# Giving a Hoot: Adaption of Conservation Laws to Address the Management of Invasive Species to Protect Spotted Owls

# INTRODUCTION

Congress enacted the Migratory Bird Treaty Act (MBTA) and the Endangered Species Act (ESA) to ensure species are protected and habitats are preserved.<sup>1</sup> In 2008, the U.S. Fish and Wildlife Service (the Service) sought permits for an experimental removal of Barred Owls, an invasive species protected under the MBTA that is contributing to the decline of the Northern Spotted Owl, a threatened species protected under the ESA and the MBTA.<sup>2</sup> In Friends of Animals v. U.S. Fish & Wildlife Service, the Ninth Circuit upheld the Service's proposed action and found that birds protected under the MBTA may be removed for scientific use.<sup>3</sup> Additionally, the Court found that removing a protected species, known as "take," does not have to benefit the species being taken (harmed, harassed, or killed).<sup>4</sup> This ruling allows Barred Owls to be removed for the benefit of Northern Spotted Owls. The court rejected the "samespecies theory," which required take of a species protected by the MBTA be for the benefit of that same species.<sup>5</sup> This decision provides the Service with flexibility to experimentally remove protected invasive species for the benefit of other species experiencing population declines. This In Brief will examine the potential ramifications of these interventions going forward.

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<sup>1.</sup> Richard M. Engeman et al., *Managing Predators to Protect Endangered Species and Promote Their Successful Reproduction, in* ENDANGERED SPECIES: NEW RESEARCH (Alexandra M. Columbus & Luke Kuznetsov, eds., 2009).

<sup>2.</sup> Friends of Animals v. U.S. Fish & Wildlife Serv., 879 F.3d 1000, 1010 (9th Cir. 2018).

<sup>3.</sup> Id. at 1001–02.

<sup>4.</sup> *Id.* at 1007.

<sup>5.</sup> *Id*.

# I. BACKGROUND

## A. The Migratory Bird Treaty Act

Congress created the MBTA to protect birds against extinction.<sup>6</sup> It functions as a cooperative agreement between different countries to recognize the threats facing many bird species due to human activities that extend beyond national borders and to protect them from take.<sup>7</sup> The MBTA codifies conventions with Canada, Mexico, Japan, and Russia for the protection of birds common to the United States and these countries, granting authority to the Service to implement the MBTA.<sup>8</sup> The Secretary of the Interior is authorized to allow the taking of species protected under the MBTA "in order to carry out the purposes of the conventions" considering "the distribution, abundance, . . . [and] breeding habits" of migratory birds.<sup>9</sup>

# B. The Endangered Species Act

Congress enacted the ESA in 1973 in a sweeping move to protect and recover threatened species along with the ecosystems they rely on for survival.<sup>10</sup> The ESA ensures that species themselves are protected from individual harm, and it also protects ecosystems and "critical habitat" species need to survive.<sup>11</sup> The Service is responsible for administering and carrying out the ESA. It does so by listing a species as endangered or threatened to provide that species protections.<sup>12</sup> An endangered species is in "danger of extinction throughout all or a significant portion of its range,"<sup>13</sup> while a threatened species is any that is "likely to become an endangered species."<sup>14</sup> The Service, under direction of the Secretary of the Interior, determines listings using five factors that affect populations, including threats to habitat, overutilization, disease or predation, inadequate regulatory mechanism, and other threats.<sup>15</sup> The Service must use the best available science in making these determinations to protect listed species' populations by limiting take and affording their habitats special protections to prevent extinction.<sup>16</sup>

<sup>6.</sup> The Migratory Bird Treaty Act, Explained, NATIONAL AUDUBON SOCIETY (last visited Jan. 22, 2020), https://www.audubon.org/news/the-migratory-bird-treaty-act-explained.

<sup>7.</sup> Id.

<sup>8.</sup> Migratory Bird Treaty Act, U.S. FISH AND WILDLIFE SERVICE (last visited Jan. 6, 2020), https://www.fws.gov/birds/policies-and-regulations/laws-legislations/migratory-bird-treaty-act.php.

<sup>9.</sup> Migratory Bird Treaty Act, 16 U.S.C. § 704(a) (2018).

<sup>10.</sup> Endangered Species Act of 1973, 16 U.S.C. § 1531(b).

<sup>11.</sup> Id. § 1531(2)–(3).

