March 01, 1938 Accessed November 10, 2019.

<sup>5</sup> National Park Service. "Birth of a National Park." *U.S. Department of the Interior*. Accessed November 1, 2019 URL: <https://www.nps.gov/yell/learn/historyculture/yellowstoneestablishment.htm>.

numerous court cases within circuit court, federal, or even the Supreme level make up the aggregate of laws governing the contemporary wildlife conservation model seen in America. One of the many avenues of game managers utilize within North America is legal game hunting to ensure wildlife stays at healthy population levels. Essentially this means that the hunters will take a certain number of wildlife set by game officials. State game agency set hunting quotas concurrent to what the natural world will statistically take each year to ensure a balance between wildlife, the land and man. End state creating a balance of reusable resources allows people to access it for enjoyment while maintaining healthy habitats.

Critical aspects of the Endangered Species Act (ESA) are either not optimized towards a suitable, structured delisting process and used for a political agenda. The ESA, in certain aspects, constrains state wildlife agencies by forced legal action to defend themselves. Like all laws in America to include the ESA requires an update or revision to maintain relevance. Hunting and game management principles derived from North America Model of Conservation (NAMC) should coincide with leveraging ESA protections to aid a listed species fully recovered.

In contemporary times game management has changed drastically since the lawlessness of the 19th century. Today's wildlife oversight is comparable to many other aspects of America's governmental structure, including federal and state portions. The US Fish and Wildlife Service (FWS), the U.S. National Oceanic and Atmospheric Administration (NOAA) Fisheries Service are the federal agencies in charge of all wildlife management. Each state has its version of the FWS or NOAA, though not always labeled as such. Each state retains individual freedom to maintain its state as long as the state falls in line with federal mandates. One federal directive to FWS from Congress was to limit and stop species from extinction. Like federal transportation

laws, the federal government sets minimum requirements, and the states must meet those minimums.

The aggregate of federal and state game laws has created a model that has come to take the name; The North American Model of Conservation (NAMC).<sup>6</sup> Canada and America have similar historical interaction with wildlife and must work in concern with each other. These collective interactions have defined today's understanding of the NAMC. However, this paper will specifically look towards America's wildlife interaction and management practices. The NAMC is based and developed by Valerius Geist and Shane Mahoney circa 1980. Today's NAMC principles were re-defined in December 2012 by both original authors as well as the Wildlife Society, and the Boone and Crockett Club:<sup>7</sup>

1. Wildlife resources are a public trust;<sup>8</sup>
2. Markets for game are eliminated;<sup>9</sup>
3. Allocation of wildlife is by law;<sup>10</sup>
4. Wildlife can be killed only for a legitimate purpose;<sup>11</sup>
5. Wildlife is considered an international resource;<sup>12</sup>
6. Science is the proper tool to discharge wildlife policy;<sup>13</sup>
7. Democracy of hunting is standard.<sup>14</sup>

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<sup>6</sup> Shane Mahoney and Valerius Geist. *The North American Model of Wildlife Conservation*. The Wildlife Society and John Hopkins University. 2019 and Organ, J.F et al.2012. *The North American Model of Wildlife Conservation*. Technical Review 12-04. Bethesda, MD: The Wildlife Society. Accessed Oct 24, 2019 ISBN: 978-0-9830402-3-1 pp. viii-iv. And a detailed list of the aggregate congressional laws and court cases are further defined in Appendix I.

<sup>7</sup> Ibid.

<sup>8</sup> *Wildlife resources are a public trust*. Meaning that the citizens of the world own the wildlife and that wildlife is held in trust by the state. The state is responsible for managing health of wildlife and habitat.

<sup>9</sup> *Markets for game are eliminated*. Hunting and fishing is for personal use only. It is legal to take wildlife and sell it on the open market.

<sup>10</sup> *Allocation of wildlife is by law*. Because wildlife is held in public trust the state determines how it will manage wildlife populations. Hunting and fishing are one of many methods a state has in managing animal populations.

<sup>11</sup> *Wildlife can be killed only for a legitimate purpose*. This places scientific reasons for killing wildlife, such as management purposes or scientific research.

<sup>12</sup> *Wildlife is considered an international resource*. Derived from the Migratory bird Act that species Do not understand the line on a map of humans. That species can cross borders therefore they are owned by all.

<sup>13</sup> *Science is the proper tool to discharge wildlife policy*: This removes human emotion from the equation and make a sound rational imperially proven decision.

<sup>14</sup> *Democracy of hunting is standard*: This removed status from whom could hunt and let it be all of society has access to wild places and the wild things in those places.



Today state game agencies management of wildlife is rooted in practices derived from the NAMC. The NAMC should be considered best practices, with the guiding intent to see wildlife on the landscape in perpetuity. Which are taken from hard lessons learned over time.<sup>15</sup> NAMC has no actual jurisdiction nor legal authority. The primary principles of NAMC are science-based methods towards governing wildlife. NAMC supports laws like the ESA.

The ESA's core is a global-focused list that seeks to provide extra protection to species that have or are treading towards extinction. The ESA use of state and federal regulations ensures the perseverance of flora and fauna in perpetuity.<sup>16</sup> Recovery of both a species and its habitat also have a lasting effect on offsetting CO<sub>2</sub> emission.<sup>17</sup> Habitat restoration limits global warming by using a rewilding technique or returning the landscape to a natural state.<sup>18</sup> The intent of the ESA is arguably the best conservation-minded legislation that America has passed. From 1976 to 2014, the FWS averaged 37 newly listed species a year, yet only delisted 71 total species during the same era. Table 1 lists the current number of species by type that is protected by ESA.

**Table 1 – Current Species Protected and Delisted Under the ESA**

	Aquatic (NMFS Lead)	Terrestrial (FWS Lead)	Total (U.S. and Foreign)
Proposed for listing	1	15	16
Candidates for listing	0	28	28
Threatened	48	401	445
Endangered	50	1,804	1,847
Delisted	4	67	71

Source: Environmental Online System (ECOS), <https://ecos.fws.gov/ecp/species-reports>.<sup>19</sup>

<sup>15</sup> Organ, J.F et al.

<sup>16</sup> 16 U.S.C. § 1531(a)(4) (2006).

<sup>17</sup> Graham Lawton. "The Call of Rewilding." *New Scientist*. Vol. 240, Issue 3199 (October 13, 2018), pp. 34-38.

<sup>18</sup> Graham Lawton pp. 34-38.

<sup>19</sup> (Table 1) Citation: Sims, C. and H. Palikhe. "Proposed Changes Would Increase the Cost and Decrease the Benefit of Listing Species as Endangered." *Choices*. Quarter 2 (2019). Accessed No November 28 2019.

The ESA intends to protect species and prevent extinction, which it has.<sup>20</sup> The ESA must adapt and evolve to adequately meet the challenges faced in the modern world. As in certain instances, people and organizations use frivolous litigation over the scientific method to justify their emotional approach towards wildlife management. These litigations waste resources on species that are recovered or have reached carrying capacity within the ecosystem.

*How do hunters and hunting better sustain wildlife to prevent species extinction?*

A blueprint of this thesis's finding is that America's history of regulated hunting, is that it has a murky, cruel, and merciless past. Nevertheless, through the despair of the 19th century, America used its political structure and fortitude to restore a finite resource. Change happens slowly; it is not an overnight sweeping process. The legal structure of the ESA and management principals of NAMC are structure well in it of themselves. Like all laws in America, the ESA and NAMC require updates and revisions to maintain relevance in modern times. Governance, be it actual legislation or best business practices, need to keep pace with culture. Culture, especially American culture, is this intangible nebulous of divergent paths, all of which lead to the same unique end state of American governance. Specifically, looking at hunting culture in America, we can see that the conflicting tracks all run towards keeping wildlife on the landscape in perpetuity. Keeping wild places wild requires bedfellows of all shapes and sizes, finding a compromise. Though the critical finding of this thesis is that hunters play a critical role in restoring endangered species. Hunters fund large conservation efforts and are a critical part of game administrators' recovery plans. Though most significant benefits towards species recovery would be to limit legal challenges and all sides being proactive in the front-end process of compromise. Versus legal challenge after legal challenge pushing a political agenda.

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<sup>20</sup> Lynne Corn, Alexandra M. Wyatt. The Endangered Species Act: A Primer. Congressional Digest. Nov2018, Vol. 97 Issue 9, p3-7. 5p.

This thesis's roadmap starts with Kingdon, Burnham, and Keys' theories of political shifts. Specifically, highlighting how American political shifts within politics affected American hunting culture and species preservation. Highlighting the political shift utilizes a focusing event seen through historical interaction with the American buffalo. Which ultimately highlights the need for the Endangered Species Act (ESA). The focusing events showcases the two primary features of this thesis. First, the North American Model of Conservation (NAMC) and second the Endangered Species Act. The use of five case studies highlight the importance, political will, and constraints of America's legal system. All of which affect species preservation and hunting culture. The case studies are

1. Snail darter
2. Pallia bird
3. American alligator
4. Gray wolf
5. Grizzly bear.

The final chapter defines some of the many futures and current threats that both hunting and endangered species face.

## Chapter 1: Part 1

### A Focusing Event

#### *The Need for an Endangered Species Act?*

A focusing event happens suddenly, which is harmful or can cause more significant future harm, known to policymakers and the general public concurrently.<sup>21</sup> Some such focusing events include the Exxon Valdez oil spill or the nuclear accident at Three Mile Island.<sup>22</sup> Both feature exact origins, rapid escalation, and apparent ramifications. Focusing events in the natural world can be easy to identify, such as natural disasters like hurricanes, earthquakes, or tornadoes. While other natural focusing events have a discernible start and end, some events stretch across time, such as the Ice Age. Often focusing events force policy changes within governments or act as a catalyst for change. John Kingdon said:

*Ideas come from anywhere, actually, and the critical factor that explains the prominence of an item on the agenda is not its source, but instead the climate in government or the receptivity to ideas of a given type, regardless of source.*<sup>23</sup>

Kingdon's theory is that people, problems, and legislative process unify only at certain times. When they come to a head, they create legislation that can pass into law.<sup>24</sup> Any problem that finds its solution in law will require people, both inside and outside of government, working in concert in direct and timely response to a focusing event.<sup>25</sup>

Today we benefit from hindsight; we can see and understand how its events interacted amongst each other before, during, and after the event. It is a tool to look back at a focusing event in American Political Development (APD), a relatively greener concept within academia as it

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<sup>21</sup> Thomas A. Birkland. "Focusing Events, Mobilization, and Agenda Setting." *Journal of Public Policy*, Vol. 18, No. 1 (Jan. - Apr., 1998), pp. 53-74.

<sup>22</sup> Ibid.

<sup>23</sup> Ibid.

<sup>24</sup> Ibid.

<sup>25</sup> Ibid.

merges social science and historical understanding. An oversimplification of APD is studying the layers of time and how political thought of that epoch affected policy. Like a geologist standing on the Grand Canyon's rim can tell what the earth was done by the sedimentary rock's color, as each layer depicts an era.<sup>26</sup> APD attempts to do the same as the geologist within the political atmospherics of our American history. Determining when X started and when X finished within a policy is nuanced. Politics is not cut and dry with transparent layers like the geologist studying sedimentary rock. Politics is nuanced, ugly, and frequently challenging to talk about without causing an emotional response.

Individual American politicians across all branches show the difficulty of merging APD and Kingdon's. Representative John Dingell, Jr. of Michigan held his position in government for 59 years from the 84th (1955-1957) to 113th (2013-2015) congresses.<sup>27</sup> For context, he was in Congress since the US first voted to support France in Vietnam, to the 14th year of the war on terror. When comparing Dingell's layer to the countless one term representatives, they do little in showing transparency other than adding contrast and texture. The single terms are mere freckles dotting the edges of every layer on the rock. Justice William O. Douglas, who served over 36 years, from 1939 to 1975 on the supreme court, has voted on a countless crucial judicial decision. Even our Presidents have varying tenures lengths, which affect the nation. William Henry Harrison only served 31 days in office. Compared to Franklin D. Roosevelt three full terms and first quarter of fourth term.

Understanding the social aspects of the sedimentary rock example, one must look at each layer's thickness compared to thinner layers. The thicker areas show where individual

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<sup>26</sup> Douglas Harris. Lesson 2, American Political Development Class. The John Hopkins University. June 2019

<sup>27</sup>Office of Art & Archives. History, Art and Archives. United States House of Representatives. Record Holders. N.D. <https://history.house.gov/Institution/Firsts-Milestones/Record-Holders/>

institutions or people held a captive audience. Shorter and thinner layers could suggest bridges between ideas, political shifts, or merely stand-alone short-lived ideas. To understand how the layers affect each other, one must investigate more than the written record. Context and nuance are foundational in human interactions, social movements, and economic issues throughout time. These nonpolitical interactions with human, social, and economic domains build a more comprehensive picture that links the layers' changes. Hunting is at play in every layer and epoch of American history.

V.O Keys Jr's research speaks towards critical elections, which had lasting effects on America's political system. Keys being one of the first to speak towards aspects outside the traditional political sphere. Specifically, the electorate itself, interest groups seeking control, and the various functions within party systems and how force or violence, monetary sanctions, and education are forms of political control.<sup>28</sup> Building on Key's research is Walter Dean Burnham, who developed a theory about how coalition parties were brought together with electoral realignment over the American past. Political realignment and shifts are critical because this shows where political parties change their respective views or alignments.

Utilizing Burnham's timeframes of the American political realignments and political process.<sup>29</sup> Burnham divides America's political history into five areas centered around political shifts: *the experimental system* (1790-1820)<sup>30</sup>, *the democratizing system* (1820-1860)<sup>31</sup>, *civil war system* (1860-1893)<sup>32</sup>, *the industrialist system* (1886-1932)<sup>33</sup>, and *the new deal* (1932-?)<sup>34</sup>. These

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<sup>28</sup> Alexander P. Lamis. "Key, V. O., Jr.." International Encyclopedia of the Social Sciences. . *Encyclopedia.com*. (August 5, 2019). <https://www.encyclopedia.com/social-sciences/applied-and-social-sciences-magazines/key-v-o-jr-0r>

<sup>29</sup> Walter Dean Burnham. *The Current Crisis in American Politics*. Oxford University Press. 1982

<sup>30</sup> Ibid. pg 102

<sup>31</sup> Ibid. pg 104

<sup>32</sup> Ibid pg 106

<sup>33</sup> Ibid pg 108

<sup>34</sup> Ibid pg 110

dates coincidentally align with many critical points that have affected America's hunters and how America governs wildlife. These shifts in political systems and processes also explain a lot of America's institutional aspects of politics.

Lastly, to understand political change and turnover amongst the layers of sedimentary rock we can use Lawrence C. Dodd and his cycle and realignment of political parties. First, why are long periods of perceived constancy followed by upheavals?<sup>35</sup> Second, why do the upheavals and rebuilding processes differ across time, space and political systems as some systems tend to gravitate to gradual change or revolutionary change?<sup>36</sup> Third, why during these upheavals new viable patterns of governance can emerge?<sup>37</sup>

These questions shape answers towards those thinner or bridging layers of the sedimentary rock example of APD studies. These upheavals throughout history are the aspects commonly referred to as history repeating itself. In order for any act to repeat itself it must run through a cycle of actions.

*“To understand why societies, experience long periods of constancy in their dominant patterns of politics, followed by short-term upheavals and reconstruction, we must understand the nature of such learning processes.”<sup>38</sup>*

Dodd’s cycle of political learning and change is; *Ignorance and Denial, Return to Orthodoxy, Learning, Solidification of New Forms*, and lastly *Stability and Stagnation*. The cycles are a method to conceptualize what has happened when looking at how political action has gotten America to where it is throughout time. Political action rarely happens overnight, it gradually builds to tipping points where political action is required to make a new law.

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<sup>35</sup> Lawrence C. Dodd, Calvin Jillson. *The Dynamics of American Politics, Approaches and Interpretations*. University of Colorado-Boulder. Westview Press. 1994 pg 332

<sup>36</sup> Ibid 332

<sup>37</sup> Ibid 332

<sup>38</sup> Ibid pg 333

The layers of American history show where hunters failed, though it also shows where hunters learned and took failure as a catalyst to adapted and start new. The hunters focusing event helps shape and provide an understanding of the layers within the policy and seeing the change within government one would still ask.

*Why do American's and the world need the Endangered Species Act?*



## Chapter 1: Part II

### The Overwhelming Slaughter:

*Rupert Brooke's*

*The Dead:*

*These hearts were woven of human joys and cares,  
Washed marvelously with sorrow, swift to mirth.  
The years had given them kindness. Dawn was theirs,  
And sunset, and the colors of the earth.  
These had seen movement, and heard music; known  
Slumber and waking; loved; gone proudly friended;  
Felt the quick stir of wonder; sat alone;  
Touched flowers and furs and cheeks. All this is ended.*

*There are waters blown by changing winds to laughter  
And lit by the rich skies, all day. And after,  
Frost, with a gesture, stays the waves that dance  
And wandering loveliness. He leaves a white  
Unbroken glory, a gathered radiance,  
A width, a shining peace, under the night.<sup>39</sup>*

The Earth's age is around 4.54 billion years old, with an error range of plus or minus 50 million.<sup>40</sup> America's age is exceptionally young compared to the earth's age, making the European occupancy of North America a focusing event on the earth itself. The need for protecting endangered species comes from the United States' relationship with the exploitation and conservation of the natural environment. America's interaction with wildlife is long and controversial, rooted in our colonial forefathers' actions and echoing through time even to the present. Before exploring the ESA, its importance, and its faults, it is critical to know the layers of American history and its focusing events. This event led the United States to create legislation that sought to keep wildlife from extinction. Using the near extinction of the iconic North American bison or buffalo (scientifically named *Bison*, *Bison* and henceforth called

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<sup>39</sup> Rupert Brooke. The Dead. The Collected Poems of Rupert Brooke 1915. Accessed September 5, 2020. URL: <https://www.poetryfoundation.org/poems/47294/the-dead-56d227a2ea215>

<sup>40</sup> Nola Taylor Redd. "How Old Is Earth?" *Space.com*. February 07, 2019 URL: <https://www.space.com/24854-how-old-is-earth.html>.

buffalo).<sup>41</sup> We can see how a 200-year timeframe is a focusing event for the earth and simultaneously for humanity, which illiterates the ESA's need.

We can see how a 200-year timeframe is a focusing event for the earth and simultaneously for humanity, which illiterates the ESA's need. Today, the image of the buffalo is of running across great swaths of America's western prairie. However, there were also significant buffalo populations east of the Mississippi when the Puritans wrote the Mayflower Compact. The buffalo's native range was almost the entire landmass of North America. The buffalo population was estimated to be as high as 60 million across America, with 32 million living on the Great Plains alone.<sup>42</sup> Hence why many places across the United States and Canada have the name buffalo. Such as Buffalo Gap in West Virginia or the 18 states that have a city named buffalo.<sup>43</sup> Early colonialists had no developed cities or markets. Therefore, early European settlers naturally turned to taking wild game through the act of hunting to aid daily life.

Like the Puritans, the first wave of Americans changed many aspects of government from its European roots. One distinct change was that hunting rights came to the layman compared to European society's upper classes.<sup>44</sup> Although most of what today is the United States was English land, it was unsettled. Once a settler staked a claim, he owned the land. By English common law and traditional forest law, when one owned the land, one also owned the animals on the land, the monarchy owned the non-staked land.<sup>45</sup> Though, by being a landowner, one is

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<sup>41</sup> Editors National Geographic. "American Bison." Accessed November 15, 2019 URL: <https://www.nationalgeographic.com/animals/mammals/a/american-bison>.

<sup>42</sup> Rhonda Frasier. "Bison Timeline." All About the Bison accessed November 2, 2019 URL: <https://allaboutbison.com/bison-in-history/bison-timeline> and Rinella, Steven. *American buffalo: In Search of a Lost Icon*. New York: Spiegel & Grau, 2008 pg 10.

<sup>43</sup> Rinella, Steven 2008 pg 5.

<sup>44</sup> Belin, Mandy de. "From the Deer to the Fox: The Hunting Transition and the Landscape, 1600-1850." *Hatfield: University of Hertfordshire Press*, 2013. Pg 20.

<sup>45</sup> Ibid.

therefore required to pay taxes.<sup>46</sup> The America colonies were still required to pay taxes for the land. However, the ownership of wildlife remained with public ownership.<sup>47</sup>

### **The Experimental System (1790-1820)<sup>48</sup>**

As Burnham states, this phase is the Experimental System where, “All of American political life was experimental, a period of nation-building, and shared experimental quality.”<sup>49</sup>

As you create a new layer you needed to also start a new cycle, which would be Ignorance and Denial.

This new mentality of hunting is in America's founding documents, the Massachusetts Body of Liberties (December 1641). The law stated: "that every inhabitant who owns a house shall have free fishing and fowling [bird hunting] within the city limits or areas defined by the town itself. [It also allowed] fishing or hunting on other ponds, bays, coves or rivers, in which the seawater ebbs and flows into and out of."<sup>50</sup> As seen today, people could hunt on another's private property only with permission from the landowner. Essentially, all this served to allow layman access to land and hunting, whereas, in England, hunting was reserved to the upper echelons of society.<sup>51</sup> This single passage inscribed in 1641 will develop in contemporary times as the seven principles of the North American Model for Conservation.<sup>52</sup> Because of this passage, it would have undoubtedly played a role in the Supreme Court decision of *Martin v.*

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<sup>46</sup>Ibid pg 7.

<sup>47</sup> Gordon R. Batcher et al.

<sup>48</sup> Ibid. pg 102

<sup>49</sup> Burnham pg 102

<sup>50</sup> Bruce Frohnen. “The Massachusetts Body of Liberties December 1641.” Line 16. (2002 Liberty Fund). Accessed March 20, 2019 isbn 0-86597-332-6 pg 22.

<sup>51</sup> Belin, Mandy pg 11.

<sup>52</sup> Organ, J.F et al. The North American Model of Wildlife Conservation. The Wildlife Society Technical Review 12-04. The Wildlife Society. 2012. Bethesda, Maryland, USA. Accessed March 24, 2019 ISBN: 978-0-9830402-3-1 pg 2.

Waddell in an 1842 ruling, which would establish Public Trust Doctrine.<sup>53</sup> Public Trust Doctrine places all wildlife under the state's supervision but is owned by all citizens equally.

The second passage from the Massachusetts Body of Liberties of December 1641, which the animal's rights movement has claimed as their starting point of the social movement, is;

*“No man shall exercise any tyranny or cruelty’ towards any bruit creature which are usually kept for man’s use.”*<sup>54</sup>

This second passage will also shape what is "Fair Chase" or the ethic which surrounds hunting. Compounding on hunting was humanity's never-ending wanderlust for exploration and innovation. During the 1800s, the US federal government gave land away on a first-come, first-served basis with railroads and mining interests being some of the first to claim great land swaths. The discovery of oil and the Second Industrial Revolution saw the coasts linked by railroad tracks. Both served to increase commercial sales. America surpassed European nations and became the largest economy in the world.<sup>55</sup>

### **The Democratizing System (1820-1860)**<sup>56</sup>

The Democratizing System and Return to Orthodoxy; by Burnham, this era is known for the development of national two-party competition, dismantling of neomercantilism on the federal level, agrarian yeoman’s political style and political goals.<sup>57</sup> For Dodd’s Return to Orthodoxy is that;

*“Political actors decide collective governing rules and structures, erode the collective governing processes as they increasingly pursued private interests, generate epistemological crises, and then return to epistemological orthodoxy (including*

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<sup>53</sup> Gordon R. Batcheller et al. The Wildlife Society. The Public Trust Doctrine: Implications for Wildlife Management and Conservation in the United States and Canada. Technical Review 10-01 September 2010. Accessed March 26, 2019. URL: [https://wildlife.org/wp-content/uploads/2014/05/ptd\\_10-1.pdf](https://wildlife.org/wp-content/uploads/2014/05/ptd_10-1.pdf) pg 11,12

<sup>54</sup> Frohnen pg 21

<sup>55</sup> Rebecca Beatrice Brooks. “The Industrial Revolution in America.” HistoryofMassachusetts.org. April 11, 2018 URL: <https://historyofmassachusetts.org/industrial-revolution-america/>

<sup>56</sup> Ibid. pg 104

<sup>57</sup> Burnham pg 105

*particularly an adherence to collective rules and procedures) to resolve political and social crises.*"<sup>58</sup>

We must draw a line where something started; therefore, the west's preverbal opening does this, starting with the Lewis and Clark expeditions of 1804 to survey the Louisiana purchase land.<sup>59</sup> We know that Mountain men were already in the west, but many more followed, and America enters into mass fur trading on a global scale. The trapping for beaver pelts even created one of America's first millionaires.<sup>60</sup>

The Lewis and Clark expedition and the numerous reports from French missionaries confirm the abundance of wildlife spread across the American west. Elk or Wapiti (*Cervus Canadensis*), henceforth Elk, was estimated to have a population across America around 10 million.<sup>61</sup> These facts only served to drive more people west into the vast newly acquired American territory. America's polite, now having the ability to hunt on a first-come, first-served basis. This likely carried over the belief that with such vast amounts of wildlife, one would not need to worry about their sustainability.

It established a culture rooted in Burnham's Experimental System and Dodd's Ignorance and Denial cycle; it shows a complete failure to account for human technological advancement.<sup>62</sup>

Humans eclipsed wildlife's natural defenses with the development of the firearm (rifle).<sup>63</sup> Firearms allowed hunters a significant standoff distance from the herd. Before this, buffalo did not treat man as a threat because the traditional hunter/predator needed to be within range to bite

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<sup>58</sup> Dodd pg 334

<sup>59</sup> Editors History.com. Lewis and Clark. History.com. June 6, 2019. <https://www.history.com/topics/westward-expansion/lewis-and-clark> accessed Aug 10 2019.

<sup>60</sup> Editors Forbes. Richest Americans in History. Forbes.com. Accessed March 18, 2019. URL <https://www.forbes.com/asap/1998/0824/032.html>

<sup>61</sup> Tim Nephew. History of the North American Elk. Grit Rural American Know How. January/February 2014. Accessed March 16 2019 URL: <https://www.grit.com/animals/wildlife/north-american-elk-zm0z14jzsmi>

<sup>62</sup> Steven Rinella.

<sup>63</sup> Rinella, Steven pg 5.

the buffalo physically. The buffalo is a herd animal whose natural predators are the wolf, coyote, mountain lion, and grizzly bear.<sup>64</sup> The buffalo's survival and protection depended on its sheer numbers and physical size. Eyes positioned on the sides of the skull allow the buffalo to see better predators approaching. When danger is near, the buffalo takes flight away from predators.<sup>65</sup> The buffalo hunter could now be 100 to 500 yards away shooting at the buffalo herd. The buffalo did not view the hunter as a threat because of the standoff distance. The buffalo merely heard a loud noise with a single buffalo falling and continued standing still to be shot.<sup>66</sup> The rifle's long-range and the buffalo's lack of a natural response to that range left the species vulnerable to slaughter. By the time Lewis and Clark set off exploring the new American West, the buffalo slaughter was already in full swing. The last known buffalo killed east of the Mississippi River was shot in Wisconsin in 1832;<sup>67</sup> the eastern elk followed the same fate with the last known eastern elk killed in Pennsylvania in 1877.<sup>68</sup>

The hunting culture era marks a time where we doubled down on the taking of wild game. The Oregon Trail has fully transitioned from a horse only mountain man trail to large covered wagon convoys miles long. The full swing of westward expansion started. Settlers took any wild game without hesitation as a means of survival. It also meant taking physical terrain away from the animals as settlers increased. Therefore, water diversion for crops increased, and Whites became commonplace on the landscape.

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<sup>64</sup> The National Wildlife Federation. "American Bison." Accessed November 2, 2019 URL: <https://www.nwf.org/Educational-Resources/Wildlife-Guide/Mammals/American-Bison>.

<sup>65</sup> Ibid.

<sup>66</sup> Ibid.

<sup>67</sup> David Hart. Back from Brink: Elk and Bison Roam Again in Eastern U.S. Game and Fish Magazine. N.D. Accessed August 13, 2019. URL: <https://www.gameandfishmag.com/editorial/back-from-brink-elk-and-bison-roam-again-in-eastern-u-s/192938>

<sup>68</sup> Ibid

Market hunting, or more merely killing wildlife with the intent to sell on the open market, was an early driving force behind the buffalo's slaughter. Compounding this weapon efficiency is that Buffalo hunters were merely taking small aspects exclusively, such as hides and tongue, which was considered a delicacy.<sup>69</sup> Many of these hunters felt that the next great herd would wander down from Canada and restore the American prairie population.<sup>70</sup> Others thought the buffalo's abundance was so great that humans could not possibly kill enough to put a dent in the overall population. here are even accounts of people shooting buffalo from moving trains for target practice or fun, leaving them to rot.<sup>71</sup>

### **Civil War System (1860-1893)<sup>72</sup>**

Burnham's words' civil war system is; "the major "decision," the reorganization of the party system and policy outputs along explicitly sectional lines." <sup>73</sup> Dodd would put this era as the Learning phase. This era required the nation to look inwards and reflex in many realms; hunting and wildlife preservation was no different.

This period was not merely a low period for national recovery from the civil war; it was also when the hunting community started learning the ramification of their actions. Population growth and continued westward expansion brought white settlers into direct armed conflict with Native Americans in the western territories. The Indian Wars, coupled with firearms improvements, brought further and nearly final devastation to the western buffalo populations. The US Army utilized a total war campaign policy against the Indians, which meant attempting

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<sup>69</sup> J. Weston Phippen. "Kill Every Buffalo You Can! Every Buffalo Dead Is An Indian Gone". May 13, 2016. Accessed April 11, 2019 URL: <https://www.theatlantic.com/national/archive/2016/05/the-buffalo-killers/482349/>.

<sup>70</sup> Rinella, Steven pg 10.

<sup>71</sup> Gilbert King. "Where the buffalo No Longer Roamed." Smithsonian.com Accessed March 5, 2019 URL: <https://www.smithsonianmag.com/history/where-the-buffalo-no-longer-roamed-3067904/>.

<sup>72</sup> Ibid pg 106

<sup>73</sup> Burnham pg 106

to starve the Indians by any means.<sup>74</sup> Therefore, soldiers shot buffalo, which they assumed the Indians would eat. Many senior military officials sponsored and organized civilian buffalo hunts by fully outfitting and leading civilian hunting excursions to pursue the buffalo.<sup>75</sup> The US Army depended upon Buffalo Runners, or hunters, to scout ahead for Indians while acting as hunting parties to feed the troops.<sup>76</sup>

### **The Industrialist System (1886-1932)<sup>77</sup>**

The Industrialist System and Solidification of New Forms. Burnham's states that the 1890s is where development began to diverge. As Dodd's stated, "We work to create a process where it can be sustained and create the process." The era is when both the hunter and animal rights movement eliminate competition and take multiple large steps toward preserving wildlife and wild places. This epoch sees the passage of conservation funding methods which are set in perpetuity, such as the Lacey Act and Migratory Bird Act (treaty). *Solidification of New forms*, brings up the Political Entrepreneurship such as Theodore Roosevelt paved the way in establishing methods towards preserving, restoring and maintaining wild places.

By 1894, buffalo populations crashed to almost extinction over 200 years, from an estimated 60 million circa the 1640s to Yellowstone only having 26 wild buffalo in the park.<sup>78</sup> Wild buffalo outside of Yellowstone dwindled to an estimated 300-500 total buffalo across North America.<sup>79</sup> Turkey (Meleagris) once held populations in 39 continental states and the

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<sup>74</sup> Ibid.

<sup>75</sup> David D. Smits. "The Frontier Army and the Destruction of the Buffalo: 1865-1883." *The Western Historical Quarterly*, Vol. 25, No. 3 (Autumn, 1994), pp. 312-338.

<sup>76</sup> Ibid.

<sup>77</sup> Ibid pg 108

<sup>78</sup> Julie Ann Fuller. "Population Demography of The Yellowstone National Park Bison Herds." *Master's Thesis Montana State University*. April 2006. URL:

<https://scholarworks.montana.edu/xmlui/bitstream/handle/1/1294/FullerJ0506.pdf?sequence=1>.

<sup>79</sup> Editors FWS.com. American buffalo, (Bison bison) January 1998. URL:

[https://www.fws.gov/species/species\\_accounts/bio\\_buff.html](https://www.fws.gov/species/species_accounts/bio_buff.html)



Canadian province of Ontario. However, it dwindled to only 21 southern states and none in Canada.<sup>80</sup> Elk was at an estimated 500,000 down from 10 million.<sup>81</sup> This same destruction happened across North America and forced numerous animals into extinction or near extinction during the 18th, 19th, and early 20th centuries.<sup>82</sup> For a more extensive list of species brought to extinction after European contact in North America, see appendix II.

