

The Grey Harvest: Hunting Wolves in America's Heartland

by

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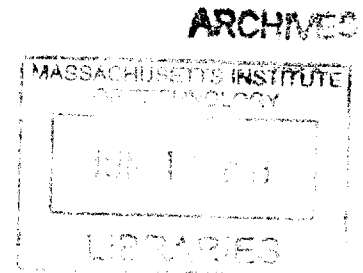
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ABSTRACT

For centuries, humans killed the grey wolf (*canis lupis*) out of fear and misunderstanding. By the 1950s, the species had been hunted to brink of extinction within the continental United States save for a small remainder in Minnesota's heavily forested northern wilderness. Environmental studies in the 1960s demonstrated that wolves were valuable to local ecosystems, leading to a scientific and cultural reassessment. In 1974, the federal Endangered Species Act (ESA) shielded wolves from further slaughter, allowing the species to rebound and spread across the Great Lakes region. The decision to protect wolves bred resentment amongst some farmers who complained that the predators were a threat to their livelihoods.

In late 2011, the government removed the grey wolf from the ESA, citing its full recovery. Just days later in January 2012, Minnesota and Wisconsin both authorized public wolf hunts to bring their respective populations back down to manageable levels. Game officials maintained that these "harvests" — the first in each state's history — were a necessary step for effective wolf management. Critics, however, protested that killing a recently threatened species in such fashion might jeopardize its long-term survival.

Wolves invoke passionate sentiments that obscure rational discussion; objective analysis does not always prevail. In Minnesota, there was valid evidence for a cull. With 3,000 wolves in the forest and advanced monitoring technology available to researchers, reducing that number by 400 wolves was a calculated risk worth taking. This fact did not, however, deter conservation groups and advocacy organizations from mounting a concerted protest over the summer of 2012. In Wisconsin, the rationale for a hunt was thinner. Politicians insisted upon aggressive measures that many scientists felt would pose a legitimate danger to the Badger State's fragile contingent of 800 wolves. Input from the state's leading biologists was largely ignored during the legislative process.

This is a tale of two ostensibly similar, yet ultimately divergent, wolf hunts: one that took science into account and one that shoved it aside. Both carry equally important implications for the future of grey wolf management in the Midwest.

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I. The Woods

The wolf dens were just ahead, tucked into the ridge above the frozen marsh. It was early November 2012, and winter in northern Minnesota had already arrived. Light snow swirled amidst old-growth cedars as a tall, barrel-chested environmentalist named Barry Babcock split off from the trail, his boots crunching on frost and fallen birch. As we trudged along, I asked Babcock about the chances of seeing a grey wolf patrolling near its home. He didn't reply at first. He just stopped and squinted up through the lattice of branches, listening to the calls of the circling birds.

"I can usually tell by the ravens," he said. "Ravens follow the wolves."

Babcock's laconic baritone was hushed, almost conspiratorial. He knew we weren't the only ones looking for wolves in these woods, just as he knew that, unlike us, these others would be carrying rifles instead of corncob pipes.

After about thirty minutes, we reached the first den. It was a small hole three feet deep and about a foot in diameter, likely dug by a pregnant female wolf to breed her pups over winter. Babcock crouched down to inspect it. Something darted in the dark. A roly-poly porcupine had taken up occupancy. Whatever wolves once lived here, they had either moved on or been killed.

"They say there are so many wolves out here, well, where are they?" Babcock said, a strain of anger hovering just below the surface of his even-keeled voice. He stood up slowly, shook his head, and stared out over the pond. "How many dead wolves do they need?"

For the first time in state history, Minnesota was hunting wolves. For much of the past century, the state's three million acres of dense forest had been home to the last native grey wolves in the continental United States. Then, last January, on the heels of the federal government's decision to remove the wolf from the Endangered Species List, Minnesota authorized a recreational public "harvest." The scale of the cull was unprecedented: Of the roughly 3,000 wolves estimated to roam the state, over 400 would be shot and killed by year's end. Next door, Wisconsin wolf hunters would claim an additional 117.

Minnesota game management officials maintained that the carefully orchestrated hunt would bring the wolf population back down to sustainable and practical levels. Livestock farmers in the northern regions of the state weren't about to complain; wolves, they claimed, had threatened their livelihood for years. Recreational hunters, many of whom blamed the resurgent predator for a depleted white-tailed deer population, eagerly awaited the opportunity to stalk a species that had been off limits for nearly forty years.

The hunt was not without ecological risk. Like bald eagles, great white sharks, and other apex predators at the top of the food chain, wolves stabilize forest ecosystems by regulating the populations of their prey. They keep deer and elk herds in check, thus ensuring that the herbivores don't overgraze on young timber, which in turn robs songbirds of their nesting habitats, beavers of their dam building materials, and so on. If Minnesota

were to lose all of its wolves, evidence suggests that the state's woodlands would teeter on the brink of biological chaos.

Among those concerned was Babcock. He has lived in Minnesota's north woods for over five decades and considers wolves his neighbors. Semi-retired after running a bed-and-breakfast for twelve years, he lives in rustic simplicity in a Thoreau-esque nine-foot-by-twenty-four-foot home on the edge of the Chippewa National Forest, three hours north of the Twin Cities. He grows his own vegetables, harvests wild rice, taps maple syrup, and draws all of his electricity from solar panels that he bought from the British military at a discount.

He's also an avid hunter, evidenced by the freshly skinned doe carcass hanging outside his cabin. His ice chest is stocked with grouse and venison that he shot himself, and his wardrobe skews disproportionately toward camouflage and blaze-orange. All of which is to say: Barry Babcock is no animal hugger. But contrary to the bloodthirsty portrayals in pop culture (epitomized by the 2012 Liam Neeson action film *The Grey*), he stressed that wolves are "nothing to be afraid of" and wondered aloud if Minnesota's hunt was simply the latest instance of humans slaughtering the iconic animal due to fear and misunderstanding.

Indeed, objective analysis has not always been prioritized when it comes to wolves. For centuries, Americans culled the species with little regard for biological consequences. In the past decade, the opposite has been true: Wolves were shielded unnecessarily out of facile cultural mysticism and romanticism. Even today, with the species better understood than ever before, facts are often subsumed by rhetoric; sentiment frequently trumps science. The polarized climate around wolves has complicated the efforts of biologists and game management officials trying to balance the concerns of the public with the long-term health of the species.

