RESTORING GRASSLANDS BY RESTORING SPECIES

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INTRODUCTION

"This miraculous plant" is how David Attenborough describes grass.¹ Grasslands cover forty percent of the earth, including vast parts of Australia, the Russian Federation, China, the United States, and Canada.² They provide food, host recreation, serve as wildlife habitat, and store huge amounts of carbon.

Grasslands are also "the world's most imperiled ecosystem." Nearly all our native grasslands are gone.³ The grasslands that remain are threatened by agricultural conversion, climate change, invasive species, and numerous other factors.

The protection of grasslands is important, but insufficient. We need to restore grasslands, not simply preserve the few we have left. From an ecological perspective, "[r]eestablishing the dominant grass species in restored grasslands is relatively easy, though "it is difficult to establish and maintain many of the less common species that provide the majority of biodiversity in native prairies."⁴ The greater challenge to grasslands restoration is not ecological, but legal. Grasslands, like all lands, are owned by someone. Many of the areas that historically consisted of native grasslands in the Great Plains of the United States are owed by private individuals, unlike the federal ownership of most of the lands further west. Those private owners often prefer other plants, especially wheat, instead of grass. The restoration of grasslands requires a legal tool that encourages or even requires such actions.

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^{1.} Planet Earth: The Great Plains (BBC television broadcast Apr. 8, 2007).

^{2.} See Robin P. White et al., *Pilot Analysis of Global Ecosystems: Grassland Ecosystems*, WORLD RESOURCES INSTITUTE, 2000, at 12 (Grasslands are "terrestrial ecosystems dominated by herbaceous and shrub vegetation and maintained by fire, grazing, drought and/or freezing temperatures.").

^{3.} See Id. at 22 (finding that 96.8% of North American tall-grass prairies have been destroyed, including 82.6% of Kansas tall-grass prairies).

^{4.} John Blair et al., *Grassland Ecology*, ECOLOGY AND THE ENVIRONMENT, THE PLANT SCIENCES 389, 419 (2014).

One such tool is the Endangered Species Act (ESA). Enacted by Congress in 1973, the ESA provides robust protections against extinction and facilitates the recovery of species so they are no longer endangered.⁵ The reintroduction of species to their original habitat is a common means by which the law encourages the recovery of a species. The uncompromising character of the ESA suggests that it may be able to restore native grasslands by restoring the wildlife that once lived there.

This essay begins by describing the role that the reintroduction of species plays in the ESA. It then considers the potential importance of the ESA as a tool for conserving grassland species. Next it considers the Eskimo curlew, a bird that was once abundant throughout the North American grasslands and which is now listed as endangered under the ESA, but whose reintroduction is precluded by the likelihood that it is already extinct. The essay turns next to the blackfooted ferret, which is being introduced in multiple sites throughout the Great Plains. One of those sites is on private land in Logal County, and the controversy that has resulted there reveals both some of the opportunities and the challenges for relying on the ESA to preserve grassland ecosystems.

I. REINTRODUCING ENDANGERED SPECIES

The Endangered Species Act is designed to prevent species from going extinct.⁶ But it does more than that. Once a species is listed, the Fish & Wildlife Service must prepare a recovery plan. Section 4 of the ESA directs the Secretary of the Interior to "develop and implement [recovery plans] for the conservation and survival of endangered and threatened species . . . unless he finds that such a plan will not promote the conservation of the species."⁷ The contents of a recovery plan—again, to the maximum extent practicable—must include (1) "a description of such site-specific management actions as may be necessary to achieve the plan's goal for the conservation and survival of the species," (2) "objective, measurable criteria which, when met, would result in a determination . . . that the species be removed from the list" of endangered or threatened species; and (3) "estimates of the time required and cost to carry out those measures needed to achieve the plan's goal and to achieve intermediate steps toward that goal."⁸

^{5.} See generally JOHN COPELAND NAGLE ET AL., THE LAW OF BIODIVERSITY AND ECOSYSTEM MANAGEMENT (3d ed. 2012) (summarizing the ESA).

