

Native American fire management at an ancient wildland-urban interface in the Southwest United States

www.nrfirescience.org/resource/22621

The intersection of expanding human development and wildland landscapes—the “wildland–urban interface” or WUI—is one of the most vexing contexts for fire management because it involves complex interacting systems of people and nature. Here, we document the dynamism and stability of an ancient WUI that was apparently...

Author(s): Christopher I. Roos, Thomas W. Swetnam, T. J. Ferguson, Matthew J. Liebmann, Rachel A. Loehman, John R. Welch, Ellis Q. Margolis, Christopher H. Guiterman, William C. Hockaday, Michael J. Aiuvalasit, Jenna Battillo, Josh Farella, Christopher A. Kiahtipes

Year Published: 2021

Type: Document

Book or Chapter or Journal Article

Conservation of Earth’s biodiversity is embedded in Indigenous fire stewardship

www.nrfirescience.org/resource/23536

Large and severe wildfires are becoming increasingly common worldwide and are having extraordinary impacts on people and the species and ecosystems on which they depend. Indigenous peoples comprise only 5% of the world’s population but protect approximately 85% of the world’s biodiversity through stewardship of Indigenous-...

Author(s): Kira M. Hoffman, Emma L. Davis, Sara B. Wickham, Kyle Schang, Alexandra Johnson, Taylor Larking, Patrick N. Lauriault, Nhu Quynh Le, Emily Swerdfager, Andrew J. Trant

Year Published: 2021

Type: Document

Book or Chapter or Journal Article

Persuasion without policies: the work of reviving Indigenous peoples’ fire management in southern Australia

www.nrfirescience.org/resource/22947

Catastrophic and unprecedented wildfires have unfolded across fire-prone landscapes globally over the last three years, with highly publicized loss of human life, property destruction and ecological transformation. Indigenous peoples within many nations have persuasively argued that traditional fire management can enhance existing...

Author(s): Will Smith, Timothy Neale, Jessica K. Weir

Year Published: 2021

Type: Document

Book or Chapter or Journal Article

Application of the socio-ecological system framework to forest fire risk management: a systematic literature review

www.nrfirescience.org/resource/22780

Although increasing concern about climate change has raised awareness of the fundamental role of forest ecosystems, forests are threatened by human-induced impacts worldwide. Among them, wildfire risk is clearly the result of the interaction between human activities, ecological domains, and climate. However, a clear understanding of...

Author(s): Ingrid Vigna, Angelo Besana, Elena Comino, Alessandro Pezzoli

Year Published: 2021

Type: Document

Book or Chapter or Journal Article

Indigenous fire management: a conceptual model from literature

www.nrfirescience.org/resource/22407

Culture influences how fire is perceived and managed in societies. An increasing risk of catastrophic wildfire has shifted political and academic attention on the use of Indigenous fire management (IFM) as an alternative to the common fire suppression paradigm. However, what is IFM? Here we conduct a conceptual framework analysis of...

Author(s): William Nikolakis, Emma Roberts

Year Published: 2020

Type: Document

Book or Chapter or Journal Article

Integrating tribes and culture Into public land management [Chapter 5.5]

www.nrfirescience.org/resource/21702

Many of the cultural traditions practiced by Native Americans were channeled from or associated with their experiences with the natural world. These traditions, in turn, served to inform land management practices that effectively maintained a sustainable ecological balance among people and land for thousands of years. Today, many...

Author(s): David Flores, Gregory Russell

Year Published: 2020

Type: Document

Book or Chapter or Journal Article

Indigenous and local knowledge in sustainability transformations research: a literature review

www.nrfirescience.org/resource/21328

Scholars, politicians, practitioners, and civil society increasingly call for sustainability transformations to cope with urgent social and environmental challenges. In sustainability transformations research, understandings of transformations are often dominated by Western scientific knowledge. Through a systematic literature...

Author(s): David P. M. Lam, Elvira Hinz, Daniel J. Lang, Maria Tengö, Henrik von Wehrden, Berta Martín-López

Year Published: 2020

Type: Document

Book or Chapter or Journal Article

Resistance and representation in a wildland-urban interface fuels treatment conflict: the case of the Forsythe II project in the Arapaho-Roosevelt National Forest

www.nrfirescience.org/resource/20938

Land treatments in wildland-urban interface (WUI) areas are highly visible and subject to public scrutiny and possible opposition. This study examines a contested vegetation treatment-Forsythe II-in a WUI area of the Arapaho-Roosevelt National Forest in Colorado. An initial phase of the research found vocal opposition to Forsythe II...

Author(s): Hannah Brenkert-Smith, Jody L. Jahn, Eric A. Vance, Juan Ahumada

Year Published: 2020

Type: Document

Book or Chapter or Journal Article

Goal setting and Indigenous fire management: a holistic perspective

www.nrfirescience.org/resource/22219

...