Most notable, perhaps, is the passenger pigeon (*Ectopistes Migratorius*). In Jamestown circa 1607, the passenger pigeon population to between 3 to 5 billion.<sup>83</sup> The last known passenger pigeon, named Martha, died in captivity at the Cincinnati Zoological Gardens on September 1, 1914.<sup>84</sup> The known science, hunting regulation, and social will of the early 19th century were not the same as contemporary times. Americans' actions were to reap the natural world with little to no forethought about future generations. Which as fundamentally changed with the establishment of Yellowstone.<sup>85</sup>

In the nineteenth century, many great Americans noticed the effects of industry, lack of hunting laws or practices, or the general public opinion on wildlife. As a result, this era marks the beginning of America's conservation political stream.<sup>86</sup> This period saw the establishment of the National Audubon Society, which brought awareness towards birds and stop the fashion

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<sup>80</sup> James Earl & Mary C. Kennamer, Ron Brenneman. History of the Wild Turkey in North America. NWTf Wildlife Bulletin NO.15. accessed March 5, 2019. Pg 14-3. [https://www-nwtf-org-files.s3.amazonaws.com/75e1-00766357-History%20of%20the%20Wild%20Turkey%20in%20North%20America.pdf?versionId=5B3hPfm3kFL\\_FFYshCjoT8vMhzboUKM\\_](https://www-nwtf-org-files.s3.amazonaws.com/75e1-00766357-History%20of%20the%20Wild%20Turkey%20in%20North%20America.pdf?versionId=5B3hPfm3kFL_FFYshCjoT8vMhzboUKM_)

<sup>81</sup> Tim Nephew. History of the North American Elk. Grit Rural American Know How. January/February 2014. Accessed March 16 2019 URL: <https://www.grit.com/animals/wildlife/north-american-elk-zm0z14jzfsmi>

<sup>82</sup> For a larger list of species brought to extinction after European contact in North America see appendix II.

<sup>83</sup> Smithsonian Institution. "The Passenger Pigeon. Department of Vertebrate Zoology." *National Museum of Natural History in cooperation with Public Inquiry Services*, Smithsonian Institution. N.D. Accessed Nov 15, 2019. URL: <https://www.si.edu/spotlight/passenger-pigeon>.

<sup>84</sup> Chris Heller. Martha. "The Very Last Passenger Pigeon." *The Atlantic.com*. September 18, 2014.

<sup>85</sup> Editors Nation Parks Service. "History of Bison Management." National park Service.com Last updated: March 7, 2019 URL: <https://www.nps.gov/yell/learn/management/bison-history.htm>.

<sup>86</sup> John Kingdon. *Agendas, Alternatives, and Public Policies*. Addison-Wesley Educational Publishers Inc. 2003 ISBN 0-321-12185-6.

industries' use of feathers.<sup>87</sup> Similarly, George Grinnell and President Theodore Roosevelt started the Boone and Crocket Club, which sought to create a better hunter and bring animals ethical practices.<sup>88</sup> John Muir created the Sierra Club to bring people outdoors and defend the natural resources for all to use.<sup>89</sup> These powerful social groups, among others, worked together as a conservation movement. They worked to garner legislative support for laws aimed at preserving the natural world. The creation of Yellowstone National Park was a watershed moment for America's conservation movement. Yellowstone was the first time that land was set aside merely to keep a particular area wild or in its natural state.<sup>90</sup>

These historical events surrounding the buffalo's slaughter and the creation of the ESA demonstrate the wisdom of John W. Kingdon's theory of public policy.<sup>91</sup> America's historic conservation efforts validating Kingdon's theory. Each law or Supreme Court decision over these 100 years was not only one cog in the wheel of the larger conservation movement but also a response to a focusing event or crisis. Therefore, each cog validates its problem, political and policy stream, and ultimately aligns with laws.

When Theodore Roosevelt became president, the conservation movement was given more attention and gained momentum as an accepted part of social policy. President Roosevelt felt strongly about conservation and influenced policy using his personality and knowledge of the policy process.<sup>92</sup> Roosevelt changed a lot within America's government, as seen with the

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<sup>87</sup> National Audubon Society. "Migratory Bird Treaty Act." Accessed April 25, 2019 URL: <https://www.audubon.org/news/migratory-bird-treaty-act>.

<sup>88</sup> Organ, J.F et al.

<sup>89</sup> Editors Sierra Club. "About the Sierra Club". Sierra Club.org. Accessed Nov 26 2019. URL: <https://www.sierraclub.org/about-sierra-club>.

<sup>90</sup> Editor National Parks Service. "National Park System Timeline (Annotated)." E-Library. Accessed November 15, 2019 URL: [https://www.nps.gov/parkhistory/hisnps/NPSHistory/timeline\\_annotated.htm](https://www.nps.gov/parkhistory/hisnps/NPSHistory/timeline_annotated.htm).

<sup>91</sup> John Kingdon.

<sup>92</sup> Morris, Edmund. *The Rise of Theodore Roosevelt* (Theodore Roosevelt Series Book 1). Random House Publishing Group. 2001 Kindle Edition Chapter 12. and "*Hunting Trips of a Ranchmen*" Theodore Roosevelt

Square Deal. However, the changes towards how America views the natural world polity and the subsequent conservation movements are equal notches on his belt.

During and after Roosevelt's presidency, the following laws were established and now the bedrock foundation for American hunting and conservation. These laws and treaties are the product of the aforementioned people, who showed a mastery of Kingdon's theory. Lacey Act of 1900, Antiquities Act of 1906, Mitigatory Bird Treaty Act 1918 would follow the Lacey Act with its intention towards stopping market hunting but especially at the feather fashion industry.<sup>93</sup> Harriet Hemenway and her cousin, Minna Hall, and the National Audubon Society, created a movement that led to a law and US treaty known as the Migratory Bird Treaty Act.<sup>94</sup> This treaty was initially between the US and Canada and now includes Japan, Mexico, and Russia.<sup>95</sup> The Migratory Bird Act prohibits the killing, capturing, and selling of individual migratory birds.

### **The New Deal (1932-?)**

The New Deal, Stability, and Stagnation. Burnham's thoughts are that this brought new immigrant voters to the first time, permanent federal involvement in the mixed economy, and development of countervailing institutions of power in the larger society.<sup>96</sup> Dodd's is the leveling of understanding to create normalcy within the system. This is an essential context for what was happening within the nations, especially in this realignment. The nation has fully recovered from WWI and would soon be involved in yet another global conflict. Then with the space race,

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(1885), and *"The Winning the West"* Theodore Roosevelt (1889) and *"Ranch Life and Hunting Trips"* Theodore Roosevelt (1888).

<sup>93</sup> William Souder. "How Two Women Ended the Deadly Feather Trade." *Smithsonian Magazine*. March 2013.

<sup>94</sup> Ibid.

<sup>95</sup> National Audubon Society. "Migratory Bird Treaty Act."

<sup>96</sup> Burnham pg 111

Americans become a real superpower. These events raised science in all domains like a tide raising all ships.

This era for the hunting community has run Dodd's full-cycle circle. One of the first significant acts from the hunting community was establishing a permanent funding stream set in perpetuity. Which ensured that animal habitat and, therefore, the animals themselves always had dictated funding to preserve the resource. This was done with the Federal Aid in Wildlife Restoration Act or better known as the "Pittman-Robertson Act," which was an 11 percent excise tax on sporting arms and ammunition.

This era sees Turkey's return to its native range as well as being restored in 49 US states and 5 Canadian provinces.<sup>97</sup> Elk restored to sustainable populations in the west and concurrently produced hunt-able populations of Elk in Kentucky, Pennsylvania, North Carolina, Tennessee, Virginia, West Virginia, Arkansas, Missouri and Wisconsin.

One area whereas a nation we have come full circle is wolves. The hatred of wolves is carried from our European forefathers and came to an apex in the 1930s when the last known grey wolf shot in Yellowstone National Park. The federal government and ranchers poisoned wolves and paid a 20-25\$ reward for wolf carcasses in the 1950s.<sup>98</sup> By the 1980's wolves in the lower 48 were eradicated, only to be re-introduced in the early 1990s. They have made such a full recovery that they are now under state game and fish agencies, and a few states even allow

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<sup>97</sup> James Earl & Mary C. Kennamer, Ron Brenneman. History of the Wild Turkey in North America. NWTf Wildlife Bulletin NO.15. accessed November 22, 2018. Pg 14-3. [https://www-nwtf-org-files.s3.amazonaws.com/75e1-00766357-History%20of%20the%20Wild%20Turkey%20in%20North%20America.pdf?versionId=5B3hPfm3kFL\\_FFYshCjoT8vMhzboUKM\\_](https://www-nwtf-org-files.s3.amazonaws.com/75e1-00766357-History%20of%20the%20Wild%20Turkey%20in%20North%20America.pdf?versionId=5B3hPfm3kFL_FFYshCjoT8vMhzboUKM_)

<sup>98</sup> Editors at PBS. The Wolf That Changed America- Wolf Wars: America's Campaign to Eradicate the Wolf. September 14, 2008. Accessed August 13, 2019. URL: <https://www.pbs.org/wnet/nature/the-wolf-that-changed-america-wolf-wars-americas-campaign-to-eradicate-the-wolf/4312/>

the hunting of the wolf. However, this decision flip flops what feels like daily and will be further addressed in chapter three.

This era has also established numerous legislation that required both sides to come together and agree upon aspects of hunting and wildlife management. The most significant area where both the hunting community and animal rights groups worked together was with the Endangered Species Preservation Act (ESPA). ESPA was the precursor to the ESA both of which allowed America to lead a global movement towards saving endangered species. Other legislations where the hunting community and animal rights would have come together are the Clean Air Act, 1963, and the Clean Water Act, 1948, with significant amendments in 1972. However, this is a small sample of unity.

## **Conclusion**

The hunting community has not had the prettiest history, dotted with what many would consider lust and greed. Hunting's is tied to America's history but to say that hunting alone killed many of America's game species in the 19th century fails to consider American's overall expansion during this epoch. Westward expansion shapes America's exceptionalism and its "yourself" attitude, which America has created. It also gave birth to a government with a terrible track record in many areas, such as slavery, failing to honor treaties with the native American. The overpowering capitalistic greed of the industrial revolution, but those are other layers within the study of APD and for a different paper. American's hunting history simultaneously shows the complex nature which took place. Many of our European forefathers never experiences and kept flocking to America's west, which only fueled the overflowing melting pot.

Lastly, game management was radically different than in Europe. In Europe, like North America, the state owns the animal. However, hunting clubs and or landowners have more

control over hunting regulations and animals than in North America. In North America, a private landowner merely owns the land but not the wild animals. Whereas in Europe, a general rule when a landowner owns the land, they also own the animals while the animal is physically on the property. Exponentially, more difficult as animals do not live in areas defined by lines on human maps. They travel from private property to federal, from one state to another, and even from one nation to the next. The animal seeks the best suitable habitat for its sustainability, or animals do what animals do regardless of human influences. Therefore, individual governments must determine the best use within their equivalent lines on the map, be it more houses or dedicated to wildlife.

Hunting or animal protection will only be done through legislation, and we need to understand how our government formed protection. Burnham and Dodd's political realignment highlights issues Americans and specifically, the hunting community, faced during America's political development and the cycles in which America has grown. In order to maintain health and sustainable wildlife in perpetuity and avoid relapsing into the beginning of Dodd's cycle, the hunting community and the animal's rights community need to unite like in Burnham's industrial era. These layers of governance, creating wealth and exploration, add shape to why things need to be protected.

## Chapter II

### Explaining the Endangered Species Act.

*"If education really educates, there will, in time, be more and more citizens who understand that relics of the old West add meaning and value to the new. Youth yet unborn will pole up the Missouri with Lewis and Clark, or climb the Sierras with James Capen Adams, and each generation, in turn, will ask: Where is the big white bear? It will be a sorry answer to say he went under while conservationists weren't looking."  
Aldo Leopold, Sand County Almanac*

One of the defining points for conservation within the Dodd's new deal era was that humanity came to understand how it forced species into extinction. As well as the need for a system to system to fund conservation. Even with recognition of the misdeeds done humanity was still causing extinction which gave way for the creation of the Endangered species Act (ESA). ESA gave oversight above specified flora and fauna on the verge of extinction. The ESA gives extra and frequently specific protections towards flora and fauna, but the individual state agencies carry out the daily actives.<sup>99</sup>

Endangered Species Act (ESA) actual protection of a wildlife species at the federal level in America started with the Bald and Golden Eagle Protection Act of 1940. Moreover, *taking* means any harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing, or collecting a bald or golden eagle.<sup>100</sup> In 1966, the United States would see the Endangered Species Preservation Act (ESPA) passage as the first federal listing of all endangered animals in America. The ESPA prohibited the *taking* of listed animal species on all

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<sup>99</sup> United States. The Endangered Species Act As Amended by Public Law 97-304 (the Endangered Species Act Amendments of 1982). Washington. U.S. G.P.O., 1983. pg 1

<sup>100</sup> Rebecca F. Wisch. "Brief Summary of the Bald and Golden Eagle Protection Act." *Michigan State University College of Law* (2002). URL: <https://www.animallaw.info/article/brief-summary-bald-and-golden-eagle-protection-act>. and Taking means harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing, or collecting a bald or golden eagle.

national wildlife refuges.<sup>101</sup> *Taking* was further defined by ESPA to mean harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in any such conduct. American's Congress felt that the ESA could be a catalyst for protection on a global scale. In 1969 saw amendments that prohibited the importing and export-selling of species that faced worldwide extinction.<sup>102</sup> The Marine Mammal Protection Act (MMPA) would follow in 1972. This Act prohibited the taking of all marine mammals, such as whales, dolphins, seals, sea lions, sea otters, and polar bears inhabiting the United States' waters.<sup>103</sup> In 1972, President Nixon wrote a detailed letter to Congress with his proposed environmental program. This letter would act as a catalyst for change towards rewriting the ESPA into a stronger law to safeguard endangered species.<sup>104</sup>

By 1973, the ESA's first edition was enacted, with the intent to support species from extinction, done through the enforcement of the FWS on top of state game and fish services rules and regulations. The ESA also gained global traction towards protecting endangered species in 1973, when 80 nations signed the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). CITES watches for and restricts international commercial trade that centers around endangered flora or fauna in certain instances.<sup>105</sup>

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<sup>101</sup> Taking further defined by ESPA. Means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in any such conduct.

<sup>102</sup> US Fish and Wildlife Service. "A History of the Endangered Species Act of 1973." *Endangered Species Act*. Last updated: December 11, 2018. URL: <https://www.fws.gov/endangered/laws-policies/esa-history.html>.

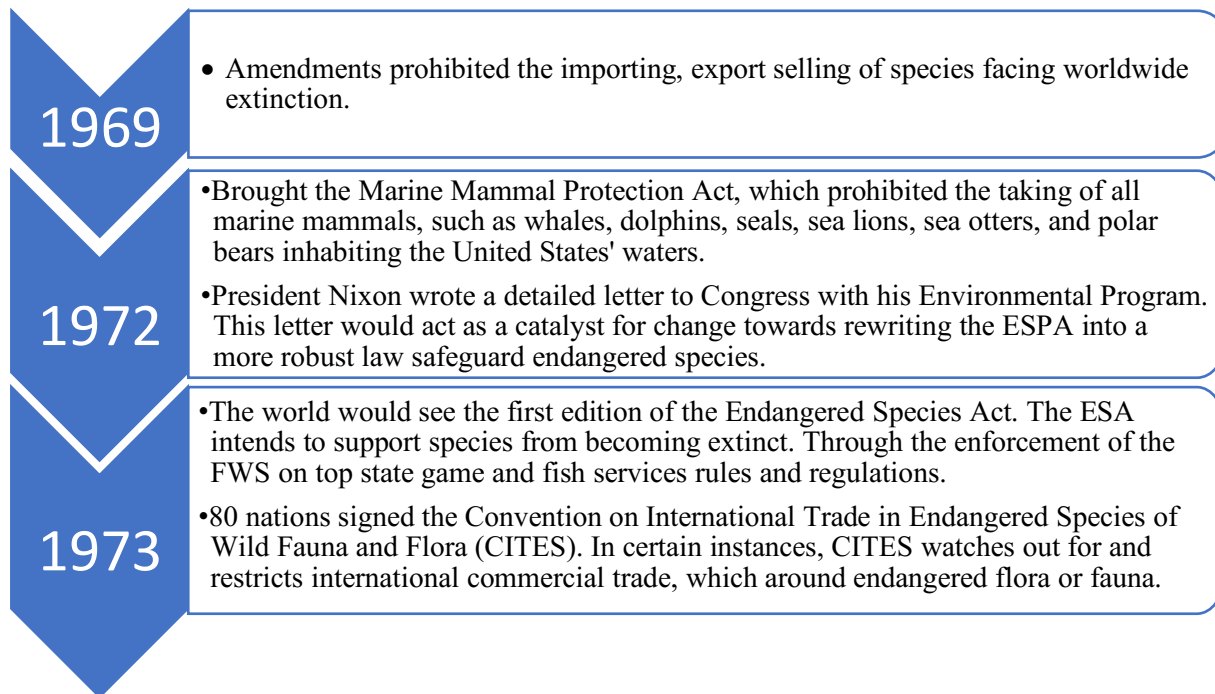
<sup>103</sup> Ibid and *taking* definition from ESPA.

<sup>104</sup> John Woolley, Gerhard Peters. "Special Message to the Congress Outlining the 1972 Environmental Program." The American Presidency Project. Accessed November 18, 2019 URL: <https://www.presidency.ucsb.edu/documents/special-message-the-congress-outlining-the-1972-environmental-program>.

<sup>105</sup> US Fish and Wildlife Service. "A History of the Endangered Species Act of 1973." *Endangered Species Act*.



eagle.<sup>106</sup> In 1966, the Endangered Species Preservation Act (ESPA) was the first list of endangered animals within America. The ESPA was the first to define and prohibited taking of listed animal species from national wildlife refuges.<sup>107</sup> At that time, Congress essential felt that the ESA could be a catalyst for protection on a global scale seen through the below timeline and events.<sup>108</sup>



Since the initial law in 1973, the ESA has been amended four times: 1978, 1982, 1988, and 2004. With every amendment, the ESA intent remained the same. "Save a species which is in danger of extinction throughout all or a significant portion of its range." Eventually extend to plants and invertebrates.<sup>109</sup> Each revision further refined *taking* as well as a better articulation of

<sup>106</sup> Rebecca F. Wisch. and *Taking* means harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing, or collecting a bald or golden eagle.

<sup>107</sup> *Taking* further defined by ESPA. Means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in any such conduct.

<sup>108</sup> US Fish and Wildlife Service. Endangered Species Act, A History of the Endangered Species Act of 1973. And John Woolley, Gerhard Peters and US Fish and Wildlife Service. "A History of the Endangered Species Act of 1973." *Endangered Species Act*.

<sup>109</sup> US Fish and Wildlife Service. Endangered Species Act, Section 3. Last Updated: July 15, 2013 URL: <https://www.fws.gov/endangered/laws-policies/section-3.html>.

what recovery plans mean<sup>110</sup> These changes gave the FWS the authority and jurisdiction to enforce the federal laws protecting endangered species and their habitat.

Listing a species onto ESA protections can happen in two ways: (1) by the FWS or (2) by a petition from concerned private citizens or organizations. Regardless of who starts the process, one or more of the five following criteria must be present for the FWS to consider a species endangered potentially:

1. The present or threatened destruction, modification, or curtailment of its habitat or range;
2. Over-utilization for commercial, recreational, scientific, or educational purpose;
3. Disease or predation;
4. The inadequacy of existing regulatory mechanisms; and/or
5. Other natural or manmade factors affecting its continued existence<sup>111</sup>

If the FWS determines there is enough information to warrant a listing, then a proposed rule is created. Once the proposed rule is submitted, it waits for the proposed rule status queue, known as Candidate for Listing.

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<sup>110</sup> *TAKE* Except as provided in sections 6(g)(2) and 10 of this Act, with respect to any endangered species of fish or wildlife listed pursuant to section 4 of this Act it is unlawful for any person subject to the jurisdiction of the United States to— (A) import any such species into, or export any such species from the United States; (B) take any such species within the United States or the territorial sea of the United States; (C) take any such species upon the high seas; (D) possess, sell, deliver, carry, transport, or ship, by any means whatsoever, any such species taken in violation of subparagraphs (B) and (C); (E) deliver, receive, carry, transport, or ship in interstate or foreign commerce, by any means whatsoever and in the course of a commercial activity, any such species; (F) sell or offer for sale in interstate or foreign commerce any such species; or (G) violate any regulation pertaining to such species or to any threatened species of fish or wildlife listed pursuant to section 4 of this Act and promulgated by the Secretary pursuant to authority provided by this Act. (2) Except as provided in sections 6(g)(2) and 10 of this Act, with respect to any endangered species of plants listed pursuant to section 4 of this Act, it is unlawful for any person subject to the jurisdiction of the United States to— (A) import any such species into, or export any such species from, the United States; (B) remove and reduce to possession any such species from areas under Federal jurisdiction; maliciously damage or destroy any such species on any such area; or remove, cut, dig up, or damage or destroy any such species on any other area in knowing violation of any law or regulation of any State or in the course of any violation of a State criminal trespass law;(C) deliver, receive, carry, transport, or ship in interstate or foreign commerce, by any means whatsoever and in the course of a commercial activity, any such species; (D) sell or offer for sale in interstate or foreign commerce any such species; or (E) violate any regulation pertaining to such species or to any threatened species of plants listed pursuant to section 4 of this Act and promulgated by the Secretary pursuant to authority provided by this Act.

<sup>111</sup> US Fish and Wildlife Service. Endangered Species Act, Section 4. Last Updated: July 15, 2013 URL: <https://www.fws.gov/endangered/laws-policies/section-4.html>.

The FWS maintains the Candidate species lists in Federal Register. The federal register is a way to notify the general public that a species is trending towards the listed status. While a candidate is on the register list, the species receive no protection under the ESA. Once a published Notice of Review is in the Federal Register, ESA protection begins. A Notice of Review serves to warn landowners, industry, and game agencies that certain species are of critical concern and outline a recovery plan towards countering the species faces.

Suppose a petition begins from a concerned citizen or organization. In that case, the FWS first step is listing the species in the Federal register. The finding will answer one of two questions if the petitions answer does not have ample evidence. The listing process stops. Suppose there is enough evidence to warrant the listing process by accumulating data and information over a 12-month petition process. The petition must span the actual ecosystems and governing agencies, city to state, federal and tribal, commercial to educational organizations, and the general public.<sup>112</sup> The 12-month petition intends to gather information to determine if listing the species is warranted and meets the definitions of threatened or endangered.<sup>113</sup>

The 12-month petition process has three possible outcomes.<sup>114</sup> First, the listing is not required; if so, the process stops. Second, if ample evidence, the creations of the prosed and listed in the federal register. Once listed in the federal register, the general public and peer-reviewing are allowed to happen.<sup>115</sup> Lastly, after the peer-reviewed and public comments phase,

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<sup>112</sup> Ibid.

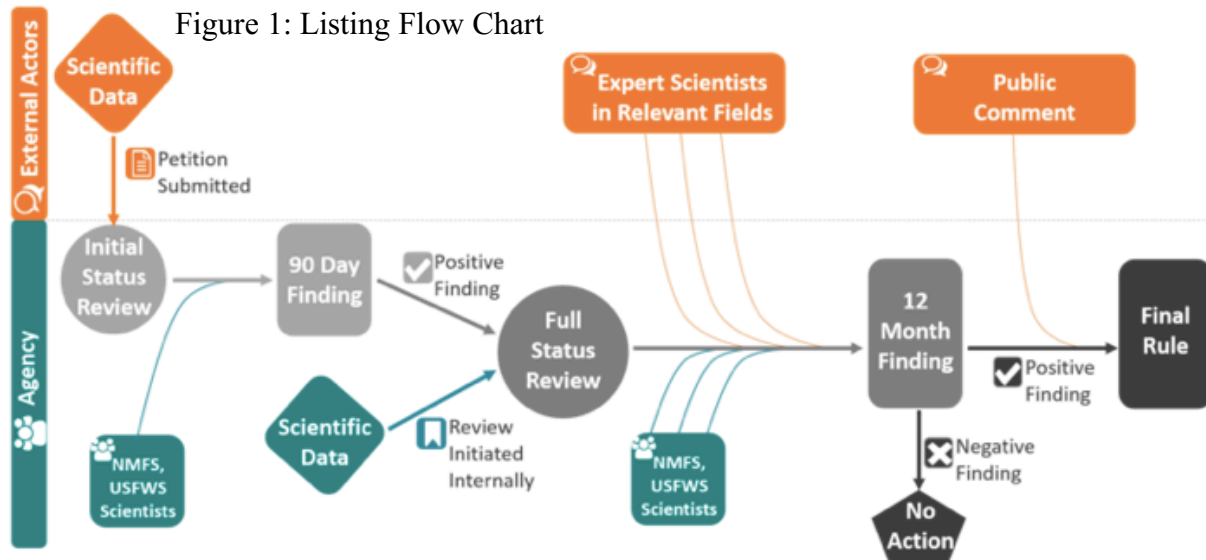
<sup>113</sup> Ibid.

<sup>114</sup> Figure 1: The Public Comment Project. “Endangered Species Act”. Publiccommentproject.com Accessed from: <https://publiccommentproject.org/statutes#esa>.

<sup>115</sup> Ibid.

a final rule is published in the federal register. Once the final rule has been published the species is federally protected under ESA protection.<sup>116</sup>

**Delisting** is the removal of federal protection and returning species to state game and fish



agencies' control. The most critical aspect for a species recovery is the restoration of the species natural habitat.<sup>117</sup> Recovery happens in one of three ways; first, the threats are reduced or eliminated. Second, the species is returned to or capable of maintaining a self-sustaining population in the wild. Third, removal from ESA protection because the species no longer requires protection.<sup>118</sup>

Delisting and recovery start with a recovery plan. The recovery plan is a part of the initial listing on the federal register. However, some recovery plans take longer to outline fully. Recovery plans are non-regulatory documents justifying scheduling research or management plans or actions. The recovery plan describes population levels, habitat, and any state or tribal regulations required before delisting.<sup>119</sup> Recovery plans require coordination amongst federal,

<sup>116</sup> Ibid.

<sup>117</sup> US Fish and Wildlife Service. Endangered Species Act, Section 4.

<sup>118</sup> Ibid.

<sup>119</sup> Ibid.

state, tribal, and local governments and non-governmental organizations (NGO), International NGOs (INGO), and other interested parties.<sup>120</sup> Every five years, a review of all listed species' recovery plans take place.

The recovery plans' reviews are to determine if reclassification is warranted based on answering the five items during the listing process.

1. The present or threatened destruction, modification, or curtailment of its habitat or range;
2. Over-utilization for commercial, recreational, scientific, or educational purpose;
3. Disease or predation;
4. The inadequacy of existing regulatory mechanisms; and
5. Other natural or manmade factors affecting its continued existence<sup>121</sup>

If there is ample evidence that delisting is warranted, it follows a similar process as the listing. The delisting process begins with public comment, followed by peer review, and ending with the publication of the final ruling on delisting. There are three reasons for delisting. First and most straightforward, the species has become extinct. Second, the species has recovered and no longer requires protection of the ESA. Third, original listing information is proven to be inaccurate, and the species is not in danger of extinction. Once delisted, the FWS and state agencies will monitor a species for five years. If a species encounters threats from its original listing, it is re-listed. Suppose a species encounters new threats to its survival, not identified during the listing. In that case, it will retain its protections during the delisting process. The FWS retains emergency means to return species under ESA protections if needed.<sup>122</sup>

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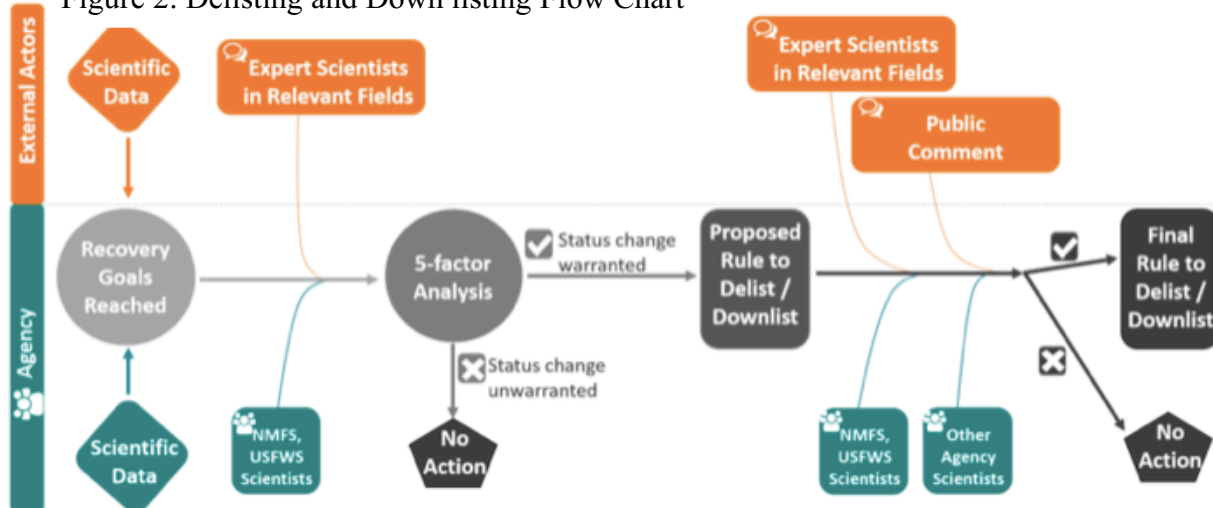
<sup>120</sup> Ibid.

<sup>121</sup> Ibid.

<sup>122</sup> US Fish and Wildlife Service. Endangered Species Act, Section 4.

If a recovery plan is correct, it will allow seamless transition from protected to a delisted and recovered species. However, the current process has only delisted 2% of species ever listed.<sup>123</sup>

Figure 2: Delisting and Down listing Flow Chart



## Literature Review

After more than a century of destructive practices, private activist groups and a conservation-minded presidential administration finally created legislation to protect the natural environment and prevent extinctions. They prove Kingdon's agenda-setting theory that when the three streams merge, it can produce a law. Even if it takes 100 years before the stream met or if they need to remerge in refinement, for America, these streams united multiple times in the various aforementioned laws, each building on the next. Time and circumstances change, which requires the reemergence of Kingdon's theory to start anew.

<sup>123</sup> Figure 2: The Public Comment Project and Crow Indian Tribe v. United States “Case: 18-36030.” May 24, 2019 ID: 11309224 Accessed from: [https://www.fws.gov/mountain-prairie/es/Library/DN45\\_US\\_OpeningBrief.pdf](https://www.fws.gov/mountain-prairie/es/Library/DN45_US_OpeningBrief.pdf).

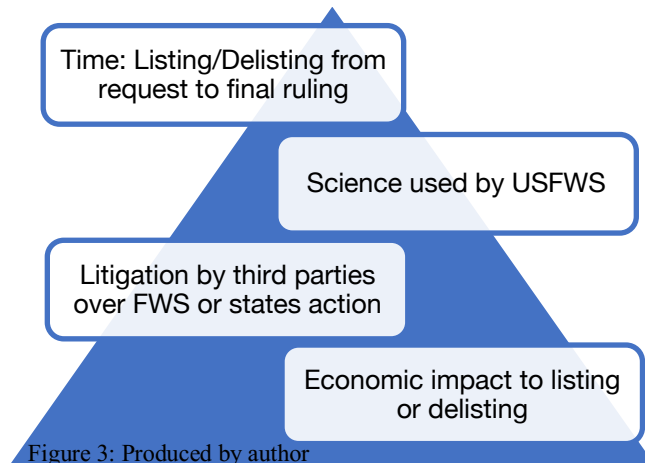
The ESA, as we know it, is not perfect. Getting a perfect ESA is a difficult undertaking as this law pulls on the heartstrings of many.<sup>124</sup> Regardless of the ESA's contention, most agree that the ESA is the prevailing law

protecting species in peril within the United States.<sup>125</sup> An oversimplified explanation of the ESA is that it has saved and will continue to save species on the verge of extinction. No political party wants to change that.<sup>126</sup>

Making any changes to the ESA is a

challenging task because stopping extinction transcends political parties.<sup>127</sup> The ESA is relatively small and straightforward in size and scope when compared to other laws. The small size is deceiving as the ESA carries a robust set of teeth, making the ESA, the so-called pit-bull of environmental law, appropriate.<sup>128</sup>

Highlighting only four issues that surround the ESA emphasizes frustration, which encompasses both the ESA and NAMC. Species are public property, merely managed by individual states. The animals are held in trust by state game and fish agencies. The individual states maintain healthy populations of wildlife and their habitat for the general public. When the



<sup>124</sup> Jonathan Wood. "The New Endangered Species Act Rules, Explained." *Property and Environment Research Center*. August 14, 2019. URL: <https://www.perc.org/2019/08/14/the-new-endangered-species-act-rules-explained/>.

<sup>125</sup> Emily, Puckett; Dylan Kesler; Noah Greenwald. "Taxa, Petitioning Agency, And Lawsuits Affect Time Spent Awaiting Listing Under the US Endangered Species Act." *Biological Conservation*. Volume 201, September 2016, Pages 220-229.

<sup>126</sup> Emily, Puckett; Dylan Kesler; Noah Greenwald.

<sup>127</sup> Shawn Regan. "The New Endangered-Species Regulations Are Good for Species." *Property and Environment Research Center*. September 16, 2019. URL: <https://www.perc.org/2019/09/16/the-new-endangered-species-regulations-are-good-for-species/>.

