

# DAMAGE CAUSED BY REINTRODUCED WILDLIFE: SHOULD THE GOVERNMENT BE HELD ACCOUNTABLE?

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*This student note examines the application of the Fifth Amendment's Takings Clause to government reintroduction of wildlife programs. The reintroduction of certain animals by the government to aid in wildlife conservation efforts has caused damage to private property owned by farmers and ranchers. These owners fear that the reintroduction programs will threaten their livelihood. The note discusses federal and state reintroduction programs, focusing on how the federal and state governments and the courts currently handle the problem of private property damage caused by reintroduced wildlife. The student author argues that the problems caused by reintroduced wildlife are best solved by treating private property damage caused by these animals as government takings.*

## I. INTRODUCTION

The Fifth Amendment states that private property shall not "be taken for public use, without just compensation."<sup>1</sup> The clause seems to convey a simple maxim of law; however, "[f]ew issues in American jurisprudence have proven to be as unsolvable as the scope of the Takings Clause."<sup>2</sup> Although courts have struggled with how to apply the Takings Clause,<sup>3</sup> the law was, until recently,<sup>4</sup> relatively well-established in the area of destruction of private property by protected wildlife.<sup>5</sup> A majority of courts addressing the problem have held that the government did not owe compensation in cases of damage caused by protected wildlife.<sup>6</sup> In *Christy v. Hodel*,<sup>7</sup> however, the Ninth Circuit recently raised an

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1. U.S. CONST. amend. V.

2. Donald W. Large, *The Supreme Court and the Takings Clause: The Search for a Better Rule*, 18 ENVTL. L. 3, 4 (1987).

3. *Id.* at 50-54.

4. *Christy v. Hodel*, 857 F.2d 1324, 1335 n.9 (9th Cir. 1988), *cert. denied*, 490 U.S. 1114 (1989). The Ninth Circuit raised the question, without answering it, of whether the Takings Clause applies if governmentally introduced wildlife subsequently has caused damage. *Id.* at 1335 n.9.

5. Brian B. O'Neill, *The Law of Wolves*, 18 ENVTL. L. 227, 231-32 (1988).

6. *See, e.g.,* *Mountain States Legal Found. v. Hodel*, 799 F.2d 1423, 1429 (10th Cir. 1986) (holding that damage to private land by wild horses and burros protected by Wild Free-Roaming Horses and Burros Act did not constitute a taking entitling private owners to compensation from the federal government); *Sickman v. United States*, 184 F.2d 616 (7th Cir. 1950) (holding that the federal government cannot be held responsible for crop damage caused by wild geese, protected under the Migratory Bird Treaty Act, that have not been reduced to ownership, control, or possession by the government, *cert. denied*, 341 U.S. 939 (1951)); *Bishop v. United States*, 126 F. Supp. 449, 452-53 (Ct. Cl. 1954) (holding that the mere fact that property was damaged as result of the Migratory Bird Treaty Act, which denied permission to hunt wild geese, was insufficient to be a taking), *cert. denied*,

important issue that may change the way courts apply the Takings Clause in some situations.<sup>8</sup> The court stated that the government "may be held responsible for damage caused by . . . wild animals that have been relocated by the government, under a theory that such animals are instrumentalities of the government."<sup>9</sup> This note analyzes how governmental agencies currently handle situations that involve damage caused by reintroduced wildlife and how the application of the Takings Clause to the problem provides a more consistent and logical solution.

The second part of this note discusses both the application of the Takings Clause to personal property and the scope of the wildlife takings problem.<sup>10</sup> Part II begins with a general discussion of the Takings Clause as applied to personal property.<sup>11</sup> Part II then analyzes the reintroduction of red wolves into North Carolina and the proposed reintroduction of gray wolves into Yellowstone National Park.<sup>12</sup> Finally, Part II briefly discusses various other federal and state reintroduction programs.<sup>13</sup> Part III focuses on how federal and state governments and the courts currently handle the problem of private property damage

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349 U.S. 955 (1955). Several state courts have also rejected claims for damage to property by wildlife protected under state laws. *See, e.g.,* *Jordan v. State*, 681 P.2d 346 (Alaska Ct. App. 1984) (holding that a state regulation that prevented the killing of bears, even when the bear was eating a legally killed moose, did not result in a taking or an injury to hunter's property); *Leger v. Louisiana Dep't of Wildlife & Fisheries*, 306 So. 2d 391 (La. Ct. App. 1975) (holding that the state was not liable for damage caused by wild deer to farmer's sweet potato crop because the state owned the deer in its sovereign capacity and not in its proprietary capacity); *Barrett v. State*, 116 N.E. 99 (N.Y. 1917) (holding that in releasing beaver into area where they were formerly exterminated, the state was acting as trustee for the people and in their best interest and therefore may not be held liable for any damage caused by the animals); *see also* *Platt v. Philbrick*, 47 P.2d 302 (Cal. Ct. App. 1935) (holding that a private property owner whose property was within a newly created game refuge must, in the interest of public welfare, bear any damage caused by the game); *Collopy v. Wildlife Comm'n, Dep't of Natural Resources*, 625 P.2d 994 (Colo. 1981) (holding that a regulation that created a region in which goose hunting was prohibited did not amount to a taking even though the area encompassed a private farm that suffered crop loss due to foraging geese); *Maitland v. People*, 23 P.2d 116 (Colo. 1933) (holding that the creation of game refuge encompassing private land and thereby prohibited the killing of wildlife on the private property within refuge borders was not an unconstitutional taking that required compensation); *Cooke v. State*, 74 P.2d 199 (Wash. 1937) (holding that damage caused by beaver and muskrat to a private skating rink located in wildlife refuge does not amount to taking because the owner would have been justified in removing the animals before they caused damage). *But see* *Shellnut v. Arkansas State Game & Fish Comm'n*, 258 S.W.2d 570 (Ark. 1953) (holding that a taking resulted when a game refuge was created that deprived private property owners within the refuge of the ability to hunt animals that caused crop damage); *State v. Herwig*, 117 N.W.2d 335 (Wis. 1962) (holding that a regulation prohibiting hunting on private land that was attractive to waterfowl, during open season on waterfowl, was an invalid taking of private property without compensation).

7. 857 F.2d 1324 (9th Cir. 1988), *cert. denied*, 490 U.S. 1114 (1989).

8. 857 F.2d at 1335 n.9. The court suggested that situations in which the federal government actually exerted control over wildlife by capturing and releasing them into an area where they had not been present may present a stronger takings argument than situations in which a federal regulation protected already present wildlife. *Id.*

9. *Id.*

10. *See infra* notes 17-126 and accompanying text.

11. *See infra* notes 17-43 and accompanying text.

12. *See infra* notes 44-111 and accompanying text.

13. *See infra* notes 112-26 and accompanying text.

caused by reintroduced or protected wildlife.<sup>14</sup> Part III also analyzes the effect of applying the Takings Clause to situations in which reintroduced wildlife causes damage to private property.<sup>15</sup> Next, Part IV suggests factors that should be present in order for wildlife damage to be considered a governmental taking.<sup>16</sup> Finally, Part V concludes that the problems caused by reintroduced wildlife are best solved by treating private property damage caused by the reintroduced wildlife as a governmental taking.

## II. WILDLIFE REINTRODUCTION AND THE TAKINGS PROBLEM

### A. *The Takings Clause as Applied to Private Property*

The Takings Clause of the Fifth Amendment to the Constitution states that "private property [shall not] be taken for public use, without just compensation."<sup>17</sup> The Takings Clause is fairly easily applied when the government takes private property formally through its powers of eminent domain.<sup>18</sup> The Takings Clause presents a problem, however, when the government does not actually exercise its powers of eminent domain, but instead takes physical action that has the effect of a taking.<sup>19</sup> Although the Supreme Court has held that a taking may occur without a formal exercise of the government's eminent domain power, the Court has not formulated a single, consistent theory to determine when these situations exist.<sup>20</sup> The Supreme Court has instead developed several theories that concentrate on a variety of factors to determine when a taking occurs.<sup>21</sup>

The five most common Takings Clause tests are: balancing,<sup>22</sup> benefit versus detriment,<sup>23</sup> investment-backed expectancy,<sup>24</sup> diminution-in-

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14. See *infra* notes 127-204 and accompanying text.

15. See *infra* notes 205-61 and accompanying text.

16. See *infra* notes 262-318 and accompanying text.

17. U.S. CONST. amend. V. Takings cases are not limited to federal actions because many states have similar clauses in their own state constitutions. See ROGER BERNHARDT, *REAL PROPERTY* 411 (2d ed. 1981).

18. JESSE DUKEMINIER & JAMES E. KRIER, *PROPERTY* 987 (2d ed. 1988).

19. Andrea L. Peterson, *The Takings Clause: In Search of Underlying Principles* (pt. I), 77 CAL. L. REV. 1299, 1301 (1989).

20. *Loretto v. Teleprompter Manhattan CATV Corp.*, 458 U.S. 419, 426 (1982). But see Natasha Zalkin, *Shifting Sands and Shifting Doctrines: The Supreme Court's Changing Takings Doctrine and South Carolina's Coastal Zone Statute*, 79 CAL. L. REV. 205 (1991) (providing a structural overview of the Supreme Court's reasoning process).

21. BERNHARDT, *supra* note 17, at 412.

22. The balancing test weighs the public's interest in the government action against the private loss suffered as a result of the action to determine whether a taking arises. *Large, supra* note 2, at 24-25; see also *Miller v. Schoene*, 276 U.S. 272 (1928); *Barrett v. State*, 116 N.E. 99 (N.Y. 1917).

23. Under the benefit versus detriment test, a taking exists if, in securing a benefit to the public, the government action causes harm to a private property, and the primary emphasis of the action was not to prohibit the private property owner from causing a detriment to the public. *Large, supra* note 2, at 29; see also *Goldblatt v. Town of Hempstead*, 369 U.S. 590 (1962); *Just v. Marinette*, 201 N.W.2d 761 (Wis. 1972).

24. Under the investment-backed expectancy test, a taking exists when the government action interferes with a private property owner's reasonable investment-backed expectation. Peterson,

value,<sup>25</sup> and physical invasion.<sup>26</sup> Each of the tests is primarily oriented towards solving the problem of the taking of real property.<sup>27</sup> A wildlife takings case, however, predominantly involves personal property, such as livestock and crops,<sup>28</sup> instead of real property.<sup>29</sup> Because a direct taking of personal property occurs, the test to demonstrate a governmental taking hinges on proving that the government exerted control over the wildlife that caused the damage, and not on showing an erosion of economic rights.<sup>30</sup>

Most taking theories are based on a measure or balancing of the economic effect of the governmental action on the property owner versus the social utility or benefit to the public that results from the action.<sup>31</sup> In applying the theories to wildlife takings cases, the tremendous social value placed on the preservation and reintroduction of wildlife outweighs the damage caused to a few individual landowners in almost every situation.<sup>32</sup> As a result of the problems with proving a wildlife taking under the economically based tests, private property owners are best able to demonstrate a taking under the physical invasion test.<sup>33</sup>

The physical invasion test was most recently applied by the Supreme Court in *Loretto v. Teleprompter Manhattan CATV Corp.*<sup>34</sup> The case involved a New York law requiring landlords to permit cable television companies to install cable facilities on their property.<sup>35</sup> Justice Marshall, writing for the majority, stated that courts have uniformly found a taking where the character of the government action is a permanent physical occupation of the property.<sup>36</sup> Moreover, he stated that, in a physical taking, the test of whether the government action achieves an important public benefit or has only minimal economic impact on the property

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*supra* note 19, at 1320. See, e.g., *Kaiser Aetna v. United States*, 444 U.S. 164 (1979); *Penn Central Transp. Co. v. New York City*, 438 U.S. 104 (1978).