Author(s): William Nikolakis, Emma Roberts, Ngaio Hotte, Russell Myers Ross

Year Published: 2020

Type: Document

Book or Chapter or Journal Article

Integrating tribes and culture into public land management

www.nrfirescience.org/resource/21528

Many of the cultural traditions practiced by Native Americans were channeled from or associated with their experiences with the natural world. These traditions, in turn, served to inform land management practices that effectively maintained a sustainable ecological balance among people and land for thousands of years. Today, many...

Author(s): David Flores, Gregory Russell

Year Published: 2020

Type: Document

Book or Chapter or Journal Article

A review of Indigenous knowledge and participation in environmental monitoring

www.nrfirescience.org/resource/21076

There is a growing interest by governments and academics in including Indigenous knowledge alongside scientific knowledge in environmental management, including monitoring. Given this growing interest, a critical review of how Indigenous peoples have been engaged in monitoring is needed. We reviewed and analyzed the academic...

Author(s): Kim-Ly Thompson, Trevor C. Lantz, Natalie C. Ban

Year Published: 2020

Type: Document

Book or Chapter or Journal Article

Indigenous knowledge and seasonal calendar inform adaptive savanna burning in northern Australia

www.nrfirescience.org/resource/20820

Indigenous fire management is experiencing a resurgence worldwide. Northern Australia is the world leader in Indigenous savanna burning, delivering social, cultural, environmental and economic benefits. In 2016, a greenhouse gas abatement fire program commenced in the savannas of south-eastern Arnhem Land in the Northern Territory,...

Author(s): Michelle McKemey, Emilie Ens, Yugul Mangi Rangers, Oliver Costello, Nick Reid

Year Published: 2020

Type: Document

Book or Chapter or Journal Article

Getting back to fire sumé?: exploring a multi-disciplinary approach to incorporating traditional knowledge into fuels treatments

www.nrfirescience.org/resource/19614

Background: Evaluating fuel treatment effectiveness is challenging when managing a landscape for diverse ecological, social, and economic values. We used a Participatory Geographic Information System (PGIS) to understand Confederated Colville Tribal (CCT) member views regarding the location and effectiveness of fuel treatments...

Author(s): Monique D. Wyncoop, Penelope Morgan, Eva K. Strand, Fernando Sanchez-Trigueros

Year Published: 2019

Type: Document

Book or Chapter or Journal Article

Community conversations: applying traditional knowledge to fire management and research

www.nrfirescience.org/resource/18962

Today, many tribes wish to use traditional knowledge (TK) and cultural burns in a contemporary setting to address issues of wildland fire and fuel management that have risen as a result of fire suppression policies. Here, the term TK is used in place of “TEK”, or traditional ecological knowledge, as TK is a more inclusive term...

Author(s): Hannah Lopez, Frank K. Lake, Vita Wright

Year Published: 2019

Type: Document

Research Brief or Fact Sheet

Out of the Ashes: Ecological Resilience to Extreme Wildfire, Prescribed Burns, and Indigenous Burning in Ecosystems

www.nrfirescience.org/resource/22989

Until Euro-American colonization, Indigenous people used fire to modify eco-cultural systems, developing robust Traditional Ecological Knowledge (TEK). Since 1980, wildfire activity has increased due to fire suppression and climate change. In 2017, in Waterton Lakes National Park, AB, the Kenow wildfire burned 19,303 ha, exhibiting...

Author(s): Cristina Eisenberg, Christopher L. Anderson, Adam Collingwood, Robert Sissons, Christopher J. Dunn, Garrett W. Meigs, David E. Hibbs, Scott Murphy, Sierra Dakin Kuiper, Julian SpearChief-Morris, Leroy Little Bear, Barbara Johnston, Curtis B. Edson

Year Published: 2019

Type: Document

Book or Chapter or Journal Article

Indigenous fire stewardship

www.nrfirescience.org/resource/19831

This chapter addresses Indigenous Fire Stewardship and cultural burning using several case studies applicable to wildland fire management in the Wildland-Urban Interface. Indigenous fire stewardship practices had the highest influence around settlements (e.g. permanent villages, seasonal camps) and travel corridors (i.e. trails and...

Author(s): Frank K. Lake, A. C. Christianson

Year Published: 2019

Type: Document

Book or Chapter or Journal Article

Indigenous peoples and collaborative forest governance in northern forests: examining changes in policies, institutions, and communities — a selection of research papers presented at the ISSRM Conference

www.nrfirescience.org/resource/19476

No abstract available.