^{6.} See John Copeland Nagle, *The Effectiveness of Biodiversity Law*, 24 J. LAND USE & ENVTL. L. 203 (2009) (analyzing the ESA's stated purposes).

^{7. 16} U.S.C. § 1533(f) (2003) (The FWS does not develop a recovery plan for a species if (1) the species is thought to be extinct, (2) state management plans serve as an adequate substitute, or (3) ecosystem initiatives addressing the recovery of multiple species exist. The law further describes how to establish priorities among species for recovery plans and what must be included in a recovery plan. To the maximum extent practicable, priority is to be given to listed species "that are most likely to benefit from such plans, particularly those species that are, or may be, in conflict with construction or other development projects or other forms of economic activity").

^{8. 16} U.S.C. § 1533(f)(1)(B); 16 U.S.C. § 1533(f)(1)(C), (D) (noting public comments on a proposed recovery plan must be considered, and the Secretary must report to Congress every two

Almost by definition, a species that has become endangered no longer lives in many areas where it once could be found. Many recovery plans call for the reintroduction of species into habitat that they once occupied, or into habitat that is suitable even if the species never actually lived there before. The list of species that have been reintroduced into former or new habitat since the enactment of the ESA includes California condors, grizzly bears, black-footed ferrets, peregrine falcons, and many others.⁹ Many other recovery plans list reintroduction as a possible step toward the preservation of a species.¹⁰ But a 1994 study of 145 reintroduction efforts involving 115 threatened or endangered species concluded that only sixteen had produced populations that were sustaining themselves in the wild, and that only half of those species had been endangered.11 The reintroduction of the red wolf into the Great Smoky Mountains National Park was abandoned in 1998 when government officials removed the remaining wolves because the wolves could not find enough prey to survive.12

Reintroduction efforts face other criticisms as well. They are costly. They are dependent upon adequate habitat, and so face the same challenges as existing populations of wild species in the face of human development. And they can be controversial among local residents, as illustrated by the reaction of Arizona ranchers to the reintroduction of the Mexican wolf and the reaction of many Idaho residents to proposed grizzly bear reintroductions.¹³

II. ENDANGERED GRASSLANDS SPECIES

The disappearance of nearly all of our native grasslands would suggest that nearly all of the grassland species should be gone, too, but the lists of extinct species do not include many that lived in grasslands.

Nor are there as many endangered species in grasslands as you would expect. Only 17 of the nearly 2,000 species listed as endangered or threatened are found in Kansas. That places the state in 34th place, far behind Hawaii's 500 endangered or threatened species.¹⁴

years regarding the status of efforts to develop recovery plans and the status of species for which plans have been developed).

^{9.} See NAGLE, supra note 7, at 215-16.

^{10.} See, e.g., Recovery Plan for the Salt Creek Tiger Beetle, U.S. FISH AND WILDLIFE SERVICE, 3–7 (Jan. 3, 2017) https://ecos.fws.gov/docs/recovery_plan/SCTB%20Signed%20Final%20Recovery%20Plan.pdf (calling for "reintroduction efforts to restore populations of the Salt Creek tiger beetle at identified occupied and unoccupied recovery areas reintroduction efforts to restore populations of the Salt Creek tiger beetle at identified occupied and unoccupied recovery areas").

^{11.} See Mark Derr, As Rescue Plan for Threatened Species, Breeding Programs Falter, N.Y. TIMES (Jan. 19, 1999), http://www.nytimes.com/1999/01/19/science/as-rescue-plan-for-threatened-species-breeding-programs-falter.html.

^{12.} See Timothy B. Wheeler, Effort to Return Red Wolves to Great Smoky Mountains Ends in Failure, L.A. TIMES, Dec. 13, 1998.

^{13.} See Blair, supra note 5, at 215-16 (reviewing these criticisms of reintroduction efforts).

