

Sometimes a historian has to wait a long time to answer a question, in this case nearly forty years. And to get that answer takes patience, perseverance, and maybe a little luck. To historian Susan Flader, the question had to do with the pivotal incident in one of the most important essays in the annals of the conservation movement, Aldo Leopold's "Thinking Like a Mountain."

SEARCHING FOR ALDO LEOPOLD'S GREEN FIRE

Some four decades ago I sent my book on the backstory of Aldo Leopold's most iconic essay, "Thinking Like a Mountain," to the publisher, acutely aware that I had not one shred of contemporaneous evidence as to when, where, or even whether the key event in the essay—when Leopold shoots a wolf and

watches a "fierce green fire" die in her eyes—had occurred. Now, all these years later, *Green Fire* was to be the title of a film about Leopold's life and legacy, a project on which the Aldo Leopold Foundation was engaged with a film crew from the U.S. Forest Service, making documentation of the time and place even more important.

THINKING LIKE A MOUNTAIN

Shortly after receiving his master's degree in forestry from the Yale Forest School, Aldo Leopold arrived in the Southwest in July

1909 and spent his first two years in the Forest Service leading surveys of the Apache National Forest before serving on the Carson National Forest and in other assignments. In trying to determine where and when the wolf encounter took place, I had pored over every page of Leopold's extant diaries from these years in the Forest Service, his hunting journals, his official correspondence and reports (including thousands of related documents from the National Archives as well as records centers and forest offices throughout the country), his letters to family and colleagues, all of his writings, both published and unpublished—

BY SUSAN FLADER

whatever I could find—always searching for some mention of that seminal green fire event. But I found none.

In the end, based largely, I suppose, on my sense of the particular hold on Leopold's imagination exerted by the country along the Mogollon Rim in the Apache National Forest of eastern Arizona, where he had spent the first two years of his career, I had ventured to write, "The old wolf in 'Thinking Like a Mountain'...may have been shot on the Apache Forest."¹ The particular context for this supposition was my mention of Leopold's later change of attitude toward predators as reflected in his 1940 essay "Escudilla," in which he lamented the death of Old Bigfoot, the grizzly that dominated Escudilla Mountain, at the hands of a government trapper. For that animal we did have contemporaneous evidence of Leopold's thoughts at the time, in the form of a September 25, 1909, letter to his father urging him to come hunt on the Apache: "There is a big White Bear in here. Come on and show him how to behave. Nobody else can bother him so far, it seems."²

In my book *Thinking Like a Mountain* I did not dwell on my lack of evidence for the wolf incident or try to explain it away, because we had Leopold's own account, first committed to paper in 1944, decades after the incident would have occurred, and I had ample evidence that the transformation of Leopold's thinking regarding wolves had not occurred suddenly, as he watched the green fire die, but slowly, even tortuously, over a period of several decades. It did not seem essential to pinpoint the exact circumstances of the incident in the absence of evidence, especially since I was quite conscious that evidence could one day appear. I had been told that there might still be more family letters somewhere, but no amount of pleading for help at the time could make them surface. We were also missing several of Leopold's official Forest Service diaries (in which he recorded his activities each day), and for his last five years in the Southwest, when he served as assistant district forester (1919–1924), we were missing almost all of the forest inspection reports I had found mention of his having written.

The missing inspection reports were of far greater concern to me at the time, because they could have borne directly on the most significant aspect of the story I was trying to tell: the evolution of Leopold's thinking about processes of change on southwestern mountain watersheds, which I believed were the source of his seminal concepts of land health and a land ethic. The missing reports were deeply frustrating. As I searched through hundreds of cartons of Forest Service documents at the federal records center in Denver, nearly every time I came to a place where one of Leopold's reports should have been I found a pink slip indicating something had been removed. Further investigation revealed that the reports had been pulled out some years earlier and loaned to Roderick Nash, who had been working on a chapter about Leopold for his book, *Wilderness and the American Mind* (1967). Nash had made no mention of the reports in his book and, when queried, said that he had sent them back to the Forest Service before his cross-country move in 1966. Regional Forester Willard Hurst went



Aldo Leopold on the Apache National Forest, Arizona Territory, c. 1909.

COURTESY OF ALDO LEOPOLD FOUNDATION

to great lengths to help locate the missing reports, writing to every national forest in the Southwestern Region, but to no avail.