Year Published: 2019

Type: Document

Conference Proceedings

Sharing Multiple Perspectives on Burning: Towards a Participatory and Intercultural Fire Management Policy in Venezuela, Brazil, and Guyana

www.nrfirescience.org/resource/19891

Although there is convincing scientific research for the role of Indigenous fire practices in sustainable land management, Indigenous peoples' involvement in policy-making is limited. This paper presents findings from a fire management workshop where experiences and perspectives were shared among 60 academic, government, and...

Author(s): Bibiana A. Bilbao, Jayalaxshmi Mistry, Adriana Millán, Andrea Berardi

Year Published: 2019
Type: Document
Book or Chapter or Journal Article

We're Not Doing Enough Prescribed Fire in the Western United States to Mitigate Wildfire Risk

www.nrfirescience.org/resource/19761

Prescribed fire is one of the most widely advocated management practices for reducing wildfire hazard and has a long and rich tradition rooted in indigenous and local ecological knowledge. The scientific literature has repeatedly reported that prescribed fire is often the most effective means of achieving such goals by reducing...

Author(s): Crystal A. Kolden
Year Published: 2019
Type: Document
Book or Chapter or Journal Article

Indigenous impacts on North American Great Plains fire regimes of the past millennium

www.nrfirescience.org/resource/18852

Fire use has played an important role in human evolution and subsequent dispersals across the globe, yet the relative importance of human activity and climate on fire regimes is controversial. This is particularly true for historical fire regimes of the Americas, where indigenous groups used fire for myriad reasons but paleofire...

Author(s): Christopher I. Roos, María Nieves Zedeño, Mary M. H. Erlick
Year Published: 2018
Type: Document
Book or Chapter or Journal Article

When Scientists "Discover" What Indigenous People Have Known For Centuries

www.nrfirescience.org/resource/16943

Our knowledge of what animals do when humans aren't around has steadily increased over the last 50 years. For example, we know now that animals use tools in their daily lives. Chimps use twigs to fish for termites; sea otters break open shellfish on rocks they selected; octopi carry coconut shell halves to later use as shelters....

Author(s): George Nicholas
Year Published: 2018
Type: Document
Book or Chapter or Journal Article

Tribal fire and forest management: Confederated Salish-Kootenai fire history, philosophy, and resource management strategies

www.nrfirescience.org/resource/19687

Within the ancestral homelands of the Confederated Salish Kootenai Tribes (CSKT), the Fire Continuum Conference (May 2018) discussed the complexity of wildland fire and fuels research and management. The CSKT fieldtrip took place on the Flathead Reservation (figure 1), about 20 miles north of Missoula, and the presenters addressed...

Author(s): Monique D. Wynecoop
Year Published: 2018
Type: Document
Research Brief or Fact Sheet

A Global Analysis of Hunter-Gatherers, Broadcast Fire Use, and Lightning-Fire-Prone

Landscapes

www.nrfirescience.org/resource/18298

We examined the relationships between lightning-fire-prone environments, socioeconomic metrics, and documented use of broadcast fire by small-scale hunter-gatherer societies. Our approach seeks to re-assess human-fire dynamics in biomes that are susceptible to lightning-triggered fires. We quantify global lightning-fire-prone...

Author(s): Michael R. Coughlan, Brian I. Magi, Kelly M. Derr

Year Published: 2018

Type: Document

Book or Chapter or Journal Article

A Special Issue of the Journal of Forestry—Tribal Forest Management: Innovations for Sustainable Forest Management

www.nrfirescience.org/resource/20080

Native American forests and tribal forest management practices have sustained indigenous communities, economies, and resources for millennia. These systems provide a wealth of knowledge and successful applications of long-term environmental stewardship and integrated, sustainable forest management. Tribal forestry has received an...

Author(s): Michael J. Dockry, Serra Hoagland

Year Published: 2017

Type: Document

Book or Chapter or Journal Article

Returning fire to the land - Celebrating traditional knowledge and fire

www.nrfirescience.org/resource/15224

North American tribes have traditional knowledge about fire effects on ecosystems, habitats, and resources. For millennia, tribes have used fire to promote valued resources. Sharing our collective understanding of fire, derived from traditional and western knowledge systems, can benefit landscapes and people. We organized two...

Author(s): Frank K. Lake, Vita Wright, Penelope Morgan, Mary E. McFadzen, Dave McWethy, Camille Stevens-Rumann

Year Published: 2017

Type: Document

Book or Chapter or Journal Article

Participatory geographic information systems as an organizational platform for the integration of traditional and scientific knowledge in contemporary fire and fuels management

www.nrfirescience.org/resource/15030

Traditional knowledge about fire and its effects held by indigenous people, who are connected to specific landscapes, holds promise for informing contemporary fire and fuels management strategies and augmenting knowledge and information derived from western science. In practice, however, inadequate means to organize and communicate...