^{14.} See FWS, Listed Species Believed To Or Known To Occur In Each State, FWS

Moreover, relatively few of those 17 species in Kansas are found in grassland ecosystems. Consider the list:

Bat, gray	
Bat, Northern long-eared	
Beetle, American burying	
Crane, whooping	
Ferret, black-footed	
Knot, red	
Madtom, Neosho	
Mucket, Neosho	
Plover, piping	
Rabbitsfoot	
Shiner, Arkansas River	
Shiner, Topeka	
Spectaclecase (mussel)	
Sturgeon, pallid	
Tern, leastinterior	
Milkweed, Mead'	
Orchid, western prairie fringed	

That gives us just a handful of species to work with in an effort to deploy the ESA to reintroduce native species to their native grasslands.

III. THE ESKIMO CURLEW

Let me begin by considering a grassland species that is listed as endangered

https://ecos.fws.gov/ecp0/reports/species-listed-by-state-totals-report.

under the ESA even though it is omitted from the FWS's list of species in Kansas. The Eskimo curlew is a bird that would breed on the tundra of western arctic in Canada and Alaska and then winter on the pampas of Argentina. Its migration route took it across the grasslands of the Great Plains. It appears that "the grasslands in Kansas provided suitable stopover habitat for Eskimo Curlews as they migrated through the state." ¹⁵ Hundreds of thousands of Eskimo curlew made that journey each year during the nineteenth century, and then they were hunted in nearly equal numbers. ¹⁶ The birds were also affected by the conversion of grasslands to agriculture, the suppression of fires, and the extinction of their favored prey, the Rocky Mountain grasshopper.¹⁷ In Kansas, the last time the birds were present and killed in numbers was around Wichita in 1878 and 1879.¹⁸

The reintroduction of the Eskimo curlew would seem to offer a prime opportunity to restore healthy native grasslands of the sort that existed in the nineteenth century.¹⁹ There is just one catch: it's probably extinct. The last sighting of an Eskimo curlew in Kansas occurred in 1902.²⁰ The last confirmed sighting anywhere occurred in 1963.²¹ Of course, there have been assorted unconfirmed sightings, some more credible than others, but they become less credible as the years and the decades pass without the discovery of a living, breathing Eskimo curlew.²² The only "real" curlew that I have seen resides in a drawer in the Field Museum of Natural History in Chicago.²³

Even after decades of no sightings, the Eskimo curlew remains on the list of endangered species. During its most recent five-year review of the species in 2016, the FWS "conclude[d] the likelihood that the Eskimo curlew remains extant is extremely low."²⁴ Even so, it declined to recommending delisting the curlew because the persistence of unconfirmed sightings "make it difficult to

17. *Id*.

18. EDWARD HOWE FORBUSH, A HISTORY OF THE GAME BIRDS, WILD-FOWL AND SHORE BIRDS OF MASSACHUSETTS AND ADJACENT STATES 423 (1912) (reporting information compiled from James Howard of Wichita by the Kansas Audubon Society).

19. See ESKIMO CURLEW supra note 16, at 6 ("The limited availability of suitable habitat and key food resources in the Midwestern States during the Eskimo curlews' spring migration may impede potential recovery of the species."); see also KAN. DEP'T OF WILDLIFE, PARKS & TOURISM, PETITION FOR SPECIES REVIEW: ENDANGERED / THREATENED / SPECIES-IN-NEED-OF-CONSERVATION STATUS 6 (2013) ("Although, Kansas has experienced widespread decline of historical grasslands, the Flint Hills still provide suitable stopover and foraging habitat for the species, yet no verifiable observations have occurred.").

20. See KAN. DEP'T OF WILDLIFE, PARKS & TOURISM, supra note 19; see also ESKIMO CURLEW supra note 16, at 5.

21. Id. at 3.

22. Id.

24. ESKIMO CURLEW supra note 16, at 11.

^{15.} KAN. DEPT. OF WILDLIFE, PARKS, AND TOURISM, Petition for Species Review Endangered/Threatened/Species-in-Need-of-Conservation Status, Eskimo Curlew.

^{16.} FAIRBANKS FISH & WILDLIFE FIELD OFFICE, U.S. FISH & WILDLIFE SERVICE, ESKIMO CURLEW (*NUMENIUS BOREALIS*) 5-YEAR REVIEW: SUMMARY AND EVALUATION 3 (2011) [hereinafter ESKIMO CURLEW].

