

NATIONAL INTERDISCIPLINARY LOOKOUT CONFERENCE

The **1st** National Conference Dedicated to the Study of Fire Lookouts in the Human Environment.

APRIL 19TH 9:00AM IRIC Building – Atrium

BOOK **OF** ABSTRACTS



University of Idaho

Conference organizers

Michael Decker

College of Graduate Studies

Andrea Alberto Dutto

College of Art and Architecture

Conference board

Billy Cooter

Idaho Fire Lookouts

Michael Decker

University of Idaho

Andrea Alberto Dutto

University of Idaho

Allison Ginn

United States Forest Service

Cat House

Idaho Fire Lookouts

Gary Weber

Forest Fire Lookout Association

Academic board

Devin Becker

Library - University of Idaho

Chris Lamb

Geography - Clarke University

Hannah Green

English - University of Idaho

Brandon Light

Forest Ecology - University of Idaho

Jack Kredell

Environmental Science - University of Idaho

Gabriele Orlandi

Alpine Anthropology - University of Venice, IT

Connor Reakes

Architecture student - University of Idaho

2025 AIAS President

THE PAST AND FUTURE OF FIRE LOOKOUTS

The 1st National Interdisciplinary Lookout Conference (NILC)

The 1st National Interdisciplinary Lookout Conference (NILC) focuses on exploring both the history and the evolving role of fire lookout towers and content adjacent to fire lookout towers.

This year's theme, "The Past and Future of Fire Lookouts," focuses on exploring both the history and the evolving role of fire lookout towers and content adjacent to fire lookout towers. It aims to bring together diverse perspectives to shape the future of fire lookout towers, which remain integral to fire management policies in Idaho and across the American West.

The conference is sponsored by the University of Idaho's College of Art and Architecture, College of Graduate Studies, College of Natural Resources, Center for Digital Inquiry and Learning and is developed in partnership with the Forest Fire Lookout Association.

Michael Decker, Andrea Alberto Dutto

CONFERENCE SCHEDULE

- 8:00-9:00 am— Registrations
- 9:00-9:20 am— Welcome and Opening Remarks:
Michael Decker, Andrea A. Dutto, Gary Weber
- 9:30-10:45 am— **PANEL 1 | Room 305**
Care and maintenance: the Ethics of Lookouts
Chair: **Michael Decker**
Speakers: **Cat House & Billy Cooter**
Preserving Idaho's Fire Lookouts
- Ben James**
"Sunshine" AKA filmmaking on Sundance Mtn
- Kevin Roach**
Timeless Guardians: Human Fire Lookouts
- Jenna Bruggeman**
The 5S Organization System
- 9:30-10:45 am— **PANEL 2 | Room 321**
The Memories of Lookouts
Chair: **Gary Weber**
Speakers: **Don Patterson**
Tracing Lookouts Past
- Clare O'Connel**
St Mary Peak Fire Lookout
- Connor Reakes**
The Study of a Typological Artefact
- 9:30-10:45 am— **PANEL 3 | Room 105**
Placement, Displacement: Re-negotiating the Places of Lookouts
Chair: **Jack Kredell**
Speakers: **Michael Guerin**
Red Hill Lookout
- Jacob Riddle**
Photogrammetry and Reflections on Resiliency
- Simon Scott**
The Unnatural Devolution
- 11:00-12:15 am— **PANEL 4 | Room 105**
Re-enacting the Icons
Chair: **Hannah Green**
Speakers: **Nancy Hammond**
How Mabel Gray Became the First (but not the only) Lookout
- Mark Wetherington**
Overexposed: Social Media and Three Fingers Lookout (Washington)
- Brayden Jones**
Wylies Peak: Legend and Successor