<sup>12.</sup> Id. § 1533(a).

<sup>13.</sup> Id. § 1532(6).

<sup>14.</sup> Id. § 1532(20).

<sup>15.</sup> Id. § 1533(a)(1).

<sup>16.</sup> See id. § 1533(a)–(b).

# C. History of Northern Spotted Owl and Barred Owl Studies

Northern Spotted Owls have been listed as threatened under the ESA since the 1970s.<sup>17</sup> Northern Spotted Owls are brown, medium-sized birds that have characteristic white spots and only live in the old-growth forests of the Pacific Northwest.<sup>18</sup> The Northern Spotted Owl occupies a range of forests from British Columbia through the Cascade Mountains and as far south as California.<sup>19</sup> At the time of listing, the Service and other land management agencies limited harvest of timber on federal lands to protect spotted owl habitat in old-growth forests.<sup>20</sup> This was a contentious move that was opposed by the timber industry.<sup>21</sup> Despite this protection, Northern Spotted Owl populations continued declining an average of 2.9 percent per year from 1985 to 2006, suggesting that factors other than habitat loss are influencing their decline.<sup>22</sup>

The Service has found that increased competition, displacement, and predation by the Barred Owls are contributing to the decline of Northern Spotted Owls.<sup>23</sup> Barred Owls are larger than Northern Spotted Owls, with white stripes across their brown feathers.<sup>24</sup> An invasive East Coast species, Barred Owls are more aggressive than Northern Spotted Owls and compete with them for similar food and nesting habitat.<sup>25</sup> One study showed that in some areas, Barred Owl and Northern Spotted Owl diets overlap by more than 76 percent, leading to intense competition for resources.<sup>26</sup> These larger owls have also been observed physically attacking and killing Northern Spotted Owls.<sup>27</sup> Barred Owls have greatly expanded their range in the West and are found in every area surveyed for Northern Spotted Owls.<sup>28</sup> This expansion in Barred Owls' range is largely due to anthropogenic environmental changes, such as altering grasslands to have trees (by suppressing fires that historically halted the succession of grassland species and by planting trees in suburban backyards), that allowed their westward travel.<sup>29</sup>

In 2008, the Service created a new recovery plan for the Northern Spotted Owl pursuant to the ESA.<sup>30</sup> The Service proposed an experimental strategy of lethal and nonlethal Barred Owl removal to test its large scale effectiveness in

<sup>17.</sup> Mark Bonnett & Kurt Zimmerman, *Politics and Preservation The Endangered Species Act and the Northern Spotted Owl*, 18 ECOLOGY L. Q. 105, 106 (1991).

<sup>18.</sup> Id. at 109.

<sup>19.</sup> U.S. Fish and Wildlife Service, Revised Recovery Plan for the Northern Spotted Owl (Strix occidentalis caurina), vi (2011).

<sup>20.</sup> Bonnett & Zimmerman, supra note 17 at 106.

<sup>21.</sup> Id. at 107.

<sup>22.</sup> U.S. Fish and Wildlife Service, *supra* note 19 at A-4.

<sup>23.</sup> Id. at III-43, vii.

<sup>24.</sup> Bonnett & Zimmerman, *supra* note 17 at 109, 122.

<sup>25.</sup> U.S. Fish and Wildlife Service, supra note 19 at B-10.

<sup>26.</sup> Id.

<sup>27.</sup> Id.

<sup>28.</sup> *Id.* at B-10-11.

<sup>29.</sup> *Id.* at III-9, B-10.

<sup>30.</sup> Id. at I-1.

protecting Northern Spotted Owl populations and further understanding the interactions between the two species.<sup>31</sup> Following approval of an Environmental Impact Statement (EIS), the Secretary of the Interior issued the Service a permit under the MBTA in September 2013 to take up to 3,600 Barred Owls.<sup>32</sup> The Service later reduced the take to 1,600 Barred Owls due to funding issues limiting resources for the experiment.<sup>33</sup>

# D. Case Background

In 2014, Friends of Animals ("Friends") filed suit in federal district court in Oregon, alleging that the Service's permit violated the MBTA by allowing the take of Barred Owls for the protection of Northern Spotted Owls.<sup>34</sup> The court granted summary judgment for the Service after finding the permit was valid under the MBTA.<sup>35</sup> Friends appealed, claiming that the MBTA exclusively allows scientific take of a species for the scientific use of that "same species," which would prevent taking one species of owl for the benefit of another.<sup>36</sup>