25. Under the diminution in value test, a taking arises when the governmental action causes damage sufficient to amount to an impairment of property value. Large, *supra* note 2, at 11. See, e.g., *Pennsylvania Coal Co. v. Mahon*, 260 U.S. 393 (1922).

26. Under the physical invasion test, a taking exists where the government action amounts to a permanent physical occupation of the private property owner's land. Peterson, *supra* note 19, at 1333. See, e.g., *Loretto v. Teleprompter Manhattan CATV Corp.*, 458 U.S. 419 (1982).

27. BERNHARDT, *supra* note 17, at 411-19.

28. Both crops and timber may be considered fixtures of real property when they are growing on the land, but, once the wildlife severs the vegetation, it is considered personal property. D. BARLOW BURKE JR., *PERSONAL PROPERTY* 37-38 (1983).

29. See *infra* note 125 and accompanying text.

30. This note will concentrate on demonstrating that the government's reintroduction programs give the government sufficient control over the wildlife in those programs to constitute a direct taking, rather than proving that the regulations themselves amount to a taking. See Christy v. Hodel, 857 F.2d 1324 (9th Cir. 1988) (holding that regulations under the Endangered Species Act that prevent any harassing or killing of grizzly bears do not amount to a taking under Fifth Amendment), *cert. denied*, 490 U.S. 1114 (1989).

31. See *supra* notes 22-25 and accompanying text.

32. See *infra* notes 282-315 and accompanying text.

33. See *infra* notes 34-43 and accompanying text.

34. 458 U.S. 419 (1982).

35. *Id.* at 421.

36. *Id.* at 434.

owner is irrelevant to the analysis.<sup>37</sup>

Although the action in *Loretto* involved a permanent occupation, intrusions do not necessarily have to be permanent to be considered a physical taking.<sup>38</sup> In *United States v. Causby*, the Supreme Court held that frequent flights immediately above a landowner's property constituted a partial taking because the intrusion was so immediate and direct that they subtracted from the owner's full enjoyment of the property.<sup>39</sup> Similarly, the release of wildlife by government funded reintroduction programs can result in dead livestock,<sup>40</sup> damaged crops,<sup>41</sup> reduced forage,<sup>42</sup> and destruction of property<sup>43</sup> for some private property owners—all actions that can subtract from the landowner's full enjoyment of his property.

### B. Scope of the Wildlife Takings Problem

The reintroduction of wildlife may seem like a recent phenomenon; wildlife reintroduction, however, is almost as old as wildlife protection laws.<sup>44</sup> The earliest programs were state-funded and involved both the introduction of foreign species<sup>45</sup> and the reintroduction of native animals.<sup>46</sup> Success stories exist for both types of programs.<sup>47</sup> The eastern Asian ring-necked pheasant quickly adapted to the central plains and became a great addition to the native upland game birds of America.<sup>48</sup> Other success stories include the propagation of the native wild turkey and of various types of fish such as trout and salmon.<sup>49</sup> As early as 1904,

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37. *Id.* at 434-35.

38. See *United States v. Causby*, 328 U.S. 256 (1946).

39. *Id.* at 264-65.

40. See generally *Christy v. Hodel*, 857 F.2d 1324 (9th Cir. 1988) (discussing the killing of sheep by federally protected grizzly bears), *cert. denied*, 490 U.S. 1114 (1989).

41. See generally *Leger v. Louisiana Dep't of Wildlife & Fisheries*, 306 So. 2d 391 (La. Ct. App. 1975) (discussing damage to sweet potato crop by protected deer), *writ of review denied*, 310 So. 2d 640 (La. 1975).

42. See generally *Mountain States Legal Found. v. Hodel*, 799 F.2d 1423 (10th Cir. 1986) (discussing damage caused by protected, introduced horses and burros).

43. See generally *Platt v. Philbrick*, 47 P.2d 302 (Cal. Dist. Ct. App. 1935) (discussing damage to a skating rink by protected beaver and muskrat).

44. The first wildlife protection laws came during the late nineteenth century as state legislatures chartered administrative agencies to deal with game depletion. Keith Saxe, *Regulated Taking of Threatened Species Under The Endangered Species Act*, 39 HASTINGS L.J. 399, 402 (1988).

45. George C. Coggins & Michael E. Ward, *The Law of Wildlife Management on The Federal Public Lands*, 60 OR. L. REV. 59, 63 (1981). Foreign species include any nonnative or "exotic" species. Many of the foreign species that were either intentionally or unintentionally introduced into the United States are now considered pests, for example, starlings, rats, carp, and walking catfish. *Id.*

46. RAYMOND F. DASMANN, *ENVIRONMENTAL CONSERVATION* 217 (4th ed. 1976) (explaining that quail, cottontails, and whitetail deer were common native animals that were produced on game farms and then released into the wild).

47. *Id.*

48. *Id.* The ring necked pheasant adapted better than native upland game birds to the reduced coverage on agricultural lands. In addition to the pheasant, Hungarian partridge and chukar are other foreign upland game birds that have established themselves as permanent additions to the wildlife of America. *Id.*

49. Coggins & Ward, *supra* note 45, at 64.

the State of New York funded a project to reintroduce beaver to the state.<sup>50</sup> The New York project came just four years after Congress passed its first major wildlife act, the Lacey Act,<sup>51</sup> which imposed federal sanctions on the interstate transportation of wildlife taken in violation of either federal or state game laws.<sup>52</sup>

Although some of the early programs were successful,<sup>53</sup> most of the programs proved short-lived.<sup>54</sup> Not until the 1930s and the involvement of the federal government did reintroduction programs really begin to amount to more than trial-and-error programs.<sup>55</sup> Through the Wildlife Restoration Act,<sup>56</sup> the Fish Restoration Act,<sup>57</sup> and the Fish and Wildlife Conservation Act of 1980 (1980 Act),<sup>58</sup> the federal government enabled the funding of reintroduction programs.<sup>59</sup> The Wildlife Restoration Act enabled federal and state agencies to restore wildlife and maintain habitat crucial for species survival.<sup>60</sup> The Fish Restoration Act and the 1980

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50. *Barrett v. State*, 116 N.E. 99, 100 (N.Y. 1917). Beavers were originally so plentiful and of such commercial importance that they were represented upon the seal of New York. *Id.* Trappers seeking the value of their fur, however, nearly exterminated the beaver in the state by 1900. *Id.* With only fifteen animals left in the state (all living in Franklin county in the Adirondacks), the state legislature closed the beaver trapping season in 1900 and in 1904 provided protective laws for both the beaver and its places of abode. *Id.* The 1904 Act also appropriated \$500 (later in 1906 \$1,000 more was appropriated) for the purchase of wild beavers to restock the Adirondacks. As a result, twenty-one beavers were purchased and released in the Adirondacks. *Id.*

51. Lacey Act, ch. 553, § 1, 31 Stat. 187 (1900) (current version at 16 U.S.C. § 701, 18 U.S.C. § 42 (1988)).

52. 16 U.S.C. § 3372(a) (1988).

53. Some of the early introduction programs were so successful that they have caused population problems in years after their implementation. California has authorized the trapping and killing of nonnative red foxes whose overabundant population is preying on endangered species such as the California Clapper Rail and the California Least Tern. *Programs Help Control Animal Population, THE WATERFRONT* (Missaukee County, Mich.), Jan. 28, 1992, at 22. In Louisiana, over 4 million acres of prime wetlands is slowly being destroyed by an introduced rodent called the nutria. *Id.* In both cases, the animals were introduced in the early 20th century for sporting and commercial interests. WILLIAM H. BURT, *A FIELD GUIDE TO THE MAMMALS*, 72-73, 200-01 (1976).

54. *Coggins & Ward, supra* note 45, at 64.

55. *Id.*

56. 16 U.S.C. § 669 (1988). Congress enacted the Federal Aid in Wildlife Restoration Act, more commonly known as the Pittman-Robertson Act, in 1937. The funds for the Act are supplied through a federal excise tax on pistols, revolvers, bows and arrows. Half of the money in the fund is kept by the federal government to fund federal wildlife restoration projects; the other half is given to the states, distributed on a population basis, for wildlife restoration projects. MICHAEL J. BEAN, *ENVIRONMENTAL DEFENSE FUND, THE EVOLUTION OF NATIONAL WILDLIFE LAW* 217-25 (1983).

57. 16 U.S.C. § 777 (1988). Congress enacted the Federal Aid in Fish Restoration Act, more commonly known as the Dingell-Johnson Act, in 1950. The Act very closely mirrors the Wildlife Restoration Act but is different in several aspects. A federal excise tax on fishing equipment supplies the funds for the Act. States receive money from the Act based on geographical area and the number of licensed fishermen in the state. The funds are also limited to money spent on "fish which have material value in connection with sport or recreation." BEAN, *supra* note 56, at 225-27.

58. 16 U.S.C. §§ 2901-12 (1988). Congress enacted the Fish and Wildlife Conservation Act of 1980, more commonly known as the "Non-game Act," for two primary purposes. First, the Act provides for funding for federal and state wildlife management programs for non-game species, i.e., species that are not funded by hunting fees. Second, the Act allows states to obtain funds only if they have a comprehensive conservation plan on file before 1991. BEAN, *supra* note 56, at 227-30.

59. BEAN, *supra* note 56, at 217-30.

60. *Id.* at 217-25. Traditionally, most of the money spent from this Act has been spent for the

Act provided funds for fish restoration and management and nongame fish and wildlife restoration, respectively.<sup>61</sup> The nongame provision of the 1980 Act was crucial because most state conservation and reintroduction programs focused primarily on the propagation and survival of game species.<sup>62</sup> The money provided by the 1980 Act enabled both federal and state governments to fund often-neglected nongame species reintroduction programs.<sup>63</sup> Currently, both federal and state governments are active in funding programs to reintroduce wildlife.<sup>64</sup>

### 1. *The Red Wolf Experiment*

According to a recent unpublished survey by the United States Fish and Wildlife Service, over 500 wildlife reintroduction episodes occur in North America each year.<sup>65</sup> Currently, active or planned programs exist for the reintroduction of some of the over 495 threatened or endangered species.<sup>66</sup> Although most of the programs simply augment already-existing populations,<sup>67</sup> many of the programs involve the reintroduction of wildlife that has been absent from an area for a number of years and whose presence creates the possibility of private property damage.<sup>68</sup> The problem of private property damage includes a wide range of problems, such as the destruction of range land due to prairie dogs creating holes,<sup>69</sup> the overgrazing of orchards by deer,<sup>70</sup> and the destruction of fences by elk and moose,<sup>71</sup> to name a few of the possible scenarios. Programs that

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restoration of game animals, although the Act provides for the financing of any wild bird or animal. *Id.* at 219-20.