<sup>128</sup> Bray, Zachary. "The Hidden Rise of 'Efficient' (De)Listing." *Maryland Law Review* 73 (2) (2014.) 389-457.

state fails in maintaining a healthy population or requires support in managing the population, the federal government can ensure the preservation and eventual recovery of the species through the ESA.

This aspect of control over the wildlife started with what is now known as the Public Trust Doctrine (PTD).<sup>129</sup> PTD makes it so that all wildlife in America are owned equally by all Americans. Though all citizens own wildlife, the animal's health and well-being are the state agencies' responsibility in which the animals reside. The state maintains control over wildlife, regardless of where it is physically standing (public or private land). The landowners still maintain control over access to the private land. However, this understanding and structure would take years, and several Supreme Court case decisions to establish.<sup>130</sup>

**Time** with the listing process is where people and organizations have with the management of species is the time required to achieve ESA protection. Significant changes to the ESA listing process happened in 1978 and again in 1982. The 1978 rule stated that if there is no ruling in two years, the species petition process ended. Therefore, the fight for ESA protection would start anew.<sup>131</sup> The original 1978 candidacy petition line had 1,879 species listed and then removed, forcing them to start anew.<sup>132</sup> The majority of those removals were between 1974 and 1984. Eventually, these (1,879 removals) would be re-listed as candidates, though only re-listed due to litigation.<sup>133</sup>

As previously stated, listing a species for ESA protection can happen one of two ways, by FWS or a third party. If the FWS initiates the listing, it takes 12 months to establish protection

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<sup>129</sup> Gordon R. Batcheller et al.

<sup>130</sup> Gordon R. Batcheller et al

<sup>131</sup> Emily, Puckett; Dylan, Kesler; Noah Greenwald.

<sup>132</sup> Ibid.

<sup>133</sup> Ibid.



for the species. It differs slightly; when a third-party organization begins the listing process as it adds three months before a final ruling. Due to the 90-day FWS determination before starting the 12-month FWS path. A species' maximum wait time by section four should be two years and one month.<sup>134</sup> These are the minimum or maximum times, as defined by section four of the ESA.

**Science** used by the FWS compounds the time issue. The FWS must create a priority list that balances time and resources to protect all species. Inevitably, the limiting factors the FWS faces forces it to create a "1 to N" sequence list of all candidate species. For any organization, when everything is the priority, nothing is the priority. Third-party organizations are generally not as resource-constrained or as broadly focused as FWS.<sup>135</sup> Creating a 1 to N sequence list opens the door to a critical aspect spanning the areas of frustration with the ESA.

**Litigation** (generally) used to reignite stalled petitions and or force a determination on a petition.<sup>136</sup> hird-party organization use of litigation is a double-edged sword. First, litigation acts as a check and balance to the FWS, being the ultimate authority over wildlife. This ability to challenge the government is a cornerstone of American political action. Litigation keeps relevant policies in line with public desire. Ensures that FWS uses the best science, methods, and data to draw a genuinely science-based decision that is best for nature. The second and more controversial aspects, litigation forces management agencies to expend financial resources on legal battles instead of environmental stewardship. When taking legal action against the science for any aspect in listing or delisting, it unavoidably takes time and resources away from other species on that respective list.

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<sup>134</sup> Ibid.

<sup>135</sup> Brosi, Berry and Eric G. N. Biber. "Citizen Involvement in the U.S. Endangered Species Act." *Science*, vol. 337, no. 6096, Aug. 2012, pp. 802–803.

<sup>136</sup> Emily, Puckett; Dylan, Kesler; Noah Greenwald.

Third parties questioning the government and industry began with *Tennessee Valley Authority (TVA) v. Hill* (1978).<sup>137</sup> *TVA v. Hill* set a precedent for private groups or individuals to seek legal action against industry or the federal government on behalf of a species. In *TVA v. Hill*, the court ruled in favor with the Snail dater.

**Economic** value from 1973 to 2019 was not a factor when listing or delisting a species. This era only authorized scientific data collected in determining the next action. The species' economic value or the actual land occupied by the said species was NEVER a part of the listing assessment. The key questions asked were seeking to answer:

1. The present or threatened destruction, modification, or curtailment of its habitat or range;
2. Over-utilization for commercial, recreational, scientific, or educational purpose;
3. Disease or predation;
4. The inadequacy of existing regulatory mechanisms;
5. Other natural or manmade factors affecting its continued existence.<sup>138</sup>

Answering these questions shows a science-based approach towards ESA protections.

Currently, an argument that accounting the economic value of a species or its habitat has reemerged. The land's economic value is profit or benefit that can be made from the land if no endangered species are present. The use of counting economic value has created a new listing status of "warranted but precluded."<sup>139</sup>

Warranted but precluded can happen for various reasons but chiefly because the FWS has a backlog. Reasons for this option returns to the 1 to N sequence list created by the FWS. A warranted status but precluded is justified by the FWS if there is a backlog of pending proposals to list other species.

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<sup>137</sup> 437 U.S. 153.

<sup>138</sup> US Fish and Wildlife Service. Endangered Species Act, Section 4.

<sup>139</sup> Ibid.

Suppose the species' economic value was utilized during the listing process. The species could then be given the "warranted but precluded" status, which would NOT grant ESA protection until listed as threatened or endangered. Therefore industry, private organization, and government can use their respective economic plans when accounting for protection. Being on the federal registry means that the species is trending towards ESA protection.

The western states' sage grouse highlights the aforementioned four frustrations with the ESA. In 2010 the FWS listed the grouse as a candidate species. Governor Matthew Mead of Wyoming started a sage grouse implementation working group that gathered stakeholders around its sage grouse.<sup>140</sup>

Seeking to answer three questions:

1. Identification of areas where Greater sage-grouse and their habitat would be effectively conserved;
2. Development of a strategy to reduce or eliminate potential threats to the species;
3. Development of methodology to evaluate the document and track potential impacts overtime

The working groups' intent was simply: to keep the grouse free of ESA protections, maintain ESA-like protections at the state level, and allow every user group access to the land.<sup>141</sup> Shortly after, this working group and a series of Wyoming Governor's Executive orders set a plan to move up to the Department of Interior (DOI). This work would lead to the Greater Sage-Grouse Management plan across America.

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<sup>140</sup> Eilish Hanson. "Issue Brief: Greater Sage-Grouse: Wyoming Executive Orders and Compensatory Migration Credits." *Wyoming Legislative Service Office*. Aug 2019. URL: <https://www.wyoleg.gov/InterimCommittee/2019/09-201908288-01LSOSageGrouseIssueBrief.pdf>.

<sup>141</sup> Steven Rinella, Ed Arnett, Janis Putelis "Ep. 095: Inconvenient Critters." December 17, 2019. The MeatEater. Produced by Meateater crew. Podcast. Accessed <https://www.themeateater.com/listen/meateater/ep-095-inconvenient-critters-2>.

In 2015, FWS determined listing was not required due to the management plans in place and largely thanks to the Greater Sage-Grouse Management plan. Stakeholders rallied together, came up with a plan to prevent the need for ESA protection, and developed a course of action.

In August 2019, the ESA returned to the spotlight when the Trump administration reviewed the ESA and made administrative changes to regulations. The rule is unambiguous that listing must be from the best scientific and commercial data available.<sup>142</sup> The agency cannot decline to list because of financial impacts alone. If the determination from economic factors alone would be a violation of the statute.<sup>143</sup> The opposing view, compared to the ESA, has a clear record of stopping extinction. However, it is a one-way road to protection in perpetuity as only 2% of all listed species have recovered.<sup>144</sup> The changes restore the original distinction between threatened and endangered and custom tailoring of rule for each species.<sup>145</sup> One side view that economic assessment use at any point during the process would outweigh scientific data because of political influence. Such as allowing the industry to estimate potential lost revenue due to loss of access and back political candidates who align with the industry.<sup>146</sup>

### **The North American Model of Conservation**

NAMC has been slated as one of the best wildlife conservation models in the world.<sup>147</sup> It has a proven record of restoring game animals across North America though there is a contradiction within its construct. The model utilizes scientific principles while removing emotion from the management of wildlife. Proving how much of a heart of stone game mangers

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<sup>142</sup> Jonathan Wood.

<sup>143</sup> Ibid.

<sup>144</sup> Shawn Regan.

<sup>145</sup> Ibid.

<sup>146</sup> Lisa Friedman. "U.S. Significantly Weakens Endangered Species Act." *New York Times*. Aug. 12, 2019.

<sup>147</sup> Joseph E. Mbaiwa. "Sustainable Wildlife Utilization: Hunting as a Conservation." *International Wildlife Conservation Council US Fish & Wildlife Service*. 26-27th September 2018 Washington-DC, USA. Accessed November 1, 2019 URL: <https://www.fws.gov/iwcc/pdf/presentations/sustainable-wildlife-utilization-hunting-as-a-conservation-tool.pdf>.

must have to sustain healthy ecosystems. The model shows that it must balance science and dedicated funding in order for it to work. The model's principles are:<sup>148</sup>

1. Wildlife resources are a public trust.<sup>149</sup>
2. Markets for game are eliminated.<sup>150</sup>
3. Allocation of wildlife is by law.<sup>151</sup>
4. Wildlife can be killed only for a legitimate purpose.<sup>152</sup>
5. Wildlife is considered an international resource.<sup>153</sup>
6. Science is the proper tool to discharge wildlife policy.<sup>154</sup>
7. Democracy of hunting is standard.<sup>155</sup>

he concepts and principles behind NAMC are rooted in historical hunting practices, case law, and actual legislation. Being adored by hunters, NAMC is not perfect like the ESA. NAMC also requires updates to modern times. The critical aspect of the NAMC is the value it places on the animal.<sup>156</sup> That killing an animal goes towards managing the populations with the number determined by state officials' use of science.<sup>157</sup> The animal parts are for personal use and cannot be sold or traded (this aspect will be further explored later in the paper).

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<sup>148</sup> Organ, J.F et al.

<sup>149</sup> *Wildlife resources are a public trust.* Meaning that the citizens of the world own the wildlife and that wildlife is held in trust by the state. The state is responsible for managing health of wildlife and habitat.

<sup>150</sup> *Markets for game are eliminated.* Hunting and fishing is for personal use only. It is legal to take wildlife and sell it on the open market.

<sup>151</sup> *Allocation of wildlife is by law.* Because wildlife is held in public trust the state determines how it will manage wildlife populations. Hunting and fishing are one of many methods a state has in managing animal populations.

<sup>152</sup> *Wildlife can be killed only for a legitimate purpose.* This places scientific reasons for killing wildlife, such as management purposes or scientific research.

<sup>153</sup> *Wildlife is considered an international resource.* Derived from the Migratory bird Act that species Do not understand the line on a map of humans. That species can cross borders therefore they are owned by all.

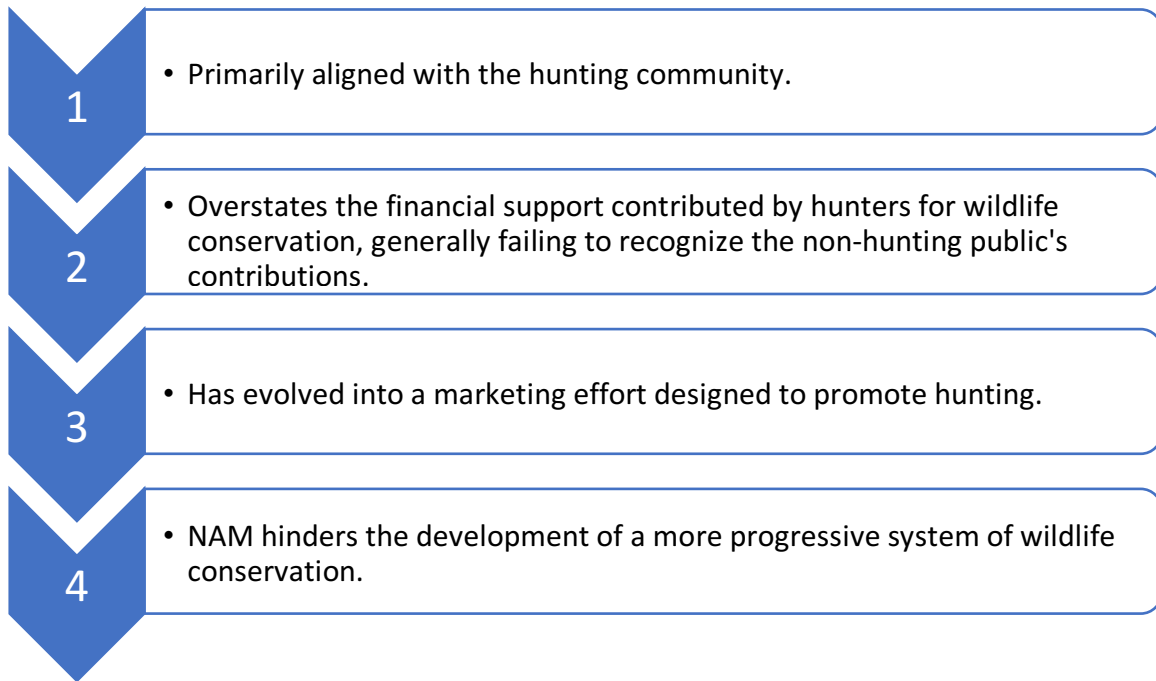
<sup>154</sup> *Science is the proper tool to discharge wildlife policy:* This removes human emotion from the equation and make a sound rational imperially proven decision.

<sup>155</sup> *Democracy of hunting is standard:* This removed status from whom could hunt and let it be all of society has access to wild places and the wild things in those places.

<sup>156</sup> Ben O'Brian, Shane Mahoney. EP. 51: Shane Mahoney on the North American Model of Conservation, Part 1" March 5, 2019. *The Hunting Collective*. Produced by MeatEater Inc. Accessed: <https://thehuntingcollective.libsyn.com>. and Ben O'Brian, Shane Mahoney. EP. 52: Shane Mahoney on the North American Model of Conservation, Part 2" March 12, 2019. *The Hunting Collective*. Produced by MeatEater Inc. Accessed <https://thehuntingcollective.libsyn.com>.

<sup>157</sup> Ibid.

Using four of five premises developed by Thomas L. Serfass, Jeremy T Bruskotter, and Robert P. Brooks we analyze NAMC faults and strengths.<sup>158</sup>



*Primarily aligned with the hunting community.* The statement that NAMC is "primarily aligned" with the hunting community is rooted in truth. When developing the model, Guest and Malone were trying to understand how history shaped modern hunting practices then transport them into commentary hunting management.<sup>159</sup> A significant fault with NAMC is its alignment towards hunters. Making NAMC to appear as a model for rich white men to create rules for other rich white men paying little regard towards minorities or gender.<sup>160</sup> Nor does NAMC account for other user groups such as birdwatchers, hikers, campers, skiers, and or general outdoor

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<sup>158</sup> Thomas Serfass, Robert Brooks, and Jeremy Bruskotter. "North American Model of Wildlife Conservation: Empowerment and Exclusivity Hinder Advances in Wildlife Conservation." *Canadian Wildlife Biology and Management* 2018: Volume 7, Number 2 ISSN: 1929-3100.

<sup>159</sup> Ben O'Brian, Shane Mahoney. EP 51 and 52.

<sup>160</sup> M. Nils Peterson & Michael Paul Nelson (2017) "Why the North American Model of Wildlife Conservation is Problematic for Modern Wildlife Management, Human Dimensions of Wildlife." 22:1, 43-54, DOI: 10.1080/10871209.2016.1234009. and Thomas Serfass, Robert Brooks, and Jeremy Bruskotter. "North American Model of Wildlife Conservation: Empowerment and Exclusivity Hinder Advances in Wildlife Conservation.".

enthusiasts.<sup>161</sup> Which also impacts wildlife every time they set foot afield. The later only serves to compound the first complaint that NAMC is ethical, gender, and race specific. If not a middle-aged white male, do not be caught walking around the woods seeking to kill Bambi. The irony is thick as the material used in developing NAMC is derived from a white male-dominated epoch. At the same time, most hunters in North America are white males.<sup>162</sup>

Regardless, NAMC is rooted in science, democratic quota allocation, and gives no weight or priority to race, creed, or gender. Secondly, there is a valid argument that other user groups' effects on wildlife need to be understood and incorporated into a wildlife conservation plan. This plan must span year-round events and activities, which will still be weighted towards the hunter. There is no way around determining the method and quota of taking wildlife. Hunting aspects will make up more than half of the principles.

*Financial support.*<sup>163</sup> American method to fund conservation is from hunting and fishing licenses and the Pitman-Robertson Act. Singling these two aspects implies that hunters are the sole revenue generators for conservation funding. Singling these two aspects implies that hunters are the sole revenue generators for conservation funding.<sup>164</sup> Because NAMC focuses on these two facts, the NAMC gives hunters such prominent placement, inflating hunters' egos. Two is that it contributes to the mistaken idea that the NAMC creates a pay-for-play scheme. Therefore, hunters imagine they should determine conservation methods and practices that it is a user-pay system. Hence hunters get to determine conservation methods and practices.<sup>165</sup>

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<sup>161</sup> M. Nils Peterson & Michael Paul Nelson and Jeremy Bruskotter.

<sup>162</sup> Ibid.

<sup>163</sup> Serfass, Bruskotter, and Brooks originally had five premises breaking “Overstates the financial support contributed by hunters for wildlife conservation, generally failing to recognize contributions of the non-hunting public” and “Financial support for wildlife conservation does not necessarily equate to philosophical support” into two separate points. This paper has combined them as they both speak towards the same point.

<sup>164</sup> M. Nils Peterson & Michael Paul Nelson (2017) and Thomas Serfass, Robert Brooks.

<sup>165</sup> M. Nils Peterson & Michael Paul Nelson (2017) And Thomas Serfass, Robert Brooks, and Jeremy Bruskotter.

Pitman-Robertson and license sales are two of many funding streams paying for conservation.<sup>166</sup> Many other nonprofit organizations have already been stated in this paper, such as the Sierra Club, The National Audubon Society, American Bird Conservancy, Wildlife Conservation Society, the Humane Society, and many more.

Though most recently, Congress has taken up a restored effort in allocating conservation funding with the passage of the recent passage of the Great American Outdoor Act. President Donald Trump signed on August 4, 2020, and passage both chambers will be overwhelming bipartisan support. The funding allocates \$900 million annually to the Land and Water Conservation Fund (LWCF), as well as \$9.5 billion over five years to address critical maintenance backlogs on public lands and waters.<sup>167</sup>

*Has evolved into a marketing effort designed to promote hunting.* Standing by itself without context, this is a true statement. As stated in the Financial premise, NAMC points out what hunters have done by creating a user-pay system with license sales and Pitman-Robertson. Hunters are simply struggling at recruitment, retention, and reactivation.<sup>168</sup> Hunting numbers across the United States has been on a steady decline for many years.<sup>169</sup> Hunters and hunting groups seek every possible manner for communication to spread their message. Hunters are not indeed at fault as it does not change the science-based approach set in place by the principles.

*NAM hinders the development of a more progressive system of wildlife conservation.* The NAMC says little about non-game species beyond recognizing the need for more extraordinary

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<sup>166</sup> Ibid.

<sup>167</sup> National Park Service, "Great American Outdoors Act" National Park Service, August 4 2020. URL: <https://www.nps.gov/subjects/legal/great-american-outdoors-act.htm>. accessed Oct 21 2020

<sup>168</sup> Chris Chaffin. "The Three "Rs" of Hunting's Future" *Hunter Leadership Forum*. June 3, 2017 accessed from: <https://www.nrahl.org/articles/2017/6/3/the-three-rs-of-huntings-future/>.

<sup>169</sup> Nathan Rott. "Decline In Hunters Threatens How U.S. Pays For." *National Public Radio*. March 20, 2018 Accessed from: <https://www.npr.org/2018/03/20/593001800/decline-in-hunters-threatens-how-u-s-pays-for-conservation?t=1575729646021>



biodiversity.<sup>170</sup> Sustained funding is a difficulty across all conservation efforts.<sup>171</sup> Compounding the finance issues is establishing a holistic biodiverse ecosystem. Private landowners are not required to follow all conservation efforts by the state.<sup>172</sup> The NAMC only states that animals are public property regardless of where they stand but does little in conservation on private land.

*NAMC and market hunting.* As stated in the focusing event, market hunting is killing the animal for commercial sale. NAMC intends that killing an animal through legal hunting is for personal use or keeps the animal legally able to sell, which is not a valid concept in America. We have private ranches that raise elk, mule deer, and whitetail deer for the explicit purpose of selling in the commercial market.<sup>173</sup> Other examples are the commercial fishing market, alligator hunting in the south, the feral hog market in Texas, and the entire fur market from trapping. Market hunting is thriving. The critical difference is that it is regulated compared to the nineteenth century, which was first come first served towards access.

The practice of legal market hunting then forces the question regarding legitimate killing. However, the NAMC fails to define what constitutes legitimate killing. The closest definition is a science-based approach. Alternatively, the democracy of hunting with the need for modern market hunting depends on the market at its core. In this case, science determines how much and what types need to be removed, which validates the reason for killing and the democracy of hunting. The democracy of hunting is creating a quota system to ensure all have equal access.

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<sup>170</sup> Organ, J.F et al. pg 2.

<sup>171</sup> Thomas Serfass, Robert Brooks, and Jeremy Bruskotter.

<sup>172</sup> Thornton Robert, Liz Klebaner. "The Critical Habitat Exclusion Policy: Implications for Conservation Partnerships on Private Land." *Natural Resources & Environment* 30, no. 1 (Summer 2015): 13–17. Accessed November 12, 2019. And Leonard William, *Practice of Wildlife Conservation*.

<sup>173</sup> Steve Wagner. "Next Year's Model." *Outdoor Life*. Vol 223, No. 2 (February 2016) 48–54.

## Chapter 3

### Case Studies

#### *Recovery Tool or Political Weapon?*

This chapter will expand on the aforementioned focusing event by examining specific instances where the Endangered Species Act (ESA) was utilized in practice. The historical actions within the wildlife management realm establish today's nuanced problems. Just as no two fingerprints are the same, no two species' recovery plans are the same. The previous chapters outlined the demise of the American buffalo and an overview of a few laws which shaped the need to establish an ESA.

This chapter will examine how the American court system impacts the ESA. Using the five case studies which will highlight the collective strengths and weaknesses of the act. The cases emphasize how the layering of bureaucratic precedence of targeted litigation has either enabled, stopped or stymied game managers ability to actually recover endangered species. Specifically, how challenges in the courts have transitioned from a prevention and recovery tool to that of a political deterrent to stop hunting.

#### *Can hunting actually support the recovery of an endangered species?*

The intent of the Endangered Species Act (ESA) is arguably the best conservation-minded legislation that America has passed. From 1976 to 2014, the US Fish and Wildlife Service (FWS)<sup>174</sup> listed 2,248 species under ESA protection averaging 37 new listings a year.<sup>175</sup> Only 71 in total have been delisted, which equates to a 3% success rate.<sup>176</sup> Table 1 lists species

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<sup>174</sup> The US Fish and Wildlife Service (FWS), the U.S. National Oceanic and Atmospheric Administration (NOAA) Fisheries Service are the federal agencies in charge of all wildlife management within the United States. This paper only cites FWS when referencing both unless NOAA requires a specific reference different from FWS

<sup>175</sup> Sims, C. and H. Palikhe. "Proposed Changes Would Increase the Cost and Decrease the Benefit of Listing Species as Endangered." *Choices*. Quarter 2 (2019). Accessed November 28 2019.

<sup>176</sup> Ibid

by type and status era.<sup>177</sup> This chapter explores the ESA's critical aspects, a law that seeks to support recovery but slow progress. Like all laws in America, the ESA requires updates and revisions to maintain relevance.

**Table 1 – Current Species Protected and Delisted Under the ESA**

	Aquatic (NMFS Lead)	Terrestrial (FWS Lead)	Total (U.S. and Foreign)
Proposed for listing	1	15	16
Candidates for listing	0	28	28
Threatened	48	401	445
Endangered	50	1,804	1,847
Delisted	4	67	71

Source: Environmental Online System (ECOS), <https://ecos.fws.gov/ecp/species-reports>.<sup>178</sup>

As stated in the listing and delisting process, the FWS requires public comment from the general public and the scientific community to ensure the best actions happen. Each state has its version of the FWS or NOAA, though not always labeled as such. Sometimes, government leaders must make timely decisions for the greater good based on presented information without public comment. Like Roosevelt did in 1891 with the "Midnight Forest Reserve," formally known as the Forest Reserve Act.<sup>179</sup>

The "Midnight Forest Reserve" tell comes from the western states representative's seeking to garner more state control over the forest and therefore the lumber industry. Which Senator Charles W. Fulton of Oregon introduced an amendment to the 1907 Agricultural Appropriations Bill.<sup>180</sup> Which would remove the president's ability to create National Forests by

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<sup>177</sup> Ibid

<sup>178</sup> (Table 1) Ibid

<sup>179</sup> Cummings Mason, "How America Started Saving National Forests." The Wilderness Society Accessed March 28, 2019. URL: <https://www.wilderness.org/articles/article/how-america-started-saving-national-forests>

<sup>180</sup> Editors Fish and Wildlife Services, Siuslaw National Forest, Fun Facts, Fish and Wildlife Services [https://www.fs.usda.gov/Internet/FSE\\_DOCUMENTS/fsbdev7\\_007136.pdf](https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fsbdev7_007136.pdf). Accessed 11 Oct 2020.

proclamation. Roosevelt and Gifford Pinchot needed the Appropriations bill to pass the square deal. Knowing that once land moved to state control it would be gone but needing to support Americans' with the square deal there was a mad dash to preserve as much as possible with no public comment. Regardless, final decisions are made solely in government circles, with aspects taken from the general public. When the government makes an error, it is the people's voice that eventually changes the government.<sup>181</sup> As stated in the listing and delisting process, the FWS requires public comment from the general public and the scientific community to ensure that the best actions happen.<sup>182</sup>

To question governmental decisions is a cornerstone of American political structures. This practice has been and will continue throughout America's governance. Questioning the government plays a critical role in raising public voices to the ear of elected leaders. The ability to question government has increasingly become more important in today's political sphere, particularly with humanity's interaction surrounding the natural world. Technology and the continued growth of humanity only intensify the need to govern our natural world. There are only a few opportunities to manage humanity's collective exchanges with nature correctly. Therefore, these should be approached with deliberation, and allow for more nimble reaction because it is not likely to be perfect nor are these situations static. Government and people will make mistakes, but rectifying missteps faster and more efficiently is done when the people's voices are heard.

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<sup>181</sup> The US Fish and Wildlife Service (FWS), the US National Oceanic and Atmospheric Administration (NOAA) Fisheries Service are the federal agencies in charge of wildlife management. This paper only cites FWS when referencing both unless NOAA requires a specific reference different from FWS.

<sup>182</sup> Cummings Mason, "How America Started Saving National Forests."

## Review of Federal Registry and US Court System

Like humanity's interactions with the natural world, our internal political process continues to evolve. Since the ESA passage, humanity's interaction and preservation of the natural world have been taken from the scientific communities and given to the judges to determine federal rules and regulations' legal precedent. In today's world, the importance of managing wildlife and human interaction becomes more difficult as more people question wildlife managers' actions. There is a trend to question more through the court system than through the FWS public comment. Compounding the FWS is the president's use of executive orders and running through the supreme court to overturn.<sup>183</sup> A second way is for federal agencies to create federal regulation. If an agency seeks to make, change, or delete a rule, it follows four steps. First, the agency publishes the proposal within the federal register. Second is public comment. Third, the agency analyzes the public comment against the rationale for said change. Fourth, it announces the federal register's final version with a summarized description of comments received the agency's response to comments. Then rule goes into effect.<sup>184</sup>

Federal agencies must seek public comment when creating new regulations.<sup>185</sup> The reason is to allow specialists within the field, or the people affected by a new rule, change, delete, and shape the regulation. There are many forms of public comment across America – every township has its form. The federal government utilizes the federal register to collect public comments on federal regulations.<sup>186</sup> The need for the federal register blossomed in a 1934

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<sup>183</sup> Editors USA.gov. "How Laws Are Made." USA.gov. Accessed March 28, 2019, <https://www.usa.gov/how-laws-are-made>

<sup>184</sup> Editors USA.gov. "How Laws Are Made."

<sup>185</sup> Editors EPA.gov. "Summary of the Administrative Procedure Act." EPA.gov. Accessed March 29, 2020. URL: <https://www.epa.gov/laws-regulations/summary-administrative-procedure-act>

<sup>186</sup> Editors Project on Government Oversight. "How to Comment on a Rule." Center for Effective Government. Accessed March 28, 2020. URL: <https://www.foreffectivegov.org/node/4059>

Supreme Court case, which challenged the constitutionality of President Roosevelt's "New Deal," specifically the National Industrial Recovery Act (NIRA).<sup>187</sup>

The case's crux changed with the defendants violating a regulation that technically did not exist when the supposed violation was committed, as the Constitution specifically prohibits ex post facto prosecution against individuals.<sup>188</sup> The point being that the sheer number of different orders, codes, regulations, or decrees issued by the federal government was too voluminous even the government officials producing said documents did not know how to track what was in effect.<sup>189</sup> Therefore, congress passed the Federal Register Act, on July 26, 1935.<sup>190</sup>

In 1946, the first significant revision to the federal register came with the passage of the Administrative Procedure Act (APA) (5 USC 552).<sup>191</sup> The APA required agencies to allow time for public comment before final rules take place. This change transformed the Federal Register from a mere single source of the most current rules and regulations to an essential part of the American democratic process. It gave a voice to the layman equal to that of government officials by allowing public comment. Today the public is allowed 30 to 60 days for public comment, though more complex rules can allow up to 180 days.<sup>192</sup>

Once the orders, codes, regulations, instructions, rules, guidelines, and decrees are established and active, the public has the means to counter. Countering a law is typically done

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<sup>187</sup> National Archives and Records Administration. "The Fish and Wildlife Service. Federal Register 70th Anniversary". Archives.gov Accessed March 29 2020. URL: <https://www.archives.gov/files/federal-register/the-federal-register/history.pdf>

<sup>188</sup> Ibid

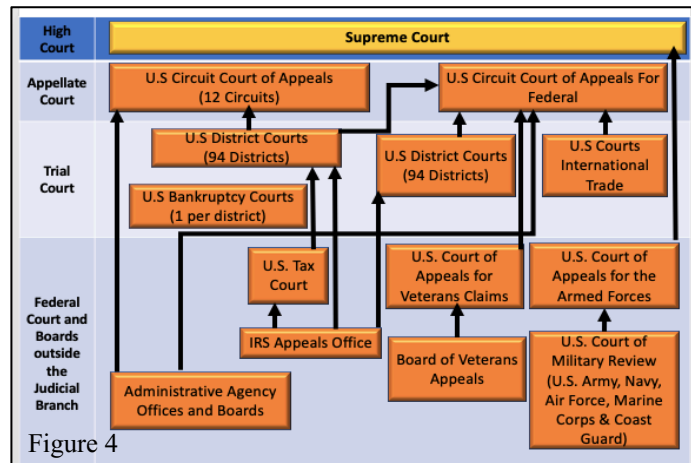
<sup>189</sup> Ibid

<sup>190</sup> National Archives and Records Administration. "The Fish and Wildlife Service. Federal Register 70th Anniversary" and Bunk Amy. "Fish and Wildlife Service. Federal Register 101". Fish and Wildlife Service. Federal Register. Legal Affairs and Policy Office. Accessed March 29, 2020. URL: [https://www.federalregister.gov/uploads/2011/01/fr\\_101.pdf](https://www.federalregister.gov/uploads/2011/01/fr_101.pdf)

<sup>191</sup> National Archives and Records Administration. "The Fish and Wildlife Service. Federal Register 70th Anniversary"

<sup>192</sup> Office of the Federal Register. "A Guide to the Rulemaking Process." Federal Register. Accessed March 28, 2020. URL: [https://www.federalregister.gov/uploads/2011/01/the\\_rulemaking\\_process.pdf](https://www.federalregister.gov/uploads/2011/01/the_rulemaking_process.pdf)

during the proposal period but can be challenged later. Challenging can also be done in a court or through Congress. When challenging in court, the plaintiff will generally argue that the agency failed procedurally, overstepped the agency's authority, or is unconstitutional.<sup>193</sup> A challenge through Congress will be to submit a new bill, requiring both



houses' clearance and a presidential signature with Congress's possible override if the president elects to veto.<sup>194</sup> Challenging a rule through Congress would have a longer-lasting effect. However, it can take years because this route essentially returns to the congressional process's beginning with a new bill.

A challenge through Congress will be to submit a new bill, requiring both houses' clearance and a presidential signature with Congress's possible override if the president elects to veto.<sup>195</sup> Challenging a rule through Congress would have a longer-lasting effect. However, it can take years because this route essentially returns to the congressional process's beginning with a new bill.

