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Dear Reader,

Lookouts contain multitudes. Rooted in the history of North American forests, they are commonly understood as small, rudimentary cabins perched on vantage points above ridgelines and tree canopies. Their height varies according to their siting—shorter atop mountains, taller at lower elevations—but in all cases, they offer expansive views over the surrounding landscape. Beyond their utilitarian function, lookouts also carry symbolic meaning. A rich phenomenology of lived experience has long cast these structures as beacons of the past.

Although inspired by fire lookouts, the explicit reference to fire has been deliberately removed from the title of this journal. This choice invites a broader inquiry into studies that place the act of observation from above at their center—not only as a technical theme, but also as a point of departure for reflection across the humanities. In this sense, we refer both to the construction and the deconstruction of a point of view, understood as a site where technical challenge converges with introspective inquiry and critical intellectual development. Thus, Lookouts is not intended to focus solely on fire lookouts (though these may be the first buildings that come to mind), but rather on the various types and attitudes of keeping watch.

This first issue seeks to gather essays that trace the historical emergence of lookouts as a proxy for forest management. Its close engagement with the American fire lookout tradition stems from the *1st National Interdisciplinary Lookout Conference*, held at the University of Idaho in April 2024. The contributors represent a wide range of perspectives on

the subject, including historians, enthusiasts, practitioners, organizers, and academics. Their essays address the past, present, and future of the fire lookout, and together they reflect the breadth of the lookout community.

In different ways, each contributor underscores the importance of recognizing the heritage value of lookouts, particularly in light of their gradual disappearance from forested landscapes due to deterioration, neglect, and vandalism. In doing so, they echo a warning often associated with Aldo Leopold: that it is only when a resource becomes scarce that humanity begins to appreciate its value. This observation is all the more relevant today, as screen-based technologies increasingly mediate our experience of reality—or, more precisely, our access to its depth—and reshape the very act of taking a long, attentive look.

We hope that this first issue will offer an opportunity to reflect on these themes while also marking the beginning of a long-term project.

FIRE LOOKOUTS AND THE ACT OF REMAINING¹

MICHAEL DECKER

UNIVERSITY OF IDAHO

Sundance Mountain

In the Department of Lands office in Nordman, Idaho, Pam Aunan, tosses me a forest green shirt with the word “fire” printed in large white letters on the front. I met Pam just two weeks ago when my colleagues, Jack Kredell and Chris Lamb, and I had interviewed her at *Sundance Mountain Lookout* in the Selkirk Mountains.

Pam, who runs the volunteer fire lookout program for the Priest Lake fire district, called me last week because an unexpected opening became available on the tower. She wanted to offer me and my dog, Trout, the chance to work for a few days as a lookout, thinking it would be a good opportunity for someone studying lookouts to be one. I agreed immediately, in part because *Sundance Lookout* was the site of a lightning strike that ignited the 1967 Sundance Fire, burning fifty-thousand acres and killing two firefighters. The fire was exceptional by mid-twentieth century standards because it made an anomalous run of sixteen miles in just nine hours. It was the focus of numerous studies on unpredictable fire behavior thereafter, although burns of such severity and unpredictability have become common as climate change’s effects ignite volatile fuel loads. These days, many wildfires are as severe as the Sundance Fire.

1 This essay first appeared in “Keeping Watch,” a geo-spatial narrative project that embeds oral history testimonies by former and current fire lookouts on a GIS interface, funded by a University of Library Seed Grant and supported by the faculty and staff of the Center for Digital Inquiry and Learning (CDIL).

Wildfire's increase is exacerbated by the continued settlement of areas inside the wildland urban interface or WUI: an area where developing human settlement meets what the U.S. Fire Administration calls "*unoccupied land*." These homes are, unsurprisingly, at a higher risk of being destroyed by wildfire, which prompts complex fire reduction efforts by both private and government agencies. More specifically, in *Fire: A Brief History* (2001), fire historian Stephen Pyne defines the WUI, and those who live on it, as:

"...*still urban sprawl, even when populated by people who want woody jungles for privacy and naturalness.*"²

The WUI, as experts like Pyne are quick to point out, is a space where the needs of human and non-human worlds often clash.

A growing wealth inequality along the wildland urban interface also contributes to the frustrations many long-time Idahoans have toward wealthier part-time residents with second homes. The newcomers' dream homes typically receive more firefighting resources, often bankrolled by insurance companies trying to protect expensive assets; in the Priest Lake fire district, most of these homes are built where the lake shore meets large adjacent swaths of unoccupied land. Lookouts—like *Sundance*—are either placed on or near the wildland urban interface or overlooking valuable stands of timber.

Fire Lookouts were created by the Forest Service in the 1910s under its early philosophy of sustainable forest management. At the time, this meant managing timber products, although it has since expanded to include recreation. When Gifford Pinchot—along with Teddy Roosevelt—founded the Forest Service in 1905, he championed economic principles of land conservation and sustainable development.³

Inspired by lookouts in Europe, Asia, and more recently by private lumber companies, the Forest Service began outfitting and utilizing lookouts

2 Stephen J. Pyne, *Fire: A Brief History*, rev. and expanded ed. (Seattle: University of Washington Press, 2019), 179–80.

3 Roderick Frazier Nash, *Wilderness and the American Mind* (New Haven: Yale University Press, 1967), 122–40.

during the early-twentieth century. Initially, the Forest Service was met with opposition from private landowners and capitalists because they felt that the agency would inhibit the free and largely unregulated market of logging. During the summer of 1910, however, a series of wildfires in Idaho and Montana converged into one giant blaze that was roughly 260 miles long and 200 miles wide. Three-million acres burned, and eighty-five people died. Numerous acts of heroism and a swift response by the Forest Service bolstered public support for the nascent agency.

Emboldened by a changing public perception and the need for more effective fire monitoring networks, the Forest Service began building thousands of fire lookouts over the next twenty years. After WWII, military technology, including aerial capabilities, was repurposed for fire detection purposes. The 1940s marked the beginning of the technological obsolescence of fire lookouts.

Today, fire lookouts are placed intentionally on an interface separating land classifications and are overseen by different agencies, businesses, and individuals. They are also decommissioned on this same principle; lookouts found in the center of what is now federally designated wilderness, and thus not managed as rigorously for fire, are often no longer operated and unless they have special cultural or personal significance, they are often left to decompose back into the earth.

The lookouts that are staffed and operational for firefighting purposes are commonly in strategic locations to observe fire strictly for the purpose of making sure it does not cross the wilderness boundary. Examples of this are: *St. Mary's Peak* near Lolo and Stevensville, *Sundance Mountain* near the towns of Collin and Nordman as well as significant recreational activity, and Ruffneck Peak nearby the Stanley Basin.

Not all non-operational lookouts are abandoned, however. Some lookouts built in scenic locations on top of craggy mountains are now managed by the Forest Service as backpacking shelters or even rentals. In Idaho, which has more designated wilderness than

any other state and, by no coincidence, more fire lookouts, abandoned cabins freckle the interior of its wildlands.

And on private property, some landowners have relocated fire lookouts and now list them as *AirBnB* rentals. This shift in purpose reveals a changing relationship to wilderness over the last century; lookouts were first built not as conduits of a wilderness aesthetic but rather as extensions of logging and mining in the early twentieth century.

Pam's boss, John, slides a map across the table. It shows the topography surrounding Priest Lake and how the Selkirk Mountains make a skinny valley that crosses the Canadian border. Lightning bolts mark where several strikes occurred a week ago during a June thunderstorm. These strikes are concerning because Idaho is in the early stages of its worst drought in several decades. I will be on the tower during what is projected to be the hottest recorded temperatures ever in the Northwest: one-hundred-and-thirteen degrees Fahrenheit, tomorrow.

Pam and John tell me to watch for sleeper fires at the strike locations. Sleepers are burns that do not immediately consume large amounts of fuel, but instead sit dormant and produce periodic smoke events before erupting into a larger fire, sometimes up to two weeks after initial ignition.

I shake their hands and thank Pam for the opportunity. She smiles and adjusts her baseball cap and tells me to have fun and to drink alcohol in moderation because of the altitude. The Idaho Department of Lands gave me a truck to use. I open the door and Trout jumps up on the seat. Around 9 a.m., the temperature is approaching ninety degrees Fahrenheit.

I look at my Idaho Department of Lands shirt, the government truck, and the black highway leading me like a river to *Sundance Lookout* high in the Selkirk Mountains. The truck kicks up dust, as we climb the poorly maintained service road, and the all-terrain tires are tested by sharp rocks while the undercarriage narrowly misses deep ruts and boulders. I forget to shift into four-wheel drive and, briefly, the truck's tires spin free on the steep slope. Trout sits up abruptly and observes the situation. Don't worry, Bud.

The burn scar is the first thing I notice when cresting the peak of Sundance Mountain: despite over half of a century of regeneration, the vegetation is noticeably stunted compared to nearby mountain slopes. The heat thickens the air as I close the truck door and wave to the lookout staff being relieved from duty. Her two dogs run to the edge of the fifty-foot-tall tower, and she waves back—Trout looks at them uninterested.

I inspect the inside of my new home which has a dish sink, propane stove, and a small refrigerator in the corner. Gas lamps hang on the wall above a small bed that I throw my sleeping bag over. I step onto the deck and see smoke obfuscating mountains to the east and north. With aerial surveillance taking place, I question how much of this antiquated role is necessary. I crack a beer and drag my camp chair to the deck. Trout sits next to me.

At the center of the tower is a podium on which sits a large steel table holding the Osborne Fire Finder. Lookouts use this device to precisely locate fires. It has a three-hundred-and-sixty-degree alidade surrounding a map with the fire tower at its center. The Osborne is used to call in the location of a smoke using degrees and minutes that are communicated to a fire dispatcher over the two-way radio system installed below the podium.

The Osborne Fire Finder was manufactured between the years 1920 and 1935 by Leopold and Stevens, a telescope manufacturing company, which also produced replacement parts until 1975. Production halted because new fire detection methods had made the fire finder more or less obsolete. However, Osbornes have made an unlikely comeback recently. After a substantial increase in wildfires in the late-90s and early 2000s, the federal government contracted with a new manufacturer, San Dimas and Technology Center, to resupply fire lookouts with Osbornes and to produce replacement parts as needed.

Why have federal and state governments and timber protection agencies (the latter usually funded by private logging companies) kept the human-staffed fire lookout around? I can think of many reasons why we should have them. For instance, shouldn't we be physically present in the places we are managing rather than making decisions from a God's-eye view? Even in wild places, should this human element be

removed? I use “wild” according to the wording of the Wilderness Act of 1964 which defines wilderness as “a place where man himself is but a visitor who does not remain.”

Yet it is precisely because the fire lookout allows us to remain in wilderness so effectively that they have not disappeared entirely. The phenomenological relationship to place remains valuable not only to individuals for personal reasons, but also to agencies like the Forest Service or Idaho Department of Lands. It would be incorrect to analyze the modern fire lookout without acknowledging the very real service it still provides.

Lookout staff not only locate and call in new fires, they also monitor existing ones in real time and communicate with on-the-ground fire crews. Heat mapping can provide information about fire spread and size, and sophisticated weather modeling can determine precipitation levels, wind speed, and heat index; however, attentive fire lookouts experience these phenomena while searching for anomalies in the landscape. Technology has augmented, even reduced, the role of the human fire lookout, but it cannot entirely replace it.

Through the window, a breeze sneaks in. The tower is about 15 degrees cooler than the valley. The bear grass makes the air smell sweet, and the last patches of snow are melting at a perceptible rate. A pine snag on the ridge to my southeast stands in an otherwise healthy forest, and below it the highwater mark of evening inches closer. I fixate on this steady pull between night and day. The sun’s geometry positions the tree at the fulcrum of light and dark. I glance at my phone: 7:38 p.m.

The sun dips behind the mountains. The evening neon radiates through bars of smoke rising above the Selkirks, and a stratum of ozone and geology slowly dims into the night sky. Venus appears to my west. The universe flickers on. The Milky Way swirls like a parking lot oil stain as I lie in bed reading William Least Heat-Moon’s *Blue Highways* (1982).

In *Blue Highways*, young Heat-Moon has lost his English lectureship, and his marriage is dissolving. Devastated, he sets out on a circular journey traveling from New England and through the southwestern United States, into the Pacific

Northwest before veering east again. The only discernible destination is where he began. He drives a green Astrovan named Ghost Dancing after the Native American ritual which foretold the return of departed spirits and the end of colonial expansion.

Making his way through the American Southwest, Heat-Moon reflects on the smells and nuances of the central Nevada desert. Its lonesomeness makes him consider the Latin root of the English word vacation, which is *vacare* (meaning “to be empty”). He uses the open space to infuse himself with impressions of the landscape and foster a connection to the non-interior world. To see himself out there in the desert and merge with the interstitial absence of the Nevada landscape and finally be “absorbed” by it.

Heat-Moon looks out of Ghost Dancing and sees himself reflected in the pellucidity of the van window, transposed onto the desert. As if were evaporating he says “...*It was calming and cleansing to be absorbed by that vacancy...*”⁴ Seeing yourself as connected to and part of the exterior world is a common first step toward an ethics that accounts for the interconnected nature of the world and cosmos. Lookouts seem to facilitate this swiveling between self and the more-than-self because of their innate architecture. The panoramic windows provide easy access between the inside and outside world and allow one to glean their place in the larger landscape while protected from the elements.

I put down *Blue Highways* and turn off my headlamp, get out of my sleeping bag, and walk to the window. Between the inside of the cabin and the night sky, the windows and propane lamp transpose my face onto the universe. I walk to the deck and suddenly all that remains is black plasma where my face was.