Minnesota's Department of Natural Resources (DNR) felt confident that the hunt would thin out the saturated population without harming the predator/prey balance of the local ecosystem — and despite Babcock's misgivings, the best available evidence supported this view. By contrast, just across the border, Wisconsin's legislature ignored scientific input entirely and authorized a cavalier hunt that placed its fragile contingent of wolves in serious jeopardy.

Two thousand twelve, then, was a tale of two ostensibly similar wolf hunts that actually carried very different implications for species management. One state's decision was based on statistics and reason, the other's on dogma and public opinion. As thousands of hunters prepared to enter the woods, the long-lasting ramifications of the cull hinged on the answer to a single question: How many wolves is too many?

II: History

Reaping

Minnesota's decision to hunt one of nature's most iconic species is, in many ways, the continuation of deep-seated historical tensions. The grey wolf's earliest ancestors crossed the Bering Strait into North America from Eurasia some 300,000 years ago. These *canis lupis* forebears were morphologically similar to the wolves we see today: a broad, pronounced skull larger than any dog's; elongated paws evolved for effortless speed across terrain; coarse outer fur for warmth in high latitudes; teeth ideal for shredding flesh and cracking bone. They fed in boreal lands teeming with deer and elk. By the end of the Pleistocene era, wolves occupied the whole northern hemisphere, a range thought to be the largest territorial distribution of any single mammal in history. For 100,000 years, they had no natural predators.

Considering their ubiquity and their hunting prowess, it's no wonder, then, that early civilizations frequently invoked wolves in mythology. The shamans of the Turkic tribes (central Asian precursors of today's Turks and Uzbeks) considered the wolf the giver of life and the spiritual mother of the earth. In Norse legend, Sköll the wolf crossed the sky each day attempting to consume the chariot carrying the sun. A she-wolf was said to have nursed the founder of Rome, and a second-century Irish king claimed to speak in lupine tongues. In North America, Native American tribes considered *nishiime ma'iingan* ("brother wolf") to be humanity's sacred companion.

European civilizations felt differently. Respect for the wolf easily shaded in to fear and superstition. From Ovid to the New Testament to Dante, wolves were cast as symbols of greed, treachery, and viciousness. In medieval times, they were cast as malevolent shape shifters: the *were-wulf* of Anglo-Saxon England, the *weriuwolf* of Germany, the *vârcolac* of Romania. In the twelfth century, Armenian women who sinned were cursed to spend seven years in wolf form, during which time they would inevitably devour their own children. These prejudices lingered as Europeans began colonizing the New World. (Even today, more than a thousand years after the earliest known version of *Little Red Riding Hood*, the sinister anthropomorphic wolf remains one of Western society's most durable cultural totems.)

Supernatural concerns aside, wolves posed a far more tangible threat to seventeenth century North American pilgrims: agricultural predation. As settlers took over what had been prime hunting grounds, the displaced wolves preyed on livestock under the cover of darkness. Anger grew as farmers awoke to slaughtered cows, hens, and hunting dogs.

"They are fearefull Curses," wrote missionary Thomas Morton in 1637, "and will runne away from a man...as fast as any fearefull dogge."

Indeed, despite their lethal efficiency, wolves do not, as a general rule, pick fights with humans. North American history contains few instances of unprovoked attacks, owing to the fact that wolves are primarily opportunists, taking easy meals (such as a wounded or

already-dead piece of game) whenever they can and choosing their battles carefully when faced with mobile prey. Wolves often observed human activities from the edge of the forest, but retreated if challenged.

Nevertheless, attacks on livestock were widespread enough to prompt the Massachusetts Bay Colony to offer bounties for every pelt beginning in 1630. Over the next two centuries, nearly every other territory in the union would follow its lead. The only good wolf was a dead wolf.

In 1782, Hector St. John de Crevecoeur, a landowner living in the Hudson River valley, described the prevailing sentiment:

By living in or near the woods, [farmers'] actions are regulated by the wildness of the neighborhood. The deer often come to eat their grain, the wolves to destroy their sheep... This surrounding hostility immediately puts the gun into their hands: they watch these animals; they kill some; and thus, by defending their property, they soon become professed hunters. This is the progress.

By the late 1800s, western territories such as Wyoming hired professional “wolfers” to lay out cyanide-laced carrion and burn down forests near any suspected dens. On an 1899 hunting trip, soon-to-be president Theodore Roosevelt famously called the grey wolf the “beast of waste and desolation” even while noting with some curiosity that it had “become one of the rarest sights of the plains.”

Hunting wolves was not solely the province of sportsmen and bounty hunters. Naturalists killed their fair share too. Ornithologist John James Audubon participated in an Ohio River wolf slaughter that doubled as a revenge killing. He watched in admiration as his neighbor captured three wolves in a pit and severed their leg tendons to cripple them before siccing his hunting dogs, who “satiated their vengeance on the destroyer of the master’s flock.”

In 1905, the U.S. government’s Bureau of Biological Study embarked upon the most extensive and efficient wolf extermination campaign in history, killing thousands wolves annually in a fashion that approached sadism. Wolves were castrated, gutted alive, and roasted over open flames. Some were given fishhooks to swallow. Such initiatives were carried out with the intent of sanitizing the wild of danger so that the general public could better enjoy its splendor.

The last two wolves in Yellowstone National Park died at the hands of park rangers in 1926. With their passing, Minnesota became the only state in the continental U.S. to retain its original grey wolf bloodline.

Reassessment

As the grey wolf vanished from the landscape, its ferocious public image began to soften. With more and more workers taking white-collar jobs in the years following World War II, many in this rapidly expanding suburban middle class had never even seen a wolf, much

less been inconvenienced by one. The species fast became an exotic curiosity found only in history texts, dime store Western novels, and popular sporting magazines. Wolves became a nostalgic emblem of the lost American wilderness, and with this sentiment came a new cultural mystique.