^{23.} *About This Artwork*, ART INST. CHICAGO, http://www.artic.edu/aic/collections/artwork/184491 (last visited May 25, 2017).

discount the possibility of an extant breeding population," scientific information about the bird is sufficiently modest that "surveys may not have been adequate to detect a small population, particularly in the Eskimo curlew's remote Arctic breeding range," and the similarity of the Eskimo curlew to other shorebirds "increase potential that Eskimo curlews could go undetected."²⁵

The Eskimo curlew presents a wonderful legal puzzle: how does the ESA apply to a species that may not exist? The FWS hasn't bothered to prepare a recovery plan for the curlew. But there are recovery plans for some listed species that may already be extinct, including some rare Hawaiian birds.²⁶ The apparent discovery of ivory-billed woodpeckers in Arkansas in 2005 blocked a water project for a little while, even though the presence of the woodpeckers there was questioned then and is even more unlikely after a decade of intensive, hi-tech, multi-million dollar efforts to find one of the birds.²⁷

IV. THE BLACK-FOOTED FERRET

Thankfully, there is a more promising species to reintroduce into its native Kansas grasslands. The black-footed ferret is largely nocturnal and solitary, except when breeding or raising litters.²⁸Up to 91% of its diet is composed of prairie dogs.²⁹ Historically, black-footed ferret lived wherever prairie dogs lived throughout the Great Plains, mountain basins, and semi-arid grasslands.³⁰ John James Audubon named it in 1851 based on a specimen that the naturalist Alexander Culbertson sent from Fort Laramie, Wyoming. Then the species was not seen for 25 years, causing many zoologists to doubt its existence.³¹ Eventually, the black-footed ferret populations declined as grasslands were converted to croplands, farmers poisoned prairie dogs, and prairie dogs succumbed to sylvatic plague.³³ As prairie dogs died, black-footed ferrets disappeared, too.

The black-footed ferret was another of the original species to be listed as

31. JEITY R. Choate et al., *History and Status of the Black-Footed Ferret in Kansas*, 85 TRANSACTIONS OF THE KAN. ACADEMY OF SCI. (1903-) 121–32 (1982).

^{25.} Id. at 11.

^{26.} See U.S. FISH AND WILDLIFE SERVICE, REVISED RECOVERY PLAN FOR HAWAIIAN FOREST BIRDS viii (2006) (recovery plan for 21 Hawaiian forest birds including ten that "have not been observed reliably in more than 10 years and may possibly be extinct"), https://ecos.fws.gov/docs/recovery_plans/2006/060922a_docs/doc761.pdf.

^{27.} See generally TIM GALLAGHER, THE GRAIL BIRD: HOT ON THE TRAIL OF THE IVORY-BILLED WOODPECKER (2017).

^{28.} U.S. FISH & WILDLIFE SERV., 2D REV., RECOVERY PLAN FOR THE BLACK-FOOTED FERRET (*MUSTELA NIGRIPES*) 15 (2013).

^{29.} CONRAD N. HILLMAN & TIM W. CLARK, MUSTELA NIGRIPES. USDA NATIONAL WILDLIFE RESEARCH CENTER, 2 (1980), http://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=2643&context=icwdm_usdanwrc.

^{30.} U.S. FISH & WILDLIFE SERV., *supra* note 28.

^{32.} Id.

^{33.} U.S. FISH & WILDLIFE SERV., supra note 28.

endangered under the 1966 predecessor of the ESA.³⁴ In fact, many thought it was already extinct by the time the ESA became law in 1973. It had been 1957 since a black-footed ferret had been seen in Kansas.³⁵ But then a rancher in north-central Wyoming – or rather, to give credit where credit is due, a rancher's dog – discovered a ferret which proved to be part of what appears to have been the last surviving wild colony.³⁶