Chicken Peak

Jack, Chris, and I have driven to the edge of the Frank Church River of No Return Wilderness, seventy miles from McCall, Idaho along a dirt road, stopping to fish the Salmon River which early settlers called “*the river of no return.*” Drifting my caddis along the water, I think of the ghosts of the Tukudeka, a mysterious mountain tribe of Shoshone-Bannock Native Americans, colloquially known as the Sheepeaters.

4 William Least Heat-Moon, *Blue Highways: A Journey into America* (Boston: Back Bay Books, 1982), 188.

We will make the twenty-mile hike from Mosquito Ridge to the Tukudeka namesake, Sheepeater Mountain, which is home to one of the most remote fire lookouts in the world. This place's common name The Frank Church, or usually just The Church, was given after one of the key architects of the Wilderness Act of 1964, Idaho Senator Frank Church. Church remains one of the most prolific progressive voices ever in Idaho politics, and one of the most accomplished establishment environmentalists in American history. As the floor speaker for the passage of the Wilderness Act, he played a key role in drafting and signing the law that denoted this area as wilderness.

We wake up on Big Creek, a main tributary of the Salmon River, and drive up a rugged road to the Mosquito Ridge trailhead. On the way, we pass the ruins of mining towns and go through a small creek. We have taken Chris's 1996 4Runner that has a failing differential and overheats periodically because we fitted the wrong filter to it when changing the oil before we left. There is no auto parts store for a hundred miles, so we just add oil we bought from an old man on the side of the road.

The road narrows and we pull over at a shallow divot. Loading our packs, I read the trailhead sign and notice that there are no other hiker census cards in the wooden Forest Service box. A laminated sign announces we are at the official boundary of the Frank Church River of No Return Wilderness.

The word "wilderness" is deceptively unstable. It is a noun that functions like an adjective. Older mentions of wilderness often referred to something's wilderness quality or used the indefinite article like in "a bog" or "a city." It is only very recently that we have "The Frank Church Wilderness." Thus, it is important to think of wilderness not only as a setting but also as a construct. As postmodern historian William Cronon asserts in his essay *The Trouble with Wilderness* (1996):

*"Far from being the one place on earth that stands apart from humanity ... [wilderness] is quite profoundly a human creation – indeed the creation of very particular human cultures at very particular moments in human history."*⁵

5 William Cronon, "The Trouble with Wilderness; or, Getting Back to the Wrong Nature," in *Uncommon Ground: Rethinking the Human Place in Nature*, ed. William Cronon (New York: W. W. Norton & Company, 1996), 69.

The relationship of the fire lookout (both human and structure) to wilderness seems obvious. They do, after all, oversee such areas, or are at least adjacently located to them. However, it is only by elucidating wilderness both as place and concept that this relationship is fully understood. Wilderness boundaries established through legislation are fixed, whereas the concept of wilderness is not.

Far from the modern perception of wilderness, early American colonizers brought with them the European fear and hatred of wilderness which they believed impeded human progress. Tellingly, Andrew Jackson said in his 1830 inaugural address that “what good man would prefer a country covered with forests and ranged by a few thousand savages to our extensive Republic, studded with cities, towns, and prosperous farms, embellished with the improvements which art can devise or industry execute.”

Further, Americans began ascribing the same aesthetic value to wilderness as to the Jacksonian art and industry. Bob Marshall, founder of The Wilderness Society, in his 1930 *The Problem of the Wilderness* (a similar title to Cronon’s *The Trouble with Wilderness*) says:

*“One looks from outside at works of art and architecture, listens from outside to music or poetry. But when one looks at and listens to the wilderness, he is encompassed by his experience of beauty, lives in the midst of the esthetic universe.”*⁶

By the inception of fire lookouts, there was a full-blown battle over the meaning of wilderness in both thought and in practice.

Two wings of environmental thought were crystallizing in the late nineteenth and early twentieth centuries that still frame the contemporary wilderness paradigm. Conservationists (championing sustainable forest use for economic purposes) and preservationists (preaching wilderness non-interventionism) split from one another around the time that lookouts were first utilized to protect forest “crops.” The Forest Service,

6 Robert Marshall, “The Problem of the Wilderness,” *The Scientific Monthly* 30, no. 2 (1930): 145.

aided by the New Deal's Civilian Conservation Corps, built thousands of fire lookouts, including *Chicken Peak* (1930) and *Sheepeater Mountain Lookout* (1934). The sole purpose for these lookouts was negating the wilderness condition through systematic fire suppression. The preservationists, led by John Muir, Aldo Leopold, and Howard Zahniser, fought legal battles over the preservation of Yosemite's Hetch Hetchy Valley, Dinosaur National Monument, and the Grand Canyon, which led to the ratification of The Wilderness Act in 1964.

The creation of wilderness areas such as *The Church* directly correlates with the decline of fire lookouts. After all, there is no reason for a human made structure in what is legally defined as a place "*where man himself is a visitor who does not remain.*"⁷ However, fire lookouts sometime in the middle of the twentieth century become endowed with a similar scarcity as wilderness, and a different, less utilitarian gaze begins to be cast from them. As Aldo Leopold said of wilderness, "*only when the end of the thing is in sight do we discover that the thing is valuable.*"⁸

Writers like Gary Snyder, Jack Kerouac, Edward Abbey, and Phillip Whalen staffed lookouts in the 1950s and 60s. Gary Snyder, rather than describing the official management purposes of lookouts, "[sits] cross-legged, in the practical and traditional posture of a Buddhist meditation." Jack Kerouac, too, not encountering wildfire *per se*, came "face to face with [himself]."⁹

By the 1980's it was clear that the real cultural significance of lookouts rested not in their utilitarian purpose, but rather in their connection to human wilderness: an artificial landscape at the nexus of the material world and spirituality that has emerged in reaction to rampant techno-industrialism.

Most often, lookout life embodied not the clear segregation of wilderness or civilization, but rather the blending of the two. For instance, in *The Lookout*,

7 Wilderness Act of 1964, Section 2 (c). (1964).

8 Aldo Leopold, "The Last Stand of the Wilderness," *American Forests and Forest Life* 31 (1925): 599-600.

9 Jack Kerouac, *Desolation Angels* (New York: Perigee Books, 1960), 4.

Doug Peacock pours a bottle of 1970 Les Forts while listening to a Bach Cello solo:

*"[feeling] like Captain Nemo in my mountain top glass house" as a violent thunderstorm passes over. Suddenly, someone radios him to confirm his official pack-out date. He then tries to regain his "sense of solitude."*¹⁰

Sheepeater Lookout is the last remaining staffed lookout in *The Church*, and recently only for emergency purposes. As we climb the Mosquito Ridge trail, the outline of Sheepeater Peak briefly comes into view. Last month, we interviewed a lookout enthusiast named Richard Holm who also restores lookouts in his spare time. In his book, *Points of Prominence* (2009) Holm explains that Sheepeater exists at the edge of lookout evolution, and that those who staff it are primarily "fire monitors" who make sure that fire does not cross the wilderness boundary.

10 Dennis Peacock, "The Lookout," in *Go Tell It on the Mountain*, ed. J. J. Maughan (Mechanicsburg, PA: Stackpole Books, 1996), 144.

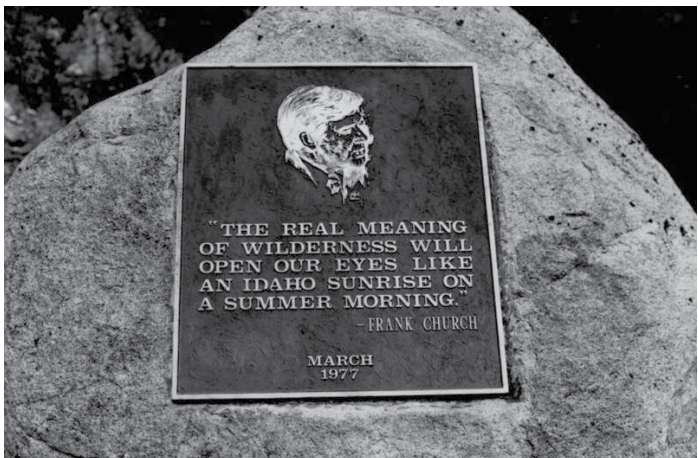


Fig. 1
Frank Church plaque near Big Creek,
Idaho.
Courtesy of the University of Idaho
Special Collections.



Fig. 2
Southwest aspect of Chicken Peak.
Courtesy of the University of Idaho
Special Collections.

From Mosquito Ridge, the Salmon River rushes five thousand feet below me and high mountain wildflowers sway in the warm updraft. On a ridge above us, *Chicken Peak* is the most unique fire lookout I have seen in the entire state of Idaho; its prominent roof and neon orange paint helped pilots navigate over empty swaths of terrain before GPS technology. *Chicken Peak* is the halfway point between the Mosquito Ridge trailhead and Sheepeater Lookout.

Chicken Peak, unlike some mountains whose shoulders gradually marry into other peaks, is very exposed. I bet this cabin rocks like a boat during storms.

Inside, the floor is collapsing around an intact podium upon which the fire finder once sat. Carved initials and corresponding dates have collected over the years, creating a kind of palimpsest. Jack carves JK + MM, and I take out my pocketknife and carve MD + KW with a heart around it.

“*Oh, sh**, smoke,*” says Jack. I turn around and stare through the smashed windows, my gaze directed in a very particular way, and see a plume of smoke rising from behind a ridge. We agree to keep an eye on it and not hike any further. Although the fire appears to be coming from across the Salmon River, we would, foolishly, be going closer to it if we continue our current route. Jack says his friend Andy is an expert with InciWeb, which is a website with information about active wildfires. We send a message using my *Garmin InReach*.



Fig. 3
Alidade table inside of Chicken Peak.
Courtesy of the University of Idaho
Special Collections.

This is Jack. We are on *Chicken Peak* in view of a wildfire east of Dixie. No danger to us currently. Could you get us some info on it?

Hours pass as we watch the plume grow into a cloud and banter about our options. For a moment, the sun bursts through the smoke and beams a kaleidoscopic refraction. “*Watch*”, says Chris, and suddenly, I am compelled back inside the deteriorating tower. I step across the floorboards, careful, so as not to trip. The panes where the windows once were makes a frame around the smoke and holds the plume in place as if it were a painting.

Standing at the podium, I imagine my hands resting on the fire finder and prepare to maneuver the alidade. I close one eye and look through the crosshairs to sight in my smoke. After all these years, there is still a pull; my gaze is directed in a very particular way and for a specific purpose.

Framing the fire from the inside feels different than being outside. With my hands on the podium, I feel a sense of safety and order; the window objectifies the fire and thus controls it. Outside, I feel disoriented and less in control. The twinned histories of conservation and preservation are at odds with each other here. The cabin is at once being reclaimed and yet still functions to conceptualize the landscape in human terms.

“What do you think?” I ask Jack and Chris. “I guess even if there’s a five percent possibility that it’s dangerous, which is probably what we’re looking at, we should turn around,” Jack replies. I can tell that he is annoyed by me and Chris who are much more afraid of the fire spreading past the river than he is. Chris nervously affirms that it would be unwise to continue hiking toward the fire.

My Garmin rings and announces Andy’s response that comes through in limited character segments:

Planned Actions: “Today, Aviation and ground resources are continuing structure protection work and improving the roads and fuel breaks near the community.”

Projected Incident Activity: “The fire has continued to burn actively and spread in all directions, and fire managers are anticipating that it will continue today under current conditions.”

Also, an hour ago they posted an Area Closure for the Dixie Jumbo Area.

Looks like there might be another fire a little west of Dixie near Buffalo Hump.

From InciWeb: “The Dixie Jumbo Fire is located 40 miles southeast of Grangeville, Idaho and 15 miles south of Elk City, Idaho. It is located on the Nez Perce-Clearwater National Forest Red River Ranger District. It was detected on the afternoon of July 5, 2021.”¹¹

Our decision is made. With the fire uncontained and spreading in all directions, and despite a river and ridgeline between the fire and *Sheepeater Lookout*, we would be unwise to not turn around.

Last spring, I interviewed writer Don Scheese who lived and worked in the Frank Church as a fire lookout in the 1980s. He was stationed on *Ruffneck Lookout* close to the town of Stanley, Idaho. After eighteen summers as a fire lookout, Scheese wrote a book about his experiences called *Mountains of Memory*. In it, he defines landscape as a “modified space” which is the result of changes made to the land by humans. To Scheese, it was the people who lived in landscapes “especially the various inhabitants of the Frank Church over Millennia,”¹² who created

11 Received via Garmin InReach on July 7, 2021.

12 Don Scheese, *Mountains of Memory: A Fire Lookout's Life in the River of No Return Wilderness* (Iowa City: University of Iowa Press, 2000), 17.

them through their needs and desire. It was them, Scheese says, “*who interest me the most.*”

I notice something hidden in the dirt. It is a small button from a pair of Levis jeans. I pick it up and examine it. The metal is degraded enough that it could be twenty, even thirty, years old. Perhaps it was dropped by someone in the 1980s, and at the same time, Don Scheese sat on *Ruffneck Peak*. I clasp the button tightly and slide it into my pocket before turning back down Mosquito Ridge.

Diablo Peak

Jack, Chris, and I have spent the last two weeks traveling across Idaho— beginning in the Frank Church Wilderness and now moving onto the Selway-Bitterroot— taking photos of fire lookouts and interviewing those who work on active sites. We feel beat up and tired, our skin is leathery, and our lips are cracking from the drastic shifts in elevation.

My girlfriend, Kourt, has driven down to the Lochsa country of central Idaho (north of The Church) to meet us. The Selway-Bitterroot Wilderness touches seven ranger districts, the Lochsa being one. Together we are hiking to *Diablo Peak* where long-time wilderness activist Bill Moore spends two weeks each year as a lookout staff. Like Pam, Bill runs a volunteer lookout program that provides an additional level of fire reduction and helps keep the tradition of lookouts alive.