Despite the missing inspection reports, I wrote rather extensively about Leopold's interpretation of the "dissolution" of southwestern watersheds, always returning, as he did in much of his writing during his years in the Southwest, to what he had observed in his first years on the Apache Forest, especially in the valley of the Blue River, which had been the probable route of Coronado on his 1540 expedition through the Southwest. What Leopold called "this smiling valley" had once supported a thriving ranch community that had been washed out by erosion initiated farther up the slopes, so that its homes had been reduced to just a fraction of their previous numbers even by the time Leopold arrived there; he was assigned to lead a timber reconnaissance along the route of a proposed road that would now have to clamber high over the mountains. When he returned to the Apache and other forests along the Mogollon Rim on inspection trips in the early 1920s, he observed the same processes at work in mountain valleys throughout the area—overgrazing, elimination of fire, brush encroachment, erosion and gullying—but he always returned to the example of the Blue in his writing and speaking.³ This watershed problem and Leopold's conclusion that humans bore ultimate responsibility for it, I argued, would be the context for his mature understanding of the role of wolves—and deer and people—in the mountain ecosystem that he expressed so evocatively decades later in "Thinking Like a Mountain," as well as for his mature concepts of land health and a land ethic.⁴

Regarding Leopold's description of the wolf incident, I realized that there were a number of places where it could have occurred besides the Apache. It could possibly have happened during his next assignment on the Carson National Forest in northern New Mexico, where he had started a newsletter illustrated with some of his own drawings, including one of a wolf howling "into the far blackness of the night."⁵ Or on the Datil Forest in west central



U.S. FOREST SERVICE PHOTO, COURTESY OF ALDO LEOPOLD FOUNDATION

Aldo Leopold (second from right) and his Apache reconnaissance crew, 1910. He spent two seasons surveying the Apache National Forest.

New Mexico, where the family of his Hispanic wife, Estella, grazed their sheep. In a 1919 article on a turkey hunt in the Datil he remarked that he had once knocked down three big lobo wolves, two of which got away—a tantalizing possible connection to the green fire event, although it was vague and did not quite jibe with his later telling, in which “the old wolf was down and a pup was dragging a leg into impassable slide-rocks.”⁶ Or it could have been farther south on the Gila National Forest, where he had begun to win cooperation as early as the mid-1910s from sportsmen, stockmen, and forest officers in a largely successful program of conservative range management; extermination of wolves, grizzlies, and other predators; and establishment of game refuges—all of which greatly improved conditions for both deer and livestock. Not only would the Gila become his case example of “normal range” in a book he began writing in the 1920s on deer management but it would also be the first area he proposed for a new type of land dedication, a roadless hunting ground or wilderness area.⁷

CHANGE OF LUCK

Several years after publication of my book, a batch of missing family letters finally appeared and was added to Leopold’s papers in the University of Wisconsin Archives. I volunteered to organize them (a total of about 7,000 pages of letters written to family members mostly during the first ten years after he left home), hoping of course to discover something about the elusive green fire incident. But again, no luck.

Then, in the mid-1980s, in the course of his doctoral research for a full biography of Leopold, Curt Meine stumbled on the missing forest inspection reports that had so vexed me. On a stop at the Tonto National Forest office in Phoenix, he was greeted with a pile of Leopold materials that he instantly recognized were the missing reports, not only for the Tonto but also for nearly all the other forests Leopold had inspected in New Mexico and Arizona. How they ended up at the Tonto remains a mystery, but they are at the Tonto to this day. Possession is nine-tenths of the law, and by the 1980s possession of Leopold materials was a point of pride, as it likely had not yet been when Regional Forester Hurst had made his inquiries in the 1960s. Curt was allowed to make copies, which he used extensively for his book and then deposited with the Leopold Papers in the university’s archives.⁸ I devoured them as soon as I could, feeling sad to have missed so rich a source for my earlier book but relieved to find that they would not have materially altered my interpretation that had necessarily been based on Leopold’s other writings.

In the years both before and after the publication of Meine’s book in 1988, Leopold’s green fire experience took on ever more significance in the minds of many writers and environmentalists who had come to regard it as his “epiphany.” The incident was of surpassing import to the Earth First! and deep ecology movements in the United States in the 1980s. Leopold’s story in “Thinking Like a Mountain” was told and retold around campfires and permeated the increasingly contentious debate about wilderness in those years.⁹ Mindful of its growing iconic import, Curt went to

greater lengths than I had in an effort to pinpoint the time and place. He concluded that the wolf shooting most likely occurred in the fall of 1909 on the Apache, explaining in a long footnote that his evidence was entirely circumstantial because of the absence of Leopold's detailed Forest Service diaries for that period. Although some of his diaries from his time on the Carson were also missing, Curt noted that Leopold's former colleague on the Carson, Elliott Barker, concurred that the Apache was a more likely locus.¹⁰

Curt also reported that as Leopold closed in on the dying wolf, holding his rifle between himself and the animal, "the wolf gnashed out and grabbed the rifle butt in its teeth." Although uncited, this was a story related to him by Leopold's son Luna, who had seen the scarred gun. Here, perhaps, was a piece of contemporaneous material evidence, although Curt and I occasionally sparred about it. To me it seemed that the rifle story, while graphic, could also be wishful thinking, and that if Leopold had really killed a wolf he would have certainly written home about it.

The year after Curt's biography appeared, Roderick Nash, who had not mentioned the green fire incident in *Wilderness and the American Mind*, wrote about it in *The Rights of Nature* (1989), placing it in 1909 along "a New Mexico river," but without citing any evidence for the time or location. Subsequent writers variously located the incident in New Mexico, often on the Gila National Forest, or in Arizona, usually on the Apache. And there were also doubters that the event ever occurred; they assumed Leopold was taking poetic license.