Author(s): Brooke Baldauf McBride, Fernando Sanchez-Trigueros, Stephen J. Carver, Alan E. Watson, Roian Matt, William T. Borrie, Linda Moon Stumpff

Year Published: 2017

Type: Document

Book or Chapter or Journal Article

Weaving Indigenous and sustainability sciences to diversify our methods

www.nrfirescience.org/resource/18879

Indigenous and sustainability sciences have much to offer one another regarding the identification of

techniques and methods for sustaining resilient landscapes. Based upon the literature, and our findings, it is evident that some Indigenous peoples have maintained distinct systematic, localized, and place-based environmental...

Author(s): Jay T. Johnson, Richard Howitt, Gregory Cajete, Fikret Berkes, Renee Pualani Louis, Andrew D. Kliskey

Year Published: 2016

Type: Document

Book or Chapter or Journal Article

Climate change and indigenous peoples: a synthesis of current impacts and experiences

www.nrfirescience.org/resource/14756

A growing body of literature examines the vulnerability, risk, resilience, and adaptation of indigenous peoples to climate change. This synthesis of literature brings together research pertaining to the impacts of climate change on sovereignty, culture, health, and economies that are currently being experienced by Alaska Native and...

Author(s): Kathryn Norton-Smith, Kathy Lynn, Karletta Chief, Karen Cozzetto, Jamie Donatuto, Margaret Hiza Redsteer, Linda E. Kruger, Julie Maldonado, Carson Viles, Kyle P. Whyte

Year Published: 2016

Type: Document

Synthesis, Technical Report or White Paper

Tribal engagement roadmap (Highlights)

www.nrfirescience.org/resource/16116

USDA Forest Service R&D has been conducting research for many years with tribes and in Indian country and has collaboratively developed the USDA Forest Service Research and Development Tribal Engagement Roadmap (Tribal Engagement Roadmap) to help highlight and prioritize the agency's efforts and raise the visibility of tribal...

Author(s): Tania Ellersick

Year Published: 2016

Type: Document

Technical Report or White Paper

Taking Fire: Understandings of Indigenous Burning and Environmental Politics in Australia and the United States, 1910-2015

www.nrfirescience.org/resource/16968

Non-Indigenous understandings of 'fire-stick farming' have historically existed not as anthropological curiosities but as political incendiaries, as competing interest groups have attempted to publically appropriate or deny Indigenous burning in environmental debates and discourse. My PhD research investigates the political and...

Author(s): Daniel May

Year Published: 2016

Type: Document

Book or Chapter or Journal Article

Opportunities to utilize traditional phenological knowledge to support adaptive management of social-ecological systems vulnerable to changes in climate and fire regimes

www.nrfirescience.org/resource/13956

The field of adaptive management has been embraced by researchers and managers in the United States as an approach to improve natural resource stewardship in the face of uncertainty and complex environmental problems. Integrating multiple knowledge sources and feedback mechanisms is an important step in this approach. Our objective...

Author(s): Christopher A. Armatas, Tyron J. Venn, Brooke Baldauf McBride, Alan E. Watson, Stephen J. Carver
Year Published: 2016
Type: Document
Book or Chapter or Journal Article

Forest site classification for cultural plant harvest by tribal weavers can inform management

www.nrfirescience.org/resource/13813

Do qualitative classifications of ecological conditions for harvesting culturally important forest plants correspond to quantitative differences among sites? To address this question, we blended scientific methods (SEK) and traditional ecological knowledge (TEK) to identify conditions on sites considered good, marginal, or poor for...

Author(s): Susan S. Hummel, Frank K. Lake
Year Published: 2015
Type: Document
Book or Chapter or Journal Article

Social science research on Indigenous wildfire management in the 21st century and future research needs

www.nrfirescience.org/resource/12910

This article reviews social science research on Indigenous wildfire management in Australia, Canada and the United States after the year 2000 and explores future research needs in the field. In these three countries, social science research exploring contemporary Indigenous wildfire management has been limited although there have...

Author(s): Amy Christianson
Year Published: 2015
Type: Document
Book or Chapter or Journal Article

Traditional fire-use, landscape transition, and the legacies of social theory past

www.nrfirescience.org/resource/16974

Fire-use and the scale and character of its effects on landscapes remain hotly debated in the paleo- and historical-fire literature. Since the second half of the nineteenth century, anthropology and geography have played important roles in providing theoretical propositions and testable hypotheses for advancing understandings of the...

Author(s): Michael R. Coughlan
Year Published: 2015
Type: Document
Book or Chapter or Journal Article

Whitebark pine workshop: science, management, and community

www.nrfirescience.org/resource/20084

Whitebark pine is a culturally and ecologically important species to the peoples of the Confederated Salish and Kootenai Tribes (CSKT), located on Montana's Flathead Indian Reservation. Past management practices, pathogen and insect infestations, and climate change have all contributed to a dramatic decline in the abundance of...