Bill is the son of the late Forest Service Lochsa district ranger and activist Bud Moore, who implemented a multiple-use policy in the Selway-Bitterroot Wilderness. Multiple-use policy aims to manage competing needs and values to achieve ecosystem health alongside human society’s economic demands. Bud was one of the first lookouts in this part of the country and spent several seasons on McConnell Mountain, just over the ridge from *Diablo*.

Bill tells us that Bud began his tenure with the Forest Service as a lookout and smoke chaser. He was stationed at McConnell Mountain in 1935 where he stayed for several years and found a flaw in the Forest Service’s fire watching approach: during lightning storms, he was confined to a cabin below the tree line which had been outfitted to withstand strikes. Bud constructed a small tower from rocks where he watched for lightning above

the tree line during summer storms. From this vantage point, he made notations about strike locations and improved his overall accuracy and effectiveness as a fire lookout. When the district ranger came to check on Bud, he was impressed with his design and ordered a fire lookout be built in place of the rock pile.

Bud left the Selway-Bitterroot region to fight in World War II but returned and became district ranger in the early-1950s, before it was designated as Wilderness. At the time, they enforced the Forest Service's infamous 10 a.m. policy: all fires were to be exterminated by 10 a.m. the following morning. However, enabled by the signing of The Wilderness Act of



Fig. 4
Michael Decker and Bill Moore on Diablo
Peak. Courtesy of the University of Idaho
Special Collections.

1964, the Selway-Bitterroot became protected Wilderness, which meant that a new set of fire policies were put in place from total fire suppression to wildfire as prescribed burn.

In a sense, Bud always recognized that some of his policies, retrospectively, were harmful. This included spraying DDT and suppressing fire. Bud often admitted shortcomings and proposed different management models, ones that imagined

more sustainable environmental futures. For example, he led the reintroduction of controlled burns in fire deficit areas in the Selway-Bitterroot. Many of his thoughts and actions can be found in his sprawling book *The Lochsa Story: Land Ethics in the Bitterroot Mountains* (1996). Tellingly, this book was written a full decade prior to its publication because many of the ideas within it were not yet popularly accepted, and, as Bill points out, Bud refused to vanity publish.

“*Bill!*” I call out as the shape of Diablo’s lookout materializes through the ubiquitous wildfire smoke. I see a fluorescent work shirt and a pale hand wave howdy. Bill is a septuagenarian who moves slowly but confidently, the result of a life spent hiking and living in a big open country. He smiles an honest, crooked smile that makes me feel at home. He invites us up to the cabin and brews a pot of coffee creating an effortless and organic hospitality, and prompting conversation in a way that only a pot of coffee shared among friends can.

The tower is full of books (notably, Kressek’s *Fire Lookouts of the Northwest*) and gear that lookouts have left over the years. The design of most towers is the same: a propane stove, small refrigerator, wooden framed bed, and shelving around the ceiling for holding canned goods and books. A map of the tower’s surrounding topography is attached to a wooden board that folds down from the ceiling above the bed, intended for use in conjunction with the fire finder. Most of the tower’s belongings are somewhat antiquated; however, there are modern objects as well: a *Garmin InReach* on which I glanced a message asking Bill if he had been evacuated yet (the Lolo Complex fires are burning nearby), his iPhone that he uses to snap a portrait of our team, and a newer REI backpack near the bed.

“*Could you really quickly give us a three-sixty view here?*” Chris begins the interview. Bill chuckles and points his finger to the east.

“I’m not sure how to put it. We’re sitting on the ridge between the Selway drainage and the Lochsa drainage. You got Big Fog lakes up here in the fog or the smoke. You can just see the tail end of it. It’s about a mile long and has a sand bar at one end. Wonderful fishing. You come up over this ridgetop here, that’s Genette Mountain. You go down into Little Moose Crick and that’s Dead Elk Point right there. There’s a little low one called Footstool. Go down this way and that’s Goat

*Lakes. Behind them is Wahoo Point and Battle Creek Ridge. That is all in what used to be the Nez Perce National Forest. It's now the Clearwater-Nez. Then you go around this corner where the smoke is really heavy and that's Elbow Bend. Between Elbow Bend and that corner is a huge old-growth cedar grove that was written up in the National Geographic in 1935. That ridge that's coming down like that is Maple Ridge. There's a little mountain range called the Graves Range, and right out there is Graves Peak."*¹³

As Bill describes the landscape, I imagine him oscillating his body from left to right, creating an arc of the horizon along an azimuth that traces a three-hundred-and-sixty-degree trajectory as his tinted glasses reveal one squinting eye that identifies the landmarks through an internalized parallax view. The other striking thing is that we cannot see any of the places Bill talks about; the smoke is too thick. From the tower, the landscape appears as a white purgatory upon which nothing can be discerned; it is a strange canvas which defamiliarizes the familiar. However, Bill quickly points out that this smoke indicates something natural occurring on the landscape, and that the high-visibility days of his and Bud's early time as fire lookouts was the result of *Smokey the Bear* and the Forest Service's 10 a.m. policy.

We sit around for hours listening to Bill's stories, and he goes into extensive detail about his father's work in the district. He has interesting ways of pronouncing words: Diablo, for instance, is pronounced "*die-ablo*." I also notice Bill's childlike essence: though time has aged him, I have no problem imagining him young, and when he talks about Bud, he always refers to him as "*Pops*." Bill celebrates his father, but there is pain in his voice. It is obvious how much he misses Bud, who represents a past way of life and attachment to the land. The act of maintaining lookout structures and lookout volunteer programs is an attempt, among other things, to keep this attachment alive. Storytellers like Bill, and the rest of us, really, see the world through an aggregation of experience. Places do not, to humans, exist in isolation of memory, and perhaps except for the Nez Perce who were born from this land, Bill and Bud are as infused with the landscape as anyone.

In *Lochsa Story*, Bud tells the story of himself as a young trapper on his first solo trip into the Bitterroots. Near a small

13 Interview conducted by author with Bill Moore on Diablo Peak in August 2021.

lake in the Valley of the Brushy Fork, Bud comes face-to-face with a large grizzly bear, a species that was already on its way out of the area. Frozen with fear each stare into the face of the other and the human and bear come to an understanding as Bud says, that:

*"The forests belonged to the bear, but the meadow was mine; so I camped at its edge beneath thick-limbed spruces that would shield my blanket from the frost."*¹⁴

This encounter becomes central to the land ethics that Bud presents in his book, and how he frames multiple-use theory as a viable management path forward; the idea that he and the Grizzly agree to live out their distinct yet still intertwined existences becomes a challenging idealization that is critical for the survival of both human and bear.

Some say that fire lookouts give those who stay on them a long view, not just in-terms of the twenty-five-mile radius around the tower, but a view that looks deep into the past and future; and like the tower's view, Bud believed that the remnants of his encounter with the bear—"his boot prints mingled with the grizzly tracks on the trail"—said something about where it is we come from, and where it is we are going, like the light of a distant star glimpsed from a lookout during the night, at once happening and already having happened.

The futurist approach has been the most effective for wilderness preservation. For instance, prior to signing the Alaska National Interests Land Act in 1978, Jimmy Carter stated that:

*"We have the imagination and the will as a people to both develop our last great natural frontier and also preserve its priceless beauty for our children and grandchildren."*¹⁵

This same rhetoric of conservation on behalf of future generations has permeated the conversation of most environmental issues today, including that of global climate change and unchecked human development. As Roderick Nash says of creating a more balanced "Island Civilization" that does not dominate the natural world:

"It opens a future in which humans, finally, can become good neighbors in the ecological neighborhood. Protecting

¹⁴ Bud Moore, *The Lochsa Story: Land Ethics in the Bitterroot Mountains* (Missoula, MT: Mountain Press Publishing Company, 1996), 12.

¹⁵ Carter, J. (1978, December 1). Statement by the president on the designation of national monuments in Alaska. The American Presidency Project. <https://www.presidency.ucsb.edu/documents/statement-the-president-the-designation-national-monuments-alaska>

*Wilderness by concentrating our civilization is a symbol of our species' capacity for restraint."*¹⁶

The Wilderness Act of 1964 is arguably the most radical environmentalist action ever taken at the federal level. Quoted more than any other section though is its stance on permanent human settlement, which states that "*man himself is a visitor who does not remain*" in the wilderness. Yet, this is untrue. There is archaeological and anecdotal evidence that humans have moved across The Church and Selway-Bitterroot for thousands of years. Everywhere, there is proof of humans in the wilderness.

This ecological amnesia is what Cronon asserted was the danger of official wilderness boundaries: that they would separate our everyday lives from the conservation mindset of wilderness. Humans, and specifically settler-colonial societies, he worried, would continue to justify more localized forms of environmental neglect if they could imagine untouched nature elsewhere.

Environmental and queer activist, Nicole LeFavour, staffed fire lookouts for several years, and in her essay *Listening to Voices in the Wilderness* (1996) describes how:

*"decades of lookout use show on the tree stumps and snags below. Every year we have to walk farther for the wood, the skeleton of another ancient limber pine turned to a streak of wood smoke stretches across the sky."*¹⁷

LeFavour shows that remaining in such a way makes one more in tune with resource use. She continues to wonder that "*somewhere far away men and women in the depths of marble buildings debate our need for wilderness.*"¹⁸ LeFavour is concerned with location and how politicians make high-stakes decisions while remaining disconnected from wild places.

Lookout structures have a long history of producing lifelong lovers of the wilderness and some of its most

16 Frazier Nash, *Wilderness and the American Mind*, 385.

17 Nancy LeFavour, "Listening to Voices in the Wilderness," in *Go Tell It on the Mountain*, ed. J. J. Maughan (Mechanicsburg, PA: Stackpole Books, 1996), 8.

18 *Ibid.*, 9.

passionate protectors. Ray Kresek, for instance, says that he started his forestry career on a lookout and made the decision to end it there as well; in between, he established the Salmo-Priest Wilderness. However, the Forest Service announced in 2023 during a Senate Budget Committee hearing that they intend to further reduce staffed lookouts. Lookouts, according to National Budgets Director, Mark Lichtenstein, will be replaced by sophisticated smoke watching cameras that are augmented using artificial intelligence. To what extent fire lookouts will remain is uncertain, but the direction is clear; and as we reduce our reliance on human experience, I wonder how it is we will remain.

I sip my coffee down to a black residue as we start packing our cameras and prepare to head back down the trail. The smoke, I think, has gotten worse since we arrived. Bill gestures vaguely out toward McConnell Mountain where his dad had worked. In the end, lightning ignited a wildfire five miles from Bud's old rock pile and three days later the now-decommissioned McConnell Mountain fire lookout burned down. Bill wrote that Bud, who passed away in 2010, would not be sad because *"the story is a lesson about the circle of life and death in the Wilderness world."*¹⁹

Bud's personal land ethic emphasized that no human alteration to the land is without consequences. Any changes to an ecosystem will have unforeseen and unintended consequences. Making good management decisions requires living and working in a single place for a lifetime rather than for short durations. *"Nature's ways"* Bud believed *"have to be respected if we are to prosper very long."*²⁰ And these ways, he reminds us, are intricate and need both human emotions and applied science to become defensible.

After we return to our busy lives at work and school, Bill will still be here. I think that being here does matter, and that despite cost, efficiency, or current politics, the very act of remaining in one place and becoming familiar with its personality is more important than ever. I pause for a moment and inhale the smoky air. The wind blows across my cheek. I think of it fanning the flames of the nearby Lolo Complex Fires. Ground squirrels

19 Bud Moore, "A Circle of Life and Fire," *Lookout Network*, Forest Fire Lookout Association, Spring 2015, 17.

20 Moore, *The Lochsa Story*, 432.

chatter in the nearby rocks and where the sky once was is now only smoke. I would, if possible, lie down next to the lookout in the bear grass and never leave.

Michael Decker, Winter 2024

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THREE FINGERS LOOKOUT: A SOCIAL MEDIA CASE STUDY

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As participation in outdoor recreation in the United States continues to rise, with over 175.8 million people reporting recreating outside in 2024 according to the Outdoor Industry Association,¹ the recreational use of fire lookouts is increasing as well. Lookouts available for rental are often booked solid months in advance and popular day-use lookouts can see dozens of visitors per day during the peak season. Data for overnight visitation to first-come, first-serve lookouts is more difficult to obtain. However, for certain lookouts – like *Three Fingers Lookout* in the Boulder River Wilderness of the Mt. Baker-Snoqualmie National Forest in Washington, and the *Hidden Lake* and *Winchester Mountain Lookouts* also on the MB-SNF, the increase in recent years is indisputable. This lookout can be framed as a composite for recreational overuse as it applies to lookouts as well as in wild spaces more broadly.

The use of lookouts for recreation has many positive impacts. It can increase awareness of the role fire lookouts play in the stewardship of our public lands through interpretive materials or personnel at the lookout, provide opportunities for experiential learning when the lookout is still equipped with a fire finder, and create advocates for their preservation as historic structures. But when usage increases to levels that stress the lookout structure itself, negatively impact the experience for visitors, and impact the ecosystem surrounding the lookout, it can create dilemmas

1 “2024 Outdoor Participation Trends Report,” Outdoor Foundation, 2024, accessed February 24, 2026, <https://outdoorindustry.org/article/2024-outdoor-participation-trends-report/>.

for public land management agencies and ethical concerns for users and the broader outdoor recreation community.