61. *Id.* at 225-30.

62. *Id.* at 227-28. The two main reasons why states primarily spend money on game animals are that most states fund their conservation programs primarily from hunting fees, and that states can increase their own revenues, through hunting fees, by improving the attractiveness of hunting in their own state. *Id.*

63. *Id.*

64. See, e.g., William Booth, *Reintroducing a Political Animal*, 241 SCI. 156 (1988) (noting that currently over 500 wildlife reintroduction episodes occur in North America each year); Coggins & Ward, *supra* note 45, at 72 n.63 (explaining that under the Fish and Wildlife Conservation Act of 1980, 16 U.S.C. §§ 2901-12 (1988), states receive a reimbursement for the costs of developing and implementing programs that conserve nongame fish and wildlife).

65. Booth, *supra* note 64, at 156.

66. *Id.*

67. *Id.*

68. *Northern Rocky Mountain Gray Wolf Restoration Act of 1990: Hearings on S. 2674 Before the Subcomm. on Public Lands, Nat'l Parks and Forests*, 101st Cong., 2d Sess. 149-50 (1990) [hereinafter *Hearings*] (statement of Thomas Geary, President, Idaho Farm Bureau Federation).

69. John Husar, *Mmmm, Good! A Pesky Rodent Turns Out to be Doggone Tasty*, CHI. TRIB., Oct. 2, 1991, § 4, at 1. Although prairie dogs have not been extensively reintroduced to range land, the black-footed ferret, which feeds primarily on the prairie dogs, is protected. 50 C.F.R. § 17.84(g) (1991). As a result of the reintroduction of the ferret, prairie dog towns in the release areas have also been protected, leading to the possible degradation of range land for cattle. Husar, *supra*, at C1.

70. Hunters nearly decimated the whitetail deer in the Eastern United States by the early 20th century. Michael Kenna, *White-tailed Deer*, NAT'L GEOGRAPHIC, Feb. 1992, at 66, 71. Through reintroduction efforts and stricter hunting laws, the deer have come back so successfully that they now threaten commercial crops and timberlands. *Id.*

71. The potential damage that elk and moose can inflict on surrounding farmland is one of the main reasons that the State of Wisconsin has not implemented a reintroduction program for the

reintroduce predatory animals<sup>72</sup> are particularly problematic, as many predators will kill livestock as a source of food.<sup>73</sup>

The first program to return large predators back to their native habitat reintroduced red wolves into North Carolina.<sup>74</sup> The red wolf was originally native to the southeastern United States.<sup>75</sup> The wolf's range<sup>76</sup> stretched from the Atlantic Ocean to eastern Texas, and as far north as central Missouri and southern Illinois.<sup>77</sup> Loss of habitat and predator control efforts, however, caused the wolf to become extinct throughout much of its range.<sup>78</sup> By the 1960s, land development and other human activities<sup>79</sup> in the red wolf's habitat restricted the wolves to extreme southeastern Texas and southwestern Louisiana.<sup>80</sup> Finally, in 1972 the Fish and Wildlife Service (FWS) adopted a recovery plan for the red wolf that included the reintroduction of the wolves into parts of their former range.<sup>81</sup>

FWS chose the remote Alligator River National Wildlife Refuge in Dare and Tyrrell Counties, North Carolina, for the 1987 reintroduction of red wolves.<sup>82</sup> FWS selected the site because of its geographical isolation and limited chance of predator-livestock encounters.<sup>83</sup> Further-

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animals. *State Doesn't Want Elk, Moose, Caribou*, UPI, Aug. 14, 1990, available in LEXIS, Nexis Library, UPI File.

72. A predatory animal is any animal that feeds upon other animals. WEBSTER'S NINTH NEW COLLEGIATE DICTIONARY 926 (1984). Examples of reintroduced predatory animals include large predators such as wolves and smaller predators such as martens. See *Hearings*, *supra* note 68, at 150; MICHIGAN DEP'T OF NATURAL RESOURCES, WILDLIFE DIV., 1991-92 MICHIGAN HUNTING AND TRAPPING GUIDE 21 (1991).

73. For an analysis of what circumstances favor wildlife predation, see generally Roger D. Nass et al., *Circumstances Associated with Predation Rates on Sheep and Goats*, 37 J. RANGE MGMT. 423 (1984).

74. Jeffrey P. Cohn, *Red Wolf in the Wilderness*, 37 BIOSCIENCE 313 (1987).

75. See *Endangered and Threatened Wildlife and Plants*, 51 Fed. Reg. 41,790 (Dep't Interior 1986) [hereinafter *Red Wolf Reg.*] (determination of experimental population status for an introduced population of red wolves in North Carolina).

76. The range of an animal indicates the geographical area in which the animal naturally occurs. BURT, *supra* note 53, at xv.

77. *Red Wolf Reg.*, *supra* note 75, at 41,791.

78. *Id.* The red wolf's preferred habitat is that of pristine riverine bottomlands and connecting "canebrakes," or wetlands, that are also the primary habitat of the small mammals on which the wolves prey. *Id.*

79. The primary activities responsible for the destruction of the red wolf's habitat were projects that drained much of the canebrakes for agricultural use and dams that flooded the riverine valleys. *Id.*

80. Cohn, *supra* note 74, at 314.

81. *Id.* Originally, the FWS had planned to introduce the captive-born red wolves into the 170,000 acre Land-Between-the-Lakes recreational tract that lies between lakes formed by dams on the Tennessee and Cumberland rivers. Opposition from farmers, who were afraid of livestock raids, and conservationists, who argued that there were too many hunters in the area, caused the FWS to drop the proposal. *Id.* at 315.

82. 50 C.F.R. § 17.84 (1991). In 1976 and 1978, the FWS released red wolves onto a 4,000 acre compound on Bull's Island, South Carolina, in order for scientists to determine whether an eventual permanent release into the wild would be successful. *Red Wolf Reg.*, *supra* note 75, at 41,791.

83. *Endangered and Threatened Wildlife and Plants*, 56 Fed. Reg. 56,325 (Dep't Interior 1991) [hereinafter *Tennessee Red Wolf Reg.*] (codified at 50 C.F.R. § 17 (1991)) (determination of experimental population status for an introduced population of red wolves in North Carolina and Tennes-

more, an adjacent 47,000 acre U.S. Air Force bombing range served as a buffer zone between the wolves' refuge and surrounding populated areas.<sup>84</sup> Other factors that the FWS took into consideration to ensure minimum livestock predation included the relative abundance of natural prey,<sup>85</sup> the initial release of only four pairs of wolves,<sup>86</sup> and the promise to capture and return any wolf that strayed from the range.<sup>87</sup>

The steps that the FWS took to avoid the problem of livestock loss appear to be working.<sup>88</sup> As of 1989, no livestock losses from wolf predation were reported.<sup>89</sup> The FWS policies, however, have simply postponed an almost certain event—the taking of livestock by a federally introduced predator.<sup>90</sup> Not only is the present population of wolves in the North Carolina refuge expected to quadruple,<sup>91</sup> thus increasing space and food demands, but FWS plans to implement other reintroduction programs for wolves in the southeast.<sup>92</sup> Even though the red wolf program will likely present a governmental takings problem, the problem is even more likely to occur more than 2,000 miles away, in the rich ranching country of western Wyoming with the gray wolf, the red wolf's larger cousin, as the culprit.<sup>93</sup>

## 2. Yellowstone's Gray Wolves

Although the gray wolf is closely related to the red wolf, important differences exist between the two animals that make the gray wolf a more likely candidate to cause livestock deaths.<sup>94</sup> First, the gray wolf can grow to nearly twice the size of the red wolf, and is capable of stalking a wider range of prey.<sup>95</sup> Second, the gray wolf has already proven its live-

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see). The area surrounding the release site has a low human population and virtually no livestock.  
*Id.*

84. Red Wolf Reg., *supra* note 75, at 41,791.

85. *Id.* at 41,791. The abundance of the red wolf's natural prey, small mammals such as rabbits and opossums, should minimize livestock predation by the wolves. *Id.*

86. Cohn, *supra* note 74, at 315. Initially, introducing only four wolves should reduce the chance of the wolves straying from the reserve because the refuge can sustain a red wolf population of 25 to 35 animals. Red Wolf Reg., *supra* note 75, at 41,792.

87. *Id.* at 41,794. Preventing the wolves from straying from the refuge reduces the chance that the wolves will come into contact with livestock in more agriculturally developed areas. *Id.*

88. 2 YELLOWSTONE NAT'L PARK ET AL., WOLVES FOR YELLOWSTONE? A REPORT TO THE UNITED STATES CONGRESS 1-40 (1990) [hereinafter GRAY WOLF REPORT].

89. *Id.*

90. Although wolves primarily prey on wild animals, domesticated animals also occasionally will be killed when the range of the wolves overlaps that of the domestic animal. See BURT, *supra* note 53, at 70-72; see also Nass et al., *supra* note 73, at 423 (explaining ranching practices that tend to encourage predation).

91. Cohn, *supra* note 74, at 316.

92. In 1991, FWS released red wolves into the Great Smoky Mountains National Park in hopes of expanding the wolf's range. *Where Would They Be Without the Law?*, INT'L WILDLIFE, Apr.-May 1992, at 57; see also Tennessee Red Wolf Reg., *supra* note 83, at 56,330 (suggesting one of the reasons for red wolf reintroduction was to reduce the number of feral swine and overpopulations of deer that inhabit the park).