Aldo Leopold, one of the most famous environmental writers of the twentieth century, shot wolves as a boy. But over time, he gradually changed his mind about the animal. His change of heart was evident in his 1944 essay, "Thinking Like a Mountain:"

In those days we had never heard of passing up a chance to kill a wolf. In a second we were pumping lead into the pack... We reached the old wolf in time to watch a fierce green fire dying in her eyes... I was young then, and full of trigger-itch; I thought that because fewer wolves meant more deer, that no wolves would mean hunters' paradise. But after seeing the green fire die, I sensed that neither the wolf nor the mountain agreed with such a view.

The piece was included in Leopold's posthumous 1948 book *A Sand County Almanac*, still considered to be one of the foundational texts of ecological science. In it, the author promoted a new environmental ethos predicated on maintaining the health of the land and its animals. In Leopold's recasting, nature was a delicately constructed house of cards liable to destabilize if any element were to be significantly disrupted by humans.

This type of thinking was emblematic of the conservation movement that flourished in the 1960s. Humanity had overstepped its ecological bounds, environmentalists said. Evidence was mounting that hundreds, if not thousands, of species stood on the verge of disappearing forever due to hunting or habitat loss. The stark finality of the word *extinction* resonated with Americans living in an uneasy age of potential nuclear apocalypse.

In 1963, Congress instructed a committee of U.S. Fish & Wildlife Service (FWS) biologists to compile a comprehensive list of threatened species. This was no easy task: Concrete population data on individual species was disparate and scarce. Though far from exhaustive, the biologists selected 331 at-risk species — including the grey wolf — and devised a framework for population restoration centered on land purchases. Under the plan, the U.S. would buy up to \$15 million worth of habitat annually and cordon it off from development to encourage those species' reproduction.

The recommendations formed the basis of the 1966 Endangered Species Protection Act. Though it was the most sweeping conservation legislation to date, it was not without loopholes. To blunt the ire of their farming and hunting constituents, lawmakers inserted vague phrases such as "best efforts" and "as much as practicable" in to the regulatory language. In practice, these semantic trap doors all too often gave property owners license to ignore the act's provisions. Many farmers continued to cull wolves at will; others burned down forests around their properties to prevent the government from purchasing it as habitable wolf territory.

In 1972, after receiving praise for his successful passage of the Clean Air Act and the creation of the Environmental Protection Agency, President Richard Nixon called on Congress to strengthen the 1966 endangered species law as well. The new act, drafted by the Department of the Interior, dramatically increased government oversight over ecosystems and banned the killing of any endangered species under its purview, including the oft-besieged grey wolf.

Remarkable even today for its scope and breadth, the new Endangered Species Act was a landmark in environmental legislation. It passed Congress with near-unanimous support and President Nixon signed it into law on December 28, 1973.

A Wary Truce

Killing wolves, even those that preyed on livestock, was now punishable by a \$20,000 fine and a potential prison sentence. Recreational deer hunters, meanwhile, complained that a revitalized wolf population meant there would be fewer prize bucks in their rifle sights. Almost immediately, politicians in Minnesota's heavily forested northern counties began arguing for the law's repeal.

This put the state's Department of Natural Resources (DNR) in a difficult bind: Game wardens, generally sympathetic to the concerns of farmers and hunters, were now responsible for ensuring that angry residents did not continue to kill wolves. In 1974, the agency's commissioner, Robert Herbst, repeatedly asked the federal government to rethink the protective measures and hand wolf management responsibilities back to the state. Minnesota, he argued, should be allowed to handle its own affairs with the species.

The U.S. Fish and Wildlife Service refused the request, but extended an olive branch in 1975. The agency authorized federal trappers (and federal trappers only) to re-locate wolves suspected of attacking livestock by capturing them in non-lethal leg traps, tranquilizing them, and moving them to another part of the state.

The concession did not defuse the situation. On a chilly January morning in 1977, Minnesota DNR officials in Voyageurs National Park arrived at the ranger station to find a dead wolf on the doorstep. It had been shot in the head and run over with a truck. Its hide was painted with the letters "S.O.S." — the calling card of a clandestine group calling itself Sportsmen's Only Salvation. An anonymous phone call threatened more vigilante action unless the wolf problem was solved. Shortly thereafter, another carcass appeared in front of a local city hall. Next came a severed wolf head left on the stairs of a Duluth newspaper. Police turned up few leads and made no arrests.

DNR commissioner Herbst pleaded for patience, saying that a solution with the federal government was in the works. Minnesota would soon be able to compensate farmers up to \$400 for every animal lost to a wolf attack. But that same month, hundreds crowded in to a town center in Rainier to protest the continued ban on wolf killing. Many shouted that they were still prepared to take the law into their own hands.

"I've got a family to feed and I'm going to get rid of some wolves, one way or another," said one farmer who later sued the government for \$58,000 worth of lost cattle.

This overheated rhetoric, however, did not line up with statistics. From 1975 to 1980, wolf-related complaints averaged just thirty per year and affected only twenty-one individual farms — less than one percent of the state total. Each of those five years saw less than 100 cows killed, hardly an economic catastrophe. The low number would seem to contradict the seventy percent of northern residents who, in a contemporaneous poll, considered wolves a serious threat to livestock. Even today, public opinion surveys consistently show that wolf attacks — much like shark attacks and plane crashes — carry outsized menace in the popular imagination.

All the while, Minnesota's wolves continued to recover. In the first four years of federal protection, they had more than doubled their numbers. Around 1,000 wolves now roamed the state and their range was expanding. The détente grew more tenuous with each passing season.

De-listing

By the late 1980s, the robust wolf recovery in Minnesota had encouraged the U.S. government to try to replicate it in Yellowstone National Park. During the wolves' sixty-year absence, the park's aspen growth had stagnated; complacent elk herds were eating young saplings as soon as they emerged from the ground. There were fewer beavers and fewer avian species. The park's landscape was languishing and biological science offered one promising solution: bring back the wolves.

At the time, all available evidence suggested the wolves would dramatically improve Yellowstone's ecosystem. River willows had declined close to sixty percent during the 1900s as a result of elk overgrazing, a problem that wolves would quickly rectify by thinning out the herd. Other ecological studies indicated that wolves would foster plant and animal biodiversity. They would also reduce the spread of elk-borne chronic wasting disease by preying on sickened animals.