As a volunteer-maintained lookout without an official reservation system (most lookouts available for overnight stays are managed through *recreation.gov* or state agencies), the Three Fingers Lookout has historically operated on a first-come, first-serve basis. For decades, this seemed to be sufficient. The challenging hike and remote location prevented the lookout from regularly reaching maximum capacity. As the population of Seattle, the closest metropolitan area, grew there was a boom in outdoor recreation. A 2018 article in the Seattle Times cited data that showed:

“the increase in the number of hikers is seven times greater than our [Seattle] population growth over the past decade.”²

Visits to the *Three Fingers Lookout* began to rise dramatically as well, despite access becoming more challenging due to road washouts. Once the lookout – arguably one of the most photogenic and stunning in the Northwest, if not the nation – gained popularity on social media in the early 2020s and went “viral” the amount of visitation increased to an unprecedented level. The connection to social media and increased use was also noted by the Seattle Times:

“Nielsen [polling] data show that people who hike are 43 percent more likely than average to have used Instagram in the past 30 days.”³

The Leave No Trace Center for Outdoor Ethics noted in 2018 that social media, such as Instagram, has effects on public lands:

“There is little question that social media plays a role in the promotion of various outdoor locations, and in some cases, has led to significant resource and social impacts.”⁴

At *Three Fingers Lookout*, it is estimated that visitation has tripled within the last decade, with more than 500 persons likely having spent the night in 2023.⁵ A volunteer with Friends of *Three Fingers Lookout* reported seeing 12 persons spending the night at one time; a maximum occupancy of 8 is listed by

2 Gene Balk, “Instagram Effect? Number of Seattle-Area Hikers Has Doubled in Less Than 10 Years, Data Show,” *The Seattle Times*, April 2, 2018, accessed February 24, 2026, <https://www.seattletimes.com/seattle-news/data/instagram-effect-number-of-seattle-area-hikers-has-doubled-in-less-than-10-years-data-show/>.

3 Ibid.

4 “Leave No Trace and Social Media,” Leave No Trace Center for Outdoor Ethics, accessed February 24, 2026, <https://lnt.org/sites/default/files/Leave%20No%20Trace%20and%20Social%20Media.pdf>.

5 Michael Holmquist, telephone interview by author, July 19, 2024.

the Mountaineers (a Seattle-based nonprofit that assists with restoration efforts) on their trip planning webpage for *Three Fingers Lookout*.⁶

For lookouts on national forest lands that are part of the rental program, overnight reservations are managed via *recreation.gov* portal and capacity is limited. While this results in popular lookout being booked out months in advance, it largely eliminates user conflicts and prevents the amount of use from exceeding the available infrastructure, such as trailhead parking and toilet facilities. As frustrating as this system can be for those wishing for the ability for a spontaneous visit, it is undoubtedly an effective way of managing overnight use at popular lookouts.

Despite heavy recreational use, *Three Fingers Lookout* is not part of the rental program and instead relies on the first-come, first-serve model. In recent years, users of the *AllTrails* app have begun trying to extend first-come, first-serve into the digital world. Those intending to visit the lookout for an overnight stay have created an unofficial, ineffective, and confusing system by publicly posting their anticipated timeframe for hiking into *Three Fingers Lookout*. This elucidates a lack of official infrastructure that meets the demands of recreationists, the lookout structure itself, and the ecological zone surrounding the lookout. Some unofficial reservations read as such: “Confirmed group of 3 staying at the top July 10th” read one entry; “Confirmed trip overnight July 26-27 (group of 4)” stated another. There were dozens of similar posts before hiking season for the North Cascades had begun. Some of these posts were for dates that were logistically unfeasible and much too early in the season given the lookout’s location and which demonstrated a profound degree of ignorance of the effort it would take to reach the historic fire lookout – perched at 6,854 feet, requiring a round-trip of 38-miles, and with snowpack persisting into early July and requiring crampons and ice axes. Several posts overlapped with dates previously posted.

Other comments expressed a frustration at this unofficial system to try and secure a spot at this iconic structure.

“For everyone using all trails as a reservation system, I’m going to go up the day before your reservation. I don’t know

6 “Three Fingers Trip Planning,” The Mountaineers, accessed February 24, 2026, <https://www.mountaineers.org/locations-lodges/everett-branch/committees/everett-look-out-trail-maintenance-committee/web-pages/three-fingers-trip-planning>.

which one but one of y'all for sure getting scooped. [...] Owen and Wiley can't wait to see you guys up there July 10th!!! Any chance I could borrow or share a sleeping bag? I won't have room for mine because of the speaker I'll be carrying. Hope you guys like Pitbull!"

This impromptu reservation system may feel innocuous or well-intentioned at first, but it actually raises complicated ethical questions about the tradition of first-come-first-serve accommodations at singular destinations like *Three Fingers Lookout*. When I brought up this topic with Mark Sundeen, associate professor of Environmental Studies at the University of Montana, he said:

*"It sounds like rubbish to me. I mean, people can make imaginary reservations all they want but [...] they mean nothing if someone else shows up who doesn't pay any attention to AllTrails."*⁷

While most understand that the lookout is a shared resource, it is unavoidable that user conflicts could emerge after having spent so much effort to reach the lookout only to find it occupied by others.

The lack of oversight also makes the jobs of lookout volunteers and non-profits more challenging. Michael Holmquist, a volunteer with Friends of *Three Fingers Lookout*, also believed that users posting about their intentions to stay overnight on *AllTrails* was problematic to the structural integrity of the lookout. *"I think it absolutely confuses things,"* said Holmquist. *"You cannot tell me with a straight face you're not claiming the lookout."*⁸ Holmquist said that while overnight use of the *Three Fingers Lookout* has increased substantially in the last decade, volunteer recruitment remains a challenge for the group who coordinates maintenance projects. Situated in a topographical and climatologically extreme environment, the weather alone creates significant maintenance challenges. Combined with the cumulative impact of hundreds of visitors using the lookout — even seemingly mundane actions like opening the door repeatedly and raising and lowering the shutters add up in terms of wear-and-tear — the Friends of *Three Fingers Lookout* represent the intersection of increased recreational demand catalyzed by social media proliferation and the lack of official oversight in wild spaces.

⁷ Email conversation, July 19, 2024.

⁸ Michael Holmquist, telephone interview by author, July 19, 2024.

As this topic was first being researched in the summer of 2024, many of the comments posting about staying specific nights had been deleted. When asked, none of the several users who were contacted had deleted the comments themselves and *AllTrails* did not respond to multiple requests for comment about why they were deleted. Similar comments have reappeared by different users, creating a confusing situation, and as of fall 2025 there does not appear to be any moderation by *AllTrails* of comments related to future overnight stays. At the present time, it seems apparent that social media fame, like it has with numerous other locations in designated wilderness, has created more problems than it has solved for *Three Fingers Lookout* and those who manage and maintain it.

Its location in the Boulder River Wilderness area of the Mount Baker-Snoqualmie National Forest creates several management challenges for the lookout. Camden Bruner, District Ranger of the Darrington Ranger District where the lookout is located, said that maintaining wilderness characteristics, such as opportunities for solitude, can be challenging when areas become more popular. “*There’s no way around it; Three Fingers Lookout is Instagram famous*”⁹ he said. “*The quality and the quantity of the social media content is incredible.*”¹⁰ Some of the social media content has been filmed using drones, which are prohibited in federally designated wilderness areas. This further elucidates the difficulty of maintaining historic legislation like the Wilderness Act of 1964 as technology becomes more advanced and difficult to moderate. The act of flying drones is shown to be inextricably linked to intangible spaces like social media, which are increasingly demonstrating their ability to have adverse impacts on tangible spaces like the Boulder River Wilderness where *Three Fingers Lookout* is located.

Despite highlighting this illegal act, drone videos remain on Instagram and other social media platforms where they remain outside of the legal authority of the Wilderness Act. While there are currently no plans to add the lookout to a permit or reservation system, Bruner said that it is imperative for those visiting *Three Fingers Lookout* to use it responsibly, to practice Leave No Trace, and make sure they are capable of completing the challenging hike to reach the lookout. This, as previously

9 Camden Bruner, District Ranger, Darrington Ranger District, Mount Baker-Snoqualmie National Forest, interview by author, August 14, 2024.

10 Ibid.

stated, becomes a complicated question of environmental ethics, wilderness management and how humans interface with physical spaces in the age of virtual platforms like *AllTrails*, Instagram, and other social media.

While the challenges facing *Three Fingers Lookout* and the role played by social media in negative impacts is clear, there do not seem to be readily apparent solutions aside from restrictions on use, which have profound downsides as well.

What is perhaps most concerning is the possibility for other first-come, first-served lookouts in the backcountry – and specifically in designated wilderness areas – to find themselves on a similar trajectory. Those closest to major population centers and most photogenic seem to be those most at risk, but *Three Fingers Lookout* illustrates that distance from the trailhead does not meaningfully discourage visitation. While most visitors to *Three Fingers Lookout* likely live in Washington or adjacent states, there many accounts of people traveling across the country as well as internationally for the specific purpose of spending the night in the lookout after being inspired by online content. This is not problematic in itself, but can lead to varying degrees of preparedness¹¹ and an amplified degree of “summit fever” where making it to the destination after traveling so far takes priority over prudent backcountry risk management.

Unfortunately, relative obscurity and a remote location do not guarantee responsible use or prevent lookouts in wilderness areas from being damaged. The *Little Snowy Top Lookout* in the Salmo-Priest Wilderness of northeast Washington and northwest Idaho saw relatively few visitors given its distance from major population centers and the approximately nine-mile hike required to reach it. It was tragically destroyed by a fire in 2016, likely the result of misuse of the woodstove. This is especially concerning because once wilderness lookouts are destroyed, especially ones retired from active duty, they are often gone for good. This makes determining the right balance of management for lookouts, which inevitably hinges on the degree and methods to which they are accessible by the public, a particularly daunting challenge.

11 A rescue in June 2023 involved out-of-state hikers and occurred when significant snowpack was present. “Three Hikers Rescued from Three Fingers Mountain by Search and Rescue,” *Lynnwood Times*, June 22, 2023, accessed February 8, 2026, <https://lynwoodtimes.com/2023/06/22/three-fingers-mountain-230622/>.

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DESIGN AS IMPROVEMENT AN ARCHITECTURAL APPROACH TO LOOKOUTS

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In this essay, I examine lookouts from the standpoint of architectural design. Over two consecutive semesters (Spring and Fall 2024), I proposed this topic in my design studios not only because of its eccentricity compared with more conventional assignments—such as designing a library or a private house—but also because it offered an opportunity to reconsider what truly constitutes a problem of architectural design. In this sense, the theme served both as an object of research and as a pedagogical tool for the students who participated in these courses.

Because lookouts are often located in remote and environmentally exposed sites, their structures must be strong enough to withstand severe seasonal stresses—particularly wind and harsh weather—while at the same time allowing unobstructed observation of the surrounding territory. For this reason, lookout cabins are typically characterized by walls that are extensively glazed or otherwise perforated along the entire perimeter. Reconciling structural resistance with visual openness is therefore one of the fundamental challenges embedded in their design. Taken together, these conditions frame the lookout primarily as a problem of engineering design—often a complex one—while aesthetic or symbolic considerations, typically associated with architecture, might appear secondary.

Yet the story does not end there. Over time, hikers and lookout enthusiasts have come to recognize these structures

as meaningful elements of the landscapes. Far from being perceived merely as functional devices, lookouts have acquired a distinct aesthetic presence within forests and mountain ranges. This reception is particularly interesting because it emerged largely outside the domain of professional architectural design. Most lookouts were not conceived by architects, and their aesthetic value therefore belongs to what might be described as an aesthetics of reception¹—an appreciation that developed spontaneously through use, experience, and cultural memory rather than through formal design intention. For this reason, their aesthetic significance cannot easily be explained through the conventional frameworks used to describe the conventional contribution of architectural design to the built environment.

In recent years, this phenomenon has gained new relevance as recreational uses increasingly accompany the traditional service functions of lookouts. Many structures have been restored or reconstructed after damage or collapse, and some have been adapted to serve as overnight shelters for hikers and tourists.² These transformations inevitably introduce new questions: technological upgrades, functional adjustments, and possible modifications to the appearance of the structures themselves. In such contexts, professional architects are often called upon to intervene.

These interventions can generate new trajectories in the evolution of lookout structures, but they also carry certain risks. When architectural design is not grounded in a careful understanding of the historical and cultural logic of lookouts, it may inadvertently lead to their “homogenization.” Under the influence of commercial architectural conventions and market-driven expectations, the distinctive character of lookouts may be diluted, replaced by forms that respond more to tourism imagery than to the historical logic of the structures themselves.

At the same time, the reflections developed here are not motivated by nostalgia. The argument presented in this essay is not an attempt to preserve lookouts as relics of a bygone era or to transform them into museum objects. Rather, it seeks to explore how architectural design might contribute to their future development without severing the connection with their

1 Hans Robert Jauß, *Toward an Aesthetic of Reception* (Brighton: Harvester Press, 1982).

2 Seaborn Larson, “Former Fire Lookouts a Tool for Tourism,” *The Western News*, December 6, 2016. See also Tish McFadden and Tom Foley, *How to Rent a Fire Lookout in the Pacific Northwest* (Berkeley, CA: Wilderness Press, 2005).

historical evolution. In other words, the goal is not conservative resistance but a form of critical reflection oriented toward the future—one that treats historical memory as a resource rather than as a constraint.

Seen in this light, architecture can intervene not only as a creative activity but also as a form of knowledge. Its role is not simply to produce new objects but to interpret existing ones, to understand their internal logic, and to guide their transformation over time.

A useful precedent for this approach can be found more than a century ago in the early years of the U.S. Forest Service under the leadership of its first Chief, Gifford Pinchot. Pinchot understood that the construction of buildings for administrative personnel was not merely a practical matter. It was also a strategic means of shaping a recognizable public image for the newly created federal agency.

In his view, the ranger station functioned both as an operational base and as a point of contact with the public. In the *Use Book*,³ Pinchot describes in detail the criteria for locating, organizing, and equipping the cabins that formed the basic units of these stations. Alongside these technical instructions, however, he also addressed the question of appearance. His prescriptions were brief and almost military in tone:

*“these cabins should be built of logs, with shingle or shake roofs.”*⁴

This choice of logs was not arbitrary. Logs provided practical advantages in remote environments, but they also carried symbolic significance. They conveyed an image of rustic authenticity that allowed the new federal agency to communicate its mission and identity to the public.