The recovery plan for the black-footed ferret calls for "(1) the continued efforts of captive breeding facilities to provide animals of suitable quality and quantity for release into the wild; (2) the conservation of prairie dog habitat adequate to sustain ferrets in several populations distributed throughout their historical range; and (3) the management of sylvatic plague to minimize impacts to ferrets at reintroduction sites."³⁷ For the species to be downlisted from endangered to threatened, the recovery plans calls for "free-ranging black-footed ferrets totaling at least 1,500 breeding adults, in 10 or more populations, in at least 6 of 12 States." For delisting the species from the ESA altogether, the plan requires "free-ranging black-footed ferrets totaling at least 3,000 breeding adults, in 30 or more populations, with at least one population in each of at least 9 of 12 States."³⁸ The plan asserts, "the single, most feasible action that would benefit black- footed ferret recovery is to improve prairie dog conservation. If efforts were undertaken to more proactively manage existing prairie dog habitat for ferret recovery, all other threats to the species would be substantially less difficult to address."39

The FWS took all of the wild ferrets discovered in Wyoming into captivity in order to protect them and in order to begin a captive breeding program.⁴⁰ The ferrets have thrived in captivity. About 280 ferrets now live in captive breeding facilities located throughout the United States and Canada.⁴¹

Efforts to reintroduce the ferrets into the wild began as the number of ferrets rebounded. Most reintroduced black-footed ferrets have been released into nonessential experimental population areas as set forth in ESA section 10(j).⁴² Under that provision, a listed species reintroduced outside of its current range,

^{34. 32} Feg. Reg. 4001 (March 11, 1967).

^{35.} Dan Mulhern, *Black-footed Ferrets Return to Kansas*, U.S. FISH AND WILDLIFE SERVICE: ENDANGERED SPECIES (Aug. 28, 2012), https://www.fws.gov/endangered/news/bulletin-spring2009/ferrets-return-to-kansas.html.

^{36.} See T.W. Clark, et al., Nebraska and South Dakota Black-tailed Prairie Dog Management on the Nebraska National Forest and Associated Units, 72-84, United States Department of Agriculture (May 2007).

^{37.} U.S. FISH & WILDLIFE SERV., supra note 28.

^{38.} Id. at 55.

^{39.} Id. at 7.

^{40.} Id. at 19.

^{41.} *Id.* at 61 ("Captive black-footed ferret breeding populations are currently housed at the U.S. Fish and Wildlife Service National Black-footed Ferret Conservation Center near Wellington, Colorado; the Cheyenne Mountain Zoological Parkin Colorado Springs, Colorado; the Louisville Zoological Garden in Louisville, Kentucky; the Smithsonian Biology Conservation Institute in Front Royal, Virginia; the Phoenix Zoo in Phoenix, Arizona; and the Toronto Zoo in Toronto, Ontario.").

^{42.} See 16 U.S.C § 1539(j) (2012). See generally NAGLE, supra note 6, at 216–18.

but within its historical range, may be designated as "experimental." Such a designation authorizes the FWS to promulgate special regulations for the conservation of the reintroduced species, thereby giving the agency greater flexibility to manage the species. Additional management flexibility exists if the experimental population is also designated "nonessential." The FWS has used section 10(j) to facilitate the reintroduction of California condors, gray wolves, whooping cranes, and many other species in addition to ferrets.⁴³ Reintroduced ferrets in section 10(j) areas are protected by the specific regulations promulgated for the experimental population and section 9 of ESA.⁴⁴

There are now an estimated 364 wild ferrets living in the twenty sites where they have been reintroduced.⁴⁵ There have been 20 specific black-footed ferret reintroduction projects, beginning in 1991.⁴⁶ These projects include: Shirley Basin, Wyoming, in 1991; Badlands National Park, South Dakota, in 1994; UL Bend National Wildlife Refuge, Montana, in 1994; Conata Basin, South Dakota, in 1996; Aubrey Valley, Arizona, in 1996; Fort Belknap Indian Reservation, Montana, in 1997; Coyote Basin, Utah, in 1999; Cheyenne River Indian Reservation, South Dakota, in 2000; Wolf Creek, Colorado, in 2001; Bureau of Land Management 40 Complex, Montana, in 2001; Janos, Mexico, in 2001; Rosebud Indian Reservation, South Dakota, in 2004; Lower Brule Indian Reservation, South Dakota, in 2006; Wind Cave National Park, South Dakota, in 2007; Espee Ranch, Arizona, in 2007; Logan County, Kansas, in 2007; Northern Cheyenne Indian Reservation, Montana, in 2008; Vermejo Ranch (black-tailed prairie dog habitat), New Mexico, in 2008; Grasslands National Park, Saskatchewan, Canada, in 2009; and Vermejo Ranch (Gunnison's prairie dog habitat), New Mexico, in 2012.⁴⁷ Four reintroduction sites (Aubrey Valley, Arizona; Chevenne River Reservation, South Dakota; Conata Basin, South Dakota; and Shirley Basin, Wyoming) are considered self-sustaining at present.48