Efforts to restore the top predator to Yellowstone carried "enormous symbolic importance as well as ecological importance," said National Wildlife Foundation president M. Rupert Cutler in 1988. "It will be viewed as one of the major conservation accomplishments of the 1990s."

Not everyone agreed. One Montana state representative told reporters that the state "needs wolves like we need another drought." Legislators in Idaho and Wyoming, including future Vice President Dick Cheney, banded with rancher and cattlemen associations in condemning the proposal. Their argument was largely based on financial concerns as opposed to ecological evidence. Re-introducing wolves, they said, would only increase attacks on cattle, thus cutting into livestock production and leaving ranchers with economic losses.

"We're going to see, I think, an explosion," said an official from the Montana Farm Bureau. "They have no natural enemies, except man. If man is restricted from providing any controls, they figure out pretty quick this whole place is one big lunch counter."

In the case of Yellowstone, at least, public opinion aligned with scientific facts. National polls showed a majority in favor of restoring the wolves, buoyed by lingering historic guilt that the *Chicago Tribune* likened to "reparations" payments made to former slaves after the Civil War. In 1995, after seven years of legislative wrangling, a group of sixty-six wolves was released into the park. Within a few years, more than 75 wolves were living in the park.

Wolf population monitoring is still an inexact science, but it has come a long way over the past sixty years. Back in the late 1950s (an era before long-range tranquilizer darts), biologists used non-lethal leg traps to subdue animals, tie them up carefully, staple a colorful "tag" to their ear, and release them. The job was thankless, with no guarantee that the tagged animal would ever be seen the wild again. But at the time, it was the only way to get a rough estimate of how many wolves were in the state.

Radio transmitter collars, invented in the late 1960s, revolutionized the field. By fastening one around a wolf's neck, scientists could use the signals to track pack movements. A decade later, the advent of satellite imagery provided researchers with top-down views of wolves in motion across the landscape. Together, these two technologies showed that the species was maintaining its foothold in Minnesota. Slowly but surely, facts and figures replaced anecdotes.

Today, computer models can build relatively accurate wolf population forecasts by combining information from tracking surveys, satellite records, and radio collared wolves to provide a holistic overview of species activity. Researchers can plug in an array of other parameters, too, such as breeding patterns, migratory routes, and proximity to other packs. Biologists can even use this technology to forecast which farms are at highest risk for livestock attacks.

By 2000, with wolves thriving in two separate areas of the country, the rationale for keeping them under federal protection grew ever thinner. By that point, Minnesota had over 2,400 healthy wolves and several packs had crossed the border into northwest Wisconsin and the upper peninsula of Michigan. "We may find that it's nearly time to declare success for the recovery of the gray wolf in some areas and shift some of the federal attention and funding to other threatened and endangered animals and plants that are truly in need of emergency care," Ron Refsnider of the U.S. Department of the Interior said that July.

By early 2001, talk of removing the species from the Endangered Species Act began to grow in earnest. Sensing a change in the offing, Minnesota's Department of Natural Resources drafted a hypothetical management plan in preparation for the day when the wolf might once again be under state control. It allowed for the killing of "problem" wolves so long as the state maintained a minimum population of 1,600. The plan also banned any recreational hunting for five years following a de-listing.

Three years later, in July 2004, with wolves in the Great Lakes region totaling nearly 4,400, the U.S. Department of the Interior formally de-listed the grey wolf. The decision drew criticism from some biologists, who argued that wolf's recovery was still a fragile work in progress, and conservation groups who objected to putting wolves back in harm's way.

Later that month, the Sierra Club took the government to court. "What ought to be a celebration of a conservation success is instead a cruel hoax," the group wrote in a statement. "The proposed management plan for our wolves amounts to little more than open season. It simply is not safe to turn over management of our wolves to the state." A federal circuit court upheld the group's challenge, beginning a drawn-out game of tug-of-war that saw the wolf's status change almost yearly. The government tried de-listing again in 2006, 2007, and 2009. Each time, successful lawsuits from conservation groups scuttled the plans.

In May 2011, the government de-listed the wolf once again. This time, counterarguments failed to gain traction. It was becoming impossible to deny the evidence: Grey wolves were no longer in danger of extinction. In fact, the wolf was thriving and its range was increasing. Two prominent conservation groups (Defenders of Wildlife and the National Resources Defense Council) even lent their support, a reversal of previous opposition. The die was cast.

On December 21, 2011, Secretary of the Interior Ken Salazar formally announced the delisting, ending nearly forty years of protection. The wolf was hailed as a conservation success story, becoming just the nineteenth species to come off the Endangered Species on account of full recovery. Come January, Minnesota would take on management responsibilities for the species once again.

III: Minnesota

Best Laid Plans

Despite the recommended five-year waiting period, Minnesota wasted little time in authorizing a wolf hunt. On January 6, 2012, news leaked that legislators, in conjunction with the state's Department of Natural Resources, planned to introduce a bill that would allow hunters to cull wolves that November.

The state's hastiness to hunt a newly de-listed species took many by surprise. Conservation groups blasted what they considered to be a ready-fire-aim approach to game management. "It's taken thirty-five years, now we're proposing that a season be opened?" Howard Goldman, state director of the Humane Society of America said in a statement. "Hunting for recreation, or sport, or trophies works against the long-term survival of wolves in Minnesota."

The *Minneapolis Star Tribune's* editorial board criticized the legislative "sprint" and lack of public input period, noting that the rush "minimized opportunities for Minnesotans to comment in meaningful ways." The bill's hasty rollout exposed the DNR to charges of collusion and back room dealings – accusations that, once they had been introduced, proved hard to dispel.

The controversy united some strange bedfellows. A wolf advocacy institution joined with the livestock industry in support of the bill, while some Twin Cities Republicans joined conservation groups in opposition. Subsistence hunter Barry Babcock spoke out against the bill alongside representatives from the state's eleven Ojibwe and Sioux reservations, who decried the lack of Native American input into the wolf management plan despite having sovereignty over large swathes of wolf territory.