This dual framework—practical function combined with symbolic identity—continued to shape the work of the Forest Service’s technical divisions in the decades that followed.⁵ Administrators and architects refined Pinchot’s initial guidelines, particularly by paying greater attention to local contexts. Beginning in the 1920s, architects working in

3 United States Forest Service, *The Use Book: The Use of the National Forest Reserves* (Washington, DC: Government Printing Office, 1905).

4 United States Forest Service, *The Use Book: Regulations and Instructions for the Use of the National Forests* (Washington, DC: Government Printing Office, 1907), 147.

5 Kay Atwood et al., *Utility and Service Combined with Beauty: A Contextual and Architectural History of USDA Forest Service Region 6: 1905–1960* (Washington, DC: U.S. Government Printing Office, 2005).

regional offices—among them William J. Fox⁶—developed projects that sought to reconcile technological modernization with stylistic and landscape integration.⁷

Interestingly, this framework applied primarily to ranger stations and not to lookouts. Within the broader building program of the Forest Service, lookouts remained largely outside the sphere of architectural design. For most of their history they were constructed without any explicit attempt to reconcile technical efficiency with aesthetic expression.

Only a few examples break this pattern. One of the most notable is the *La Cumbre Peak Lookout*, designed in 1945 by Kepler Johnson in the Los Padres National Forest.⁸ Johnson proposed an experimental structure in which a steel frame supported a continuous band of glass between the walls and the roof, slanted outward along the entire perimeter. The design sought a coherent integration of structural innovation and architectural form. Yet precisely because of its sophistication—and the cost and technical expertise it required—it never became a widely reproducible prototype.

Most lookouts evolved along a very different path. Their development was less the result of architectural planning than of incremental adjustments to individual components. Over time, these adjustments often centered on the cabin itself. Although the cabin is only one element within the lookout system, it gradually became the principal reference point for typological classification.

This circumstance produced a somewhat paradoxical situation. Referring to a cabin type such as the L-4 does not necessarily indicate whether the structure stands on a tower, rests on concrete piers, or sits directly on a rocky outcrop. In other words, the final form of the lookout—the complete assembly of its components—never acquired a systematic classification of its own.

For this reason, the lookout may be understood less as a building in the conventional architectural sense than as a technical assemblage. In the terms proposed by Gilbert Simondon, it

6 “William Fox, a Butte native and recent graduate of the University of Washington’s School of Architecture, was hired as the first architect.” John R. Grosvenor, *A History of the Architecture of the USDA Forest Service* (Washington, DC: U.S. Government Printing Office, 1999), 33.

7 See, for instance, the Fenn Ranger Station (1936), Nexperce National Forest, Region 1. Idaho Heritage Trust, Fenn Ranger Station, accessed March 14, 2026, <https://www.idahoheritagetrust.org/projects-grants/fenn-ranger-station/>

8 Grosvenor, *A History of the Architecture of the USDA Forest Service*, 99.

resembles a “technical object”: an entity composed of multiple components that cooperate functionally while maintaining a certain autonomy.⁹ Each component—cabin, tower, stair, walkway—follows its own trajectory of development.

This characteristic helps explain why the lookout resists interpretation through traditional architectural categories. Architects usually conceived buildings as unified compositions governed by a coherent internal logic. Lookouts, by contrast, behave more like “machines” assembled from parts that respond to different operational logics.

Before the USFS began to develop a systematic technical knowledge of these structures in the mid-1910s,¹⁰ the basic configuration of lookouts had already emerged through the practical experiences of the people who used them. Many of these experiences were adventurous, and some were even tragic. In the early decades, lookouts were essentially the product of spontaneous experimentation.

Rather than comprehensive redesigns, most changes took the form of small adjustments responding to immediate needs: a component that had failed, a feature that proved inconvenient, or a practical improvement suggested by daily use. In this sense, the history of lookouts is deeply connected to the everyday ingenuity of those who inhabited them.

Some early examples illustrate this process particularly well. Elijah “Lige” Coalman, for instance, modified a frame cabin by adding a glazed cupola above the roof, allowing observation in all directions.¹¹ His *Summit House* became the prototype for what later came to be known as the D-6 cabin type. Similar experiments led to the development of the D-1 cabin, where a log structure was vertically extended to create an elevated observation space.¹²

Although only a few dozen examples of these prototypes were built, they prepared the ground for a major step forward: the introduction of the L-4 cabin. Unlike earlier developments, the L-4 relied on prefabricated components that could be

9 Gilbert Simondon, *On the Mode of Existence of Technical Objects*, trans. Ninian Mellamphy (London: University of Western Ontario, 1980).

10 “Forests in Region 1 began to experiment with lookout construction as early as 1915. The first lookout tower in Region 1 was erected in 1916; it comprised a small cab mounted on a windmill tower.” Grosvenor, *A History of the Architecture of the USDA Forest Service*, 96.

11 Mount Hood History, “Elijah ‘Lige’ Coalman – Mount Hood Legend,” accessed March 14, 2026, <https://mounthoodhistory.com/mount-hood/elijah-lige-coalman/>

12 Ray Kresek, *Fire Lookouts of the Northwest* (Spokane: Historic Lookout Project, 1984).

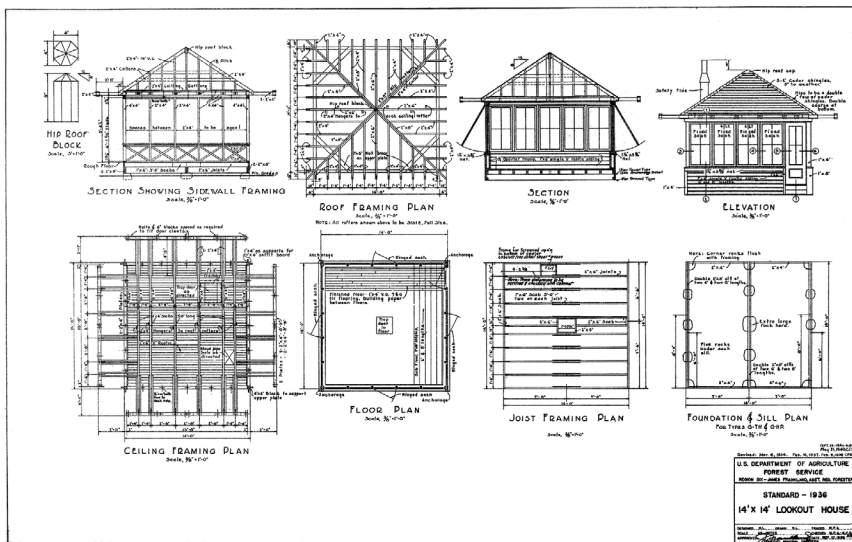


Fig. 1
Board extracted from the *Standard Lookout Structure Plans* (1938) showing the structure and standardized components of a fourteen-by-fourteen-foot cabin.

reproduced on a large scale. Standardized in the 1938 handbook *Standard Lookout Structure Plans*, prepared by the USFS Division of Engineering under T. W. Norcross,¹³ the system enabled the construction of thousands of similar structures across the United States (fig. 1).

Parallel developments affected other components of the lookout assembly, including towers, stairways, and walkways. From the earliest crow's nests—or even from the simple use of natural ridges as observation points¹⁴—the problem of vertical access emerged as a central theme. The relationship between cabin and tower therefore evolved in close dialogue with the specific conditions of each site.

Seen from this perspective, the lookout form is not imposed by a single design gesture, but is best understood as the result of a logic of assembly that extends from the landform itself.

At this point a methodological question arises: what role can architectural design play within such a logic of assembly?

13 T.W. Norcross, *Standard Lookout Structure Plans* (Washington D.C.: U.S. Department of Agriculture, 1938).

14 "The earliest lookouts were high peaks with an unobstructed view, with tents as shelters and short mapboard stands for pinpointing the smoke on maps." Grosvenor, *A History of the Architecture of the USDA Forest Service*, 96.

Traditional architectural practice relies on composition—the search for a unified form in which individual elements are subordinated to the overall image.¹⁵ The lookout, however, follows a different logic. Its components retain their individuality even when combined with others.

Instead of producing a unified image, the process generates a multiple image, in which each component remains legible as a distinct item. The lookout therefore appears less as a finished object than as the cumulative result of many partial interventions carried out over time.

This condition brings the lookout close to the concept of “ad hocism,” described by Charles Jencks and Nathan Silver as the practice of “making do with whatever is at hand.”¹⁶ In their *Adhocist Manifesto*, they describe creative moments in which hybrid forms emerge through the conjunction of previously separate systems. In architecture, ad hocism is less a stylistic code than a practical attitude, closely related to the idea of bricolage. As Irénée Scalbert has argued, bricolage is not limited to artistic practice but reflects a broader mode of engaging with reality.¹⁷ Even the most abstract forms of knowledge, he suggests, must sometimes rely on what Claude Lévi-Strauss calls the “science of the concrete”—a form of thinking that embraces circumstance and accident.¹⁸

Few artifacts embody this principle more clearly than lookouts, whose development has historically been shaped by precisely such circumstances. Yet acknowledging their affinity with ad hocism also raises an important question. How far can we rely on the logic of improvisation alone? Can we build a coherent understanding of lookouts if we explain their evolution only through isolated moments of ingenuity or accidental discovery?

If taken too far, such an approach risks reducing their history to a series of anecdotes—a narrative populated by unexpected events and sudden flashes of brilliance. While these stories are often compelling, they may obscure the deeper processes that have shaped the evolution of the structures themselves.

15 See “Composizione/Progettazione,” in *Casabella*, vols. 520–521, 1986.

16 Charles Jencks and Nathan Silver, *Adhocism: The Case for Improvisation* (Cambridge, Massachusetts: MIT Press, 1972).

17 Irénée Scalbert, “The Architect as Bricoleur,” *Candide. Journal for Architectural Knowledge* 4 (2011): 69–88.

18 “To a degree all constructions, all knowledge involves bricolage. Even the most abstract science must sometimes appeal to the science of the concrete.” *Ibid.*: 81. See also, Claude Lévi-Strauss, *The Savage Mind* (Chicago: University of Chicago Press, 1962).

For this reason, it may be more productive to shift the focus from “improvisation” to “improvement.”

Improvement introduces a different conceptual framework. Rather than emphasizing isolated moments of invention, it highlights a continuous process linking past and present. Each intervention becomes part of an ongoing trajectory in which earlier conditions are not erased but transformed.

Understood in this way, design no longer aims simply at producing novelty. Instead, it generates innovations that acknowledge both a point of departure and a provisional point of arrival. The old and the new become inseparable elements of the same process.

This perspective brings design and preservation into alignment. An act of design becomes simultaneously an act of continuation.

A similar insight appears in Stewart Brand’s influential book *How Buildings Learn* (1994).¹⁹ Drawing on analogies with biology, Brand suggests that buildings behave like organisms: they adapt, evolve, and accumulate traces of their past transformations. From this point of view, buildings do not simply change from one state to another. They pass through successive phases while retaining the memory of previous configurations. As Brand famously remarks: “*It is much easier to continue than to begin.*”²⁰

Improvement therefore becomes a method of working with existing structures rather than replacing them. Each intervention addresses a specific problem while preserving the traces of earlier solutions, much like a black box that records the history of its own adjustments.

Although Brand rarely discusses architecture in strictly aesthetic terms, his argument opens the possibility of what might be called an “aesthetics of transition”—an appreciation of forms that exist between established stylistic codes. Seen in this light, improvement becomes less a supporting tool within architectural practice than a conceptual shift. It invites us to reconsider architecture not as the creation of isolated objects but as participation in a continuous process of transformation shaped by circumstances and time.

Lookouts provide an especially clear illustration of this

19 Stewart Brand, *How Buildings Learn: What Happens after They’re Built* (New York: Penguin Books, 1995).

20 Brand, *How Buildings Learn: What Happens after They’re Built*, 105.

process. Within them, the improvement directives issued by the U.S. Forest Service coexist with countless spontaneous modifications carried out by the personnel who inhabit these structures. Historically, these informal adjustments have often been the true drivers of their evolution.

The question that follows is whether such improvements can move from spontaneity to method—from improvisation to design. In my own teaching, I have explored this possibility by introducing improvement as a distinct phase within the design process.²¹ Situated between investigation and innovation, this phase focuses on identifying a specific component of an existing lookout and exploring how it might be transformed without disrupting the overall logic of the structure.

One example may help illustrate this approach. Because the cabin has historically functioned as the primary parameter of typological classification, the project focused on improving a cabin type rather than a specific lookout. The case concerns the L-4 cabin, whose interior space measures fourteen by fourteen feet within a light wood frame. Around this enclosed space runs a three-foot-wide catwalk bordered by a guardrail. The catwalk serves both as an observation platform and as the point where the stairway arrives before entering the cabin. It therefore acts as an intermediate zone between exterior and interior.

Recognizing this space as an external extension of the cabin, one student explored the relationship between visibility and security. The proposal relocated the cabin's glazed walls outward to the perimeter of the catwalk, extending them to meet the ends of the roof rafters and creating a new enclosed volume measuring twenty by twenty feet (fig. 2).

This intervention increased privacy and safety while also producing a new aesthetic effect: once the external guardrails were removed, the cabin's stereometric clarity became more evident. Because the project preserved the original structure while integrating it into a larger enclosure, it could be understood as an improvement rather than a replacement.

Not every intervention labeled as improvement, however, produces positive results. When an intervention fails to recognize the lookout as an assembly of autonomous components, it risks

21 Andrea Alberto Dutto, "Lookout Towers Go to College," *Lookout Network: Quarterly Publication of the Forest Fire Lookout Association* 35, no. 2 (2024): 8–9 (Vienna, VA: Keith Argow Publisher). See also, Andrea Alberto Dutto, "Recreation, Preservation, and Repair: Architecture of the U.S. National Forest System," in *ACSA 113th Annual Meeting: Repair*, ed. Sara Jensen Carr and Rubén García Rubio (Washington, DC: ACSA, 2025), 112–119.