APACHE RECONNAISSANCE

Fast-forward to 2009. In January, Curt and I heard that Luna Leopold's daughter Madelyn had found several more Leopold letters in her mother's safe-deposit box after her death. In response to a query about dates and contents, she prepared a brief inventory in early February. The list included a letter from Leopold to his mother dated September 22, 1909, during his initial Apache reconnaissance, in which Leopold mentioned that he and a ranger had killed two timber wolves. Both Curt and I realized immediately

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and working all the while. Then a letter from a gentle peaceable place like home comes like a message out of another world. Maybe you all think I have forgotten because I don't say very much, but — I tell you no. Every night when all the others are snoring in their beds, I finish my letters and then go outside and sit over the embers of the fire till they die, smoking my pipe and thinking. But now has come to me the greatest of sorrows — I have lost my pipe. I would lay down a ten-dollar bill to have it back. It happened the other day, when I hurriedly stuffed it in my pocket to shoot a Turkey. By the way, since the 15th you may guess my Sundays have been busy. Wheatley and I have killed 2 Timber Wolves and 2 Turkeys and a lot of grouse, but no deer. Somehow we have had luck. The party has seen

Detail from Aldo Leopold's letter to Mama, September 22, 1909, page 7, on which he casually mentions killing wolves.

the significance of the find. As it happened, we were just then preparing for a multicultural conference in Albuquerque that would focus on the southwestern roots of a land ethic and at which I was to speak on Leopold in the opening session. The conference would be the lead event in a yearlong celebration of the centennial of Leopold's arrival in the Southwest. Naturally I had to see that letter, and on February 9, two days before my flight to New Mexico, Madelyn sent a scan.

I was of course expecting to find more explication of the event, but there was none. Instead, buried on page seven of a nine-page letter, after several sentences lamenting "the greatest of sorrows—I have lost my pipe," Leopold casually mentioned the wolves in part of a single sentence: "Wheatley and I have killed 2 Timber Wolves and 2 Turkeys and a lot of grouse, but no deer." He then continued with five sentences about their bad luck with deer.¹¹

That was it.

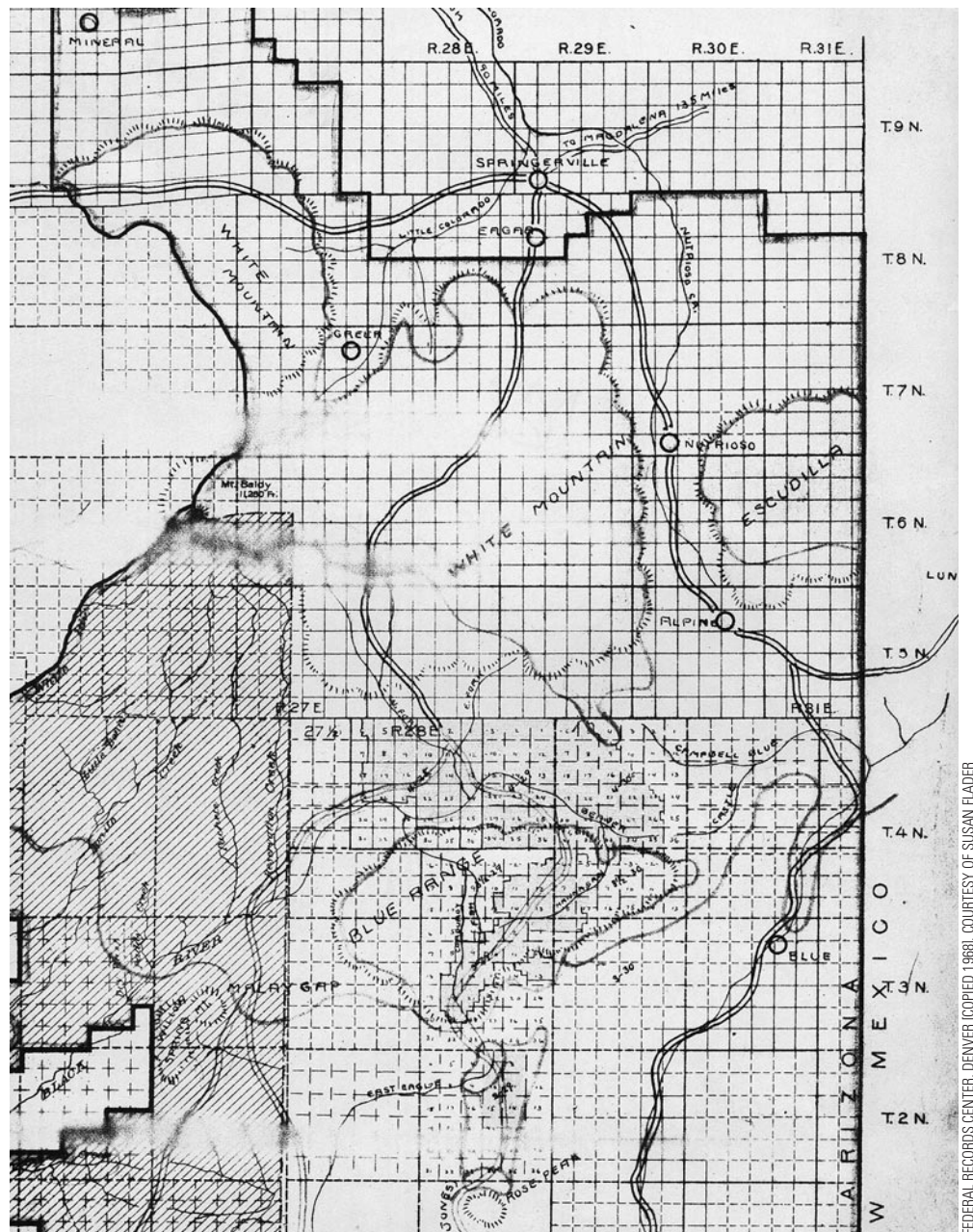
But in his heading Leopold provided a location: "Camp No. 2, Milligan Cienega Sec. 19 T. 49 R. 28E." I immediately dug out some old maps from my research back in the 1960s, but could make no sense of the township and range information, which is particularly confused on the Apache. So I pored over the maps, looking for a Milligan Cienega, also to no avail. There were several Milligan place names in the northern part of the forest and a Milligan Peak and Milligan Lake in the upper Blue River watershed, which I thought more promising because of Leopold's keen interest in the Blue River and because his survey work that fall was termed the Blue Range Reconnaissance. The Milligan sites were in T4N, and no amount of squinting at Leopold's handwritten T. 49 could turn it into T4N; the range did not match, and there were no section numbers on any of my maps. There was nothing more I could do in the limited time available.