93. GRAY WOLF REPORT, *supra* note 88, at 1-50 to 1-56.

94. See *infra* notes 95-98 and accompanying text.

95. BURT, *supra* note 53, at 70, 72.

stock-killing ability in sparsely settled northern Minnesota, where the wolves account for the deaths of about one cow in every 2,000 and one sheep in every 1,000.<sup>96</sup> Finally, the Yellowstone area, the site selected by FWS for wolf reintroduction, is not as geographically isolated from ranching operations as is the red wolf refuge in North Carolina.<sup>97</sup> Therefore, the area is more susceptible to predator-livestock encounters.<sup>98</sup>

The plan calls for the reintroduction of ten breeding pairs of wolves into Yellowstone National Park as early as 1994.<sup>99</sup> In addition, the plan also regulates existing populations of wolves in central Idaho and northern Montana.<sup>100</sup> The FWS has made several important concessions to local ranchers in order to reduce the threat of livestock predation.<sup>101</sup> Under the plan, states will control how many wolves will be allowed in each area after the minimum of ten breeding pairs is met.<sup>102</sup> The killing of wolves observed in the act of depredating<sup>103</sup> or harassing<sup>104</sup> livestock on both private and public land will also be allowed.<sup>105</sup> The plan even calls for compensating ranchers for livestock depredation caused by the wolves.<sup>106</sup>

Concessions made by the FWS, particularly the compensation scheme for livestock depredation, seem to make the takings problem moot in this scenario.<sup>107</sup> A takings problem, however, still may exist

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96. Sharon Begley et al., *Return of the Wolf*, NEWSWEEK, Aug. 12, 1991, at 44, 48. A slightly higher figure for sheep, 12 per 10,000, was indicated in a different study. Sean Kelly, *Return of a Native: Wolves' Comeback Stirs Hope, Howls in West*, WASH. POST, Aug. 9, 1991, at A3.

97. GRAY WOLF REPORT, *supra* note 88, at 1-50 to 1-56.

98. *Id.*

99. REINTRODUCTION AND MANAGEMENT OF WOLVES IN YELLOWSTONE NATIONAL PARK AND THE CENTRAL IDAHO WILDERNESS AREA, A REPORT TO THE UNITED STATES CONGRESS BY THE WOLF MANAGEMENT COMMITTEE 5 (1991) [hereinafter WOLF MANAGEMENT REPORT]. The gray wolf reintroduction program passed the House in June of 1991 and is expected to pass the Senate with only slight opposition from the Western states. Begley et al., *supra* note 96, at 49. The Senate will vote on the program following the completion of the Interior Department's environmental impact statement on the reintroduction of the gray wolf to Yellowstone. *Wolves: A Step Closer To Going Home*, INT'L WILDLIFE, Mar.-Apr. 1992, at 30.

100. WOLF MANAGEMENT REPORT, *supra* note 99, at 4.

101. In both Montana and Wyoming, polls indicate that the majority of citizens favor the wolf reintroduction program. GRAY WOLF REPORT, *supra* note 88, at 1-24. Support for the program, however, is not universal, and among the groups that strongly oppose the program are ranchers, citizens from rural areas, and citizens from areas that border Yellowstone Park. *Id.* The poll results will undoubtedly pressure politicians from states that border Yellowstone to weigh their traditional support of the ranching industry against the opinion of the majority of the voters. *But see* James Coates, *Plan to Restore Wolf to Yellowstone Draws Howls of Betrayal*, CHI. TRIB., May 26, 1991, § 1, at 20 (environmentalists may fight the reintroduction because of the authority given to ranchers to shoot wolves outside the Yellowstone range).

102. WOLF MANAGEMENT REPORT, *supra* note 99, at 12. This could cause an actual decrease in the amount of wolves present in some areas because 40 to 50 wolves exist in Montana and 10 to 20 exist in Idaho. Coates, *supra* note 101, at 20.

103. FWS defines depredation as the "killing or serious maiming of domestic livestock by one or more wolves." WOLF MANAGEMENT REPORT, *supra* note 99, at 14-15.

104. FWS defines harassing as "an act which involves physically chasing, attempting to take, or in the act of taking livestock." *Id.*

105. *Id.*

106. *Id.* at 15.

107. Because the reintroduction plan for Yellowstone calls for the reimbursement to ranchers

because the compensation scheme is not automatically funded and heavily relies on congressionally appropriated funds.<sup>108</sup> In addition, Animal Damage Control (ADC),<sup>109</sup> which will administer the fund, has not yet specified the amount of compensation for a kill, or what criteria are needed to get the compensation.<sup>110</sup> Regardless of how the compensation scheme works in the gray wolf scenario, the question of whether livestock depredation by introduced predators is a government taking remains unanswered.<sup>111</sup>

### 3. Other Federal and State Programs

Wolf reintroduction is not the only current or proposed program that involves the federal government reintroducing a predator that has long been absent from an area.<sup>112</sup> In 1987, the FWS reintroduced sixty-three otters to San Nicolas Island, southwest of Los Angeles.<sup>113</sup> Gross annual losses sustained by the shellfishing industry due to the otter reintroduction plan have been estimated from \$106,000 to well over ten times that amount.<sup>114</sup> Other recent federal programs that could possibly involve livestock depredation or crop damage by reintroduced predators involve the Florida panther,<sup>115</sup> the Mexican wolf,<sup>116</sup> the California condor,<sup>117</sup> the peregrine falcon,<sup>118</sup> and the black-footed ferret.<sup>119</sup>

Not all reintroduction programs have a federal origin.<sup>120</sup> Michigan reintroduced elk to the Lower Peninsula in 1918 after a forty-year absence from the state.<sup>121</sup> Not only have the elk caused thousands of dollars of crop and timber damage on private property since their reintroduction, but the elk are also responsible for damage to physical

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for livestock taken by wolves, the rancher would be compensated for any loss, and a takings problem would not result. *Id.* at 15.

108. *Id.* at 19. Although the fund primarily relies on appropriated funds, it is also open to assessments on selected national park entrance fees and other sources. *Id.*

109. ADC researches and exerts operational control over depredating animals injurious to agriculture, horticulture, forestry, wild game animals, fur bearing animals, and birds, and for the protection of stock and other domestic animals through the suppression of animal diseases in predatory and other wild animals. 7 U.S.C. § 426 (1988).

110. WOLF MANAGEMENT REPORT, *supra* note 99, at 15.

111. See *infra* notes 228-45 and accompanying text.

112. Cohn, *supra* note 74, at 316.

113. Booth, *supra* note 64, at 156. The population on the island failed by 1992, however, and there are currently no plans to reintroduce the otters. *ABC World News Saturday* (ABC television broadcasts, Jan. 18, 1992) available in LEXIS, Nexis Library, BRCASST File. Not all of the otters that were placed on the island died. Many of the otters swam back to the indigenous colony off the coast of California. *Id.*

114. Booth, *supra* note 64, at 158.

115. *Everglades Losing Florida Panther*, INT'L WILDLIFE, Nov.-Dec. 1991, at 28.

116. Begley et al., *supra* note 96, at 50.

117. *California Condors, Saved in Captivity, Return to Wild*, INT'L WILDLIFE, Nov.-Dec. 1991, at 25.

118. Booth, *supra* note 64, at 156.

119. *Black-Footed Ferrets Return to the Wild*, INT'L WILDLIFE, Nov.-Dec. 1991, at 26.

120. DASMANN, *supra* note 46, at 216.

121. PUBLIC AFFAIRS OFFICE, MICHIGAN DEP'T OF NATURAL RESOURCES, FACT SHEET ON MICHIGAN ELK 1 (1986).

structures.<sup>122</sup> Michigan's recent reintroduction of moose to the Upper Peninsula likewise poses the same problems many have encountered with the elk.<sup>123</sup> Even introductions of common animals, such as upland game fowl for hunting purposes, create the possibility of crop damage to private property.<sup>124</sup> The extent and variety of reintroduction programs<sup>125</sup> highlight the probability that a governmental takings problem will arise and the potential problems that such takings may present in the absence of any other mandated remedy for property owners.<sup>126</sup>

### III. ANALYSIS: PRESENT STATUS OF THE TAKINGS PROBLEM

#### A. Current Answers to the Takings Problem

As the red wolf<sup>127</sup> and gray wolf<sup>128</sup> reintroduction programs demonstrate, both federal and state governments have tried to solve the problem of private property damage caused by governmentally reintroduced wildlife by providing a variety of ways for the private property owner to either protect his property or to be reimbursed for losses.<sup>129</sup> In some cases, private groups have also attempted to provide relief to damaged private property owners.<sup>130</sup> Unfortunately, attempts by both the government and private groups to solve the problem have led only to a variety of fragmentary solutions.<sup>131</sup>

#### 1. Endangered Versus Threatened Status

One difficulty many of the reintroduction programs face is that the reintroduced animals are classified either as "endangered species"<sup>132</sup> or "threatened species,"<sup>133</sup> and therefore are protected under the Endan-

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122. *Id.* at 1-2.

123. John Husar, *Woods and Waters*, CHI. TRIB., Mar. 8, 1992, § 3, at 12.

124. Coggins & Ward, *supra* note 45, at 105.

125. See, e.g., Barrett v. State, 116 N.E. 99, 102 (N.Y. 1917) (explaining that reintroduced beavers felled 198 poplar trees on private woodlot in a period of three years); PUBLIC AFFAIRS OFFICE, MICHIGAN DEP'T OF NATURAL RESOURCES, *supra* note 121, at 2 (explaining that reintroduced elk are responsible for thousands of dollars of crop and timber damage and may also be responsible for physical damage to livestock fences); Coggins & Ward, *supra* note 45, at 105 (explaining that the reintroduction of upland game birds was one early successful reintroduction program despite the fact that these birds were often responsible for crop damage); see also Booth, *supra* note 64, at 157 (explaining that reintroduced sea otters eat pink abalone, red sea urchins, and spiny lobsters, depleting the supply available to commercial fishermen).

126. See *supra* notes 99-111 and accompanying text.

127. See *supra* notes 65-93 and accompanying text.

128. See *supra* notes 94-111 and accompanying text.

129. See *supra* notes 112-26 and accompanying text. States also use flexible hunting seasons and kill limits to reduce populations of game animals and therefore reduce the problem of wildlife damage to private property. See, e.g., *Special Canada Goose Hunting Season Slated For Jan. 4-Feb. 2*, THE WATERFRONT (Missaukee County, Mich.), Jan. 7, 1992, at 12.

130. Begley et al., *supra* note 96, at 48.

131. See *supra* notes 127-30, *infra* notes 152-204 and accompanying text.

132. The Endangered Species Act defines an "endangered" species as "any species which is in danger of extinction throughout all or a significant portion of its range." 16 U.S.C. § 1532(6) (1988).

133. The Endangered Species Act defines a "threatened" species as "any species which is likely

gered Species Act (ESA).<sup>134</sup> The ESA forbids any taking<sup>135</sup> of an endangered species except in certain circumstances in which a permit by the Secretary of the Interior is first obtained.<sup>136</sup> Because the ESA limits the Secretary's power to issue permits to takings for scientific purposes or for enhancing the propagation of the species,<sup>137</sup> the private property owner is virtually forbidden to use any offensive means to protect his or her property.<sup>138</sup> Courts consistently have upheld the endangered species protection provisions in face of an individual's basic right to protect his or her property.<sup>139</sup>

The ESA is less restrictive for wildlife classified as threatened species.<sup>140</sup> Once the Secretary of the Interior determines that an animal is threatened, the Secretary is required under the ESA to "issue such regulations as he deems necessary and advisable to provide for the conservation of such species."<sup>141</sup> The Secretary has wider discretion in determining what actions should be prohibited and what actions are permissible with regard to threatened species<sup>142</sup> than endangered species.<sup>143</sup> The Secretary must take affirmative action to prohibit such activities as taking, possessing, or selling a species—activities that are automatically prohibited for endangered species.<sup>144</sup> Status as a threatened species therefore appears on its face to provide the private property owner some leeway in protecting his livestock or other property against damage from protected wildlife.<sup>145</sup> The practical differences between the "endangered" status and "threatened" status, however, are less significant.<sup>146</sup>

A series of controversies involving the State of Minnesota and its native gray wolves provided the catalyst for these practical differences to be explored.<sup>147</sup> Northern Minnesota is home to the last indigenous popu-

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to become an endangered species within the foreseeable future throughout all or a significant portion of its range." 16 U.S.C. § 1532(20) (1988).