On private lands, most ferrets have been reintroduced thanks to the Safe Harbor Agreements (SHA) developed by the FWS under the ESA. As the FWS explains, "[t]he Safe Harbor policy and associated regulations are intended to facilitate the conservation of listed species through a collaborative approach with non-Federal property owners. The policy and regulations are designed to create incentives for non-Federal property owners to implement voluntary conservation measures for certain listed species by providing certainty with regard to possible future restrictions should the covered species later become more numerous as a result of the actions taken by the non-Federal cooperator."

^{43.} See Nagle, supra note 5, at 215–16.

^{44.} U.S. FISH & WILDLIFE SERV., supra note 28.

^{45.} Id. at 22.

^{46.} See Pritpal S. Soorae, *More case studies from around the globe*, IUCN GLOBAL RE-INTRODUCTION PERSPECTIVES 1, 157–64 (2011).

^{47.} U.S. FISH & WILDLIFE SERV., supra note 28.

^{48.} Id. at 20.

^{49.} Safe Harbor Agreements and Candidate Conservation Agreements With Assurances;

implement voluntary conservation measures for a listed species," and in turn the FWA assured them "that no additional future regulatory restrictions will be imposed."⁵⁰ The FWS provides that assurance via a permit, issued pursuant to ESA section (10)(a)(1)(A), which authorizes the incidental taking of the species.⁵¹ "Before issuing such a permit, the FWS must make a written finding that all covered species in the SHA will receive a net conservation benefit from management actions taken pursuant to the agreement."⁵²

The FWS developed a programmatic safe harbor agreement for blackfooted ferrets in 2013. The agreement is intended "to encourage non-federal landowners to voluntarily engage in conservation activities to benefit and advance recovery of the endangered black-footed ferret." 53 The agreement facilitates "reintroductions of ferrets on properties of willing landowners." The mechanism employed by the FWS is the issuance of "a section 10(a)(1)(A)Enhancement of Survival Permit (Permit) to the Service's Black-Footed Ferret Recovery Coordinator (Permittee) for a term of 50 years."⁵⁴ That permit enables the permittee to "enroll eligible and willing non-federal landowners through Certificates of Inclusion for a minimum term of 10 years under this Agreement. The Certificates of Inclusion convey the Permit's incidental take authorization and the Safe Harbor assurances to Cooperators."55 Additionally, the FWS would prepare a biological opinion pursuant to ESA section 7 that, among other things, landowners.56 addresses the concerns of neighboring

V. REINTRODUCING BLACK-FOOTED FERRETS TO KANSAS

There are about a dozen black-footed ferrets living in Logan County, Kansas. Their fascinating story is a testimony to the persistence of the ferrets, their supporters, their opponents, and the role of the ESA in supporting voluntary conservation efforts.

In 2005, several Logan County ranchers approached the FWS about the possibility of introducing black-footed ferrets onto their property.⁵⁷ The FWS evaluated the proposal according to the strictures of the ESA and the National Environmental Policy Act (NEPA). It prepared a biological opinion under the ESA, which concluded, "the proposed reintroduction of ferrets in Logan County

54. Id.

Revisions to the Regulations, 69 Fed. Reg. 24,084 (May 3, 2004).

^{50.} Id.

^{51.} See id.

^{52.} Id.

^{53.} U.S. FISH AND WILDLIFE SERV., BLACK-FOOTED FERRET RECOVERY PROGRAM, BLACK-FOOTED FERRET PROGRAMMATIC SAFE HARBOR AGREEMENT 10 (2013).