In my talk at the Albuquerque conference, I reported the discovery of the letter and quoted the sentence, noting its matter-of-fact mention of the two wolves, sandwiched as it was between the lost pipe and the bad luck on deer, with no hint of epiphany. The announcement nevertheless provoked considerable hallway discussion. Keynoter Gary Paul Nabhan, with a glint in his eye, even invited Curt and me on an expedition to search for Leopold's pipe! Another colleague, Russell Winn, said he was organizing a Leopold conference in the shadow of Escudilla Mountain on the Apache for the following September and asked if we would consider speaking. I was interested, as it would give me an opportunity to dig more deeply into Apache material that I had collected back in the 1960s but used only tangentially in my book, and there was now the added possibility of looking for the green fire site. Curt, who had been tapped to serve as the on-screen guide for the *Green Fire* film, already had plans for a shoot on the Apache, but the film crew was aiming for June rather than September.

As I skimmed through old files in preparation for my talk at the Apache conference, I came upon several references to a map Leopold had been working on after his reconnaissance that fall of 1909. If we could find it, the map might show place names like Milligan Cienega. When I phoned Curt to ask if he had ever seen Leopold's map or tried to find it in Apache offices, he said so many scholars had been looking for it over the years that he seriously

doubted it would be worth my while to schedule time for that quest. Besides, the film crew had decided to do their southwestern shoot before the conference and had just arranged for a retired wilderness ranger to meet them at the Alpine station to visit the upper Blue River and discuss possible wolf sites. Did I want to join them? That was an easy question to answer—no way would I miss this opportunity.

The night before my early morning flight to Arizona I made one last foray through my basement file cabinets to see if there was anything I might have missed. Looking again in a folder labeled *Apache maps*, I started flipping through faded old 3M copies when suddenly a tiny, tiny Leopold signature caught my eye under a small hand-printed title "Apache Reconnaissance." It was in a sheaf of nondescript pages, probably related material that I had copied at the Denver record center back in the 1960s but never carefully studied and then had completely forgotten! I



Detail from Aldo Leopold's map of his 1909 reconnaissance of the Apache National Forest, February 8, 2010.

FEDERAL RECORDS CENTER, DENVER (COPIED 1988). COURTESY OF SUSAN FLADER

put the lot in my suitcase and took it along, still unexamined, when I went to meet Curt and the film crew and retired ranger Don Hoffman at the Alpine ranger station.

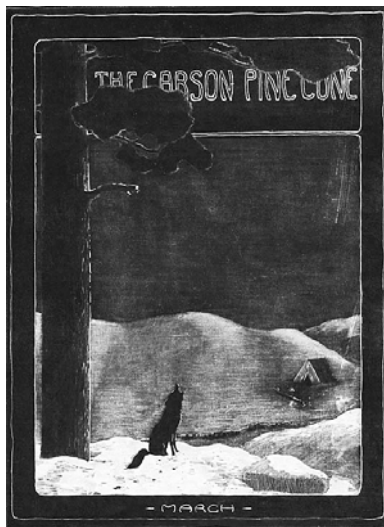
"Now don't look at the maps or say anything until we get the camera set up," the filmmakers admonished us. When they finally worked through some technical glitches and asked us to begin, Curt explained how he had consulted with Rob Nurre, a friend who is an expert on the federal land survey system, and together they had concluded that Leopold would probably have begun his reconnaissance in the only township on the Apache that had been surveyed at the time. He pointed to the likely section 19 on Don's map. But Don, who had spent some 27 years as wilderness ranger on the Apache, had never heard of a Milligan Cienega (a spring or small marsh) in that vicinity. The general area was one he knew well, having begun his career on a fire crew stationed nearby, but he pointed out that it was on the Black River, not the Blue, which Curt and I and other scholars had long thought might have been the site of the wolf incident.