Officials stressed that the hunt would be both scientific and sustainable, not a free-for-all slaughter like in olden days. The DNR would create just 6,000 wolf kill permits, allocate them via lottery, and limit the total number of statewide kills to 400. That number did not figure to significantly endanger Minnesota's wolf population. Successful hunters would be required to register the animal's carcass at a DNR field office and the total number of wolves killed would be updated daily on the agency's website. If and when hunters reached the quota, the season would end immediately.

The DNR commissioner called the hunt conservative, and indeed, some criticized the agency for not going far enough. "I think they're being way too cautious," said Mark Johnson, executive director of the 20,000-member Minnesota Deer Hunters Association, who felt the quota could have easily been doubled.

With wolf behavior better understood than ever before, Minnesota officials felt confident that their kill quota was appropriate. "We have decades of research about wolf dynamics," said Dan Stark, a large carnivore specialist for the DNR. "There's a lot of good information that we can use to identify the potential limit of wolves we can take without having an impact on the population."

The Warpath

As the contentious wolf debate played out in the Minnesota legislature, anti-hunt protesters went on the offensive. In late April, representatives from national environmental organizations including the Sierra Club, the Audubon Society, and the Center for Biological Diversity met with Governor Mark Dayton to discuss options for halting the wolf hunt. The groups stressed the animal's cultural significance and ecological importance in the hope that Dayton would veto the wolf season. It was not too late, they said, to stop the proposed killing.

But Dayton, barely a year into his first term, was supportive of the measure which had passed both legislative chambers narrowly, but with bipartisan support. The hunt provisions were bound up in the annual omnibus Fish & Wildlife bill, a package that contained other revenue-generating initiatives the governor badly needed in order to balance a state budget awash in red ink. On May 3, he signed the entire bill into law.

As disappointed conservation groups regrouped, little-known homegrown upstart Howling for Wolves entered the fray. The non-profit advocacy group launched a blitzkrieg of TV, radio, and social media advertisements railing against what it claimed was unwarranted animal cruelty and recklessness toward the wolf's long-term survival.

"Is this grassroots or what?" group founder Maureen Hackett asked with a grin, just before addressing a group of cheering supporters in Hibbing, Minnesota. Lithe, chipper, and feisty, Hackett has stormed barricades before. After successfully lobbying for smoke-free state hospital grounds in 2003 and falling just short in a fiercely contested outsider bid for Congress in 2010, the physician and former Air Force forensic psychiatrist has become the public face of anti-hunt resistance in the state. She has both a candidate's knack for sound bites and a crusader's force of conviction, greeting friends and acquaintances with fist bumps while engaging critics in verbal fisticuffs.

Hackett vigorously contests the notion that the DNR had wolves' best interests at heart. The rush to get a hunting season passed, she said, directly contradicts the cautious wait-and-see approach that Minnesota itself advocated just two years prior to the wolf coming off of the Endangered Species List.

Suspecting there was more to the story, Howling For Wolves investigated what transpired behind closed doors between legislators and top DNR officials. In July, the group obtained emails from Dennis Simon, the DNR's Chief of Wildlife Management, who had written to his colleagues, "...we owe it to our primary clients, hunters and trappers, and to livestock producers as secondary clients, to do what we can to establish a legitimate harvest opportunity."

To Hackett, the notion of appeasing clients signaled that the wolf hunt was based in something other than science. "The Minnesota DNR is trading political favors on the backs of wolves," she wrote in a press release. Howling For Wolves promoted an alternative narrative, one in which northern legislators conspired with powerful anti-wolf constituencies like livestock producers to push the hunt through before too much scrutiny could be applied.

What's more, Hackett added, the hunt was poorly designed for solving wolf/human conflicts in the state. "The hunt does not address [livestock attacks] in a logical way," she says, a point that DNR officials have since conceded. Hackett doesn't object to killing problematic wolves as a matter of last resort, conceding that some wolves will die every year. But since farmers can already kill wolves in self-defense, she said, adding more hunting on top of that comes down to two things: "entertainment and pelts."

Her message resonated with the public. Howling for Wolves quickly expanded into a big tent coalition. Animal cruelty advocates protested the barbarous nature of catching wolves in metal traps. Native American spoke out against the killing of their sacred animal. Subsistence hunters such as Barry Babcock objected to killing animals for recreation rather than food. Environmental activists insinuated that extractive industries (especially ore mining companies) were pulling strings behind the scenes. Still others claimed a special gut level affinity toward the wolf that they simply couldn't explain.

Of these divergent justifications, all were rooted in emotional opposition to wolf killing rather than scientific analysis. Many Howling for Wolves members could not bear to see even one wolf killed, despite population data that suggested oversaturation in the north woods. The group bemoaned the “slanted” news coverage in the *Minneapolis Star-Tribune* and Minnesota Public Radio, despite the fact that both outlets ran multiple stories that highlighted the opposition.

As the summer wore on, Howling For Wolves jockeyed for media attention and public support. Hackett penned numerous op-eds and staged protests at the governor’s mansion. Billboards appeared on Highway I-35 depicting bloodied wolves with their feet and snouts caught in vicious metal traps alongside text that read: STOP DNR TORTURE: NOW OR NEVER. It scored another public relations victory in early August when the DNR’s own online survey found that nearly eighty percent of over 7,000 respondents were opposed to the hunt. The vote, however, was likely skewed by an influx of out-of-state respondents organized by national conservation groups.

The hunt’s most prominent scientific supporter was L. David Mech, the internationally renowned ‘wolf man’ of Minnesota. Mech (rhymes with ‘reach’) has been monitoring wolves since the late 1950s, when he tracked and surveyed them as a graduate student at Purdue University. Now grey-bearded and in his seventies, he wears many professional hats: senior scientist for the U.S. Geological Survey; ecology professor at the University of Minnesota; founder of the International Wolf Research Center in Ely, Minnesota. He has studied pack behaviors in Alaska, Michigan, Russia, and Norway among other locales. Anyone writing about wolves will almost certainly cite one of his 400-plus articles or quote from one of his dozen books. Indeed, it’s likely that Mech has forgotten more facts and figures about wolves than most people learn in a lifetime.