134. *Id.* §§ 1531-43.

135. The ESA defines "taking" as any "means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." *Id.* § 1532(19).

136. *Id.* § 1539(a)(1)(A).

137. *Id.*

138. Since the addition of the "experimental population" clause, private property owners may be able to use offensive means to protect their property in some circumstances. *Id.* § 1539(j). Presently, livestock owners are permitted to harass red wolves that are actually pursuing or killing livestock. See 50 C.F.R. § 17.84 (1991). Livestock owners may also kill red wolves that have pursued or killed their livestock if project personnel efforts to capture the depredating animals have proven unsuccessful. *Id.*

139. See Lauri Alsop, *The Right to Protect Property*, 21 ENVTL. L. 209 (1991).

140. See generally Saxe, *supra* note 44 (explaining circumstances in which the Fish and Wildlife Service has allowed the takings of threatened animals).

141. 16 U.S.C. § 1533(d) (1988).

142. The Secretary may by regulation prohibit any act listed under 16 U.S.C. § 1538(a)(1) (1988), but is not required to do so. *Id.* § 1533(d).

143. Endangered species are automatically protected under *id.* § 1538(a)(1), which includes the prohibition against taking any species listed.

144. *Id.* § 1533(d).

145. See *Sierra Club v. Clark*, 755 F.2d 608, 611 (8th Cir. 1985).

146. See *infra* notes 147-53 and accompanying text.

147. O'Neill, *supra* note 5, at 227.

lation of gray wolves in the continental United States.<sup>148</sup> The range of the wolf population also overlaps marginal agricultural land where livestock owners occasional report killings by wolves.<sup>149</sup> The takings problem presented a tricky situation for both federal and state officials because the ESA classified the wolf as an endangered species and limited the ways that the agencies could handle the problem.<sup>150</sup> In an attempt to solve the problem, the FWS reclassified the wolf as threatened.<sup>151</sup> The FWS hoped that, by changing the wolf's status, the hunting and trapping of wolves could be permitted legally.<sup>152</sup> Instead, the change brought about a federal lawsuit that enabled the courts to define what actions are permitted to control both endangered and threatened wildlife.<sup>153</sup>

In *Sierra Club v. Clark*,<sup>154</sup> the Eighth Circuit explained the limits on livestock predation control programs with regard to endangered and threatened species.<sup>155</sup> In upholding the district court's decision that regulations permitting the sport trapping of eastern timber wolves were illegal,<sup>156</sup> the Eighth Circuit examined and applied various sections of the ESA.<sup>157</sup> The court determined that the ESA banned all sports seasons on any endangered species;<sup>158</sup> such a season, however, was allowed for threatened species in "extraordinary cases."<sup>159</sup> The court then remanded the case back to the district court to determine whether the regulations for the livestock predation control program<sup>160</sup> were arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with the ESA.<sup>161</sup>

On remand, the district court held that the livestock predation control program that was in place at the time of the lawsuit violated the ESA.<sup>162</sup> The court then explained under what circumstances a livestock predation control program is in accordance with the ESA.<sup>163</sup> The court

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148. *Fund for Animals, Inc. v. Clark*, 577 F. Supp. 784, 785 (D. Minn. 1984).

149. See *supra* note 96 and accompanying text.

150. *Sierra Club v. Clark*, 755 F.2d 608, 611 (8th Cir. 1985).

151. *Id.*

152. *Id.*

153. O'Neill, *supra* note 5, at 227.

154. 755 F.2d at 608.

155. *Id.* The court held that regulations allowing the sporting season on timber wolves was in violation of the Endangered Species Act because there was no showing that the threatened animal had exceeded the population limits of its ecosystem as required under 16 U.S.C. § 1532(3) (1988). 755 F.2d at 608.

156. 755 F.2d at 613.

157. *Id.* at 613-15 (examining 16 U.S.C. § 1538(a)(1), banning the taking of endangered animals under any circumstances; 16 U.S.C. § 1539(a)(1), enabling the Secretary to take animals for scientific purposes to ensure the survival of the species; and 16 U.S.C. § 1532(3), providing for the taking of threatened species in extraordinary cases).

158. *Id.* at 614 n.8.

159. The ESA provides that "extraordinary cases" include those in which population pressures within a given ecosystem cannot be otherwise relieved. 16 U.S.C. § 1532(3) (1988).

160. Livestock depredation programs are administered by the Department of the Interior and are implemented to reduce or eliminate the predation of domestic animals by wild predators. See *Sierra Club*, 755 F.2d at 618-19.

161. *Id.* at 612-13.

162. *Fund For Animals, Inc. v. Clark*, 607 F. Supp. 737, 738 (D. Minn. 1985).

163. *Id.* at 738. The court ordered that the program be amended to prohibit: (1) the trapping or

stated that livestock depredation programs were permitted for both endangered and threatened species<sup>164</sup> only where reasonable cause exists to believe that the predator had committed a significant depredation on domestic animals.<sup>165</sup>

The final court decisions not only helped define the limits on predation control for protected animals but also exposed potential problems under the ESA.<sup>166</sup> Private property owners still face possible property losses caused by predation or other acts of reintroduced wildlife.<sup>167</sup> The decisions in *Sierra Club v. Clark* reduced the Secretary's authority to promulgate wildlife protection laws that would give private property owners the ability to use offensive means to prevent livestock killings before they occurred.<sup>168</sup> In an attempt to balance the court's tightening of "threatened" status protection, Congress created the "experimental population" classification.<sup>169</sup>

## 2. Experimental Populations

The experimental population classification has the effect of giving endangered species that are reintroduced to an area, the protection of only a threatened species.<sup>170</sup> The classification allows the Secretary to diminish the regulatory impact of reintroducing an endangered species to an area by proscribing all the protective regulations for the species.<sup>171</sup> Moreover, the classification enables future reintroduction programs to take place without invoking the anger of potentially affected private property owners by imposing the restrictive "endangered" status regulations on them.<sup>172</sup> The special provision also allows the Secretary to promulgate regulations that provide private property owners with the right to take animals that cause private property damage.<sup>173</sup>

The flexibility given to both the gray wolf and red wolf reintroduc-

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killing of animals on private land unless reasonable cause exists to believe that the wolves committed a significant depredation upon domestic animals lawfully present in such area; (2) the trapping or killing of animals on public land within one half mile of private land unless reasonable cause exists to believe that the wolves committed a significant depredation upon domestic animals lawfully present in such area; (3) the killing of any young trapped on or before August 1 of the year trapped; (4) the selling or exporting in interstate or international commerce of Minnesota gray wolves. *Id.*

164. *Sierra Club*, 755 F.2d at 614 n.8.

165. *Sierra Club v. Clark*, 607 F. Supp. 737, 738 (D. Minn. 1985).

166. One potential problem is that the court failed to define "significant depredation" in its opinion. *Id.*

167. *Alsop*, *supra* note 139, at 209.

168. The ESA effectively prevented the taking of any wildlife under the guise of a livestock depredation program until the FWS proved that a significant depredation problem existed. *Sierra Club*, 607 F. Supp. at 738. The court decisions, however, were silent on other types of regulations that might be promulgated to give protection to the private property owner. *Id.*

169. 16 U.S.C. § 1539(j) (1988).

170. *Id.* § 1539(j)(2)(C).

171. *Id.* § 1533(d).

172. Private property owners in the area of the reintroduction are not automatically subjected to the restrictions of 16 U.S.C. § 1538(a)(1), nor will they probably be subject to federally imposed critical habitat restrictions of 16 U.S.C. § 1533(b)(2). See 16 U.S.C. § 1539(j)(2)(C) (1988).

173. *Saxe*, *supra* note 44, at 306. Such liberalization of the policies of the ESA is available to the

tion programs is available because the wolves are classified as experimental population animals under both programs.<sup>174</sup> Regulations proposed by the Secretary for the gray wolf program will expand the rights of private property owners by allowing them to kill wolves observed in the act of depredating or harassing livestock.<sup>175</sup> Similarly, regulations currently in place under the red wolf program allow private property owners to harass,<sup>176</sup> and in some circumstances, kill, wolves observed in the act of pursuing or killing livestock.<sup>177</sup> The use of regulations to expand private property owners' rights is so successful that similar regulations are present in every experimental population reintroduction program.<sup>178</sup>

The ability of the Secretary to tailor experimental population reintroduction programs to accommodate local concerns is an invaluable tool for the government.<sup>179</sup> Unfortunately, not all governmentally reintroduced animals fall under the experimental population clause.<sup>180</sup> The wildlife first must be considered endangered or threatened under the ESA.<sup>181</sup> Second, only the Secretary of the Interior can authorize the classification.<sup>182</sup> Lastly, the population must be wholly separate geographically from the nonexperimental population of the same species.<sup>183</sup>

Even after the Secretary has classified the wildlife as a member of an experimental population, the animals are further subdivided into two categories.<sup>184</sup> Wildlife populations receive full "threatened species" status if the Department of the Interior determines them to be essential to the continued existence of the species<sup>185</sup> or if the populations occur within a

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Secretary under the rationale that keeping the local people happy will improve the prospects for survival of the species. 16 U.S.C. § 1539(j) (1988).

174. The red wolf has been classified as an experimental population animal since it was reintroduced into North Carolina. GRAY WOLF REPORT, *supra* note 88, at 1-40. The gray wolf is considered an experimental population animal in the Yellowstone reintroduction legislation. WOLF MANAGEMENT REPORT, *supra* note 99, at 12-13.

175. WOLF MANAGEMENT REPORT, *supra* note 99, at 14-15.

176. 50 C.F.R. § 17.84(c) (1991). The harassment methods are limited to those that are not lethal or physically injurious to the animal. *Id.*

177. *Id.* Livestock owners may take wolves that are responsible for pursuing or killing livestock after efforts by project personnel to capture the animals have proven unsuccessful, provided that such a taking is immediately reported to the Park Superintendent. *Id.*

178. As of 1991, the government has implemented seven experimental population reintroduction programs. 50 C.F.R. § 17.84 (1991). The regulations vary from the broad power to take any Guam Rail that is responsible for depredations to personal property, to the limited power to take yellowfin madtom (a type of catfish) if incidental to applicable state fishing laws. *Id.*

179. *Hearings, supra* note 68, at 177 (answers to questions submitted by Senator Bumpers on S. 2674).