There were miles of rimrock along both sides of Black River, Don ruminated, and the Black River was considerably larger than the upper Blue, better fitting Leopold's 1944 description of the wolf's howl echoing "from rimrock to rimrock" and of the animal "fording the torrent, its breast awash in white water." In fact, Don told us, he had encountered *A Sand County Almanac* that first summer on the Apache, having borrowed it from another crew member, and "Thinking Like a Mountain" had riveted his attention. He had had a favorite lunch spot on a nearby rimrock that he had thought could be just the sort of place Leopold was describing. But what of Leopold's frequent mention of the Blue?

ON THE RIMROCKS

At this point I pulled out my sheaf of faded 3M copies and began spreading them out on the big table—they turned out to be segments of Leopold's 1909 map! As we pored over them, we could find no Milligan Cienega, but to our amazement we found that Leopold had written the words "Blue Range" directly across the watershed of the Black River, not the Blue River! As we continued pondering the varied strands of evidence, Don suggested that Leopold and his colleagues might have used the term "Blue Range" to refer to the summer cattle range along the *Black* River utilized by settlers who lived along *Blue* River. Blue River livestock permittees still use pastures along Blue River for winter range and move their stock to the higher country in the Black River watershed during the summer.

It was past time to see what we might find on the ground, but first we had an appointment with officials at the interagency Mexican



Aldo Leopold's drawing of a wolf howling "into the far blackness of the night" for the blueprinted cover of the Carson National Forest newsletter, March 1912.

ALDO LEOPOLD ARCHIVES, COURTESY OF THE ALDO LEOPOLD FOUNDATION

gray wolf recovery office in Alpine, where we discussed the troubled status of the 1998 reintroduction of the wolf to the Apache. The population was not growing as expected or modeled, because so many of the animals were being shot or removed for depredation on livestock. But the area along Black River that had become the focus of our attention, we now learned, was where wolves were most reliably being reported.

We then continued by road on down to the nearby Blue River in the vicinity of Milligan Peak to get film footage of this river so important to Leopold's evolving understanding of southwestern watersheds and to see whether we thought it could possibly fit his description of the green fire site. At least on this day it seemed too small a stream and not as clearly "rimrocked." By this time I had to get back to give a talk at the public library that evening, so there was no chance of our getting as far as Black River that day. Moreover, Don was tied up the next day, so he could not help us find

the way to section 19. Riding with Don in his truck back to the ranger station, I read Leopold's entire letter to him. If, as Leopold wrote, he had shot the wolf the previous Sunday (September 19), I suddenly realized that he would likely not yet have moved to the Milligan Cienega camp but rather returned to his previous camp, which he had said was at "Slaughter's ranch." Don knew immediately where that was; it was now known as PS Ranch, after its PS brand (for Pete Slaughter), and was owned by the Arizona Game and Fish Department. Growing more excited by the minute about the prospect of actually locating the site, Don determined to get out of his commitment the next day in order to help us find it.



PHOTO BY ANN DUNSKY

From left to right, Susan Flader, Don Hoffman, and Curt Meine discussing maps and documents at the Alpine Ranger Station in an effort to identify the "green fire" wolf site, September 2009, 100 years to the month after the incident.



Don Hoffman viewing results of the Wallow Fire on the Apache from the rim of Black Canyon near the “green fire” site, August 2011.

The next morning we headed out again under threatening skies. Our first stop was on the eastern rimrocks of Black River, a relatively more accessible site where the film crew could at least get some footage before being rained out. Then on to Slaughter’s old ranch house, to capture more “Old West” footage. And finally, with a drizzly rain already setting in, a drive down a rutted, mud-slicked road, with Don suggesting that it might be wise to turn around before we got seriously mired in the muck. By the time we got as far as we could go, it was pouring. At the risk of not being able to get back out, we gathered in the film crew’s van for lunch while waiting out the storm. Eventually the rain abated, but clouds of fog completely filled the valley. We could see nothing! Then, slowly, the fog began to lift, and we could make out the river below. We set up the camera and began our on-site discussion. Don felt quite confident that we were within a half mile either way of the green fire site, based on its rimrocks at a reasonable distance from Slaughter’s ranch for a hike or horse ride with Wheatley on their Sunday off, as described in Leopold’s letter.

The rain soon grew heavier again, but we decided we could not leave before reading “Thinking Like a Mountain” there on the rimrock, the raindrops splattering on our jackets and on the pages as we passed the book from person to person. After some-one read aloud the sentence, “We were eating lunch on a high rimrock, at the foot of which a turbulent river elbowed its way,” Don spoke up: “That word Leopold used, *elbowed*, there is only one place along here where the river could be described as elbowed, and it is right down there,” and pointed. He pointed also to some talus matching Leopold’s description of “impassable slide-rocks.”