11:00-12:15 am—**PANEL 5 | Room 321**

*Policies and Regulations of Fire-fighting:
Lookouts and Politics*

Chair: **Brandon Light w/ Gabriele Orlandi**

Speakers: **Penny Morgan**

Fire and climate: Past, Present and Future

Nick Koenig & Emily Lane

**Looking and Building for More Just Futures in
the Climate Crisis at the Wildland Urban Interface**

Alyssa Kreikemeier

The Cerro Grande Wildfire

11:00-12:15 am—**PANEL 6 | Room 305**

*Resistance, Resilience, Recovery:
the Bones of Lookouts*

Chair: **Andrea A. Dutto**

Speakers: **Leif Haugen**

Restoring Fire Lookouts

Rick McClure

Planning, Partnership, and Plenty of Patience

Andrew Shearman

Echoes of Fire

12:30-2:00 pm—**KEYNOTE LECTURE | Atrium**

Richard Holm

Fire Lookouts and Research

2:15-3:15 am—**PANEL 7 | Atrium**

*How to Restore, Establish, and Maintain a
Volunteer Lookout Program*

Chair: **Bill Moore**

Speakers: **Rene Eustace**

Leif Haugen

Mike Forbes

Mark & Rhett Moak

3:30-4:30 pm—**CLOSING REMARKS | Room CNR_010**

Mark Moak

Evolution of a Wilderness Lookout

4:30-5:30 pm—Dinner | Atrium

CARE
AND
MAINTENANCE:
THE
ETHICS
OF
LOOKOUTS

Speakers: Cat House & Billy Cooter
Ben James
Kevin Roach
Jenna Bruggeman

Chair: Michael Decker

PRESERVING IDAHO'S FIRE LOOKOUTS

Cat House & Billy Cooter

Once nearly 1,000 strong, fewer than 200 of Idaho's fire lookouts remain—many threatened by time, fire, and neglect. This presentation explores their history, significance, and preservation through stories, research, and multimedia. We'll visit remote summits, uncover forgotten artifacts, and meet those behind Idaho Fire Lookouts—a project inspired by a passion for hiking, history, and photography. Learn how grassroots efforts, including Lookout Mountain's restoration, are making a difference. Whether adventurer or historian, you'll leave inspired to help protect them.

"SUNSHINE," AKA FILMMAKING ON SUNDANCE MOUNTAIN

Ben James

This talk introduces my film project *Sunshine*, set at the Sundance Mountain fire lookout near Priest Lake, ID, where an eco-terrorist hides and sparks conflict between locals and state authorities. I begin by sharing research from my 2023-24 fire lookout volunteer experience and how solitude shaped my views on surveillance, vulnerability, and wildness. Next, I explore fire towers as symbols of tension between control and nature. Finally, I reflect on indie filmmaking in Idaho, with scripts and location footage.

TIMELESS GUARDIANS: HUMAN FIRE LOOKOUTS

Kevin Roach

As AI and camera systems rise in wildfire detection, the value of human Lookouts remains unmatched. Trained eyes detect early flare-ups invisible to tech, provide real-time, localized context, and offer critical on-the-ground insight that enhances fire response. Lookouts embody the Forest Service's mission—connecting people, land, and legacy. Beyond efficiency, they offer ecological wisdom, public engagement, and a lower-impact alternative to expanding tech infrastructure. Preserving Lookouts means protecting practical knowledge, cultural heritage, and a vital line of defense.

THE 5S ORGANIZATION SYSTEM

Jenna Bruggeman

This project explores merging traditional fire lookout practices with modern needs. A semester-long study produced nine architectural boards: the first three analyze a 1940s Idaho Cupola; the next three propose improvements in hygiene, sanitation, and organization while preserving the lookout's essence. The final boards introduce a new prototype inspired by the Japanese 5S system, where every item has a place and living elements fold away to save space. Influenced by Asian design, the result honors tradition while embracing innovation.

THE MEMORIES OF LOOKOUTS

Speakers: Don Patterson
Clare O'Connel
Connor Reakes

Chair: Gary Weber

TRACING LOOKOUTS PAST: FIELDWORK AND FIRE IN THE RIVER OF NO RETURN WILDERNESS

Don Patterson

In the summers of 1979 and 1980, my wife and I worked for the Big Creek Ranger District on the Payette National Forest, conducting a fuels inventory across the River of No Return Wilderness. Backpacking remote trails, we documented fuel conditions and visited the district's few remaining staffed fire lookouts—only three of the original 33 remained, and just one survives today. Our experience included wilderness challenges, such as a tick fever evacuation, and visits to Taylor Ranch. My wife also served as a fire lookout on South Baldy. This presentation reflects on our fieldwork, the decline of lookouts, and offers rare images and hand-drawn maps from this transitional era.

ST MARY PEAK FIRE LOOKOUT: A SUCCESSFUL PARTNERSHIP

Clare O'Connel

This presentation highlights a successful 14-year collaboration between the U.S. Forest Service and the Selway-Bitterroot Frank Church Foundation to operate and maintain the historic St. Mary Peak Fire Lookout in the Bitterroot National Forest near Stevensville, Montana. Combining federal stewardship with nonprofit engagement, the partnership encourages public involvement in wilderness conservation, strengthens fire detection efforts, and preserves a cultural landmark listed on the National Register of Historic Places in 2017. The talk will explore the project's origins, challenges, and achievements, demonstrating how shared efforts keep the lookout active as both a fire management asset and a symbol of wilderness heritage in the Selway-Bitterroot Wilderness.