*“Federal courts hear cases involving the constitutionality of a law, cases involving the laws and treaties of the U.S. ambassadors and public ministers, disputes between two or more states, admiralty law, also known as maritime law, and bankruptcy cases.”<sup>196</sup>*

<sup>193</sup> Editors Justia. "Challenging Regulatory Actions." Justia. Accessed March 29, 2020. URL: <https://www.justia.com/administrative-law/challenging-regulatory-actions/>

<sup>194</sup> Ibid

<sup>195</sup> Ibid

<sup>196</sup> Ibid

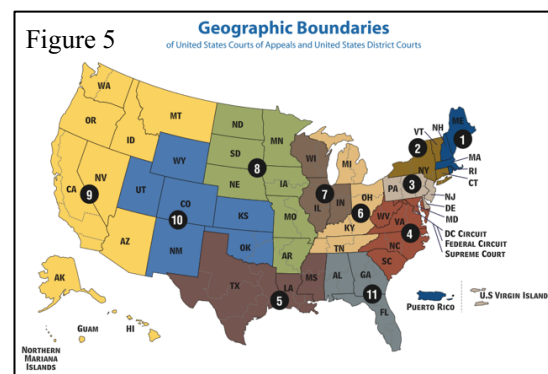
Though the federal courts are separate from the other two branches of the federal government, it works with them on constitutional matters.

Generally, cases will start at one of the 94 district courts. Each state, as well as the District of Columbia, has at least one district court.<sup>197</sup>The US Bankruptcy Court, Court of International Trade, and the US Court of Federal Claims oversee bankruptcy, international trade, and customs laws and claims for monetary damages against the US government. All fall under the preview of the district court.<sup>198</sup> Each of the four US territories (Puerto Rico, the Virgin Islands, Guam, and the Northern Mariana Islands) has district courts to hear their federal cases.

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The Appellate Court or "Court of Appeals" further divides 94 district courts into 12 circuits courts. Thus, it moves the challenges from district court decisions within the respective circuit and decisions of federal administrative agencies.<sup>200</sup> Moreover, it has a nationwide preview over patent laws and cases decided by the US Court of International Trade and the US Court of Federal Claims.<sup>201</sup> The appellate court's purpose is to rule if the law was applied appropriately in the lower courts. A three-judge panel and no jury conduct the appellate courts.

The Supreme Court is the final court within America and the supreme law of the land. The Supreme Court will only see 100 to 150 cases per year of the 7,000 to 8,000 cases it



<sup>197</sup> Ibid  
<sup>198</sup> Ibid  
<sup>199</sup> Ibid  
<sup>200</sup> Ibid  
<sup>201</sup> Ibid



reviews from the 12 circuit courts.<sup>202</sup> To be seen by the Supreme Court, the parties must petition where the petitioner asks the Supreme Court for a grant of a *writ of certiorari*.<sup>203</sup> Meaning the Supreme Court will petition the order from the lower court to send the case records. Each Justice of the Supreme Court has three to four clerks who summarize the cases. The Justices will then vote on accepting the cases or not, based on the clerks<sup>204</sup>

In summary, laws or regulations originate and are condensed into an amalgamation of how the public seeks to have federal oversight and science use. The first aspect is that constituents reach out to their elected officials and voice their needed change requirements. The elected officials sponsor and gather support to pass a bill through Congress, ending with a presidential signature, which results in a new law. Second, federal agencies propose a change to or creation of a new rule in the federal register. After a public comment period, the agency will post the final rule within the federal register. A federal review via the Civilian Review Agency (CRA) will validate the final rule. Then on the effective date, the agency's rule goes into effect. If one does not like the federal law, they can seek another bill passed through Congress, which negates the original law. Alternatively, one may challenge court, starting at the district court level and moving through the Supreme Court system.

### **Case Studies**

The previous chapters discussed the buffalo's demise and outlined laws that supported the establishment of the ESA. This chapter reviews the American court system, which is an important baseline when questioning government actions. The following case studies outline the

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<sup>202</sup> Editors US Courts. "Supreme Court Procedures." and Figure 2 Editors Unites States Courts. "Court Website Links." United States Courts.gov Access on March 30, 2020. URL:

[https://www.uscourts.gov/sites/default/files/u.s.\\_federal\\_courts\\_circuit\\_map\\_1.pdf](https://www.uscourts.gov/sites/default/files/u.s._federal_courts_circuit_map_1.pdf)

<sup>203</sup> Editors US Courts. "Supreme Court Procedures."

<sup>204</sup> Ibid

evolution of the ESA with a specific interest in species recovery. These species are geographically separate. Some are invariably linked, as they are the stair steps that build case law precedence surrounding the ESA. The ESA timeline below as well in the annexes depicts the ESA's major event is the starting point for the case studies.

The significant changes to the ESA are in 1978, 1982, 1988, and 2004. These changes are essential. It shows when and how the ESA adapted to changes with time, scientific understanding, and management plans. They are also critical to highlighting how the courts become more involved in decisions over management plans.

## ESA Timeline:<sup>205</sup>

<b>1966</b>	Endangered Species Preservation Act
<b>1969</b>	Congress amended the Act to provide additional protection to species in danger of "worldwide extinction" by prohibiting their importation and subsequent sale in the United States.
<b>1973</b>	-Endangered Species Act signed -80 nations to sign the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).
<b>1982</b>	<p><i>"ESA First Amendments"</i></p> <ol style="list-style-type: none"> <li>1. Determinations of the status of species were required to be made solely on the basis of biological and trade information, without consideration of possible economic or other effects [section 4];</li> <li>2. A final rule to determine the status of a species was required to follow within one year of its proposal unless withdrawn for cause. This requirement replaced a two-year limit that had been enacted in 1978 on adopting a final rule. Failure to meet the two-year deadline had been grounds for mandatory withdrawals of more than 1500 proposed species listings in 1979 [section 4];</li> <li>3. Section 10 included a provision to designate experimental populations of listed species that could be subject to different treatment under section 4 for critical habitat, section 7 for interagency cooperation, and section 9 for prohibitions;</li> <li>4. Section 9 included a prohibition against removing endangered plants from land under Federal jurisdiction and reducing them to possession;</li> <li>5. Section 10 introduced habitat conservation plans, providing "incidental take" permits for listed species in connection with otherwise lawful activities.</li> </ol>
<b>1988</b>	<p>Monitoring candidate and recovered species was required, with adoption of emergency listing when there is evidence of significant risk [section 4];</p> <p>Several amendments dealt with recovery matters: 1) recovery plans were required to undergo public notice and comment, and affected Federal agencies were required to give consideration to those comments; 2) new subsection 4(g) required five years of monitoring recovered species; and 3) biennial reports were required on the development and implementation of recovery plans and on the status of all species with plans;</p> <p>A new section 18 required a report of all reasonably identifiable expenditures by the Federal government and States that received section 6 funds on a species-by-species basis on the recovery of endangered or threatened species; and Protection for endangered plants was extended to include a prohibition on malicious destruction on Federal land and other "take" that violates State law [section 9].</p>
<b>1996</b>	District Population Segments (DPS) Established (61 FR 4722)
<b>2004</b>	Section 4(a)(3) exempted the Department of Defense from critical habitat designations so long as an integrated natural resources management plan prepared under section 101 of the Sikes Act (16 U.S.C. 670a) and acceptable to the Secretary of the Interior is in place.
<b>2019</b>	U.S. Fish and Wildlife Service (FWS) and the National Marine Fisheries Service (NMFS) (collectively referred to as the "Services" or "we"), revise portions of our regulations that implement section 4 of the Endangered Species Act of 1973, as amended (Act). The revisions to the regulations clarify, interpret, and implement portions of the Act concerning the procedures and criteria used for listing or removing species from the Lists of Endangered and Threatened Wildlife and Plants and designating critical habitat.

<sup>205</sup> ESA Timeline: Editors U. S. Fish and Wildlife Service. "A History of the Endangered Species Act of 1973". U. S. Fish and Wildlife Service Endangered Species Program. Accessed 2 April 2020. URL: [https://www.fws.gov/endangered/esa-library/pdf/history\\_ESA.pdf](https://www.fws.gov/endangered/esa-library/pdf/history_ESA.pdf)

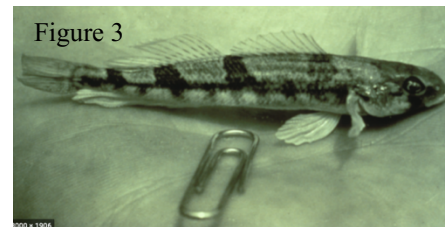
## Snail Darter

### Tennessee Valley Authority v. Hill (437 U.S. 153) (1978)

*“The Thermopylae in the history of America's conservation movement”<sup>206</sup>*

Tennessee Valley Authority v. Hill was the first case the supreme court ruled made a ruling about the ESA. It also remains one of the most instructive cases in American environmental law.<sup>207</sup> With this case the supreme court validated Congress original intent of the ESA to prevent species extinction, ultimately set a precedent that litigation can save a species.<sup>208</sup> Being Also becoming the first time that the U.S. government made a decision to extirpate a species. Ultimately proving that ESA has actual legal means to stop human action which can harm a species.

Background: A Snail Darter is a small fish in the perch family.<sup>209</sup> The Darter's habitat is flowing freshwaters such as rivers, streams, and creeks. First,



<sup>206</sup> Plater, Zygmunt “A Jeffersonian Challenge from Tennessee: The Notorious Case of the Endangered ‘Snail Darter’ Versus Tva’s Tellico Dam--And Where Was the Fourth Estate, the Press?” Tennessee Law Review, vol. 80, no. 3, Spring 2013, pp. 501–541. EBSCOhost, [search.ebscohost.com/login.aspx?direct=true&db=lf&AN=89943507&site=ehost-live&scope=site](http://search.ebscohost.com/login.aspx?direct=true&db=lf&AN=89943507&site=ehost-live&scope=site).

<sup>207</sup> Dernbach, John C. Law and History Review, vol. 27, no. 1, 2009, pp. 230–231. JSTOR, [www.jstor.org/stable/27641672](http://www.jstor.org/stable/27641672). Accessed April 2, 2020. URL: <https://kansaspress.ku.edu/978-0-7006-1504-9.html>

<sup>208</sup> Plater, Zygmunt J. B. The Snail Darter and the Dam: How Pork-barrel Politics Endangered a Little Fish and Killed a River. New Haven: Yale University Press, 2013, and Irvin Robert. "Snail Darter Politics" Huffington Post. Accessed April 3, 2020 URL: [https://www.huffpost.com/entry/snail-darter-politics\\_b\\_4833457?guccounter=1&guce\\_referrer=aHR0cHM6Ly93d3cuZ29vZ2xlLmNvbS8&guce\\_referrer\\_sig=AQAAANsuX1G-8MB57-zACQ\\_4kFQLIEX1U0xkl2Fk31i2WyKc-mqqgCHnuvJUGoLAEjsHBW\\_RcxWwnL6\\_CXnVyXFyOqb2KIwBjCrO11J0hEHYEv27rq9qS\\_NDQSYa2chIRjgdhBm8E\\_djqp\\_IVadrAMKsask4N5qIohokARZM2wwtx9O3](https://www.huffpost.com/entry/snail-darter-politics_b_4833457?guccounter=1&guce_referrer=aHR0cHM6Ly93d3cuZ29vZ2xlLmNvbS8&guce_referrer_sig=AQAAANsuX1G-8MB57-zACQ_4kFQLIEX1U0xkl2Fk31i2WyKc-mqqgCHnuvJUGoLAEjsHBW_RcxWwnL6_CXnVyXFyOqb2KIwBjCrO11J0hEHYEv27rq9qS_NDQSYa2chIRjgdhBm8E_djqp_IVadrAMKsask4N5qIohokARZM2wwtx9O3) and Plater, Zygmunt “A Jeffersonian Challenge” and Fish and Wildlife Service. Federal Register. Vol. 49, No. 130 1. July 5, 1984. Accessed April 3, 2020, URL [https://ecos.fws.gov/docs/federal\\_register/fr854.pdf](https://ecos.fws.gov/docs/federal_register/fr854.pdf) and US District Court for The District of Hawaii - 73 F. Supp. 2d 1181 October 13, 1999, Palila V. Hawaii Dept. Of Land and Natural Resources.

<sup>209</sup> Editors of Encyclopedia Britannica. "Darter Fish." Encyclopedia Britannica. Accessed April 3, 2020, URL: <https://www.britannica.com/animal/darter-fish> and Figure 3 (Snail Darter Image) USFWS. "Endangered Fish Darters Image." Division of Public Affairs. Accessed April 3, 2020. URL: <http://images.fws.gov/default.cfm?fuseaction=records.display&CFID=5694254&CFTOKEN=94260430&id=D800CBF2%2D65B8%2DD693%2D7923BAE7A708E7DA>

discovered in the Little Tennessee River in 1976. Darters are the general term of about 100 different subspecies. Darter characteristics consist of two dorsal fins between 2.5 and 23 cm (1 to 9 inches) in length and among the most brightly colored fish in North America.

The Tellico Dam was one of the Tennessee Valley Associations (TVA) projects derived from President Franklin Roosevelt's economic recovery plans to modernize the region and provide jobs and electricity. The Tellico Dam was the last of the TVA projects and a minor feature in developing the Tennessee River Channel.<sup>210</sup> Initially planned for construction as an extension of the Fort Loudoim Dam, in 1942, it received congressional appropriation. Subsequently, the funding was canceled just a few months later because of wartime priorities.

By 1961, President Kennedy implored federal agencies to seek out projects which could stimulate the economy. The Tellico Dam project re-emerged as a TVA top priority. This project would flood around 38,000 acres (66 sq. miles) to make more land development and create an estimated 25,000 jobs. It would also create recreational space, which would generate 1.4 million dollars annual revenue.<sup>211</sup> The original plan was solely for electrical output for the region. However, as the Tellico Dam re-emerged, the TVA board of directors took a different approach to procure more land than the reservoir would require.<sup>212</sup> This expansion ensured that the TVA was not involved in another controversy around shoreline development. Boeing had already made moves to procure vast tracks of the shoreline for a proposed project named "Timberlake

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<sup>210</sup> Rechichar, Stephen J., and Michael R. Fitzgerald. "Administrative Decision and Economic Development: TVA's Tellico Dam Controversy." Accessed April 3, 2020. URL: <http://web.a.ebscohost.com/ehost/detail/detail?vid=0&sid=04d43a9d-a851-4786-8c49-f35ccc3c0df2%40sessionmgr4007&bdata=JnNpdGU9ZWwhvc3QtbGl2ZSZzY29wZT1zaXRl#AN=7287486&db=bsu>

<sup>211</sup> Plater, Zygmunt "A Jeffersonian Challenge"

<sup>212</sup> Rechichar, Stephen J., and Michael R. Fitzgerald. "Administrative Decision and Economic Development: TVA's Tellico Dam Controversy."

Project<sup>213</sup> Second, it was to provide another aspect to stimulate the economy by procuring extra acreage for public controlled shoreline development.<sup>214</sup>

These economic reasons to build the dam were challenged even before the snail darter was found. As local farmers, trout fisherman, Cherokees, historians, and anthropologists all sought to stop the dam's construction in 1964. By 1968 the dam construction is underway but stopped by a court challenge sighting that the TVA failed in preparing an Environmental Impact Statement (EIS). Which has nothing to do with the snail darter. The challenge sighting the environmental impacts is upheld in a ruling in 1972. 1973 has three major events, first Dr. David Etnier discovers the "snail darter". The TVA completes the EIS and the dissolved the 1972 injunction and dam construction resumes. Lastly Nixon signing the ESA into law. In October of 1974 the farmer regroup and seek to challenge the building of the dam as it violates section 7 of the ESA. 1975 has Boeing stopping its involvement in the Timberland project and snail darter is listed and its habitat under ESA protections. Which the TVA objects to placing the fish on the ESA list. 1976 a scientific review panel gave the darter its own taxonomic classifications and the darter filed an injunction over the dam in district court. The district court found that Tellico Dam did violate Section 7 of the ESA but issued no injunction. Therefore, dam construction continued.

Elevating through the courts had the Sixth Circuit stating that the district court did confirm that the dam would jeopardize the snail darter therefore the completion of the project would violate the Endangered Species Act. The injunction caused a national outburst of

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<sup>213</sup>," Plater, Zygmunt "A Jeffersonian Challenge" And Rechichar, Stephen J., and Michael R. Fitzgerald. "Administrative Decision and Economic Development: TVA's Tellico Dam Controversy."

<sup>214</sup> Rechichar, Stephen J., and Michael R. Fitzgerald. "Administrative Decision and Economic Development: TVA's Tellico Dam Controversy."

bemused attention for the darter and ESA. Then the challenge was continued to the supreme court.

By 1978 and the courts validation of the ESA which stopped the dam construction the TVA only had one option left to complete the dam. Which was to counter the supreme court ruling with the passage of federal law. A presidential cabinet “God Committee” unanimously upholds snail darter injunction on economic grounds. But Senator Howard Baker and Rep. John Duncan push a stealth rider amendment on the 1980 appropriations bill. This bill nullified the supreme court’s ruling as well as the God Committee decision. Essentially, allowed the completion of Tellico Dam even if it met that the snail darter habitat and the fish itself were allowed to die into extinction.

The Snail Darter case is essential because this small fish validated the importance of the ESA and simultaneously started a new era surrounding environmental concerns from a species' perspective.<sup>215</sup> For the hunter this marks the first time that environmental groups will seek litigation by protecting critical habitat and an endangered species. Even though the dam was ultimately constructed it still took four federal court rulings, and passage of legislations through both chambers of congress. The snail darter also proves at a national scale that Americans do want to stop extinction which will limit growth in other areas.

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<sup>215</sup> Hall Noah. "Percina tanasi Snail Darter." Animaldiversity.org. Accessed April 3, 2020. URL: [https://animaldiversity.org/accounts/Percina\\_tanasi/](https://animaldiversity.org/accounts/Percina_tanasi/)

## Timeline of legal action for the Snail Darter: <sup>216</sup>

Legend	
ESA Specific Rule	Congressional Legislation
Removal from ESA	Federal Court Decision
1954	Tellico Dam planning is started.
1961	President Kennedy task federal agency to finds methods to stimulate the economy.
1964	TVA's plan for Tellico Dam is rejected by the local region.
1968	Dam construction is started and stopped shortly after beginning. The Environmental Defense Fund wins an injunction due to TVA lack of preparing Environmental Impact Statement (EIS).
1973	<b>August:</b> Dr. David Etnier discovers the "snail darter" ( <i>percina tanasi</i> ). <b>December</b> Endangered Species Act of 1973
1974	The local farmers, Zygmunt Jan Broel Plater and Hank Hill meet to begin planning a lawsuit where the Tellico Dam violated Section 7 of the ESA by endangering the darter's survival.
1975	<b>March:</b> Boeing Corp. pulls out of the Timberlake project, due to not being a economical viable option. TVA continue the procurement process of obtaining the required land to support the dam and reservoir. <b>November:</b> Snail Dart is listed as an endangered species under ESA protection due to critical habitat lose.
1976	<b>January:</b> Snail Darter ( <i>percina tanasi</i> ) by a scientific review panel is given its own taxonomic classifications. <b>February:</b> Lawsuit filed in district court, that Tellico Dam is violating Section 7 of the ESA towards the rights of the Snail Darter. <b>May:</b> District validates ESA Section 7 violations, though no injunction is issued.
1977	Sixth Circuit grants injunction which caused national outbursts the court citing is: <i>"Tellico Dam would 'jeopardize the continued existence of the snail darter,' and, therefore, the completion of the project would violate the Endangered Species Act."</i>
1978	Tellico Dam planning is started. Supreme court upholds 6 <sup>th</sup> circuit court decision.
1979	<b>January:</b> The " <i>God Squad</i> " is created by Baker-Culver. While Critics of dam raise concern over TVA's economic viability. <b>September:</b> A rider amendment on the 1980 appropriations bill, over-riding the ESA, approves completion of Tellico Dam. <b>November:</b> TVA completes Tellico Dam. Snail darters transferred to several transplant locations.
1984	-Snail darter transplants are successful and established in other areas. Thus, a down listing to "threatened" is justified. -Final Ruling complete Thursday, July 5, 1984.

<sup>216</sup> Plater, Zygmunt J. B. The Snail Darter and the Dam: How Pork-barrel Politics Endangered a Little Fish and Killed a River and Rechichar, Stephen J., and Michael R. Fitzgerald. "Administrative Decision and Economic Development: TVA's Tellico Dam Controversy." and Irvin Robert. "Snail Darter Politics" and Plater, Zygmunt "A Jeffersonian Challenge" and Federal Register. Vol. 49, No. 130 1. July 5, 1984 and U.S. District Court for The District of Hawaii - 73 F. Supp. 2d 1181 October 13, 1999 Palila V. Hawaii Dept. Of Land and Natural Resources.



## Palila

### Palila v. Hawaii Department of Land and Natural Resources

Palila v. Hawaii Department of Land and Natural Resources is essential for a few reasons. First, the Palila followed the snail darter path, reconfirming that a species can defend itself in court, reinforcing Congress original intent to save a species from extinction. As well that the ESA can preempt individual state's control over a species. Even if the species solely resides in a single state with no interstate or federal connection. In that any ancillary cost to the state created from or by the injunction is permissible, when the injunction is not tantamount to money damages.<sup>217</sup> Second, it was the first successful suit upheld under section 9 of the ESA. Which is important because it upholds the ESA under commerce and treaty clauses of Congress. Finds no eleventh amendment bar for enforcement from individuals or private parties against state government officials or agencies.<sup>218</sup>



Figure 4

Background: The Palila (*Loxioides bailleui*) is a honeycreeper finch.<sup>219</sup> It is one of the largest bodied honeycreepers and only found in Hawaii. They grow between 15 and 16.5 cm long (6 and 6.5 inches) with a thick bill or beak. It has a golden-yellow head, white abdomen, and grey back. This bird depends on the Hawaiian ecosystem, specifically the island of Hawai'i māmane forests on Mauna Kea for feeding and nesting.<sup>220</sup>

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<sup>217</sup> Nelson, Jack R. "Palila v. Hawaii Department of Land and Natural Resources: State Governments Fall Prey to the Endangered Species Act of 1973." Accessed April 3, 2020 URL: [https://heinonline-org.proxy1.library.jhu.edu/HOL/Page?lname=&public=false&collection=journals&handle=hein.journals/eclawq10&men\\_hide=false&men\\_tab=toc&kind=&page=281](https://heinonline-org.proxy1.library.jhu.edu/HOL/Page?lname=&public=false&collection=journals&handle=hein.journals/eclawq10&men_hide=false&men_tab=toc&kind=&page=281)

<sup>218</sup> Ibid

<sup>219</sup> The state of Hawaii. Sheep and Goats. Restore Mauna Kea-Mauna Kea Forest Restoration Project. Accessed April 3, 2020, URL: <https://dlnr.hawaii.gov/restoremaunakea/threats/sheep-and-goats/> and Encyclopedia. Palila. "Beacham's Guide to the Endangered Species of North America." and Figure 4 Handbook of Bird of the Wild. "Palila (*Loxioides bailleui*)" HBW Alive. Accessed April 3, 2020. URL: <https://www.hbw.com/species/palila-loxioides-bailleui>

<sup>220</sup> Encyclopedia. Palila. "Beacham's Guide to the Endangered Species of North America"

The Palila was initially listed as an endangered species in November of 1967, being the first class of endangered species. In 1977, the FWS determined its critical habitat was only ten percent of its historical range. The bird's population decline was due to the importation of sheep and goats from early European explorers, specifically Captain Cook and Captain Vancouver circa 1778.<sup>221</sup> Before this introduction, there were no grazing animals on the island.<sup>222</sup> The sheep and goats feed on the mountains' fauna, preventing birds from creating suitable nesting areas. The sheep and goat population ebbed and flowed since their introduction but managing the problem did not formally start until 1937 with fencing the area off and removing 50,000 sheep, goats, and cattle from the landscape.

After World War II, Hawaii established a new game management plan focused on maintaining limited but stable populations for sport hunting species. Rather than species eradication like pre-war management. For example, the termination of hunting allowed the Palila population to increase. However, the introduction of Mouflon sheep to the island offset gains in Palila populations. Further limiting the bird's recovery was that the state and fish agencies began to crossbreed the newly introduced mouflon with other feral ewes.

Because of the feral goats and sheep are taking critical habitat from the Palila, private organizations and individuals challenged the states management over sport hunting and wildlife management. Hawaii's game managers stated that the Palila and feral goats and sheep could coexist under state management. As state management created protection for the Palila and simultaneously providing economic revenue from hunter interest. Also, that this was a state sovereignty issue as the bird resided intra state. The plaintiffs considered the presence of the

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<sup>221</sup> Nelson, Jack R. "Palia v. Hawaii Department of Land and Natural Resources: State Governments Fall Prey to the Endangered Species Act of 1973 and Hawaii Forest & Trail. "Feral Goat." Hawaii Forest & Trail. URL: [https://www.hawaii-forest.com/feral\\_goat/](https://www.hawaii-forest.com/feral_goat/). Access April 3, 2020

<sup>222</sup> The state of Hawaii. Sheep and Goats

mouflon sheep to be a “taking” in the Palila critical habitat under the ESA. Which sought an injunctive to remove the mouflon sheep from the Palila’s critical habitat.

The issue which came to the court was if the sheep were “harming” the Palila in violation of the ESA. The defendants contended that “harm” only includes actual injury to the bird from habitat destruction or modification. A decline in the Palila population would be the only to find actual injury, but because their population had remained static there was no “harm”. The court ruled with the plaintiffs’ that actions which significantly impair or actual negative impact or its continued existence or recovery. Thus, “harm” does not require to prove an actual decline in population merely an impairment to existence. The court also cited that the habitat utilized by the sheep would either decrease the Palila population or prevent the recovery. Therefore, the court held that the presence of the goats and sheep in the Palila critical habitat was harming the Palila as defined in the ESA regulations.

The court maintained the goat and sheep population was harming the Palila in violation of the ESA. Until the Mamane forest regenerated the coexistence of sheep, goats were not authorized, and they required removal from the slopes on Mauna Kea.

This same ruling was reconfirmed again in 1986, 1987, 1998, 2000 and 2009. Which is important to hunters that the ESA intents to support native species recovery over hunting. This proves that state game managers need to ensure that the best sciences is being used and not areas can support hunting and recovery. Larger than hunting the importance of Palila v. Hawaii Department of Land and Natural Resources is that the ESA can reach down into state issues to support the recover a species.

## Timeline of legal action for the Palila: <sup>223</sup>

Legend	
ESA Specific Rule	State's Rights
Removal from ESA	Federal Court Decision
1967	Palila listed as endangered species under Endangered Species Preservation Act.
1973	Endangered Species Act of 1973 signed Palila are listed an endangered species.
1976	FWS designated Mauna Kea as critical habitat.
1978	Supreme court upholds 6 <sup>th</sup> circuit court decision for TVA v. Hill (437 U.S. 153).
1979	Palila versus the Hawai'i Department of Land and Natural Resources (DLNR), is brought to 9th Circuit court. Where it challenged section 9 of the ESA. Palila also held that state agencies and officials were in violation of ESA may be compelled to take affirmative action under a prospective injunction.
1986	US District Court, Hawai'i, upholds the ruling that mouflon sheep are the harmful to Palila.
1987	US District Court, Hawai'i, Reaffirms previous order that sheep and goats are harmful to the Palila. Also, mandating that mouflon sheep and hybrids must be eradicated within one year.
1998	Defendants and plaintiffs agree to a stipulation and order that DLNR will use its best efforts to minimize migration of ungulates into critical habitat. Will remove bag limits or quotes reducing management restrictions, allow multiple forms of hunting and will conduct semi-annual aerial hunts. Known as the "1998 Stipulated Order".
1999	Hunter and DLNR seek change of 1987 order in US District Court, Hawai'i which is denied and reaffirmed the pervious ruling that sheep and goats are the root cause of the habitat lose.
2000	Hunter organizations appeal the 1999 decision in US Court of Appeals, Ninth Circuit, which is dismissed because of a lack of standing.
2009	Earthjustice files motion enforce the eradication orders of 1979, 1987, and 1998.

<sup>223</sup> Palila Timeline: State of Hawaii. "Sheep and Goats" and Encyclopedia. Palila. Beacham's Guide to the Endangered Species of North America. Accessed 3 April 2020 URL: <https://www.encyclopedia.com/environment/science-magazines/palila> and Nelson, Jack R. "Palila v. Hawaii Department of Land and Natural Resources: State Governments Fall Prey to the Endangered Species Act of 1973." and Hawaii Forest & Trail. "Feral Goat" and Henkin David. Defending a Species Paradise. Earthjustice. Accessed 3 April 2020. URL: <https://earthjustice.org/library/PALILA> and Palila v. Hawaii Dept. of Land & Natural Resources, 471 F. Supp. 985 (D. Haw. 1979)

## American Alligator

The American alligator proves that game managers can restore endangered species while allowing commercial taking and sport hunting. The alligator has little to no federal litigation proving that when trust is given to game managers with federal protection in place to reenforce state management. A species can recover faster.

Background: The American alligator is a reptile that remains relatively unchanged over the 180-200 million years of its existence.<sup>224</sup> It lives in the southeastern states of America, specifically



Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, North Carolina, Oklahoma, South Carolina, and Texas.<sup>225</sup> Alligators live in wetlands, or coastal swamps areas, grow to 3-4.5M (10-15 feet) in length and weigh up to 450Kg (1,000lbs).<sup>226</sup> As an apex predator, their diet consists of fish, turtles, snakes, and small mammals. Alligators are opportunistic predators known to consume almost any protein source with confirmed eating house pets and humans, though the latter is rare.<sup>227</sup>

The alligator was first classified as endangered in 1967, being the first class of endangered species. Initially, it was listed as endangered as there was a lack of proper

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<sup>224</sup> Fish and Wildlife Service. Federal Register. Vol. 52, No. 107. June 4, 1987. Pp 201059-21064 Accessed April 3, 2020. URL: [https://ecos.fws.gov/docs/federal\\_register/fr1263.pdf](https://ecos.fws.gov/docs/federal_register/fr1263.pdf) and US Fish and Wildlife Service. "American Alligator, Alligator Mississippians." USFWS Endangered Species Program. Accessed April 10, 2020 URL: <https://www.fws.gov/uploadedFiles/American-Alligator-Fact-Sheet.pdf>

<sup>225</sup> Ibid

<sup>226</sup> National Geographic. American Alligator. National Geographic. Accessed April 4, 2020. URL: <https://www.nationalgeographic.com/animals/reptiles/a/american-alligator/> and Figure 5 (American Alligator) Reptile Park. "Image capture American Alligator" Australian Reptile Park. Accessed May 4, 2020. URL: <https://reptilepark.com.au/animals/reptiles/alligator-crocodiles/american-alligator/>

<sup>227</sup> Ibid

regulations surrounding the alligator harvest.<sup>228</sup> The increase of federal and state oversight to preserve and recover the American Alligator only served to rise individual awareness. The rise in individual awareness in turned lifted the national consciousness of endangered species. These actions supported the rapid recovery of alligators in many regions.<sup>229</sup> In 1975, this brought a reclassification of 'threatened status' in three coastal parishes of Louisiana.<sup>230</sup>

Then in 1977, select areas within Florida, South Carolina, Georgia, Louisiana, and Texas were downgraded from endangered to threatened status.<sup>231</sup> By 1987, FWS produced the final rule, which stated:

*“Alligator populations in Alabama, Arkansas, Georgia, Mississippi, North Carolina, Oklahoma, and South Carolina. Alligator populations in these seven states are relatively stable and the alligator’s distribution throughout these seven States is limited largely by habitat suitability. Reclassification would reduce restrictions on States for future management and research. Any proposed harvests would have to comply with the Service’s special rule on American alligators and existing State statutes and regulations.”*<sup>232</sup>

The American alligator is the best example of the importance of the ESA. The regulation to protect the alligator was in place as well as facing habitat loss. Federal and state game agencies were able to monitor the alligator while concurrently developing plans to restore the population to a sustainable level. An aspect of the alligator's recovery plan addressed

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<sup>228</sup> Eversole, Cord B., Et Al. “A Theoretical Population and Harvest Model for American Alligators (*Alligator Mississippiensis*.)” Herpetological Monographs, Vol. 32, No. 1, Dec. 2018, Pp. 22–33. Ebscohost, Doi:10.1655/HERPMONOGRAPHS-D-17-00005 and Reptiles Magazine. “Reptile Conservation Success Story: The American Alligator.” Reptiles Magazine.com. Access March 2, 2020. URL: <http://www.reptilesmagazine.com/Reptile-Conservation-Success-Story-The-American-Alligator/> and Voice of America. “American Alligators: Conservation Success Story” Voice of America. Accessed March 2, 2020. URL: <https://www.voanews.com/archive/american-alligators-conservation-success-story>

<sup>229</sup> Ibid

<sup>230</sup> Fish and Wildlife Service. Federal Register. Vol. 40, No. 131. July 8, 1975. Pp 28712-28713 Accessed March 15, 2020 URL: [https://ecos.fws.gov/docs/federal\\_register/fr63.pdf](https://ecos.fws.gov/docs/federal_register/fr63.pdf) and Fish and Wildlife Service. Federal Register. Vol. 40, No. 188. September 26, 1975. Pp 44413-44415 Access March 15, 2020, URL: [https://ecos.fws.gov/docs/federal\\_register/fr72.pdf](https://ecos.fws.gov/docs/federal_register/fr72.pdf) and Fish and Wildlife Service. Federal Register, Vol. 42, No. 6, January 10, 1977, Accessed March 15, 2020, URL: [https://ecos.fws.gov/docs/federal\\_register/fr4.pdf](https://ecos.fws.gov/docs/federal_register/fr4.pdf)

<sup>231</sup> Fish and Wildlife Service. Federal Register. Vol. 52. No. 107. June 4, 1987.