These final, unanticipated bits of evidence as to the probable site led us to reflect that Leopold had described the setting and selected the verb “elbowed” thirty-five years after the fact with astounding recall. To me it was an indication that, nonchalant

though his letter to his mother may have been at the time, and despite abundant evidence that Leopold’s change of attitude toward wolves had occurred only slowly over the intervening decades, the event had nonetheless seared itself into his consciousness.

REMAINING QUESTIONS

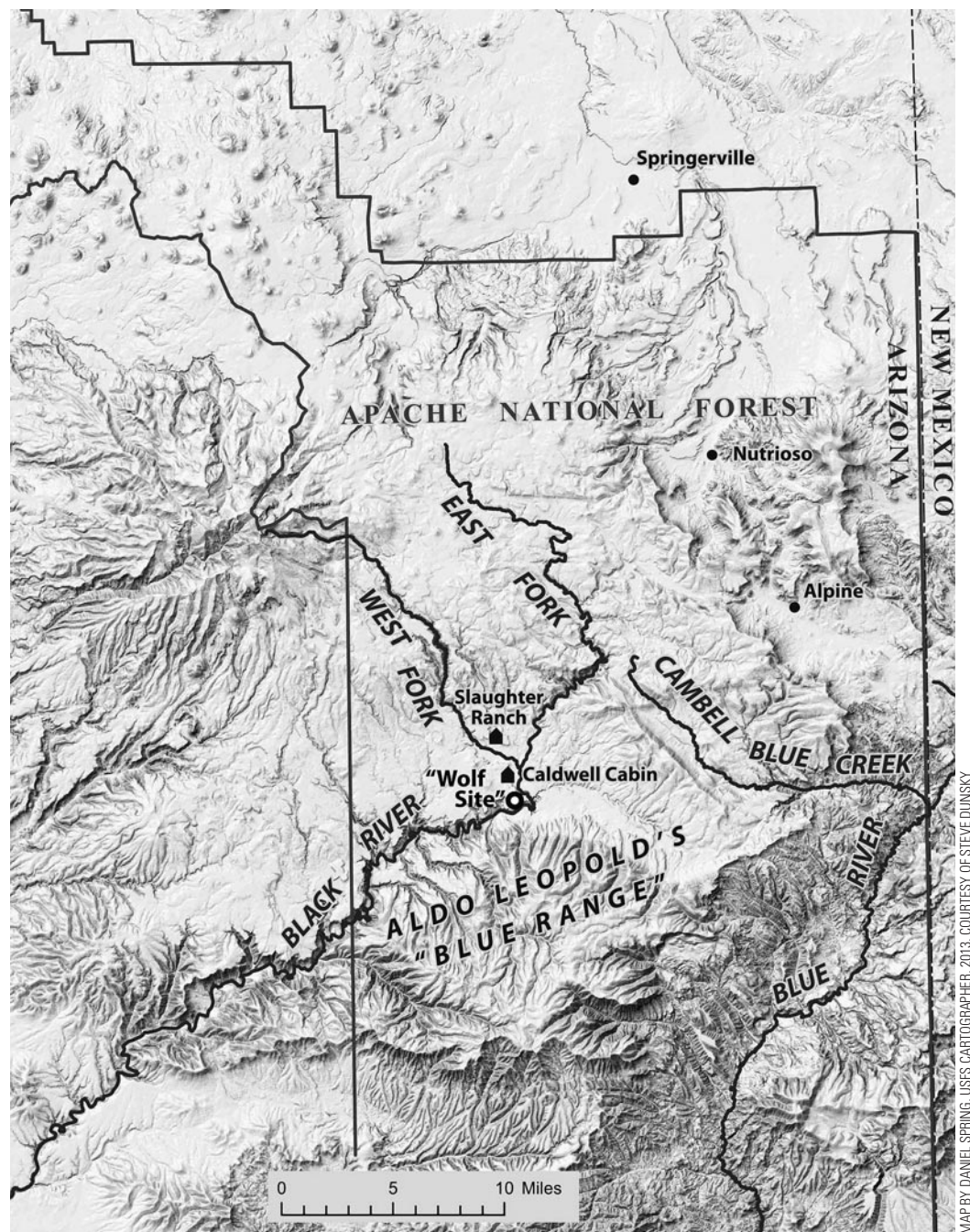
Our confirmation of the probable site occurred one hundred years to the month from when the incident occurred, as we reported the next day at Russ Winn’s conference “In the Footsteps of Aldo Leopold,” held at the base of Escudilla Mountain. In the weeks and months after our visit to the Apache Forest, Don and Russ began working with the Forest Service on a proposed green fire interpretive trail at the site. We also had an extended e-mail discussion about the rifle Leopold had used, whether its effective range would have been sufficient for use at the site we had identified, and whether it could have been the same as the Winchester rifle that had just been digitally scanned for the new online collection of Leopold materials at the University of Wisconsin Archives.¹² Leopold Foundation senior scientist Stan Temple, who had formerly held Leopold’s wildlife chair at the University of Wisconsin, examined the actual rifle, a Winchester .30-30 model 1894, and reported in detail on its markings, including Leopold’s hand-carved initials “AL” on the stock and a serial number and patents on various metal parts. From the serial number Don determined that the rifle was manufactured in late 1908, suggesting that Leopold had bought it new when he went West in 1909.