Author(s): Corey L. Gucker
Year Published: 2015
Type: Document
Technical Report or White Paper

Tribal Engagement roadmap

www.nrfirescience.org/resource/16168

The U.S. Department of Agriculture (USDA), Forest Service is recognized as a leader among Federal land management agencies in partnering collaboratively with American Indian and Alaska Native governments and indigenous communities. The Forest Service Research and Development (R&D) Deputy Area recognizes that working with tribes...

Year Published: 2015

Type: Document

Technical Report or White Paper

Spraycan: A PPGIS for capturing imprecise notions of place

www.nrfirescience.org/resource/22844

It is increasingly common for participatory data to be collected from the public via a PPGIS, in order to gain a greater understanding both of the world around us, and people's experience of it. The place-based thoughts and feelings of an individual do not, however, always fit well with the space-based points and polygons into which...

Author(s): J. J. Huck, Duncan Whyatt, Paul Coulton

Year Published: 2014

Type: Document

Book or Chapter or Journal Article

Fire and tribal cultural resources

www.nrfirescience.org/resource/13815

Native American tribes regard plants that have evolved with frequent fire and other natural resources as living cultural resources that provide, water, food, medicines, and other material goods while also sustaining tribal cultural traditions. Collaborations between management agencies and tribes and other Native American groups can...

Author(s): Frank K. Lake, Jonathan Long

Year Published: 2014

Type: Document

Book or Chapter or Journal Article

Traditional ecological knowledge: a model for modern fire management?

www.nrfirescience.org/resource/13810

For many thousands of years, aboriginal peoples worldwide used fire to manage landscapes. In North America, the frequency and extent of fire (both human caused and natural) were much reduced after European colonization. Fire exclusion became the policy in the United States for most of the 20th century as the country became more...

Author(s): Gail Wells

Year Published: 2014

Type: Document

Research Brief or Fact Sheet

Trust: A Planning Guide for Wildfire Agencies and Practitioners—An International Collaboration Drawing on Research and Management Experience in Australia, Canada, and the United States.

www.nrfirescience.org/resource/18880

This planning guide is the outcome of an international collaboration of researchers and practitioners/field managers working in communities at risk of wildfire in three countries. Initially, the team of social scientists from Australia, Canada, and the United States utilized the collective research literature to examine factors that...

Author(s): Bruce A. Shindler, Christine Olsen, Sarah M. McCaffrey, Bonita McFarlane, Amy Christianson, Tara K. McGee, Allan Curtis, Emily Sharp
Year Published: 2014
Type: Document
Technical Report or White Paper

Collaboration in national forest management

www.nrfirescience.org/resource/18873

National forest management efforts have generally moved toward collaborative and participatory approaches at a variety of scales. This includes, at a larger scale, greater public participation in transparent and inclusive democratic processes and, at a smaller scale, more engagement with local communities. Participatory approaches...

Author(s): Susan Charnley, Jonathan Long, Frank K. Lake
Year Published: 2014
Type: Document
Technical Report or White Paper

The many elements of traditional fire knowledge: synthesis, classification, and aids to cross-cultural problem solving in fire-dependent systems around the world

www.nrfirescience.org/resource/12537

I examined the hypothesis that traditional social-ecological fire systems around the world include common elements of traditional fire knowledge (TFK). I defined TFK as fire-related knowledge, beliefs, and practices that have been developed and applied on specific landscapes for specific purposes by long time inhabitants. In all, 69...

Author(s): Mary R. Huffman
Year Published: 2013
Type: Document
Book or Chapter or Journal Article

Rethinking the study of landscape management practices among hunter-gatherers in North America

www.nrfirescience.org/resource/16979

There has been little movement to systematically incorporate the study of indigenous landscape management practices the method and theory of hunter-gatherer research in North American archaeology, despite a growing interest in this The purposes of this article are twofold. One is to address why, until quite recently, archaeologists...

Author(s): Kent G. Lightfoot, Rob Q. Cuthrell, Chuck J. Striplen, Mark G. Hylkema
Year Published: 2013
Type: Document
Book or Chapter or Journal Article

Aboriginal precedent for active management of sagebrush-perennial grass communities in the Great Basin

www.nrfirescience.org/resource/12146

Until recently, most contemporary ecologists have ignored or diminished anecdotal historical accounts and anthropologists' reports about aboriginal fire in the Great Basin. Literature review shows that Indians practiced regular use of fire for many purposes, including the obvious reasons of increasing the availability of desired...