<sup>232</sup> Ibid

maintaining the commercial value of the species.<sup>233</sup> Though listed under ESA, protection farming practice remained legal and supported, releasing alligators back into the wild.

The alligator's success is primarily due to ESA level protections and oversight from the state to enabled private farming and captive breeding. These programs created a commercial solution that removed a black-market demand, which led to legitimate enterprises and helped the alligator population recover.<sup>234</sup> The second reason for successful recovery was the negligible legal debate in federal court over recovery methods. The alligator's recovery disproved one of the North American Model of Conservation (NAM) tenants of eliminating market hunting. Harvesting wild alligator eggs for commerce was one of the central tenants within the alligator management plan.<sup>235</sup> Regardless of the ethics surrounding the commercial sale of alligator meats and its parts, the ESA took an endangered animal to recovered. Thriving so well, it can support regulated commercial hunting.

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<sup>233</sup> Brian Seasholes. "The Great Gator Hoax: The American Alligator is Thriving, No Thanks to The Endangered Species Act." Capital Research Center. Accessed March 15, 2020. URL: <https://capitalresearch.org/article/the-great-gator-hoax-the-american-alligator-is-thriving-no-thanks-to-the-endangered-species-act/>

<sup>234</sup> Brian Seasholes. "The Great Gator Hoax" and Eversole, Cord B., Et Al. "A Theoretical Population and Harvest Model for American Alligators (*Alligator Mississippiensis*)." and Reptiles Magazine. "Reptile Conservation Success Story: The American Alligator" and Voice of America. "American Alligators: Conservation Success Story"

<sup>235</sup> Brian Seasholes. "The Great Gator Hoax"

## Timeline of the American Alligator: <sup>236</sup>

Legend	
ESA Specific Rule	State's Rights
Removal from ESA	Federal Court Decision
1967	1967: American Alligator listed as endangered species under Endangered Species Preservation Act.
1973	1973: Endangered Species Act of 1973 signed American Alligator listed as an endangered species.
1975	1975: Three coastal parishes of Louisiana, reclassified as recovered. September 26, 1975-40 FR 44412
1977	1977: partial recovery in all of Florida and certain coastal areas of South Carolina, Georgia, Louisiana, and Texas (January 10, 1977 42 FR 2071)
1979	1979: reclassification to threatened recovered in nine additional parishes of Louisiana (June 25, 1979-44 FR 37130)
1981	1981 reclassification to threatened in 52 parishes in Louisiana, reflecting complete recovery (August 10, 1981 48 FR 40884)
1982	1982: reclassification to threatened in Texas, reflecting complete recovery (October 12, 1983-48 FR 48332)
1985	1985: Florida, reflecting complete recovery (June 20, 1985-50 FR 25072)
1987	1987: FWS amended the special rule that a species-wide reclassification to threatened due to similarity of appearance for the American Alligator. Reason for status change is that the population has enough genetic diversity to no longer be biologically endangered or threatened. Before 1987 the Alligator populations in Texas, Louisiana, and Florida was already reclassified due to recovery. This rule supports the alligator population in Alabama, Arkansas, Georgia, Mississippi, North Carolina, Oklahoma, and South Carolina. The reclassification lowers the restrictions to all state game agencies more freedom to manage their populations, any harvest would be required to comply with FWS special rules for American Alligators
2003	2003: Georgia opened its first alligator season.
2005	2005: Mississippi opened its first alligator season.
2006	2006: Alabama opened its first alligator season.
2007	2007: Arkansas opened its first alligator season
2014	2014: South Carolina opened its first alligator season
2018	2018: North Carolina opened its first alligator season

<sup>236</sup> Alligator timeline: Ricky Flynt. "MDWFP Alligator Program". Mississippi Department of Wildlife, Fisheries and Parks. Accessed 1 February 2020. URL: <https://www.mdwfp.com/wildlife-hunting/alligator-program/> and Fish and Wildlife Service. Federal Register. Vol. 52, No. 107. 4 June, 1987 Accessed 1 February 2020. URL: [https://ecos.fws.gov/docs/federal\\_register/fr1263.pdf](https://ecos.fws.gov/docs/federal_register/fr1263.pdf) and Felsher John N. "Alligators Make Remarkable Recovery." Alabama Living Coop. Accessed 1 February 2020. URL: <https://alabamaliving.coop/article/alligators-make-remarkable-recovery/> and Arkansas Game and Fish Commission. "Alligator". Arkansas Game and Fish Commission Accessed 1 February 2020. URL: <https://www.agfc.com/en/hunting/big-game/alligator/> and Georgia DNR. "How Gator Hunting Came to Georgia" Wildlife Resources Division. Accessed 1 February 2020. URL: <https://georgiawildlife.blog/2019/07/03/how-gator-hunting-came-to-georgia> and North Carolina Wildlife Resources Commission. "Wildlife Commission to Offer Limited Alligator Hunting Opportunities in Hyde County" N.C. Wildlife Resources Commission Accessed 1 February 2020. URL: <https://www.ncwildlife.org/News/wildlife-commission-to-offer-limited-alligator-hunting-opportunities-in-hyde-county> and South Carolina General Assembly. "Captive Alligator Propagation Act" South Carolina General Assembly 120th Session, 2013-2014 Accessed 1 February 2020. URL: [https://www.scstatehouse.gov/sess120\\_2013-2014/bills/714.htm](https://www.scstatehouse.gov/sess120_2013-2014/bills/714.htm)



## Gray Wolf

The Gray Wolf is vital because it highlights that state and federal agencies seek to recover listed species. However, iconic species attract more legal challenges, ultimately slowing the delisting process and taking time and resources from other species. The gray wolf has been in court 31 times during the 47 years it has been under ESA protections. Attempted delisting eight separate times which three were successful, but only for a short period. Listed as endangered within the 48 contiguous states but the gray wolf is not genetically at risk of extinction across its range. The gray wolf shows how litigation slows recovery which means more time and resources are diverted from other species which require support.

The gray wolf is a charismatic megafauna which only convolutes how it proceeds through every issue surrounding the wolf. A charismatic megafauna is a large animal species with symbolic value or widespread popular appeal.<sup>237</sup> Generally, these are species which are anthropomorphized, through stuffed animals and a newer term known as the *Disney Affect*.<sup>238</sup> Which has populated the world with anthropomorphized nonhuman animals' cartoons. Charismatic megafauna is often used by activist groups on both sides of the political aisle to gain public support for their respective goals.



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<sup>237</sup> Albert C, Luque GM, Courchamp F (2018) The twenty most charismatic species. PLoS ONE 13(7): e0199149. <https://doi.org/10.1371/journal.pone.0199149> accessed 12 Oct 2020

<sup>238</sup> Leventi-Perez, Oana, "Disney's Portrayal of Nonhuman Animals in Animated Films Between 2000 and 2010." Thesis, Georgia State University, 2011. [https://scholarworks.gsu.edu/communication\\_theses/81](https://scholarworks.gsu.edu/communication_theses/81) accessed 12 Oct 2020

Background: The Grey Wolf (*Canis lupus*) or Timberwolves are canines.<sup>239</sup> Their coat color ranges from gray, brown, white, and black. Their size depends on multiple factors, such as the climate where they live and Access to food. The average body size ranges from 1M to 1.5 M (3-5 Ft) and tails .5M to .75M (1-2 foot). Females weigh 27 to 45 KG (60 to 100 lbs), while males are 31 to 65kg (70 to 145 lbs).<sup>240</sup>

The wolf has been viewed as a savage predator even though North America only has a handful of accounts of wolves attacking humans.<sup>241</sup> America's westward expansion removed the wolf from its native home range, generally across North America.<sup>242</sup> People fear and hatred around wolves was more toxic than the grizzly bear faced as game and fish agencies held bounties on the wolves with reward programs allowing outright poisoning to reduce the wolf population.<sup>243</sup>

The federal government seeking to support farming and ranching backed the incentive killing programs with the last wolf taken from Yellowstone in 1926.<sup>244</sup> The compensation programs towards killing wolves were so significant that only an estimated 100 wolves remained in Minnesota and a small scattering across Montana by the ESA passage. Which left the largest

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<sup>239</sup> Figure 6 (Gray Wolf) Matthew Daly. "House Passes Bill to Drop Legal Protections for Gray Wolves" Bloomberg.com. URL: <https://www.bloomberg.com/news/articles/2018-11-16/house-passes-bill-to-drop-legal-protections-for-gray-wolves> Accessed March 11, 2020

<sup>240</sup> National Wildlife Federation. "Gray Wolf." National Wildlife Federation. Accessed March 11, 2020. URL: <https://www.nwf.org/Educational-Resources/Wildlife-Guide/Mammals/Gray-Wolf>

<sup>241</sup> Linnell, John, Alleau, Julien. "Predators That Kill Humans: Myth, Reality, Context, and the Politics of Wolf Attacks on People." *Problematic Wildlife*, DOI 10.1007/978-3-319-22246-2\_17 Accessed March 11, 2020

<sup>242</sup> Collier, Amy. "'This Land Was Made for You and Me \*-And Them: Why and How the Department of the Interior Should Give Greater Consideration to the Gray Wolf's Historical Range.'" *Ecology Law Quarterly*, vol. 45, no. 2, July 2018, pp. 289–326. EBSCOhost, DOI:10.15779/Z38V11VK7G.

<sup>243</sup> Fish and Wildlife Service. A Proposed Rule: Endangered and Threatened Wildlife and Plants; Removing the Gray Wolf (*Canis lupus*). Federal Register. Accessed March 15, 2020. URL: <https://www.federalregister.gov/documents/2019/03/15/2019-04420/endangered-and-threatened-wildlife-and-plants-removing-the-gray-wolf-canis-lupus>

<sup>244</sup> Collier, Amy. "'This Land Was Made for You and Me \*-'"

concentration of wolves in the contiguous states was on Isle Royale, Michigan.<sup>245</sup> Simply because it was a remote island undeveloped island.

The gray wolf like the Palila and American alligator was listed as an endangered species in the first class of endangered species in November of 1967. The western gray wolf's recovery plan was established by 1978 and eventually divided into four distinct populations segments (DPS); Western Great Lakes (Great Lakes), Northeastern, Western (Northern Rockies), and Southwestern. The gray wolf district populations created four separate paths for the gray wolf under the ESA. This case study only focuses on the gray wolves of the Western Great Lakes and the Northern Rockies.

One of the objectives of the recovery plan was to restore wolf habitat and populations. The 1982 change to the ESA allowed select species' classification in select areas to be considered experimental and nonessential. More simply, the recovery plan allowed for transplant animals, which were not subject to the same rules. This new classification allowed the 1995 reintroduction of the gray wolf into Yellowstone as a new method to restore the wolf population.<sup>246</sup>

Revise to make this clearer. Are you saying that the court case resulted in specific limits on hunting and methods for dealing with animals that strayed or attacked livestock or.. I'm not sure?

Concurrently, in 1982, Minnesota sought to delist the gray wolf as its population-level rose. Delisting would return the gray wolf to Minnesota's game agencies for the overall management. The state could use sport hunting, as a method to maintain a stable population.

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<sup>245</sup> Ibid

<sup>246</sup> Fish and Wildlife Service. A Proposed Rule: Removing the Gray Wolf (*Canis lupus*)" and Collier, Amy. "This Land Was Made for You and Me '\*."

Game and fish managers had to balance the wolf species' recovery with sport hunting and human access to public spaces. These actions quickly became a legal battle in *Sierra Club v. Clark*.<sup>247</sup> *Sierra Club v. Clark* sought legal clarification on how to deal with problem animals and how limited take could be used in the state's management plan.<sup>248</sup> The court any take was for "for the conservation" of the wolf, that any *take* must be in the best interest of the wolf. Therefore, hunting was not in the interest of the wolf.<sup>249</sup>

By 1997, the Yellowstone gray wolves were in court with *Wyoming Farm Bureau v. Babbitt* as well as other cases. The final decision was

allowing experimental population to be maintained only when it is "wholly separate geographically" from nonexperimental populations includes overlap even with individual members of nonexperimental species. However, the defendants' treatment of all wolves found within boundaries of designated experimental population areas as nonessential experimental animals was contrary to law as provided in their own regulations. Therefore, the court ordered that Defendants' Final Rules establishing a nonessential experimental population of gray wolves in Yellowstone National Park in Wyoming, Idaho, Montana, central Idaho and southwestern Montana was unlawful. Further, that by virtue of the plan being set aside, defendants must remove reintroduced non-native wolves and their offspring from the Yellowstone and central Idaho experimental population areas.<sup>250</sup>

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<sup>247</sup> *Sierra Club v. Clark*, 577 F. Supp. 783, 787 (8th Cir. 1985) and Hallel and Keith J. "Sierra Club v. Clark: The Government Cries Wolf," William Mitchell Law Review: Vol. 11: Iss. 4, Article 3. Accessed March 11, 2020. URL: <https://open.mitchellhamline.edu/cgi/viewcontent.cgi?article=2571&context=wmlr>

<sup>248</sup> Fish and Wildlife Service. A Proposed Rule: Removing the Gray Wolf (*Canis lupus*)" and Fish and Wildlife Service. Federal Register. Vol. 50, No. 239. December 12, 1985, Accessed March 11, 2020. URL: [https://ecos.fws.gov/docs/federal\\_register/fr1063.pdf](https://ecos.fws.gov/docs/federal_register/fr1063.pdf) and Animal Law Legal Center. "Sierra Club and Defenders of Wildlife et al. 1985" Michigan State University. Accessed March 11, 2020. URL: <https://www.animallaw.info/case/sierra-club-v-clark> and *Sierra Club and Defenders of Wildlife et al., appellees v. William P. Clark, as Secretary of the Interior and the Department of the Interior, et al., United States Court of Appeals, Eighth Circuit.* 755 F.2d 608. February 19, 1985

<sup>249</sup> *Ibid*

<sup>250</sup> Animal Law Legal Center. "Wyoming Farm Bureau Federation, et al., James R. and Cat D. Urbigkit, National Audubon Society, et al., Plaintiffs, v. Bruce Babbitt, Defendants." and Bramblett Brian. "Wolves in the West: The Triumph of Section 10(j) of the Endangered Species Act" Public Land and Resources Law Review. Vol 22. No 133. Accessed March 12, 2020. URL: <https://scholarship.law.umt.edu/cgi/viewcontent.cgi?article=1161&context=plrlr> and "Wyoming Farm Bureau Federation, et al., James R. and Cat D. Urbigkit, National Audubon Society, et al., Plaintiffs, v. Bruce Babbitt, in his official capacity as Secretary of the Department of Interior, et al., Defendants" United States District Court, D. Wyoming. 987 F.Supp. 1349 December 12, 1997.

Wolf recovery from the late 1990s to mid-2000s played out more in the courtroom than in the field. Game managers were juggling with the use and meaning of legal terms and definitions. *Chevron, USA, Inc. v. Natural Resources Defense Council (1984)*,<sup>251</sup> which created the Chevron defense. *Babbitt v. Sweet Home Chapter of Communities for a Great Oregon (1995)* used Chevron defense to force the FWS to address an ambiguous term of "take" within the E.S.A.,<sup>252</sup> which ultimately redefined the word "take"<sup>253</sup>

From 2000 to 2009, the status of gray wolves in the western Great Lakes and the Northern Rockies was challenged ten times. General contention surrounded who managed the wolves and those who sought the prevention of an expiration policy. At the same time, state game agencies needed to balance human-wildlife interactions while remaining financially solvent and, more importantly, maintaining a healthy population of the species.

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<sup>251</sup> *Chevron, USA, Inc. v. Natural Resources Defense Council, Inc.* 467 US 837 (1984).

<sup>252</sup> Simona Papazian. "Sweet Home's Effect on the Chevron Doctrine and the Increased Role of the Judiciary in Reviewing Agency Statutory Interpretations" *Fordham Environmental Law Review*. Volume 7, Number 2, 2011 Article 1. Accessed March 12, 2020. URL: <https://ir.lawnet.fordham.edu/cgi/viewcontent.cgi?article=1409&context=elr> and *Babbitt, Secretary of the Interior v. Sweet Home Chapter of Communities for a Great Oregon*, 515 US 687 (1995)

<sup>253</sup> *TAKE*: Except as provided in sections 6(g)(2) and 10 of this Act, with respect to any endangered species of fish or wildlife listed pursuant to section 4 of this Act it is unlawful for any person subject to the jurisdiction of the United States to— (A) import any such species into, or export any such species from the United States; (B) take any such species within the United States or the territorial sea of the United States; (C) take any such species upon the high seas; (D) possess, sell, deliver, carry, transport, or ship, by any means whatsoever, any such species taken in violation of subparagraphs (B) and (C); (E) deliver, receive, carry, transport, or ship in interstate or foreign commerce, by any means whatsoever and in the course of a commercial activity, any such species; (F) sell or offer for sale in interstate or foreign commerce any such species; or (G) violate any regulation pertaining to such species or to any threatened species of fish or wildlife listed pursuant to section 4 of this Act and promulgated by the Secretary pursuant to authority provided by this Act. (2) Except as provided in sections 6(g)(2) and 10 of this Act, with respect to any endangered species of plants listed pursuant to section 4 of this Act, it is unlawful for any person subject to the jurisdiction of the United States to— (A) import any such species into, or export any such species from, the United States; (B) remove and reduce to possession any such species from areas under Federal jurisdiction; maliciously damage or destroy any such species on any such area; or remove, cut, dig up, or damage or destroy any such species on any other area in knowing violation of any law or regulation of any State or in the course of any violation of a State criminal trespass law; (C) deliver, receive, carry, transport, or ship in interstate or foreign commerce, by any means whatsoever and in the course of a commercial activity, any such species; (D) sell or offer for sale in interstate or foreign commerce any such species; or (E) violate any regulation pertaining to such species or to any threatened species of plants listed pursuant to section 4 of this Act and promulgated by the Secretary pursuant to authority provided by this Act.

2009 saw a return of political power like the Tellico Dam with President Bush's executive order, also known as the "midnight ruling," which delisted the Northern Rocky wolves in accordance with the 2004 FWS decision.<sup>254</sup> From 2010 to 2019, legal battles still raged in courts. However, some of the Northern Rockies wolves were delisted and considered a huntable population.<sup>255</sup>

During this timeframe, the central issue for the Northern Rocky wolves was defining the DPS boundary.<sup>256</sup> To summarize, the significant events were as follows: 2009 the "midnight ruling" delisted the wolf; 2009 court case over delisting; 2010 Montana and Idaho began hunting; August 2010 federal court returned Idaho and Montana's wolves to threatened status; and in 2011, federal court delisted wolves in Idaho, Montana and parts of Oregon, Washington, and Utah. Yet the wolves within Wyoming's state borders were still considered a threatened species. Furthermore, in 2011, Montana and Idaho held a second hunting season. In March of 2012, the court ruled that Congress could delist an Endangered Species; August 2012, Northern Rocky Mountain Gray wolves are delisted, including in Wyoming. November 2012 saw challenges to the August 2012 delisting. June 2013, FWS proposed delisting the gray wolf in 48 contiguous states, except the Mexican gray wolf. 2011 Federal district court reinstated that the Northern Rocky Gray wolves are a threatened species. 2017 a three-judge panel from the US Court of Appeals of the District of Columbia mandated the wolves' delisting in Wyoming. In June 2019, FWS started removing the gray wolf from the list of endangered and threatened wildlife.<sup>257</sup>

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<sup>254</sup> Edward.A Fitzgerald. "Delisting Wolves in the Northern Rocky Mountains: Congress Cries Wolf" Environmental Law Institute. Accessed March 12, 2020. URL: <https://elr.info/sites/default/files/articles/41.10840.pdf>

<sup>255</sup> Ibid

<sup>256</sup> Ibid

<sup>257</sup> Fish and Wildlife Service. Federal Register. Vol. 84, No. 109. June 6, 2019. Accessed March 13, 2020. URL: <https://www.govinfo.gov/content/pkg/FR-2019-06-06/pdf/2019-11908.pdf#page=1>

The Western Great Lakes DPS had similar dealings with the legal system. The cases specific to the Western Great Lakes DPS were as follows: January 2005 Section 10 (j) rule changed where landowners used depredating permits to kill select wolves.

September 2010, Michigan and Wisconsin Departments applied for depredation permits, issued in May of that same year. March 2006, a proposed rule to delist the gray wolf western great lakes DPS.

In August 2006, a judge ruled against the use of depredation permits. 2007 Final Rule to delist the gray wolf western great lakes DPS. In 2008 throughout the nations, all gray wolves returned to threatened status. 2009, FWS sought to delist the DPS western great lakes again. However, this decision was withdrawn and then subsequently settled in court, which resulted in the western great lakes DPS remaining in a threatened status. The flip-flopping of threatened status to delisted would continue every other year for the next ten years. In 2019 FWS starts removal of the gray wolf from the list of endangered and threatened wildlife.

## Timeline of Gray Wolves. <sup>258</sup>

Legend	
ESA Specific Rule	State's Rights
Removal from ESA	Federal Court Decision
1973	1973 Endangered Species Act
1974	1974 Gray Wolf was listed as an endangered species, which applies to all wolves in the contiguous states. Individual subspecies receive endangered status: eastern timber wolf, and Rocky Mountain wolf.
1976	1976 A third gray wolf subspecies, the Mexican wolf was listed.
1978	1978 - Eastern Gray wolf recovery plan was written and approved - To eliminate problems with listing separate subspecies of the gray wolf and identifying relatively narrow geographic areas in which those subspecies are protected, on March 9, 1978, we published a rulemaking relisting the gray wolf at the species level as endangered throughout the conterminous 48 States and Mexico, except for Minnesota, where the gray wolf was reclassified to threatened. In addition, critical habitat was designated in that rulemaking. Designated Isle Royale National Park, Michigan, and Minnesota wolf management zones 1, 2, and 3 as critical habitat. Also promulgated special regulations under section 4(d) of the Act for operating a wolf management program in Minnesota at that time.
1980	1980 Northern Rocky Mountain (NRM) Wolf Recovery Plan completed.
1982	1982 Mexican Gray wolf recovery plan was written and approved. ESA is amended to allow for a 10(J) Rule of classify reintroduced species as experimental and nonessential.
1985	1985 Sierra Club v. Clark results in depredation control modified (50 FR 50793)
1987	1987 The Northern Rocky Mountain Wolf Recovery Plan revised
1992	1992 Eastern Gray wolf recovery plan was revised.
1994	1994 Designated areas in Idaho, Montana, and Wyoming as nonessential experimental populations in order to initiate gray wolf reintroduction projects in central Idaho and the Greater Yellowstone Area.
1995	1995 The U.S. Fish & Wildlife Service (FWS) begins reintroducing gray wolves to central Idaho and Yellowstone.
2000	1. The United States appealed the District Court's ruling, and on January 13, 2000, the Tenth Circuit Court of Appeals upheld the wolf reintroduction rule. Consequently, wolves in central Idaho and the Greater Yellowstone area are protected and managed as nonessential experimental populations 2. Proposal to Reclassify/Delist the Gray Wolf in the Lower 48 States to threatened. As well as make four distinct populations of wolves. <ol style="list-style-type: none"> <li>1. Western Great Lakes. (Great Lakes)</li> <li>2. Northeastern.</li> <li>3. Western. (Northern Rockies)</li> <li>4. Southwestern</li> </ol>
2003	2003 Final Rule to designate 3 DPS and change the ESA status of the gray wolf throughout most of the lower 48 States to threatened.

<sup>258</sup> Gray wolf timeline: Earthjustice. "Timeline: Wolves in Danger." Earthjustice. Accessed 22 February 2020 URL: <https://earthjustice.org/features/campaigns/wolves-in-danger-timeline-milestones> and Fish and Wildlife Service. "Gray Wolves - Western Great Lakes States." Accessed 22 February 2020 URL: <https://www.fws.gov/midwest/wolf/history/timeline.html> and Fish and Wildlife Service. "Northern Rocky Mountain (NRM) Gray Wolf Recovery Timeline" Fish and Wildlife Service. Accessed 22 February 2020 URL: <https://www.fws.gov/mountain-prairie/es/species/mammals/wolf/20120828NRMTimeline.pdf> and Fish and Wildlife Service. A Proposed Rule: Endangered and Threatened Wildlife and Plants; Removing the Gray Wolf (*Canis lupus*)". and International Wolf Center. "Gray Wolf Timeline. For the Contiguous United States." International Wolf Center. Accessed 22 February 2020 URL: <https://wolf.org/gray-wolf-timeline/>



Northern Rockies Wolves

Western Great Lakes Wolves

<p><b>2004</b></p> <p>Idaho and Montana's state management plans are approved</p> <ol style="list-style-type: none"> <li>1. Wyoming's management plan is declined by USFWS.</li> <li>2. Subsequently, Wyoming challenges USFWS over state management of wolves. Anti-hunter/animal rights groups support USFWS to stop state managed hunting.</li> </ol>	<p><b>2004</b></p> <p>Proposal to delist the gray wolf Eastern DPS</p> <p><b>2005</b></p> <p>Michigan and Wisconsin Departments of Natural Resources apply for permits to use lethal measures to control depredations.</p>
<p><b>2005</b></p> <p><b>Jan:</b> Section 10 (j) rule change where landowners use depredating permits to kill select wolves.  <b>Oregon:</b> district court rules against gray wolf reclassification. Wolves return to previous listed status prior to the 2003 change.  <b>Federal judge</b> dismisses Wyoming's lawsuit over USFWS decision over Wyoming's management plan. Siding with USFWS. Wyoming takes decision to 10<sup>th</sup> circuit court.  <b>Vermont</b> court ruling removes the DPS from 2003.</p>	<p><b>2005</b></p>
<p><b>2006</b></p> <ol style="list-style-type: none"> <li>1. Wyoming losses in 19<sup>th</sup> circuit court. Court rules that the original 2004 FWS decision stands.</li> <li>2. Announcement of a proposed rule to delist the gray wolf western DPS.</li> <li>3. Wyoming's Governor petitions FWS to delist Western gray Wolf from ESA. Petition is rejected because of a lack in adequate management by state.</li> </ol>	<p><b>2006</b></p> <ol style="list-style-type: none"> <li>1. <b>March:</b> Proposed rule to delist the gray wolf western great lakes DPS.</li> <li>2. <b>May:</b> Permits were issued to the Wisconsin DNR and the Michigan DNR to kill depredating wolves</li> <li>3. <b>August:</b> judge rules against the use of depredation permits by Wisconsin DNR and the Michigan DNR.</li> </ol>
<p><b>2007</b></p> <ul style="list-style-type: none"> <li>• FWS issues a proposed rule to delist Northern Rockies Gray wolves from the endangered species list. Wyoming must amend its 2004 management plan.</li> <li>• Wyoming's wolf management plan is approved by FWS.</li> <li>• Wyoming's 2007 wolf management plan is challenged in court.</li> </ul>	<p><b>2007</b></p> <p>Final Rule to Delist the Gray Wolf Western Great Lakes DPS</p>
<ul style="list-style-type: none"> <li>• The 2005 Section 10(J) rule change is challenged in court by Anti-hunter/animal rights groups.</li> <li>• The final rule for delisting of the Northern Rockies population of gray wolves from the Endangered Species List is published.</li> <li>• Northern Rockies wolves delisting is challenged in court.</li> <li>• Northern Rockies Wolves are returned to a threatened status, months before Idaho, Montana and Wyoming would use hunting as a legal management tool for wolves.</li> </ul>	<ol style="list-style-type: none"> <li>1. <b>February:</b> Final Post-delisting Monitoring Plan for Western Great Lakes established.</li> <li>2. <b>December:</b> Court ruling places Gray Wolf - Western Great Lakes DPS and Northern Rocky Mountains back under ESA protections. As ordered by the courts from two lawsuits.</li> </ol>

## Northern Rockies Wolves

## Western Great Lakes Wolves

2009	<p>January</p> <ol style="list-style-type: none"> <li>1. Pres. Bush “midnight ruling” delists Northern Rockies wolves to the 2004 FWS decision.</li> <li>2. Earthjustice and others seek to challenge the “mid night ruling”. Pres. Obama halts the delisting. No court actions</li> </ol> <p>March: Department of Interior affirms FWS determination to delist wolves in Idaho, Montana, Washington, Oregon, Utah and Great Lakes DPS. (Wyoming’s wolves are still listed as threatened.)</p> <p>April: Earthjustice files suit against the delisting. Idaho and</p>	<ol style="list-style-type: none"> <li>1. April: Final Rule to Delist the Western Great Lakes DPS</li> <li>2. July: Delisting withdrawn for Western Great Lakes DPS to provide opportunity for public comment.</li> <li>3. September: USFWS Settles in court to retain Gray Wolf Western Great Lakes as being listed in a threatened status.</li> </ol>
		2010
		Federal Register Notice to start delisting the Gray Wolf in Minnesota, Wisconsin, Michigan (Western Great Lakes)
	<ol style="list-style-type: none"> <li>1. March: Idaho and Montana have first legal hunting seasons of wolves after delisting.</li> <li>2. August Federal Court returns Idaho and Montana’s wolves to threatened status. Ruling that protections for the same population must be the same across every state.</li> </ol>	2011
		<p>May: Proposal to delist gray wolf Western Great Lakes DPS, remove 29 other states from gray wolf range and announce National Wolf Strategy.</p> <p>August: Federal Register Proposed Rule: Comment Period Reopens on Proposal to Delist Western Great Lakes DPS</p> <p>September: U.S. Fish and Wildlife Service Posts Supplementary Materials on Gray Wolf in the Eastern United States.</p> <p>December: Final Rule to Delist the Western Great Lakes DPS</p>
	<ol style="list-style-type: none"> <li>1. April: "Department of Defense and Full-Year Continuing Appropriations Act" signed reinstating the 2009 ruling. Delisting wolves in Idaho, Montana and parts of Oregon, Washington and Utah. (Wyoming wolves are still listed as threatened.)</li> <li>2. August: District court upholds legislation which delisted protions of the Northern Rockies DPS. Decision is taken to 9<sup>th</sup> Circuit court.</li> <li>3. October: Proposed delisting of Wyoming Wolves</li> <li>4. Fall: Idaho and Montana hold second hunting season.</li> </ol>	2013
2012		<p><b>February 13:</b> Litigation on 2011 Wolf Delisting (Western Great Lakes DPS)</p> <p><b>June 13:</b> FWS proposed delisting the gray wolf in 48 contiguous states, except for a small population of Mexican gray wolves in Arizona and New Mexico.</p>
	<ol style="list-style-type: none"> <li>1. <b>March:</b> 9<sup>th</sup> Circuit court rules that Congress has the right to delist species.</li> <li>2. <b>August:</b> Northern Rockies mountain Gray wolves are delisted, including Wyoming.</li> <li>3. <b>November:</b> Earthjustice and others challenges the August 2012 delisting.</li> </ol>	2014
		<b>December:</b> Federal Court decision, wolves in Great Lakes are returned to a threatened status.
2013		2015
	<ol style="list-style-type: none"> <li>1) <b>May:</b> Earthjustice and five other groups called Department of Interior to not delist Gray Wolves in contiguous states.</li> <li>2) <b>June:</b> FWS proposed delisting the gray wolf in 48 contiguous states, except for a small population of Mexican gray wolves in Arizona and New Mexico.</li> </ol>	<p><b>February:</b> Reinstatement of final rules for the gray wolf in Wyoming and the Western Great Lakes in compliance with court orders.</p>
2014		2019
	Federal district court reinstates the 2011 Department of Defense and Full-Year Continuing Appropriations Act ruling over wolves in Wyoming. Returning them to a threatened status	<p><b>March:</b> Proposed Rule to Delist of gray wolf in the contiguous states (except the Mexican wolf).</p>
2017		
	Three judge panel at US Court of appeals for district of Columbia issues mandate delisting gray wolves in the state of Wyoming.	

## Grizzly Bear

(This case study only defines Grizzly Bear in the contiguous states)

The grizzly bear is the second case where charismatic megafauna is the target for preservation through litigation, which has prolonged delisting. Just like the wolf the grizzly bear will see its share of litigation over control. The grizzly bear will also see litigation over who science is more correct making it a preverbal food fight over control. Listed as endangered within the 48 contiguous states but like the gray wolf it is not genetically at risk of extinction across its range. It solely revolves around bears in the contiguous states. Like the gray wolf the grizzly bear case study reconfirms how the ESA is being used as a political weapon over state control versus recovery. Returning to state control means the state game managers can use hunting as a population and revenue source for conservation efforts. Legal hunting of charismatic megafauna brings on a slew of other challenges within the hunting community as well as the anti-hunting community. The litigation surrounding the ESA and grizzly bears is being used as a political weapon to further that void amongst hunters. As well to set a precedence towards eventually elimination of hunting all together.