THE STUDY OF A TYPOLOGICAL ARTEFACT

Connor Reakes

Bear Mountain's 53' L-4 lookout, built in 1951 with materials dropped by air and hauled by mule, remains staffed and maintained by the USFS—rare among towers increasingly decommissioned. My research follows three phases: typological study, improvement, and innovation. Located in one of the Idaho's most fire-active regions, Bear Mountain is ideal for fire observation. Insights from longtime lookout Steven Kalling inspired a "Pagoda" redesign: a utilitarian stair and railing system with PV panel roofing and a new dwelling unit beneath the original tower. The final proposal integrates fire research, hiker recreation, and preservation, surrounding the historic structure with a protective, multifunctional lattice framework.

**PLACEMENT,
DISPLACEMENT:
RE-NEGOTIATING
THE
PLACES
OF
LOOKOUTS**

Speakers: Michael Guerin
Jacob Riddle
Simon Scott

Chair: Jack Kredell

RED HILL LOOKOUT: CALIFORNIA'S MOST UNIQUE DETECTION STATION HISTORICAL, ARCHITECTURAL, AND CULTURAL CONTEXT

Michael Guerin

Growing up in suburban Southern California, I knew fire lookouts existed nearby, but I had no idea one was just a mile from home. Decades later, I became both a fire lookout staffer and a volunteer archivist for the San Bernardino National Forest, documenting the history of local towers. This presentation explores one of the most unique lookouts ever built—Red Hill/Mather—located in a developing suburb. I'll share its design, challenges faced by the Forest Service, and how it became a private residence today.

PHOTOGRAMMETRY AND REFLECTIONS ON RESILIENCY

Jacob Riddle

In this artist talk, Jacob Riddle reflects on his 2024 Artist in Residence experience at Castle Butte Lookout, supported by Open AIR Montana and the Selway-Bitterroot Frank Church Foundation. Using photogrammetry, Riddle created 3D scans of artifacts and natural elements, transforming them into sculptural monuments that honor the fragile balance between human history and nature. His work responds to the lasting effects of wildfire, celebrating resilience in both ecosystems and human creativity. The talk explores his creative and technical process, along with the philosophical themes that drive his practice—a meditation on loss, survival, and renewal in a time of profound ecological and cultural transformation.

THE UNNATURAL DEVOLUTION

Simon Scott

The lookout is a structure, a person, and an action—change one, and the others shift. This fourth-year architecture project redefines the lookout typology by altering “lookout” as an action in three steps, tracing its effects on structure and occupant. Step one studies “looking out” from a fixed point, using the late Stormy Peak Lookout Tower in the Salmon National Forest for historical and topographic context. Step two explores “looking in,” initiating deconstruction and memorialization through a visitor-centered compound. Step three considers “looking between,” separating programmatic elements into single-use cabins. Through this staged deconstruction, the Stormy Peak Lookout ultimately transcends the typology, helping redefine its architectural boundaries.

PANEL 4

11:00 AM-12:15 PM | ROOM 105

RE- ENACTING THE ICONS

Speakers: Nancy Hammond
Mark Wetherington
Brayden Jones

Chair: Hannah Green

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

Nancy Hammond

By 1894, Idaho's gold placers were depleted, and Governor Stuenkelberg hoped the Clearwater country's western white pine would draw lumbermen. Frederick Weyerhaeuser purchased 250,000 acres and formed the Clearwater Timber Company. In 1902, Theodore Fohl fashioned a lookout tree on Thunder Mountain, sending cook Mabel Gray up to spot fires—America's first fire lookout. In response to the Yacolt Burn, Fohl formed timber protection associations, which aligned with efforts to organize the U.S. Forest Service. By 1913, Hallie Morse Daggett became the first female lookout for the Forest Service. Today, staffed fire lookouts are nearly extinct, raising the question: will future seminars remember both the first and last lookouts?

OVEREXPOSED: SOCIAL MEDIA AND THREE FINGERS LOOKOUT (WASHINGTON)

Mark Wetherington

Built in the 1930s, Three Fingers Lookout is an iconic yet remote shelter in Washington's Boulder River Wilderness. Once preserved through low use and volunteer efforts, it now faces overcrowding, damage, and increased search-and-rescue incidents due to social media exposure. As a first-come, first-served site with limited regulation, visitor impacts—including waste issues and illegal drone use—have challenged both volunteers and the Forest Service. This presentation shares initial research, interviews, and insights into how Three Fingers highlights broader management issues facing public lands in the digital age.