The Ninth Circuit sided with the Service.<sup>37</sup> This decision clarified that birds can be used for scientific purposes under the scientific use exception without aiding the conservation of that same species, or any species, so long as there is a scientific purpose.<sup>38</sup> In doing so, the court recognized the Service's history of allowing take of Barn Owls for scientific research on human hearing and hummingbirds for scientific research on aerodynamics as "use[s] for scientific purposes."<sup>39</sup>

The court concluded that the plain language of the MBTA and the Service's regulations did not support the "same-species theory."<sup>40</sup> The court here recognized the Secretary of the Interior's longstanding broad discretion to enforce the MBTA and acknowledged the Service's authority to issue a permit for Barred Owl take not limited by this "same-species" restriction.<sup>41</sup> The court also rejected the slippery slope argument, noting that a legitimate scientific use must exist in order to permit take.<sup>42</sup> These permitted takes must still follow the MBTA guidelines to ensure no threat of extinction.<sup>43</sup>

39. Id. at 1005.

<sup>31.</sup> Id. at II-4.

<sup>32.</sup> Friends of Animals v. U.S. Fish & Wildlife Serv., 879 F.3d 1000, 1002 (9th Cir. 2018).

<sup>33.</sup> *Id.*; Friends of Animals v. U.S. Fish & Wildlife Serv., No. 6:14-cv-01449-AA, 2015 U.S. Dist. LEXIS 93734, 7–8 (D. Or. July 16, 2015), *aff'd*, 879 F.3d 1000 (9th Cir. 2018).

<sup>34.</sup> Friends of Animals v. U.S. Fish & Wildlife Serv., No. 6:14-cv-01449-AA, 2015 U.S. Dist. LEXIS 93734, at \*8 (D. Or. July 16, 2015), *aff*<sup>\*</sup>d, 879 F.3d 1000 (9th Cir. 2018).

<sup>35.</sup> Friends of Animals, 879 F.3d at 1003.

<sup>36.</sup> Id. at 1010.

<sup>37.</sup> Id.

<sup>38.</sup> Id. at 1007-10.

<sup>40.</sup> Id. at 1007-10.

<sup>41.</sup> Hannah Polakowski, *Recent Developments in Environmental Law No Harm, No Owl*, 31 TUL. ENVTL. L.J. 373, 392 (2018).

<sup>42.</sup> Id. at 1008–10.

<sup>43.</sup> Id. at 1009.

### II. ANALYSIS

The Ninth Circuit correctly interpreted the MBTA and followed congressional intent by upholding the Service's discretion to act to protect a threatened species from greater decline.<sup>44</sup> Going forward, careful considerations to prevent abuse will be needed when using drastic measures to save one species that impact another protected species. This is especially important because Earth is experiencing the sixth mass extinction, and the Service will need to pursue new strategies to adhere to the MBTA's goal of preventing species from going extinct.<sup>45</sup> Policy makers, like the Service, need to be able to respond to threats with scientifically sound strategies.

This decision furthers congressional intent. Congress enacted the MBTA to ensure that migratory birds "may not be exterminated" and to give the Service broad discretion to use the best scientific practices to achieve this goal.<sup>46</sup> This decision allows the Service, which is responsible for protecting migratory birds, to ensure the long term survival of a species, even if it is accomplished by removing a more numerous species protected by the MBTA.<sup>47</sup> The MBTA ensures "the long-term conservation of shared species" and aims to "restore depleted populations of migratory birds," though a species population need not be in decline to be protected.<sup>48</sup> The Service's experimental removal of Barred Owls meets these mandates and seeks to ensure the continued existence of the Northern Spotted Owl.<sup>49</sup> The Northern Spotted Owl's status as a threatened species necessitates actions to protect the species from further decline.<sup>50</sup> Despite current habitat protection, their numbers continue to decline, indicating the need for further action.<sup>51</sup>

The ESA and the MBTA do not address invasive species. This is a major oversight because many native species are threatened by invasive species, and agencies are given little statutory direction.<sup>52</sup> Nearly half of all species protected by the ESA are threatened by "competition or predation from non-native species," though this threat is not directly addressed in the statute.<sup>53</sup> Removal of protected invasive species is an option that needs to be explored to allow

<sup>44.</sup> Polakowski, *supra* note 41, at 392.