Author(s): Kent J. McAdoo, Brad W. Schultz, Sherman R. Swanson
Year Published: 2013
Type: Document

Book or Chapter or Journal Article

Culture, law, risk and governance: contexts of traditional knowledge in climate change adaptation

www.nrfirescience.org/resource/16973

Traditional knowledge is increasingly recognized as valuable for adaptation to climate change, bringing scientists and indigenous peoples together to collaborate and exchange knowledge. These partnerships can benefit both researchers and indigenous peoples through mutual learning and mutual knowledge generation. Despite these...

Author(s): Terry Williams, Preston Hardison

Year Published: 2013

Type: Document

Book or Chapter or Journal Article

Cultural impacts to tribes from climate change influences on forests

www.nrfirescience.org/resource/16123

Climate change related impacts, such as increased frequency and intensity of wildfires, higher temperatures, extreme changes to ecosystem processes, forest conversion and habitat degradation are threatening tribal access to valued resources. Climate change is and will affect the quantity and quality of resources tribes depend upon...

Author(s): Garrett Voggesser, Kathy Lynn, John Daigle, Frank K. Lake, Darren Ranko

Year Published: 2013

Type: Document

Book or Chapter or Journal Article

Historical and cultural fires, tribal management and research issues in Northern California: trails, fires and tribulations

www.nrfirescience.org/resource/12539

Indigenous people's detailed traditional knowledge about fire, although superficially referenced in various writings, has not for the most part been analyzed in detail or simulated by resource managers, wildlife biologists, and ecologists. . . . Instead, scientists have developed the principles and theories of fire ecology, fire...

Author(s): Frank K. Lake

Year Published: 2013

Type: Document

Book or Chapter or Journal Article

Wildland fire in ecosystems: effects of fire on cultural resources and archaeology

www.nrfirescience.org/resource/141

This state-of-knowledge review provides a synthesis of the effects of fire on cultural resources, which can be used by fire managers, cultural resource (CR) specialists, and archaeologists to more effectively manage wildland vegetation, fuels, and fire. The goal of the volume is twofold: (1) to provide cultural resource/...

Year Published: 2012

Type: Document

Synthesis

National to local: a pre & post assessment of the Fuel Characteristic Classification System (FCCS) landscape variables for the Confederated Salish and Kootenai Tribes

www.nrfirescience.org/resource/13486

A modified Fuel Characteristic and Classification System (FCCS) fuelbed was created for the Confederated Salish & Kootenai Tribes (CSKT) of Montana. This crosswalk of data combined two principal sources of data: (1) locally the Bureau of Indian Affairs (BIA) Continuous Forest Inventory Data (CFI) and (2) nationally the US Forest...

Author(s): Laurel L. James

Year Published: 2012

Type: Document

Dissertation or Thesis

Listening and learning from traditional knowledge and western science: a dialogue on contemporary challenges of forest health and wildfire

www.nrfirescience.org/resource/8329

Native Americans relied on fire to maintain a cultural landscape that sustained their lifeways for thousands of years. Within the past 100 years, however, policies of fire exclusion have disrupted ecological processes, elevating risk of wildfire, insects, and disease, affecting the health and availability of resources on which the...

Author(s): Larry Mason, Germaine White, Gary Morishima, Ernesto Alvarado, Louise Andrew, Fred Clark, Mike Durglo, Jim Durglo, Margaret Friedlander, Kathy Hamel, Colin C. Hardy, Tony Harwood, Faline Haven, Everett Isaac, Laurel James, Robert Kenning, Adrian Leighton, Pat Pierre, Carol Raish, Bodie Shaw, Steven Smallsalmon, Vernon Stearns, Howard Teasley, Matt Weingart, Spus Wilder

Year Published: 2012

Type: Document

Book or Chapter or Journal Article

A case for developing place-based fire management strategies from traditional ecological knowledge

www.nrfirescience.org/resource/16101

Sustainability science promotes place-based resource management because natural processes vary among ecosystems. When local science is limited, land managers may be forced to generalize from other ecosystems that function differently. One proposed solution is to draw upon the traditional ecological knowledge that indigenous groups...

Author(s): Lily A. Ray, Crystal A. Kolden, F. Stuart Chapin

Year Published: 2012

Type: Document

Book or Chapter or Journal Article

Working with American Indian tribes on wildland fires: protecting cultural heritage sites in northwestern California

www.nrfirescience.org/resource/16098

The Federal Land Policy and Management Act (1976: Public Law 94-579) requires coordination with approved tribal management plans for the purposes of development and revisions of such plans and is inclusive of programs or projects. Federal Government consultation, such as government-to-government protocol agreements with federally...