The exchange about the rifle led to discussion of an unpublished 2005 essay by University of California, Berkeley, ecologist Dale McCullough, who had earned his PhD under Leopold’s son Starker. In the essay, McCullough debunked the wolf legend, including what he referred to as the “myth” of the supposed wolf’s tooth marks on the rifle’s stock. Starker had actually shown him the rifle and told him the story of the wolf lashing out and leaving its tooth

marks on the butt, McCullough said; he had examined the marks with great interest, having himself looked at a lot of wolf teeth for a project years earlier, and detected “no similarity of the marks on the stock to what I would have expected a wolf’s teeth to make.” Sensing how much the rifle and the story meant to Starker, he had said nothing of his doubts at the time.¹³ Temple reported, to the contrary, that he had used an actual wolf’s skull to “size up” the marks, and “found a couple pairs of indentations that matched perfectly and at least COULD have been made by a wolf’s canines.”¹⁴ The Winchester rifle housed at the University of Wisconsin is a “trapper” model, a short carbine with a 16-inch barrel and a lightweight lever-action repeating rifle with plenty of knock-down power. It was and still is considered the perfect camp and saddle rifle, according to Don Hoffman. He later returned to the site with a range finder and concluded that from either rimrock a wolf on the bank closest to Leopold would have been in range (approximately 125 yards from the east rimrock and about 150 yards from the west rimrock), especially considering that Leopold and Wheatley had emptied their guns—probably six shots each—and hit only two of the wolves, one fatally.¹⁵ Perhaps recalling Gary Nabhan’s proposed expedition to search for Leopold’s pipe, Don, Russ Winn, and others joked of returning with a metal detector to search for Leopold’s cartridges!

A LAND ETHIC FOR OUR TIME

Steve and Ann Dunskey, director and editor, respectively, of the Leopold film, who had both been present to catch the excitement of our discovery of the green fire site on film in real time, used the wolf story, told in three separate segments shot on site, as the backbone of the film. As we reviewed successive rough cuts during the summer and fall of 2010, I began to think there was too much emphasis on the wolf story and especially on the discovery of the site. Though the film was titled *Green Fire*, an obvious reference to the eyes of the dying wolf, we had discussed many other possible meanings of the term. Since the film, subtitled *Aldo Leopold and a Land Ethic for Our Time*, was intended to explore the connection



Apache National Forest, showing where Aldo Leopold located the Blue Range with respect to the Blue and Black rivers on his map of his 1909 reconnaissance.

between the development of Leopold’s concepts of land health and a land ethic and their implications in our own day, I thought of the phrase green fire more as the remarkable contagion of grassroots community-based conservation and the rapid spread of the use of fire in ecological restoration inspired by Leopold’s land ethic. But as the production crew sought to trim the film and simplify the story, I realized with some alarm that they were focusing even more on the wolf story and the parallel theme of wilderness, at the expense of what I thought was the much more important genesis of Leopold’s ethic: his concern about soil erosion and his efforts, from his earliest days in the Southwest, to restore watershed integrity. Apparently my critique was so disconcerting that the film’s producer, Buddy Huffaker, executive director of the Leopold Foundation, found it necessary to wall me off from

any further input into the editorial process in order to allow the filmmakers to finish the film in time for its scheduled premiere.

When we all finally saw the completed film at its world premiere at the National Hispanic Cultural Center in Albuquerque in February 2011, I saw that my message had gotten through, at least in part, and like most everyone else I was very impressed with the film. That began a period of travel to participate in community screenings and discussions, during which I came to understand that no matter how much I thought the film's message was the importance of grassroots conservation and restoration of land health, most audiences were riveted on wilderness and wolves and Leopold's putative conversion experience. And I realized that I bore some responsibility for this emphasis, in spite of myself, for having focused on the wolf story four decades earlier in my *Thinking Like a Mountain*, which remained the only substantial biographical treatment of Leopold for fifteen years.

For me, the most dramatic community screening and the one in which the audience discussion probed most deeply into what I saw as the essence of the film came early in the process—in Marfa, Texas, in early April 2011. It began less than three hours before and two miles away from the start of what would prove to be the largest wildfire in the most devastating year of fire in Texas history. By the time we started the screening, all roads to Marfa from all directions were closed by fire, so the audience was small, only about forty people. Never before had I realized how many images of fire we had in the film. The discussion that followed, though subdued, dealt largely with the role of fire, both wild and prescribed. This audience, on this evening at least, was willing to consider green fire as the fire of ecological restoration, rather than strictly the fire in the eyes of the wolf.