WYLIES PEAK: LEGEND AND SUCCESSOR

Brayden Jones

Nestled among vast peaks in the Selway-Bitterroot Wilderness, Wylies Peak Lookout, built in 1925, became legendary despite only nine years of service. Perched on a granite boulder, this 14x14-foot log cabin earned a place on the National Register of Historic Places as the first fire lookout to do so. In 1983, a lightning strike reduced the cabin to ash, leaving the boulder without its crown. This project unfolds in three phases: 1) analyzing the original cabin's site and architecture; 2) proposing a "successor" cabin inspired by the original's construction; and 3) creating a pilgrimage trail with habitable markers leading to the new structure, supported by visuals and models.

**POLICIES
AND
REGULATIONS
OF
FIRE-FIGHTING:
LOOKOUTS
AND
POLITICS**

Speakers: Penny Morgan
Nick Koenig & Emily Lane
Alyssa Kreikemeier

Chair: Brandon Light w/ Gabriele Orlandi

FIRE AND CLIMATE: PAST, PRESENT AND FUTURE*Penny Morgan*

How do we balance the need to protect people and property from fires with the ecological realities and imperatives of forest and rangeland fires? Fires will occur, and we are likely to have more large, severe fires in the northern Rockies as climate changes. Extensive, widespread fires occurred in the past whenever warm, dry summers followed warm springs 1650-2003. Since 1986, fire seasons have become 78 days longer. With more people living in fire-prone areas and invasive species often fueling fires, fire managers and our society face many challenges. Idaho has often been a place for innovative solutions, both at the University of Idaho through education, research, and outreach, and in fire management.

LOOKING AND BUILDING FOR MORE JUST FUTURES IN THE CLIMATE CRISIS AT THE WILDLAND URBAN INTERFACE*Nick Koenig & Emily Lane*

This talk features Emily Lane, an architectural designer at AECOM, and Nick Koenig, a climate change educator and activist, exploring how the climate crisis challenges architectural design while offering opportunities for more just futures. Nick will discuss the impact of intensified fire events due to settler fire regimes and shifting policies, from suppression to prescribed fire management. Emily will present a case study on the Fire Barracks at El Portal, a prefabricated structure for seasonal firefighters in Yosemite National Park, offering a replicable model for future fire management infrastructure. Finally, Nick will connect fire barracks and lookouts to climate projections, prison labor, and critical geography, reflecting on proactive versus reactive fire management.

THE CERRO GRANDE WILDFIRE*Alyssa Kreikemeier*

From the 1980s to 2016, national politics, large wildfires, and federal-Indigenous relations created a complex administrative environment at Bandelier National Monument in New Mexico. The monument had a significant influence on fire and resource management, integrating archeologists into firefighting as early as 1977 and collecting long-term fire ecology data from ecologist Craig Allen's arrival in 1982. Bandelier also hosted one of NPS's first prescribed fire modules. The 2000 Cerro Grande wildfire, sparked by a prescribed burn, became New Mexico's largest wildfire, leading to major investments in fire management and reigniting debates about fire policy. This talk explores the evolution of wildland fire management at Bandelier, focusing on the Cerro Grande wildfire.

RESISTANCE,
RESILIENCE,
RECOVERY:
THE
BONES
OF
LOOKOUTS

Speakers: Leif Haugen
 Rick McClure
 Andrew Shearman

Chair: Andrea A. Dutto

RESTORING FIRE LOOKOUTS: A STEP-BY-STEP APPROACH*Leif Haugen*

Since 1994, I have served as a fire lookout in Northwest Montana and led the management of 11 lookouts across the Flathead National Forest and Glacier National Park. With over 15 years of experience, I've restored or rehabilitated an average of two lookouts annually, combining carpentry expertise with fire lookout operations knowledge. This presentation will showcase one or two restoration projects, including one in Idaho, detailing the entire process—from assessment and budgeting to planning, logistics, and completion. I will discuss technical and administrative steps, key challenges, and best practices, supported by a visual narrative documenting each phase of restoration to ensure the preservation of these essential structures.