180. Kenna, *supra* note 70, at 74-76. Wildlife that has been primarily reintroduced to areas for hunting purposes, such as the wild turkey, usually does not meet the criteria set out under the experimental population standard and is regulated under state hunting laws. *Id.*

181. 16 U.S.C. § 1539(j)(2)(A) (1988).

182. *Id.* § 1539(j)(1).

183. *Id.*

184. See *infra* notes 185-89 and accompanying text.

185. "The term 'essential experimental population' means an experimental population whose loss would be likely to appreciably reduce the likelihood of the survival of the species in the wild." 50 C.F.R. § 17.80(b) (1991). In making the assessment, the Secretary of the Interior is required to use the best available information. 16 U.S.C. § 1539(j)(2)(B) (1988).

National Wildlife Refuge System or the National Park System.<sup>186</sup> If the Department determines that the wildlife is not essential to the continued existence of the species, the wildlife is given full "threatened species" status but is exempt from regulations that protect habitat critical for the species' survival.<sup>187</sup> Perhaps as a result of the restrictions that accompany an essential experimental population animal, currently no animals under the Act have been classified as essential.<sup>188</sup> Accordingly, both the red wolf and gray wolf were found to have sustainable populations outside the reintroduction areas, and therefore to be nonessential animals.<sup>189</sup>

Although the "experimental population" clause affords more flexibility in dealing with private property damage problems caused by reintroduced animals than the "threatened" status,<sup>190</sup> it does not solve the problem. Because of the stringent requirements of this clause, many reintroduced populations will fail to qualify under the provision.<sup>191</sup> Moreover, the "experimental population" clause does not directly respond to the problem—compensation for the loss of private property.<sup>192</sup>

### 3. *Direct Compensation Schemes and Other Legislative Solutions*

Compensation plans appear to be the most direct way to prevent a takings problem. The federal government has proposed a direct compensation scheme for ranchers who lose livestock due to predation by gray wolves introduced by the gray wolf reintroduction program.<sup>193</sup> In addition, some state legislatures, such as those in Minnesota and Wyoming, have implemented state-financed compensation funds for damage caused by wolves or other types of wildlife.<sup>194</sup> Even private organizations have

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186. 16 U.S.C. § 1539(j)(2)(C)(i) (1988).

187. *Id.* § 1539(j)(2)(C)(ii). The critical habitat requirement prevents the modification of any geographical area by federal action that is essential to the conservation of species management. *Id.* § 1532(5). However the Secretary may exclude any area from the critical habitat if he determines that the benefits of such exclusion outweigh the benefits of specifying such area as part of the critical habitat. *Id.* § 1533(b)(2). Therefore, a waiver of the critical habitat requirement can be very important to the citizens living in the area that the regulation affects. Although the critical habitat requirement only prevents adverse modifications through federal action, federal actions can encompass a broad range of activities. See generally RONALD D. ROTUNDA, MODERN CONSTITUTIONAL LAW 424-61 (1989) (discussing actions that are considered governmental actions).

188. 50 C.F.R. § 17.84 (1991). Currently, seven species ranging from the Colorado Squawfish to the Guam Rail are listed under the Act. *Id.*

189. Today there are over 80 red wolves in captivity spread over more than a half dozen zoos and research centers. GRAY WOLF REPORT, *supra* note 88, at 1.34. Although the population is small, the red wolves have been excellent breeders in captivity. *Id.* Gray wolves number in the thousands in both Alaska and Canada, with about 1,200 in Minnesota and 50 to 70 spread throughout Montana and Idaho. *Id.*

190. See *supra* notes 170-78 and accompanying text.

191. See *supra* notes 179-89 and accompanying text.

192. The experimental population clause does not directly provide for compensation to the owner of livestock killed by wildlife protected under the clause. See 16 U.S.C. § 1539(j) (1988).

193. WOLF MANAGEMENT REPORT, *supra* note 99, at 15.

194. *Id.* The Minnesota program only covered wolf depredations. MINN. STAT. ANN. §§ 97.487-.488 (West Supp. 1978) (repealed 1986). The Wyoming program covers damage to livestock, property, or crops, from any big game animal or game bird. WYO. STAT. § 23-1-901 (1991).

provided compensation plans to cover livestock takings. The State of Montana is currently covered by the "wolf compensation plan" established by the Defenders of Wildlife,<sup>195</sup> and both the National Fish and Wildlife Foundation and the Great Smoky Mountains Natural History Association have established funds to cover depredations caused by reintroduced red wolves.<sup>196</sup>

Unfortunately, potential problems for compensation programs already loom on the horizon. Compensation schemes lack the permanent effect of a constitutionally based takings ruling.<sup>197</sup> Because of legislative or private control, both the financing and the sustainability of the funds often are suspect.<sup>198</sup> Also, a legislatively introduced compensation program faces the threat that it might be repealed due to economic or lobbying pressures.<sup>199</sup> Finally, compensation schemes appear to be at best a piecemeal answer to the takings issue.<sup>200</sup> Not only does the degree of coverage vary from program to program,<sup>201</sup> but also not all reintroduction programs have a compensation program in place.<sup>202</sup> The State of Michigan provides neither a compensation program nor any type of recourse for property owners who suffer damage from reintroduced elk.<sup>203</sup> The state solely relies on its hunting program to control herd numbers.<sup>204</sup>

### B. Applying the Court Opinions

The federal courts have not decided the question of whether damage to private property caused by governmentally reintroduced wildlife constitutes a governmental taking.<sup>205</sup> Despite the absence of such a decision, courts have heard takings arguments for damage caused by protected native wildlife.<sup>206</sup> Many of the first wildlife takings cases involved a strict regulatory takings argument.<sup>207</sup> Because of the courts' reluctance to declare that wildlife protection laws may amount to a regulatory taking of property, plaintiffs began to change their arguments and claim that

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195. Kelly, *supra* note 96, at A4. The plan compensates livestock owners in the state who have lost livestock due to wolf predation. *Id.*

196. Tennessee Red Wolf Reg., *supra* note 83, at 15. The fund covers depredations, certified by the Park Superintendent and the Red Wolf Coordinator, caused by red wolves reintroduced to the Great Smoky Mountains National. *Id.*

197. See *supra* notes 107-11 and accompanying text.

198. See *supra* notes 107-11 and accompanying text.

199. Ranching interests have a considerable impact on legislation that may effect livestock. Begley et al., *supra* note 96, at 49-50.

200. See *supra* notes 193-96 and accompanying text.

201. See *supra* notes 193-96 and accompanying text.

202. See *infra* notes 203-04 and accompanying text.

203. See PUBLIC AFFAIRS OFFICE, MICHIGAN DEPT OF NATURAL RESOURCES, *supra* note 121, at 1-2.

204. See *id.*

205. *But see* Barrett v. State, 116 N.E. 99 (N.Y. 1917) (denying takings argument for damage done by state-introduced beavers).

206. See *supra* notes 4-6 and accompanying text.

207. See Bishop v. United States, 126 F. Supp. 449 (Ct. Cl. 1954) (plaintiffs unsuccessfully arguing that Migratory Bird Treaty of 1916 was a taking of their right to hunt geese that ate crops grown on their property).

the government was directly responsible for the protected animals that caused the private property damage.<sup>208</sup> Courts have responded to that argument in several different ways.

In the first instance, courts examined the economic effect of the damage caused by wildlife to determine if the damage was sufficient to constitute a "taking" that entitled the owner to compensation from the government.<sup>209</sup> For example, in *Mountain States Legal Foundation v. Hodel*,<sup>210</sup> the plaintiffs, owners of cattle grazing lands in Wyoming, argued that they should be compensated by the government for damage done to their land by the overgrazing of federally protected wild horses and burros.<sup>211</sup> The court applied both the diminution in value test and the investment-backed expectation test to determine whether a taking had occurred.<sup>212</sup> Under the diminution in value test, the court held that the grazing habits of the wild horses diminished the value of the land, but the reduction in value was not enough to amount to a taking.<sup>213</sup> Furthermore, the court held that the reduction in value did not constitute a taking as it did not deprive the owners of all "economically viable use" of their lands.<sup>214</sup> Finally, the court held that the reduction in value also did not interfere with the owners' distinct investment-backed expectations.<sup>215</sup>

Taking a different approach, the court in *Brzoznowski v. Andrus*,<sup>216</sup> without applying any of the takings tests to the situation, held that the government is not liable for the acts of protected wild animals.<sup>217</sup> The *Brzoznowski* case was one of the first cases on wolf depredation in northern Minnesota and involved the "endangered" status of the wolf.<sup>218</sup> The plaintiff, a farmer, sought both money damages for claimed livestock losses by wolves and an injunction requiring the Secretary of the Interior to remove wolves from his land.<sup>219</sup> Although he eventually lost his case, Mr. Brzoznowski was successful in persuading the Minnesota legislature to pass a compensation scheme for livestock depredations by wolves.<sup>220</sup> The FWS also downgraded the wolf's status to "threatened," allowing more lenient regulations as a result of the lawsuit.<sup>221</sup> Nevertheless, the holding in *Brzoznowski* may not have much precedential value in reintroduction cases because the court primarily relied on the fact that the

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208. See *Mountain States Legal Found. v. Hodel*, 799 F.2d 1423, 1430 (10th Cir. 1986).

209. *Id.* at 1431.

210. *Id.* at 1423.

211. *Id.* at 1425-26. The wild horses and burros are protected under the Wild Free-Roaming Horses and Burros Act. 16 U.S.C. §§ 1331-40 (1988).

212. *Mountain States Legal Found.*, 799 F.2d at 1431.

213. *Id.*

214. *Id.*

215. *Id.*

216. O'Neill, *supra* note 5, at 227 (citing *Brzoznowski v. Andrus*, No. 5-77-19 (D. Minn. June 9, 1978)).

217. *Id.*

218. *Id.* at 229.