The next month, another fire began in the Bear Wallow Wilderness just a few miles south of Aldo Leopold's green fire site. As I searched from afar for news over the next two months, the Wallow fire grew to be the largest wildfire in Arizona history, engulfing virtually all of Leopold's favorite haunts on the Apache National Forest. When the rains finally came and the fire ended, I revisited the Apache and was one of the first people allowed in to see Leopold's green fire site. Atop the rimrock where the pines were widely spaced there were quite a few fire-scarred trees that would likely make it, while others had burned to the ground. The canyon where the wolf had swum Black River had been much more severely hammered, as had Escudilla Mountain, home to Old Bigfoot. (These were stands of mixed spruce/fir, which are usually wet enough to avoid burning but may be consumed entirely when they do burn about once every three to five hundred years.) The reintroduced wolves on the Apache appeared to have survived the fire, though they continue to fall prey to guns.

A year later, Leopold's Gila Wilderness, the oldest designated wilderness area in the nation, located just east of the Apache, went up in smoke in what became the largest wildfire in New Mexico history. After visiting both the Gila and the Apache later that summer, I came away confident that both would recover—although the Apache will likely in time grow back as a considerably different forest, while on the Gila, where some 87 percent of the area burned with only low to moderate intensity, the health of the forest was generally improved by the fire. This is because fire has been allowed to burn freely in the Gila Wilderness for a much longer time—at least since 1968, when I first backpacked there in constant view of smoke plumes. On the Apache the change in fire policy has come more recently, and while the 2011 fire had

dropped to the ground and cleaned up debris without destroying many mature trees in most areas that had previously experienced mechanical thinning and prescribed fire, there had been insufficient funds to treat large expanses of the forest—a common problem throughout much of the West.¹⁶

The 2011–2012 fires brought Aldo Leopold's saga full circle. He had been one of the earliest foresters to appreciate the role of fire—and also of wolves—in maintaining the health of the mountain ecosystem. That was the deeper meaning in the howl of the wolf, a meaning “known only to the mountain,” as Leopold expresses it in his iconic essay. There was too much he did not yet understand about the processes at work, through both wolves and fire, in restoring the health of the system, but when—from his vantage of three and a half decades—he reflected on having seen the green fire die in the eyes of the wolf, he sensed a hidden meaning. It is a meaning we would do well to ponder if we are to deal with the interrelated implications of catastrophic wildfire, soil erosion, and ecological extinctions in our own day. □

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NOTES

1. Susan L. Flader, *Thinking Like a Mountain: Aldo Leopold and the Evolution of an Ecological Attitude Toward Deer, Wolves, and Forests* (Columbia, MO: University of Missouri Press, 1974), 39.
2. Aldo [Leopold] to Papa, September 25, 1909, Aldo Leopold Papers, University of Wisconsin Archives, Madison, WI, Box 8B4.
3. Aldo Leopold, “Erosion as a Menace to the Social and Economic Future of the Southwest,” *Journal of Forestry* 44:9 (Sept. 1946), 627–633. This was originally a speech delivered in 1922, and is similar to shorter treatments of the Blue River example in other articles Leopold published during 1921–1924.
4. Flader, *Thinking Like a Mountain*, 36–53.
5. Aldo Leopold, *The Carson Pine Cone*, March 15, 1912, Carson National Forest, Tres Piedras, NM. The quoted phrase is from “Thinking Like a Mountain,” 129.
6. Aldo Leopold, “A Turkey Hunt in the Datil National Forest,” *Wild Life* (Dec. 1919), 4–5, 16; Aldo Leopold, “Thinking Like a Mountain,” in *A Sand County Almanac and Sketches Here and There* (New York: Oxford University Press, 1949), 130.
7. Flader, *Thinking Like a Mountain*, 78–80; Aldo Leopold, “Report on Proposed Wilderness Area,” Oct. 2, 1922, Gila National Forest, Silver City, NM.
8. Curt Meine, *Aldo Leopold: His Life and Work* (Madison: University of Wisconsin Press, 1988), 175–228 passim.
9. See Susan Zakin, *Coyotes and Town Dogs: Earth First! and the Environmental Movement* (New York: Viking, 1993); and *The Great New Wilderness Debate*, ed. by J. Baird Callicott and Michael P. Nelson (Athens: University of Georgia Press, 1998).
10. Meine, *Aldo Leopold*, 93–94; 543, n10.
11. Aldo to Mama, September 22, 1909, copy in author file.
12. Aldo Leopold's Winchester rifle; accessed <http://digicoll.library.wisc.edu/WebZ/SearchOrBrowse?sessionid=01-33004-1066093225>.
13. Dale R. McCullough, “Of Paradigms and Philosophies: Aldo Leopold and the Search for a Sustainable Future,” 19; accessed oregonstate.edu/cl/shpr/sites/default/files/ideas/mccullough.pdf.
14. Stan Temple, e-mail message to Don Hoffman, et al., October 26, 2009, author file.
15. Don Hoffman, e-mail to Curt Meine, et al., October 26, 2009; Hoffman to Susan Flader, et al., February 9, 2010; copies in author file.
16. Neil Larubio, “Lab Results from the Gila,” *High Country News*, November 12, 2012, 6–7.