Mech firmly opposes romanticizing the species he’s come to know so well. He maintains that wolves are simply one animal in the broader canvas of an ecosystem and do not deserve any kind of special treatment. Just as the government once killed wolves with little regard for science, Mech feels that today’s wolf protection advocates are overcompensating in the opposite direction.

“We as scientists and conservationists who deal with such a controversial species as the wolf have a special obligation to qualify our conclusions and minimize our rhetoric,” he wrote in the scientific journal *Conservation Biology* in early 2012. “An inaccurate public image of the wolf will only do a disservice to the animal and to those charged with managing it.”

With Minnesota’s statewide wolf population topping three thousand and data showing the packs moving ever southward toward suburban areas, Mech agreed with the Department of Natural Resources that the time was right for a cull. The goal of wolf conservation, he felt, was having enough wolves in the forest to keep prey in check, yet not so many that they overrun the forest. “The long-term health of the species depends on management,” he said.

Indeed, data from the last thirty years suggests that the wolf population could sustain a twenty-nine percent decline without destabilizing; the state's proposed 400-kill quota only represented thirteen percent. Even when added to the number of wolves killed by humans for other reasons like livestock attacks and automobile accidents, Minnesota's total wolf mortality for the year was only projected to be around twenty-three percent.

It was a calculated risk that the state felt it could safely take, especially in light of increased wolf attacks on livestock. The winter of 2011 - 2012 was uncommonly mild, allowing deer to elude wolves more easily in the absence of deep snow pack. Thus, the predators fell back on alternate sources of food. Slaughtered sheep and cattle claims jumped compared to the previous year, stirring old grudges and intensifying calls for an immediate hunt.

Mech did not discount the psychological benefits of holding a hunt either. A state-sponsored wolf season, he said, might help defuse the indiscriminate anger that fueled wolf/farmer conflicts during the 1970s and '80s. By elevating the wolf from a nuisance animal to a legitimate game trophy (a transition that had proven effective for black bears forty years prior), Minnesota might quell the gratuitous unsanctioned wolf killing that actually posed a greater long-term threat to the species than a managed hunt.

"We've got a lot of people who don't think any wolf should ever be allowed to live and we've got a lot of people who don't think a wolf should ever be killed," Mech said in testimony before the Minnesota legislature, "but I think that [the DNR's plan] is extremely well thought out."

Mech's input did not sway Howling for Wolves. In September, the group filed a lawsuit against the DNR on the grounds that the agency violated its own game management rules by failing to hold an adequate public comment period and ignoring the five-year waiting period before hunting the newly de-listed wolf. Legally speaking, it was the group's strongest argument. But on October 10, the Minnesota Supreme Court dismissed the injunction on the grounds that the legislature, not the DNR, had initiated the hunt. Therefore, the agency had broken no rules. The season would go forward as scheduled.

Three weeks later, as national media converged on Minnesota, thousands of heavily armed wolf hunters prepared to enter the woods. The effects were visible across broad swathes of the north woods: the pre-dawn rush at local diners; the swelling queue for taxidermy services; the long lines at the ammunition stores where sportsmen swapped tips and tactics on how to bag deer, grouse, black bears – and now wolves.

Rifle hunters, knowing that they were unlikely to find a wolf simply by camping out in a tree stand all day, drove for miles, howling out into the woods in hopes of provoking a reply and zeroing in on a pack's location. The more technologically inclined purchased electronic transmitters designed to broadcast distress calls mimicking wounded prey. Trappers, meanwhile, brewed up a pungent cocktail of chopped-up bobcat meat and beaver castor (an oil secreted in the animal's urinary tract) as bait for luring wolves into metal-jawed snares.

At dawn on November 3, the first sanctioned wolf hunt in Minnesota state history began. It was a concentrated siege unlike anything wolves had faced in over four decades. The

persistent gunfire in the woods outside Barry Babcock's home sounded "like Army maneuvers," he said. By sundown, it was immediately clear that the hunters were going to be more successful than the DNR had anticipated. Pictures of grinning hunters next to wolf carcasses strung up in trees circulated in the local newspaper the next day.

Opponents of the hunt were despondent. "[The wolves] were blindsided," said Babcock. The hunt, he said, was not as much a noble chase as a paramilitary operation, with sheer numbers ensuring total victory for the humans. "All we can get are stays of execution," Hackett said. "Does the wolf always have to lose?"

Despite the bloodshed, Minnesota's wolf population was in little overall danger. Even the sudden loss of 400 wolves was unlikely to undo more than three decades of revitalization. Grim though it may have been for wolf hunting opponents, the facts on the ground ultimately supported the state's decision.

IV: Wisconsin

Bitter Harvest

Four hours east in Madison, Wisconsin, a parallel wolf hunt debate was taking place, one that contained far more disturbing implications about the role of science in game management decisions. For despite copious data suggesting a cautious approach with the species, public sentiment and political considerations combined to make Wisconsin's wolf season a foregone conclusion as soon the federal de-listing became final, regardless of biological consequences.

The Badger State's northwest corner contains a relatively small but robust population of between 800 and 1,000 wolves descended from packs that drifted across from Minnesota in the late 1970s. Wisconsinites, however, have never taken kindly to their new neighbors. A 2012 University of Wisconsin survey found that close to sixty percent of residents in wolf country agreed with negative statements about the animal. Of those, more than half held "very negative" opinions, a threefold increase since 2001. Forty-five percent of all respondents wanted to see the wolf population reduced to 100 or fewer.

Just as in Minnesota, Wisconsin's legislature introduced its wolf hunt bill in January 2012. But when the proposal debuted, some state biologists were taken aback by its militant terms. The law required Wisconsin Department of Natural Resources (DNR) to hold a hunt that October. The explicit goal, one of the bill's co-authors said, was to bring the statewide total closer to 350, an aggressive reduction that risked destabilizing the state's wolf population by causing massive disruption in breeding females. What's more, hunters would also be allowed to use hunting dogs and stalk wolves at night with floodlights.

These two provisions struck many as excessively cruel and unnecessary. "Biologically, if you start chasing wolves with dogs, you are essentially declaring war between the

species,” said Randy Jurewicz, the state’s former DNR wildlife manager. “You’d be causing more problems with pets and wolves in the long run.”