**PLANNING, PARTNERSHIP, AND PLENTY OF PATIENCE:
HISTORIC PRESERVATION AND HIGH ROCK LOOKOUT***Rick McClure*

Located near Mount Rainier, High Rock Lookout is a 1931 L-4 model, listed as eligible for the National Register of Historic Places in 1987. Staffed until 2003, it deteriorated due to vandalism. In 2015, the local historical society, in partnership with the Sand Mountain Society (SMS), began efforts to restore the lookout. SMS, a volunteer-driven Oregon-based nonprofit, has restored over 12 historic lookouts since 1989. This presentation focuses on how planning processes have evolved in the High Rock Lookout restoration, highlighting the importance of an effective Historic Property Plan, adhering to the Secretary of the Interior's Standards, and the roles of volunteers in project success.

**ECHOES OF FIRE: REIMAGINING LOOKOUTS AS SITES OF
MEMORY AND REFLECTION***Andrew Shearman*

This project reimagines the 1967 Sundance Fire lookouts as spaces for remembrance and reflection. Three sites embody the narrative of the fire. Sundance Peak features mirrored structures facing both the scorched and fertile landscapes. Hunt Peak, along the fire's path, arranges lookouts along a ridgeline, symbolizing the fire's journey. Roman Nose reimagines the harrowing experience of fire lookout Randy Langston, who took refuge behind a cliffside as the fire approached. These lookouts serve as architectural markers of remembrance, preserving the legacy of fire lookouts while reinterpreting their form as places of reflection.

FIRE LOOKOUTS AND RESEARCH

RICHARD HOLM

Richard H. Holm, Jr. is a commercial pilot and outdoor enthusiast with a deep interest in the state's history, particularly its remote backcountry areas. He has written extensively on backcountry aviation and fire lookouts.

This lecture will discuss Idaho fire lookout research in relation to my past projects, including my latest book, *In Selway Shadows: Last Flight of 148Z*, which connects fire lookouts to the US Forest Service's deadliest aviation disaster in the Selway-Bitterroot Wilderness.

HOW TO
RESTORE
ESTABLISH
AND
MAINTAIN
A
VOLUNTEER
LOOKOUT
PROGRAM

Speakers: Rene Eustace
Leif Haugen
Mike Forbes
Mark & Rhett Moak

Chair: Bill Moore

This panel will provide a comprehensive overview of the processes and procedures required to create and maintain a successful fire lookout program. Led by key figures in the world of lookout programs, the discussion will highlight real-world experiences, challenges, and best practices from those who have worked extensively in this field.

Bill Moore, Founding Coordinator of the Diablo Volunteers Group, will discuss the issues, work, and communications involved in maintaining various lookout stations, including Salmon Mountain and Osier Lookout. He will explore the challenges faced in wilderness areas and how to minimize impact on federal lands while managing volunteer groups.

Mike Forbes, Volunteer Coordinator for Osier Lookout on the North Fork Ranger District, will provide insight into the differences between wilderness and non-wilderness lookout stations. He will also discuss the importance of developing and maintaining detailed "seen area" maps, a critical tool for fire detection and management.

Rene Eustace, a retired USFS Detection Specialist for the West Fork Ranger District, will focus on the planning and upkeep of lookouts, as well as maintaining communication between volunteers and district staff. Rene will also examine whether volunteers pose unique challenges for fire detection and station maintenance.

Mark and Rhett Moak, Lead Lookouts at West Fork RD, will share their experiences with volunteer lookouts as part of their crew. They will offer insight into common volunteer mistakes and how to ensure effective coordination and training.

Leif Haugen, an expert in lookout building maintenance and restoration, will discuss the preservation of historic lookout structures, including the Toma Lookout. He will explain what it takes to save a facility, who must oversee the work, and which tasks are beyond volunteer capabilities.

This panel offers a rare opportunity to learn from the diverse experiences of professionals dedicated to preserving fire lookout programs.

EVOLUTION OF A WILDERNESS LOOKOUT

MARK MOAK

Mark Moak, a Professor Emeritus of Art at Rocky Mountain College in Billings, Montana, is a photographer, artist, art historian, world traveler, musician, and a long-time fire lookout with 45 seasons of experience.

Since 1980, my wife (Rhett) and I have served as USFS lookouts in five Primitive and Wilderness Areas. Over the years, we've witnessed changes in fire management, technologies, and lookout structures, but the remote lookout experience remains constant. We've adapted to evolving tools, built systems for water and solar power, and raised three children in these unique environments. Our work has led to a deep understanding of both the lifestyle and the role of fire lookouts in wilderness conservation.



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