219. *Id.*

220. *Id.*

221. *Id.* at 230.

wolves were indigenous to the area and did not consider their protected status in issuing its decision.<sup>222</sup>

The holdings of *Mountain States Legal Foundation* and *Brzoznowski* represent different ways in which courts have attempted to answer the takings problem.<sup>223</sup> The holdings, however, may allow for different results if either the facts of the cases or the way the cases were argued are changed.<sup>224</sup> The decision in *Mountain States Legal Foundation* could have come out differently if the land owners had argued for the value of the forage and water that was consumed by the animals instead of for a devaluation of the entire property.<sup>225</sup> Although the property as a whole was only slightly diminished in value, the depletion of forage by the animals was a physical taking of personal property as opposed to real property.<sup>226</sup> As a result, the ranchers could have argued that they should have been reimbursed for the value of the grazing material because it was a direct taking of a food source by a governmentally protected animal.<sup>227</sup>

The court in *Christy v. Hodel*<sup>228</sup> raised but did not comment on the question of whether the government might have further obligations to private property owners in an animal reintroduction program.<sup>229</sup> Richard P. Christy, the plaintiff in the case, was a sheep rancher that killed a federally protected grizzly bear that had been preying on his sheep.<sup>230</sup> Christy argued that, by protecting the bears, the government had transformed the bears into "government agents" who had physically taken his property.<sup>231</sup> Although Christy insisted that his property had been physically taken, the court refused to analyze the case as a physical taking.<sup>232</sup> Instead, the court focused on whether the regulations protecting the grizzly bears constituted governmental action.<sup>233</sup>

Despite analyzing the case as a possible regulatory taking, the court did express concern that a case involving damage caused by reintroduced animals might require a different analysis.<sup>234</sup> In holding against Christy, the court quoted Justice Marshall's opinion in *Douglas v. Seacoast Prod-*

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222. *Id.* at 232.

223. *See supra* notes 209-22 and accompanying text.

224. *See infra* notes 225-27 and accompanying text.

225. *See Mountain States Legal Found.*, 799 F.2d at 1423.

226. Once the forage was severed from the real property by the animals, it acquired the status of personal property. *See BURKE, supra* note 28, at 37-38.

227. *Mountain States Legal Found.*, 799 F.2d at 1434 (Seth, J., dissenting) (arguing a direct taking of personal property occurred because forage is considered a crop and private property of owner in Wyoming).

228. *Christy v. Hodel*, 857 F.2d 1324 (9th Cir. 1988), *cert. denied*, 490 U.S. 1114 (1989).

229. *Id.* at 1335 n.9.

230. *Id.* at 1326.

231. *Id.* at 1334.

232. *Id.*

233. *Id.* This note does not address the effects of regulatory takings. For an analysis of the regulatory takings aspects of the Endangered Species Act, *see* Lauri Alsop, *The Right to Protect Property*, 21 ENVTL. L. 3 (1987).

234. *Christy*, 857 F.2d at 1335 n.9.

*ucts, Inc.*<sup>235</sup> in which he stated that "it is pure fantasy to talk of 'owning' wild fish, birds, or animals. Neither the States nor the Federal Government . . . has title to these creatures until they are reduced to possession by skillful capture."<sup>236</sup> The court further stated that "[t]he federal government does not own the wild animals it protects, nor does the government control the conduct of such animals."<sup>237</sup> The court then added a footnote to the statement indicating that a situation involving governmental reintroduction of wildlife would be a different situation, and that the government might be held accountable under those circumstances.<sup>238</sup>

The case of private property damage caused by governmentally reintroduced wildlife has been settled in at least one jurisdiction, albeit on the state level.<sup>239</sup> In *Barrett v. State*,<sup>240</sup> a private property owner claimed that the government had committed a taking of his property without compensation after the State of New York reintroduced beaver that cut down 198 poplar trees on his land.<sup>241</sup> The court appeared to use a balancing test in its takings analysis.<sup>242</sup> After weighing the interests of the parties to see if the state's interests outweighed the interests of the private property owner, the court held that the damage to the timber was not a taking.<sup>243</sup> In reaching its decision, the court relied on the state's authority to exercise its police power in the public interest.<sup>244</sup> The court stated that the benefit to society of preserving the beaver outweighed the interests of the individual timber owners and that the means to this end, namely, the reintroduction program, was not unduly oppressive to them.<sup>245</sup>

In *Miller v. Schoene*,<sup>246</sup> the Supreme Court appeared to adopt a takings theory similar to that found in *Barrett*, holding that a taking exists where the benefit to the public is not greater than the harm to the affected individual.<sup>247</sup> Although *Miller* did not involve state reintroduction of wildlife, it did involve the state placing a preference on an

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235. *Id.* at 1335.

236. *Douglas v. Seacoast Prods., Inc.*, 431 U.S. 265, 284 (1977).

237. *Christy*, 857 F.2d at 1335.

238. *Id.* n.9. The court explained:

We note that plaintiffs do not contend, and the record does not show, that the federal government physically introduced any bears to areas near plaintiffs' properties. Whether the government may be held responsible for damage caused by bears or other wild animals that have been relocated by the government, under a theory that such animals are instrumentalities of the government, is a question we do not decide.

*Id.*

239. 116 N.E. 99 (N.Y. 1917).

240. *Id.*

241. *Id.* at 101.

242. *Id.*

243. *Id.*

244. *Id.*

245. *Id.* The court stated that the damage caused by the beaver was no more destructive than damage caused by already present moose or deer, and therefore did not put an undue burden on the timber owners. *Id.*

246. 276 U.S. 272 (1928).

247. *Id.*

introduced nonnative plant over one that was native to the state.<sup>248</sup> The case centered on whether a statute that required the compulsory cutting of all red cedar trees within two miles of an apple orchard was in violation of the Taking Clause even though the owners of the trees received no compensation for either the value of the standing timber<sup>249</sup> or the decrease in the value of the land.<sup>250</sup> The rule was promulgated to prevent apple trees from becoming infected with a plant disease that red cedars often harbor.<sup>251</sup> The Court held that the statute did not violate the Takings Clause.<sup>252</sup> The Court, however, did not base its holding on the theory that the threat of infection was considered a nuisance under common law.<sup>253</sup> Instead, the Court held that the state-mandated destruction of red cedar trees was justified because the state's interest in preserving apple trees was of greater value than the private interest of preserving red cedar trees in Virginia.<sup>254</sup>

Both *Barrett* and *Miller* appear to espouse a balancing test to determine when a taking exists.<sup>255</sup> The application of the balancing test to wildlife takings cases would undoubtedly place the private property owner in a difficult situation.<sup>256</sup> Private property owners would have to show that their individual losses as a whole outweighed the public's interest in the reintroduction of wildlife.<sup>257</sup> The balancing test, however, has never been expressly adopted by the Supreme Court.<sup>258</sup> The Court even recently has appeared to refute the balancing test by stating in *Loretto v. Teleprompter Manhattan CATV Corp.*<sup>259</sup> that "our cases uniformly have found a taking . . . without regard to whether the action achieves an important public benefit or has only minimal economic im-

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248. The two trees in question are the red cedar tree and the common apple tree. *Id.* at 277. The red cedar tree is a native North American tree that commonly is found throughout a large region of the Eastern United States, including Virginia. JOHN C. KRICHER & GORDON MORRISON, *A FIELD GUIDE TO EASTERN FORESTS NORTH AMERICA*, 125 (1988). The common apple tree is native to Europe and western Asia, but was widely planted in the United States during the 19th century, and still is planted for cultivation. BURTON V. BARNES & WARREN H. WAGNER, JR., *MICHIGAN TREES* 140 (1981).

249. *Miller*, 276 U.S. at 277.

250. *Id.* Red cedar trees are occasionally used for lumber but are predominantly valuable for their ornamental use. *Id.* at 279.

251. *Id.* at 274. The cedar trees are not themselves injured by the disease, but merely serve as a host for the cedar rust. *Id.*

252. *Id.* at 279.

253. *Id.* at 280.

254. *Id.* at 279. The Court based its valuation assessment on the findings of the Virginia State Legislature. *Id.*

255. Large, *supra* note 2, at 24 (describing the application of the balancing test to the takings problem).

256. The private property owner would have to show enough damage to overcome the premise that reintroduction efforts exercise "a governmental function for the benefit of the public at large and no one can complain of the incidental injuries that may result." *Barrett v. State*, 116 N.E. 99, 100 (N.Y. 1917).

257. Large, *supra* note 2, at 24.

258. *Id.* at 25.

259. 458 U.S. 419 (1982).

pact on the owner."<sup>260</sup> The wildlife takings problem remains unanswered, with no clear test to resolve the issue.<sup>261</sup>

#### IV. FACTORS INDICATING A GOVERNMENTAL TAKING: A PROPOSAL

What separates a wildlife taking from the most other takings cases is that a direct physical taking of property is almost always involved rather than a simple erosion of property rights.<sup>262</sup> The most common types of wildlife takings involve depredation of livestock or the loss of crops or forage,<sup>263</sup> although damage to physical structures from large animals occasionally occurs.<sup>264</sup> Because a physical taking results, the argument does not hinge on establishing that a sufficient amount of property rights have been eroded to demonstrate a taking.<sup>265</sup> Instead, the argument largely depends on proving that the government exerted enough control over the animals to be held responsible.<sup>266</sup>

##### A. Governmental Control over Reintroduced Wildlife

Government reintroduction programs involve a greater degree of state action than simple protective regulations.<sup>267</sup> In a reintroduction program, all the animals have been reduced to captivity prior to release.<sup>268</sup> Not only does the government control the number of animals released, but it also controls the areas into which the animals will be released.<sup>269</sup> Therefore, a strong argument exists that the government "has title to these creatures" because they have been "reduced to possession by skillful capture" prior to release.<sup>270</sup>

The government may claim that it no longer retains responsibility for the actions of the wildlife upon release of the animals.<sup>271</sup> This argument would face several obstacles. First, under common law tort liabil-

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260. *Id.* at 434-35.

261. *See supra* notes 205-60 and accompanying text.

262. Quite unlike wildlife takings cases, most of the seminal cases involving the Takings Clause concerned the erosion of a property right instead of a direct physical taking. *E.g.*, *Keystone Bituminous Coal Ass'n v. DeBenedictis*, 480 U.S. 470 (1987) (deciding whether a mining regulation that prevented the mining of coal in a way that might contribute to land subsidence was a taking); *Penn Central Transp. Co. v. New York City*, 438 U.S. 104 (1978) (deciding whether a preservation law that restricted the height of a building was a taking); *Pennsylvania Coal Co. v. Mahon*, 260 U.S. 393 (1922) (deciding whether statute prohibiting mining in such a way as to remove support underneath houses was a taking). *See generally* *Large, supra* note 2, at 3 (explaining the Supreme Court's search for a general takings rule).

263. *See supra* note 6 and accompanying text.

264. *See supra* note 125.

265. *Large, supra* note 2, at 24.

266. *See supra* note 8 and accompanying text.

267. *See infra* notes 271-78 and accompanying text.

268. *See generally* 50 C.F.R. § 17.81 (1991) (describing the process of selecting and reintroducing an experimental population).

269. *Id.*

270. *Douglas v. Seacoast Prods., Inc.*, 431 U.S. 265, 284 (1977).