The pressure for aggressive wolf control came all the way from the top. In late 2010, Governor Scott Walker had appointed Cathy Stepp, then a state senator, to head up the DNR, an agency she had criticized for being “anti-development, anti-transportation, and pro-garter snake.” Stepp shared Walker’s view that the state’s natural resource policies should serve business interests, not just conservationists.

“Putting Cathy Stepp in charge of the DNR is like putting Lindsay Lohan in charge of a rehab center,” one state representative told the *Wisconsin State-Journal*.

Environmentalists suspected that the wolf hunt was a political sop to the livestock industry. Stepp maintained that the initiative was being undertaken in good faith. “Our proposal,” she said, “must meet the expectations of hunters and the needs of farmers, who have been suffering from long unchecked wolf depredation on their livestock; and...must be logical and balanced for the general population which often sees wolves as symbolic of the wild and healthy ecosystems they value.”

In fact, Wisconsin’s hunt did not address any of those concerns. The hunt was not set up to strategically reduce cattle attacks, nor was it considerate of ecological concerns. “We were very concerned the day that the protections were removed and very concerned about the way this hunting bill was constructed,” said Peter David, wildlife biologist for the Great Lakes Indian Fish & Wildlife Commission. “They didn’t consult with DNR staff biologists...It was really drafted by a pretty small cohort of people and hurried through the legislative process.”

David was not alone in his trepidation. Adrian Wydeven, the DNR’s top mammalian ecologist and wolf expert, was conspicuously absent from the bill’s committee hearing. Wydeven has studied wolf habitats across the country for more than two decades, chaired the Wisconsin Wolf Science Advisory Committee, and served on the federal government’s timber wolf recovery team. In 2009, he predicted that the wolf would come off of the Endangered Species List, but also expected that there would be no public harvesting until at least five years after de-listing.

Wydeven, who declined to be interviewed for this article, chose his public words carefully when it came to the 2012 wolf legislation. Though he allowed that the harvest was “sustainable,” he stopped short of endorsing it enthusiastically. In February, his contact information disappeared from DNR press releases about the issue. A source close to Wydeven says that he strongly disagreed with the bill’s aggressive approach to wolf killing, preferring instead to take a wait-and-see approach that would be more scientifically informed. But in all likelihood, he held his tongue for fear of retribution from Stepp. The DNR publically denied muzzling Wydeven, saying that it did consult him about the bill — but only after it was already written.

In March, the final bill passed the legislature over the objections of some representatives who called it “irresponsible and anti-science.” Like Minnesota, Wisconsin was set for a

wolf hunt. Unlike Minnesota, however, it was abundantly clear that the hunt had not been undertaken with the facts in mind.

“Nothing’s Perfect”

Demand among hunters exceeded expectations. Wisconsin received more than 20,000 applications for licenses but granted just 1,160 via random lottery, making wolf kill permits a scarce and valuable commodity. With some 650,000 deer hunters out in the woods that autumn, some biologists worried that some disappointed riflemen would take the opportunity to bag a wolf anyway. Annual wolf poaching in Wisconsin is not insignificant; twenty-four wolves, or around one-eighth of the total 201-wolf quota, had been killed illegally the previous year.

That’s where Lance Burns comes in. Tall and broad-shouldered with a crew cut indicative of his Air Force days, Burns is one of only two Wisconsin game wardens in the entirety of Douglas County, an area of almost 1,400 square miles. His black pickup truck is his mobile office — a tangle of radios and monitors up front and a well-stocked rifle rack in the back. After tracking poachers for over fifteen years, he possesses seemingly encyclopedic knowledge of every dirt road and wooded shortcut.

“Ninety-eight percent of sportsmen do the right thing,” Burns said. “It’s that two percent that I’m out here for...[M]y best tools are patrol and visibility.”

With so much forested ground to cover and so little manpower, the Department of Natural Resources relies heavily on public tips, most of which are anonymous. Complaints come in unsolicited from residents who’ve heard gunfire in the middle of the night or stumbled across a dead wolf near their property. But the vast majority of incidents go unreported.

“I wouldn’t say it’s a code of silence, necessarily, but people are reluctant to turn in their neighbors,” Burns said. Experience has shown him that tipsters feel more comfortable calling him about illegal wolf kills when they know him personally and have assurance of his discretion. For this reason, he maintains an easygoing camaraderie with local hunters by chatting them up at gas stations and high school basketball games. Ever gregarious and rarely in a hurry, Burns will laugh and swap stories for thirty, forty minutes at a time. If he ever gets tired of being the friendliest warden in town, he could probably run for mayor. His informal conversations are akin to building an intelligence network.

Burns is especially conscious of the fact that wolves are back in the crosshairs. He himself feels the hunt was justified, based on an instinct that the forest is “saturated” with them. But although he says that he’ll often see wolves while out jogging, they don’t bother him very much. “I’m more afraid of my neighbor’s dog,” he said. “Wolves are afraid of us, too.”

On November 10, 2012, Wisconsin’s wolf season had been open just three weeks and hunters had already killed sixty-seven wolves, exactly one-third of the quota. Amid ferocious bursts of rain and occasional marble-sized hail, Burns eased his pickup through the muddy trails near Gordon, Wisconsin, a one-stoplight town on the state’s western

edge. The surrounding area is ground zero for wolf/human conflicts, owing to the high concentration of livestock farms nearby.

The bad weather had deterred many hunters that morning; Burns drove for close to an hour without seeing so much as another vehicle. Then, all of a sudden, he stopped short on the road. He pulled out his binoculars and peered through the rain at a distant pair of taillights. He stared ahead for what seemed like an eternity.

"Truck up there's moving real slow. Might be road hunting," he said, referring to the fact that it is illegal in Wisconsin to fire a gun from a vehicle. He rolled down his window, listening for telltale rifle fire. I stayed still. Finally, Burns put the truck back in gear and eased it up the incline. Just as the front bumper crested the ridge, he accelerated and closed the remaining gap in a hurry. He parked right alongside the other pickup and hopped out, gun and badge in hand.