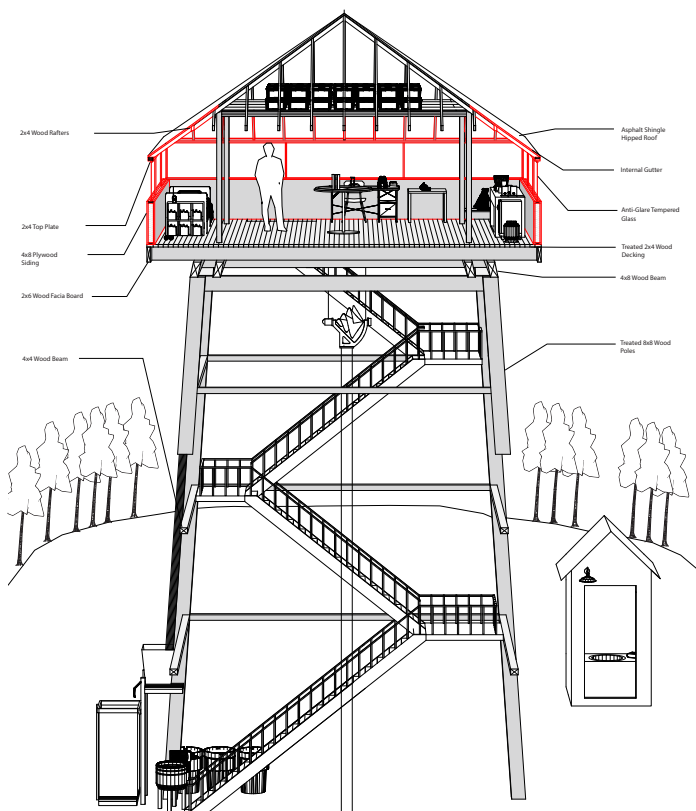


Fig. 2
Improvement project for an L-4 cabin
developed as part of Design Studio
ARCH 454, held at the Department of
Architecture, University of Idaho, Fall
2024. Student: Mauricio Lagunes.

distorting its underlying logic. In such cases, the damage is not necessarily material but typological: the coherence of the structure's internal system is compromised.

At the same time, preserving lookouts does not mean freezing them as historical images. Attempts to replicate their past appearance without understanding their internal logic may prove just as harmful as insensitive redesigns.

Only by striving to understand the underlying mechanism—the “machine” of the lookout—can architectural intervention become genuinely constructive. Returning to the premise of this essay, it is precisely this attitude that can ensure the authenticity of future architectural contributions to the heritage of lookouts, both those that already exist and those yet to be built.

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HOW MABEL GRAY BECAME THE FIRST (BUT NOT THE ONLY) LOOKOUT

NANCY HAMMOND

KIMBERLY, IDAHO

It all began in 1894. Placer miners had extracted every bit of gold from the bottom of Idaho's Clearwater River. Idaho Governor William J. McConnell, who lived in Moscow, Idaho and is buried in the Moscow Cemetery, hoped the state's next valuable commodity could be the abundant supply of high-quality virgin western white pine growing near the Clearwater River (fig. 1).

McConnell invited three men to assess Idaho's potential to strike it rich in lumber, which he called "green gold". The Clearwater's dense stands of western white pine amazed logger Theodore Henry Fohl, and timber speculators Charles O. Brown and his son Nathaniel. But the hopeful entrepreneurs didn't possess the finances to develop such a large undertaking.

Frederick Weyerhaeuser's Syndicate of fifteen companies controlled everything timber- and lumber-related along the northern Mississippi River. Brown was aware that the timber barons were rapidly depleting Minnesota's supply of the eastern white pine their businesses depended on. He advised the men to invest in Idaho's bountiful forests.

Syndicate member Edward Scofield soon sent his son George to scout the Clearwater forests. George returned with such an enthusiastic report that Scofield immediately sent cruisers and surveyors to establish boundaries around the best stands.

James J. Hill, director of the Northern Pacific Railroad, had a federal land grant to construct a rail extension in Washington state, but the project had never materialized. In 1891



Fig. 1
Large White Pine Trees. Two men look at
the camera through a stand of white pine
trees. Courtesy of the University of Idaho
Special Collections.

Weyerhaeuser had tried to purchase Hill's 40 million acres of prime old-growth timber, but his Syndicate partners refused to meet Hill's asking price. Weyerhaeuser was forced to look elsewhere for the resources he wanted to expand his empire. Scofield's report on the Clearwater's "green gold" was music to Weyerhaeuser's ears. His Syndicate purchased large swaths of Clearwater timberland. And Weyerhaeuser purchased 50 thousand acres of the highest quality timber for himself.¹

1 "January 18, 1900: The Courage to Risk," Weyerhaeuser, accessed February 24, 2026, <https://www.weyerhaeuser.com/company/history>.

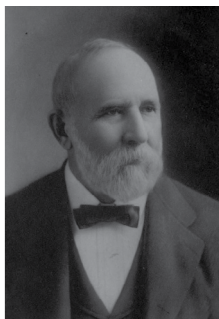
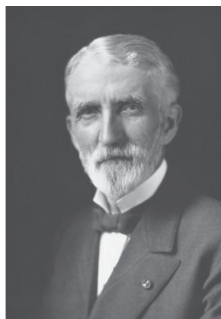


Fig. 2-3
Entrepreneurs of Idaho's
"Green Gold."
From left: Edward C.
Scofield, Frederick
Weyerhaeuser.

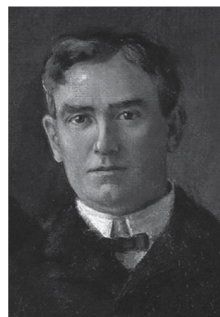
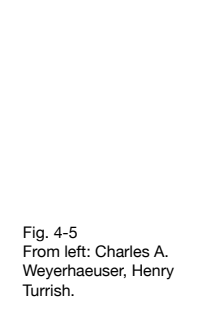


Fig. 4-5
From left: Charles A.
Weyerhaeuser, Henry
Turrish.

That November of 1894, Weyerhaeuser and his son Charles arrived in Idaho with John A. Humbird. They organized the Clearwater Timber Company in Pierce City with a capitalization of \$500 thousand. And they hired Charles O. Brown at \$150 a month to act as their local agent. Brown acquired more than 200 thousand additional acres for Clearwater Timber.²

Canadian-born timber speculator William M. Deary and Henry Turrish, of Wisconsin Log and Lumber, had formed the Northland Pine Company of Moscow, Idaho. In 1901 Northland purchased land in the Clearwater, Potlatch, and Palouse River drainages for the Weyerhaeuser Syndicate. Then Turrish and the Syndicate merged their extensive holdings.³

Northland Pine and all its assets were incorporated in March, 1903 as the Potlatch Lumber Company. The Syndicate provided \$3 million to construct a mill, said to be the largest in the world powered by steam, next to Weyerhaeuser's company town of Potlatch (fig. 6).⁴

2 "Clearwater County Is 'Rich' in Its History! Logging," Clearwater Historical Society, accessed February 24, 2026, <https://clearwatercountyadventures.com/clearwater-county-history>.

3 "Potlatch Company Records, 1901–1979: Historical Note," Orbis Cascade Alliance, accessed February 24, 2026, <https://archiveswest.orbiscascade.org/ark:80444/xv16764>.

4 "A Brief History of the Potlatch Lumber Co.," University of Idaho Library, Potlatch Lumber Company Photograph Collections, accessed February 24, 2026, <https://www.lib.uidaho.edu/digital/plcphotos/browse.html#871>.



Fig. 6
Potlatch Mill & Town, 1940. Courtesy of the University of Idaho Special Collections.

The Weyerhaeusers and their Syndicate now owned most of the Clearwater country's private timberland. They focused their efforts on building sawmills and railroads to enlarge their empire. They made no effort to develop, or organize, or provide resources dedicated to fire suppression on these lands, perhaps because it hadn't been an issue to protect their valuable, combustible timber assets in Michigan's and Minnesota's rainier climate. Or perhaps they believed there would always be more trees.

Theodore Fohl managed the Clearwater Company's timberlands. He'd set up a small cruiser and trail development camp down the east slope of twin-humped Thunder Mountain in charge of cruiser Bob Gray. Fohl had taken it on himself to protect the company's trees from going up in smoke. Sources report that beginning in 1900 Fohl's cruisers used Thunder Mountain as a detection point to spot fires.⁵

The summer of 1902 was unusually hot and dry. Fohl ordered his crew to cobble together an improvised ladder on a hemlock snag that still stood on top of Thunder Mountain after the fires of 1885 and 1887. The men also built a small platform on a branch 15 feet off the ground.

Mabel Gray, Bob Gray's sister, was Clearwater's camp cook. The story's told that every day Fohl had Mabel hitch up her

5 Zac Carscallen, "Potlatch Lumber Mill and the Company Town," *Intermountain Histories*, 2018, accessed February 24, 2026, <https://www.intermountainhistories.org/items/show/112>.

pony after she fed the crew breakfast, and again after dinner, ride one-eighth of a mile up Thunder Mountain, climb the snag, sit on the platform, and “look out”. Mabel Gray is recognized as America’s first fire lookout.

A photograph dated 1902 shows two crewmen, one possibly Mabel’s brother, helping her climb onto Fohl’s lookout tree (fig. 7). Mabel’s wearing a long-sleeved blouse and a calf-length skirt that looks to be split for riding. Her footwear looks like riding boots and a broad-brimmed hat may be hanging



Fig. 7
Mabel Gray Climbing
her Lookout on Thunder
Mountain, 1902. Cour-
tesy of the Fire Lookout
Museum.

around her neck. Stories tell that if Mabel spotted smoke from a fire, she sounded a whistle or fired a shotgun to alert the crew, then rode her pony, seen in the background, to inform the crew of the location of the danger.

I’d like to consider this story more closely. Mabel likely rose at first light to prepare a hearty breakfast for the crew. She split kindling and started a cookfire. She walked to the springhouse down by the stream, portioned off bacon from a slab hanging inside, and spooned up some sourdough starter. Then she gathered eggs from the chicken coop.

Back at camp Mabel built up the cook fire, put on coffee, mixed and kneaded her bread dough, and set it in a warm spot to rise. She cut thick slices of bread she'd baked the night before, and spread on jam she'd made from last summer's huckleberries. Then she cooked breakfast. The crew ate and headed out.

Mabel fed leftover scraps to the chickens and the camp dogs, washed and dried the plates and cups, then stacked them in a cupboard. She hung out the washcloth and towels to dry.



Fig. 8
Bertha Hill Lookout,
1906. Courtesy of the
Fire Lookout Museum.

She walked back to the springhouse to gather ox tails, carrots and tomatoes she'd harvested from her garden, and potatoes and beans.

Back at the cook tent Mabel filled a cast iron kettle with water she'd carried up from the stream. She restoked the fire, hung the kettle, and added the meat and vegetables to stew. She put the bread dough into a Dutch oven, and laid it in the coals to bake.

The photo shows that next Mabel changed into riding gear, hitched her pony, and rode up Thunder Mountain with two

crewmembers pulled off their jobs. The men helped Mabel climb up the lookout tree where she sat and looked out until they returned to help her down.

Back at camp Mabel changed into cooking clothes, set the table, and served dinner. She cleaned up, changed back into her riding gear, rode back to the lookout tree with two crewmembers, climbed the tree, and sat and looked out again until the men arrived to help her down.

Back at camp again she unhitched her pony and relaxed with the crew. Then she went to bed to rest so she could do it all again the next day. Really?!

Theodore Fohl likely managed his crew as capably as he managed Weyerhaeuser's timber assets. I think if Fohl did send Mabel to the lookout tree twice a day it was only for a good reason. Mabel Gray was, beyond doubt, a strong, self-confident woman. I think she agreed to sit for hours in that tree in the hot sun and wind only when the probability of fire existed, mostly after a thunder storm. I think Mabel agreed to be America's first fire lookout because Fohl made it clear that her work was valuable and appreciated. And I think Fohl sent two crewmembers to help Mabel safely climb up and down because he knew that good lookouts, like good cooks, are hard to find.

Later that summer, on September 8, 1902, wildfires ignited on the Oregon side of the Columbia River Gorge. Strong winds blew embers across the river and ignited nearly a dozen fires in Washington's southwest foothills. The winds converged the small fires into a tornadic blaze and pushed the inferno 30 miles in 36 hours. The fire raged unchecked for five days in Washington's Mount Rainier Forest Reserve and consumed more than 238 thousand acres containing 12 billion board feet of timber. Two small towns in Clark County were ravaged. The fire reached the town of Yacolt, blistered the paint on its buildings, shifted to the north, and burned itself out.

Horace Wetherall was one of two rangers who worked for the General Land Office in the more than two million acres of the Mount Rainier Reserve. Horace later reported that he'd spotted a fire that September day, but he took no action and let it burn. He said his pride still bore the brunt of a reprimand he'd received weeks earlier for spending money to hire a fire crew to put out a blaze.

Fig. 9
"Taken 75 years after the Yacolt fire, this photo shows the desolation still left behind. The fire spared Yacolt, which bears its name, but blistered the paint on the village's buildings."
 Source: Clark County Historical Museum.



The General Land Office had no organized system to fight the Yacolt Burn, or any wildfire. Loggers and residents were on their own to control blazes or flee for their lives. At least 65 people were reported to have died in the Yacolt Burn, 27 in Oregon and 38 in Washington (fig. 9). In 1903, reacting to the deadly Yacolt Burn, Congress doubled the Land Office's still miniscule firefighting budget to a mere \$4,072.⁶

In July, 1905 the lightning-caused Harlan fire raged through Weyerhaeuser's white pine forest near Pierce City. Perhaps Mabel Gray was on her lookout and alerted Fohl to the smoke. Records tell that he rounded up 16 men in Orofino to fight the blaze that destroyed the homestead of fur trapper John Paxon Harlan and about 80 acres of timber (fig. 10).