<sup>45.</sup> See Gerardo Ceballos et al., Biological Annihilation via the Ongoing Sixth Mass Extinction Signaled by Vertebrate Population Losses and Declines, 114 PROC. NAT'LL ACAD. OF SCI. E6089, E6090 (2017).

<sup>46.</sup> Friends of Animals v. U.S. Fish & Wildlife Serv., 879 F.3d 1000, 1006 (9th Cir. 2018).

<sup>47.</sup> Polakowski, *supra* note 41 at 392.

<sup>48.</sup> Response Brief for the Federal Appellees at 3-4, Friends of Animals v. U.S. Fish & Wildlife Serv., 879 F.3d 1000 (9th Cir. 2018) (No. 15-35639).

<sup>49.</sup> See Polakowski, supra note 41, at 392.

<sup>50.</sup> Friends of Animals, 879 F.3d at 1002.

<sup>51.</sup> *Id.* 

<sup>52.</sup> See generally, Endangered Species Act of 1973, 16 U.S.C. §1531; Migratory Bird Treaty Act, 16 U.S.C. §§ 703–712 (2018); J. Michael Scott et al., *Recovery of Imperiled Species Under the Endangered Species Act The Need for a New Approach*, 3(7) FRONT. ECOL. ENVIRON. 383, 383 (2005).

<sup>53.</sup> Beth Baker, National Management Plan Maps Strategy for Controlling Invasive Species, 51(2) BIOSCIENCE 92, 92 (2001).

declining species to survive and to adapt to the modern threats facing these species.<sup>54</sup>

By interpreting the MBTA to allow take of protected species, the court is enabling the statute to evolve to meet the needs of species protected under the ESA and the MBTA.<sup>55</sup> To achieve the goals of both statutes, the Service needs to be able to use scientific responses to protect species facing depleted populations, despite having to take a protected invasive species.<sup>56</sup>

Removing predatory and competitive species, such as Barred Owls, is a known, cost-effective way to increase the populations of threatened species when other methods are inadequate.<sup>57</sup> One study found that after predator removal, threatened species experience "increased post-breeding populations" and a seventy-nine percent increase in the average success rate of raising chicks.<sup>58</sup> This confirms that when "appropriately applied, the positive impacts from predator management are usually incontrovertible."<sup>59</sup> The Service found strong and persuasive evidence that the presence of Barred Owls is one of the largest factors in the Northern Spotted Owl's continued decline.<sup>60</sup> Exploring the possibility of large-scale predator removal for the long-term survival of an endangered species meets the goals of both the ESA and the MBTA.<sup>61</sup>

The Service's strategy for dealing with the Northern Spotted Owl illustrates a thorough and inclusive decision to save a threatened species. This careful consideration alleviates Friends' fear that a "slippery slope" would allow take wherever a scientific purpose existed.<sup>62</sup> The actions the Service took indicate that it carefully considered the decision to take Barred Owls, hopefully indicating there will be no abuse of discretion in the future. In addition to the EIS mandated by the National Environmental Policy Act (NEPA), the Service also convened the Barred Owl Stakeholder Group (BOSG) to "incorporate ethics into [its] decision making process."<sup>63</sup> This group was composed of representatives of over forty stakeholders, including government agencies, Native Nations, environmental nonprofits, and animal rehabilitators.<sup>64</sup> Together they convened to create an ethics brief, a new tool discussing the ethical implications of Barred

<sup>54.</sup> Id.

<sup>55.</sup> Scott, supra note 52, at 385.

<sup>56.</sup> Id.; see The Migratory Bird Treaty Act, Explained, supra note 6.

<sup>57.</sup> Engeman, *supra* note 1, at 172.

<sup>58.</sup> Rebecca K. Smith et al., *Effectiveness of Predator Removal for Enhancing Bird Populations*, 24(3) CONSERVATION BIOLOGY 820, 824-27 (2010).

<sup>59.</sup> Id. at 183.

<sup>60.</sup> Response Brief for the Federal Appellees at 11-12, Friends of Animals v. U.S. Fish & Wildlife Serv., 879 F.3d 1000 (9th Cir. 2018) (No. 15-35639).