After an apprehensive moment, the tension passed. As he checked the driver's identification and permits, Burns flashed a big grin and waved me over. The truck's two hunters, both men in their late twenties, were not doing any drive-by wildlife shooting. Instead, they were out hunting wolves. One of them pointed to the softened ground where two wolf tracks the size of large fists led off into the brush. A pack had crossed through the area within the past twenty-four hours, he said.

The other man, who asked to be identified only as Jordan, described his "ecstatic" reaction upon finding out that he'd won one of the coveted wolf licenses. He said that he bore no ill will toward the species as a whole, but that the novelty of hunting a long forbidden game species appealed to him. Despite the weather, the quick pace of Wisconsin's season made him feel like he had to act quickly to claim his trophy, lest the statewide kill quota be met. Asked what he planned to do with a wolf if he caught one, Jordan replied, "I'm going to mount it up."

Afterward, Burns drove out to check on a few trapping sites camouflaged effectively in the overgrown brush. None had been tripped so far. Everything appeared to be in order. But with so little human traffic in the area, it would be quite easy for someone to kill a wolf without being caught.

Asked about the difficulties of policing the wolf hunt and prosecuting poachers, Burns just shrugged. A Good Samaritan might call in an illegal kill, especially if the perpetrator is foolish enough to boast about it. But as far as a warden being in the right place at the right time, "the chances of [a poacher] being checked are probably once in a lifetime." However many wolves Wisconsin hunters killed legally, poachers were almost certain to tack on several more to the total.

Burns stopped at a muddy intersection. Orange gravel roads stretched out in all four cardinal directions. The rain had let up, but only slightly. Burns leaned over the steering wheel and peered out. "I go one way, I make a major case, you know? I go the other way, I miss it. Just fate," he said.

"Nothing's perfect when it comes to wolves."

V: Post-Mortem

Late in the afternoon on January 1, 2013, Minnesota Department of Natural Resources Commissioner Tom Landwehr received word that the 395th wolf had been killed, leaving the statewide total just a few shy of the 400-wolf quota. With wolf fatalities nearing the threshold, Landwehr decided that it was too risky to allow hunters back out into the woods for another full weekend. A half-hour after sundown on January 3rd — almost exactly one year to the day after it was introduced — Minnesota's first official wolf season came to a close.

Despite Landwehr's caution, the hunt claimed 413 wolves (the overage being the result of hunters nabbing wolves under the wire). Nearly three-quarters of those kills came from trappers, who fared far better than their rifle-toting counterparts. The hunters' lethal efficiency forced the season to close almost a month earlier than DNR officials had expected. When factoring in the number of wolves killed by poaching, wolf control measures, and vehicular accidents, humans were responsible for 712 wolf deaths in 2012.

With the cull over, the battle over interpreting the results began. Both pro- and anti-hunt advocates seized on the mortality statistics to bolster their arguments. Some suggested that the relative ease of the hunt meant the wolf population had been undercounted. "Either wolves are really dumb — which they're not — or there's more of them than we thought there were," one state legislator told the *Minneapolis Star-Tribune*. The quota, he said, could have even been higher. Howling for Wolves, meanwhile, contested the notion that killing nearly one-quarter of the estimated population in a single year could be considered sound wildlife management. "The whole idea of killing the wolf to save the wolf has been a ludicrous position from the start," Hackett said.

Scientific answers were slower in coming. In March, Minnesota DNR biologists undertook a very different kind of wolf hunt, one in search of data rather than pelts. In what is considered to be the most comprehensive study in nearly a decade, dozens of trackers combed the northern forests looking for paw prints, scat, and deer carcasses in order to piece together wolf movements in the wake of the hunt. Radio collar signals provided clues, as did the teeth, blood, and urine samples collected from carcasses of hunted wolves. The results, expected in late May, will give officials an up-to-date population baseline that will inform 2013's hunt quota.

State game officials considered the hunt a resounding success. "This [was] a sustainable harvest," Landwehr said in the hours after closing in the hunt. "We will have wolves in the state forever," referring to the consensus among biologists that Minnesota's wolf population is unlikely to drop low enough for the species to go back under federal protection. This is both a blessing and a curse, for it means that the state must continue to navigate the thorny issues surrounding the controversial predator for the foreseeable future.

L. David Mech, who has kept a low profile since January, is equal parts weary and vindicated. The wolf season played out much as he predicted it would, even as he withstood intense personal and professional criticism from organizations like Howling for Wolves. Mech, for his part, prefers to focus on the future and continues to work on new

technologies and methodologies for wolf tracking. For now, he doesn't anticipate wolf management getting easier anytime soon. "Maybe in another ten years," he said.

Minnesota's DNR signaled that it would like to hold another wolf hunt in 2013, but on March 14, a state Senate committee approved a bill reinstating the five-year moratorium on recreational wolf hunting. "Minnesotans clearly value the gray wolf and want to return to common sense strategies outlined in the original management plan reached through a consensus process," Hackett said in a public statement concerning the bill. As of this writing, the legislation is headed to budget committee, where its prospects are uncertain.

It is somewhat more likely that Wisconsin will hold a second hunt, albeit a less militant one. After killing more than one quarter of its total wolf population in 2012, there are already signs that the state will reduce its hardline stance. The Wisconsin DNR plans to replace its 'emergency' wolf hunt guidelines with permanent revisions that will incorporate more feedback from biologists like Adrian Wydeven. The agency also plans to draft a new wolf control strategy, one better suited to co-existing with a greater number of wolves than some stubborn rural residents might prefer. The seeming return to a rational, science-based wolf management program in the Badger State is encouraging.

As the snow melts in the Great Lakes region this spring, the wolf population will expand as hundreds of pups are born. Many of them will not survive; natural attrition will thin out the litters throughout the summer months. By autumn, the remaining adolescents will be strong enough to hunt for deer and moose. Inevitably, they will be unfairly loathed in the eyes of some, unjustly idolized in the eyes of others. The challenge for game management officials, then, will be to continue to make evidence-based decisions just as Minnesota did in 2012 rather than cede to uninformed public sentiment. That way, if hunters do enter the woods this winter to kill wolves again, scientists and residents alike might feel confident that it is for all the right reasons.

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