Background: The grizzly bear (*Ursus arctos horribilis*) are generally 2.5m (8ft) in length and weigh 360 kg (800 lbs) to 410kg (900lbs).<sup>259</sup> They are omnivores with a general diet of nuts, fruit, leaves, roots, fungi, and insects. They also consume various proteins derived from other wildlife such as fish, rodents, and



Figure 7

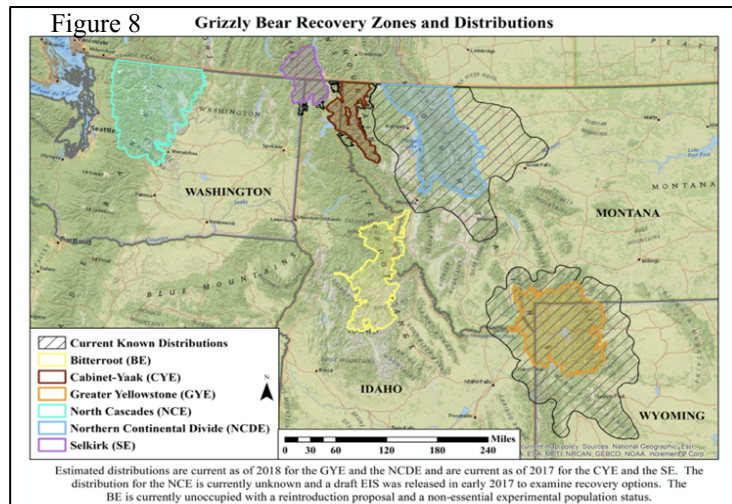
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<sup>259</sup> Encyclopedia Britannica. "Grizzly Bear." Encyclopedia Britannica. Accessed March 17, 2020. URL: <https://www.britannica.com/animal/grizzly-bear> and Kristen Schmitt. "Government ordered to review grizzly bear protections." Go, Hunt. March 17, 2020. URL: <https://www.gohunt.com/read/news/government-ordered-to-review-grizzly-bear-protections#gs.lbcw51>

various ungulates. The bear's diet varies depending on many factors such as location, time of year, and seasonal availability of the resource.<sup>260</sup>

Like the Palila, American alligator and gray wolf; the grizzly was also among the first class of endangered species in November of 1967. Placed under ESA in 1973. The 1973 listing was for the contiguous states citing six ecosystems. These six ecosystems which either held grizzly bears or were considered suitable to support them. The Greater Yellowstone Ecosystem (GYE), the Northern Continental Divide Ecosystem, the Cabinet-Yaak Ecosystem, the Selkirk Ecosystem, the North Cascades Ecosystem, and the Bitterroot Ecosystem.<sup>261</sup> The North Cascades and Bitterroot Ecosystems were confirmed to be without grizzly bears within the ecosystems. However, six grizzly bears were estimated to be living in the northern British Columbia zone of the North Cascades ecosystem.<sup>262</sup>

The grizzly bear population's downfall took a similar path as the American buffalo, as westward expansion took its toll on the bears. Before European contact, the grizzly bear range spanned from the high north of Canada, east as



Hudson Bay, and south through the America breadbasket and open prairie near Durango,

<sup>260</sup> Encyclopedia Britannica. "Grizzly Bear

<sup>261</sup> Fish and Wildlife Service. "Grizzly Bear." and Figure 8 (Grizzly Bear Recovery Zone) Fish and Wildlife Service. "Grizzly Bear Recovery Zone and Distribution." USFWS <https://www.fws.gov/mountain-prairie/es/species/mammals/grizzly/2018GBdistributions&RZs.v2.jpg>

<sup>262</sup> Fish and Wildlife Service. "Grizzly Bear."

Mexico.<sup>263</sup> As a predator, the grizzly was targeted for the stigma of being a ferocious beast, which only compounded the willingness to kill one when encountered in the wild. Eventually, the loss of habitat and needless killing dwindled bear populations within the lower contiguous states.

From 1973 to 1993, game agencies studied the grizzly bear in order to build a recovery plan. The first recovery plan in 1993 would take an additional eight years before game agencies developed a conservation strategy with a recovery goal. In 2003, the bear population in the GYE reached the targeted recovery population for the first time. Proving the ESA's power again to restore an imperiled species, the first proposal to remove the GYE bears from ESA protections was 2005. However, this proposed delisting met resistance over the science used to support the proposed delisting. The next 12 years debated the science and potential management of the grizzly bear delisting in federal court. The most recent court's decision stated that the six 1973 grizzly bears ecosystems must be recovered before the bear can be delisted. The ecosystems should be linked genetically.<sup>264</sup> Essentially it became an all or nothing recovery plan.

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<sup>263</sup> Her Majesty the Queen in Right of Canada, represented by the Minister of the Environment. Species at Risk Act Recovery Strategy Series, Recovery Strategy for the Grizzly Bear (*Ursus arctos*), Prairie Population, in Canada 2007 accessed November 15, 2018. p.g.3

[http://www.sararegistry.gc.ca/virtual\\_sara/files/plans/rs\\_grizzly\\_bear\\_prairie\\_pop\\_0707\\_e.pdf](http://www.sararegistry.gc.ca/virtual_sara/files/plans/rs_grizzly_bear_prairie_pop_0707_e.pdf)

<sup>264</sup>District of Montana Missoula Division. Crow Indian Tribe; Et Al., Vs. United States of America; Et A and The State of Wyoming. Filed 09/24/18 Accessed April 27, 2019, URL: <https://www.mtd.uscourts.gov/sites/mtd/files/Order%20in%20Crow%20Indian%20Tribe%2C%20et%20al%20vs.%20U.S.A.%2C%20et%20al%20and%20State%20of%20Wyoming%2C%20el%20al.pdf> pg 23

## Timeline for Grizzly bears.<sup>265</sup>

Legend			
ESA Specific Rule	State's Rights	Removal from ESA	Federal Court Decision
1967	Grizzly bear listed as endangered species under Endangered Species Preservation Act.		
1973	Endangered Species Act of 1973 signed and Grizzly bear are listed an endangered species.		
2000	Draft Conservation Strategy for the Grizzly Bear in the Greater Yellowstone Ecosystem is completed.		
2002	Conservation Strategy is approved after public comment period—16,794 comments were received. It will be implemented when the grizzly is removed from the threatened species.		
2003	Recovery goals are met for the sixth year in a row.		
2005	U.S. Fish & Wildlife Service proposes removing the grizzly bear from the threatened species list.		
2006	The Grizzly Bear Recovery Plan is modified to update methods of estimating population size and sustainable mortality.		
2007	The Greater Yellowstone Ecosystem distinct population segment of grizzly bear population is removed from the threatened species list. Conservation Strategy is implemented. Several groups file lawsuits challenging the decision		
2009	A federal district judge overturned the delisting ruling, placing grizzly bears back on the threatened species list claiming: (1) the Conservation Strategy was unenforceable, and (2) that the U.S. Fish & Wildlife Service did not adequately consider the impacts of the potential loss of White bark pine nuts, a grizzly bear food source.		
2010	The U.S. Fish & Wildlife Service appeals the decision to keep the grizzly bear on the threatened species list.		
2011	An appeals court rules the grizzly bear should remain on the threatened species list. They determined that the Conservation Strategy did in fact provide adequate regulatory mechanisms were in place. But the court upheld the lower court ruling that the U.S. Fish & Wildlife Service did not sufficiently address the potential impacts from reduction of White bark pine and other foods.		
2013	Yellowstone Ecosystem Subcommittee, the Interagency Grizzly Bear Committee, and Interagency Grizzly Bear Study Team recommend that grizzly bears be removed from the threatened species list because alternative foods are available, and the reduction of White bark pine is not having a significant impact on bears at this time.		
2017	U.S. Fish & Wildlife Service removes the Yellowstone population of grizzly bears from the threatened species list.		

<sup>265</sup> Grizzly timeline: National Parks Service “Grizzly Bears & the Endangered Species Act.” National Parks Service Accessed 7 February 2020 URL: <https://www.nps.gov/yell/learn/nature/bearesa.htm> and Mott Nick, Burnham Josh. “Timeline: A History of Grizzly Bear Recovery In The Lower 48 States”. Montana Public Radio. Accessed 7 February 2020 URL: <https://www.mtpr.org/post/timeline-history-grizzly-bear-recovery-lower-48-states> and Fish and Wildlife Service. “Grizzly Bear” Fish and Wildlife Service. Accessed 7 February 2020 URL: <https://www.fws.gov/mountain-prairie/es/grizzlyBear.php> and Dickie Gloria. “Interactive timeline: Fish & Wildlife Service Proposes to Delist Yellowstone Grizzly” High Country News. Accessed 7 February 2020 URL: <https://www.hcn.org/articles/grizzly-bear-timeline> and Minette Johnson, et al. “Places for Grizzly Bears A Blueprint for Restoration and Recovery in the Lower 48 States” Defenders of Wildlife. Accessed 7 February 2020 URL: [http://www.defenders.org/sites/default/files/publications/a\\_place\\_for\\_grizzlies.pdf](http://www.defenders.org/sites/default/files/publications/a_place_for_grizzlies.pdf)

<b>2018</b>	<p><b>2018 May:</b> State of Wyoming Game &amp; Fish open hunting season for Grizzly Bears. Allowing up to 22 Grizzlies to be hunted.</p> <p><b>2018 September:</b> A U.S. District Judge restored protections for the Yellowstone-area population of grizzly bears under the Endangered Species Act.</p>
<b>2019</b>	<b>2019</b> Grizzly Bears relisted under ESA Protection
<b>2020</b>	<b>2020</b> FWS stats 5-year status review

## Discussion

Starting with the snail darter you can see where congress sought to stop extinction and the supreme court validated Congress's intent. The Palila shows the breadth and depth where the ESA can reach into states issues. Which shows where and how the ESA grew into the power granted by Congress. Today's angst surrounding the ESA can be extracted from the gray wolf and grizzly examples. How a large portion of the legal action has challenged who would eventually end up in control over the species once delisted. When delisted, state management could determine how the wildlife population is managed.<sup>266</sup> Yet, the American alligator show with no litigation the states can recover a species. The American alligator, grizzly bear, and gray wolf, when these animals were returned to state game management, the state turned to legal hunting. These case studies also validated the framework of ESA and illustrates where to focus in the listing process.

When returning to where the ESA can be optimized to increase the recovery rate, we must pull facts from the case mentioned above studies to focus on what required changes. These case studies prove that America was and will continue to be a litigious society based on laws that

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<sup>266</sup> Wagner, Steve. "Next Year's Model. (Cover Story)." *Outdoor Life* 223, No 2. February 2016. Pp 48-54 Accessed March 17, 2020. URL: <http://search.ebscohost.com.proxy1.library.jhu.edu/login.aspx?direct=true&db=mth&AN=112040063&site=ehost-live&scope=site> and Organ, JF et al. *The North American Model of Wildlife Conservation. Technical Review*, 12-04. 2012 Bethesda, MD: The Wildlife Society. Accessed October 24, 2019, ISBN: 978-0-9830402-3-1 pp. Viii-iv.

act as the proverbial left and right limits of our daily lives. These case studies demonstrate how the government should act and how the layman can influence the government or question its actions when injustices occur. Second, these case studies attest that the ESA is still the best conservation legislation America has seen. Moreover, they also show that legitimate challenges to the ESA are useful in creating significant change, as seen in the amendments of 1978, 1982, 1988, and 2004. Lastly, these studies show that less litigation equates to faster recovery.

The case studies about the Palila, gray wolf, and grizzly bear all deal with the hunter's aspects versus the anti-hunter. This back and forth through three examples of endangered species show how the legal system slows recovery despite the precedents set by court decisions. Whereas with no legal challenges, recovery is possible and faster for endangered species with sport hunting as an option once the species has recovered, as seen with the American alligator. Slowing the recovery process with legal challenges is a slippery slope. The longer we wait, the more could be lost – or the more we focus on one species, we neglect another. As seen in the snail darter case, the wait was worth it as it sets a precedent. As seen with the gray wolf and grizzly bear, they show how much time, effort, and resources are taken from other endangered species. Currently, the average environmental case takes 657 days to resolve.<sup>267</sup>

- The Snail Darter: Had three different court rulings over three years. Also, a monumental congressional lift to pass a law to counter the Supreme Court ruling and pass a ruling to support the dam even though it violated ESA.
- The Palila: Eight court cases over 31 years.
- The American alligator: Fully recovered as well as returned to state management across its range. No federal cases over ESA management.
- The gray wolf: 31 times in court during the 47 years under ESA protections. Attempted delisting eight separate times. Three of those attempts were successfully for a short period.
- The grizzly bear has been in court eight times. Delisted twice and returned to a listed status both times.

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<sup>267</sup> Kourlis Rebeca, et al. "Civil Case Processing in The Federal District Courts." Institute for The Advancement of The American Legal System. Pg 38 Accessed March 18, 2020. URL: [https://www.uscourts.gov/sites/default/files/iaals\\_civil\\_case\\_processing\\_in\\_the\\_federal\\_district\\_courts\\_0.pdf](https://www.uscourts.gov/sites/default/files/iaals_civil_case_processing_in_the_federal_district_courts_0.pdf)



Case Study Total Court Counts					
	Court Decision	Congressional Legislation		Years Listed	Recovered
		Proposed	Passed		
Snail Darter	3	1	1	10	Yes
Palila	3	0	0	53	No
Alligator	0	0	0	12	Yes
Wolf	16	0	0	50- Northern Rockies 47 Great Lakes	
Grizzly Bear	8	1	0	50 (delisted twice)	No

Source: Author Produced and totals are from all case studies

Once a species is under ESA protections, an indefinitely earmark place in the species management plan. It is monitored in perpetuity to ensure that it does not require relisted. If a return to protection is needed, and the expedited relisting process will happen.<sup>268</sup> Giving the FWS more freedom for delisting and moving the legal debate to the front of the process during public comment for listing but specifically during the design of recovery plans. Once a species reaches a recovered population level, the delisting process should become a procedural process. Methodology and goals should have been pre-agreed during the comments portion, compared to returning to the court after the FWS decided.

There will always be a better way; there will always be better science. Moreover, people will continue to increase in population, which will only take from the wild kingdom. Endangered species management is only going to become increasingly more difficult. Two areas where the ESA must do better is in stakeholder involvement and delisting specific geographic regions.

FWS does identifying species that are trending towards endangerment with the current ESA listing process as defined in earlier chapters. But collecting the correct stakeholders may

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<sup>268</sup> Fish and Wildlife Service. "Laws & Policies, Regulations and Policies" US Fish and Wildlife Service. Accessed March 21, 2020. URL: <https://www.fws.gov/endangered/laws-policies/regulations-and-policies.html>

require a strong man approach from someone in a leadership position of government. The person could lead enough stakeholders to gather. There is the potential weakness that the front-end recovery plan may not garner enough stakeholder involvement. Ultimately this prolongs the delisting process as the FWS is prepared to remove protection. As well as having a political leader leading a stakeholder meeting generates its own pitfalls.

Regardless, the all or nothing approach to recovery needs to change within the ESA. The continues all or nothing approach, only serves to alienate groups and drain resources. When everything is the priority, nothing is a priority.

When it comes explicitly to the wolf and grizzly bears, the charismatic megafauna aspect must be a real issue for the FWS and ESA. People have a strong attachment to both animals, possibly a spiritual connection to them. The reasons for this connection are countless and wide-ranging. The standard explanations use center around religious practices or the general anthropomorphizing through sales of "Teddy bears" or other stuffed animals. Another is the idea that they are photogenic; thus, images are broadcast more to the public. Compounding this issue is that hunters have conflicting views regarding hunting these specific animals. All these factors help support why people do irrational things to slow the ESA and their recovery plans. Regardless of a person's views over controlling the grizzly bear, the ESA protections are working, the maps below quickly prove this. The following question should be how much resources is the GYE taking from the other five grizzly bear ecosystems due to the all or nothing approach.<sup>269</sup>

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<sup>269</sup> Figure 10 Grizzly bear GYE range: US Department of the Interior. "Animated image showing grizzly bear range expansion in GYE: 1990-2018" USGS. Access May 4, 2020 URL: <https://www.usgs.gov/media/images/animated-image-showing-grizzly-bear-range-expansion-gye-1990-2018>

**Conclusion:**

The ESA either invigorates one's spirit toward conservations and prevention or it angers people that because of the shifting baselines and evitable litigation it brings. The above case studies demonstrate that there are an all or nothing approach and a real lack of early stakeholder involvement. The problem appears to be more about how people view state management of species once listed as endangered. A view that once a listed species is recovered to state control, it will automatically be slaughtered. Showing how little faith there is in our current management system and a hard lesson learned during the buffalo slaughter. While care is required to ensure that the species does not return to being listed, this can happen with the correct stakeholders in the early stages.

Compromise is required when dealing with game management, as animals are a finite commodity. When it comes to questioning the government, it should continue. However, it should be done from the beginning versus after the fact. Moreover, than being tied to a general area whenever and wherever species can be delisted, they should be. Not delisting a select region which has recovered because other regions have not recovered slows recovery altogether.

These case studies show that the ESA's overall structure is well suited to do its job of protecting extinction. Congress's original intent to stop species extinction is still valid and has the legal standing to continue. These case studies show how the ESA is hampered by the court system and the continued use of litigation to push and agenda compared. Regardless of one's personal views towards state management, giving the species back to state control should be seen as the success—the changes required within the ESA to emphasize the public comment phase early in the process. Ensuring as many stakeholders as possible are involved in the listing side of

Figure 10

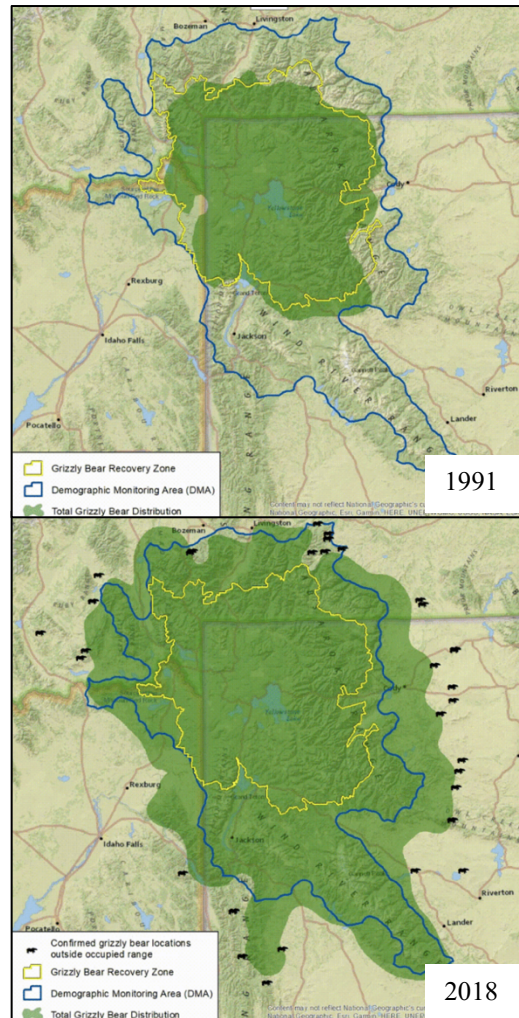
the process. However, more importantly, stakeholders' use in drafting the recovery process is critical. It could limit the legal debate during the delisting process.

Regardless of a person's views over controlling the grizzly bear, the ESA protections are working. The below maps quickly prove this. The following question should be how much resources is the GYE taking from the other five grizzly bear ecosystems due to the all or nothing approach.<sup>270</sup>

Currently, American faces two choices to remove the grizzly bear from under ESA protections. First, recovery all six ecosystems within the contiguous states. Which would be great but will take years

getting harder with the many daily constraints the world faces today. The second option is to follow the snail darter and pass legislation through congress.

This option has gain traction in the past few years with Wyoming's representatives in both the house and senate introducing Grizzly Bear State Management Act.<sup>271</sup> The intent of each bill is to allow DPS to be removed from under ESA protection while allowing the other DPS to remain protected.



<sup>270</sup> Figure 10 Grizzly bear GYE range: U.S. Department of the Interior. “Animated image showing grizzly bear range expansion in GYE: 1990-2018” USGS. Access May 4, 2020 URL: <https://www.usgs.gov/media/images/animated-image-showing-grizzly-bear-range-expansion-gye-1990-2018>

<sup>271</sup> <https://www.congress.gov/bill/116th-congress/senate-bill/614/all-info>

## Chapter 4

### Define the sides and finding middle ground.

*“Men are apt to mistake the strength of their feeling for the strength of their argument. The heated mind resents the chill touch and relentless scrutiny of logic.”*  
*William E. Gladstone*<sup>272</sup>

The threats to hunters and endangered species take many forms, and not all are direct threats. One indirect threat to wildlife is the lingering polarization within America's social culture. Today's political polarization has become embedded in all aspects of our daily lives, from political to the economic and even the racial sphere. Americans have countless opinions and fluctuating cultural views, which lead to legal changes from the government. These schisms blur into the outdoor space and often leave game managers to sort out the tension in defining outcomes in the act of preservation towards wildlife. As this system increases and morphs, game managers have simultaneous escalation to balance *wildlife*, the *land*, and humanity.

Maintaining this balance is a challenge as inevitably, something must give way to another. America's history would prove that wildlife and land preservation take a second place to economic progress. Escalating the game manager already tricky balance of ever-changing recovery goals and the constant questioning the science used to reach the now old end state. These shifts have created a problem that everything is the priority. Therefore nothing is the priority.

A single word and its meaning can swing culture in these modern times. Understanding how ever-changing culture and word definition affects wildlife will only become increasingly difficult. Conservatives, ecologists, environmentalists, hunters, and protectionist major culture shifts within America create exciting bedfellows. Understanding the modern intent of specific

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<sup>272</sup> Brainy Quote, Editors. “William E. Gladstone Quotes.” BrainyQuote, Xplore, N.D, [www.brainyquote.com/quotes/william\\_e\\_gladstone\\_150998](http://www.brainyquote.com/quotes/william_e_gladstone_150998). Accessed 18 Sep. 2020

labels can have a drastic effect on wildlife. Modern threats to hunters, but more importantly, endangered and threatened species, is the ever-shifting meaning of word definitions. Changing of culture, but specifically America's food culture, gun culture, and declining hunters.

*What are contemporary issues hunters and endangered species face?*

*What are modern issues hunters and endangered species face?*

### **Baggage of Definitions**

*"In a sense, words are encyclopedias of ignorance because they freeze perceptions at one moment in history and then insist, we continue to use these frozen perceptions when we should be doing better." <sup>273</sup>*

Game managers, civil society, private industry, and activists all agree that healthy ecosystems are required. However, each side seeks their respective victory, which has created new and divergent cultural views with the same end goal. These identical end states can simultaneously contradict themselves in the pursuit of wildlife sustainment. The indirect problem arises with the chosen meaning of the labels. Over time these titles carry unique antecedence like case law precedence within the court system. The pre-existents within the label itself now carry social baggage rooted in historical trends. Nevertheless, all merely offer a different path to the same end state; wildlife must stay on the landscape in perpetuity.

Using five standard titles or labels within the preservation and sustainment of the wildlife sphere, we can see the polarity of divergent paths surrounding the Endangered Species Act (ESA). Each chosen word that has become a label has developed its modern meaning and usage, which only layers on itself, creating a more complex understanding over time.

Conservationist, Ecologist, Environmentalist, Hunter, and a Protectionist; are by no means the end-all of titles or labels within the outdoor sphere. These five highlight some of the

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<sup>273</sup> Esther Lombardi, "Quotes Edward de Bono," Thought Co, <https://www.thoughtco.com/quotes-about-words-738759> accessed 11 Oct 2020.

extreme ends, which allows for a more straightforward distinction. A baseline of the definition before the nuanced entanglement of their contemporary meaning can take place. These terms shift in modern times, which forces game managers to adjust their focus to ensure they meet today's path.

A clearly defined simple meaning is the first critical step before entering the current evolution of new meaning. Using Merriam-Webster Dictionary to defines the following terms:

**Conservationist:**<sup>274</sup>

- 1: a person who advocates conservation especially of natural resources
- 2: someone who works to protect animals, plants, and natural resources or to prevent the loss or waste of natural resources
- 3: a person who is involved in conservation

**Example usage:**

- 1: The two both face reelection this fall and have touted their *conservationist* bona fides after the passage of the Great American Outdoors Act.
- 2: Edward was a hunter, explorer and influential *conservationist*, but not such a great scientist.

**Ecologist:**<sup>275</sup>

- 1: a branch of science concerned with the interrelationship of organisms and their environments
- 2: the totality or pattern of relations between organisms and their environment
- 3: Human Ecology
- 4: Environment, Climate

**A:** the moral ecology: an often delicate or intricate system or complex

**Example usage:**

- 1: For about a year before the beetle arrived, Bateman studied the *ecology* of the Virgin River, which flows through southern Utah into Arizona and Nevada.
- 2: Losos and his team keep testing their ideas about *ecology* and evolution on Caribbean islands.

**Environmentalist:**<sup>276</sup>

- 1: an advocate of environmentalism
- 2: one concerned about environmental quality especially of the human environment with respect to the control of pollution

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<sup>274</sup> “Conservationist.” Merriam-Webster.com Dictionary, Merriam-Webster, N.D., <https://www.merriam-webster.com/dictionary/conservationist>. Accessed 18 Sep. 2020.

<sup>275</sup> “Ecology.” Merriam-Webster.com Dictionary, Merriam-Webster, N.D., <https://www.merriam-webster.com/dictionary/ecology>. Accessed 5 Oct. 2020.

<sup>276</sup> “Environmentalist” Merriam-Webster.com Dictionary, Merriam-Webster, N.D <https://www.merriam-webster.com/dictionary/environmentalist>

**Example usage:**

- 1: Pillay is a professional drone operator and *environmentalist* who filmed the events.
- 2: Paved by liberal coastal elites and radical *environmentalist*.

**Hunter:**<sup>277</sup>

- 1: **a:** a person who hunts game  
**b:** a dog used or trained for hunting  
**c:** a horse used or adapted for use in hunting with hounds especially
  - 1): a fast-strong horse trained for cross-country work and jumping
- 2: one that searches for something

**Example:**

- 1: *Hunters* must have a license to shoot deer.
- 2: Time will tell if the coronavirus pandemic has any impact on *hunter* participation this fall.
- 3: Hurricane *hunter* aircraft will fly into the storm later today to obtain more specific data on the storm's intensity.

**Protectionist:**<sup>278</sup>

- 1: an advocate of government economic protection for domestic producers through restrictions on foreign competitors.
- Example:** For decades, a national anti-cruelty law was a dream for animal *protectionists*.

Today many have an image of *hunters* as one who seeks to kill trophies for their wall with little regard for anything else. The dictionary definition has one taking wildlife through the use of dogs or horses. In contrast, today's Environmentalists have an association with words like tree-hugger, vegan, or greenie.<sup>279</sup> Nowhere in the definition does an Environmentalist pursue stopping the unnecessary slaughter of wildlife.

This type of polarization has created a void in understanding the meaning of words themselves. For example, contemporary times would infer that a "hunter-environmentalist" is two distinctly different people. However, both would seek to have a better understanding of the entire ecosystem. Granted, each has their agendas, but the goal is the same.

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<sup>277</sup> "Hunter." Merriam-Webster.com Dictionary, Merriam-Webster, N.D., <https://www.merriam-webster.com/dictionary/hunter>. Accessed 5 Oct. 2020.

<sup>278</sup> "Protectionist." Merriam-Webster.com Dictionary, Merriam-Webster, N.D. <https://www.merriam-webster.com/dictionary/protectionist>. Accessed 5 Oct. 2020.

<sup>279</sup> Emily Barber, "What Does "Environmentalism" Really Mean?" Student Environmental Resource Center, University of California, Updated Sep. 8, 2015, <https://serc.berkeley.edu/what-does-environmentalism-really-mean/> accessed Oct. 11, 2020.



The hunter wants the game to continue hunting and its tradition to pursue its wildlife cycle's outdoor experience. The protectionist ensures that we have something for those still in the womb of time. In comparison, the environmentalist wants the correct humanities' harmful actions towards the natural world. The ecologist accounts for all impact on finding the best method to have in the ecosystem. The conservationist takes the same position as the environmentalist, but it merely seats on another political aisle.

In truth, all these labels advocate for wildlife on the landscape in perpetuity. The inference that wildlife requires healthy habitat across the entire ecosystem ultimately highlights more similarities than differences. Nevertheless, the nations are stuck at polarity versus uniting as a society, then expanding on the similarities.

Today's culture has wildlife butting next to human populations, which requires management of this relationship. The relationship requires a clear understanding of the sought-out direction and clearly defined terms. Often settling the definition requires America's most outstanding legal minds of the Supreme Court. This polarization of views spans larger than wildlife management but is a clear indirect threat to wildlife. If Americans want to continue the wildlife presence it currently has, it must seek alignment and compromise. One of the most considerable differences between a hunter and a contemporary environmentalist is that a hunter will pull the trigger and take an animal's life. However, everything about ensuring the animal has a stable ecosystem, and the ability to return year after year is the same for both the hunter and environmentalist. There is a clear difference of opinion with killing an animal, which is fine and America values those oppositional views. Speaking about the similarities and finding a compromise is what allows American democracy to flourish. Each of the five labels listed here

all seeks the same end state—working on those similarities versus the extremes will bring wildlife to the forefront.

### **Exotic and Native**

*“A scientific man ought to have no wishes, no affections, - a mere heart of stone.”*  
Charlies Darwin<sup>280</sup>

It is unrealistic that America could return the American buffalo populations to pre-European contact numbers, even if we replaced the entire cattle industry with buffalo. Grizzly bears will likely never return to the Santa Cruz mountains north of San Francisco or Arizona's Chiricahua Mountains. The latter was where one of the last grizzly bears lived outside of Yellowstone.<sup>281</sup> Nor will the wolf return across its native range. Humanity has simply removed wildlife from specific areas, and it will not allow certain species to return. Wildlife is more resilient in its return than civilization is at allowing it. The re-occupancy of wildlife from game agencies or natural return requires looking backward to determine today's outcome. This re-occupancy also requires a look at meaning layered with historical action.

Returning to terms—Native vs. Exotic. Native originates to a particular place by birth or grown, produced, or growing naturally in a particular region in a particular place or the vicinity.<sup>282</sup> Non-native being the opposite of natives. Another term for non-native is Exotic. Exotic is something introduced by another and is not native to the place where found.<sup>283</sup> Exotic

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<sup>280</sup> University of Cambridge. Darwin Correspondence Project, “Letter no. 2122,” DCP-LETT-2122 accessed on 18 Sep 2020, <https://www.darwinproject.ac.uk/letter/DCP-LETT-2122.xml>

<sup>281</sup> Elias Butler. "Tracking the last grizzly." Arizona Daily Sun. Dec. 13, 2001. [https://azdailysun.com/tracking-the-last-grizzly/article\\_60b39b0d-e320-5e95-90b9-eb948d4dfa14.html](https://azdailysun.com/tracking-the-last-grizzly/article_60b39b0d-e320-5e95-90b9-eb948d4dfa14.html) Accessed Sep. 18, 2020

<sup>282</sup> "Native." Merriam-Webster.com Dictionary, Merriam-Webster, N.D. <https://www.merriam-webster.com/dictionary/native> Accessed Sep. 18, 2020

<sup>283</sup> "Exotic." Merriam-Webster.com Dictionary, Merriam-Webster, N.D., <https://www.merriam-webster.com/dictionary/exotic> Accessed Sep. 18, 2020

appears as a simple concept in and of itself. For example, cattle and horses are exotic to North America, brought during the Age of Exploration.<sup>284</sup>

Complicating non-native or Exotic is "Bucket biology." Commonly refers to a person who discarded bait minnows from one habitat into another after a day of fishing is over. Scaled up across all 50 states, and it quickly becomes a national problem of having non-native or exotic fish occupying new water systems. Bucket biology goes far beyond fisherman discarding bait minnows after a day of fishing, which includes freed pets or released tropical fish into the ocean and plants. The Everglades National Park has an infestation of non-native Burmese pythons and numerous plants, one of the most infected parks in flora infestation.<sup>285</sup>

Bucket biology also extends into other management questions such as wild horses and burros for questioning the natural migration of non-protected game species such as mountain goats.

### **Wild Horses and Burros**

Increasing the layers of complication around non-native species today, the Wild Free-Roaming Horses and Burros Act (WFRHBA) protects exotic animals, specifically horses within America. The first free-roaming horses descended from animals with Spanish bloodlines.<sup>286</sup> The free-roaming horses have the nickname "mustangs."<sup>287</sup> The feral horses' peak was likely in Texas, Oklahoma, Colorado, and New Mexico, ending around in the mid-1800s.<sup>288</sup> Bucket

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<sup>284</sup> G. A. Bowling. "The Introduction of Cattle Into Colonial North America." Department of Dairy Husbandry, West Virginia University, Morgantown, [https://www.journalofdairyscience.org/article/S0022-0302\(42\)95275-5/pdf](https://www.journalofdairyscience.org/article/S0022-0302(42)95275-5/pdf) Access Sep. 19, 2020

<sup>285</sup> National Parks Service. "Invasive Plant Program." Everglades National Park, Apr. 4, 2017, <https://www.nps.gov/ever/learn/nature/invasiveplantprogram.htm>

<sup>286</sup> C.J. Michaels. "Three Alternatives for Managing Free-Roaming Horses and Burros: A Legal Reform." University of New Mexico, Natural Resource Journal, Volume 58, Issue 2, Summer October 2018, <https://digitalrepository.unm.edu/cgi/viewcontent.cgi?article=4010&context=nrj>

<sup>287</sup> McKnight, supra note 12, at 508–511; see also Spanish Mustang Registry (SMR) Breed Description and Characteristics, SPANISH MUSTANG REGISTRY, INC., <http://www.spanishmustang.org/characteristics.htm>

<sup>288</sup> C.J. Michaels. "Three Alternatives for Managing Free-Roaming Horses and Burros

Biology is also at play with horses. People discard horses, mules, or donkeys, which they can no longer care for into wild public lands.<sup>289</sup> Once free, the animal is now protected.