<sup>61.</sup> Endangered Species Act of 1973, 16 U.S.C. §1531(3); see Migratory Bird Treaty Act, 16 U.S.C. §§ 703–712 (2018).

<sup>62.</sup> Friends of Animals v. U.S. Fish & Wildlife Serv., 879 F.3d 1000, 1008 (9th Cir. 2018).

<sup>63.</sup> William S. Lynn, *Bringing Ethics to Wild Lives Shaping Public Policy for Barred and Northern Spotted Owls*, 26(2) SOC'Y & ANIMALS 217, 220 (2018).

<sup>64.</sup> Id. at 224.

Owl removal.<sup>65</sup> Over the course of a six-month dialogue, the BOSG came to the conclusion that humans have an obligation to implement actions to ensure survival of Northern Spotted Owls.<sup>66</sup> The creation of this stakeholder group demonstrates the Service's commitment to make "informed decisions to [resolve] these hard cases" for "wicked problems" that have no clear solution.<sup>67</sup> Predatory birds, such as owls, are very rarely taken at this level, by either lethal or non-lethal methods.<sup>68</sup> This evaluation process should shape procedures going forward, to bring ethics into the conversation when managing invasive predators for the conservation of another species.

Governmental inaction could mean the extinction of the Northern Spotted Owl species.<sup>69</sup> While both the Northern Spotted Owl and Barred Owl have been impacted by anthropogenic actions, Northern Spotted Owls have suffered while Barred Owls have prospered.<sup>70</sup> If the Service did not take action, it could mean the extinction of an entire species due to unnatural human influence.<sup>71</sup> Allowing the Service to act by taking Barred Owls is a vital step toward fulfilling humanity's ethical obligation to protect the Northern Spotted Owl, after contributing to its decline.<sup>72</sup>

In managing invasive, protected species, the steps taken by the Service in the Northern Spotted Owl case should serve as the blueprint going forward. The creation of a stakeholder group to evaluate and articulate the ethical concerns of these scientifically calculated actions will be vital as more "wicked problems" emerge in the environmental field.<sup>73</sup> These issues get at a strong divergence of values and goals where there is no clear solution to a difficult problem.<sup>74</sup> The Service's actions in approaching Barred Owl removal for the benefit of Northern Spotted Owls can be a model for the conservation of future species. When making these decisions in the future, the Service must continue to use these mindful approaches to save species. In doing so, the Service will be carrying out the intention of the MBTA and the ESA to protect species from extinction.<sup>75</sup>

#### CONCLUSION

In Friends of Animals v. United States Fish & Wildlife Service, the Ninth Circuit provided the Service with the discretion it needed to implement the goal

68. Kent B. Livezey, Killing Barred Owls to Help Spotted Owls I A Global Perspective, 91(2) NW. NATURALIST 107, 107 (2010).

74. Id.

<sup>65.</sup> Id. at 220.

<sup>66.</sup> *Id.* at 229.

<sup>67.</sup> *Id.* at 234.

<sup>69.</sup> See U.S. Fish and Wildlife Service, supra note 19, at vi.

<sup>70.</sup> Id. at III-9.

<sup>71.</sup> Lynn, supra note 66 at 229.

<sup>72.</sup> Id. at 229.

<sup>73.</sup> Id. at 224.

<sup>75.</sup> Response Brief for the Federal Appellees at 3, Friends of Animals v. U.S. Fish & Wildlife Serv.,

<sup>879</sup> F.3d 1000 (9th Cir. 2018) (No. 15-35639).

of the MBTA to prevent the extinction of migratory birds. Going forward, scientists and policy makers must make difficult decisions to correct these anthropogenic imbalances. Expert agencies need the flexibility to adapt current conservation laws to meet their goals, as scientific knowledge expands and uncovers new threats previously unaddressed. To ensure these efforts continue in good faith, the Service and other agencies will need to continue integrating ethical and scientific knowledge to bring about the best possible solutions to the difficult work of balancing ecosystems and populations severely impacted by anthropogenic changes. The holding of *Friends of the Animals* will allow the Service to make the difficult decisions needed to save species with scientific methods that will be ethically informed to bring populations back to their original balance.

Jetta Cook

We welcome responses to this In Brief. If you are interested in submitting a response for our online journal, *Ecology Law Currents*, please contact cse.elq@law.berkeley.edu. Responses to articles may be viewed at our website, http://www.ecologylawquarterly.org.