That August the areas timber companies met and agreed to assess themselves on an acreage pro-rata basis to fund fire suppression and to provide an organized fire protection force to work on whatever property where fires occurred. They formed the Clearwater-Potlatch Timber Protective Association with Fohl as Chief Fire Warden. The following year the districts

6 Douglas Scott, "Remembering the 1902 Yacolt Burn," Clark County Talk, 2017, accessed February 24, 2026, <https://clarkcountytalk.com/2017/07/24/yacolt-burn-history/>; David Wilma, "Yacolt Burn, Largest Forest Fire in Recorded Washington History to That Point, Rages for Three Days Beginning on September 11, 1902," HistoryLink, 2003, accessed February 24, 2026, <https://www.historylink.org/File/5196>; Martin Middlewood, "Clark County History: Yacolt Burn," The Columbian, 2021, accessed February 24, 2026, <https://www.columbian.com/news/2021/dec/19/clark-county-history-yacolt-burn/>.



Fig. 10
John Paxon Harlan
Homestead, Pierce City,
Idaho, c. 1902.

split into the Potlatch and the Clearwater Timber Protective Associations.⁷

1906 was Mabel Gray's last fire season as the lookout on Thunder Mountain. No records exist that she ever spotted a smoke, but she and Fohl must have found purpose and value in her effort for her to have climbed that lookout tree for four fire seasons.

That summer the Clearwater Timber Protective Association built a crude 14-foot-tall open pole platform atop three cut-off fir trees about 100 feet south of Mabel's lookout tree on Thunder Mountain, now renamed *Bertha Hill*. A full-time lookout manned this platform. By 1908 the Association had 75 forest patrolmen who extinguished 350 fires.

Bertha Hill Lookout is widely recognized as the first fire lookout in the nation. The fifth tower, built in 1918, was enclosed with glass windows and lasted for thirteen years. The current tower, built in 1958, stands as our nation's longest operating fire lookout site. And, like Mabel's perch, the lookout is currently staffed only on an emergency basis.

Back in the 1860's Theodore Roosevelt rubbed elbows with the intellectual luminaries of New York City: editor and poet William Cullen Bryant, soldier and businessman William Tecumseh Sherman, Supreme Court justice John Jay, landscape architect Frederic Law Olmstead, artist Sanford Gifford, and wallpaper entrepreneur James Wallace Pinchot. The economic boom that followed the Civil War had consumed 75 percent of New York State's once forested lands. These gentlemen of privilege roamed the Hudson River Valley, the Adirondacks, and the Catskills in search of unmolested, pristine vistas. They sponsored landscape

7 Lenta Hall, "Clearwater-Potlatch Timber Protective Association (C-PTPA)," Clearwater Tribune, 2024, accessed February 24, 2026, https://www.clearwatertribune.com/news/top_stories/clearwater-potlatch-timber-protective-association-c-ptpa/collection_fa86f8f2-1249-11ef-a957-bf5a3e6ed843.html.

artists who produced romanticized renderings of New York's mountainscapes. And they erected monumental venues to display the art to influence the viewing public that, unless conserved, these precious woodlands might be lost forever.

In 1901 President Theodore Roosevelt, now a committed conservationist, announced to Congress that the United States' burgeoning forest reserve lands would be better managed in the Department of Agriculture's Bureau of Forestry under Gifford Pinchot, James Wallace Pinchot's son, rather than in the U.S. Department of the Interior's General Land Office. Until that year the General Land Office had no organized system to fight wildfires and had spent a total of \$2,036 fighting 48 wildfires throughout the west. The House defeated Roosevelt's proposed transfer bill in 1902.

It took Congress from 1901 to July 1, 1905 to approve the transfer of 63 million acres of public forest reserves to the Department of Agriculture. Gifford Pinchot renamed his organization the United States Forest Service. Over the next two years Roosevelt placed 141 million more acres into forest reserves under care of the Forest Service.

Colorado's Congressional delegation, identified as the most rabidly anti-conservation contingent in Congress, questioned whether the federal government possessed the constitutional right to hold public lands within the borders of new states in perpetual ownership under municipal sovereignty without consent of the state. Oregon Senator Charles W. Fulton introduced the Fulton Amendment as a rider on the annual agricultural appropriations for 1907. If passed, the amendment would cede the power to create additional forest reserves in Washington, Oregon, Idaho, Montana, Wyoming, and Colorado solely to Congress. The bill would also change the name of forest reserves to national forests to emphasize that the forests were to be used and not preserved. The bill passed and was scheduled for ratification on March 7, 1907.

Roosevelt and Pinchot had just enough lead-time to skirt the upcoming limitations. Pinchot and his assistant blue-penciled boundaries of new national reserves onto maps. A proclamation was prepared for each new addition under the presidential powers provided in the Forest Reserve Act of 1891. Roosevelt signed the documents as soon as they were laid on his desk. In two days, on March 1st and 2nd, 1907, Pinchot and Roosevelt established 17 new or combined forest reserves containing

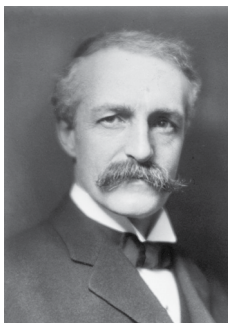


Fig. 11
Gifford Pinchot, First
Chief Forester (1905-
10).



Fig. 12
Henry S. Graves,
Second Chief Forester
(1910-20).



Fig. 13
William Buckhout Gree-
ley, Third Chief Forester
(1920-28).

over six million acres inside the six soon to be closed off western states. The press dubbed the newly protected forests as the “Midnight Reserves.”

In 1908 Pinchot organized the national forests into six autonomous regional districts. He promoted William Buckhout Greeley to supervise District One, established May, 1907 from the predecessor Northern District, and headquartered in Missoula, Montana. District One comprised 22 national forests in Montana, northern Idaho, northeastern Washington, northwestern South Dakota, southwestern North Dakota, northern Michigan, and northern Minnesota, and spanned 41 million acres.

Greeley had discovered a like-minded timber protectionist in George S. Long, Weyerhaeuser Timber Company’s general manager in Tacoma, Washington. Long had formed the Washington Forest Fire Protective Association after his company’s extensive losses in the Yacolt Burn. The two joined with lumbermen in Idaho, Montana, Washington, Oregon, and California to form the Western Forestry and Conservation Association.

In January, 1909 Long invited Greeley to a lumberman’s conference in Spokane, Washington. By June Greeley had negotiated agreements with forest protection associations throughout District One. But Pinchot disapproved Greeley’s proposed alliances because he didn’t trust the motives of lumbermen he viewed as profiteers.

Roosevelt declined to run for the presidency again. William Howard Taft, his hand-picked successor elected in 1908, was not a committed conservationist. He forced Pinchot to resign on January 7, 1910. Pinchot's associate, Henry S. Graves, Dean of Forestry at Yale University, stepped in as the new head of the Forest Service. Graves maintained that a fundamental principle in fire protection was to have one man or corps of men responsible for detecting fires early so they could be promptly attacked. Graves now permitted Greeley to institute his program of co-operative private/public firefighting. District One signed agreements with four timber protective associations in northern Idaho, plus three companies in western Montana.⁸

Greeley had acquired an organization poorly schooled in large scale firefighting because good weather had reigned over the northwestern portion of District One for half a decade. But in the summer of 1910 little rain fell in Montana's Lolo and Idaho's Coeur d'Alene forests. By July the forest floors in District One crackled underfoot with explosive tinder from the drawn-out drought, earlier in the season than anyone had ever experienced.

The "Monthly Weather Review, Climatological Data for August, 1910, in District No. 12, the Columbia Valley" reported "...the month of March was the driest since the beginning of authentic records in 1894; in April and May the precipitation was deficient by about 20 percent; June broke all records for dryness during that month; in July the rainfall was one-half normal; and August was the driest month of any name in the history of the service in Idaho. The normal precipitation for the state for the 6 months beginning with March is 7.94 inches; during the current season the fall averaged 4.61 inches which is about 58 percent of the normal." Frequent fires broke out next to construction zones along the Chicago, Milwaukee, and St. Paul rail lines. Bone dry winds incited sparks into explosive blazes.

Greeley's timber allies influenced the Secretary of Agriculture to permit Greeley to exceed his emergency budget to bolster District One's undersupplied defenses. Greeley cleared local hardware stores of axes, mattocks, shovels, crosscut saws, wash-boilers, tubs, coffee pots, and frying pans. He also hired 300 temporary firefighters from local employment offices and trained his rangers how to fight the fires with crews of up to 50 men.

8 Nancy Hammond, *The Last Lookout on Dunn Peak* (Pullman: Washington State University Press, 2023).



Fig. 13
Temporary Firefighters Camped Near
Avery, Idaho, August 1910.

Heavy smoke clouded the district's interior forests. Records show that because his men could no longer distinguish smoke coming off a new fire from smoke already hanging in the air Greeley withdrew his lookout and patrol system.

In his book "Fire Lookouts of the Northwest", Ray Kresek corroborates that Greeley had emulated Theodore Fohl's lookout. Beginning in 1907 and until the Great Fires of 1910, Greeley operated 12 lookouts in District One; three in Idaho, seven in Montana, and two in Northeast Washington. Following the fires, District One had 34 new lookouts built by 1915, and the area's timber protective associations had 17 (fig. 13).⁹

In 1912 the Klamath National Forest, mostly in northern California, built a rough-hewn log cabin, equipped with a telephone, on top of Klamath Peak. On June 1, 1913 Supervisor McCarthy hired Hallie Morse Daggett as a Forest Guard to work a four-to-seven-month tour of duty at *Eddy's Gulch Lookout* station. The lookout perched at 6,444 feet in elevation and was a three hour hard climb with pack animals. Hallie Morse Daggett is recognized as the first woman to serve as a U.S. Department of Agriculture fire lookout.

Hallie had learned to ride, hunt, fish, and shoot growing up in the rugged Siskiyou Mountains. McCarthy later wrote that the two candidates who had applied before Daggett were pathetic,

9 Ray Kresek, *Fire Lookouts of the Northwest*, rev. 3rd ed. (Fairfield, WA: Ye Galleon Press, 1998).



Fig. 14
Hallie Morse Daggett. First Woman
Forest Service Lookout.

and although Daggett was no gentleman, he hired her because she had “all the requisites of a first-class lookout”. He saw Daggett as a wide-awake woman, 30 years old, thoroughly familiar with every foot of the district, totally devoid of the timidity ordinarily associated with her sex, a perfect lady in every respect, her qualifications for the position vouched for by all who knew her aspirations, and was an ardent advocate of the Forest Service. Daggett’s sister Leslie brought up supplies and mail every week from their home nine miles away. Daggett worked at *Eddy’s Gulch Lookout* for fourteen years.

Unlike Mabel Gray, Daggett quickly became a celebrity (fig. 14). A 1914 article in the *American Forestry* magazine wrote, “Few women would care for such a job, fewer still would seek it, and still fewer would be able to stand the strain of the infinite loneliness, or the roar of the violent storms which sweep the peak, or the menace of the wild beasts which roam the heavily wooded ridges.”¹⁰

10 Gail Jenner, “Hallie Daggett: A Woman of Uncommon Fortitude,” *Prairie Rose Publications*, 2016, accessed February 24, 2026, <https://prairierosepublications.blogspot.com/2016/12/hallie-daggett-woman-of-uncommon.html>.

In 1920 William Greeley became Chief of the United States Forest Service. He acquired land to create national forests east of the Mississippi. He continued his commitment for the Forest Service to cooperate with private, state, and other federal agencies. And the Forest Service built staffed fire lookouts in every state at the time, except Kansas. The greatest concentration of lookouts was constructed to protect the north Idaho and western Montana forests ravage by the Big Burn on August 20-21, 1910, the largest and deadliest of the Great Fires of 1910.

Today, lookout towers staffed full-time in national forests are nearly extinct. Their survival depends, as it has since 1902, on whether human fire lookouts are pertinent alongside today's high-tech fire protection systems. Will papers presented at future lookout seminars remember not only the name of America's first lookout, but also the name of the last?

Nancy Sule Hammond, Winter 2024

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OBSERVATIONS OF A WILDERNESS LOOKOUT

MARK MOAK

HELLS HALF ACRE LOOKOUT

Infrastructure

Since 1980, my wife (Rhett) and I have served as USFS lookouts in the Blue Range Primitive Area, Escudilla Wilderness, Frank Church River of No Return Wilderness, Selway-Bitterroot Wilderness, and adjacent to the Bear Wallow Wilderness Area.

Our first lookout, *Bear Mountain*, was comprised of a group of structures: a cabin for living, an older cabin for tool and animal feed storage, and 7'x7' cab atop a 46' tower. Consequently, the work of detection was physically separated from most other aspects of life. The other five lookouts were live-in towers, which incorporated work and life together and fulfilled an early concept of the lookout:

“The lookout man’s dwelling, office and workroom should be centered in one house, on one floor, and in one room. The room can not be less than 12 feet square, and must be so constructed that at any moment of the day, with the turn of the head, he can see his whole field. He must be fixed so that while he is cooking, eating, reading, writing, dressing, washing his clothes, walking about, or sitting down, he can not help but be in the best position to see.”¹

¹ Coert DuBois, *Systematic Fire Protection in the California Forests* (Washington: Government Printing Office, 1914), 55.



Fig. 1
Bear Mountain Lookout "Complex."
Photo by Don Stevenson.



Fig. 2
Interior of Bear Mountain's
LX-25 tower. Photo by
Don Stevenson.