Author(s): Frank K. Lake

Year Published: 2011

Type: Document

Book or Chapter or Journal Article

Utilization of the Native American talking circle to teach incident command system to tribal community health representatives

www.nrfirescience.org/resource/16106

The public health workforce is diverse and encompasses a wide range of professions. For tribal communities, the Community Health Representative (CHR) is a public health paraprofessional whose role as a community health educator and health advocate has expanded to become an integral part of the health delivery system of most tribes....

Author(s): Brenda Granillo, Ralph Renger, Jessica Wakelee, Jefferey L. Burgess

Year Published: 2010

Type: Document

Book or Chapter or Journal Article

Fire burners to firefighters: the Nez Perce and fire

www.nrfirescience.org/resource/16113

This article presents results from an interview-based case study examining burning practices of the Nez Perce tribe in the Inland Northwest in both their contemporary and historical policy context. Despite the lack of a prominent fire tradition, our interviews uncovered a legacy of knowledge and cultural traditions linked to fire...

Author(s): Matthew S. Carroll, Patricia J. Cohn, Travis B. Paveglio, Donna R. Drader, Pamela J. Jakes

Year Published: 2010

Type: Document

Book or Chapter or Journal Article

Fire, agency and scale in the creation of aboriginal cultural landscapes

www.nrfirescience.org/resource/16126

Much recent literature explores controlled burning practices used by people of different cultures to manipulate landscapes. Because humans have only recently been able to suppress fires occurring at larger scales these studies focus on activities occurring at the scale of sites as making the greatest contribution to creating...

Author(s): Andrew Martin Miller, Iain Davidson-Hunt

Year Published: 2010

Type: Document

Book or Chapter or Journal Article

Communicating about fire with tribal organizations

www.nrfirescience.org/resource/16111

The key to working effectively with tribes is the ability to build trust and to respect differences. Unfortunately, all too often, fire managers make critical mistakes when dealing with tribal governments, tribal people, and tribal fire teams. It is easy to assume that the same ways of seeing things and communicating—the same...

Author(s): Germaine White, Pat McDowell

Year Published: 2009

Type: Document

Book or Chapter or Journal Article

Developing computer-based participatory approaches to mapping landscape values for landscape and resource management

www.nrfirescience.org/resource/16127

The last 50 years or so have seen a steady increase in the rate of destructive wildfires across the world, partly as a result of climate change and partly as a result of encroachment of human settlement on fire-based ecosystems (Russell et al. 2004; Westerling et al. 2006). Years of active fire suppression in such areas has...

Author(s): Stephen J. Carver, Alan E. Watson, Tim Waters, Roian Matt, Kari Gunderson, Brett Davis

Year Published: 2009

Type: Document
Book or Chapter or Journal Article

Living artifacts: the ancient ponderosa pines of the West

www.nrfirescience.org/resource/8160

Until late in the nineteenth century, magnificent ponderosa pine forests blanketed much of the inland West. They covered perhaps 30 million acres, an area the size of New York state, spreading across the mountains of New Mexico, Arizona, and California and flourishing throughout the eastern Cascades, the intermountain Pacific...

Author(s): Stephen F. Arno, Lars Ostlund, Robert E. Keane

Year Published: 2008

Type: Document
Book or Chapter or Journal Article

Traditional ecological knowledge: applying principles of sustainability to wilderness resource management

www.nrfirescience.org/resource/12545

Traditional ecological knowledge within specific cultural and geographical contexts was explored during an interactive session at the 8th World Wilderness Congress to identify traditional principles of sustainability. Participants analyzed the traditional knowledge contained in ten posters from Canada and...

Author(s): Nancy C. Ratner, Davin L. Holen

Year Published: 2007

Type: Document
Conference Proceedings

Wildland fire management as conservation-based development: an opportunity for reservation communities?

www.nrfirescience.org/resource/16109

This article explores the economic and cultural development potential of wildland fire management for American Indian communities. Wildland fire management provides opportunities to engage in “conservation-based development”—helping communities to strengthen their connections with the land, improve ecosystem health,...

Author(s): Kathleen Rasmussen, Michael Hibbard, Kathy Lynn

Year Published: 2007

Type: Document
Book or Chapter or Journal Article

Federal Implementation Plans Under the Clean Air Act for Indian Reservations in Idaho, Oregon and Washington; Final Rule

www.nrfirescience.org/resource/12014

The Environmental Protection Agency (EPA) is taking final action on these Federal Implementation Plans (FIPs) under the Clean Air Act (CAA) for Indian reservations in Idaho, Oregon, and Washington. The FIPs put in place basic air quality regulations to protect health and welfare on Indian reservations located in the Pacific...