271. *See Barrett v. State*, 116 N.E. 99 (N.Y. 1917).

ity, a person who knowingly releases a wild animal that has the propensity to damage property is responsible for damage done by the animal.<sup>272</sup> The tort liability arises because the person is introducing a hazard to an area, in the form of wildlife, that has the tendency to stray and do harm to others.<sup>273</sup> The length of time a person is liable for the damage, however, depends on whether the animal is indigenous to the area.<sup>274</sup> A person that releases indigenous wildlife to an area is not liable for harm done after the animal has returned to its natural state,<sup>275</sup> but, if the animal is not indigenous to the area, the person remains liable for all the harm that the wildlife causes.<sup>276</sup> An animal is considered indigenous if it is born or produced naturally in a region.<sup>277</sup> Because most reintroduction programs involve species that have been absent from an area for a period of time, the reintroduced wildlife will not be born or produced naturally in the region and will not be considered indigenous wildlife. As a result, the government should maintain responsibility for all the harm caused by the wildlife it releases.<sup>278</sup>

Even if the government were not held liable under common law tort liability, it may still be held liable under the theory that the animals are acting as government agents.<sup>279</sup> Although the government does not have strict control over every action of the animal, it does have control as to how close the animals are placed to areas where private property losses may occur.<sup>280</sup> Furthermore, the government has the power in many reintroduction cases to closely monitor the released animals and prevent dangerous situations from arising.<sup>281</sup>

### B. Application of the Traditional Takings Tests

Although the takings analysis appears to have no set formula<sup>282</sup> and is merely an ad hoc factual inquiry into each case,<sup>283</sup> a basic doctrinal structure can be formulated from the morass of opinions.<sup>284</sup> The first

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272. RESTATEMENT (SECOND) OF TORTS § 507(1) (1977).

273. *Id.* cmts. e, f.

274. See *infra* notes 275-78 and accompanying text.

275. RESTATEMENT (SECOND) OF TORTS § 508 (1977).

276. *Id.* § 507 cmt. d.

277. WEBSTER'S NINTH NEW COLLEGIATE DICTIONARY 614 (1984).

278. An interesting question that is not answered in the *Restatement (Second) of Torts* is whether liability ends with the death of all the originally released animals, or instead continues with the offspring of these animals.

279. *Christy v. Hodel*, 857 F.2d 1324, 1335 n.9 (9th Cir. 1988), *cert. denied*, 490 U.S. 1114 (1989).

280. See generally *Red Wolf Reg.*, *supra* note 75, at 41,792; *Tennessee Red Wolf Reg.*, *supra* note 83, at 56,326; *GRAY WOLF REPORT*, *supra* note 88, at 1-12 to 1-14.

281. The federal government has the ability to track animals with radio collars, monitor migrations by airplanes and helicopters, and provide federal trappers to relocate the animals when necessary. *Cohn*, *supra* note 74, at 316.

282. *Loretto v. Teleprompter Manhattan CATV Corp.*, 458 U.S. 419, 426 (1982).

283. *Penn Cent. Transp. Co. v. New York City*, 438 U.S. 104, 124 (1978).

284. *Zalkin*, *supra* note 20, at 236.

step is to determine whether the governmental action is facially valid.<sup>285</sup> In order to be facially valid, the action must serve a public purpose.<sup>286</sup> Because wildlife reintroduction programs serve a useful public purpose by increasing the biodiversity of the area of reintroduction, the actions should be considered facially valid.

The second step of the analysis is another fairly academic step. A sufficient nexus must be shown to exist between the governmental action and the substantial public purpose of the action.<sup>287</sup> The main purpose of most reintroduction programs is to increase both the number and the range of animals that were formerly native to the reintroduction area. By releasing animals into areas where they are protected and by monitoring the animals to ensure their future success, the reintroduction efforts demonstrate a strong nexus with their intended purpose.

The third step of the takings analysis applies the traditional takings tests to the governmental action.<sup>288</sup> The four factors examined are: (1) whether the conduct being prevented is similar to a public nuisance; (2) whether there is an average reciprocity of burdens and benefits distributed by the governmental action; (3) to what extent the government action has harmed reasonable investment-backed expectations; and (4) whether the action is a physical invasion of the property.<sup>289</sup> In addition, if none of the four tests are met, then the final test—whether there is any remaining economically viable use of the property—is applied.<sup>290</sup>

The governmental activity of reintroducing wildlife does not actually prevent a public nuisance from occurring; instead, the activity actually is a remedial measure to restore wildlife lost due to years of habitat destruction or mismanaged hunting practices. Although most reintroduction programs prohibit hunting of the species in question, which is arguably a nuisance in this situation, these regulations are often in place even before the reintroduction effort is started. Furthermore, the main purpose of a reintroduction program is to increase the wildlife in the area; thus, any accompanying restrictions that aid the main purpose are only secondary. Because reintroduction efforts do not prevent a public nuisance from occurring, the activity may still constitute a taking.

A taking will not be found if the detriment caused by the activity is offset by the advantage that accrues by subjecting everyone to the same regulation.<sup>291</sup> In a wildlife reintroduction case, the detriment is to individual landowners who suffer damage caused by animals released in their area.<sup>292</sup> The landowners, like the general public, also receive the benefit

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285. *Id.*

286. *Id.*

287. *Id.*

288. *Id.* at 245-46.

289. *Id.*

290. *Id.* at 257.

291. *Id.* at 250.

292. See *supra* notes 65-73 and accompanying text.

of knowing that reintroduction programs help restore wildlife to areas where they were once present. The landowner, however, does not receive any particular reciprocal benefit from the program: only the landowners around the release site, and not the general public, are actually subject to the negative effects of the program.

Although reciprocity of burdens and benefits will justify upholding a restriction, the Supreme Court appears to be split over whether a lack of reciprocity will, in itself, justify a finding of a taking.<sup>293</sup> The liberal majority in *Penn Central Transportation Co. v. New York City*<sup>294</sup> suggested that a lack of reciprocity is insufficient to constitute a taking.<sup>295</sup> On the other hand, the more conservative minority suggested that a taking would result when an action not within the nuisance exception involved no reciprocity of benefits.<sup>296</sup> Such a situation may exist in the wildlife reintroduction program, where landowners close to the release areas face a discriminatory burden of costs for the benefit of the public at large.<sup>297</sup> With the current composition of the Court more closely aligned with the conservative *Penn Central* dissent,<sup>298</sup> a takings argument has a good chance of succeeding in the wildlife reintroduction arena.<sup>299</sup>

The investment-backed expectation test requires the governmental action to interfere with the reasonable distinct investment-backed expectations of the injured party.<sup>300</sup> Under the test, private property owners have a solid argument that they are harmed by the introduction of wildlife to an area where it has been absent for a number of years.<sup>301</sup> The farmer or rancher is forced to change his or her operation to cover the extra expenses caused by the introduced wildlife.<sup>302</sup> Extra expenses include higher losses,<sup>303</sup> whether to livestock or crops, and higher costs to defend the property.<sup>304</sup> Other measures, such as extra patrolling or bringing livestock into a holding pen every night, also increase expense and manpower.<sup>305</sup> The additional costs to the operation could effect the size and feasibility of the operation.<sup>306</sup> In light of other reintroduction programs, however, the landowner has no reasonable expectation that wildlife would not be introduced to the area.<sup>307</sup> The governmental reintroduction of wildlife, therefore, does not interfere with the reasonable

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293. Zalkin, *supra* note 20, at 250.

294. 438 U.S. 104 (1978).

295. Zalkin, *supra* note 20, at 250.

296. *Id.*

297. See *supra* notes 291-92 and accompanying text.

298. Zalkin, *supra* note 20, at 250-51.

299. Cf. *supra* notes 291-92 and accompanying text.

300. See Large, *supra* note 2, at 25.

301. See *supra* note 24 and accompanying text.

302. *Id.*

303. Nass et al., *supra* note 73, at 424-25.

304. *Id.*

305. *Id.*

306. *Id.* at 425.

307. See *supra* notes 44-64 and accompanying text.

investment-backed expectations of the private property owner.<sup>308</sup>

As discussed in Part II, the physical invasion of property test provides the best chance for a landowner to prove reintroduction programs can cause a taking of property.<sup>309</sup> The release of wildlife often results in actions that produce an actual taking or physical invasion of nearby landowners' property—dead livestock,<sup>310</sup> damaged crops,<sup>311</sup> reduced forage,<sup>312</sup> and destruction of property.<sup>313</sup> Because all the actions subtract from the landowner's full enjoyment of his property, courts should find takings when any of the circumstances are present.<sup>314</sup> On the other hand, if a court decides that the four tests discussed above do not apply to the reintroduction of wildlife situation, it probably will not find a taking under the remaining economically viable use test. Although a wildlife reintroduction program may cause damage to nearby landowners, it will not prevent all viable use of the land.<sup>315</sup>

### C. Feasibility of Adequate Defense of Property as a Public Policy Issue

Perhaps the best reason for holding that a governmental taking may exist in the government reintroduction scenario is that the private property owner is placed in a situation in which defense of property is virtually impossible.<sup>316</sup> Not only are the costs often prohibitive but so is the practicality of providing an adequate defense system. The large size and rugged terrain of many ranches and farms makes fencing both uneconomical and impractical.<sup>317</sup> Government compensation under a takings theory would eliminate the need to provide cost-prohibitive defense systems, without causing the property owner to lose the value of his personal property.<sup>318</sup> The cost would be placed on the people who benefit from the conservation program—all Americans.

## V. CONCLUSION

The two competing interests in government reintroduction programs are the need to help wildlife conservation efforts and the fear felt

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308. See *supra* notes 300-07 and accompanying text.

309. See *supra* notes 34-43 and accompanying text.

310. See generally *Christy v. Hodel*, 857 F.2d 1324 (9th Cir. 1988) (discussing the killing of sheep by federally protected grizzly bears), *cert. denied*, 490 U.S. 1114 (1989).

311. See generally *Leger v. Louisiana Dep't of Wildlife & Fisheries*, 306 So. 2d 391 (La. Ct. App. 1975) (discussing damage to sweet potato crop by protected deer), *writ of review denied*, 310 So. 2d 640 (La. 1975).

312. See generally *Mountain States Legal Found. v. Hodel*, 799 F.2d 1423 (10th Cir. 1986) (discussing damage caused by protected introduced horses and burros).

313. See generally *Cooke v. State*, 74 P.2d 199 (Wash. 1937) (discussing damage to a skating rink by protected beaver and muskrat).

314. See *supra* note 39 and accompanying text.

315. See *Mountain States Legal Found. v. Hodel*, 799 F.2d 1423 (10th Cir. 1986).

316. See *Barrett v. State*, 116 N.E. 99 (N.Y. 1917).

317. *Hearings, supra* note 68, at 141-44 (testimony of George A. Bennett, Public Lands Director, ICA and Executive Director, GSHA.)

318. See *supra* notes 291-99 and accompanying text.

by farmers and ranchers that such programs will threaten their livelihood. By holding that a governmental taking arises in situations where government-introduced wildlife causes private property damage, solutions for the two problems are facilitated. Takings payments provide a fair way for the private property owner to be reimbursed for any losses that occur because of the program. Likewise, the compensation program increases the chance that the property owners will not deter or impede the reintroduction efforts.