^{55.} Id.

^{56.} See id.

^{57.} U.S. FISH AND WILDLIFE SERV. (REGION 6), FINAL ENVIRONMENTAL ASSESSMENT ON BLACK-FOOTED FERRET REINTRODUCTION ON PRIVATE PROPERTY LOGAN COUNTY, KANSAS (Dec. 2007) [hereinafter REGION 6].

in northwestern Kansas is not likely to jeopardize the continued existence of the ferret. The overall effect of the proposed action will promote conservation and recovery of black-footed ferrets even though some individual ferrets may be lost to incidental human actions and natural causes."⁵⁸ It also prepared an environmental assessment under NEPA which evaluated the proposed reintroduction along with doing nothing or indefinitely delaying the introduction.⁵⁹ The one issue that the FWS addressed was the possible hostility of neighboring landowners. The FWS "met with cooperating and neighboring landowners and the lands surrounding them." ⁶⁰ It promised that "[r]eintroduction will not be attempted on any property unless prairie dog control efforts are in place not only on the perimeter of the reintroduction sites but on adjacent lands."⁶¹ The FWS also observed that the Nature Conservancy and Kansas State University had joined the agency in managing prairie dog populations on their neighboring lands.⁶²

With those green lights, the FWS released 24 black-footed ferrets onto the ranch in 2007.⁶³ They have since encountered two types of challenges, one legal and one ecological.

The legal challenge arose out of the predictable—indeed, predicted conflict between the owners of the land hosting the black-footed ferrets and the owners of the neighboring land. The neighbors don't seem to have any objections to the black-footed ferrets themselves. But they loathe the prairie dogs on which the survival of the ferrets depends. Ranchers and farmers have long regarded prairie dogs as pests that compete with livestock for food and whose burrows can cause livestock to break their legs.⁶⁴ The solution is to exterminate the prairie dogs, or at least as many prairie dogs as possible, by shooting them, poisoning them, or anything else that works.⁶⁵ The fact that a neighboring landowner suddenly tolerates prairie dogs in order to provide habitat for black-footed ferrets presents a real threat. Prairie dogs are oblivious to property lines, and efforts to keep them on the right side of the line are not always successful.

So the Logan County Commission, heeding the complaints of their ranching constituents, dusted off an early twentieth century Kansas state law

^{58.} U.S. FISH AND WILDLIFE SERV. (KANSAS ECOLOGICAL SERVICES FIELD OFFICE), INTRA-SERVICE SECTION 7 CONSULTATION ON THE REINTRODUCTION OF BLACK-FOOTED FERRETS VIA A SECTION 10A(1)A RECOVERY PERMIT IN LOGAN COUNTY, KANSAS (Nov. 6, 2006). 59. REGION 6, *supra* note 62.

^{60.} *Id.*

^{61.} *Id*.

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^{62.} See id.

^{63.} See Dan Mulhern, Blackfooted Ferrets Return to Kansas, U.S. FISH & WILDLIFE SERVICE (Spring 2009), https://www.fws.gov/endangered/news/bulletin-spring2009/ferrets-return-to-kansas.html.

^{64.} *See* DONALD W. SPARLING, NATURAL RESOURCES ADMINISTRATION, WILDLIFE, FISHERIES, FORESTS, AND PARKS, 289–90 (2014) (describing the opposition of ranchers to blackfooted ferrets).

^{65.} See id. at 290.

which provides that "the township trustees of the several townships in this state infested by prairie dogs may enter upon the lands so infested in their respective townships and make diligent efforts to exterminate all prairie dogs thereon."⁶⁶ Indeed, if the township does not fulfill its statutory duty, then the trustees are guilty of a misdemeanor.⁶⁷

The dispute reached the Kansas Court of Appeals, which ruled for the black-footed ferrets. ⁶⁸ The ESA, the court explained, preempted the state removal law.⁶⁹ Killing prairie dogs would starve the black-footed ferrets, and starving the black-footed ferrets would deprive them of the means of the survival.⁷⁰ It would "take" the ferrets by "harming" them, which is prohibited by section 9 of the ESA.⁷¹ The court thus enjoined the county from enforcing the state law against the landowners who were hosting the black-footed ferrets.⁷²