Today horses are considered one of the more controversial animals in the west.<sup>290</sup> They are federally protected, non-native species that are reaching overpopulation levels and destroys the land. The federal agency in charge of management is the Bureau of Land Management (BLM) who lacks proper funding to manage them. Like all wildlife in America, when a horse is on private property, the public still owns it. Therefore, the landowner cannot legally kill the horse if it is causing damage. The ever-increasing horse population creates more damage to the landscape from both grazing and overuse. The BLM has evaluated the number of wild horses on the landscape three times that the fragile terrain can handle.<sup>291</sup>

The BLM currently uses "round-ups" to collect horses to protect both the land and the horses themselves. Currently, the BLM has around 50,000 horses collected in corrals. The care and feeding of the "rounded-up" horses drain the BLM's in holding, which takes from other possible methods.<sup>292</sup> There is disagreement surrounding the "round-ups," with one side citing how cruel it is to the horse, which does vastly less damage than cattle. While others feel they take too much from the land and require to be culled or sold.<sup>293</sup> The tumultuous tension over game management now has extra social baggage of contemporary contextual meaning over game management.

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<sup>289</sup> Steven Rinella "E.P. 126: Wild Horses Dr. Tolani Francisco and Dr. Karl Malcolm," The Meateater Podcast. <https://www.themeateater.com/listen/meateater/ep-126-wild-horses> Accessed Oct. 12, 2020

<sup>290</sup> Karin Brulliard, The Battle Over Wild Horses, Washington Post, Sep. 18, 2019, <https://www.washingtonpost.com/science/2019/09/18/wild-horses-have-long-kicked-up-controversy-now-foes-say-they-have-solution/?arc404=true>. Accessed Sep. 24, 2020.

<sup>291</sup> Ibid

<sup>292</sup> Ibid

<sup>293</sup> Ibid

The horses have been around since the 15<sup>th</sup> century. These animals have been a part of the landscape for over 200 years in some cases. Darwin's heart of stone starts here by defining what is native and what is exotic. America's taxpayers will be footing the bill over horses, and as the population increases, the cost will increase. Game managers require manageable and tangible wildlife population goals. Therefore, the proverbial line in the sand as to what the population cap should be and how we manage it takes place over an exotic, federally protected species.

### **Mountain Goats**

The National Park Service (NPS) had complicated the native versus exotic debate when they declared Mountain Goats (*Oreamnos Americanus*) as an invasive species. This declaration requires a lethal removal in both the Grand Teton National Park and the Olympic National Park.<sup>294</sup> Mountain goats are a native North American species only found in western mountain ranges from about 44 °N latitude to 63 °N latitude.<sup>295</sup>

What blurs the lines is that both parks did not have mountain goats when American pioneers first settled the nineteenth-century regions. The Grand Teton goats migrated into the park naturally circa the 1970s, likely from Idaho's Palisades Range.<sup>296</sup> Whereas in the Olympic

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<sup>294</sup> Evan Bush, "Removal of Olympic National Park Mountain Goats, Could Start in Late Summer; Others May Eventually Be Killed," Seattle Times, Updated May 4, 2018, <https://www.seattletimes.com/seattle-news/removal-of-olympic-national-park-mountain-goats-could-start-in-summer/> Accessed Oct. 20, 2020, and Editors of National Park Service, "Non-Native Mountain Goat Management Qualified Volunteer Program," National Parks Service, Oct. 6, 2020, <https://www.nps.gov/grte/getinvolved/mountain-goat-management-volunteer.htm>. Accessed Oct. 6, 2020. and Denise Germann, "Mountain Goat Management Plan E.A." National Park Service, N.D. <https://parkplanning.nps.gov/projectHome.cfm?projectId=47959> Accessed Oct. 12, 2020, and Editors of National Park Service, "Mountain Goat Management – Removal" National Parks Service, Oct. 6, 2020, <https://www.nps.gov/olym/getinvolved/mountain-goat-management-removal.htm>. Accessed Oct. 12, 2020

<sup>295</sup> Innes, Robin J. "Fire Effects Information System," U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Fire Sciences Laboratory. 2011. <https://www.fs.fed.us/database/feis/animals/mammal/oram/all.html>

<sup>296</sup> Terry Thomas. "Grand Teton's Mountain Goat Problem is A Thorny Issue," Post Register. Feb. 6, 2020, [https://www.postregister.com/outdoors/grand-tetons-mountain-goat-problem-is-a-thorny-issue/article\\_1f0fdf1a-db48-54f5-8a8e-0cd337bafa2d.html](https://www.postregister.com/outdoors/grand-tetons-mountain-goat-problem-is-a-thorny-issue/article_1f0fdf1a-db48-54f5-8a8e-0cd337bafa2d.html). Accessed Oct. 1, 2020

national park, the goats were transplanted by game managers in the 1920s to increase sport hunting.

The Teton Range has approximately 100 native big horned sheep (*Ovis Canadensis*), which has never been extirpated or augmented. These Teton goats coming from Idaho carry five known pathogens, extremely lethal to big horned sheep. As well as competition generated over forage in the narrow mountain ridges.<sup>297</sup> The Olympic park has 20 native flora and fauna found solely within the park borders.<sup>298</sup> Mountain goats forage for natural mineral licks to supplement their diet, which creates erosion problems.

NPS has a responsibility to maintain the ecological role and reduce the potential for local extinction. In both of these locations, the goats raise the chances of extinction of other flora and fauna. NPS did not merely jump to lethal solutions. They were thoughtful and developed a plan. From 2018 to 2020, Olympic Park had over 381 goats removed.<sup>299</sup> Many of the captured goats supported other mountain goat populations with declining populations, mostly the Cascade Range in Washington State.

Table 3: Mountain Goat Removal

<b>Total Mountain Goats Removed</b>	<b>Translocated to Cascades</b>	<b>Transferred to Zoo</b>	<b>Capture Mortalities</b>	<b>Euthanized</b>	<b>Transport Mortalities</b>	<b>Lethally Removed</b>
<b>381</b>	<b>325</b>	<b>16</b>	<b>22</b>	<b>6</b>	<b>4</b>	<b>8</b>

Source: <https://www.nps.gov/olymp/planyourvisit/mountain-goat-capture-and-translocation.htm><sup>300</sup>

<sup>297</sup> Ibid

<sup>298</sup> Olympic National Park. "Moving Mountain Goats," National Parks Service, N.D. <https://www.youtube.com/watch?v=7FVI8EZrx34> Accessed Oct. 6, 2020.

<sup>299</sup> Editors of National Park Service, "Mountain Goat Capture and Translocation," National Parks Service, Sep. 23, 2020, <https://www.nps.gov/olymp/planyourvisit/mountain-goat-capture-and-translocation.htm>. Accessed Oct. 6, 2020

<sup>300</sup> Editors of National Park Service, "Mountain Goat Capture and Translocation," National Parks Service, September 23, 2020, <https://www.nps.gov/olymp/planyourvisit/mountain-goat-capture-and-translocation.htm>. Accessed October 6, 2020

The North American Model of Conservation (NAMC) and limited legal hunts are not the right NPS answer. The use of sanctioned hunts would likely require legislation through Congress. The start of legal hunting in any national park would have an avalanche effect outside of exotic species in national parks. Similar to the “god squad” seen with the snail darter or current grizzly bear legislation.

With the aforementioned plan in place, NPS needed to lower the mountain goat populations further than the capture and transfer could support. Compounding on only an estimated third of the population, it is a high price per individual capture with an average of \$2,700 per goat. NPS made a tough but justified business decision to save the overall ecosystem using a lethal cull (killing) the goat's populations. Each of the parks sought private citizens to apply for a culling permit and then subsequently shot the mountain goats in the respective ranges.

The actual killing of a native species, such as mountain goats, is challenging to understand without understanding its history. Precisely why we are saving non-native species such as wild horses and burros. People change, and therefore government changes, which force game managers to shift policies to the new government. We define native or exotic and why we protect one over the other is only one aspect of the challenges endangered species face today. Game managers and policymakers need to look at the situation and determine what objects will be required to preserve wildlife.

Understanding these two examples is essential in understanding terminology that requires a step back to look at the whole picture. If one took the protectionist mindset, we would save all the horses, mountain goats, big horned sheep, and plants. This action would favor animal rights protection groups. Nevertheless, the environmentalist would cite how each is overgrazing and destroying the landscape. Hunters would also agree with the environmentalist in this aspect. The

conservationist would seek funding for landscape repair and funding to manage the species, which likely compounds the problem. Removing something is required to balance the ecosystem, which forces the protectionist to object.

## **Changing Culture**

America continues to redefine itself as we develop as a nation. The American path is ugly yet great because Americans can change. The change comes from asking why behind everyday aspects. Today our question centers around sustainable use, lowering greenhouse gases, and carbon offsetting. If done, it is better for the ecosystems for both humanities as well as wildlife. In turn, this helps the hunter. Some modern trends raise serious concern for hunters and endangered species. First, the food movement is a byproduct of contemporary times. Americans are increasingly shifting away from animal-based products to more plant-based diets. Second is the decline of hunters and how that impacts wildlife funding, critical for endangered species. The third is the selling of public land.

## **Plant-Based Diets**

*The enemy of my enemy is my friend?*

A 2015 survey states that about three percent of Americans were vegetarian.<sup>301</sup> A 2018 Gallop poll has 5% of U.S. adults consider themselves to be vegetarian.<sup>302</sup> Many are shifting to more plants and fewer meats because they seek to live without cruelty in the world.<sup>303</sup> This new need to be less cruel pulls at peoples' hearts strings.

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<sup>301</sup> Jeanine Marie Russaw, "World Vegan Day 2019 Statistics: Plant-Based Diets on The Rise in the U.S." Newsweekly, Nov. 1 2019 <https://www.newsweek.com/world-vegan-day-2019-statistics-1469069> Oct. 2 2020

<sup>302</sup> Zach Hrynowski, "What Percentage of Americans Are Vegetarian?" Gallup News, Sep. 27, 2019 <https://news.gallup.com/poll/267074/percentage-americans-vegetarian.aspx> Oct. 3 2020

<sup>303</sup> Jeanine Marie Russaw, "World Vegan Day 2019 Statistics: Plant-Based Diets On The Rise in the U.S."



The debate surrounding the modern plant-based movement is shaped around the carrying capacity of land and which diet is better at feeding our society while sustaining healthy ecosystems. Today's debate about diets affects wildlife and is inevitably centered around land and its use. Today we have three different agricultural land types—cultivated cropland, perennial cropland, and grazing land. Cultivated cropland requires replanting each year, such as corn, wheat, or soybeans. Perennial cropland has the plant roots regrowing year after years, such as grass or hay, potatoes, artichokes, rhubarb, fruit trees, and most herbs. Lastly, grazing land is the land for ruminants' such as; cows, buffalo, horses, goats, and sheep.

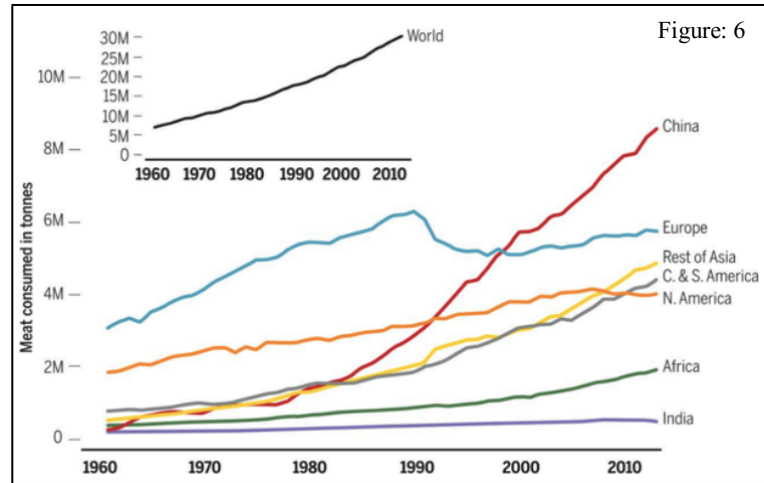
Cultivated and Perennial cropland both require the land to produce a yield worth the farmer's time and effort. Therefore, a business model is needed to maximize the yield, which requires regular water and nutrients. Planting seeds close together as well as planting at critical times to increase the growing time. Essentially, the intent is to only have the specific plant in the ground so close that it makes it difficult for weeds to grow. When a weed does grow, it is easily identifiable and subsequently removed.<sup>304</sup> Compacting the seeds into an area also removes space for other organisms throughout the food chain levels. Removal of smaller aspects of the food chain causes ripples to move up into larger species, such as nesting birds. The business model increases yield by compacting planting. Only the target plant can grow, which cuts out other biomass levels required for healthy ecosystems.

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<sup>304</sup> Linus Blomqvist, "Food Production and Wildlife on Farmland: Can We Have It All?" The BreakThrough Institute, Mar. 6, 2017 <https://thebreakthrough.org/articles/food-production-and-wildlife-on-farmland> Accessed Oct. 1, 2020

## The newest business model of farming hurts wildlife because of efficient farming

practices. Farmland birds' populations in recent years were not reduced from pesticide applications like it once was.<sup>305</sup> The bird population is not affected by pesticides today because most developed nations have curbed



toxic pesticides or the use of fertilizers. The bird loss is due to a lack of feed sources and nesting sites because of the high-yield business model agricultural systems.<sup>306</sup> This loss of lower-level biomass happens in organic and non-organic-organic farming. Both seek to produce the largest yield possible.

Studies show that organic farming has 30% more species richness and 50% more abundance than non-organic-organic farming.<sup>307</sup> Conversely, the organic farming yield gap compared to conventional non-organic farming can be up to 34% lower, requiring 50% more land to produce the same yield.<sup>308</sup> These are the extreme differences as both yield percent and required land vary

<sup>305</sup> Linus Blomqvist, "Food Production and Wildlife on Farmland"

<sup>306</sup> Morris, A. J., Wilson, J. D., Whittingham, M. J. & Bradbury, R. B. "Indirect Effects Of Pesticides On Breeding Yellowhammer (*Emberiza Citrinella*)," *Agriculture Ecosystems & Environment* BBSRC Fellowship and post-doc on farmland birds 106 (1):1-16 March 2005 DOI: 10.1016/j.agee.2004.07.016, [https://www.researchgate.net/publication/222816030\\_Indirect\\_effects\\_of\\_pesticides\\_on\\_breeding\\_Yellowhammer\\_Emberiza\\_citrinella](https://www.researchgate.net/publication/222816030_Indirect_effects_of_pesticides_on_breeding_Yellowhammer_Emberiza_citrinella). Accessed Oct. 6, 2020) and Krebs, J. R., Wilson, J. D., Bradbury, R. B. & Gavin, M. *The second Silent Spring?* (1999)

<sup>307</sup> Janne Bengtsson, Johan Ahnström, Ann-Christin Weibull, "The Effects of Organic Agriculture On Biodiversity and Abundance: A Meta-Analysis," *Journal of Applied Ecology*, Volume 42, Issue 2, April 2005, <https://doi.org/10.1111/j.1365-2664.2005.01005>. Accessed Oct. 5, 2020

<sup>308</sup> Verena Seufert, Navin Ramankutty, Jonathan A. Foley, "Comparing The Yields Of Organic And Conventional Agriculture." *Nature* 485, 229–232 (2012). <https://doi.org/10.1038/nature11069>. Accessed Oct. 4, 2020.

depending on individual crop and the individual farmer.<sup>309</sup> Regardless, neither option is suitable for wildlife, specifically birds.

One of the largest agricultural land users is large scale meat farming, specifically cattle, sheep, pigs, and chickens. They require grain, oats, and other grown products to feed the livestock sold for human consumption. Therefore, as the plant-based diet increases across America, there should be a corresponding lowering of meat production. Nevertheless, there simply is not; Americans and the rest of the world have responded by eating the same or more meat.<sup>310</sup> In America, 40% of all grain produced goes to feeding livestock, with ethanol making up 36% of the overall grain.<sup>311</sup>

The bias that vegan or vegetarians carry is that they seek to remove themselves from the animal cruelty cycle. As a stand-alone basis, this is a just opinion. However, the opinion only carries over to the large-scale meat industry. It does not account for the wildlife offset by the increase in farmland. Vegan-ism rose 600% in the U.S. alone, from 1% of the U.S. population in 2014 to 6% in 2017.<sup>312</sup> They are making plant-based diets a \$3.1 billion-dollar market, and vegan-based foods have shown an 8.1% increase from 2016 to 2017.<sup>313</sup>

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<sup>309</sup> Andrew R. Kniss, Steven D. Savage, Randa Jabbour, "Commercial Crop Yields Reveal Strengths and Weaknesses for Organic Agriculture in the United States," *PLOS One* 11(11), Aug. 23, 2016 e0165851. <https://doi.org/10.1371/journal.pone.0165851>. Accessed Oct. 5, 2020

<sup>310</sup> Derek Thompson "The Capitalist Way to Make Americans Stop Eating Meat Carnivores Are Falling for The Magic of A Longer Menu Full Of Plant-Based Options," *The Atlantic*. Jan. 10, 2020 <https://www.theatlantic.com/ideas/archive/2020/01/why-2020s-will-be-peak-meat-america/604711/>. Accessed Oct. 1 2020 and Image Johnny Wood, "How Our Growing Appetite for Meat Is Harming the Planet." *The World Economic Forum*, Aug. 21, 2018, <https://www.weforum.org/agenda/2018/08/global-appetite-for-meat-is-growing/>. Accessed 3 2020

<sup>311</sup> Ibid

<sup>312</sup> Seika Mejeur, "Vegan Statistics: Plant-Based Diets in the U.S. are Skyrocketing" *The Goodness from Seyka*, N.D. <https://forgoodnessseyks.com/vegan-statistics-plant-based-diets-in-the-us-are-skyrocketing-2/> Accessed Oct. 2, 2020, and Sarah Smith "Top Trends in Prepared Foods 2017: Exploring Trends in Meat, Fish and Seafood; Pasta, Noodles and Rice; Prepared Meals; Savory Deli Food; Soup; and Meat Substitutes" *Reportbuyer.com*, June 2017, Report ID: 4959853, <https://www.reportbuyer.com/product/4959853/top-trends-in-prepared-foods-2017-exploring-trends-in-meat-fish-and-seafood-pasta-noodles-and-rice-prepared-meals-savory-deli-food-soup-and-meat-substitutes.html>. Accessed Oct 2, 2020

<sup>313</sup> Editors Cision PR "Plant-Based Foods Sales Experience 8.1 Percent Growth Over Past Year" *Cision PR Web*, Sep. 13, 2017, <http://www.prweb.com/releases/2017/09/prweb14683840.htm>. Accessed Oct. 2, 2020

Both the increase in plant-based diets and the meat industry take their toll on wildlife. Inevitably, people have to eat, but it creates strange bedfellows in the conservation realm. The hunter-environmentalist, as well as the vegan all, seek to keep wildlife in their natural place. Uniting this strange alliance has ensured that regenerative farming practices prevent cruelty towards wildlife in wild places.

## **Hunter Decline**

*“Old age and treachery will always beat  
youth and exuberance.”*<sup>314</sup>  
Yet time still wins.

This increase in farming adds another layer of complexity to the hunter, limiting the funding for wild places and wildlife. However, the decrease of hunters is not from the plant-based diet movement of the last ten years. This decline had started in the 1980s when almost 17 million hunters bought 28.3 million licenses.<sup>315</sup> The years 2011 to 2016 had a loss of 2.2 million hunters, with 11.5 million hunters, less than 4% of the national population.<sup>316</sup> In 1991, 28% of hunters were 25-34 years old. By 2016 that same age range only made up 10% of hunters. That same year had 23% of hunters between 45 and 64 years old. That same age range doubled to 46% in 2016. The largest group of hunters are merely starting to age out of hunting. Today 50% of hunters are over the age of 47.

Like with any issues, rarely is a cause that we can single out as the definitive reason for the fall. The likely issue for the downward trend is an amalgamation of events. Some studies state that millennials have shifted away from meat-based diets to remove themselves from the

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<sup>314</sup> David Mamet. “David Mamet Quotes” Brainy Quotes N.D.

[https://www.brainyquote.com/quotes/david\\_mamet\\_478663](https://www.brainyquote.com/quotes/david_mamet_478663). Accessed 3 Oct 2020

<sup>315</sup> Natalie Krebs. "Why We Suck at Recruiting New Hunters, Why It Matters, and How You Can Fix It," Outdoor Life Oct. 15, 2019, <https://www.outdoorlife.com/why-we-are-losing-hunters-and-how-to-fix-it/>. Accessed Oct. 4, 2020.

<sup>316</sup> Ibid

cycle of animal cruelty and be less likely to purchase firearms.<sup>317</sup> The increase in video game usage and the rise in technology has negatively impacted the outdoors. In the 1970s, television had a metal bunny ears antenna with three stations. A house had a single television if one at all. Today the average house has 2.3 television with high definition fused with high-speed broadband internet across the entire house and yard.<sup>318</sup> Compounding on technology is that our population had risen from 226.5 million in 1980 to 308.7 million in 2010.<sup>319</sup>

Hunting also requires thinking about what they will partake in and the required steps, which cannot jump into quickly. The act of purchasing a hunting license requires taking a hunter's safety class/test and then obtaining a weapon. Next, buy a license and the required safety equipment. They have to find a hunting location on either public or private land and get to and from the hunting area. If lucky enough to harvest, this means the hunter must have the knowledge or funds to clean and process the animal. All of this takes dedication and some skill. When coming into hunting without a support network, this can be a daunting undertaking.

Another aspect is that hunting has generally been an old white man sport. Hunting requires using a weapon (firearm or bow). The idea can come across as intimidating for a black person or any person of non-white race. One has to be willing to take a weapon into an area where generally white men carry weapons. One is alone and sneaking around the woods, generally attempting to be undetected. The entire pretext of hunting is to sneak up to the game. A hunter appears more like a robber than a hunter. It only serves to create another barrier one

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<sup>317</sup> John Meyer, "Fewer Young People Are Taking up Hunting, Which Has Hunters Worried About the Sport's Future." The Denver Post, Sep. 16, 2019, <https://theknow.denverpost.com/2019/09/16/hunting-numbers-declining/223765>/<https://theknow.denverpost.com/2019/09/16/hunting-numbers-declining/223765/>

<sup>318</sup> U.S. Energy Information Administration, "Average Number of Televisions in U.S. Homes Declining," U.S. Energy Information Administration, Jan. 28, 2017, <https://www.eia.gov/todayinenergy/detail.php?id=30132>. Access Oct. 4, 2020

<sup>319</sup> U.S. Census Bureau, "A Look at the 1940 Census", U.S. Census Bureau N.D. [https://www.census.gov/newsroom/cspan/1940census/CSPAN\\_1940slides.pdf](https://www.census.gov/newsroom/cspan/1940census/CSPAN_1940slides.pdf). Accessed Oct. 4, 2020

needs to overcome to hunt willingly. This barrier could subject them to a deadly situation, especially given the racial tension within America.

Regardless of the reason why hunting is becoming less popular, this means hunting conservation funding is limited. America's legislators have made hunting a user-pay system because of America's ugly past with hunting. All hunting license sales go directly to fund state game management agencies and their wildlife programs. Federal acts such as the Federal Aid in Wildlife Restoration Act 1937, commonly known as the Pitman-Roberson Act, is an excise tax of 11% placed on sporting arms and ammunition paid by the manufacturer.<sup>320</sup> This act has extended to general hunting items such as bow, arrows, and other shooting industry projectiles.<sup>321</sup> This law's intent allows federal aid for the state(s) to manage and restore wildlife.

Compounding on the lack of hunters is a second related threat to wildlife and endangered species within America's shifting culture—the rising anti-gun movement. This topic is fraught with rabbit holes and opinions. However, from a funding and wildlife sustainment aspect, gun sales support wildlife. When gun sales drop, that means funding for wildlife conservation drops. Hunters need to thank the competition shooters who purchase thousands of ammunition rounds and never set foot in the hunting woods. They provide more support to conservation than license sales alone.

For instance, Pennsylvania routinely leads the nation in hunting licenses sold by the state, with 956,163 total licenses sold in 2019. The 2019 license sales generated \$37,061,112 in gross profit for the state game managers. Simultaneously, Pennsylvania's arms and ammunition industries alone had a \$1,308,688,100 in total economic output. Pitman-Roberson, from

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<sup>320</sup> U.S. Fish and Game. "Digest of Federal Resource Laws of Interest to the U.S. Fish and Wildlife Service." Sep. 2, 1937. URL: <https://www.fws.gov/laws/lawsdigest/fawild.html>.

<sup>321</sup> Ibid.

Pennsylvania's arms and ammunition industries, provided America's game managers with an additional \$143,955,691. All of used for national conservation efforts. Pennsylvania's arms and ammunition Pitman-Roberson contribution is more than three times what selling hunting licenses produced. This may seem like lots of money, which it is. However, as of 2018, there are an estimated 193,138 miles of trails on public property, estimated to cost \$886 million in maintenance cost.<sup>322</sup>

### **Selling of Public Land**

*“The public lands are a public stock, which ought to be disposed of to the best advantage for the nation.”*

America's current public land views are merely keeping them in public hands at the federal level or returning them to state control. At its surface, this appears to be two simple views that could coexist with all federal land shifted to state control. Public land is held in trust by the government, be it a city or federal level. The most straightforward form of public land to conceptualize is a city park. The more iconic is Yellowstone National Park. All are open to the public for access to the outdoors. As we peel back the layers from this issue, we find that it is not as simple. America's history is a great measuring stick as to how states will act with this power. Simply put, the state seeks to sell private land at the first chance available. For example, during the oil bomb at the turn of the century, Texas sold off a large majority of its mineral rights with no public say.<sup>323</sup> Effectively, Texas now has little to no state property and is one of the lowest

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<sup>322</sup> American Hiking Society, "Addressing the Maintenance Backlog on Public Lands S. 3422/S. 500/H.R. 1225", American Hiking Society N.D. <https://americanhiking.org/advocacy/addressing-the-maintenance-backlog-on-public-lands/>. Accessed Oct. 5, 2020

<sup>323</sup> John McFarland. Jul. 31, 2009. The Relinquishment Act – an Interesting Chapter in Texas History. URL: <https://www.oilandgaslawyerblog.com/the-relinquishment-act-an-inte/>

states with public property than the rest of America. Texas is the second-largest state in the union.<sup>324</sup>

Precedence is the simplest of the arguments for the returning of federal land to state control. Senator Mike Lee's opinion is with the creation of many states. Specifically, the western states that the federal government would have sold federally owned land to the state's admission.<sup>325</sup> Nevertheless, the 13 western states did not follow the same precedence as its eastern neighbors. When comparing Utah to North Dakota, the federal government did not honor its basic agreement in Utah and sold back the federal land. Senator Lee is merely looking out for his constituents and wants the federal government to honor its agreement in Section 9 of the federal legislation that created Utah.<sup>326</sup>

Conversely, the side that wants to maintain federal public lands feels that this is where the federal government should maintain its control for the nation. Which allows all people of America access to land. Some of the natural world found in these locations is just too beautiful to allow one state control over it, and all must share it.<sup>327</sup> These wild areas are the nations' lungs and are needed to offset CO2 emissions found across the country.

Difficulties with funding are inevitable issues as the world today revolves around money. Those who want to return federal land to the state seek to gain revenue from that land by any means surface or subsurface. The state would like to maintain control over all the land within its border. In 1906, the Antiquities Act gave the president the power and ability to designate land

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<sup>324</sup> Scott. N.D. Public and Private Land Percentages by the U.S. States. Summitpost.org. URL: <https://www.summitpost.org/public-and-private-land-percentages-by-us-states/186111>

<sup>325</sup> Editors for Mike for Senate. N.D. Home Issues Conservative Reform Agenda Public Lands URL: <https://www.lee.senate.gov/public/index.cfm/issue-lands>

<sup>326</sup> Ibid

<sup>327</sup> Yvon Chouinard, "Keep Public Lands in Public Hands." Patagonia, N.D. <https://www.patagonia.com/stories/keep-public-lands-in-public-hands/story-31480.html>



into federal control only by taking from the state. The state should be the governing body to determine if a parcel is a historic landmark, prehistoric structure, or historic, scientific interest.<sup>328</sup>

Because the state(s) do not have full control over public land, the state loses out on economic revenue. Due to this potential economic loss, a Payment in place of Taxes (PILT) offset property tax losses on non-taxable federal lands. PILT payments made to the states in 2014, was \$400 million, and in 2018 over \$552.8 million.<sup>329</sup> The use of PILT only exacerbates the problem as it is not fully funded each year by Congress.<sup>330</sup> Therefore, Western states are hamstrung by a lack of property tax per average of land, which the eastern states do not have. Compounding on this revenue is that all American taxes clear the estimated backlog of \$5 to 20 billion across all public lands.<sup>331</sup> They are paid for by legislations such as Pitman-Roberson or Land and Water Conservation Fund (LWCF). On top of the backlog, there is still the daily overhead and salaries of the various federal employees to operate the federal public land. Forcing a New Yorker or Bostonian to pay for a National Park in the western state, which they will never see nor use, seems unjust.

Maintaining America's public land is around 4 dollars per tax year when spread across America, making it a manageable task. If that were to shift back to the states, the state of Wyoming would have difficulty supporting such vast tracks of land.<sup>332</sup>

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<sup>328</sup> Editors for Mike for Senate. N.D. Home Issues Conservative Reform Agenda Public Lands

<sup>329</sup> Jonathan Shuffield, Austin Iglehear. Jun. 29, 2018, the U.S. Department of Interior announces record PILT payments to counties for 2018. URL: <https://www.naco.org/blog/us-department-interior-announces-record-pilt-payments-counties-2018> and Editors of American Public Lands. 2014. American Public Lands, Origin History and Future

<sup>330</sup> Ibid

<sup>331</sup> Editors American Hiking Society. N.D. Public Lands Maintenance. American Hiking Society. URL: [Backloghttps://americanhiking.org/advocacy/addressing-the-maintenance-backlog-on-public-lands/](https://americanhiking.org/advocacy/addressing-the-maintenance-backlog-on-public-lands/)

<sup>332</sup> Wes Siler. Nov 2 2017. Why You Do not Want the States Managing Public Land. Outside Magazine. URL: <https://www.outsideonline.com/2256531/why-you-dont-want-states-managing-public-land>

The control appears to bounce between states' rights and federal rights or environmentalism versus the extraction industry or the hunter versus the anti-hunter angle, which are all valid to a certain extent. Nevertheless, every one of these sides seeks to control, and all want public lands for various reasons. Each is a valid reason. The world today requires oil and other earth minerals to carry out our daily lives. The states want economic prosperity in their state as the political parties want to maintain their constituency. The hunter, environmentalist, and protectionist all want to see wildlife on the landscape. However, they will disagree with the taking of wildlife. There is a critical need to have the highest control level to ensure that each player has equal access, making the struggle over control of public land a multi-faceted issue: the hunter, environmentalist, and protectionist need to work together preserve wildlife and wild places.

**Conclusion:**

Culture is nebulous and ever-changing. These changes leave a mark on our history and shape our thinking. We would have the benefit of history if we chose to learn from it. Hunters have generally failed at inclusivity, which shows in the decline of hunters. However, hunters could once learn from the collective past and misdeeds to establish NAMC and federal acts such as Pitman-Robertson to ensure means to sustain hunting. American culture is in a shift with the rise of plant-based diets and our definitions of words. The shift places how we classify animals in the forefront of today's problems. The debate of native or exotic will continue and increase in difficulty as human populations and shifting views continue. The next generations will continually challenge our history. Today humanity is making mistakes sound decisions based on modern sciences. Nevertheless, our grandchild, with the benefit of time, more data will disprove our thought just as current times are disproving previous generations.

That does not mean those strange bedfellows need to remain at odds; it is the opposite. Hunters and environmentalists must rally to the ecologists to understanding. Then leverage that with what conservationists can fund. In turn, this will meet the protectionist's goal of preservation.

The next arena for game managers to wrestle with about native versus exotic will occur within Colorado and the wolf reintroduction. Colorado's 2020 Proposition 114 was a measure that would require the Colorado Parks and Wildlife Commission to reintroduce and manage gray wolves (*Canis lupus*) by the end of 2023, which transforms bucket-biology to ballot-box biology. Adding complexity in the fact that it is the first time the voter determines the recovery process. Furthering the complication to the already intense issue is how an experimental species listed under ESA protection will fare when the wolf fully transitions into the state. Some feel that the voters will direct wildlife management to sidestep science.

Inclusivity is something that hunters need to become comfortable with quickly if they seek to preserve their traditions. These traditions now include saving and preserving all species but especially endangered species. Getting a funding mechanism such as Pitman-Roberson was great. However, today this is not enough. Hunters need to develop methods to get more hunters afield and return every year and ensure that their children continue the tradition. Technology and culture will only change exponentially faster as time continues, and hunters need to find ways to keep pace. If hunters fail to recruit more hunters, all wildlife and the currently endangered species are in stark trouble.