Author(s): U.S. Environmental Protection Agency

Year Published: 2005

Type: Document
Management or Planning Document

Culturally scarred trees in the Bob Marshall Wilderness, Montana, USA- interpreting Native American historical forest use in a wilderness area

www.nrfirescience.org/resource/7966

Wilderness areas are primarily set aside to protect natural ecosystems and processes. However, most protected areas have a long history of native peoples' land use predating their protection. The general paucity of evidence in the form of historical records, in combination with romantic views of native peoples' effects on nature,...

Author(s): Lars Ostlund, Robert E. Keane, Stephen F. Arno, R. Andersson

Year Published: 2005

Type: Document

Book or Chapter or Journal Article

Private and tribal forest landowners and fire risk: a two-county case study in Washington state

www.nrfirescience.org/resource/16114

This study focused on the role of fire both as a perceived threat and a management tool of nonindustrial private forest and tribal forest landowners or managers in two counties in northeastern Washington State. Using qualitative social research methods and a risk perception conceptual frame, we identified distinct categories of...

Author(s): Matthew S. Carroll, Patricia J. Cohn, Keith A. Blatner

Year Published: 2004

Type: Document

Book or Chapter or Journal Article

Simulated indigenous management: a new model for ecological restoration in national parks

www.nrfirescience.org/resource/16119

Native American land management practices could revive the processes needed to maintain the classic ecosystems and cultural integrity of our nation parks.

Author(s): M. Kat Anderson, Michael G. Barbour

Year Published: 2003

Type: Document

Book or Chapter or Journal Article

Maintaining the mosaic: the role of indigenous burning in land management

www.nrfirescience.org/resource/16097

This article highlights the findings of the literature on aboriginal fire from the human- and the land-centered disciplines, and suggests that the traditional knowledge of indigenous peoples be incorporated into plans for reintroducing fire to the nation's forests. Traditional knowledge represents the outcome of long experimentation...

Author(s): R.W. Kimmerer, Frank K. Lake

Year Published: 2001

Type: Document

Book or Chapter or Journal Article

Using traditional ecological knowledge in science: methods and

www.nrfirescience.org/resource/20210

Advocates of Traditional Ecological Knowledge (TEK) have promoted its use in scientific research, impact assessment, and ecological understanding. While several examples illustrate the utility of applying TEK in these contexts, wider application of TEK-derived information remains elusive. In part, this is due to continued inertia in...

Author(s): H.P. Huntington

Year Published: 2000

Type: Document
Book or Chapter or Journal Article

Native burning in western North America: implications for hardwood forest management

www.nrfirescience.org/resource/11062

It is now widely acknowledged that frequent low-intensity fires once structured many western forests. What is not generally recognized, however, is that most of those fires were purposefully set by native people, not started by lightning. Data from the Rocky Mountains attest to the widespread use of fire by native people, as does...

Author(s): Charles E. Kay
Year Published: 2000
Type: Document
Conference Proceedings

Fire regimes on andesitic mountain terrain in northeastern Yellowstone National Park, Wyoming

www.nrfirescience.org/resource/8196

A fire history investigation was conducted for three forest community types in the Absaroka Mountains of Yellowstone National Park, Wyoming. Master fire chronologies were based on fire-initiated age classes and tree fire scars. The area's major forest type, lodgepole pine (*Pinus contorta* Dougl. var. *latifolia*) ecosystems, revealed a...

Author(s): Stephen W. Barrett
Year Published: 1994
Type: Document
Book or Chapter or Journal Article

Indian fires as an ecological influence in the Northern Rockies

www.nrfirescience.org/resource/7910

The importance of fire as an ecological disturbance in the Northern Rockies is well accepted. Lightning is generally thought to have been the main source of ignition prior to settlement by Europeans. But writings of explorers and pioneers mention deliberate burning by Indians frequently enough to warrant an investigation of its...

Author(s): Stephen W. Barrett, Stephen F. Arno
Year Published: 1982
Type: Document
Book or Chapter or Journal Article

Indian fires in the pre-settlement forests of western Montana

www.nrfirescience.org/resource/12043

Presents preliminary results of a two-year study examining the pattern of Indian fires in western Montana's lower elevation forests. Interviews and historic journals were used to reconstruct the characteristics of aboriginal burning. Fire scar data from paired stands indicate substantial differences in fire frequency between Indian...

Author(s): Stephen W. Berrett
Year Published: 1980
Type: Document
Conference Proceedings

Culturally peeled trees handbook

www.nrfirescience.org/resource/12391

This guide was developed to help identify Culturally Peeled Trees. Culturally Peeled Trees are a

specific type of Culturally Modified Tree. The term is used to describe the mostly pre-reservation practice by aboriginal or native people of 'peeling,' or removing, the bark/cambium layer of a tree for a variety of procurement and...

Author(s): Marcy Reiser, Laurie S. Huckaby

Type: Document

Technical Report or White Paper