The Kansas state senate voiced its opposition, too. It approved a resolution "opposing the black-footed ferret programmatic safe harbor agreement and environmental assessment." It further complained that the safe harbor agreement was flawed, prepared without the benefit of an environmental impact study, and lacking any input from the affected local governments. The resolution even asserted that Kansas were at risk from the plague because of the presence of black-footed ferrets. The state senate thus requested that the FWS refrain from introducing more black-footed ferrets in Logan County until it conducted a more thorough analysis and public outreach.⁷³ But the law was on the side of the black-footed ferrets, so they remained.

Having survived the legal challenges, all the ferrets had to do was adapt to their new Logan County home. That has proven to be an even greater challenge. Only thirteen ferrets were spotted in 2015, down from thirty in 2014 and a high of 106 before a population crash in 2011.⁷⁴

VI. CONCLUSION

What does all of this say about grasslands preservation? I am reminded of the subtitle of this symposium: "balancing preservation and agriculture in the world's most imperiled ecosystem." The past several centuries of North American history, and the past century and a half of Kansas history, suggest that not much balancing happens. When agriculture confronts preservation,

^{66.} KAN. STAT. ANN. § 80-1202 (2016).

^{67.} KAN. STAT. ANN. § 80-1208 (2016).

^{68.} Barnhardt v. Bd. of Cty. Comm'rs of Logan Cty., 281 P.3d 179 (Kan. Ct. App. 2012).

^{69.} Id.

^{70.} Id.

^{71.} Id.

^{72.} Id.

^{73.} S. Res. 1711, 2013 Leg., (Ks. 2013).

^{74.} Mike Corn, *Ferret program struggles as weather conditions change again*, KANSAS AGLAND (Dec. 5, 2015), http://www.kansasagland.com/news/government/ferret-program-struggles-as-weather-conditions-change-again/article_8d83135f-f0b2-57b6-9e4f-ad8edb0c9cac.html.

agriculture wins. There is much to celebrate in the agriculture heritage that Kansas boasts. But the loss of grasslands is a cause of lament.

The ESA doesn't do balancing either. Unlike other legal regimes, though, preservation wins according to the ESA. That is the source of much of the ongoing debate about the ESA: preservation's champions love it, while agricultural interests – and developers of all stripes – want something else. They want, in short, balancing. Most laws, including most environmental laws, rely on the balancing of competing interests to reach the best decision in particular cases. The fact that the ESA doesn't balance is what makes it work.

The reintroduction of the black-footed ferret to Kansas is one way in which the ESA could conserve and expand the state's remaining grasslands. Absent federal or states laws designed to preserve grasslands themselves, the next best approach is to preserve the species that live there. Conservation groups are already pressing to save the species that remain in the grasslands.⁷⁵ Reintroducing species that once lived there is another step toward not only preserving the few pockets of grasslands that survive, but also providing new opportunities for the expansion of imperiled grassland ecosystems. The first purpose of the ESA, after all, is "to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved."⁷⁶

The ESA isn't going to bring back the grasslands that covered Kansas during the nineteenth century. Nor can the ESA bring the Eskimo curlew back from the dead. But the ESA might be able to help the black-footed ferret – and perhaps some other species – regain a foothold there, and by doing so it can help restore more of the Kansas grasslands to their native splendor.

^{75.} See, e.g., FOREST GUARDIANS, A PETITION TO LIST 206 CRITICALLY IMPERILED OR IMPERILED SPECIES IN THE MOUNTAIN-PRAIRIE REGION OF THE UNITED STATES AS THREATENED OR ENDANGERED UNDER THE ENDANGERED SPECIES ACT, 16 U.S.C. §§ 1531 et seq. (2007), http://www.wildearthguardians.org/site/DocServer/petition_protection-206-speciesr6_7-24-07.pdf?docID=1522&AddInterest=1103.

^{76. 16} U.S.C. § 1531(b).