Lastly, public land is a complicated topic, both emotional and financial. Hunters need to expand their alliances and look at groups and organizations with similar end states, not their chosen path. There are a thousand ways to skin a cat, but in the end, the cat's hair is removed.

Hunters want healthy ecosystems to ensure that game animal continue to thrive. The same end state is valid for environmentalists and protectionist. Understanding how public land sustains areas for endangered species and expanding all wildlife is critical but getting there requires many hands. Even groups may be typically be opposed. Conservationists, ecologists, environmentalists, hunters, and protectionists can support public land by focusing on simple, clean legislation clearly defined in scope. Legislation, such as the Great American Outdoors Act, passed in 2020, proves that one can get bipartisan support for specific targeted efforts. The Great American Outdoors Act proves that Americans want to preserve the outdoors. This allows hunters can pass their traditions to future generations and ensure endangered species can be recovered.

In the end, state there are always threats to hunters and, therefore, endangered species, but addressing them head-on and straightforwardly will create joint paths with the opposition. Hunters need to be open and willing to listen to the other side to understand how ecosystems work. Healthy ecosystems must incorporate conservation, ecology, environmental, hunting, and protectionism to be healthy.

## Chapter 5 Conclusion

American hunting culture and practices drastically changed over time. It is an ugly and disjointed history, dotted with lust and greed. American westward expansion helped develop American exceptionalism and its "do-it-yourself" attitude. The American buffalo's slaughter and the extinction of other species like the passenger pigeon are examples of how hunting reflected some of the overpowering capitalistic greed of the industrial revolution. Hunters made a pivot though from a *taking* mindset to a management of the overall ecosystem. This transition of mindset took time and evolution, but Burnham's theory of political realignment shows how it tracks with how American democracy shifted and changed over time. The epochs Burnham depicts are American political shifts, but also reflect our hunters' political shifts. Burnham political shifts are *the experimental system* (1790-1820)<sup>333</sup>, *the democratizing system* (1820-1860)<sup>334</sup>, *civil war system* (1860-1893)<sup>335</sup>, *the industrialist system* (1886-1932)<sup>336</sup>, and *the new deal* (1932-?)<sup>337</sup>. Within each political shift Dodd's cycle of political learning and change applies: 1) *Ignorance and Denial*, 2) *Return to Orthodoxy*; 3) *Learning, Solidification of New Form*; and 4) *Stability and Stagnation*. Burnham's dates and Dodd's cycle align well with many critical points that affected America's hunters and how America governs wildlife.

The development of game management legislation such as the Endangered Species Act (ESA)<sup>338</sup> and the North American Model of Conservation (NAMC) are answers to the focusing events of wildlife extinction or near extinction of a number of species in the 19<sup>th</sup> century. They

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<sup>333</sup> Thomas A. Birkland. "Focusing Events, Mobilization, and Agenda Setting." *Journal of Public Policy*, Vol. 18, No. 1 (Jan. - Apr. 1998), 102

<sup>334</sup> *Ibid.* pg 104

<sup>335</sup> *Ibid* pg 106

<sup>336</sup> *Ibid* pg 108

<sup>337</sup> *Ibid* pg 110

<sup>338</sup> *Ibid* pp. 53-74.

have also provided evidence for Kingdon's theory of how people, problems, and the legislative process can unify to correct a problem. John Muir, a preservationist, and President Theodore Roosevelt, a conservationist, vehemently disagreed over many matters with respect to wilderness protection or “efficient” management of natural resources during the Progressive Era which shaped conditions inside and outside of government, but ultimately led to people and groups to unite to counter the overwhelming slaughter of wildlife. Time and circumstances change, but every new law Congress passed demonstrated the validity of Kingdon's agenda-setting theory that law is the result of when the three streams merge.

The NAMC and the ESA, as we know it, are by no means perfect. A detailed look at different modern culture aspects and how the culture shifts affects wildlife and wild places is needed to understand all the factors impacting any opportunities for reforming the existing laws.<sup>339</sup> Regardless of the contentiousness surrounding the ESA, most agree that it is the prevailing law protecting species in peril within the United States.<sup>340</sup> Most concede that the ESA has saved and will continue to save species on the verge of extinction and neither political party wants to change that.

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<sup>339</sup> Jonathan Wood. “The New Endangered Species Act Rules, Explained.” *Property and Environment Research Center*. August 14, 2019. URL: <https://www.perc.org/2019/08/14/the-new-endangered-species-act-rules-explained/>.

<sup>340</sup> Emily, Puckett; Dylan Kesler; Noah Greenwald. “Taxa, Petitioning Agency, And Lawsuits Affect Time Spent Awaiting Listing Under the US Endangered Species Act.” *Biological Conservation*. Volume 201, September 2016, Pages 220-229.

Areas for adjustment within the ESA can be highlighted through four areas. First, adjusting the time used in the listing and delisting process. Second, focusing and rally around the US Forest Wildlife Service (FWS) science vs. outright disagreement. Third, slow or limit the litigation which has surrounded the ESA. Fourth, understanding how economic factors affect endangered species and wild

places. Our modern ecosystem must have Charles Darwin's heart of stone. Which means the hunters must be held in check, to not overtake. Concurrently, the environmentalists must understand why hunters will take

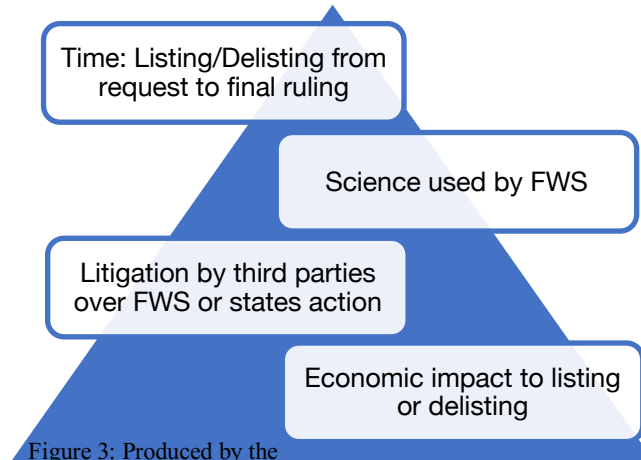


Figure 3: Produced by the

select animals. The “ecosystem” of wildlife management must have conservationists, ecologists, environmentalists, and hunters which see the value and interdependence of both hunting and protectionism in order for it to be a healthy, sustainable system.

NAMC principles are derived from current legislation or the best business practices of modern game managers. The principles of NAMC also reinforce Kingdon's agenda-setting theory even if they are only best practices and not codified laws.

The NAMC principles are:

1. Wildlife resources are a public trust;<sup>341</sup>
2. Markets for game are eliminated;<sup>342</sup>

<sup>341</sup> *Wildlife resources are a public trust*, which means that the citizens of the world own the wildlife and that wildlife is held in trust by the state. The state is responsible for managing the health of wildlife and habitat.

<sup>342</sup> *Markets for game are eliminated*. Hunting and fishing is for personal use only. It is legal to take wildlife and sell it on the open market.

3. Allocation of wildlife is by law;<sup>343</sup>
4. Wildlife can be killed only for a legitimate purpose;<sup>344</sup>
5. Wildlife is considered an international resource;<sup>345</sup>
6. Science is the proper tool to discharge wildlife policy;<sup>346</sup> and
7. Democracy of hunting is standard.<sup>347</sup>

NAMC has been one of the best wildlife conservation models in the world.<sup>348</sup> It has a proven record of restoring game animals across North America. NAMC also has a few contradictions within principles and actual daily management practices. The American alligator's recovery highlights this flaw as one can openly sell the alligators hide and meat on the open market. This slippery slope is known as market hunting—literally the practice that leads to the overwhelming slaughter of North America.

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<sup>343</sup> *Allocation of wildlife is by law.* Because wildlife is held in public trust the state determines how it will manage wildlife populations. Hunting and fishing are one of many methods a state has in managing animal populations.

<sup>344</sup> *Wildlife can be killed only for a legitimate purpose.* This places scientific reasons for killing wildlife, such as management purposes or scientific research.

<sup>345</sup> *Wildlife is considered an international resource.* Derived from the Migratory bird Act that species Do not understand the line on a map of humans. That species can cross borders therefore they are owned by all.

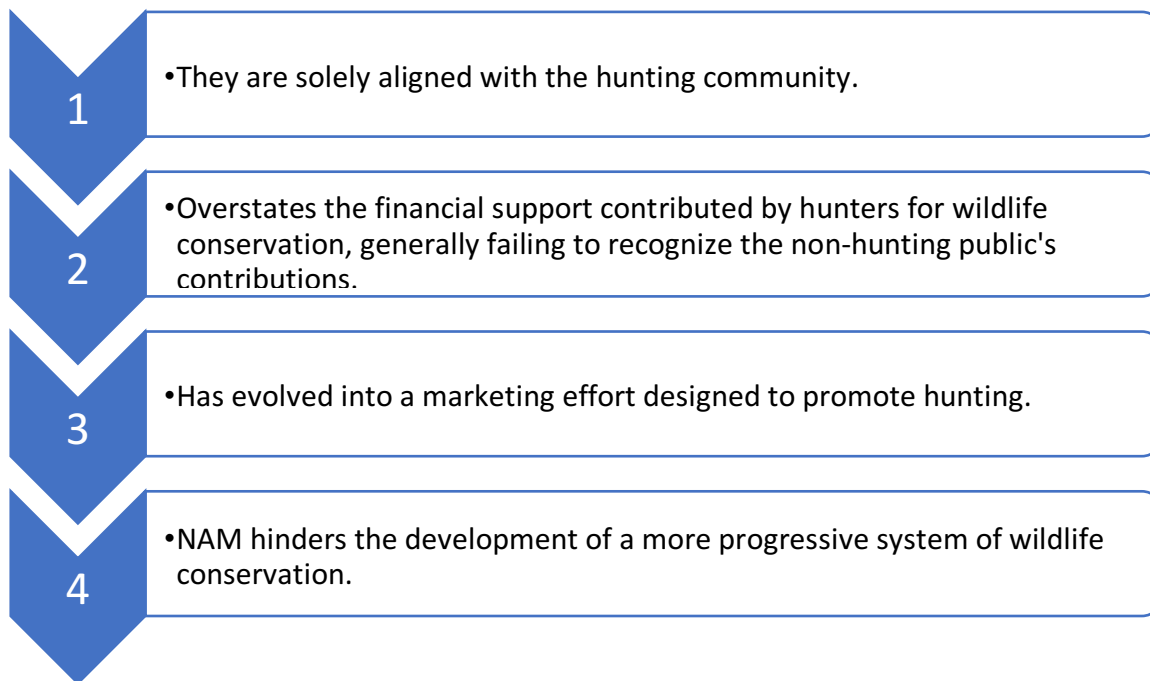
<sup>346</sup> *Science is the proper tool to discharge wildlife policy:* This removes human emotion from the equation and make a sound rational imperially proven decision.

<sup>347</sup> *Democracy of hunting is standard:* This removed status from whom could hunt and let it be all of society has access to wild places and the wild things in those places.

<sup>348</sup> Joseph E. Mbaiwa. “Sustainable Wildlife Utilization: Hunting as a Conservation.” *International Wildlife Conservation Council US Fish & Wildlife Service*. 26-27th September 2018 Washington-DC, USA. Accessed November 1, 2019, URL: <https://www.fws.gov/iwcc/pdf/presentations/sustainable-wildlife-utilization-hunting-as-a-conservation-tool.pdf>.



Areas where NAMC must improve are:



*Primarily aligned with the hunting community.* A significant fault with NAMC is its alignment towards hunters vs. being inclusive towards other user groups such as birdwatchers, hikers, campers, skiers, and or general outdoor enthusiasts.<sup>349</sup> Which also impacts wildlife every time they set foot afield. The fact that hunters are older white males makes the model appear to be solely for other rich white men paying little regard towards minorities or gender.<sup>350</sup> The model should be unabashedly for hunter’s sustainment, while simultaneously understanding the evolution will happen. Therefore, hunters must learn to conform to the current culture. Hunters must and should come from all ages, races, creed, or gender. Regardless, NAMC is rooted in science, democratic quota allocation and gives no weight or priority to race, creed, or gender

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<sup>349</sup> M. Nils Peterson & Michael Paul Nelson (2017) “Why the North American Model of Wildlife Conservation is Problematic for Modern Wildlife Management, Human Dimensions of Wildlife.” 22:1, 43-54, DOI: 10.1080/10871209.2016.1234009. and Thomas Serfass, Robert Brooks, and Jeremy Bruskotter. “North American Model of Wildlife Conservation: Empowerment and Exclusivity Hinder Advances in Wildlife Conservation.”

<sup>350</sup> Ibid

when determining tag allocations or quota limits. The decision is based on the health of wildlife in their respective ecosystems.

*Financial support.* American method to fund conservation is from hunting, fishing licenses sell, and the exercise tax known as the Pitman-Robertson Act. Pitman-Roberson and licenses sell signals that hunters are the sole revenue generators for conservation funding. Hunters need to message those two's importance and how they tie into federal revenue for conservation efforts across America.

*Has evolved into a marketing effort designed to promote hunting.* Standing by itself without context, this is a true statement. As stated in the Financial premise, NAMC points out what hunters have done by creating a user-pay system. Hunters are simply struggling at recruitment, retention, and reactivation. Hunting numbers across the United States has been on a steady decline for many years. Hunters and hunting groups must seek out every possible manner for communication to spread their message. Hunters are not indeed at fault as it does not change the science-based approach set in place by the principles.

*NAM hinders the development of a more progressive system of wildlife conservation.* The NAMC says little about non-game species beyond recognizing the need for more extraordinary biodiversity. Sustained funding is a difficulty across all conservation efforts. Compounding the finance issues is establishing a holistic biodiverse ecosystem. Private landowners are not required to follow all conservation efforts by the state. The NAMC only states that animals are public property regardless of where they stand but does little in conservation on private land. More inclusion of private landowners is required to better support hunting and recover endangered species.

*NAMC and market hunting.* As stated in the focusing event, market hunting is killing the animal for commercial sale. NAMC intends that killing an animal through legal hunting is for personal use. The commercial fishing market, alligator hunting in the south, the feral hog market in Texas, and the entire fur market from trapping. All are market hunting and appear to have corrected past mistakes. The critical difference is that today's regulated market hunting is highly regulated compared to the nineteenth century, first come, first served winner take all. The practice of legal market hunting does force the question regarding how legitimate killing should be defined. However, the NAMC fails to define what constitutes legitimate killing. The closest definition is a science-based approach. Where science determines quantity and types for removal, validates the reason for killing and the democracy of hunting. The democracy of hunting created a quota system to ensure all have equal access. Which requires compromise and stakeholder agreement amongst game management and user groups as animals are a finite commodity. However, the process must start at the beginning versus after the fact. With population number increasing and hunter numbers decline there is possibly a need for regulated market hunting for deer populations.

The case studies in this thesis show that the legislative process has the correct overall structure because it correctly protects against extinction. Congress's original intent to stop species extinction is still valid and has the legal standing to continue. The case studies found that modern practices that question the government are more about agenda setting versus species recovery. Regardless of one's personal views towards state management, giving the species back to state control should be seen as a success. Changes required within the ESA are needed and must emphasize early public comment. In addition, there is a need to ensure as many stakeholders as possible are involved in the listing side of the process. However, more

importantly, stakeholders' use in drafting the recovery process is critical. It could limit the legal debate during the delisting process.

The FWS needs to look at how it can incorporate private landowners' actions into species recovery. While incorporating the landowner, it also needs to protect the landowner. Innovation and change require risk, which means excepting scaled failure. Allowing any form of failure when speaking about endangered species has real consequences which humanity may not recover. Change requires game managers to lead with context. A context that defines straightforward ways forward methods and detailed triggers to stop their action. The public must be comfortable, allowing game managers to walk to the edge to see what works and what does not work. Without this endangered species recovery will be prone to perpetual litigation versus finding actual recovery means. Lastly, allowing for hunting of eligible species needs to be seen as a win because this means there is a stable healthy population.

Currently, America faces two choices to remove the grizzly bear from under ESA protections. First, the recovery of all six ecosystems within the contiguous states. The second option is to follow the snail darter's path and pass legislation through Congress that allows for Distinct Population Segments (DPS) towards delisting. The first option is a great end state to have. Though it will take multiple human generations and fails to address the areas which recover first. The continued action of not delisting a select region which has recovered because of an all or nothing recover of entire nations slows recovery altogether. The, second option has gained traction in the past few years with Wyoming's representatives in both the House and Senate who have introduced Grizzly Bear State Management Act(s).<sup>351</sup>

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<sup>351</sup> 116th Congress (2019-2020), "All Information (Except Text) for S.614 - Grizzly Bear State Management Act of 2019" <https://www.congress.gov/bill/116th-congress/senate-bill/614/all-info>. Access Oct 20, 2020

During the writing of this conclusion, America is in the midst of a polarizing presidential election year, President Donald Trump (R) versus former Vice President Joe Biden (D). Because of the current political climate hunters must properly message in this new information environment. President Trump's administration announced in October 2020 that it would delist the Northern Great Lakes gray wolf from ESA protections. This decision is long overdue; the wolf has been in and out of court and a political ping pong for the last 47 years. This decision will likely have more litigation because it transforms bucket-biology into ballot-box biology. Trump likely used this decision to bolster votes though this is the right decision for game managers and the wolf. Nonetheless the long-term political ramification may not justify this October surprise.

Areas where hunters need to continue their actions is with legislation that will restore habitat in wild places. Congress had recently shown that bipartisan support in the current political polarization could happen when they passed the Great American Outdoor Act (GAOA). GAOA signed into law on August 4 of 2020, proves Kingdon's theory that environmentalists, conservationists, and hunters can join together for specific targeted efforts.<sup>352</sup> The GAOA also moves Americans to preserve the outdoors for future generations while fixing the maintenance backlogs. Which also serves the endangered species and their recovery. It also provides more access which feeds the revenue process.

The hunter and animal rights activists will never agree on killing an animal for food. This fundamental disagreement does not mean though that they cannot work together for the betterment of endangered species. The priority is maintaining wild things in wild places.

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<sup>352</sup> Dan Harsha, "The Biggest Land Conservation Legislation in A Generation." National & World Affairs. The Harvard Gazette. July 27, 2020<https://news.harvard.edu/gazette/story/2020/07/the-likely-impact-of-great-american-outdoors-act/>. Accessed Oct 20, 2020

## Appendix I

### Federal Legislation and Supreme Court Cases

- *Public Trust Doctrine* (PTD) of 1842.<sup>353</sup> Originates with Roman civil law and is a center point in many environmental and wildlife laws. At its core PTD is society giving the government control over managing wild places and the things in those wild places. Through it is still owned by all, as nature resources are universally owned. Therefore, they all should have equal access to said resource, though managed via a trust system by government.
- *Lacey Act* of 1900 (*16 U.S.C. §§ 3371-3378*). Becoming the first federal law protecting wildlife, was originally designed to stop unlawful game hunting by allowing federal reciprocity between states to arrest the poachers.<sup>354</sup> It enforces civil and criminal penalties for the illegal trade of animals and plants. This act has progressed since its original passage in 1906, now forbidding the import, export, transport, purchase, or sale of species which violate state, federal, tribal, or foreign law.<sup>355</sup> The year 2008 saw the most recent amendments adaptations, escalating the extent of the act's legislation power over timber, timber products, plants and plant products.<sup>356</sup> Today it regulates the import of any species protected by international or domestic law and prevents the spread of invasive, or non-native, species of both flora and fauna.
- *Antiquities Act* of 1906 (*16 USC §§ 431-433*). is the first law authorizing the President to establish or create archeological sites, protect landmarks, structures, and objects of historic or scientific interest by designating them as National Monuments on public lands. Once a site is created it obligates federal agencies to manage the site in order to preserve for present and

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<sup>353</sup> Gordon R. Batcheller et al. "The Public Trust Doctrine: Implications for Wildlife Management and Conservation in the United States and Canada." *The Wildlife Society Technical Review* 10-01 September 2010. Accessed April 24, 2019. Summary in appendix I.

<sup>354</sup> Alexander, Kristina. "The Lacey Act: Protecting the Environment by Restricting Trade." *Congressional Research Service*. CRS-2013-AML-0158. Last modified January 14 2014. <https://fas.org/sgp/crs/misc/R42067.pdf>.

<sup>355</sup> Ibid.

<sup>356</sup> Editors Forest Legality. "U.S. Lacey Act." Forest Legality.org. Accessed November 13, 2019 <https://forestlegality.org/policy/us-lacey-act> and Boucher, Doug, et al. "Climate and the Lacey Act." Greentips, Aug. 2014, pp. 1–8. EBSCOhost, [search.ebscohost.com/login.aspx?direct=true&db=8gh&AN=109932945&site=ehost-live&scope=site](https://search.ebscohost.com/login.aspx?direct=true&db=8gh&AN=109932945&site=ehost-live&scope=site).

future generations. It also authorizes the President to protect landmarks, structures, and objects of historic or scientific interest by designating them as National Monuments. Was largely spearheaded by Representative John Lacey though President Theodore Roosevelt is given majority of the credit. The Antiquities Act is the first law forcing the US government to think about preservation and maintaining places for future generations.<sup>357</sup> Specifically, it was designed to protect areas like national historic landmarks, or areas of scientific interest on lands federally owned.<sup>358</sup>

*Migratory Bird Treaty* of 1918 (16 U.S.C. §§ 703–712). Makes it illegal to take, possess, import, export, transport, sell, purchase, barter, or offer for sale, any migratory bird, or the parts, nests, or eggs of such a bird except under the terms of a valid Federal permit. The Migratory Bird Act was challenged in a Supreme Court case *Missouri vs Holland* in 1920. The state of Missouri argued that the Migratory Bird Act overstepped the states’ rights to manage game species within the state. Regulation of game species is not the purview of the federal government by the U.S. Constitution.<sup>359</sup> Therefore, under the tenth Amendment the U.S. government had no constitutional right to enter into a treaty concerning game regulation.<sup>360</sup> The Migratory Bird Act was upheld in a 7-2 vote because the treaty ratified by the Senate was the supreme law of the land and that the preservation of the nature world was of national interest and should be protected by federal law.<sup>361</sup>

Anyone can purchase a Duck Stamp and 98% of the profits are used for waterfowl habitat restoration and sustainment.<sup>362</sup> A bird hunter over the age of 16 is required by law to purchase

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<sup>357</sup> National Park Service. “American Antiquities Act of 1906.” Last updated: June 22, 2017 URL: <https://www.nps.gov/subjects/legal/american-antiquities-act-of-1906.htm>.

<sup>358</sup> 16 USC §§ 431-433 *The Antiquities Act*.

<sup>359</sup> Matthews, Olen. "Who Owns Wildlife?" *Wildlife Society Bulletin (1973-2006)* 14, No. 4 (Winter, 1986): 459-65.

<sup>360</sup> *State of Missouri V. Holland, United States Game Warden* 252 U.S. 416; 64 L. Ed. 641; 40 S. Ct. 382; 11 A.L.R. 984; 18 Ohio L. Rep. 61.

<sup>361</sup> *Ibid*.

<sup>362</sup> The Wildlife Society. Policy Brief Migratory Bird Hunting and Conservation Stamp Act. TheWildlifeSociety.org [http://wildlife.org/wp-content/uploads/2014/11/Policy-Brief\\_DuckStamp\\_FINAL.pdf](http://wildlife.org/wp-content/uploads/2014/11/Policy-Brief_DuckStamp_FINAL.pdf).

the stamp in addition to state licenses when fowl hunting. The money raised by the Duck Stamp is earmarked for the Migratory Bird Conservation Fund (MBCF). The MBCF is used primarily by the FWS to acquire and maintain migratory bird habitats.<sup>363</sup>

- *Pitman-Roberson Act of 1937 (16 U.S.C. 669-669)* or Federal Aid in Wildlife Restoration Act of 1937. Is an excise tax on the sale of firearms and ammunition to help fund wildlife conservation in the United States. In the 76 years since its inception, over \$7 billion have been collected from manufacturers and has been made available to states. Commonly known as the Pitman-Roberson Act is an exercise tax of 11% placed on sporting arms and ammunition paid by the manufacturer.<sup>364</sup> This act has been extended to the selling of general hunting items such as bow, arrows and other projectiles in the shooting industry.<sup>365</sup> The intent of this law allows federal aid to be given to the state(s) for management and restoration of wildlife.
- *Land and Water Conservation Fund of 1964 P.L. 88-578, §1(b)*. The Land and Water Conservation Fund (LWCF) Act was enacted on September 3, 1964 (P.L. 88- 578; 78 Stat. 897). The text of the law had been codified at *16 U.S.C. §§460l-4 et seq.* It was re-codified under *P.L. 113- 287 to 54 U.S.C. §§200301 et seq.* *Land and Water Conservation Fund* uses revenues from the depletion of one natural resource to support conservation of another precious resource i.e. land and water.<sup>366</sup>
  - Most recently it was place under permanent funding with the passage of the *Great American Outdoor Act*. President Donald Trump on August 4, 2020. The funding will place will receive \$900 million annually, as well as also includes \$9.5 billion over five years to address critical maintenance backlogs on public lands and waters.

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<sup>363</sup> Ibid.

<sup>364</sup> US Fish and Game. “Digest of Federal Resource Laws of Interest to the U.S. Fish and Wildlife Service.” September 2 1937. URL: <https://www.fws.gov/laws/lawsdigest/fawild.html>.

<sup>365</sup> Ibid.

<sup>366</sup> Katie McKalip. Great American Outdoors Act Becomes Law. Backcountry Hunters & Anglers. August 04, 2020 Accessed from: [https://www.backcountryhunters.org/great\\_american\\_outdoors\\_act\\_becomes\\_law](https://www.backcountryhunters.org/great_american_outdoors_act_becomes_law)



- has two goals; first to aid in preserving, developing and maintaining public accessibility to outdoor recreation. The second goal was to allow access to the public for health and vitality.<sup>367</sup> Simply put, a means to allow people to access wild places for health and recreation. The LWCF is a funding source within the Treasury for implementing outdoor recreation. The LWCF authorizes the fund to receive \$900 million annually, if appropriated by Congress (i.e., discretionary appropriations). The LWCF funds federal and state recreation areas, with 40% percent of the appropriations for “federal purposes” and not less than 40% for “financial assistance to states.”<sup>368</sup>
- The *Endangered Species Act* (ESA) of 1973.<sup>369</sup> (16 U.S.C. § 1531) of 1973. Will be further defined throughout the paper. But simply places federal protections on species facing threats at maintaining a healthy population.

#### **Supreme Court cases:**

- *Martin v. Waddell* (41 U.S. (16 Pet.) 367) (1842), Considered the first PTD case find the public held a common right to fish in navigable and tidal waters. As the underlying lands were owned by the state for the common use by the people.
- *Pollard v. Hagan* (44 U.S. (3 How) 212) (1845), one of two Supreme Court cases that establish what is known as equal footing doctrine.
- *Smith v. Mary* (442 U.S. 735) (1855), established ownership of tidal water lands and the management over game on the tidal flats.

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<sup>367</sup> P.L. 88-578, §1(b). The Land and Water Conservation Fund (LWCF) Act was enacted on September 3, 1964 (P.L. 88- 578; 78 Stat. 897). The text of the law had been codified at 16 U.S.C. §§460l-4 et seq. It was re-codified under P.L. 113- 287 to 54 U.S.C. §§200301 et seq.

<sup>368</sup> Ibid.

<sup>369</sup> *Endangered Species Act* (ESA) (16 U.S.C. § 1531). of 1973. Will be further defined throughout the paper.

- *Missouri vs Holland* (252 U.S. 416) (1920), case that affirms that the states must follow US treaties over wildlife manage even though game species are managed and controlled by the state.
- *Sierra Club vs Morton* (405 U.S. 727) (1972), known for the dissenting opinion of William O. Douglas. Douglas claimed that the natural resources should have a standing of their own with the ability to sue.
- *Tennessee Valley Authority v. Hill* (437 U.S. 153) (1978) The court chose the snail darter over a dam as the simple intent of Congress with the ESA was to halt and reverse species extinction, by any means necessary. The Tellico Dam project, by granted an injunction for the conflict between Tellico Dam operation and the explicit provisions of Section 7 of the Endangered Species Act. Ruling upheld the ESA protection.
- *Palila v. Hawaii Department of Land and Natural Resources* (639 F.2d 495) (9th Cir. 1981) because of sailing practices in the 19th century Hawaii had a lot of non-native and invasive species. First, it established the right to protection of endangered animals to human conventions that damage the ecosystems which they live on. Second, there was federal over-reaching into what was prior an internal state matter. Lastly, ability of endangered species to have standing to sue as plaintiffs in their own right was not questioned.
- *Babbitt v. Sweet Home Chapter of Communities for a Great Oregon* (515 U.S. 687) (1995) a case challenged the word “harm” in the ESA.

## Appendix II

### North American Big Game Extinction List

Species that were brought to extinction after European contact in North America are:

- The Great Auk (*Pinguinus impennis*)
- Sea Mink (*Neovison macrodon*)
- Labrador duck (*Camptorhynchus labradorius*)
- Eastern elk (*Cervus canadensis canadensis*)
- Rocky Mountain locust (*Melanoplus spretus*)
- Newfoundland wolf (*Canis lupus beothucus*)
- Carolina parakeet (*Conuropsis carolinensis*)
- California grizzly bear (*Ursus arctos californicus*)
- Kenai Peninsula wolf (*Canis lupus alces*)
- Heath hen (*Tympanuchus cupido cupido*)
- Cascade Mountains wolf (*Canis lupus fuscus*)
- Texas wolf (*Canis lupus monstrabilis*)
- Bernard's wolf (*Canis lupus bernardi*)
- Scioto madtom (*Noturus trautmani*)
- Mexican grizzly bear (*Ursus arctos*; formerly *Ursus arctos nelsoni*)
- *Achyranthes atollensis* (also called atoll achyranthes or Hawai'i chaff flower)
- Turgid blossom pearly mussel (*Epioblasma turgidula*) turgid riffle shell turgid-blossom naiad or turgid blossom)
- Susky seaside sparrow (*Ammodramus maritimus nigrescens*)
- Levuana moth (*Levuana irridescens*)
- Eastern cougar or Eastern puma (*Puma concolor cougar*).

Species Brought to near extinction levels

- Turkey (*Meleagris*)
- Elk or Waptia (*Cervus Canadensis*)
- mountain lion, (*Puma Concolor*) Also commonly referred to as Cougar or Puma

- Pronghorn or Antelope (*Antilocapra Americana*)
- Big Horn Sheep (*Ovis canadensis*)
- Mule deer (*Odocoileus Hemionus*)
- White Tail Deer, (*Odocoileus Virginianus*)
- The Great Egret (*Ardea alba*)
- Mallard Ducks (*Anas platyrhynchos*)

This list is by no means encompassing and is generally centered around game species which the NAMC played a role in restoring.

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16 U.S.C. § 1531(a)(4) (2006)

16 U.S.C. §§ 3371-3378 Lacey Act

16 U.S.C. §§ 703–712 Mitigatory Bird Treaty

16 U.S.C. 669-669 Federal Aid in Wildlife Restoration Act

16 U.S.C. ch. 35 § 1531 Endangered Species Act

16 USC §§ 431-433 The Antiquities Act

252 U.S. 416 Missouri v. Holland

405 U.S. 727 Sierra Club vs Morton

41 U.S. (16 Pet.) 367 Martin v. Waddell

437 U.S. 153 Tennessee Valley Authority v. Hill

437 U.S. 153 Tennessee Valley Authority v. Hill

44 U.S. (3 How) 212 Pollard v. Hagan

442 U.S. 735 Smith v. Mary

515 U.S. 687 Babbitt v. Sweet Home Chapter of Communities for a Great Oregon

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## **Curriculum vitae**

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### **Education**

MA Government, (Currently pursuing)  
Johns Hopkins University, Advanced Academic Programs

BS Strategic Studies and Defense Analysis (Summa Cum Laude) 2016  
Norwich University Northfield Vermont

### **Work Experience**

18 years US Marine Corps 14 of which with Marine Raiders (Marine Special Operations Command (MARSOC))

### **Hunting Education**

Wyoming Hunters Education 1997  
International Jour de Formation Obligatoire (JFO) 2017  
French Bowhunting Federation (Fédération Française de Chasse à l'arc (FFCA)) 2017  
Belgium Hunters License (Permis de chasse à l'arc) 2017  
French (Permis de chasse à l'arc) 2017

### **Hunting Organizations USA**

Wild Sheep Foundation  
Back Country Hunters and Anglers

### **Hunting Organizations International**

Flemish Bowhunting Association (Vlaamse Boogjacht Vereniging)  
Fédération Française de Chasse à l'arc (FFCA)  
Fédération Wallonne des Chasseurs a L'Arc (FWCA)

### **Hunting Experience USA**

Wyoming, Montana, Colorado, Oregon, Texas, Arizona, Maryland, Virginia, North Carolina, South Carolina, Georgia and Florida

### **Hunting Experience International**

Belgium, France, Germany, Kyrgyzstan and Tajikistan