Fig. 3
Interior of the CCC-built one-room log
cabin. Photo by Don Stevenson.



Fig. 4-6
 Bear Mountain tower, Reno &
 Escudilla Lookouts (below L-R).
 Apache-Sitgreaves National
 Forests, Arizona. Photo by Don
 Stevenson (fig. 4).



Fig. 7
Hells Half Acre Lookout. Bitterroot National Forests, Idaho.



Fig. 8-9
Spot Mountain and
Salmon Mountain
Lookouts (below L-R).
Bitterroot National
Forests, Idaho.





Fig. 10-11
L-R: Interiors of Hells Half (above) and
Spot Mountain (below).
Both are variations of the R-6 design:
Hells Half is the 1959 and Spot is the
1964 model. These interiors are similar
to Reno's and Escudilla's CL-100 design,
except for their bases.



Fig. 12
Salmon Mountain is an L-4 (1936) design and is smaller than the R-6, but for me, the L-4 is the classic lookout design. Though the R-6 has less “class,” according to the venerable Ray Kresek, I have found it to be the most livable.



Fig. 13
The Alidade at Bear Mountain. Regardless of plan, the central feature of any lookout is the alidade, which is affixed to a stand or cabinet. The standard alidade is the Osborne firefinder.



Fig 14
Original 1922 Spot
Mountain Lookout struc-
ture. 1934 image from
the Carpenter Collection.
Photo by Kenneth Edwin
Carpenter.

Fig 15
The tower is only part of the lookout infrastructure. The outhouse is very important! Spot Mountain's is the best we've had. Over the years, we've dug new holes at Bear Mountain, Hells Half, and Spot.



Fig. 16
Water is a necessity and a lookout's proximity to a reliable spring is a plus. The spring at Spot Mountain provides very tasty water usually until mid-September. It's a mile below the tower, providing some good exercise as well.



Fig. 17
Snow melt can supplement our water supply, mainly as wash water. But the snow doesn't last long. The 2024 snow water gathering operation at Spot Mountain = 190 gallons.

Fig. 18-19
Showers at Bear Mountain and Hells
Half. The most efficient solar shower
we've used was a design I found in
Mother Earth News. It involved a truck
inner tube, hose, coupling, and garden
sprayer. Photo by Rhett Moak (fig. 18).





Fig. 20

When we—a family of five—moved to Hells Half. We tried to all live and work in a 15'x15' space. That lasted about two weeks until we got a tipi for the kids. But consideration for the children was one reason we chose Hells Half. Every fire season before, they had to live in a cabin—eight miles from our vehicle—in the middle of the woods with their parents all summer. Because Hells Half has a road that is part of the Magruder Corridor and, therefore excluded from the Wilderness, we were all less isolated: pros and cons.



Fig. 21-22

(Right) Rhett, Daniel, and John Snyder (our first packer) on Smokey, with Joe and Duke at Bear Mountain. (Left) Karl and Tiny plus Slim, Matthew, Beth, Murray, Sam, No. 7, and Emily departing Spot Mountain. All lookouts depend on district personnel for all kinds of support. This is doubly true for lookouts in roadless areas. We depend on packers and their animals food, equipment, mail - basically anything material in nature. These are some of the toughest, smartest, and most capable folks we've ever known.

Fire

In the Wilderness, we have seen fire suppression increasingly give way to “managed” fires in many iterations: PNF (Prescribed Natural Fire), WFU (Wildland Fire Use), fire for resource benefit, to more flexibility in LRMPs (land resource management plans) and currently allowing for even more flexible fire decisions in all Wildland Fires.

We have observed that wilderness fires are not prioritized for suppression action; for several years (until 2025), very few were suppressed, though resources were available. (This partially accounts for our being evacuated 10 times.) With the increase of managed Wilderness fires, we have had to reevaluate our purpose as lookouts. In addition to detection—commonly mischaracterized as our sole function—duties have always included being good hosts and public land ambassadors to visitors; observing and reporting weather conditions; learning the land & its creatures; maintenance; communicating with dispatch, the district, other lookouts, crews, and emergency personnel. Who lives in the woods more than lookouts? In this time of increasing remote technology, ground truth is vital and lookouts are actually there to provide it. Our lookout journey has led us to this: helping to keep people safe is our highest duty.



Fig. 23
Our first evacuation: Devil's Storm Fire &
Hells Half Acre Lookout, 1999.
Photo by Daniel Moak.



Fig. 24
Gold Pan Fire from Salmon Mtn Lookout.
8/15/2013. 16:29. Hells Half's wrapped
tower is at upper right. As a result of Gold
Pan, we were moved to Salmon Mtn from
Hells Half, which, though burned over,
did survive.



Fig. 25
Eagle Creek Fire and Spot Mountain
Lookout (partially wrapped).
Photo by Skylar Brown, 9/3/2017.



Fig. 26
Indian Ridge Fire, Moon, and Jupiter. From Spot Mtn.
00:13. 8/18/2022. This fire burned very actively at night.
There is difference between hearing the euphemistic
term, "stand replacement," and witnessing it. The juxtaposition of fleeting pyrotechnic beauty and destruction
leaves me fascinated and troubled.

Flora and Fauna

Living at a lookout has intimately exposed us to the natural world. Wild flowers, insects, birds, and smaller mammals abound. Sightings of larger animals are more rare; it seems it is hard for them “to make a living” on a mountaintop.



Fig. 27
Phlox. Spot Mountain,
6/26/2024.



Fig. 28
Common Wood-nymphs
pollinating Yarrow. Spot
Mountain, 8/3/2023.



Fig. 29
Golden-mantled ground
squirrels and sulfur
flowers Spot Mountain,
7/31/2022.



Fig. 30
American Kestrel. Spot
Mountain, 9/22/2021.



Fig. 31
Trail Cam Image
(6-frame composite). At
Spot Mountain Spring,
June-July 2018.

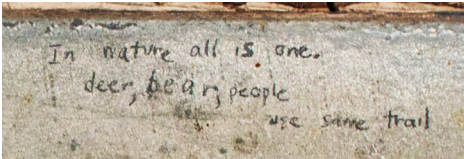


Fig. 32
Graffiti from Bear Moun-
tain Lookout. Before
1980.

The Sky

Living in a tower on a mountaintop is like living between heaven and earth—surrounded by sky and accompanying weather. The sky's phenomena are magical—day and night: myriad cloud forms, sunrises & sunsets, mist, rainbows, glories, halos, Brocken spectre, airglow, crepuscular rays, aurora, lightning! etc. and of course, astral bodies: sun, moon, stars, galaxies, planets, comets, meteors. The lookout truly is an observatory with a front row seat to the universe!



Fig. 33
Storm with corkscrew
"beavertail" over the Bit-
terroot Crest. From Spot
Mountain, 8/25/2023.

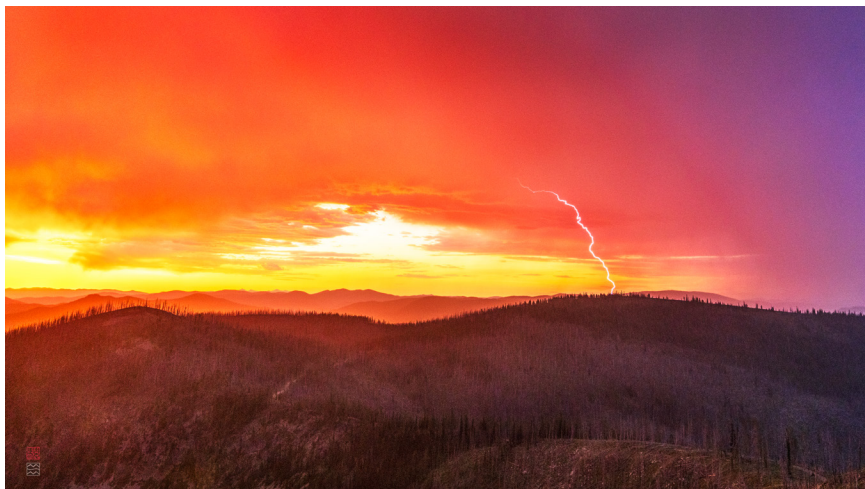


Fig. 34
Lightning at Sunrise from Hells Half,
7/2/2025.



Fig. 35
Lightning in the West Windows. Spot
Mountain, 8/25/2022.



Fig. 36
Airglow with Meteor. From Hells Half,
8/15/2025.



Fig. 37
Comet Neowise from inside Spot Mtn
Lookout, 7/15/2020.

Awe

Our initiation to the lookout was a rebirth... a reawakening to the natural world. I've often said the lookout experience is like living in the book of Psalms... indescribable beauty and sublime terror. I've felt so special and so insignificant simultaneously. Perhaps the word that best describes this is awe.

Paraphrasing Dacher Keltner from an interview on *The Pulse*:
*"When we experience awe... we feel insignificant, small, humble, which paradoxically, can be inspiring, liberating, empowering... as the self fades... our egos become small, allowing us to feel purpose and being connected to larger things..."*²

2 Maiken Scott, Dacher Keltner. "Transformative Power of Awe," *The Pulse*, January 13, 2023, WHYY/NPR, Apple Podcasts 13, <https://podcasts.apple.com/us/podcast/transformative-power-of-awe/id772127662?i=1000594265314>.



Fig. 38
Milky Way, Jupiter, Saturn, Perseid Meteor, and Zumi. Spot Mountain, 8/9/2021.

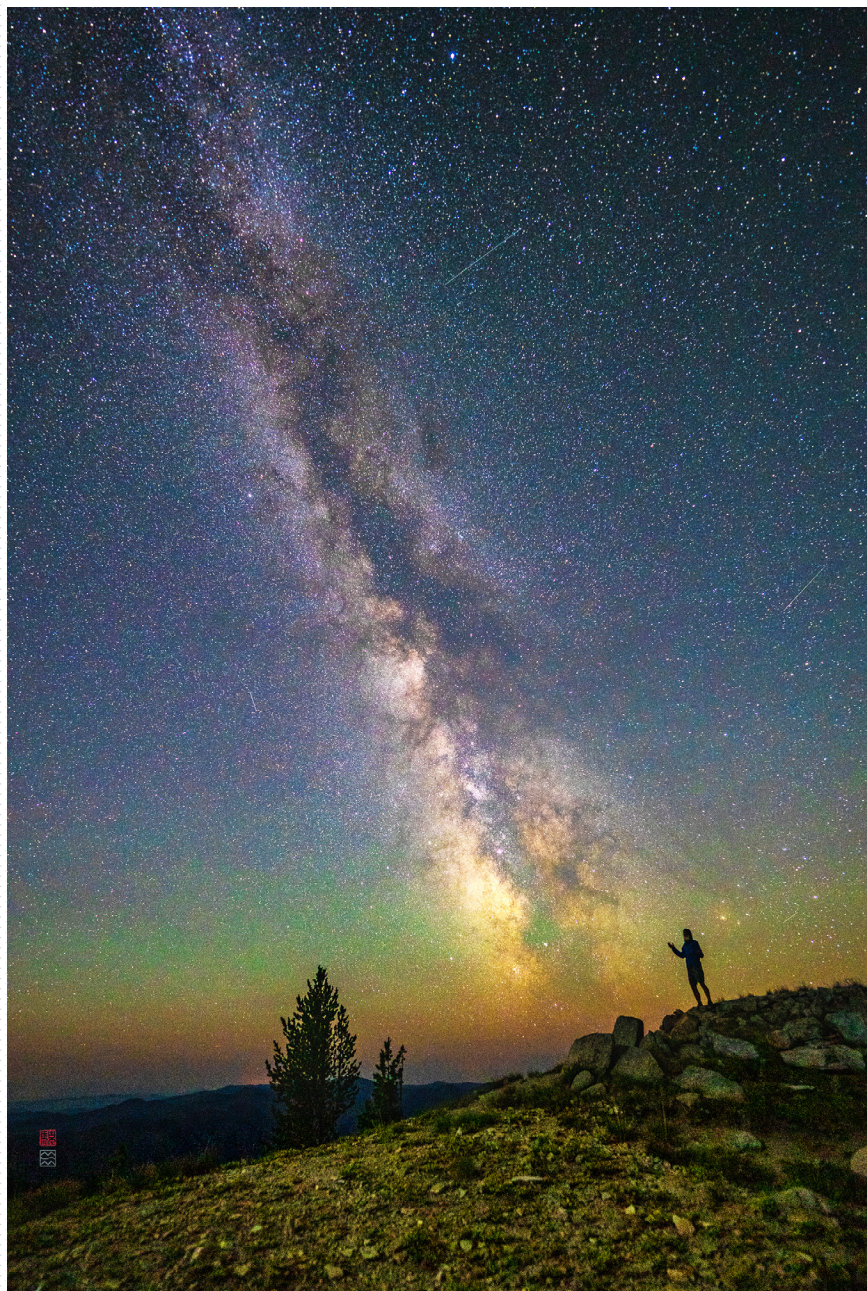


Fig. 39
Under the Milky Way at Spot Mountain,
8/15/2022.

Gratitude

Living on the tops of mountains has changed me. It is a commitment to a place that, though providing few modern amenities along with serious opportunity costs, it is worth it. *“Tis a gift to be simple.”*

No place brings me greater contentment, fulfillment, time to think, and bliss than the lookout.

And to have a constant life partner and companion—sharing equally—makes the experience complete.

But is not only the lifestyle that brings fulfillment: it is the job, too. We feel that we make a difference, that we contribute not only to the human enterprise, but to the earth as well. I would venture to say that the mindset of a lookout is to love and protect the forest and the folks who work in and visit it.

Mark S. Moak, Winter Solstice 2025



Fig. 40
Rhett and Mark, Salmon Mtn Lookout,
9/27/2022.



Fig. 41
Self-portrait under the
Milky Way, Spot Moun-
tain, 2019.



Fig. 42
"Bless you, my Dog,"
Spot Mountain, 2024.

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